

Program Catalog 2017-2019

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Message from the Dean

Welcome to Rutgers School of Health Professions. As the nation's largest health professions School, we offer a vast range of programs from certificate to undergraduate to post-graduate degrees. Each program is tailored to meet emerging health care workforce needs, as well as those of practicing health professionals.

The hallmark of health care today is change. Not only is our School equal to the challenges inherent in these changes, but we serve as agents of change in the ways in which we educate our students. It is our goal to offer the very best programming possible to help our students compete in today's dynamic health care environment. We view our students as the centerpiece of the School, and we are extremely proud of their achievements.

The School's faculty members are among the finest health professions faculty in the nation. The University takes great pride in their teaching as well it might, given the outstanding success of our graduates on national and regional licensure, registry or certifying examinations or judged by the high degree of satisfaction our graduates and their employers express. When you come to the Rutgers School of Health Professions, you will find a professional and competent faculty who will pay personal attention to your academic needs. Our faculty members are also engaged in research and scholarship and many of them are often invited to present papers at national, international and regional symposia or conferences.

At Rutgers SHP, we also place a high value on community service. The School shares in this sense of purpose and vision. As students in the Rutgers School of Health Professions you, too, will participate in these services as an integral part of your learning experiences.

As you read about the School's many programs in this catalog, you will discover a vibrant, exciting School well poised to prepare you as a health professional for the 21st century. I am pleased to welcome you to Rutgers School of Health Professions!

For more information on the School and our programs, please visit our website at http://shp.rutgers.edu

Sincerely,

Gwendolyn Mahon, Ph.D.
Dean, Rutgers School of Health Professions

History

1973

The College of Medicine and Dentistry of New Jersey Board of Trustees approved a concept document for the establishment of the CMDNJ-School of Allied Health Professions (CMDNJ-SAHP).

1976

The document was approved by the New Jersey Department of Higher Education and the School became a separate entity within the University offering eleven certificate programs on the Newark Campus.

1981

To better reflect its broadened scope, the SAHP became the CMDNJ-School of Health Related Professions.

1987

The School applied to the New Jersey Board of Higher Education to seek degreegranting authority.













1988

The School attained approval and initiated a B.S. in Clinical Laboratory Sciences with nine collaborating public and independent colleges.

1992

The Flexibility Legislation of 1992 enabled the University to extend its degree granting authority to include all undergraduate programs.

2013

The New Jersey Medical and Health Sciences Education Restructuring Act went into effect, integrating Rutgers, The State University of New Jersey, with all units of the University of Medicine and Dentistry of New Jersey (UMDNJ), except University Hospital in Newark and the School of Osteopathic Medicine in Stratford.

Today

Currently, over 1700 full and part-time students are enrolled in the Rutgers School of Health Professions. The School offers educational programs online and across four Rutgers campuses: Health Sciences at Newark, Piscataway, Scotch Plains, and Stratford. In addition, the School offers non-matriculated courses and certificate programs through the Center for Advanced and Continuing Education.



Mission

To improve people's lives in New Jersey and beyond, through quality education, innovative research and scholarship, superior service and cutting-edge clinical practice.

Vision

The School of Health Professions will be an international leader in preparing holistic and dynamic health care professionals through education and individual care. Graduates will be prepared with the knowledge, skills, and intellectual approaches necessary to become progressive, innovative, and interprofessional practitioners and leaders in the ever-changing healthcare landscape. Our School will continue to be a leader in our disciplines by developing programs that anticipate and respond to the health care needs of the community; increasing and expanding our academic, clinical, and research partnerships around the world, and continuing our efforts in technological advancement.

Rutgers University Learning Goals

Rutgers University graduates should possess the skills and knowledge to be responsible citizens and productive contributors to society in their workplaces and in their intellectual, cultural, and social endeavors. Therefore, the university community will work to provide the education that supports the following learning goals.

I. Intellectual and Communication Skills

A. Critical Thinking

Students will develop their ability to engage in logical thinking and complex critical analysis.

B. Communication

Students will develop their skills in expressing complex ideas through written and oral communication.

C. Mathematical Reasoning and Analysis

Students will develop their skills in analyzing and interpreting numerical data, and in reasoning and problem solving through mathematical processes.

D. Scientific Inquiry

Students will develop their understanding of scientific methods of inquiry, including the use of observation and experimentation to answer questions and generate new knowledge.

E. Information and Computer Literacy

Students will develop their skills in gathering, accessing, analyzing, and interpreting information, in part through using the tools of modem computer technology.

II. Understanding Human Behavior, Society, and the Natural Environment

A. Historical Understanding

Students will develop their understanding of the historical bases of the societies and world in which we live.

B. Multicultural and International Understanding

Students will understand the multicultural aspects and international dimensions of the societies and world in which we live.

C. Understanding of Literary and Artistic Expression

Students will develop their understanding of and appreciation of the various creative literary and artistic endeavors.

D. Understanding the Bases of Individual and Social Behavior

Students will develop their understanding of the nature of human behavior.

E. Understanding the Physical and Biological World

Students will develop their understanding of the natural environment in which we live and the forces that have shaped it.

III. Responsibilities of the Individual in Society

A. Citizenship Education

Students will develop their understanding of the political and policy making processes of the United States and of their role as citizens in a democratic society.

B. Social and Ethical Awareness

Students will develop their ability to recognize and assess ethical questions, and to make reasoned judgments about alternative solutions to those issues.

School of Health Professions Learning Outcomes

A. Professional Competencies: Graduates achieve professional competencies as currently defined by their respective profession.

Objectives: SHP graduates will be able to:

- Demonstrate appropriate content knowledge as required by either entry-level or post-professional practice
- 2. Demonstrate clinical, research and/or technical skills necessary for successful performance in the chosen discipline
- B. Professionalism: Graduates exhibit professional behaviors such as cultural sensitivity, integrity, respect, compassion, and altruism, and demonstrate excellence in delivery of service and a commitment to their profession.

Objectives: SHP graduates will be able to:

- 1. Exhibit professional behaviors in all interactions
- 2. Exhibit a commitment to their profession through professional membership or participation in professional activities, and by interrelating with other professionals
- 3. Identify and evaluate the impact of culture and diversity on health beliefs, practices, and actions
- Apply and/or demonstrate leadership principles and strategies in organization or professional settings
- C. Communication: Graduates effectively communicate in oral, written, and technical formats.

 Objectives: SHP graduates will be able to:
 - 1. Express concepts in writing using proper grammar and stylistic guidelines
 - 2. Appropriately document health information according to professional standards
 - Demonstrate critical thinking by synthesizing, organizing, presenting, and/or disseminating information following established guidelines at a level appropriate for the target audience
 - 4. Adapt appropriate interactions and/or strategies to accommodate diverse audiences
- D. Collaboration: Graduates collaborate with health care team members and other stakeholders to facilitate the attainment of common goals.

Objectives: Within their scope of practice, SHP graduates will be able to:

- Identify roles and responsibilities of team members in the provision of patient/client/community care
- 2. Identify opportunities and/or participate with others to set and achieve goals
- E. Ethics and Jurisprudence: Graduates identify, critically evaluate, and practice professional, ethical and legal decision-making.

Objectives: Within the scope of their profession, SHP graduates will be able to:

- 1. Maintain and/or adhere to professional ethics and legal requirements
- Articulate ethical and legal decision making practices (process by which an ethical/legal decision was made)
- 3. Apply ethical and legal principles to Identify breaches of professional ethics or legal requirements
- F. Education: Graduates incorporate educational strategies into their roles.

Objectives: Within the scope of their profession, SHP graduates will be able to:

- 1. Identify relevant educational content for a target audience
- 2. Plan, implement and/or evaluate an educational program appropriate for a target audience
- G. Scholarship: Graduates apply methods of scientific inquiry and disseminate findings.
 Objectives: SHP graduates will be able to:
 - 1. Propose a problem/topic and appropriate methods to investigate it

- 2. Use systematic search techniques to find and critically appraise research and other sources of evidence
- 3. Summarize and disseminate findings to appropriate audiences
- H. Problem Solving: Graduates identify, critically analyze, and solve a variety of challenges.

 Objectives: SHP graduates will be able to:
 - 1. Recognize and respond appropriately to various situations within their discipline regarding clinical, cultural, psychosocial, quality improvement and/or administrative problems
 - 2. Design and/or implement solutions using best evidence and/or practice guidelines
 - 3. Assess outcomes
- I. Information Management: Graduates effectively access, manage and use scientific, health care and/or patient/client information while respecting the ownership and privacy of sources.

Objectives: SHP graduates will be able to:

- 1. Identify and access sources of evidence/information to inform the decision-making process for scholarship or patient care
- 2. Analyze evidence/information for quality, economic, legal, and social implications
- 3. Demonstrate proficiency in information privacy regulations, e.g. HIPPA and PHI
- 4. Adapt to changing technology in their field
- J. Safety: SHP graduates create a safe practice environment for themselves and their patients.

 Objectives: Within their scope of practice, SHP graduates will be able to:
 - 1. Recognize medical, behavioral, and public health emergencies
 - 2. Demonstrate skills to create safe environments and respond to health emergencies



Administration & Faculty

Gwendolyn M. Mahon Dean	mahongm@shp.rutgers.edu 973.972.4276
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Vacant Chief Business Officer	

For a directory listing of SHP faculty, please visit the following link

shp.rutgers.edu/Faculty/faculty.html

Office of Enrollment Management & Student Success



65 Bergen Street, Room 147 Newark, NJ 07101

Phone number: (973) 972-5454 Fax number: (973) 972-7463

E-mail: shp_registrar@shp.rutgers.edu

Enrollment Services' hours of operation are as follows:

Monday - Friday 8:30 a.m. to 5:00 p.m.

Admissions Office

The Admissions Office provides applicants with valuable information and the necessary tools and resources to guide them through the process of becoming a student at SHP. Applications may be submitted well in advance of a program's admit term. However, applications will not be reviewed until the program director is ready to begin the review process.

For information on how to apply to any SHP program, visit the Admissions website at

http://shp.rutgers.edu/prospective_students/admissions/index.html

Office of the Registrar

The Office of the Registrar assists students and helps them to become familiar with SHP. It also serves as a reference for continuing students. Contact the Office of the Registrar for general information about SHP and specific information on academic policies and procedures by visiting the Registrar's website at

http://shp.rutgers.edu/current_students/registrar/index.html



Refunds & Withdrawals

For the most up-to-date information regarding withdrawal dates, please see the SHP website at:

http://shp.rutgers.edu/current_students/registrar/regist_02_reg_dates.html

Non-attendance or notification to the instructor/program director does not constitute formal withdrawal. Students wishing to officially withdraw from a course or courses must submit a Program Withdrawal and Course Withdrawal form, which can be found online at:

http://shp.rutgers.edu/current_students/registrar/documents/ProgramandCourseWithdrawalForm1.pdf

The official date of withdrawal is the date on which the completed form is filed, NOT the date of last attendance.

Please note - The Program Withdrawal and Course Withdrawal form will be forwarded to the student's program for approval, once approved and returned to Enrollment Services, the withdrawal will be processed and refund granted if applicable.

Further, if the student withdraws from ALL courses, reducing to zero credits, he/she will also need to indicate a status: Leave of Absence, Maintaining Matriculation, or Official Withdrawal from the School. This requires completing and submitting the proper form. The form may be found at the Registrar's website

http://shp.rutgers.edu/current_students/registrar/index. html

Financial Aid Information

Detailed information about financial aid resources can be found online at:

http://rbhs.rutgers.edu/studentfinancialaid/index_new_brow.htm

Tuition & Fees

Information about tuition and fee rates for the School of Health Professions can be found on the Rutgers Office of Student Accounting, Billing, and Cashiering website.

SHP students are encouraged to review the Billing and Collections information related the Rutgers Biomedical and Health Sciences.

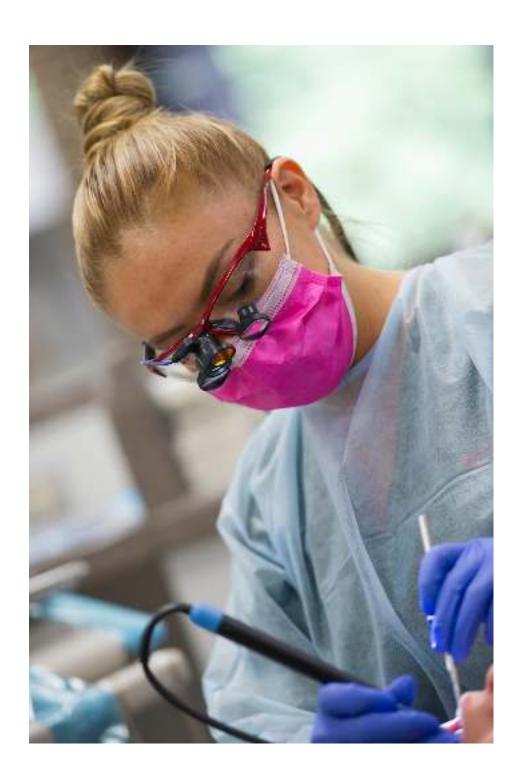
http://www.studentabc.rutgers.edu/billing-and-collections-rutgers-biomedical-and-health-sciences-rbhs



We Offer

SHP offers programs at the associate, bachelors, masters and doctoral levels and in locations in Northern, Central, and Southern New Jersey. Depending on the program of study, courses are offered in the fall, spring, and summer, with the option of an in-person, online or a hybrid format. The online course delivery method allows access 24/7 access to course content. Mode of instruction is asynchronous, although some courses offer live video conferencing that is recorded for future reference. All students regardless of program are required to have access to internet services, along with web-browsing, email, word processing and statistical analysis capabilities. The University does not provide these services, but does provide all matriculants with an e-mail address and access to its network, including the Rutgers Virtual Library with full-text research databases and the student Banner web system.

Department of Allied Dental Education



School of Health Professions **shp.rutgers.edu**

Dental Hygiene Program

Program on HOLD – Currently NOT accepting students

Degree Options

Bachelor of Science in Dental Hygiene

Dental Hygiene Profession

Scope of practice for the Dental Hygienist: A dental hygienist, under the direct supervision of a dentist, removes stains and deposits from the teeth; applies agents which make teeth more resistant to decay; plans and provides community dental health education; charts conditions for diagnosis and treatment by the dentist; exposes, processes and mounts radiographs; applies chemotherapeutic agents; provides dietary counseling and patient education; and performs a variety of direct patient care services as delegated by the dentist.

The dental hygienist must possess manual dexterity, good vision, good health, and optimal personal and oral hygiene.

Traditionally, most dental hygienists have been employed in private dental offices. However, employment opportunities for dental hygienists also include: community and school health education programs, hospital dental clinics, private industrial employee clinics, armed services, dental sales, dental manufacturing companies, and administrative, research, and teaching positions within academic institutions.

Program Description

The program consists of the SHP Core Curriculum, general education prerequisites, basic and dental sciences, interdisciplinary health science classes, collaborative procedures and clinical practice. Graduates are prepared as dental hygienists with optimum employment opportunities and career mobility.

Upon completion of the Program, graduates are eligible to take the American Dental Association (ADA) National Dental Hygiene Board and the Commission on Dental Competency Assessments (CDCA) Dental Hygiene examinations.

The Program is Ethics and Jurisprudence examination is also required for licensure in New Jersey. Accredited by the American Dental Association's (ADA) Commission on Dental Accreditation (CODA). Please note that the State Board of Dentistry of New Jersey conducts criminal background checks on all applicants for licensure. Completion of an

Academic Standing

Students must maintain a minimum of B- in all courses

Full-time and Part-time Status

The Program is offered on a full-time basis which includes two (2) summer sessions, two (2) fall terms and two (2) spring terms following completion of all general education Core and prerequisite courses as specified. Matriculation leads to the Bachelor of Science in Dental Hygiene Degree (BSDH) and eligibility for licensing board examinations.

Allied Dental Education Department

Program Director: Vaishali Singhal, DMD

E. singhava@shp.rutgers.edu

P. 908-889-2517

Primary Campus Location

Scotch Plains

Major Clinical Affiliates

Clinical sites are located throughout New Jersey.

- Rutgers-School of Dental Medicine – Newark
- VA New Jersey Health
 Care System East Orange
- Rutgers SHP Scotch Plains

Accreditation

Commission on Dental Accreditation of the American Dental Association

211 East Chicago Avenue

Chicago, IL 60601-2678

P. (312) 440-2500

Status: Last accreditation visit 2012; next site visit is 2019

For more info;

Contact SHP Admissions:

E. SHPadm@shp.rutgers.edu P. 973-972-5336

shp.rutgers.edu (Dental Hygiene
Program)

Learning Goals

The following learning goals have been established by the Dental Hygiene Program;

Graduates will:

- exhibit competency as clinicians through demonstrated performance on the Commission on Dental Competency Assessments (CDCA Dental Hygiene Examination, National Dental Hygiene Board Examination and feedback from Employer Surveys;
- assume responsibility for health promotion and disease prevention for individuals and communities through participation in multiple dental health education projects, and
- perform multiple, advanced level dental auxiliary functions as defined in the New Jersey State Dental Practice Act under the auspices of Dental Specialties II.

A passing grade of 80 is required in all courses. Students must maintain a minimum 2.0 GPA each semester to remain in the program. Graduates obtain the RDH license to practice in New Jersey through application to the State Board of Dentistry. Students demonstrate professional development through membership in the American Dental Hygienists Association (ADHA) and participation in related professional activities on local, state and national levels.

Learning Outcomes

- Perform expanded duties, incorporate principles and manipulate properties of dental materials to laboratory proficiency as outlined in the New Jersey Dental Auxiliary Practice Act.
- 2. Provide dental hygiene care which includes:
 - a) comprehensive collection of patient data to identify the physical and oral health status;
 - b) analysis of assessment findings and use of critical thinking to address the patient's dental hygiene treatment needs.
- 3. Access (ASSESS?) and perform a self-analysis of exposed digital radiographs using EAGLESOFT to formulate an appropriate treatment plan based upon findings.
- 4. Research all medications taken by a patient. Maintain a drug diary including dental implications for treatment of all patients.
- 5. Describe how to evaluate each component of a comprehensive periodontal assessment.
- 6. Prepare treatment plans for a patient with plaque induced gingivitis and slight chronic periodontitis.

Curriculum

Please refer to the database for program requirements and course descriptions via the SHP website: http://coursecatalog.shp.rutgers.edu

Admission to Program

The following college level general education pre-requisite courses must be completed with a minimum grade point average (GPA) of 2.85 or above. Students are required to attend classes on both the Newark and Scotch Plains campuses as indicated by the assigned schedules each term. Students are also required to complete all SHP Core requirements prior to admission.

Prerequisite Courses

Anatomy and Physiology I	4
Anatomy and Physiology II	4
English Composition I	3
College Chemistry I	4
General Psychology I	3
Microbiology	4

Candidates for admission are ranked according to GPA in the six (6) pre-requisite courses.

The following courses must also be completed with a minimum 2.0 GPA prior to start of dental courses in January:

- Effective Speech
- English Composition II
- Math, college level Algebra (please refer to each individual school of admission for math required)
- Intro to Sociology

PLEASE NOTE: All SHP CORE COURSES and GENERAL EDUCATION COURSE REQUIREMENTS must be completed PRIOR to starting the professional phase of the Program.

A 2.85 cumulative GPA on all prerequisite courses for admissions.

For more information about admissions, please contact the Office of Admissions: SHPadm@shp.rutgers.edu or 973-972-5336 or 973-972-1844.

Department of Clinical Laboratory Sciences



School of Health Professions **shp.rutgers.edu**

Medical Laboratory Science Program

Degree Options

- Bachelor of Science (in Clinical Laboratory Science)
- Second Bachelor of Science (in Clinical Laboratory Science)
- Certificate

Medical Laboratory Science Profession

Medical laboratory scientists use their biomedical expertise to:

- provide information to physicians to help diagnose cancer, diabetes, kidney disease, leukemia, drug overdoses, and many other conditions;
- identify pathogens, determine their susceptibility to various drugs, and detect their drug-resistance mutations;
- prepare stem cells, red blood cells and platelets for safe transfusion;
- use microscopy to identify abnormal cells and infectious agents in medical specimens;
- analyze DNA for mutations associated with genetic diseases, and
- monitor drug therapy to ensure patient safety.

Medical laboratory scientists have career opportunities in hospitals, physician offices, veterinary, and national and regional testing laboratories; biotechnology, pharmaceutical, chemical and cosmetic industries; local, state or federal health agencies; research and teaching institutions; advanced degrees in medicine and dentistry; and masters and doctoral degrees in clinical laboratory science and biomedical sciences.

Program Description

The Medical Laboratory Science program is the only University-based program in New Jersey offered by Rutgers School of Health Professions (SHP). The curriculum consists of 45 credits of professional coursework and is 15 months (4 semesters) in duration. A minimum of 88 to 90 credits of pre-professional basic science and general education course requirements are completed before entering the program. The program is primarily designed for students seeking their first baccalaureate degree. However, other options are available to individuals who already possess a baccalaureate degree or equivalent.

There are three options for students interested in applying to the program:

Option 1: Joint Bachelor of Science in Clinical Laboratory Sciences offered by Rutgers SHP and 13 collaborating colleges and universities for students seeking a first baccalaureate degree (see list of Academic Affiliates to the right).

Clinical Laboratory Sciences Department

Program Director: Deborah Josko, Ph.D. E: daj100@shp.rutgers.edu

P: 908-889-2422

Primary Campus Location

Newark

Academic Affiliates

Academic institutions with partnership programs at the Rutgers School of Health Professions.

- Bloomfield College
- Caldwell University
- College of St. Elizabeth
- Fairleigh Dickinson University
- Felician University
- Georgian Court University
- Kean University
- Monmouth University
- New Jersey City University
- New Jersey Institute of Technology
- Ramapo College
- Rutgers Newark College of Arts and Sciences
- Saint Peter's University

Major Clinical Affiliates

Clinical sites are located throughout New Jersey and New York.

- Atlantic Health Systems
- Bayshore Hospital
- CentraState Medical Center
- Englewood Hospital & Medical Center
- Hackensack University Medical Center
- Holy Name Medical Center
- Liberty Health Systems

Option 2: Bachelor of Science in Clinical Laboratory Sciences offered solely by Rutgers SHP for students who already have a baccalaureate degree in biology or a related science from an accredited U.S. or international college or university.

Option 3: Certificate in Medical Laboratory Science for students with an international degree from a non-accredited college or university equivalent to a baccalaureate degree in the U.S.

Classes begin annually in the summer semester. Class size varies with approximately 40 to 50 students enrolled per year. The curriculum consists of classroom and on-line lectures/seminars and on-campus student laboratory experiences. These sessions provide the foundation for subsequent supervised hands-on clinical practice in off-campus clinical laboratories of affiliated hospitals. Additional experiences are provided in molecular diagnostics, data analysis and statistics, research, laboratory management and educational theory. Program graduates are eligible for the national certifying examination in the Medical Laboratory Scientist category given by the American Society for Clinical Pathology MLS (ASCP).

Students must provide their own transportation to off-campus affiliated clinical sites. Regular attendance and participation in scheduled activities is expected.

Academic Standing

Students are considered in good academic standing if they achieve and maintain a minimum GPA of 2.25 after each semester.

Full-time and Part-time Status

Students may attend classes on a full-time or part-time basis. Part time students must complete the Program within 8 semesters of initial enrollment, including summer semesters.

Learning Goals

The mission of the Medical Laboratory Science program is to educate students to function competently, creatively, responsibly, and collaboratively in a dynamic health care environment.

The educational goals of the Medical Laboratory Science program are to:

- prepare competent Medical Laboratory Scientists to function in the clinical laboratory science field at the baccalaureate level;
- 2. provide the student with a broad-base background to serve as a foundation for future growth and development, and
- 3. prepare graduates to adapt to a changing health care environment.

The curriculum prepares graduates for entry-level practice in scientific/technical areas, supervision/management, education, and research. It is also designed to socialize the student to the attitudes and values of the profession, provide an overview of the legal, ethical, economic, political, and social aspects of the profession and the health care delivery system in general, and to instill a commitment to life-long learning. Finally, the curriculum is designed to develop generic skills in effective communication, problem solving, and self-directed learning.

- Meadowlands Hospital Medical Center
- Memorial Hospital for Cancer and Allied Diseases (Memorial Sloan Kettering Cancer Center NY)
- Newark Beth Israel
 Medical Center
- New York
 Presbyterian Medical
 Center
- Robert Wood Johnson
 Somerset Medical Center
- Robert Wood Johnson University Hospital
- Saint Barnabas
 Medical Center
- Saint Joseph's Regional Medical Center
- Saint Mary's General Hospital
- Saint Michael's Medical Center
- Trinitas Hospital
- University Hospital Newark
- VA New Jersey Health Care System

Accreditation Status

National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) 5600 N. River Road Suite 720 Rosemont, IL 60018-5119 P. 773-714-8880 W. www.naacls.org

Status: Reaccredited in October 2013 for seven years

For more info

For additional information about the Medical Laboratory Science Program, contact SHP Admissions:

Admissions E. SHPadm@shp.rutgers.edu P. 973-972-5336

Learning Outcomes

These learning outcomes meet the Institute of Medicine's core competencies for health care professionals, namely, the ability to provide patient-centered care, work in interdisciplinary teams, employ evidence-based practice, apply quality improvement, and utilize informatics. (Institute of Medicine, *Health Professions Education: A Bridge to Quality*, Washington, DC: National Academies Press, 2003)

The graduate of the Medical Laboratory Science program will be able to:

- perform the analysis of the full range of clinical laboratory tests to include clinical chemistry, hematology, hemostasis, immunology; immunohematology, transfusion medicine, clinical microbiology, urine and body fluid analysis, laboratory operations, and emerging diagnostics.
- interpret, correlate, and integrate clinical laboratory data across multiple disciplines of clinical laboratory science to provide test information that is evidence-based for use in diagnosis, prognosis, disease monitoring, and therapeutic decision-making;
- apply principles and practices of quality assurance/improvement, method evaluation, management, regulatory compliance, critical thinking and problem solving, evidence-based practice, and research to laboratory services to assure accuracy and validity of laboratory information, reduce diagnostic errors, improve efficiency and timeliness, and reduce costs;
- 4. use informatics to evaluate clinical laboratory data, support evidence-based practice, and perform quality improvement to enhance the quality of laboratory processes;
- apply educational terminology and methodologies to appropriately train and educate users and providers of laboratory services;
- 6. demonstrate proficiency in both oral and written communication, using both scholarly and technical formats, to work effectively in interprofessional teams;
- demonstrate appropriate professional relationships with diverse groups of patients, peers, other health care providers, faculty, and the public;
- 8. comply with professional codes of ethics and display ethical behavior in education, practice, and professional and scholarly activities, and
- participate in professional organizations and the clinical laboratory community at large to promote quality laboratory services that are safe, effective, efficient, equitable, timely, and patient-centered, and to advance the profession.

Additional Program Information

A part-time (17-18 credit) Discipline Specific Program in one of the major areas of Medical Laboratory Science is offered.

Additional programmatic information is available online at http://shp.rutgers.edu/dept/CLS/MLS/index.html

Curriculum

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Admission to Program

Option 1: Joint Bachelor of Science in Clinical Laboratory Sciences (BS in CLS). The pre-professional curriculum consists of a minimum of 88 to 90 credits (generally six semesters) including general education and required basic science

and math courses taken at one of the 13 academic institutions collaborating with Rutgers SHP. Pre-professional course requirements must be completed with a grade of C or better before the student begins the professional component at Rutgers SHP. Required pre-professional basic science/math courses and credits include:

Human Anatomy and Physiology 4-8 credits Microbiology 4 credits Immunology 3-4 credits Cell Biology 3-4 credits **General Chemistry** 8 credits **Organic Chemistry** 4 credits Biochemistry with lab 4 credits Precalculus 3-4 credits Statistics 3 credits

In addition, coursework in Genetics and Molecular Biology is recommended.

Applicants for options 2 and 3 below will be considered on a space available basis with priority given to applicants seeking their first baccalaureate degree through the Joint BS in CLS program.

Option 2: Second Bachelor of Science in Clinical Laboratory Sciences (BS in CLS).

Applicants must possess a baccalaureate degree from an accredited U.S. or international college or university with a minimum of 76 to 82 credits of eligible transfer courses including completion of the basic science and math course requirements listed in Option 1 with a grade of C or better and 30 credits of general education.

Option 3: Certificate in Medical Laboratory Science. Applicants with a degree from a non-accredited international college or university who completed the basic science and math course requirements listed in Option 1 with a grade of C or better will be considered for a Certificate.

Applicants should complete prerequisite basic science and math course requirements within 7 years of enrollment.

Applicants with an international degree in Options 2 and 3 will only be considered if their degree is equivalent to a U.S. baccalaureate as determined by a Rutgers SHP approved international transcript evaluation agency and they achieve a minimum score of 79/80 on the Internet-based Test of English as a Foreign Language (TOEFL) exam.

GPA minimum requirement/credentialing requirement

Achievement of an overall grade point average of 2.85 (4.0=A) and grades of C or better in all required science and math courses.

For more information about admissions, please contact the Office of Admissions: SHPadm@shp.rutgers.edu or 973-972-5336.

Cytopathology Program

Degree Options

 Master of Science (in Clinical Laboratory Science -Cytopathology

Advance Practice Cytotechnology Profession

Advanced practice cytotechnologists perform diagnostic cytology by microscopically examining cells removed from all body sites to determine if a malignancy, precancerous lesion, or benign disease, such as an infection or inflammatory condition, is present. They assess acceptability of specimens collected at bedside by fine needle aspiration, use image analysis to screen specimens, and digital pathology to document their findings. They also use high-complexity technologies for detection and characterization of cancers and pathogens by examining DNA, RNA, and other cellular components using immunochemistry, flow cytometry, digital image analysis, fluorescence-in-situ hybridization, polymerase chain reaction, and other molecular methods. They demonstrate attention to detail, decision-making ability, and excellent communication skills. They apply principles of evidence-based practice, engage in research, scholarship, and continuous learning, and uphold the highest levels of ethical and professional values.

Advanced practice cytotechnologists are integral in providing anatomic pathology services; they work closely with pathologists, other laboratory professionals, and clinicians in hospital and reference laboratories, cancer centers, as well as in biopharma corporations, and research and academic institutions.

Program Description

The MS in CLS Cytopathology Track is the only accredited cytotechnology educational program in New Jersey. The curriculum consists of 60 credits taken over 5 semesters including 37 credits of Cytopathology core, 6 credits of Cytopathology electives, 12 credits of the MS-CLS core, and 5 credits of graduate project. Lectures and seminars are conducted on campus and online and student laboratory sessions are conducted on campus. Supervised clinical practice is provided at affiliated clinical sites in hospitals and reference laboratories.

There are three options for students interested in applying to the program:

- Entry-level professional for individuals with a BS degree in biology or related science and completion of the required undergraduate prerequisite science courses.
- Post-professional for practicing cytotechnologists with a BS degree, certification as a Cytotechnologist from the American Society for Clinical Pathology, and completion of the required undergraduate prerequisite science courses.
- 3+2 BS to MS program to be developed with Rutgers.

Classes begin annually in the Fall semester. Regular attendance and participation in scheduled campus and online activities is expected. Students must provide their own transportation to off-campus affiliated clinical sites.

Clinical Laboratory Sciences Department

Program Director: Cecilia B. Vallejo, M.D.

E. vallejcb@shp.rutgers.edu P. 908-889-2424/2425

Primary Campus Location

Newark

Major Clinical Affiliates

Major Clinical Affiliates Clinical sites are located throughout New Jersey.

- Community Medical Center
- Jersey Shore Medical Center
- AHS/ Morristown Medical Center
- Miraca Life Sciences
- Newark Beth Israel Medical Center
- Quest Diagnostics
- Robert Wood Johnson University Hospital
- Somerset Medical Center
- St. Barnabas Medical Center
- St. Clare's Hospital
- St. Joseph's Medical Center
- St. Michaels' Medical Center
- The Valley Hospital
- University Hospital Newark

Accreditation

The Commission on Accreditation of Allied Health Education Programs (CAAHEP) and the Cytotechnology Programs Review Committee of the American Society of Cytopathology 400 West 9th Street, Suite 201 Wilmington, DE 19801 P. (302) 429-8802

Contact: Debby McIntyre, CPRC Coordinator

Status: Accredited; reaccreditation process will begin in October 2017 Program graduates are eligible for certification as a Cytotechnologist (CT) and in Molecular Biology (MB) by the American Society for Clinical Pathology (ASCP).

Academic Standing

- Students must maintain a B average (GPA 3.0)
- Students are expected to continually maintain matriculation while enrolled in the program.

Full-time and Part-time Status

A part-time option is available only for certified and practicing cytotechnologists enrolled in the post-professional option; they must complete the program within 5 years (10 semesters) of enrollment. All other students must attend full-time.

Learning Goals

The goals of the MS-CLS Cytopathology Track are to prepare competent advanced practice cytotechnologists who will function in traditional and expanded roles in cytology and the health care system; to provide students with a broad-based background to serve as a foundation for future growth and development; and to prepare graduates to adapt to a changing health care environment. The curriculum is designed to prepare graduates for entry-level and advanced practice in scientific/technical areas, supervision/management, education, and research. It is also designed to socialize the student to the attitudes and values of the profession, to provide an overview of the legal, ethical, economic, political, and social aspects of the professions and health care delivery system in general, and to instill a commitment to life-long learning. The curriculum is also designed to develop generic skills in effective communication, problem solving, and self-directed learning.

Learning Outcomes

These learning outcomes meet the Institute of Medicine's core competencies for health care professionals, namely, the ability to provide patient-centered care, work in interdisciplinary teams, employ evidence-based practice, apply quality improvement, and utilize informatics. (Institute of Medicine. *Health Professions Education: A Bridge to Quality*. Washington, DC: National Academies Press, 2003)

The graduate of the Rutgers MS CLS-Cytopathology Track will be able to:

- Perform diagnostic cytology on gynecologic, non-gynecologic, and fine needle aspiration specimens to identify and determine specimen adequacy, cellular constituents within normal limits, inflammatory, premalignant, and malignant cellular changes, and effects of therapy.
- Use Rapid Onsite Evaluation (ROSE) to assess acceptability of specimens collected by fine needle aspiration, perform locatorguided screening for gynecologic samples, and use digital pathology to document findings.
- Perform high-complexity methods for detection and characterization
 of cancers and pathogens by examining DNA, RNA, and other cellular
 components using immunochemistry, flow cytometry, digital image
 analysis, fluorescence-in-situ hybridization, polymerase chain
 reaction, other molecular methods, and emerging diagnostics.

For more info

For additional information about the Cytotechnology Program, contact SHP Admissions:

Admissions

E. SHPadm@shp.rutgers.edu

P. 973-972-5336

- 4. Apply principles and practices of quality assurance/improvement, method evaluation, management, regulatory compliance, critical thinking and problem solving to cytology laboratory services to reduce diagnostic errors, improve efficiency and timeliness, and decrease costs
- Critically review, appraise, and synthesize the cytology and health sciences literature.
- Identify and systematically investigate research questions to promote evidence-based cytology practice.
- 7. Use a variety of information technologies to address both theoretical and practical problems, enhance communication, and disseminate knowledge to applicable audiences and interest groups.
- Demonstrate proficiency in both oral and written communication, using both scholarly and technical formats, to work effectively in interprofessional teams.
- 9. Participate in cytology and other healthcare professional organizations and the cytology community-at-large through patient advocacy, volunteerism, education, and research.
- 10. Demonstrate appropriate professional relationships with diverse groups of patients, peers, other health care professionals, faculty, and the public.
- 11. Comply with professional codes of ethics and display ethical behavior in practice, education, professional and scholarly activities.

Additional Program Information

Additional programmatic information is available online http://shp.rutgers.edu/dept/CLS/cyto/index.html

Curriculum

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Admission to Program

Application Dates:

March 1 for Fall term (all options)
September 1 for Spring term (post-professional option only)

Application, fee, and all supportive documents must be submitted by these dates.

Requirements:

- Baccalaureate degree from a regionally accredited
 U.S. college or university*
- Completion of the following prerequisite courses with a grade of B or better (generally within 7 to 10 years of enrollment):
 - o Anatomy and Physiology 8 cr
 - o Cell Biology 3 cr
 - Microbiology 4 cr
 - o Immunology 3 cr
 - Histology 3 cr
 - General Chemistry 8 cr

- o Organic Chemistry 3-4 cr
- o Biochemistry with lab 4 cr
- o Precalculus/Calculus 3 cr
- Statistics 3 cr
- Genetics and Molecular Biology are recommended
- Overall minimum GPA of 3.0
- Cumulative GPA of 3.0 for science courses
- Official transcripts of undergraduate and graduate coursework from all institutions attended.
- Curriculum vitae/resume
- Personal essay addressing career goals and reasons for pursuing the MS-CLS Cytopathology Track.
- Two (2) letters of recommendation from supervisor, lab manager, pathologist, and/or college professor who have the knowledge to evaluate the applicant's academic and professional performance.
- Personal interview
- For post-professional option only:
 - Professional certification as a Cytotechnologist by the American Society for Clinical Pathology, CT(ASCP)
 - Professional experience as a cytotechnologist in GYN, Non-GYN, and FNA within the last 3 years. Applicants who do not meet this requirement will be evaluated on an individual basis by portfolio assessment.
- *Applicants who have earned a degree from a non-U.S. accredited institution must comply with the applicable University and School policies and submit:
 - Transcript evaluation by World Education Services (WES)
 - Only WES is accepted for the MS-CLS
 - Course and grade evaluation is required
 - Official transcripts sent from the non-US institution directly to Rutgers-School of Health Professions
 - TOEFL exam scores:
 - o Taken within the last 2 years
 - Minimum of 79/80 on the Internet-based exam is required

Online application:

http://shp.rutgers.edu/prospective_students/admissions/index.html

The Admissions Selection Process

Selection of applicants for admissions is a competitive process that is the responsibility of the program faculty admissions committee. The University places no restrictions on prospective applicants because of their color, creed, race, sex, age, marital status, or national origin. The University recognizes the value of diversity and is committed to providing appropriate support to its student body.

GPA minimum requirement/credentialing requirement:

- Overall minimum GPA of 3.0
- Cumulative GPA for science courses of 3.0
- For post-professional option only: professional certification as a Cytotechnologist by the American Society for Clinical Pathology, CT(ASCP)

For more information about admissions, please contact the Office of Admissions:

SHPadm@shp.rutgers.edu or 973-972-5336.



Medical Laboratory Science Program

Degree Option

 Master of Science in Clinical Laboratory Science – Medical Science Laboratory

Medical Laboratory Science Profession

Medical laboratory science professionals are vital members of the interprofessional health care team. They evaluate/interpret results, integrate data, problem solve, and monitor test quality to provide accurate laboratory test information essential for patient diagnosis and treatment. They consult with members of the health care team regarding test utilization and test results critical to the medical decision process. They promote safe, effective, efficient, equitable, timely, and patient-centered clinical laboratory services. Advanced degrees in medical laboratory science expand knowledge and skills and prepare medical laboratory science professionals for career advancement in laboratory management/ administration, consultation, new test development, and research. Medical laboratory scientists are an integral part of clinical pathology. Employment opportunities include medical center and hospital labs, reference labs, biomedical corporations, research, and academic institutions.

Program Description- MSCLS-MLS Track

The program is 33 credits, offered online, and designed for certified (BOC-ASCP) medical laboratory professionals seeking to advance their knowledge, skills, and develop new proficiencies needed to meet the challenges of a changing profession and healthcare system. The program prepares students for managerial and leadership roles in clinical laboratory services and the healthcare industry by expanding skills in:

- Advanced clinical laboratory science
- Management/Leadership/ Strategic planning/Finance
- Quality assurance/Quality improvement
- Informatics
- Health professions education
- Research

Program Structure

- 33 credits beyond the baccalaureate degree
- All courses are web-based (online)
- Full- and part-time options
- Graduate project self-directed, faculty-mentored project designed to address a practical problem or issue in clinical laboratory science and/or health care delivery.

While learning valuable new advanced clinical laboratory science skills, students have the opportunity to interact on a one-to-one basis with faculty and colleagues from all over the country and internationally through various online asynchronous and synchronous delivery modes/technologies.

Distinguishing features Include:

- Flexibility of anytime, anywhere education
- Convenience of entirely online course offerings
- Wealth of faculty expertise in clinical laboratory sciences

Clinical Laboratory Sciences Department

Program Director: Nadine Fydryszewski, Ph.D. E. fydrysna@shp.rutgers.edu P. 973-972-310

Primary Campus Location

ONLINE: web-based program

For more info

For additional information about the Master's degree in the Clinical Laboratory Sciences Program, contact SHP Admissions:

Admissions

E. SHPadm@shp.rutgers.edu

P. 973-972-5336

- National and international guest lecturers who are experts in the field
- Growing network of successful alumni
- Career ladder and advanced education opportunities in the doctoral program (DCLS)
- Highly-regarded University reputation

Academic Standing

Academic:

- Student must maintain a B average (GPA 3.0).
- Students are expected to continually maintain matriculation while enrolled in the program.

Full-time and Part-time Status

Full-time and part-time options are available.

- Full-time: enroll for a minimum of 9 credits (3 courses) per semester.
- Part-time: enroll for 3-6 credits (1-2 courses) per semester

The majority of students enroll part-time and typically complete the program in 3 to 5 years. Students must complete the program within 6 years (12 semesters) of enrollment.

Learning Goals

The goal of the program is to advance knowledge through an in-depth study of the disciplines of clinical laboratory science related to improvement of quality and delivery of laboratory services critical to clinician decision-making and patient care. This includes advanced knowledge in clinical chemistry, hematology/hemostasis, clinical microbiology, infectious disease, immunology, transplantation, transfusion services, emerging trends in clinical laboratory science, education, health policy, models to improve clinical laboratory services, critical analysis, and development of skills in evidence-based practice and research.

Learning Outcomes

These learning outcomes meet the Institute of Medicine's core competencies for health care professionals, namely, the ability to provide patient-centered care, work in interdisciplinary teams, employ evidence-based practice, apply quality improvement, and utilize informatics. (Institute of Medicine. *Health Professions Education: A Bridge to Quality*. Washington, DC: National Academies Press, 2003).

The graduate of the Rutgers SHP MS CLS-MLS Track will be able to:

- 1. Critically review, appraise, and synthesize the health sciences literature.
- 2. Identify and systematically investigate research questions pertinent to clinical laboratory practice.
- Synthesize new concepts, models and theories through the appropriate application of empirical knowledge and the scientific method to help resolve clinical laboratory and health sciences issues or problems.
- Apply the advanced knowledge and technical skills needed to serve as active contributors and/or leaders in the clinical laboratory science professions.
- 5. Apply current knowledge to evaluate or design more effective ways to deliver clinical laboratory and health-related services.

- Use a variety of information technologies to address both theoretical and practical problems, enhance communication, and disseminate knowledge to applicable audiences and interest groups.
- 7. Demonstrate proficiency in both oral and written communication, using both scholarly and technical formats.
- 8. Work collaboratively with others to advance the scientific bases of knowledge in clinical laboratory science via ongoing scholarship.
- 9. Integrate basic principles of ethics and cultural sensitivity within all interpersonal and professional activities.

Additional Program Information

Additional program information is available on the Dept. of CLS website at: http://shp.rutgers.edu/dept/CLS/MSCLS/index.html

Curriculum

See program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Campus Location

The MSCLS-MLS Track is fully web-based, with all courses offered **ONLINE**. Oncampus sessions are not required.

Admission to Program

Application Dates:

March 1 for Fall term September 1 for Spring Term

Application, fee, and ALL supportive documents must be submitted by these dates.

Requirements:

- Professional certification as a medical laboratory professional:
 MLS(ASCP) or MLT(ASCP) with BS degree
- Baccalaureate degree from a regionally accredited US college or university, preferably in CLS or a related science field. *
- Overall minimum GPA of 3.0
- Cumulative GPA of 3.0 for science courses
- Official transcripts of undergraduate and graduate coursework from ALL institutions attended.
- Curriculum vitae/resume
- Personal essay addressing career goals and reasons for pursuing the MS-CLS
- Proficiency in written communication to successfully complete frequent writing assignments, exams, and papers required in online courses
- Two (2) letters of recommendation from supervisor, lab manager, pathologist and/or college professor who have the knowledge to evaluate the applicant's academic and professional performance.
- Personal interview (via conference call)

- * Applicants who have earned a degree from a non-US accredited institution must comply with the applicable University and School guidelines and submit:
 - Transcript evaluation by World Education Services (WES).
 - Only WES is accepted for the MS-CLS
 - Course and grade evaluation is required
 - Official transcripts sent from the non-US institution directly to the Rutgers School of Health Professions
 - TOEFL Exam scores
 - o Taken within the last 2 years
 - o Minimum of 79/80 on Internet-based test is required

Online application: http://shp.rutgers.edu/prospective_students/admissions/index.html

The Admissions Selection Process

Selection of applicants for admissions is a competitive process that is the responsibility of the program faculty admissions committee. The University places no restrictions on prospective applicants because of their color, creed, race, sex, age, marital status, or national origin. The University recognizes the value of diversity and is committed to providing appropriate support to its student body.

GPA minimum requirement/credentialing requirement

- Overall minimum GPA of 3.0
- Cumulative GPA for science courses of 3.0
- Professional certification as a medical laboratory professional:
 MLS(ASCP) or MLT(ASCP) with BS degree
- MLS-ASCPi (ASCP international credential) will be considered on an individual basis.

For more information about admissions, please contact the Office of Admissions: **SHPadm@shp.rutgers.edu** or 973-972-5336.

Graduate Certificate in Clinical Laboratory Science

Program Description

Medical laboratory science professionals seeking advanced education but not necessarily a graduate degree may choose to enroll in the Graduate Certificate in Clinical Laboratory Science program.

Graduate Certificate in CLS

The Graduate Certificate in Clinical Laboratory Science is an online 12-credit post-professional course of study for medical laboratory professionals who hold a baccalaureate degree and are certified (BOC-ASCP). It is designed for practicing professionals who want to advance their knowledge and skills in the clinical laboratory sciences and develop new proficiencies needed to meet the challenges of a changing profession and health care system. If students are not ready to commit to the master degree program, but wish to advance their knowledge in clinical laboratory science, the Graduate Certificate in Clinical Laboratory Science is an excellent option.

Advantages of completing the Graduate Certificate in CLS

 Short course of study provides an excellent way to gain additional knowledge in CLS.

- Determines if online courses are an effective mode of learning.
- Credits completed in the Graduate Certificate in CLS may be applied to the Rutgers MS-CLS-MLS Track or DCLS programs

Program Structure

- 12 credits 4 courses
- All courses are web-based (online)

While learning valuable new advanced clinical laboratory science skills, students have the opportunity to interact on a one-to-one basis with faculty and colleagues from all over the country and internationally through various online asynchronous and synchronous delivery modes/technologies.

Distinguishing Features Include:

- Flexibility of anytime, anywhere education.
- Convenience of entirely on-line course offerings.
- Wealth of faculty expertise in clinical laboratory science
- National and international guest lecturers who are experts in the field.
- Career ladder and advanced education opportunities in the master's program (MS-CLS MLS Track) and doctoral program (DCLS).
- Highly-regarded University reputation.

Students accepted into the certificate program enroll in a non-matriculated status. Completion of the Graduate Certificate in CLS does not guarantee acceptance into other degree programs offered by the Department of Clinical Laboratory Sciences or other programs offered by Rutgers.

Academic Standing

Student must maintain a B average (GPA 3.0).

Full-time and Part-time Status

Full-time and part-time options are available.

- Full-time: enroll for a minimum of 9 credits (3 courses) per semester.
- Part-time: enroll for 3-6 credits (1-2 courses) per semester

Students must complete the program within 3 years (6 semesters) of enrollment.

Admission Requirements

Application Dates:

- March 1 for Fall term
- September 1 for Spring Term

Application, fee, and ALL supportive documents must be submitted by these dates.

Requirements:

• Current professional certification as medical laboratory professional: MLS (ASCP) or MLT(ASCP) with a BS degree.

- Baccalaureate degree from a regionally accredited U.S. college or university, preferably in CLS or a related science field. *
- Overall minimum GPA of 3.0
- Cumulative GPA of 3.0 for science courses
- Official transcripts of undergraduate and graduate coursework from ALL institutions attended
- Curriculum vitae/resume
- Personal essay addressing career goals and reasons for pursuing the Graduate Certificate in CLS
- Proficiency in written communication to successfully complete frequent writing assignments, exams, and papers required in online courses

- Transcript evaluation by World Education Services (WES).
 - Only WES is accepted for the Graduate Certificate in CLS.
 - Course and grade evaluation is required
- Official transcripts sent from the non-US institution directly to the Rutgers School of Health Professions
- TOEFL Exam scores
 - Taken within the last 2 years
 - o Minimum of 79/80 on Internet-based test is required

How To Apply

Complete the "Certificate of Study Application Form" including all applicable fees. Submit the following:

- Certificate Application Form and fee
- Official transcripts of undergraduate and graduate coursework from ALL institutions attended
- A copy of current professional certification as a medical laboratory professional (MLS-ASCP or MLT-ASCP with BS degree)
- Current resume or curriculum vitae (CV)
- Personal essay addressing career goals and reasons for pursuing the Graduate Certificate in CLS

Certificate Application Form

For the form and additional details review the following website:

http://shp.rutgers.edu/dept/cace/

For additional information refer to the website: http://shp.rutgers.edu/dept/CLS/GCLS/index.html

Non-Matriculated Status

Practitioners who are not ready to make the commitment to a graduate program, or who wish to advance knowledge and skills, may take up to 12 credits on a non-matriculated basis. Registration information as a non-matriculated student can be found on the website at: http://shp.rutgers.edu/dept/cace/

Additional Information

For additional information about the application process, contact the Office of Admissions at (973) 972-5336 or via e-mail.

^{*}Applicants who have earned a degree from a non-U.S. accredited institution must comply with the applicable University and School guidelines and submit:

Clinical Laboratory Science Program

Degree Option

• Doctorate in Clinical Laboratory Science

Program Description

The **Doctorate in Clinical Laboratory Science** (DCLS) is an advanced practice degree designed for the certified medical laboratory scientist (MLS-ASCP^{CM}) with an interest in advancing theoretical and clinical knowledge, practice, and research. Rutgers SHP is the first in the nation to offer this unique opportunity, taught by faculty with exceptional clinical expertise and world-wide recognition. The DCLS focuses on advanced clinical practice by preparing medical laboratory scientists to assume expanded roles as integral members of the interprofessional healthcare team in a variety of practice settings.

The DCLS consists of 80 credits beyond the baccalaureate degree. The theoretical (pre-residency) courses are all web-based (**ONLINE**). Following completion of these courses, a one year, full time clinical doctorate residency/practice component is required, which includes a research project. Additionally, the clinical residency offers an outstanding opportunity for interprofessional collaboration.

Graduates of the DCLS program are prepared to be effective leaders in many facets of the clinical laboratory science profession, particularly in advanced practice roles. The advanced practice clinical laboratory practitioner can increase efficiency, facilitate patient management outcomes, and improve timely access to accurate and appropriate laboratory information by participating directly in patient care decisions, monitoring laboratory utilization, and conducting research on the diagnostic process. DCLS practitioners contribute to the interprofessional health care team and quality healthcare delivery as:

- Experts in clinical laboratory testing.
- Partners with clinical pathologists involved in clinical rounding and patient care.
- Consultants with clinicians, other healthcare providers, and patients regarding laboratory test selection and test results interpretation.
- Participants in interprofessional healthcare team conferences and clinical rounds.
- Researchers conducting outcomes studies that provide evidence-based data that benefit patient care, patient safety, and promote quality and cost effective utilization of clinical laboratory services.
- Advocates for patients by contributing to the reduction of medical errors.

Academic Standing

Academic:

- Student must maintain a B average (GPA 3.0).
- Students are expected to continually maintain matriculation while enrolled in the program.

Clinical Laboratory Sciences Department

Program Director: Nadine Fydryszewski, Ph.D. E. fydrysna@shp.rutgers.edu

P. 973-972-3107

Primary Campus Location

- Pre-residency courses online
- One-year, full time residency at affiliated clinical site

For more info

For additional information about the Doctorate degree in the Clinical Laboratory Science Program, contact SHP Admissions:

Admissions

E. SHPadm@shp.rutgers.edu

P. 973-972-5336

Full-time and Part-time Status

A part time option is available for the **ONLINE** pre-residency portion of the program. The residency portion of the program is a one year, full time clinical residency at an affiliated institution and includes completion of a research project.

- Full-time: enroll for a minimum of 9 credits (3 courses) per semester.
- Part-time: enroll for 3-6 credits (1-2 courses) per semester

Students must complete the program within 10 years of enrollment.

Curriculum

The DCLS program offers an innovative educational experience utilizing a blended pedagogy, distance education, and clinical practice. The curriculum includes interdisciplinary theoretical courses and the clinical residency enhances the student's experiences to interact with other healthcare professionals.

- 80 credits beyond the baccalaureate degree
- Completion of a one year, full time clinical practice/residency component
- Research project conducted during the residency year.

The DCLS curriculum focuses on four core areas: Advanced Clinical Laboratory Science, Professional, Research, and Clinical Practice/Residency. All preresidency courses are offered **ONLINE** and during the residency year some courses are web-enhanced.

See program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Learning Goals

The goal of the DCLS program is to prepare graduates for advanced practice in clinical laboratory science, instill the importance of the interprofessional team approach to health care and the role of the DCLS on that team, and increase skills in evidence-based practice and research methodologies to conduct translational research in clinical laboratory science.

Learning Outcomes

The DCLS program promotes the general outcomes established for clinical doctorate graduates of Rutgers School of Health Professions, and implements the competencies developed by the American Society for Clinical Laboratory Science (ASCLS) Professional Doctorate Task Force, and the Graduate Task Force of the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

These learning outcomes meet the Institute of Medicine's core competencies for health care professionals, namely, the ability to provide patient-centered care, work in interdisciplinary teams, employ evidence-based practice, apply quality improvement, and utilize informatics. (Institute of Medicine. *Health Professions Education: A Bridge to Quality*. Washington, DC, National Academies Press, 2003).

The graduate of the DCLS program will be able to:

- Provide patient-centered, customized consultation services on appropriate test selection and interpretation for the purpose of clinical decision making among the interprofessional health care team and for the patient.
- Monitor laboratory data, test utilization, and diagnostic testing
 processes in individual patients and populations using informatics and
 analytics to reduce diagnostic errors, improve efficiency, and reduce
 costs.
- Conduct research and apply evidence to demonstrate clinical utility of laboratory tests and algorithms and to improve the quality, efficiency, and safety of the overall diagnostic testing process.
- Educate health care providers, patients, their families, and the general
 public about the indications, best evidence, patient preparation, and
 interpretation of clinical laboratory testing, including home self-testing.
- 5. Direct laboratory operations to comply with all state and federal laws and regulations, as well as guidelines determined by professional boards of licensure, and certification/accreditation agencies.
- 6. Participate in public and private health policy decision making at all organization and government levels using best evidence.

Additional Program Information

Additional information is available on-line. http://shp.rutgers.edu/dept/CLS/DCLS/index.html

Admission to Program

General Information

Selection of applicants for admission is a competitive process that is the responsibility of the program faculty/admissions committee. The University places no restrictions on prospective applicants because of their color, creed, race, sex, age, marital status, or national origin. The University recognizes the value of diversity and is committed to providing appropriate support to its student body. The Admissions Committee carefully reviews each application and only the most competitive applicants are invited for an interview.

When initially screening applicants, the admissions committee looks for evidence of the following:

- Ability of the applicant to handle a rigorous science course workload as demonstrated by the applicant's previous coursework and GPA.
- Career goals that align with the scope of practice of a DCLS as discussed in the personal essay.
- Evidence of professionalism, as demonstrated in the resume/CV, such as:
 - professional society membership
 - professional leadership at local, state, region and/or national level
- Research interests as discussed in the personal essay.
- Strong written communication skills as demonstrated in the personal essay.
- Commitment to continuous continuing education as demonstrated in the BOC-ASCP CE transcript.

Application Deadlines: (application and all required documents are due by these dates)

- March 1 for Fall Term
- September 1 for Spring Term

Admissions Requirements:

- Baccalaureate degree in CLS or related science from a regionally accredited US institution or equivalent*
- Completion of a NAACLS-accredited Medical Laboratory Science program or equivalent international program
- Professional certification as a generalist Medical Laboratory Scientist
 MLS(ASCP)^{CM} with proof of continuing certification maintenance
 - Submission of BOC-ASCP Continuing Education Transcript is required.
- Minimum of three (3) years clinical laboratory experience in the United States, preferably as a generalist medical laboratory scientist
- Overall minimum GPA of 3.3 and science course cumulative GPA of 3.2
- Graduate Record Examination (GRE) General test scores taken within the last 5 years
- Official transcripts of undergraduate and graduate coursework from ALL institutions
- Curriculum vitae/resume
- Personal essay A well written, grammatically correct essay is a key expectation and is carefully reviewed by the committee to assess if the applicant should move to the next phase of the admissions process, the interview. The essay should address/discuss:
 - background information
 - o career goals and reasons for pursuing the DCLS degree
 - motivation to become an advanced practitioner by earning the DCLS
 - o unique life and professional experiences
 - o leadership roles in CLS and other life areas
 - research interests
 - positive attributes to bring to the DCLS program and the CLS profession
- Three (3) letters of recommendation. Recommendation letters should be from individuals who are thoroughly familiar with the candidate's academic ability, their work ethic and professionalism, and their general characteristics.
 - Two (2) letters from professional supervisor, pathologists, or laboratory managers; Letters from co-workers who do not serve in a supervisory capacity to the applicant are not acceptable.
 - o One (1) letter from a college professor
- Personal interview (via video conference); Meeting the minimum requirements does not guarantee an invitation for an interview.
- *Applicants who have earned a degree from a non-U.S. accredited institution must comply with the applicable University and School policies and submit:
 - Official transcripts sent from the non-US institution directly to Rutgers-School of Health Professions
 - World Education Services (WES) Evaluation of transcripts
 - Only WES evaluation accepted; detailed course and grade evaluation is required

- TOEFL Exam taken within the last 2 years
 - TOEFL is NOT required if a Bachelor's degree or higher has been awarded in the U.S. *Please note: If applicant has an Associate's degree in the U.S., TOEFL scores are required.*
 - o A minimum of 79/80 on the Internet-based test is required

Online application:

http://shp.rutgers.edu/prospective_students/admissions/index.html

GPA minimum requirement/credentialing requirement

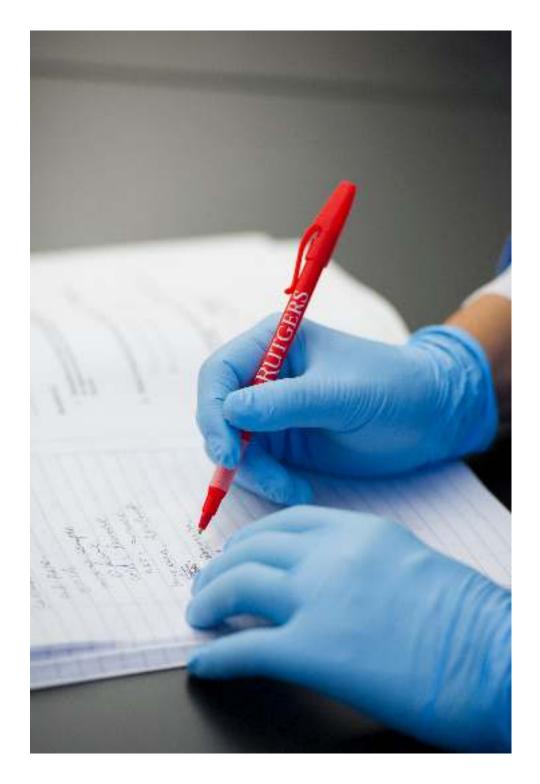
- Overall minimum GPA of 3.3 and science courses cumulative GPA of 3.2
- Professional certification as a generalist Medical Laboratory Scientist MLS(ASCP)^{CM} with proof of continuing certification maintenance.

For more information about admissions, please contact the Office of Admissions:

SHPadm@shp.rutgers.edu or 973-972-5336.



Department of Health Informatics



Health Information Management Program

Degree Options

- Bachelor of Science (Joint and Solo)
- Second Bachelor of Science
- Undergraduate Certificate

Health Information Management Profession

The Health Information Manager is a member of the health care team and is the professional responsible for management of health information systems consistent with medical, administrative, ethical and legal requirements.

Health information professionals acquire, analyze and protect data in both electronic and traditional methods to provide information critical to the health care industry. In addition to collecting many kinds of data from a variety of sources, they monitor the integrity of the information, ensure appropriate access to health records and manage the use of this data.

Career opportunities in health information now extend well beyond the health information department and the acute care facility. Professionals with technical expertise, problem solving skills, knowledge of clinical medicine and superior communication skills are needed to ensure quality health care documentation, protecting patient confidentiality and develop and maintain the electronic health record. The need for accurate and up-to-date health records is not confined to health care facilities. These professionals are employed by managed care organizations, insurance companies, law firms, physician offices, consulting firms, software companies and the pharmaceutical industry.

Program Description

The Health Information Management Program provides a broad professional education which is based on the baccalaureate competencies developed by the American Health Information Management Association (AHIMA). The curriculum prepares the graduate to successfully achieve the Registered Health Information Administrator (RHIA), a nationally recognized credential in the HIM and health care field.

General Education Requirements for the HIM program include 59-70 credits of courses in the Humanities, Social Sciences, Science & Mathematics, Health, Concentration Courses and free electives. These courses are completed through an affiliate or at a regionally accredited college or university prior to admission.

Student holding an AS, AA, or higher degree and students who have completed all or most of the required general elective credits may apply directly to SHP. The undergraduate must have completed the core and breadth courses prior to continuing into the professional phase of the degree at Rutgers. The HIM program is also a joint degree program between Rutgers School of Health Professions and several affiliate colleges/universities. Entering first time freshman may select any affiliate to complete two years of pre-professional

Health Informatics Department

Program Director: Barbara Manger E. HIM@shp.rutgers.edu P. 973-972-4356

Primary Campus Location

- Health Sciences at Newark
- ONLINE: web-based program

Program Director: Barbara Manger E. mangerbj@shp.rutgers.edu P. 973-972-4356

Academic Affiliates

Academic institutions with partnership programs at the Rutgers School of Health Professions.

- Fairleigh Dickinson University
- Felician College
- Georgian Court University
- Kean University
- New Jersey City University
- Rutgers University Newark College of Arts & Science
- Saint Peter's University
- Thomas Edison State University

Major Professional Practice Affiliates

PPE sites are located throughout New Jersey.

- Atlantic Health Care System
- RWJ Barnabas Health Care System
- Hackensack Meridian Health Care System
- RWJUH Health System
- Bayonne Medical Center
- Englewood Hospital
- Hackensack
 Mountainside Hospital
- · Holy Name Hospital
- JFK Medical Center
- Medical Center at Princeton
- Hackensack Palisades General Hospital

course work. Transfer students with some of their General Education courses completed may apply to any affiliates for completion of their general education requirement who generally will transfer in up to half of their required courses*.

The professional component includes didactic, laboratory and professional practice experiences. Major course requirements include 61 credits in Health Information Management courses to be completed ONLINE at Rutgers. No more than one-half of the major courses may be transferred into the HIM Program. Students must maintain an overall GPA of 2.75 and a major course GPA of 2.75 to remain in the program.

Health Information Management courses at Rutgers are taught **ONLINE**. The professional practice experience (PPE) is required for graduation and must be scheduled during the daytime hours to allow adequate supervision at the PPE site. This Management Affiliation consists of 75 hours of practice on site at a contracted facility as well as 75 hours of **ONLINE** modular education.

Joint degree students will complete between 120 and 133 credit hours at Rutgers and the partner institution in order to be awarded the degree. Solo degree students, second degree students and post baccalaureate certificate students will have met the requirements to be admitted directly to SHP.

Whether in hospitals, ambulatory care or alternate settings where health information is developed, maintained and applied, the HIM graduate will be able to manage health information systems consistent with the medical, administrative, ethical and legal requirements of the healthcare delivery system.

At the conclusion of the educational experience, the graduates will demonstrate high ethical standards regarding the personal and aggregate use of health information.

Learning Goals:

- To prepare competent Registered Health Information Administrators for employment in all types of health care facilities.
- To prepare graduates to meet the needs of the healthcare industry.
- To provide students with a balanced curriculum in liberal arts and professional courses.
- To provide knowledgeable well-trained professional in the health information professions.
- To enhance faculty development and encourage professional growth in order to provide up to date curriculum throughout the program.

Learning Outcomes

At the conclusion of the professional courses in the HIM program, the student will demonstrate knowledge and competency as defined in the 86 professional competencies established by the American Health Information Management Association. These competencies are in the following domains with a representative sample of learning outcomes:

- Data Content, Structure & Standards (Information Governance)
 - Verify that documentation in the health record supports the diagnosis and reflects the patient's progress, clinical findings, and discharge status

- St. Joseph's Regional Medical Center
- St. Peter's University Medical Center
- Summit Health Care
- Trinitas Medical Center

Accreditation

Commission on Accreditation of Health Informatics and Information Management Education (CAHIIM)

233 N. Michigan Avenue

Chicago, IL. 60601

Contact: Claire Dixon-Lee, Ph.D, RHIA, **FAHIMA**

Status: Ongoing current accreditation

confirmed 2016

For more info

For additional information about the **Health Information Management** Program, contact the HIM program

E. HIM@shp.rutgers.edu

P. 973-972-4356

For additional information about the **Health Information Management** Program, contact SHP Admissions:

Admissions

F. SHPadm@shp.rutgers.edu

P. 973-972-5336

Informatics, Analytics and Data Use

- · Apply analytical results to facilitate decision-making
- 2. Revenue Management
 - Manage the use of clinical data required by various payment and reimbursement systems
- 3. Compliance
 - Determine processes for compliance with current laws and standards related to health information initiatives and revenue cycle
- 4. Leadership
 - Effectively communicate through project reports, business reports and professional communications

A full listing of these competencies can be found at:

http://www.cahiim.org/him/curriculumrequirements.html

Academic Standing

Retention in the program is based on the following:

- Maintenance of a GPA at 2.75 or better
- Successful completion of all major courses with a grade or "C" or better with no more than 4 courses receiving a grade lower than C+
- · Retake of a failed course is only permitted once
- Adherence to the policies of Rutgers SHP and affiliating institutions and health care agencies governing professional practice sites

Full-time and Part-time Status

Students may complete this program on a full-time or part-time basis.

Additional Program Information

For more detailed information on the profession, requirements, curriculum please visit the program's website:

http://shp.rutgers.edu/program_overview/health_info.html

Curriculum

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Admission to Program

In addition to the general college admission requirements to Rutgers SHP, the Health Information Management Program requires:

- Usually, completion of all pre-professional requirements with a grade of C or above at the partner institution
- Junior standing (completion of 56 semester hours)
- An overall minimum grade point average of 2.75 on a 4.0 scale is required to apply to the program
- Submission of a formal application to Enrollment Services by May 1st immediately preceding the intended Fall Semester enrollment
- Official transcripts of all previous college courses including the partner

institution. International students must provide a transcript evaluation from an approved transcript evaluation company. Applicants must also have completed the specific prerequisite courses listed below.

For more information about admissions, please contact the Office of Admissions:

SHPadm@shp.rutgers.edu or 93-972-5336.



Clinical Trials Sciences – Biopharma Program

Degree Options

- Master of Science in Clinical Trial Sciences
 - Regulatory Affairs track
 - Clinical Trial Management and Recruitment track
 - Drug Safety & Pharmacovigilance track
 - Medical Affairs track
- Certificates

Clinical Trials Professions

Clinical Research Professionals are involved in the writing, executing, and monitoring of human subject research on drugs, biologics, and medical devices. They are employed by Biopharmaceutical Companies, Regulatory Agencies, Contract Research Organizations and Academia, and ensure compliance with all regulatory, ethical and legal guidelines.

Program Description

The Masters of Science in Clinical Trial Sciences (MSCTS) is a 36-credit **ONLINE** program consisting of a 9-credit core plus 27 credits of specialization courses and electives. Students select a track and develop a program plan in consultation with an academic advisor. Current specialization areas or tracks include the following:

- Regulatory Affairs
- · Clinical Trial Management & Recruitment Sciences,
- Drug Safety & Pharmacovigilance
- Medical Affairs

For current information regarding the specializations, please refer to the program website.

The Program culminates in a systematic literature review graduate project or mentored fieldwork experience if qualify, designed to address a biopharma or clinical trial sciences issue or problem of interest to the student.

Academic Standing

Students are expected to maintain at least part-time status (3-6 credits minimally) each fall and spring semester. If for some reason the student is unable to do this he/she must complete a "Maintaining Matriculation/Leave of Absence Form and submit it to the Office of Enrollment Services. Failure to do so may result in disenrollment from the program. Students enrolled in the MS have 5 years to complete the program and those enrolled in the certificates may take up to 3 years to finish. Please check our program requirements listed on our website.

Health Informatics Department

Program Director: Doreen Lechner biopharma@shp.rutgers.edu 973-972-6482

Primary Campus Location

ONLINE: web-based program

For more info

For additional information about the Clinical Trials Sciences—Biopharma Educational Initiative Program, contact the Program Director at 973-972-6482 Since this is a web-based program, students are required to meet the minimum hardware/software requirements and Internet access to include web-browsing capability. The University does not provide these services, but does provide students with an e-mail address and access to its network, including the Rutgers Virtual Library with full-text research databases and the student Banner Web system.

Students must maintain a GPA of 3.0 to remain in good academic standards.

Full-time and Part-time Status

Students may attend on a part-time or full-time status. Additionally, some students may decide to enroll in individual courses on a non-matriculated basis to achieve knowledge in one particular area or to make efficient course selections as they decide which track or certificate is appropriate. Students may be permitted to take up to 12 credits as a non-matriculant.

Learning Goals

The Overall Goal of this Master's degree is to prepare competent individuals to work in the Biopharmaceutical Industries, Regulatory Agencies, Contract Research Organizations or Academia, with the primary objective of assisting with the execution and reporting of clinical drug and device trials commensurate with clinical, legal, ethical, and regulatory guidelines. Specifically, students will become familiar with clinical trial fundamentals, especially related to product evaluations for licensing and marketing. Additionally, students will have a comprehensive understanding of the regulatory and legal framework guiding the planning, execution, completion, and reporting of clinical trials and be able to perform specific duties based on the student's area of concentration.

Learning Outcomes

The goals and objectives of the program vary depending on track chosen but all students will be able to:

- Formulate a basic study design incorporating knowledge on sample size, placebo response, significance, blinding, minimizing bias, randomization, as well as concepts surrounding multiple analyses and multiple treatment arms and endpoints.
- 2. Identify important clinical questions to develop a research hypothesis.
- 3. Critique the drug literature with regard to study design, methods, statistics, quality of literature review, conclusions, and writing style and organization.
- Discuss ethical principles within the context of clinical trials, including informed consent and subject recruitment and retention, and identify cases of error, misconduct and fraud.
- 5. Interpret and summarize major regulatory documents in the U.S. and compare and contrast these with international regulations.
- Explain the drug/device/biologic evaluation process including all phases
 of product development in clinical research and GCP guidelines' impact
 on quality.
- 7. Disseminate study results in the form of reports to regulatory agencies, to the sponsor, or for publication in a medical journal.

Additional Program Information

Four short-term academic certificates (15 credits for each certificate) are available:

Certificate in Clinical Trials Regulatory Affairs

Certificate in Clinical Trials Recruitment

Certificate in Drug Safety & Pharmacovigilance

Visit the program website at http://shp.rutgers.edu/dept/biopharma/

Curriculum

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Admission to Program

Applications are accepted for Fall and Spring Terms. Admission is offered on a rolling basis. Requirements for MS admissions include:

- Completed application and applicable fee
- Official transcript of highest degree
- Two recommendations, preferably from professional colleagues/ supervisors or from course instructors (using forms provided by and returned separately to the Office of Enrollment Services); Only one recommendation is required for application to the Certificates
- Personal statement of how the applicant expects to apply the degree to his/her professional career goals
- Current resume or curriculum vita
- TOEFL test score and credentialed transcript if student has graduated from a non-US university.
- Requirements for admission into one of the Program's certificates are the same as for the MS degree except that only one letter of reference is required.

Certificate and non-matriculant applicants should apply via the Biopharma Initiative website.

GPA minimum requirement/credentialing requirement

The minimum GPA required for admissions is 3.0. A science background is preferred by not required.

For more information about admissions, please contact the Office of Enrollment Services: enrollmentservices@shp.rutgers.edu or 973-972-5454.

Biomedical Informatics Program

Degree Options

- Master of Science
- Ph.D.

Biomedical Informatics Professions

Biomedical Informatics is an interdisciplinary science that involves both the conceptual and practical tools from diverse disciplines for the understanding, invention, generation and propagation of biological and medical information - to solve complex problems in prevention and treatment of diseases, health care, health sciences and pharmaceutical research, education, clinical/medical decision-making, and delivery of health care. As such, Biomedical Informatics is an essential element of 21st-century health and biological sciences.

A few examples of biomedical informatics application include:

- Reducing diagnostic uncertainties and improving clinical decisionmaking by using computing techniques and information technologies.
- Designing interactive consultation system to treat patients more efficiently and cost effectively by using national databases.
- Developing transportable software systems for image reconstruction and for 3-D visualization and analysis of medical imaging data.
- Analyzing healthcare datasets for use in clinical or biomedical research.
- Designing large databases of digitized medical images for use in medical decision-making, teleradiology, or teleconsultation.
- Designing and managing clinical, pharmacy, radiology, laboratory or hospital information systems.

Program Description

The Master of Science program in Biomedical Informatics began in 1993. The student body is a diverse group of health professionals; however, admission is not limited to medical and health related professionals.

All students complete at least 36 credits hours of which at least 30 hours must be formal course work. This includes:

- 18 credit hours of core courses
- 6 credit hours in an area of emphasis/ specialization
- 6 credit hours of electives
- 6 credit hours of directed thesis or project

In addition to core courses, electives and directed research projects, the student can pursue an in-depth study in one of the following tracks:

- Bioinformatics
- Clinical Informatics

Health Informatics Department

Program Director – Shankar Srinivasan E. srinivsh@shp.rutgers.edu P. 973-972-4279

Primary Campus Location

- Health Sciences at Newark
- ONLINE: web-based program

For more info

For additional information about the Certificate in the Healthcare Informatics Program, contact SHP Admissions:

Admissions

F. SHPadm@shp.rutgers.edu

P. 973-972-5336

Students successfully completing the program are granted the Master of Science degree in Biomedical Informatics.

To meet the needs of busy professionals, we offer students the flexibility in time and place for study. Both the post-graduate certificate in Healthcare Informatics and the Master of Science in Biomedical Informatics are available in both in-class and **ONLINE** modes. For the **ONLINE** version of the program all the required courses are made available as web based courses and the thesis/project guidance will be offered through interactions with instructors by multi-media resources and electronic communications.

Academic Standing

Students must maintain 3.0 to stay in good academic standing

Full-time and Part-time Status

Both categories of students are admitted in the Program. Full-time students may complete the MS degree in 18 months, but will usually require two years. Part-time students may take three to five years to complete the degree.

Learning Goals

The principal goal of the MS program is to enable a student to apply informatics theories, methods and processes for the generation, storage, retrieval, and communication of health care data.

Learning Outcomes

Upon completion of the program, the graduates will be able to:

- Analyze information requirements for clinical decision-making, health sciences education and training, and hospital/health care management.
- Demonstrate competency in health care data analytics by using theories and methods of data structure, algorithms, and programming.
- Participate in the Planning, Implementation and Quality Assurance aspects of Electronic Health Records.
- Design, develop and implement computer-based teaching and learning systems to improve effectiveness of health sciences education and training.
- Manage health care, and medical information systems and technologies including Electronic Health Records.
- Utilize cost-benefit/cost-effectiveness analysis methodologies.
- Utilize concepts and tools of artificial intelligence, expert systems, and probabilistic models to improve decision-making.
- Evaluate and improve the effectiveness of clinical, educational, and/or management information systems.

Additional Program Information

Application packets including program-related information may be obtained by writing or calling the Office of Admissions at (973) 972-5336 or via e-mail or by visiting the website at: http://shp.rutgers.edu/dept/informatics/masters.html

Curriculum

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Academic Standing

Program retention: Retention in the graduate programs is based on the following criteria:

- Maintenance of GPA at 3.0 or better;
- Obtain no more than one course failure for the duration of the program;
- Retake a failed course only once and attain a C or better grade; and
- Adherence to the policies of the Rutgers SHP and affiliating institutions and health care agencies.

Admission to Program

General Requirements: Applicant for admission must hold a bachelor's degree from an accredited institution in the U.S. or its equivalent with a major in any field of health sciences (including medicine, dentistry, allied health, nursing, public health, pharmacy), or biological sciences, computer science, engineering, business administration or an equivalent field of study.

Admissions requirements include:

- Completed applications form with the SHP's application fee.
- Three (3) letters of recommendation. Professors and/or individuals directly responsible for supervising the applicant, attesting to the candidate potential success in the program should write these letters.
- Official transcripts(s) of previous collegiate work or last earned degrees.
- Personal statement describing interest and commitment to the program.

International Students and TOEFL:

In addition to the requirements stated above international students are required to provide evidence of English language proficiency by submitting Test of English as a Foreign Language (TOEFL) examination scores. Applicants with scores below 550 or CBT equivalent are not considered for admission. International students are required to have their transcript evaluated by an approved evaluation agency for United States equivalency.

GRE Exemption:

All Applicants for the MS program are exempted from the GRE requirement.

Prerequisites:

International students please see either the Admissions and or the Office of International Services for more information on Visa or similar issues. Applications for Fall admission must be received by June 1. Supporting documents must be filed by July 1. Application for Spring admission must be received by October 1. Supporting documents must be filed by November 1.

For more information about admissions, please contact the Office of Admissions: SHPadm@shp.rutgers.edu or 973-972-5336.

Biomedical Informatics Program

Admissions to the PhD program has been temporarily suspended

Degree Options

- Master of Science
- Ph.D.

Biomedical Informatics Professions

Biomedical Informatics is an interdisciplinary science that involves both the conceptual and practical tools from diverse disciplines for the understanding, invention, generation and propagation of biological and medical information - to solve complex problems in prevention and treatment of diseases, health care, health sciences and pharmaceutical research, education, clinical/medical decision-making, and delivery of health care. As such, Biomedical Informatics is an essential element of 21st-century health and biological sciences.

A few examples of biomedical informatics application include:

- Improving research designs and outcomes of clinical trials, epidemiological studies and health services research.
- Design, implement and validate clinical decision support systems for use in medical and dental specialties.
- Conduct hospitalization outcomes research for effective allocation of budget and resources.
- Deriving and evaluating novel computational biology approaches for cancer diagnoses and treatments.
- Utilizing computational approaches and modern computer-based techniques in drug design, molecular genetics.
- Designing and implementing ontologies and enterprise wide solutions for the semantic web and as health information portals.

Program Description

The Ph.D. degree program in Biomedical Informatics represents an articulated program of study designed primarily to serve health care practitioners, health sciences educators and researchers, and students who have completed a MS degree in: Biomedical Informatics, Computer Science, Engineering, Biology, Biomedical Sciences, or students who hold Master's or advance degrees in the health-related professions, or basic sciences. The program is designed to prepare individuals for informatics leadership positions in the schools of health sciences, teaching hospitals, health care organizations, pharmaceuticals, biomedical research laboratories, and government agencies. Students can select one of the

Health Informatics Department

Program Director – Shankar Srinivasan E. srinivsh@shp.rutgers.edu P. 973-972-4279

Primary Campus Location

- Health Sciences at Newark
- ONLINE: web-based program

For more info

For additional information about the Ph.D. degree in the Biomedical Informatics Program, contact SHP Admissions:

Admissions:

E. SHPadm@shp.rutgers.edu

P. 973-972-5336

following areas of specialization/tracks:

- Bioinformatics
- Clinical Informatics
- Public Health Informatics
- Hospital/Health Care Management Informatics

The curriculum consists of at least 61 credits beyond MS degree in Biomedical Informatics. Graduate courses taken for a MS degree in any health science, including biomedical informatics, computer science, and computational biology and bioinformatics degrees may be applied to the Ph.D. course requirements.

The 61 credits beyond the MS degree in Biomedical Informatics include:

- A total of 61 Credits made up of 24 credits of courses (i.e. 8 courses) and 36 credits of Dissertation Research and 1 credit of the Graduate Colloquium (seminar)
- The 24 credits of courses consist of 4 Core Courses (out of a choice of Six Core courses) all at 5000 level and 2 Track/Specialization Courses (should be at the 7000 level) and 2 more Elective Courses (should be at 7000 level). The list of courses providing the choices for the core, the track and the electives can be viewed in the PhD Program Requirements for Graduation
- Qualifying Examination: Students must pass a doctoral qualifying
 examination, which is designed to test the fundamental knowledge
 of students in biomedical informatics theory and systems, health care
 systems, and selected Biomedical Informatics courses related to the
 area of specialization. Admission to the doctoral program does not
 imply candidacy for a degree. Registration for dissertation research will
 be permitted to those who have passed the qualifying examination
- 36 credits of dissertation research culminating in submission of the final draft of the dissertation. In addition to the dissertation, submission of at least one research paper for publication in a peer reviewed journal
- Registering for the BINF7910 Biomedical Informatics Colloquium / Seminar once during the sojourn of the PhD program constitutes the remaining 1 credit making up the total number of credits to be 61 credits. Besides registering once for BINF7910 the student is also required to attend the colloquium each semester during the length of his/her PhD program
- Oral Examination: The dissertation must be defended in an oral examination

Academic Standing

Students must maintain 3.0 to stay in good academic standing

Full-time and Part-time Status

Both full-time and part-time students are admitted to the program. Full-time students may complete the program in three to five years. Part-time students may take up to seven years to complete the program. Students successfully completing the program will be granted the Ph.D. degree in Biomedical Informatics by Rutgers.

Learning Goals

Graduates of this program develop, implement, and evaluate informatics algorithms, biomedical computing solutions and technologies for decision support tools for improving clinical practice, and health care delivery and management; and design systems for more effective and informative research and education.

Learning Outcomes

Upon successful completion of the Ph.D. program, the graduates will:

- Demonstrate comprehensive knowledge of various scientific advances in the discipline.
- Utilize theories and tools of biomedical informatics to solve problems in health care.
- Design and conduct original research to generate knowledge in the field of biomedical informatics.
- Demonstrate competency in knowledge engineering by using theories and methods of data structure, algorithms, and programming.
- Demonstrate competence in both scholarly and technical writing.
- Provide leadership in the applications of information technology in all aspects of health care.
- Demonstrate instructional skills.
- Utilize cost-benefit/cost-effectiveness analysis methodologies.
- Utilize concepts and tools of artificial intelligence, expert systems, and probabilistic models to improve clinical decision-making.
- Evaluate and improve the effectiveness of clinical information systems.

Additional Program Information

Application packets including program related information may be obtained by writing or calling the Office of Enrollment Services or please call Office of Admissions at (973) 972-5336 or via e-mail or by visiting the website at: http://shp.rutgers.edu/dept/informatics/phd.html

Curriculum

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Admission to Program

General Requirements: Applicant for admission to the Graduate Programs in Biomedical Informatics must hold a Master's degree from an accredited institution in the U.S. or its equivalent with a major in any field of health sciences (including medicine, dentistry, allied health, nursing, public health, pharmacy), or biological sciences, computer science, engineering or an equivalent field of study. A student seeking admission to any of the Graduate Programs must satisfy all entrance requirements of Rutgers SHP.

These requirements include:

- Completed applications form with the SHP s application fee
- Three (3) letters of recommendation. Professors and/or individuals
 directly responsible for supervising the applicant, attesting to the
 candidate's potential success in the program, should write these letters
- Official transcripts(s) of previous collegiate work or last earned degrees
- GRE scores
- Personal statement describing interest and commitment to the program

GRE Exemption:

Applicants already holding a doctoral (e.g., Ph.D., M.D., D.D.S.) or MS in Computer/Information and Engineering Sciences, Public Health, Nursing, Business Administration degree from an accredited institution in the USA, or Rutgers medical, or dental students are exempted from the GRE requirement.

International Students and TOEFL:

In addition to the requirements stated above international students are required to provide evidence of English language proficiency by submitting Test of English as a Foreign Language (TOEFL) examination scores. Applicants with scores below 550 or CBT equivalent are not considered for admission. International students are required to have their transcript evaluated by an official transcript evaluation agency such as the WES.

Prerequisites:

International students please see either the Admissions and or the Office of International Services for more information on Visa or similar issues. Applications for Fall admission must be received by June 1. Supporting documents must be filed by July 1. Application for Spring admission must be received by October 1. Supporting documents must be filed by November 1.

For more information about admissions, please contact the Office of Admissions: **SHPadm@shp.rutgers.edu** or 973-972-5336.

Health Care Informatics Program

Degree Options

Certificate (in Health Care Informatics)

Biomedical Informatics Professions

Biomedical informatics is an applied science, and is inherently intertwined with the contents of clinical and biomedical sciences with computer and information sciences. Biomedical Informatics is the study of biomedical, health care and clinical information: its structure, its communication, and its use. Since all aspects of science and society have become increasingly information intensive, the need to understand, to apply, and to create new methods for analyzing, managing, and acquiring information has never been greater. Nowhere is this need more acute than in biomedical, clinical, health care and pharmaceutical industries where health care planners, managers, scientists and practitioners routinely confront conflicting sources of knowledge and burgeoning numbers of data.

Program Description

The Healthcare Informatics Certificate Program is designed to quickly build up competencies in the field of Biomedical Informatics especially for those seeking a career change or advancement. Upon successful completion of a minimum of 18 credits in the Program, the student is eligible to receive a Certificate in Health Care Informatics from Rutgers, the State University of New Jersey- School of Health Professions (SHP). A student must take a minimum of 9 credits from a group of core courses, and 9 credits from a group of specialization courses.

The Curriculum contents and guided projects under this option can be tailored to meet a student specific area of interest or requirements. Permission to take courses is contingent upon fulfillment of the specific course prerequisites, and approval of the Program Director. Those students who wish to continue onto the Master of Science Program in Biomedical Informatics can do so at any time during their tenure in the Certificate Program by forwarding the necessary application material to the Program Director. Further details can be obtained by consulting with the Program Director.

Academic Standing

Students must maintain 3.0 to stay in good academic standing

Full-time and Part-time Status

Both full-time and part-time students are admitted in the program. Full-time students can expect to finish the Certificate program within 1 year while Part-time students can finish in 1 to 2 years.

Health Informatics Department

Program Director – Shankar Srinivasan E. srinivsh@shp.rutgers.edu P. 973-972-4279

Primary Campus Location

- Health Sciences at Newark
- ONLINE: web-based program

For more info

For additional information about the Certificate in the Healthcare Informatics Program, contact SHP Admissions:

Admissions

E. SHPadm@shp.rutgers.edu

P. 973-972-5336

Learning Goals

The Certificate in Health Informatics program is designed for health care professionals who do not wish to pursue a graduate degree yet have a need to enhance their understanding of Health Informatics, and improve their knowledge and skills in relation to the use of the various tools and methods of Health Informatics.

Learning Outcomes

Upon completion of this program, the graduates will be able to:

- Use computers and information handling tools for a wide range of professional activities.
- Identify information needs in one's own work environment, select appropriate off-the-shelf technological solutions and make modifications necessary to accomplish both generic and health specialty related activities.
- Make strategic decisions about institutional policies and investments in:
 patient care and treatment systems, patient management systems,
 human resources and cost management systems, and professional
 education and training systems.

Additional Program Information

Additional programmatic information is available online http://shp.rutgers.edu/dept/informatics/certificate.html

Curriculum

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Admission to Program

Applicant for admission must hold a bachelor's degree from an accredited institution in the US or its equivalent with a major in any field of health sciences (including medicine, dentistry, allied health, nursing, public health, pharmacy), or biological sciences, computer science, engineering, business administration or an equivalent field of study. A student seeking admission must satisfy all entrance requirements of Rutgers SHP.

These requirements include:

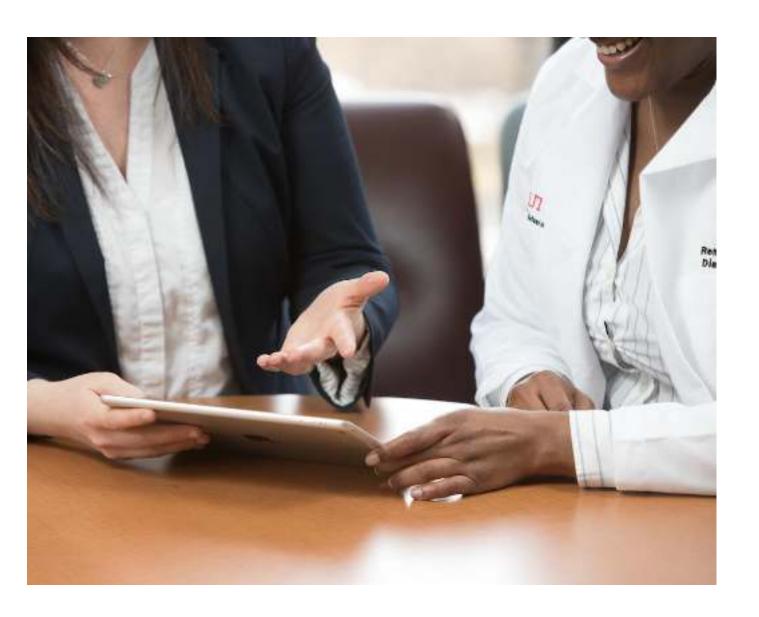
- Completed applications form with the SHP s application fee.
- Three (3) letters of recommendation. Professors and/or individuals
 directly responsible for supervising the applicant, attesting to the
 candidate's potential success in the program, should write these letters.
- Official transcripts(s) of previous collegiate work or last earned degrees.

GPA minimum requirement/credentialing requirement

Minimum GPA requirement is 3.0.

For more information about admissions, please contact the Office of Admissions: **SHPadm@shp.rutgers.edu** or 973-972-5336.

Department of Interdisciplinary Studies



Health Sciences Program

Degree Options

- Bachelor of Science (in Health Sciences)
 - Allied Dental concentration
 - joint program with Thomas Edison State University
 - Aging Studies* concentration
 - joint program with Rutgers Newark College of Arts and Science
 - solo Bachelor of Science degree with the School of Health Professions
 - Health Services Management* concentration
 - joint program with Thomas Edison State University
 - solo Bachelor of Science degree with the School of Health Professions
 - Imaging Sciences concentration
 - joint program with Thomas Edison State University
 - Psychiatric Rehabilitation* concentration
 - solo Bachelor of Science degree with the School of Health Professions

Health Sciences Professions

Enhancing the career opportunities for health care professionals is the goal of the programs within the Department of Interdisciplinary Studies. The programs in the Department range from baccalaureate degree programs all the way through the Ph.D. Regardless of one's current educational background - associate degree/ professional certificate, bachelor's or master's degree, there is a program in this Department designed to expand the skill sets for health care professionals and add value to your career.

Program Description

The Interdisciplinary Studies Department offers an **online** Bachelor of Science in Health Sciences Program (BSHS), with five distinct concentrations: Allied Dental, Health Services Management, Advanced Imaging Sciences, Aging Studies, and Psychiatric Rehabilitation, either as a joint program or solo degree.

The SHP Bachelor of Science in Health Sciences (BSHS) degree program is a unique and flexible program designed specifically for prospective and currently credentialed health care professionals. The program recognizes and builds on previous academic course work as well as the allied health professional's work experience. It provides interdisciplinary course work and advanced courses within concentrations that are designed to promote and broaden health care professionals' career opportunities in their chosen field.

Interdisciplinary Studies Department

Program Director: Cheryl Bellamy E. bellamcg@shp.rutgers.edu P. 973-972-8576

Primary Campus Location

• ONLINE: web-based program

Academic Affiliates

Academic institutions with partnership programs at the Rutgers School of Health Professions.

 Thomas Edison State University

For more info

For additional information about the Bachelor of Science in Health Sciences Program, contact SHP Admissions:

Admissions

E. SHPadm@shp.rutgers.edu P. 973-972-5336

The joint program is offered in partnership with two other New Jersey higher education institutions: Thomas Edison State University (TESU) and Rutgers-Newark College of Arts & Sciences (RNCAS). These partners provide the general education, basic sciences, and liberal arts courses. SHP provides all the health-related courses, including the interdisciplinary core of courses. Upon completion of the program, the student receives a Bachelor of Science degree, awarded jointly by Rutgers/RNCAS or TESU. When applying to SHP, an applicant must also select the partner institution.

The Solo SHP BS program is offered at Rutgers-School of Health Professions (SHP) only. The general education, basic sciences, and liberal arts courses, as required by the SHP core curriculum, will be evaluated for transfer credit from the student's previous academic coursework. SHP provides all health-related courses, including the interdisciplinary core of courses. Upon completion of the program, the student receives a Bachelor of Science degree awarded by Rutgers SHP.

The BSHS program allows students to enroll in individual courses as a non-matriculant. Rutgers, The School of Health Professions permits individuals to take up to 12 credits as a non-matriculant. Please visit the program website at http://shp.rutgers.edu/dept/IDS/bshsciences/program.html

Academic Standing

Barring unusual circumstances, the student is expected to maintain part-time status (3-9 credits) minimally and a 2.5 cumulative GPA each semester. If for some reason the student is unable to do so, he/she must complete a Change in Student Status form indicating Matriculation Continued and submit it to the Office of Enrollment Services. Failure to do so may result in dismissal from the program. In addition, all core courses are web-based courses and students are required to meet the minimum technology requirements to take these courses.

Full-time and Part-time Status

Most students enroll and complete courses in the BSHS program on a parttime basis.

Learning Goals

The mission of the Department of Interdisciplinary Studies is to enhance the preparation and experiences of health care professionals and educators by utilizing interdisciplinary models of education. Integral to this mission is the development and maintenance of an inter-professional learning environment that fosters enhanced communication, cooperation, and collaboration among the health-related professions.

The goals of the program are to:

- Advance and broaden the skills of current and future health related professionals who are prepared at the associate degree/certificate level and/or pursuing the bachelor's degree.
- Provide advanced level interdisciplinary courses designed to meet the diverse, flexible and professional needs of future and practicing health care professionals.

 Provide a learning environment that prepares students to work collaboratively with other health care professionals to promote health and to address current health issues and challenges.

Learning Outcomes

- Compare, contrast, and apply the common theories and methods used in making value decisions in ethical situations in health care.
- Demonstrate a working knowledge of computer applications in the clinical, administrative and/or educational settings of the healthcare system.
- Analyze and propose strategies to resolve problems within health care organizations.
- Analyze cultural diversity in the delivery of healthcare.
- Critically evaluate the various types of published scientific literature, including clinical trials, reviews, and case studies.

Curriculum

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Admission to Program

Admission for the Bachelor of Science in Health Sciences program requires an associate degree and/or certificate from an accredited allied health education program. Program concentration in Aging Studies does not require previous allied health coursework.

Depending upon a student's academic background, a student may be admitted to the SHP **solo** BS for the Aging Studies, Health Services Management, or Psychiatric Rehabilitation concentration. To enroll in the solo bachelor's program, students must possess an Associate Degree. All students are required to complete the SHP core curriculum requirements.

To enroll in the **joint program** in either the Advance Imaging Sciences, Allied Dental, or Health Services Management concentrations, students must possess an associate degree or certificate, and be licensed, certified, or registered in their applicable field. All students are required to complete RNCAS' or TESU's general core curriculum and residency requirements.

All students regardless of entrance route are required to complete a 15 credit Interdisciplinary Health Sciences core, and one area in the professional concentration component. Additionally, all students must complete a practicum or internship in their concentration area.

Admission to the program occurs once a year after the March 1 deadline. The application and all supporting documents must be received by March 1. For further information and an application for admission please contact the Office of Enrollment Services.

Students enrolled in the joint Rutgers/TESU program pay the Rutgers SHP rate.

A notarized copy of the health professionals' credentials (i.e., license, certification, or registration, if applicable) must be submitted with an admissions application for all concentrations.

GPA minimum requirement/credentialing requirement

All applicants must have an overall grade point average of 2.50.

For more information about admissions, please contact the Office of Admissions:

SHPadm@shp.rutgers.edu or 973-972-5336.



Health Care Management Program

Degree Options

· Master of Science

Health Care Management Program

Health care is a very complex industry with many distinct types of stakeholders including but not limited to patients, clinicians, third-party payers, as well as public and private oversight and regulatory agencies. This coupled with an array of legislative changes, quality initiatives and resource limitations pose distinct challenges to health care managers and leaders, and the organizations in which they function. The Rutgers, School of Health Professions (SHP) Master of Science in Health Care Management (MSHM) program targets specific competencies needed by managers and leaders, enabling them to effectively address environmental challenges and help health care organizations thrive and succeed.

Program Description

The MSHM program is a 30-credit, online program specifically designed for those with established careers in health care seeking to expand their management and leadership skills and overall career opportunities. The program offers an array of specialized courses in health care management and administration, such as: management & leadership, strategic planning, quality assurance, current issues and trends, financial management, law and ethics, as well as other related course work.

The MSHM prepares health care professionals to meet the demands of changing health services systems and oversight organizations. In general, the program consists of 12 credits of core coursework, 15 credits of specialization coursework, and a 3-credit graduate project. The Program culminates in a faculty-guided, self- directed graduate project designed to address a health science issue or a problem of interest to the student. It is prospectively planned and an approved research, educational, administrative or community service activity designed to support and enhance the student's ability to apply their graduate experience and achieve tangible outcomes. Students develop their program plan in consultation with their advisor. The graduate project requirement can be completed off-campus.

The curriculum is intended for those working full-time in health care, seeking to obtain their MSHM on a part-time basis.

Learning Goals

Prepares health care professionals with the value-added skills to help lead their organizations towards long-term success.

Interdisciplinary Studies

Program Director: Al Heuer E. heueraj@shp.rutgers.edu P. 973-972-2418 or Barbara Herbert E. herberba@shp.rutgers.edu P. 973-972-8576

Primary Campus Location

• Online: web-based program

For more info

For additional information about tracks in the Health Care Management Program, contact SHP Admissions:

Admissions E. SHPadm@shp.rutgers.edu P. 973-972-5336

Learning Outcomes

Program learning outcomes are aligned with the School-wide Outcomes, specifically focusing on:

- Demonstrate an understanding of the evolution and key elements of US Healthcare System, roles of major organizations & stakeholders and key legislation.
- Compare and contrast the major features of leadership styles, and how they apply to healthcare organizations to promote long-term success.
- Evaluate and apply strategies for effectively interfacing with organizational leaders and managing the day-to day operations of health care organizations to help them succeed.
- Interpret key legislation, how that legislation impacts health care organizations, their employees and the communities they serve.
- Compare and contrast bioethical principles and give examples as to how they apply to health care stakeholders.
- Describe the key elements of strategic planning and demonstrate the ability to apply them in simulated cases.
- Compare and contrast the various types of financial statements and demonstrate the ability to interpret them to depict of the financial condition of a health care organization.
- Create and reconcile a business operational and capital budget.
- Demonstrate an understanding of key principles for recruiting, retaining, training and optimizing the performance of employees within health care organizations.
- Interpret key legislation related to employee relations, hiring, termination and terms of employment.
- Describe key strategies and tools in quality assurance and give examples as to how they can be applied to optimize healthcare organizational outcomes.
- Compare and contrast research study designs; analyze the strengths and weaknesses
 of each design and how they can be applied to answer research questions and
 investigate hypotheses.
- Demonstrate proper techniques for gathering, formatting, storing and analyzing data, to help optimize organizational performance or investigate research questions and hypotheses.

Competency in these areas will be demonstrated by students in the form of selected outcomes, which include their academic performance in courses within the curriculum which are related to each of these subjects, as well as the integration, synthesis and application of these subjects within their capstone project known as Graduate Project. Other metrics used to evaluate the attainment of these goals and objectives will be student, course and graduate survey results.

Degree Tracks

The Master of Science in Health Care Management has three tracks. They are Management and Leadership, Pharmaceutical Management and Health Care Informatics; each of which is described below.

Management & Leadership Track: This track is appropriate for a wide range of health professionals who are seeking to advance their careers and expand their career options. This track is especially suited for those seeking to broaden and deepen their health care management and administrative skill-set. The track offers ideal blend of structure

and flexibility, combining foundational course requirements related to management, leadership, finance and strategic planning, as well as other related competencies.

Pharmaceutical Management with the Certified Medical Representative Institute (CMRI):

The CRMI track is available exclusively to experienced pharmaceutical professionals. This track is intended to expand the skill-set needed for pharmaceutical professionals to advance

their current careers within the management and leadership ranks of pharmaceutical organizations.

Health Care Informatics: Students seeking a combination of health care management with a concentration in informatics can select this track. This combination is ideal for individuals who would heavily utilize information systems in the management of their unit(s).

Curriculum

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Academic Standing

Students must maintain a GPA of 3.0 to remain in good academic standing

Full-time and Part-time Status

The MSHM is geared towards students who are currently employed on a full-time basis in the health care industry seeking to expand their skills. Generally, MSHM students register for 3-6 credits each fall and spring semester. It typically takes student s 2-4 years to complete the program.

Program Partner: Certified Medical Representatives Institute

Admission to Program

- Completed program application and applicable fees;
- Official transcript from CMRI (for CMRI students only);
- Official transcript of bachelor's degree;
- A current resume or curriculum vitae;
- Three letters of recommendation, Recommender forms must be submitted by the recommender to the Office of Admissions or the recommender must sign the seal of the envelope if the form is submitted by the student. Recommendations must come from supervisors or faculty. Recommendations are NOT permitted from relatives, friends, or peers;
- A two to four-page essay/statement of career interest and relevancy of MSHM program to achieving professional goals. Essays must address all the following points:
 - How the applicant found out about the program and what attracted them to apply to this specific program.
 - Why the applicant is interested in pursuing a master degree in health care management and how previous education and career experiences have prepared them for it.
 - What attributes and accomplishments strengthen the applicant's candidacy, but may not be evident from letters of support, transcripts or other elements of the application package.
 - A description of how at least three of the health care management skills/competencies covered in the curriculum apply to the applicant's current career in health care.
 - The last "course" in the program that students take is a capstone project known as "Graduate Project", where students are required to synthesize and apply the knowledge/skills they have acquired in the program. Students often pursue a work- related project in the areas of process improvement, strategic planning, among many

others. As such, applicants should describe a general overview of, and preliminary ideas for, the type of project(s) they may be interested in conducting for the Graduate Project.

 The essay should also describe plans which the applicant has for utilizing the degree and the knowledge/skills acquired from the program, to help achieve long term career goals.

GPA minimum requirement/credentialing requirement

Undergraduate cumulative GPA of 3.0 or greater. Copy of professional credential, if applicable.

Additional Program Information

For more information about admissions, please contact the Office of Admissions: **SHPadm@shp.rutgers.edu** or 973-972-5336.

For more information about the MSHM program, please contact Ms. Barbara Herbert at herberba@shp.rutgers.edu or 973-972-8576.

Or visit the website at http://shp.rutgers.edu/dept/IDS/mshm/program.html

Health Sciences Programs

Degree Options

- Master of Science in Health Sciences
 - Aging track
 - Health Professions Education track
- Ph.D.
 - Health Leadership track
 - Nutritional Sciences track
 - Rehabilitation and Movement Sciences track
 - Psychiatric Rehabilitation and Counseling Profession track

Health Sciences Professions

There are well over 200 distinct entry and advanced level health professions. These include direct patient caregivers and supervision educations and organizational centers. The programs of the Department of Interdisciplinary Studies are designed to bring together the diverse range of health care professionals and educate them for careers beyond the entry level or for expanded career opportunities within health care.

Program Description

The Master of Science in Health Sciences (MSHS) is an **ONLINE**, 30-33 credit, graduate program. whose focus is to provide specializations in the areas of Aging Studies and Health Professions Education. These programs are all built on top of a solid framework of evidence based research.

The program is especially appropriate for healthcare professionals who wish to expand their skill sets in the areas of:

- Aging
- Health Professions Education

To accommodate the individual needs of busy professionals, the MSHS Program offers maximum flexibility in both content and delivery. The specialization categories allow students to choose a plan of study to meet their personal needs and interests. The Program culminates in a faculty-guided, self- directed graduate project designed to address a health sciences issue or problem of interest to the student.

Interdisciplinary Studies

Program Director: Ann Tucker E. tuckeraw@shp.rutgers.edu P. 856-566-6434

Track Contacts

Aging Track: Tracy Davis 856-566-2765 tracy.e.davis@shp.rutgers.edu

Health Professions Education: Ann Tucker E. tuckeraw@shp.rutgers.edu P. 973-972-5410

Primary Campus Location

ONLINE: web-based program

For-more info

For additional information about the Health Sciences Program, contact SHP Admissions:

Admissions E. SHPadm@shp.rutgers.edu P. 973-972-5336 The graduate project requirement can be completed off-campus under faculty guidance. This means that most students can expect to complete all their Program requirements via the Internet.

Academic Standing

While in the program, students may not earn more than one grade below a B- and must meet the overall GPA requirement of a 3.0 to be eligible for graduation.

Full-time and Part-time Status

The Program can be pursued on either a full or part-time basis, with up to five (5) years allowed for completion. To maintain matriculation status, students must register for coursework during each regular semester. Should a student choose not to register for a course during a fall or spring semester, the student must complete a Change in Student Status form indicating Matriculation Continued and submit the form to Enrollment Services. Failure to do so may result in dismissal from the program.

Learning Goals

The goals of the program are to:

- enhance the career and educational opportunities of health professionals, including preparing students in health professions education or aging studies;
- 2. and `provide health professionals with a strong background in health sciences research enabling health professionals to understand, investigate, and apply evidence based research to their health care career.

Learning Outcomes

Overall program learning outcomes are based on the core research and capstone requirements of the program. Following the core learning outcomes are the outcomes for each program track.

Students in the Master of Science in Health Sciences will:

Research Core

- examine and critically assess data acquisition (including sources of publicly available datasets), data storage, data transmission, data analysis, structured database systems (including patient information and bibliographic data bases) and current methods for improving and expanding heath care data technologies.
- plan and implement the data analysis phase of a quantitative research study, including the presentation and interpretation of findings
- explore research methods used in the health sciences, with an emphasis on selecting and applying appropriate research designs and assessing the quality of health sciences published studies.
- identify, analyze, synthesize, and communicate health sciences information using evidence-based methods

Capstone Graduate Project

 integrate, synthesize and apply the concepts, principles, and skills learned while in his/her graduate program to the selected project;

Aging Studies Track

Learning Outcomes

The Aging Studies Track prepares students to:

- Communicate effectively with older adults and health care professionals in the field of aging.
- Recognize the roles and responsibilities of different health care professionals who may interact with older adults and communicate to others that interdisciplinary teams are often considered best practice when providing care to older adults.
- Engage in interdisciplinary health care teams through the development of a comprehensive understanding of the needs of older adults, including medical, biological, social, and psychological.
- Participate in geriatric assessment and aid in the planning health promotion programs for older adults.
- Examine social and health care policies that relate to seniors and the impact of such policies on seniors and other populations.
- Identify appropriate healthcare and social services for older adults through a firm knowledge of aging programs and services on a national and local level.

Health Professions Education Track

Learning Outcomes

The Health Professions Education track prepares students to:

- Develop a cumulative, individualized Health Professions Education Teaching Portfolio.
- Utilize an analytical and developmental approach to understanding the roles and functions of health professions educators.
- Apply major learning theories to instructional design, course development, and appropriate teaching strategies according to the goal(s) of health professions instruction, learner characteristics, and desired outcomes.
- Examine the selection, design, development, application and appraisal of tests and measurements used to evaluate both health professions student's ability/attributes and the instructional process.
- Educate and assess students in the clinical environment.
- Plan a health professions curriculum that includes identification of curriculum objectives and courses, curriculum mapping, and a curriculum management plan for continuous quality improvement.
- Prepare a health professions education/health sciences research based abstract.

Additional Program Information

Additional programmatic information is available online at http://shp.rutgers.edu/dept/IDS/mshsciences/program.html

See database for more specific program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Note: Program of study is subject to change, total credits vary by specialization track

Admission to Program

Eligibility:

The program is designed for health professionals who have earned a bachelor's degree with a minimum overall GPA of 3.0, and are licensed or certified to practice in their field (where applicable).

Application:

Applications to the program are accepted throughout the year. Priority is given to applications received by June 1 for the Fall term, October 1 for the Spring term and March 1 for the Summer term. Applicants may take up to 12 credits as a non-matriculant. Taking these courses as a non-matriculant does not guarantee admission into the program. Upon admission, these credits may be applied to fulfill the Program's requirements. Approval of courses to be applied to the program is completed on an individual basis. In general, courses taken as a non-matriculant may be applied to the program if the following criteria are met:

- 1. the course is a designated MSHS course;
- the applicant earned a B or greater in the course as a non-matriculant; and
- 3. the course was completed within 5 years of acceptance into the program; and the course content has not changed substantially since earning credit for the course. All applicants must submit the following:
 - Completed Rutgers–SHP application and all applicable fees
 - · Official transcript of highest degree
 - Two recommendations, preferably from professional colleagues/ supervisors or from course instructors (using forms provided by and returned separately to the Office of Enrollment Services). Letters from relatives, friends, or peers are not acceptable.
 - Personal statement of how the applicant expects to apply the degree to his/her professional career goals
 - Current resume or curriculum vita
- Copy of one's current state license and/or professional certification, if applicable (please note that some courses or activities if conducted in NJ may require that students in licensed professions hold a valid NJ license)

International students must comply with the applicable University and School guidelines, which include the following: (1) achieving a score of 550 or higher on the written Test of English as a Foreign Language (or 213 on the computer-based version), and (2) providing an external evaluation of all foreign transcripts from an agency approved by the Office of Enrollment Services that verifies US baccalaureate equivalency.

Selection Process:

- All applications will be reviewed for completeness (see submission requirements, above)
- Program faculty review all complete applications and recommend the best qualified candidates for admission
- Applicants will be notified of their application status by mail; those accepted into the Program will be mailed an official notification of admission, including a link to all required admissions materials

 Matriculation as a student in the Program is contingent on return and receipt of all required materials, including the signed acceptance of admission, health and immunization forms, approval to conduct a background check, and any requisite fees.

GPA minimum requirement/credentialing requirement

A minimum undergraduate GPA of 3.0 is required for admission into the program.

For more information about admissions, please contact the Office of Admissions: **SHPadm@shp.rutgers.edu** or 973-972-5336.



School of Health Professions **shp.rutgers.edu**

Health Sciences Program

Admissions to the PhD program has been temporarily suspended

Degree Options

- Master of Science in Health Sciences
 - Aging track
 - o Integrative Health and Wellness track
 - Disease Management track
- Ph.D.
 - o Health Leadership track
 - Nutritional Sciences track
 - Rehabilitation and Movement Sciences track
 - Psychiatric Rehabilitation and Counseling Profession track

Health Sciences Professions

Health Sciences is the discipline that uses scientific knowledge to produce interdisciplinary and inter-professional solutions in the problem domain of human health, the healthcare delivery system, and the health-related workforce education system.

Program Description

The Doctor of Philosophy (Ph.D.) in Health Sciences program is coordinated by the Rutgers, School of Health Professions (SHP), Department of Interdisciplinary Studies (IDST) in collaboration with other SHP departments and other units of the University. The SHP departments most involved in this collaboration are the: Department of Nutritional Sciences, Department of Rehabilitation and Movement Sciences, and the Department of Psychiatric Rehabilitation and Counseling Professions.

The Program emphasizes independent/directed study and research under the guidance of a faculty advisor. The distribution of required courses versus elective courses within the sixty (60) credit requirement varies by track. There are currently four major tracks within the Ph.D. in Health Sciences program: Interdisciplinary/Leadership track, Nutritional Sciences track, Rehabilitation and Movement Sciences track and Psychiatric Rehabilitation and Counseling Professions track.

In collaboration with and the approval of the student's advisor, a student can select the elective courses of the Program to meet individual research goals and career aspirations. The number of credits distributed between specialization/ elective courses and dissertation courses is flexible and determined by the student and the student's advisor. In addition, the Program provides several options for meeting course requirements, including independent study, transfer credits, pre-approved registration at other colleges or universities (including **ONLINE** courses), and portfolio assessment.

Interdisciplinary Studies

Program Director: Bob Denmark E: denmarrm@shp.rutgers.edu P: 973-972-5410 or Barbara Herbert E: herberba@shp.rutgers.edu P: 973-972-8576

Track Contacts

Nutritional Sciences track: Riva Touger-Decker E: decker@shp.rutgers.edu P: 973-972-6596

Psychiatric Rehabilitation and Counseling Professions track: Ann Murphy

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murphyaa@shp.rutgers.edu P: 908-889-2461 Rehabilitation and Movement Sciences track:

Sandra Kaplan

kaplansa@shp.rutgers.edu P: 973-972-2459

Primary Campus Location

ONLINE: web-based program

For more info

For additional information about the Health Sciences Program, contact SHP Admissions:

Admissions E. SHPadm@shp.rutgers.edu P. 973-972-5336 Complementing the Program's flexibility is its innovative delivery approach and practical research and residency requirements. Most all courses are web-based providing students with significant control over when and where their learning is done.

With advisor approval, research is most often conducted off-campus and students fulfill their residency requirement by defending their dissertation proposal and completed dissertation in-person (during IDST8121: Dissertation Seminar I and IDST8424: Dissertation Seminar IV, respectively) and meeting any additional residency requirements specified by the track.

Students can normally pursue a specialization/focus in any area supported by an available full-time SHP faculty research advisor having the applicable expertise (the student's Dissertation Chairperson must be a full-time faculty member of SHP). The student's faculty research advisor is usually the student's Dissertation Chairperson. Ph.D. research advisement is most commonly available in the following general areas:

- Interdisciplinary Studies Research advisement in this area is provided primarily by faculty in the Department of Interdisciplinary Studies. This department is best able to support research in the following areas:
 - Aging
 - Health Leadership
 - Health Management and Administration
 - Health Professions Education
- Nutritional Sciences Research advisement in this area is provided by faculty in the Department of Nutritional Sciences and is available only to those students who hold the Registered Dietitian (RD) certification.
- Rehabilitation and Movement Sciences Research advisement in this area is provided by faculty in the Department of Rehabilitation and Movement Sciences.
- Psychiatric Rehabilitation and Counseling Professions Research advisement in this area is provided by faculty in the Department of Psychiatric Rehabilitation and Counseling Services.

More detailed information about the department is available online at: http://shp.rutgers.edu/dept/IDS/phdhsciences/program.html

Academic Standing

To meet the program's minimum academic standards, Ph.D. in Health Sciences students must maintain at least a 3.0 cumulative grade point average (GPA

Full-time and Part-time Status

The program can be pursued on either a full- or part-time basis, with up to 10 years allowed for completion. To maintain matriculation status, students must register for coursework (to include dissertation seminar/advisement or pre- approved external courses) during each regular semester. Should a student choose not to register for a course during a fall or spring semester, the student must complete a Change in Student Status form indicating Maintenance of Matriculation and submit the form to Enrollment Services. Failure to do so may result in administrative withdrawal from the program. A student who has been withdrawn from the program and wishes to continue must re-apply, and if admitted, must complete a minimum of 25% of the program requirements.

Learning Goals

The mission of the Department of Interdisciplinary Studies is to enhance the preparation and experiences of health care professionals and educators by utilizing interdisciplinary models of education. Integral to this mission is the development and maintenance of an inter-professional learning environment that fosters enhanced communication, cooperation and collaboration among the health-related professions.

Learning Outcomes

In addition to our allegiance to the school-wide outcomes, the PhD program has these learning outcomes:

- Excel in a leadership role in the research, academic, and/or clinical setting
- Optimize organizational outcomes within a variety of health care settings
- Plan, conduct and defend original research that creates or tests new concepts, hypotheses, models and/or theories
- Apply research findings in the design and/or evaluation of new methods or approaches to diagnostic or treatment services, healthcare delivery systems, or patient or health professions education
- Work collaboratively with others to advance the scientific bases of knowledge in the health professions via ongoing research and scholarship
- Critically review, appraise and synthesize the health sciences literature
- Demonstrate competency in oral, written, and electronic modes of communication, using both scholarly and technical formats
- Apply computer and information technologies to address both theoretical and practical problems, enhance communication and disseminate knowledge
- Integrate basic principles of ethics and cultural sensitivity within all interpersonal and professional activities

Additional Program Information

For more information, visit the program's website at

http://shp.rutgers.edu/dept/IDS/phdhsciences/program.html

Curriculum

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Admission to Program

Eligibility:

The Program is designed for health-related professionals with training or experience in the application of scientific knowledge or methods in the delivery of health care or related services.

In addition, applicants must have earned at least a Master's degree with an overall GPA of at least 3.0, and, where applicable, be licensed or certified to practice in their field.

Applications:

The deadline for receipt of all admissions materials is March 1 each year, for Summer or Fall matriculation. Applicants may take up to 12 credits as a non-matriculant, which can be applied to fulfill the program requirements upon admission. However, taking these courses, even doing well in them does not guarantee admission to the program. Admission is a multi-faceted process of which ability to complete coursework is only one part. All applications will be reviewed for completeness. Only complete applications are forwarded to the Admissions Committee. A Complete application must include the following:

- Completed Rutgers–SHP application + all applicable fees
- Official transcript of highest degree
- Graduate Record Examination General test scores forwarded by ETS
 (institutional code: R3116). The requirement for GRE scores is
 never waived. Notes: (a) according to ETS policy, GRE scores are only
 reportable for 5 years; (b) in cases where the GRE was taken more
 than 5 years ago, but the scores are contained on an official transcript
 submitted as part of the application, this may be considered an official
 score; and c) because the GRE is one of many factors in the admission
 decision, we do not apply or set any minimum score or cut-off for
 either the test as a whole or its components
- Three recommendations, preferably from professional colleagues/ supervisors or from course instructors (using forms provided by and returned separately to the Office of Enrollment Services). Letters from relatives, friends or peers are not acceptable.
- Statement of research interests where possible, applicants should provide more than one research interests and should not be so specific or detailed as to make it difficult to match with the expertise of faculty members who may serve as the applicant's research advisor.
- Resume or curriculum vita
- Copy of current state license and/or professional certification, if applicable (please note that some courses or activities may require that students in licensed professions hold a valid NJ license).

International students must comply with the applicable University and School guidelines, which include the following: (1) achieving a score of 550 or higher on the written Test of English as a Foreign Language (or 213 on the computer-based version), and (2) providing an external evaluation of all foreign transcripts from an agency approved by the Office of Enrollment Services that verifies US baccalaureate equivalency.

Selection Process:

- The Admissions Committee reviews all complete applications and recommends the best qualified candidates for a general interview.
- The best qualified candidates are interviewed by a team of faculty.
- Candidates recommended for further consideration by the interview team normally are invited to schedule a one-on-one meeting with a faculty member identified as potential research advisor.
 Candidates who obtain the support of a faculty member willing to serve as their research advisor receive an offer of admission.

Matriculation as a student in the Program is contingent on return and receipt of all required materials, including the signed acceptance of admission, immunization and insurance forms, approval for background check, and any requisite fees.

GPA minimum requirement/credentialing requirement

A minimum undergraduate GPA of 3.0 is required for admission into the program.

For more information about admissions, please contact the Office of Admissions: **SHPadm@shp.rutgers.edu** or 973-972-5336.



Department of Medical Imaging Sciences



School of Health Professions **shp.rutgers.edu**

Cardiac Sonography Program

Degree Options

- Certificate
- Bachelor of Science (in Medical Imaging Sciences)
- Second Bachelor of Science (in Medical Imaging Sciences)

Cardiac Sonography Profession

Cardiac sonography (also known as echocardiography) is the use of ultrasound imaging to view the cardiovascular anatomy in a non-invasive and pain free examination. This safe and convenient method of diagnosis allows the physician to assess the function of the heart in a dynamic way. Cardiac sonographers are specially trained professionals who are an integral part of the cardiovascular medical management team in today's health care environment. They use sophisticated equipment that acquires two-dimensional images of the heart and Doppler spectral tracings of blood flow to provide an accurate assessment of the patient's condition. Cardiac Sonographers are one of the first lines of testing towards diagnosis of cardiovascular conditions and help the physician to guide the patient to the correct path of treatment.

Program Description

The Rutgers Cardiac Sonography Program is a fifteen-month program and covers both didactic and clinical instruction in cardiac ultrasound and non-invasive cardiovascular diagnostic testing. The course of study includes Applied Anatomy and Physiology, Pathophysiology, Ultrasound Physics, Instrumentation and Applied Cardiac Sonography. Clinical training is provided in active Cardiology departments that are equipped with the most advanced ultrasound equipment. The Rutgers Cardiac Sonography program is offered as a University Certificate, Bachelor of Science degree (with joint partners), or as a 2nd Bachelor of Science degree.

Academic Standing

The student is expected to maintain a minimum of 2.7 GPA (80%) for each course, satisfactory attendance, satisfactory completion of assignments within allotted time frames, compliance with all Rutgers rules and regulations as set forth in the SHP and Program Student Handbook, and adherence to Rutgers academic integrity guidelines and academic policies of the School and University.

The student is expected to complete the course clinical objectives as noted in each clinical rotation syllabus. The student is responsible of familiarizing themselves with the total department's operation and all personnel they will be interacting with for the rotation period.

Each semester, students are responsible for the completion of Clinical Projects administered to them.

Medical Imaging Sciences Department

Program Director: Stanley Ort E. stanley.ort@rutgers.edu P. 908-889-2526

Primary Campus Location

Scotch Plains

Academic Affiliates

Academic institutions with partnership programs at the Rutgers School of Health Professions.

- Bloomfield College
- College of St. Elizabeth
- Fairleigh Dickinson University
- Felician College
- Georgian Court University
- New Jersey City University
- Ramapo College
- Rutgers Newark

Major Clinical Affiliates

Clinical sites are located throughout New Jersey.

- · Community Medical Center
- Monmouth Medical Center
- Ocean Medical Center
- Riverview Medical Center
- Robert Wood Johnson University Hospital
- Robert Wood Johnson University Hospital – Somerset
- Saint Barnabas Medical Center
- Saint Clare's Hospital
- Saint Peter's University Hospital
- University Hospital Newark

The student is expected to report to the clinical affiliate as scheduled for their designated rotation and training. Consistent, punctual attendance is a requirement for course completion. Two or more unexcused absences is considered excessive and unless the time is made up to the satisfaction of the affiliate and program faculty, the student will receive an F for the course. Tardiness is considered a form of unexcused absence.

Full-time and Part-time Status

The Cardiac Sonography is offered as a full-time only program. The mode of teaching is traditional classroom-based education with some web-enhanced courses.

Learning Goals

The goal of the Rutgers SHP Cardiac Sonography program is to produce graduates competent in knowledge and techniques of cardiac sonography able to meet entry-level occupational demand.

Learning Outcomes

Prior to graduation, Rutgers SHP Cardiac Sonography program students will demonstrate the following competencies:

- Describe the physical principles of ultrasound imaging and Doppler ultrasound blood flow velocity measurements.
- Recognize and interpret sonographic and Doppler ultrasound features of normal cardiac anatomy, physiology, and pathophysiology.
- Document imaging data and findings that reflect non-critical (normal or routine) vs. critical (emergent) results to an appropriate medical authority.
- Perform techniques of patient care appropriate to those of the diagnostic cardiac sonographer.
- Exhibit professional and ethical behaviors in the delivery of patient services commensurate with the expectations of the medical professions.

Additional Program Information

Additional program information is available online at the program's website add in website:

http://shp.rutgers.edu/dept/med_imaging/cardiac_son/index.html

Curriculum

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Accreditation

The Cardiac Sonography Program is fully accredited by the Commission for the Accreditation of Allied Health Education Program (CAAHEP)

1361 Park Street

Clearwater, FL 33756

P. 727-210-2350

Joint Review Commission on Education in Diagnostic Medical Sonography (JRC-DMS) 6021 University Boulevard Suite 500

Gerry Magat, Executive Director

magat@jrcdms.org

Ellicott City, MD 21043

Initial accreditation date: May 2013.

Next survey 2018.

For more info

For additional information about the Cardiac Sonography Program, contact SHP Office of Admissions:

Admissions

E. SHPadm@shp.rutgers.edu

P. 973-972-5336

Admission to Program

Students must have the following:

OPTION 1:

Certificate in Cardiac Sonography:

- Completed a two-year allied health education program (i.e. radiography, nursing, etc.) or equivalent college course work (60 college credits in any discipline).
- 2. Completed the specific prerequisite courses listed below.
- Foreign educated students applying for the certificate option must submit an evaluation of their foreign transcripts by World Education Services, official foreign transcripts, and official test scores from TOEFL (Test of English as a Foreign Language) or 6 credits of college English courses at a U.S. college.

OPTION 2:

Joint Bachelor of Science in Medical Imaging Sciences:

- Completed the required liberal study courses, and pre-requisite courses (see below), at the partner institution
- 2. Minimum GPA of 2.85.

For more information please refer to the section on Bachelor of Science in Medical Imaging Sciences. See above right-side column for Academic Affiliates.

OPTION 3:

Second Bachelor of Science Degree:

- Possess a BS or BA degree from a United States regionally accredited college or university or from an international university that is accredited in its own country. International students must provide a transcript evaluation from an approved transcript evaluation company.
- 2. Completed the specific prerequisite courses listed below.

Specific Prerequisite Courses:

- 1. *Human Anatomy & Physiology (6-8 credits)
- 2. College Math, Algebra or Statistics (3 credits)
- General Physics (2-4 credits) or Physics for the Diagnostic Imaging Professional offered through the Department of Medical Imaging Sciences
- 4. English (6 credits)
- 5. *Medical Terminology (on-line certificate courses are accepted).

*It is recommended that these courses be completed within 5 years of application to program.

Suggested coursework:

- 1. Introduction to Computers
- 2. knowledge of MS PowerPoint

Students accepted into the program are required to complete a CPR course for Allied Health Professionals prior to starting the program.

GPA minimum requirement/credentialing requirement:

All students with a GPA of 2.85 and above are encouraged to apply. However, final consideration of GPA scores will depend on the pool of applicants.

For more information about admissions, please contact the Office of Admissions: **SHPadm@shp.rutgers.edu** or 973-972-5336.



School of Health Professions **shp.rutgers.edu**

Diagnostic Medical Sonography Program

Degree Options

- Certificate
- Bachelor of Science (in Medical Imaging Sciences)
- Second Bachelor of Science (in Medical Imaging Sciences)

Diagnostic Medical Sonography Profession

"The profession of diagnostic medical sonography includes general sonography, cardiac sonography, vascular technology, and various subspecialties. The profession requires judgment and the ability to provide appropriate health care services. General sonographers, cardiac sonographers, and vascular technologists are highly skilled professionals qualified by education to provide patient services using diagnostic techniques under the supervision of a licensed Doctor of Medicine or Osteopathy. The general sonographer, cardiac sonographer, and vascular sonographer may provide this service in a variety of medical settings where the physician is responsible for the use and interpretation of appropriate procedure."

General sonographers, cardiac sonographers, and vascular sonographers assist physicians in gathering data necessary to reach diagnostic decisions.

Program Description

Our Diagnostic Medical Sonography Program (DMSP) is a full-time, fifteen-month program starting in September which covers both clinical and didactic instruction in abdominal, obstetrical, gynecological, and neonatal neurosonography ultrasound. The course of study includes Applied Anatomy and Physiology, Pathophysiology, Ultrasound Physics, Instrumentation and Applied Sonography. Clinical education is provided in active Radiology and Perinatal Testing departments equipped with the most advanced ultrasound equipment. The DMSP offers various options based on an applicant's prior educational history. We offer a B.S. in Medical Imaging with partner institutions, and a second B.S. option for those who hold a B.A. or B.S. degree. We also offer a certificate program and post-certificate B.S. completion program. The professional curriculum is the same for all options.

Graduates of the program will be eligible for examination by the American Registry of Diagnostic Medical Sonographers.

Academic Standing

Students must minimum of 2.7 GPA in to remain in good academic standing.

Full-time and Part-time Status

This program is only available on a full-time basis primarily during the day.

Medical Imaging Sciences Department

Program Director: Cynthia Silkowski E. silkowcy@shp.rutgers.edu P. 908-889-2521

Primary Campus Location

- Newark
- Scotch Plains

Academic Affiliates

Academic institutions with partnership programs at the Rutgers School of Health Professions.

- Bloomfield College
- College of Saint Elizabeth
- Fairleigh Dickinson University
- Felician College
- Georgian Court College
- New Jersey City University
- Ramapo College
- · Rutgers University Newark

Major Clinical Affiliates

Clinical sites are located throughout New Jersey

- CentraState Health Care System
- Bayshore Community Hospital
- Hackensack University Medical Center
- University Medical Center of Princeton at Plainsboro
- Morristown Memorial Hospital
- Ocean Medical Center
- Atlantic Health Systems Hospital Corp, Overlook Hospital

Learning Goals

Produce graduates competent in knowledge and techniques in "general" diagnostic medical sonography that can meet entry-level occupational demand.

Learning Outcomes

Upon completion of the Diagnostic Medical sonography program, graduates will be able to:

- *Obtain, review, and integrate pertinent patient history and supporting clinical data to facilitate optimum diagnostic results.
- Identify and describe sonographic features for normal, abnormal and congenital variations/pathologies in abdominal, obstetrical, gynecological and small parts sonography as well as have awareness of normal and abnormal vascular and cardiac sonography.
- Explain principles of diagnostic ultrasound physics.
- Perform appropriate procedures and record anatomic, pathologic, and/ or physiologic data for interpretation by a physician.
- Record, analyze, and process diagnostic data and other pertinent observations made during the procedure for presentation to the interpreting physician.
- Exercise discretion and judgment in the performance of sonographic and/or other noninvasive diagnostic services.
- Demonstrate appropriate communication skills with patients and colleagues.
- Exhibit professional and ethical behaviors in the delivery of patient services commensurate with the expectations of the medical professions.
- Provide patient education related to medical ultrasound and/or other diagnostic vascular techniques, and promote principles of good health.
- Develop and cultivate the confidence and responsibility needed to perform as a competent sonographer.
- Understand and recognize the importance of adaptability.
- Implement and perform diagnostic procedures adhering to acceptable departmental, institutional, governmental and professional standards.
- Encompass strategies that assure professional development at a level of clinical practice consistent with acceptable standards.
- Establish values and attitudes congruent with professional standards and ethics.
- Demonstrate awareness of and operate within the Diagnostic Medical Sonographer's scope of practice.

Additional Program Information

For More Detailed Information on the profession, requirements, curriculum, please visit the program's website at:

http://shp.rutgers.edu/dept/med_imaging/DMSonography/index.html

- Atlantic Health Systems, Atlantic Maternal Fetal Medicine at Morristown
- St. Clare's Medical System
- The Valley Hospital, Maternal Fetal Medicine
- Somerset Medical Center
- Jersey Shore University Medical Center
- Holy Name Medical Center
- Robert Wood Johnson University Hospital
- Robert Wood Johnson University Hospital – Antenatal Testing Unit
- Saint Peter's University Hospital
- Saint Peter's University
 Hospital Maternal Fetal
 Medicine
- St. Barnabas
 Ambulatory Care Center
- St. Barnabas Medical Center
- Newark Beth Israel
 Medical Center Maternal
 Fetal Medicine
- University Hospital Newark
- Doctor's Office Center
- Jersey City Medical Center

Accreditation

Commission on Accreditation of Allied Health Education Program

35 East Wacker Drive, Suite 1970

Chicago, IL 60601-2208

P. (312) 553-9355

Status: Reaccredited September 2014. Next accreditation is 2024.

For more info

For additional information about the Diagnostic Medical Sonography Program, contact SHP Admissions:

Admissions

E. SHPadm@shp.rutgers.edu

P. 973-972-5336

Curriculum

Please refer to the database for program requirements and course descriptions via the SHP website: http://coursecatalog.shp.rutgers.edu

Admission to Program

The Diagnostic Medical Sonography Program offers 3 educational options.

OPTION 1:

Certificate in Diagnostic Medical Sonography:

- Completed a two-year allied health education program (i.e. radiography, nursing, etc.) or equivalent college course work (60 college credits in any discipline)
- 2. Completed the following equivalent college course prerequisites:
 - a. *Human Anatomy & Physiology (6-8 credits)
 - b. College Math, Algebra or Statistics (3 credits)
 - General Physics (2-4 credits) or Physics for the Diagnostic Imaging Professional offered through the Department of Medical Imaging Sciences
 - d. English (3 credits)
 - e. *Medical Terminology (on-line certificate courses are accepted).

*It is recommended that these courses be completed within 5 years of application to program. A minimum grade of B- is required for the Anatomy and Physiology courses or there equivalent.

OPTION 2:

Bachelor of Science in Medical Imaging Sciences:

 Completed the required liberal study courses at the partner institution with a minimum GPA of 2.85. For more information please refer to the section on Bachelor of Science in Medical Imaging Sciences at program's website

http://shp.rutgers.edu/dept/med_imaging/DMSonography/index.html

OPTION 3:

Second Bachelor of Science Degree:

- Possess a BS or BA degree from a United States regionally accredited college or university or from an international university that is accredited in its own country. International students must provide a transcript evaluation from an approved transcript evaluation company.
- 2. Completed the specific prerequisite courses listed in Option 1.

Students accepted into the program are required to complete a CPR course for Allied Health Professionals prior to starting the program.

Foreign educated students who apply for to the program must submit an official evaluation of their foreign transcripts by World Education Services, official foreign transcripts, and official test scores from TOEFL (Test of English as a Foreign Language).

GPA minimum requirement/credentialing requirement

Applicants with a GPA of 2.85 and above may apply. When reviewing an application, a strong emphasis is placed on the overall GPA and the actual grades received for the required prerequisite courses. A minimum grade of Bis required for the Anatomy and Physiology courses or their equivalent courses.

After application review, the strongest candidates will be scheduled for an interview. In selecting students for admission, the program looks for evidence of character, potential, motivation and sound academic preparation.

For more information about admissions, please contact the Office of Admissions: **SHPadm@shp.rutgers.edu** or 973-972-5336.

*Taken from the Essentials and Guidelines from Diagnostic Medical Sonography Programs accredited by the Commission on Accreditation of Allied Health Education Programs.



School of Health Professions shp.rutgers.edu

Nuclear Medicine Technology Program

Admissions to this program have been temporarily suspended

Degree Options

- Certificate
- Bachelor of Science (in Medical Imaging Sciences)
- Second Bachelor of Science (in Medical Imaging Sciences)

Nuclear Medicine Technology Profession

Nuclear Medicine Technology is a medical specialty that uses radioactive materials for the diagnosis and treatment of disease. It is a field that has grown phenomenally over its relatively short existence. Recent advances in the field include monoclonal antibody and peptide imaging, positron emission tomography (PET) fused with CT, and expanded use of therapeutic procedures. Nuclear Medicine Technologists are highly skilled professionals whose knowledge in patient care techniques and the biological and physical sciences enable them to work hand- in-hand with physicians and other allied health professionals to provide care, comfort and an accurate diagnostic and treatment plan for each patient. They are specifically trained in radiation safety, laboratory techniques, imaging procedures and the use of highly specialized equipment to assure the efficient daily operation of their facility.

Technologists can find employment opportunities in hospitals, private imaging centers, and laboratories. Additional, career opportunities exist with technical and radiopharmaceutical companies in product sales and technical support. All career opportunities offer competitive salaries and attractive benefits.

Program Description

The Nuclear Medicine Technology Program is full time for a duration of fifteen months. During these fifteen months, students study nuclear medicine from its roots to present day technology, then explore its future potential in diagnostic and therapeutic medicine. This is done through a combination of didactic classroom work and hands on clinical time in the hospital setting. Students are expected to maintain a grade average of at least 80% to remain in the program.

The program has certificate, and Bachelor Degree options, all program options prepare the student for examination by the Nuclear Medicine Technology Certification Board and/or American Registry of Radiologic Technologists. The program is approved by the New Jersey Commission of Radiation Protection and accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology.

The academic curriculum and the clinical training facilities have been selected to provide a program that is educational and comprehensive in its methods and is capable of thoroughly training students in the principles, ethics and practices of Nuclear Medicine Technology.

Medical Imaging Sciences Department

Program Director: Isabel Breen E. Itb11@shp.rutgers.edu P. 908-889-2449

Primary Campus Location

- Newark
- Scotch Plains

Academic Affiliates

Please see the faculty listing online under Medical Imaging Department (view all campuses).

- Bloomfield College
- College of St. Elizabeth
- Fairleigh Dickinson University
- · Georgian Court University
- New Jersey City University
- Ramapo College
- Rutgers Newark
- · Felician College

Major Professional Practice Affiliates

Clinical sites are located throughout New Jersey.

- Holy Name Hospital
- Palisades General Hospital
- Advanced Medical Imaging
- Cardinal Health Radio Pharmacy
- Robert Wood Johnson
 University Hospital New
 Brunswick
- Robert Wood Johnson University Hospital -Somerset
- St. Peter's University Hospital
- University Hospital Newark
- Newark Beth Israel Medical Center

Participate in a minimum of 1,450 hours of hands on experience in nuclear medicine imaging and non-imaging procedures.

Academic Standing

Students must maintain a 2.85 GPA and earn a minimum grade of B- for all curriculum courses for program advancement.

Full-time and Part-time Status

This is a full-time program. We currently have no provisions for part-time enrollment.

Learning Goals

Students will be proficient in all aspects of Nuclear Medicine Technology for entry-level technologist employment. Students will practice safe, compassionate, and ethical professional patient care.

Learning Outcomes

- Perform useful calculations associated with radiation and radioactivity, including decay equations and unit conversions.
- Operate gamma cameras and ancillary equipment for radiation measurement and radiation safety.
- Demonstrate practical patient care including infection control, venipuncture, body mechanics, and patient assessment and interaction.
- Explain the effects of radiation on microscopic and macroscopic living systems.
- Implement radiation safety procedures and applicable state and federal regulations.
- Describe human anatomy especially as it pertains to clinical nuclear medicine
- Demonstrate nuclear medicine quality control procedures and protocols.
- · Pass a mock registry exam.

Additional Program Information

For more detailed information on the profession, requirements, curriculum please visit the following websites:

http://shp.rutgers.edu/dept/med_imaging/nuclear/index.html http://shp.rutgers.edu/dept/med_imaging/nuclear/accreditation.html

Curriculum

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Admission to Program

OPTION 1: Certificate in Nuclear Medicine Technology Applicants for this program must have successfully completed at least two years of college and the following post-secondary course work from an accredited institution in higher education. Prior completion of an Allied Health Care program may meet these requirements. Applicants must have current certification in Basic Life Support (BLS) or must complete a BLS course on their own before the end of the first semester.

Accreditation

Joint Review Committee on Educational Programs in Nuclear Medicine PMB 418, #1 2nd Ave East, Suite C Polson, MT 59860-2107 P: (406) 883-0003

Contact: Jan Winn

Accreditation Status: Program is currently but on probation

For more info

For additional information about the Nuclear Medicine Technology Program, contact SHP Admissions:

Admissions

E. SHPadm@shp.rutgers.edu

P. 973-972-5336

- 2 semesters of Human Anatomy and Physiology with laboratory
- 1 semester of Biology with laboratory
- 1 semester of Introduction to Chemistry with laboratory
- 1 semester of College Algebra or Pre-Calculus (3 cr.)
- 2 semesters of Oral/Written Communications
- 1 semester of General Physics
- 1 semester of Social Sciences
- 1 semester of Humanities
- Medical terminology

Minimum GPA requirement is 2.85

Minimum of grade of B- in Anatomy and Physiology Courses

OPTION 2: Bachelor of Science in Medical Imaging Science: Applicants must have completed the required liberal study courses at the partner institution with a minimum GPA of 2.85. For more information please refer to the section on Bachelor of Science in Medical Imaging Science.

Applicants must have current certification in Basic Life Support (BLS) or must complete a BLS course on their own before the end of the first semester.

OPTION 3: Second Bachelor of Science Degree: This option is for applicants that possess a BS or BA degree from a United States regionally accredited college or university or from an international university that is accredited in its own country. International students must provide a transcript evaluation from an approved transcript evaluation company. Applicants must also have completed the specific prerequisite courses listed below. Minimum GPA requirement is 2.85 with a minimum of grade of B- in Anatomy and Physiology Courses. Applicants must have current certification in Basic Life Support or must complete a BLS course on their own before the end of the first semester.

- 2 semesters of Human Anatomy and Physiology with laboratory
- 1 semester of Biology with laboratory
- 1 semester of Introduction to Chemistry with laboratory
- 1 semester of College Algebra or Pre-Calculus (3 cr.)
- 2 semesters of Oral/Written Communications
- 1 semester of General Physics
- 1 semester of Social Sciences
- 1 semester of Humanities
- Medical terminology

For all program options, foreign educated students must submit the following: TOEFL scores (minimum TOEFL score of 90 on the Internet-based exam with minimum individual element scores as follows: Reading 20, Listening 20, Speaking 26, and Writing 24. The Computer-Based exam minimum score is 233) and WES translation of foreign transcripts. Interested applicants can contact the Office of Admissions at (973) 972-5336.

School of Health Professions

shp.rutgers.edu

Radiologic Imaging Modalities Program

Degree Options

Certificate

Radiologic Technologist Professions

Radiologic technologists are the medical professional who are registered by the American Registry of Radiologic Technologist (ARRT) and are known as "R.T.s". R.T.s have completed a minimum of two tears of formal education in an accredited program. Radiologic technologist perform diagnostic imaging examinations that encompass the entire body. They are educated in anatomy, patient positioning, examination techniques, equipment protocols, radiation safety, radiation protection and patient care. Radiologic technologist may practice in advanced specialties that include but are not limited to CT, MRI and Mammography.

Program Description

The Certificate in Radiologic Imaging Modalities (RIM) Program was designed to enhance the professional development of ARRT certified Radiologic Technologist by providing students with the ability to acquire knowledge and skills necessary for advanced practice.

The program is offered via distance learning. The program combines a strong academic curriculum and intensive clinical training. Clinical requirements can be fulfilled at a Rutgers SHP facility or at another facility pending approval of a clinical contract. Clinical schedules are flexible and arranged on an individual basis according to the student ability to attend.

The program recognizes and builds on previous academic coursework of Radiologic Technologist who have previously earned a certificate or associate degree. This unique and flexible program is geared towards ARRT credentialed radiologic technologist wishing to increase their marketability in the field and obtain the highly-sought after advanced standing in CT, MRI and Mammography.

Academic Standing

Generally, academic standing is based on student performance in didactic and clinical courses.

Students are required to maintain at least a 2.5 cumulative grade GPA in order to remain in compliance with the program's academic policies. Students whose GPA falls below 2.5 will be placed on academic probation. Additional information is available in the Rutgers SHP Student Handbook

http://shp.rutgers.edu/current_students/pdf/Handbook.pdf.

Medical Imaging Sciences

Program Director: Gladys Montane Ed.D., R.T., (R) (M) E. montangm@shp.rutgers.edu

Primary Campus Location

- ONLINE web-based
- Newark

P. 973-972--8528

Major Clinical Affiliates

University Hospital – Newark Newark Beth Israel - Newark

For more info

For additional information about the Certificate in Radiologic Imaging Modalities program, contact SHP Admissions:

Admissions

E. SHPadm@shp.rutgers.edu

P. 973-972-5336

Full-time and Part-time Status

In general, the RIM certificate program at Rutgers, School of Health Professions (SHP) is designed to meet the needs of working radiologic technologist. The program is designed to be accomplished on a part-time basis in 5 years.

Learning Goals

The RIM program is designed to enhance the professional development of Radiologist Technologist by providing the didactic knowledge and skills necessary to advance in the work place for advanced practice in CT, MRI and Mammography. The combination of a strong academic curriculum and intensive clinical training provides a program that is comprehensive in its methods, preparing students for the advanced national registry examination.

Learning Outcomes

Upon successful completion of the program, graduates will be able to:

MRI

- Demonstrate MR safety and protective practices associated with MR imaging procedures.
- State advantages and disadvantages of axial, sagittal, coronal and oblique images in MRI (i.e., which structures are best demonstrated from each projection).
- Describe common artifacts that occur during imaging
- Describe the criteria for imaging windows for different areas of the body.
- Describe the differences between adult and pediatric pulse sequences in MR.
- Describe the differences in tissue signal characteristics between adult and pediatric examinations.
- Evaluate images for appropriate positioning, anatomy, pulse sequences and overall quality.
- Identify the common indications and pathology for body systems in the adult and pediatric patient
- identify normal MR tissue characteristics of anatomical structures of interest.
- Identify the MR tissue characteristics of select pathological processes.
- Apply and identify imaging parameters that determine image contrast.
- Apply the imaging parameters involved in MR image formation.
- Apply MR imaging parameters in the clinical setting.
- Apply imaging options used to optimize image quality in MRI
- Recognize and explain changes in sizes and shapes of anatomical structures that can indicate pathology.

- Construct pulse sequence diagrams based on specific timing of RF pulses and gradient applications.
- Recognize emergencies that can occur in MR imaging, and explain appropriate actions required of the technologist.
- Analyze the process of MR signal induction, sampling and conversion.

CT

- Compare the image characteristics of spin echo and gradient echo pulse sequences.
- Identify arrhythmias on ECG.
- Identify a premature contraction on the ECG wave.
- Apply ECG dose modulation to reduce patient dose.
- Apply prospective gating to reduce patient dose in cardiac CT
- Identify key artifacts on a CTA study of a coronary arteries.
- Determine if contrast media is indicated for a specific procedure and if indicated, name the type and specify the dosage and route of administration.
- Determine from patient medical laboratory results, patient history and charted information if the use of contrast media is contraindicated and explain why.
- Adapt conventional scanning parameters for CT procedures of the head and neck to spiral mode and explain the differences.

Mammography

- Correlate clinical breast changes with imaging findings, and comparison with previous mammograms.
- Implement proper techniques and procedures for conducting a breast assessment.
- Use non-diagnostic descriptors to record findings and document observations arising from the breast exam.
- Participate in patient education regarding breast selfexamination.
 - Modify procedures to assist patients with special needs.
- Apply the current national guidelines and standards set forth by the Mammography Quality Assurance Advisory Committee, the Food and Drug Administration (FDA) and the American College of Radiology (ACR).
- Properly operate mammography equipment and demonstrate the correct use of compression devices, filtration devices, the magnification setup, use of grids and automatic exposure controls.
- Accessorize equipment according to the procedure being performed.
- Set appropriate kVp, mA and time or automatic exposure control (AEC) and the correct position of the photosensor.

- Process digital images.
- Apply specimen imaging guidelines.
- Apply specimen handling protocols and record keeping for pathologic analysis.
- Document test results and make appropriate adjustments or recommendations to maintain patient safety.
- Implement appropriate corrective measures when established QC standards are not within recommended guidelines.
- Perform routine safety checks on mammography equipment and accessories.

Additional Information

Additional programmatic information is available online. http://shp.rutgers.edu/dept/med_imaging/radiologist/index.html

Curriculum

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Admission to Program

To qualify for admission, applicants must meet the following requirements:

- ARRT registered Diagnostic Radiographer
- 6 credits of college level English/Written Expression or equivalent courses with a minimum grade of "C"
- 3 credits of college level Algebra or an equivalent course with a minimum grade of "C"
- An accumulative grade point average of 2.5 or higher in a standard 4.0 scale
- An up-to-date Radiologic Technology License from New Jersey and current registration by the ARRT. If not licensed in NJ must be eligible. To check for eligibility please contact New Jersey Department of Environmental Protection Radiological Bureau at 609-984-5890.

Selection for admissions is a competitive process that is the responsibility of the faculty. Decisions are based on a composite of the applicants overall academic ability, including achievement in professional and science courses. Aptitude in oral and written self-expression; personal characteristics such as leadership potential; and life and work experiences are also considered.

For more information about admissions, please contact the Office of Admissions: **SHPadm@shp.rutgers.edu** or 973-972-5336.

School of Health Professions

shp.rutgers.edu

Radiologic Imaging Modalities Program

Degree Options

Bachelor of Science

Radiologic Technologist Professions

Radiologic technologists are the medical professionals who are registered by the American Registry of Radiologic Technologist (ARRT) and are known as "R.T.s". R.T.s have completed a minimum of two tears of formal education in an accredited program. Radiologic technologists perform diagnostic imaging examinations that encompass the entire body. They are educated in anatomy, patient positioning, examination techniques, equipment protocols, radiation safety, radiation protection and patient care. Radiologic technologists may practice in advanced specialties that include but are not limited to CT, MRI and Mammography.

Program Description

The Bachelor of Science Radiologic Imaging Modalities (BS RIM) Program was designed to enhance the professional development of ARRT certified Radiologic Technologist by providing students with the ability to acquire knowledge and skills necessary for advanced practice.

The program is offered via distance learning. The program combines a strong academic curriculum and intensive clinical training. Clinical requirements can be fulfilled at a Rutgers SHP facility or at another facility pending approval of a clinical contract. Clinical schedules are flexible and arranged on an individual basis according to the student ability to attend.

The BS RIM program is a joint degree program offered in partnership with Thomas Edison State University (TESU). TESU provides general education, basic sciences, and liberal arts courses. Rutgers-School of Health Professions provides the specialty courses in the imaging sciences. The program recognizes and builds on previous academic coursework of Radiologic Technologist who have previously earned a certificate or associate degree. This unique and flexible program is geared towards ARRT credentialed radiologic technologist wishing to increase their marketability in the field and obtain the highly sought Baccalaureate degree.

The program recognizes and builds on previous academic coursework as well as allied health professional experience to provide students with entry level radiography credits which may be applied towards the concentration and additional transfer credits which may be applied towards the completion of the general education requirements of the bachelor's degree.

Medical Imaging Sciences

Program Director: Gladys Montane Ed.D., R.T., (R) (M) E. montangm@shp.rutgers.edu

Primary Campus Location

- ONLINE web-based
- Newark

P. 973-972--8528

Major Clinical Affiliates

University Hospital – Newark Newark Beth Israel - Newark

For more info

For additional information about the Certificate in Radiologic Imaging Modalities program, contact SHP Admissions:

Admissions

F. SHPadm@shp.rutgers.edu P. 973-972-5336

Academic Standing

Generally, academic standing is based on student performance in didactic and clinical courses.

Students are required to maintain at least a 2.5 cumulative grade point average (GPA) in order to remain in compliance with the program's academic policies. Students whose GPA falls below 2.5 will be placed on academic probation. Additional information is available in the Rutgers SHP Student Handbook

http://shp.rutgers.edu/current_students/pdf/Handbook.pdf.

Full-time and Part-time Status

In general, the BS RIM program at Rutgers, School of Health Professions (SHP) is designed to meet the needs of working radiologic technologist. The program is designed to be accomplished on a part-time basis in 7 years.

Learning Goals

The BS RIM program enhances the professional development of Radiologist Technologist by providing the didactic knowledge and skills necessary to advance in the work place for advanced practice in CT and MRI. The combination of a strong academic curriculum and intensive clinical training provides a program that is comprehensive in its methods, preparing students for the advanced national registry examination.

Learning Outcomes

Upon successful completion of the program, graduates will be able to:

MRI

- Demonstrate MR safety and protective practices associated with MR imaging procedures.
- State advantages and disadvantages of axial, sagittal, coronal and oblique images in MRI (i.e., which structures are best demonstrated from each projection).
- Describe common artifacts that occur during imaging
- Describe the criteria for imaging windows for different areas of the body.
- Describe the differences between adult and pediatric pulse sequences in MR.
- Describe the differences in tissue signal characteristics between adult and pediatric examinations.
- Evaluate images for appropriate positioning, anatomy, pulse sequences and overall quality.
- Identify the common indications and pathology for body systems in the adult and pediatric patient
- identify normal MR tissue characteristics of anatomical structures of interest.
- Identify the MR tissue characteristics of select pathological processes.
- Apply and identify imaging parameters that determine image contrast.

- Apply the imaging parameters involved in MR image formation.
- Apply MR imaging parameters in the clinical setting.
- Apply imaging options used to optimize image quality in MRI
- Recognize and explain changes in sizes and shapes of anatomical structures that can indicate pathology.
- Construct pulse sequence diagrams based on specific timing of RF pulses and gradient applications.
- Recognize emergencies that can occur in MR imaging, and explain appropriate actions required of the technologist.
- Analyze the process of MR signal induction, sampling and conversion.

CT

- Compare the image characteristics of spin echo and gradient echo pulse sequences.
- Identify arrhythmias on ECG.
- Identify a premature contraction on the ECG wave.
- Apply ECG dose modulation to reduce patient dose.
- Apply prospective gating to reduce patient dose in cardiac CT
- Identify key artifacts on a CTA study of a coronary arteries.
- Determine if contrast media is indicated for a specific procedure and if indicated, name the type and specify the dosage and route of administration.
- Determine from patient medical laboratory results, patient history and charted information if the use of contrast media is contraindicated and explain why.
- Adapt conventional scanning parameters for CT procedures of the head and neck to spiral mode and explain the differences.

Additional Information

Additional program information is available online. http://shp.rutgers.edu/dept/med_imaging/radiologist/index.html

Curriculum

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Admission to Program

To qualify for admission, applicants must meet the following requirements:

- ARRT registered Diagnostic Radiographer
- 6 credits of college level English/Written Expression or equivalent courses with a minimum grade of C

- 3 credits of college level Algebra or an equivalent course with a minimum grade of C
- An accumulative grade point average of 2.5 or higher in a standard 4.0 scale
- An up-to-date Radiologic Technology License from New Jersey and current registration by the ARRT. If not licensed in NJ must be eligible. To check for eligibility please contact New Jersey Department of Environmental Protection Radiological Bureau at 609-984-5890.

Selection for admissions is a competitive process which is the responsibility of the faculty. Decisions are based on a composite of the applicants overall academic ability, including achievement in professional and science courses. Aptitude in oral and written self-expression; personal characteristics such as leadership potential; and life and work experiences are also considered.

For more information about admissions, please contact the Office of Admissions: **SHPadm@shp.rutgers.edu** or 973-972-5336.



School of Health Professions **shp.rutgers.edu**

Vascular Sonography Program

Degree Options

- Certificate
- Bachelor of Science (in Medical Imaging Sciences)
- Second Bachelor of Science (in Medical Imaging Sciences)

Vascular Sonography Profession

Vascular sonography (also known as vascular technology) is the use of ultrasound imaging to view the vascular anatomy in a non-invasive and pain-free examination. This safe, convenient method of diagnosis allows the physician to assess the flow of blood through the arteries and veins in a dynamic way. Vascular sonographers are specially trained professionals who are an integral part of the cardiovascular medical and surgical management team in today's health care environment. They use sophisticated equipment that acquires two- dimensional images of the blood vessels (sometimes called vasculature) and Doppler spectral tracings of blood flow to provide an accurate assessment of the patient's condition. Vascular Sonographers provide one of the first lines of testing towards diagnosis of cardiovascular conditions and help the physician to guide the patient to the correct path of treatment.

Program Description

The Vascular Sonography Program is 15 months long, covering didactic and clinical instruction on the non-invasive diagnosis of vascular diseases. It includes courses in vascular anatomy, physiology, pathophysiology, physics of ultrasound, medical instrumentation, and surgical and medical therapeutics for vascular diseases.

Techniques in diagnostic testing are taught in the classroom but require extensive clinical practice. Technical skills are only developed through direct patient testing. Our view is that this clinical phase is critical to the success of our graduates. It is a large and very important component of our instruction, reinforced by experienced vascular sonographers and technologists in active hospital and private practice vascular laboratories affiliated with the program.

Students can expect to have approximately 40 hours of active commitment per week in classroom, clinical, and travel. They must have a car to commute between classes and clinical sites. Hospital affiliates are not closely spaced and one hour of travel may be required. Part-time work may be possible but can be difficult for students to manage. Work cannot interfere with the required program hours.

Academic Standing

Students must maintain a minimum of a 2.7 GPA (80%), and compliance with all Rutgers rules and regulations as set forth in the SHP Student Handbook, department policy manual, and the Rutgers academic integrity guidelines.

Medical Imaging Sciences Department

Program Director: Stanley Ort E. stanley.ort@rutgers.edu P. 908-889-2526

Primary Campus Location

Scotch Plains

Faculty

Please see the department faculty listing online under Medical Imaging Sciences (Scotch Plains campus).

Academic Affiliates

Academic institutions with partnership programs at the Rutgers School of Health Professions.

- Bloomfield College
- · College of St. Elizabeth
- Fairleigh Dickinson University
- Felician College
- · Georgian Court University
- New Jersey City University
- Ramapo College
- Rutgers Newark

Major Clinical Affiliates

Clinical sites are located throughout New Jersey:

- East Orange VA Medical Center
- Hackensack
 University Hospital
- Saint Barnabas Hospital
- · Christ Hospital
- Saint Clare's Hospital
- Jersey Shore Vascular Institute
- University Hospital Newark
- Newark Beth Israel Hospital

Regarding clinical affiliations, the student is expected to report to the clinical affiliate as scheduled for their designated rotation and training. Consistent attendance is a requirement for course completion. Two or more unexcused absences is considered excessive and unless the time is made up to the satisfaction of the affiliate and program faculty the student will receive an F for the course. Tardiness is considered a form of unexcused absence. It is the students' responsibility to familiarize themselves with the total department operation and all personnel they will be interacting with for the rotation period.

Full-time and Part-time Status

This is a full-time program.

Learning Goals

Produce graduates competent in knowledge and techniques in Vascular Sonography that to meet entry-level occupational demand.

Learning Outcomes

Upon completion of the Vascular Sonography program, graduates will be able to:

- Explain the physical principles of ultrasound imaging and Doppler ultrasound blood flow velocity measurements.
- Identify sonographic and Doppler ultrasound features of normal cardiovascular and vascular specific anatomy, physiology, and pathophysiology.
- Appropriately document findings to an appropriate medical authority.
- Conducttechniques of patient care appropriate to those in the performance of diagnostic cardiac sonography.
- Exhibit professional and ethical behaviors in the delivery of patient services commensurate with the expectations of the medical professions.
- Explain physical principles of sonographic image formation and interpret blood flow velocity measurements.
- Adjust instrument settings required to obtain optimal images.
- Identify normal cardiovascular anatomy.
- Distinguish pathologic changes in vascular anatomy due to peripheral arterial and venous disease.
- Examine fluid dynamics of normal blood flow.
- Describe pathological changes in blood flow due to vascular disease.

Additional Program Information

Additional programmatic information is available online:

http://shp.rutgers.edu/dept/med_imaging/vascular/index.html

- Robert Wood Johnson University Hospital -Somerset
- Saint Peters University Medical Center

Accreditation

Full Accreditation by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) through:

Joint Review Committee on Education in Cardiovascular Technology (JRC- CVT)

1449 Hill Street

Whitinsville, MA 01588 Phone: 978-456-5594

Fax: 727-210-2354

Email: office@jrccvt.org
Contact: Jackie Long-Goding,

Executive Director

Status: CAAHEP accredited since 1995. Re-accredited 2004, and 2009 on continuing accreditation status.

Next survey 2018.

For more info

For additional information about the Vascular Sonography Program, contact SHP Admissions:

Admissions

E. SHPadm@shp.rutgers.edu P. 973-972-5336

Curriculum

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Admission to Program

The Program is an upper division undergraduate program. Certificate candidates must have an Associate's degree from an accredited institution of higher education. Credits include:

- Human Anatomy and Physiology with laboratory (6-8 credits)
- College Math, Algebra or Statistics (3 credits)
- Medical Terminology
- English Composition (6 credits)
- Physics (2-4 credits, minimum 2 credits without lab)

Foreign educated applicants must submit a TOEFL score with a minimum score of 600, official transcripts from foreign institutions, and an acceptable translation of foreign transcripts.

OPTION 1: Certificate in Vascular Sonography: Applicants must have previously completed an Associates' degree from an accredited institution of higher learning. Applicants must also have completed the specific prerequisite courses listed below.

OPTION 2: Bachelor of Science in Medical Imaging Sciences: Applicants must have completed the required liberal study courses, and pre-requisite courses (see below), at the partner institution with a minimum GPA of 2.85. For more information please refer to the section on Joint Bachelor of Science in Medical Imaging Technologies. See Academic Affiliates in the above right side column.

OPTION 3: Second Bachelor of Science Degree: This option is for applicants that possess a BS or BA degree from a United States regionally accredited college or university or from an international university that is accredited in its own country. International students must provide a transcript evaluation from an approved transcript evaluation company. Applicants must also have completed the specific prerequisite courses listed below.

Specific Prerequisite Courses: Option 1 and 3 applicants must have completed the following college course prerequisites or their equivalent: *Human Anatomy & Physiology (6-8 credits), College Math, Algebra or Statistics (3 credits), General Physics (2-4 credits) or Physics for the Diagnostic Imaging Professional offered through the Department of Medical Imaging Sciences, English (6 credits) and *Medical Terminology (on- line certificate courses are accepted). *It is recommended that these courses be completed within 5 years of application to program.

Suggested coursework: Introduction to Computers, knowledge of MS PowerPoint. Students accepted into the program are required to complete a CPR course for Allied Health Professionals prior to starting the program.

GPA minimum requirement/credentialing requirement

A minimum of 2.85 is required.

For more information about admissions, please contact the Office of Admissions: **SHPadm@shp.rutgers.edu** or 973-972-5336.



School of Health Professions **shp.rutgers.edu**

Radiologist Assistant Program

Degree Options

a. Master of Science

Radiologist Assistant Professions

A radiologist assistant is an advanced-role for experienced diagnostic radiologic technologist who functions as a radiology extender, supplementing and supporting the work of radiologists. The RA serves to enhances patient care as an advanced level practitioner who works under the supervision of a radiologist performing patient assessment, patient management, fluoroscopy and other advanced level radiological procedures, and making initial observation of diagnostic images. In performing these duties, the radiologist assistant allows the radiologist to focus on interpretation, diagnosis and treatment.

Program Description

The 44-credit, distance learning graduate degree program was created to meet the career goals of working radiological professionals. The program follows the national curriculum set forth by the American Society of Radiologic Technologist and the American College of Radiology and meets the American Registry of Radiologic Technologist certification requirements. Students are required to identify a radiology practice with an American Board of Radiology radiologist(s) willing to mentor and assess their competence.

The RA program offers students the highest level of educational experiences by combining distance education with visits to the Newark campus once per year to provide students with the benefit of face-to-face contact with faculty.

The American Registry of Radiologic Technologist has recognized the Master of Science Radiologist Assistant program since 2004. The program is recognized until 2020.

Academic Standing

Students are required to maintain at least a 3.0 cumulative GPA in order to remain in compliance with the program's academic policies. Students whose GPA falls below 3.0 will be placed on academic probation.

Full-time and Part-time Status

In general, the Radiologist Assistant program at Rutgers, School of Health Professions (SHP) is designed to meet the needs of working diagnostic radiographers. The program is designed to be accomplished on a part-time basis in 3 years. All course requirements for graduation must be completed within 4 years of starting the program.

Medical Imaging Sciences

Program Director: Gladys Montane, Ed.D., R.T., (R)(M)

E. montangm@shp.rutgers.edu P. 973-972-8528

Primary Campus Location

 ONLINE – web-based program

Major Clinical Affiliates

*Students must identify a radiologist group to serve as a mentor and supervise clinical experiences.

University Hospital – Newark

For more info

For additional information about the Radiologist Assistant Program, contact SHP Admissions:

Admissions G. SHPadm@shp.rutgers.edu P. 973-972-5336

Learning Goals

The Master of Science Radiologist Assistant program is designed to enhance the professional development of Diagnostic Radiographers in the workforce. Throughout the duration of studies students are presented with the knowledge and skills necessary for advanced practice. The combination of a strong academic curriculum and intensive clinical training provides a program that is comprehensive in its methods and capable of thoroughly training students in the advanced practices of a Radiologist Assistant.

Learning Outcomes

Upon successful completion of the program, graduates will be able to:

- Apply radiologic clinical analysis process in the patient care setting.
- Identify the administration, indications, contraindications and adverse effects related to moderate sedation and local anesthetics. Assess the patient and patient's records prior to and manage the patient during examinations requiring moderate sedation.
- Under radiologist supervision, perform patient examinations for diagnostic inspection and therapeutic treatment.
- Evaluate examination outcomes against examination requirements.
- Compose an internal memorandum of initial observations made during the examination following prescribed protocols.
- Identify the advantages and limitations of equipment and various exposure settings as a diagnostic tool.
- Verify quality assurance (QA) and quality control (QC) procedures to ensure that equipment is operating safely and in a standardized manner prior to patient exposure and on a daily basis.
- Apply techniques for reducing exposure to external and internal sources of radiation to the patient and personnel
- Implement a systematic method or technique for observing static and dynamic patient images for the purpose of recognizing normal anatomical and physiological appearances, and those variations in appearance that may indicate pathology or injury.
- Make recommendations for additional images or alternative imaging procedures as warranted for diagnostic purposes.
- Formulate initial observations presented to the radiologist
- Implement the use of clinical pathway knowledge in the clinical setting
- Adhere to health information and medical informatics policies and procedures, including those related to the use of electronic health record systems.
- Assess, evaluate and formulate priorities in daily practice.
- Assess and evaluate psychological and physical changes in the patient's condition and formulate appropriate actions.

Additional Information

Additional program information is available online. http://shp.rutgers.edu/dept/med_imaging/radiologist/index.html

Curriculum

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Admission to Program

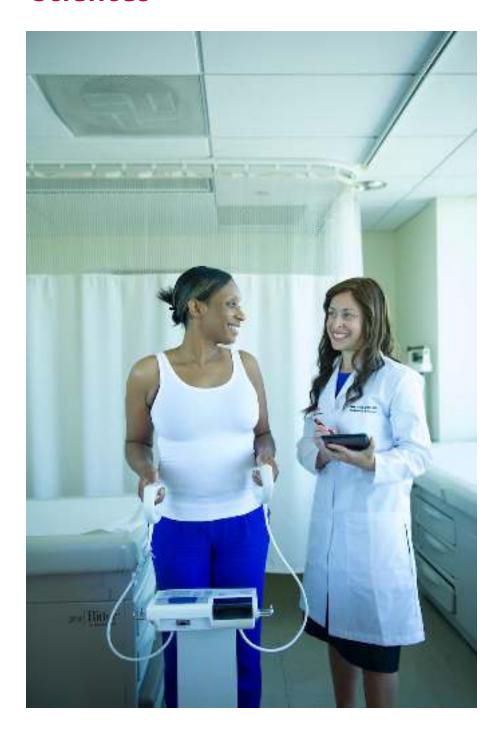
To qualify for admission, applicants must meet the following requirements:

- Graduated from a Joint Review Committee on Education in Radiologic Technology approved Diagnostic Radiography program
- Earned bachelor degree with an accumulative grade point average of 3.0 or higher
- Possess an up-to-date New Jersey Diagnostic Technologist license or other state license if required to practice in the state and current registration by the American Registry of Radiologic Technologists (to determine NJ state license eligibility contact the Department of Environmental Protection Bureau of Radiological health at (609) 984-5890)
- Employed as a full-time radiographer for a minimum of one year.
 Identify a radiologist group to serve as your preceptor (academic/clinical)
- Provide three letters of recommendation (two from a radiologist) and personal statement
- Provide proof of current Basic Cardiac Life Support Certification (BCLS)
- Have successfully passed an Introductory Pathophysiology, Human
 Disease or an equivalent with a B or better. The program does offer an Introduction to Pathophysiology course every Summer semester online
- Provide personal statement
- Identify a radiology group to serve as a mentor by completing the Clinical Preceptorship Memorandum of Understanding

Selection for admissions is a competitive process which is the responsibility of the faculty. Decisions are based on a composite of the applicant's overall academic ability, including achievement in professional and science courses. Aptitude in oral and written self-expression; personal characteristics such as leadership potential; and life and work experiences are also considered.

For more information about admissions, please contact the Office of Admissions: **SHPadm@shp.rutgers.edu** or 973-972-5336.

Department of Nutritional Sciences



School of Health Professions **shp.rutgers.edu**

Coordinated Program in Nutrition and Dietetics

Degree Option

• Second Bachelor of Science (in Nutrition and Dietetics)

Nutrition and Dietetics Profession

The Registered Dietitian Nutritionist (RDN) are credentialed experts in food and nutrition and provide nutrition care to individuals and groups. Registered dietitian nutritionists (RDN) work in a variety of health care settings, in fitness, business and industry, community/public health, education, research, government agencies and private practice. In clinical settings, the RDN assesses nutritional needs of individuals and groups throughout the lifespan and developments, implements, monitors and evaluates plans to meet these needs. They also provide nutrition education in these settings to consumers and professionals as well as develop to assume leadership positions.

The U.S. Bureau of Labor Statistics anticipates increasing career growth for RDNS because of an increased emphasis on health promotion and disease prevention across employment settings. For more information about the role of an RDN, please click here: **Eatrightpro.org RDN Role**.

Program Description

The Coordinated Program in Nutrition and Dietetics is an **online** program that builds upon previous education and provides career advancement for individuals already credentialed with the dietetic technician registered (DTR). The program combines a broad background in related science, nutrition and dietetics courses, and supervised practice rotations. Upon completion of the program, graduates will have critical thinking and scientific skills needed for clinical dietetics practice, management, and leadership to meet the challenges of the 21st century. They will also receive a Bachelor of Science in Nutrition and Dietetics degree and will be eligible to take the registration exam for registered dietitians (RD) administered by the Commission on Dietetic Registration (CDR).

The Coordinated Program in Nutrition and Dietetics within the Department of Nutritional Sciences is a unique and flexible distance education program designed specifically for the DTR. The program consists of didactic course work and clinical supervised practice rotations. All courses are taught using the Moodle distance learning platform. Supervised practice rotations occur in the student's locale in clinical sites where Rutgers SHP has a clinical contract.

Academic Standing

Students must maintain a minimum grade point average of a 2.85 to remain in the program.

Full-time and Part-time Status

The BSND Coordinated Program is both part time (6-11 credits per semester) and full time (12 or more credits per semester) program.

Department of Nutritional Sciences

Program Director: Dr. Pamela Rothpletz-Puglia E. rothplpm@shp.rutgers.edu P. 973-972-8393

Primary Campus Location

ONLINE: web-based program

Academic Affiliates

Academic institutions with partnership programs at the Rutgers School of Health Professions.

Thomas Edison State University

Accreditation

Accreditation Council for Education in Nutrition and Dietetics of the Academy of Nutrition and Dietetics 120 S. Riverside Plaza Chicago, II 60606 P. 312-899-5400

Status: Program accredited 2011 - 2022

For more info

For additional information about the Bachelor of Science in the Nutrition and Dietetics Program, contact SHP Admissions:

Admissions

E. SHPadm@shp.rutgers.edu

P. 973-972-5336

Learning Goals

The goal of the program is to provide the didactic and clinical education and training necessary to prepare students with a broad-based knowledge of food, nutrient composition and the role of nutrition in the regulation of body processes. Graduates of the program are eligible to take the Commission on Dietetic Registration registered dietitian nutritionist examination and will be able to utilize this knowledge in working collaboratively with other healthcare professionals, educators and policy makers to promote health and alleviate many of the nutritionally related health problems existing in the community, state and nation.

Learning Outcomes

The Coordinated Program in Nutrition and Dietetics covers all the core knowledge and competencies required by the Accreditation Council for Education in Nutrition and Dietetics (ACEND®). Examples of demonstrable learning competencies include:

CRDN 1.2. Apply evidence-based guidelines, systematic reviews and scientific literature.

CRDN 1.3. Justify programs, products, services and care using appropriate evidence or data.

CRDN 2.2. Demonstrate professional writing skills in preparing professional communications.

CRDN 2.13 Prepare a plan for professional development according to Commission on Dietetic Registration guidelines.

CRDN 3.1. Perform the Nutrition Care Process (a through e below) and use standardized nutrition language for individuals, groups and populations of differing ages and health status, in a variety of settings.

CRDN 3.2. Conduct nutrition focused physical exams.

CRDN 4.4. Apply current informatics technology to develop, store, retrieve and disseminate information and data.

CRDN 4.8 Develop a plan to provide or develop a product, program or service that includes a budget, staffing needs, equipment and supplies.

Additional Program Information

The nutrition courses may also be counted as Continuing Professional Education courses for the DTR credential.

The second degree BSND Degree Program may take up to 3 years to complete.

Program Website - http://shp.rutgers.edu/dept/nutr/BSND/index.html

Department Website - http://shp.rutgers.edu/dept/nutr/index.html

Curriculum

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Admission to Program

This program is no longer accepting new students after the fall of 2017 admission cycle. Though the program will remain open for fall 2017 admitted students and the currently enrolled students. The application process includes the following:

- RBHS-SHP Application
- \$75 Application fee
- Official Transcript(s) from all institutions
- Copy of Dietetic Technician Registration card
- Resume
- Statement of academic and professional goals
- Two letters of recommendation
- A minimum grade point average of 3.0 from previous degrees

The Coordinated Program in Nutrition and Dietetics faculty will interview eligible applicants prior to acceptance into the program. For more information, please see the admissions website.

Applicant must be a registered dietician technician to enter the program. For more information about admissions, please contact the Office of Admissions: SHPadm@shp.rutgers.edu or 973-972-5336.



School of Health Professions **shp.rutgers.edu**

Clinical Nutrition Programs

Degree Options

• Master of Science (MS) in Clinical Nutrition

Clinical Nutrition Professions

Dietetics represents the art and science of applying the principles of food and nutrition in health and disease with the goal of improving nutrition outcomes. It is a growing profession with many career possibilities in areas of health care, industry, education, research, community and public health. Whichever option you choose, you'll share your knowledge of food and nutrition to help maintain the health of people.

Program Description

The MSCN is a 31-credit, **online**, clinically focused, graduate degree program designed exclusively for the Registered Dietitian Nutritionist (RDN). The program culminates with a research thesis.

Our program prepares graduates with the advanced knowledge, expanded skills, and intellectual maturity necessary to become progressive, innovative and interprofessional practitioners and leaders in the dynamic health care environment. The program utilizes an **online** learning environment and virtual face-to-face meetings

Students are prepared with the critical thinking and scientific skills needed for advanced-level clinical practice, management, and leadership positions. Our program instills an appreciation for interprofessional collaboration and education, and provides opportunities to achieve expanded roles in health promotion, disease prevention, and intervention for a 21st Century multi-cultural society.

Academic Standing

Students must maintain a 3.0 GPA to stay in good academic standing

Full-time and Part-time Status

The MSCN program can be completed on a part or full time basis. If completed on a part-time basis, it generally takes approximately three to four years to complete, depending on semester credit loads.

Department of Nutritional Sciences

Program Director: Rena Zelig, DCN, RDN, CDE, CSG E. zeligre@shp.rutgers.edu or mscn@shp.rutgers.edu P. 973-972-5956

Primary Campus Location

ONLINE: web-based program

For more info

For additional information about this Clinical Nutrition Program, contact SHP Admissions:

Admissions

E. SHPadm@shp.rutgers.edu

P. 973-972-5336

Learning Goals

MSCN Mission Statement

The MSCN is dedicated to the pursuit of excellence through an individualized advanced-level, clinically focused graduate degree program. The program instills an appreciation of lifelong learning, professional leadership and service. It prepares graduates with the advanced knowledge, expanded skills, and intellectual maturity necessary to become progressive, innovative and interprofessional practitioners and leaders in the dynamic health care environment.

MSCN Goal Statements:

- Advances knowledge and expands skills necessary to execute the role
 of innovative and progressive dietetics practitioners.
- Provides an outcome oriented, student centered approach to graduate education.
- Promotes collaboration and interdisciplinary education through advanced level courses.
- Promotes the design, conduct, and analysis of clinical nutrition/dietetics research.
- Advocates professional leadership and service.
- Promotes the design, conduct, and analysis of clinical nutrition/dietetics research.
- Advocates professional leadership and service.

Learning Outcomes

Upon the completion of the program, graduates will be prepared to:

- Provide medical nutrition therapy utilizing the Nutrition Care Process model inclusive of standardized language for nutrition diagnosing, assessment, care planning and monitoring of medically complex patients with acute, chronic, and terminal illnesses.
- Collaborate with health care team members in the interdisciplinary management of specialized nutrition modalities, conditions, and illnesses.
- Establish nutrition practices for health promotion, disease prevention and management independently or in collaboration with health care provider organizations.
- Design and conduct dietetics/nutrition research in a variety of settings.
- Critically appraise research and scholarly work, and incorporate the current scientific knowledge and emerging trends in science into practice.
- Utilize effective management, leadership, and information technology skills to guide dietetics practice into the future.
- Interpret and apply evidence-based research literature in clinical practice.

- Design, implement, and evaluate health and medical nutrition therapy interventions in a multi-cultural society.
- Assume roles as competent 'clinical practitioners.
- Become lifelong learners, using self-assessment and continuing education to persistently advance individual knowledge and skills
- Comply with the Code of Ethics of the Academy of Nutrition and Dietetics and display ethical behavior in practice, education, and scholarly activities.

Additional Program Information

The Department of Nutritional Sciences at Rutgers is a Continuing Professional Education (CPE) Accredited Provider (#UN001) with the Commission on Dietetic Registration. Each course hour is equivalent to one CPE credit hour. For more information on the continuing education course we offer visit the Institute for Nutrition Interventions website.

Non-Matriculated Status

Registered Dietitian Nutritionists (RDNs) who may be considering enrollment, or who may wish to simply advance their knowledge and skills, may take up to 12 credits on a non-matriculated basis. Please refer to the non-matriculated student's website.

Additional programmatic information is available on-line at

http://shp.rutgers.edu/dept/nutr/programs/m_clinutr.html

Curriculum

See database for program requirements and course descriptions:

http://coursecatalog.shp.rutgers.edu

Admission to Program

Prospective students must be Registered Dietitian Nutritionists (RDNs).

- International applicants must hold an equivalent credential that meets US standards by the Commission on
- Dietetic Registration (www.cdrnet.org).
- A minimum GPA of 3.2 is required for admission. Applicants with a lower GPA may be considered on an individual basis.
- At least six months of clinical experience as an RDN

Application materials include:

- SHP application, which is available at_ http://shp.rutgers.edu/prospective_students/admissions/ online_app.html
- An official copy of the transcript for highest nutrition degree earned and certificate of completion / transcript from pre-professional practice

- program, if applicable
- Copy of RDN card
- Resume or Curriculum Vitae
- A letter of intent describing short and long term goals for completing the MSCN program
- One letter of recommendation from an individual with a graduate degree who is familiar with your professional work

Applicants who meet the admission criteria will be scheduled for an interview with select faculty in the Rutgers SHP Graduate Programs in Clinical Nutrition (GPCN).

A minimum GPA of 3.2 is required for admission; however, applicants with a lower GPA may be considered on an individual basis. Applicants that meet the admission criteria will be scheduled for an interview with select faculty in the Graduate Programs in Clinical Nutrition.

Graduates of the Rutgers SHP Dietetic Internship who maintained a 3.2 GPA in the program are accepted into the program if they complete all application procedures within five years of graduation. Six elective credits from their graduate internship course work may be transferred when the MSCN is started within 5 years of graduation from the Dietetic Internship. Graduates of the Rutgers SHP Coordinated Program who maintained a 3.2 GPA in the nutrition didactic and rotation courses of the Coordinated Program are accepted if they complete all application procedures within five years of graduation. Graduates from both programs must submit all application materials and be interviewed by program faculty. Undergraduate transcripts are not required if a letter is included within the application materials stating their graduation date from Rutgers.

Applicants who are foreign-trained must take the Test of English as a Foreign Language (TOEFL) and must submit an official copy of a transcript evaluation prepared by a recognized transcript evaluation agency such as: World Education Services Inc., PO Box 5087, Bowling Green Station, New York, NY, 10274-5087, http://www.wes.org/; or similar transcript evaluation service. Foreign-trained applicants who have completed a master's degree in the U.S. are eligible for a waiver from this requirement.

Admission is offered twice per year for the MSCN program. The application deadline is April 1 for the following Fall admission and October 1 for the following Spring admission.

GPA minimum requirement/credentialing requirement

A minimum GPA of 3.2 and current registration with the Commission on Dietetic Registration are required.

For more information about admissions, please contact the Office of Admissions: **SHPadm@shp.rutgers.edu** or 973-972-5336.

School of Health Professions **shp.rutgers.edu**

Clinical Nutrition Programs

Degree Option

Doctor of Clinical Nutrition (DCN)

Clinical Nutrition Professions

Dietetics represents the art and science of applying the principles of food and nutrition in health and disease with the goal of improving nutrition outcomes. It's a growing profession with many career possibilities in areas of health care, industry, education, research, community and public health. Whichever option you choose, you'll share your knowledge of food and nutrition to help maintain the health of people.

Program Description

The Doctorate of Clinical Nutrition (DCN) is the first Advanced Practice Clinical Doctorate Program in the US and globally exclusively for Registered Dietitian Nutritionists (RDN). The DCN is designed for the RDN with an interest in advancing clinical learning, practice and research beyond the Master's degree. The 50-credit predominantly **online** program enhances knowledge and skills through an in-depth study of clinical nutrition, emerging trends in dietetics, integrative care, education and policy, as well as critical analysis and application of research and practice in the clinical setting. The research experience includes the design and conduct of pilot and practice-based research studies. Students complete a 350-hour advanced practice clinical residency designed based on individual interests and goals. Students are required to come to New Jersey three times during their study.

Full-time and Part-time Status

The program can be taken on a full-time or part-time. The DCN program generally takes approximately four to five years to complete, depending on semester credit loads.

Learning Goals

The Doctor of Clinical Nutrition (DCN) is dedicated to the pursuit of excellence through a clinically focused dietetics advanced practice doctorate program. Our graduates are innovative, autonomous, advanced dietetics practitioners and researchers with expert level knowledge and skills, critical thinking proficiency and aptitude in scientific inquiry. The DCN emphasizes interprofessional collaboration and evidence based practice through courses, an advanced clinical practice residency, and practice based research project.

Department of Nutritional Sciences

Program Director: Jane Ziegler, DCN, RDN. E. ziegleja@shp.rutgers.edu or dcn@shp.rutgers.edu P. 973-972-9487

Primary Campus Location

 ONLINE: web-based program

For more info

For additional information about this Clinical Nutrition Program, contact SHP Admissions:

Admissions

E. SHPadm@shp.rutgers.edu

P. 973-972-5336

DCN Goal Statements:

- Provides an in-depth study of clinical nutrition and evidence based practice through cutting-edge coursework and a clinical practice residency to prepare graduates to assume the role of an advanced level dietetics practitioner.
- Prepares graduates to be able to design, conduct, and analyze clinical nutrition research in diverse settings.
- Develops experts in evidence based nutrition practice using clinical reasoning and scientific inquiry.
- Fosters professional leadership, service, and scholarly efforts.

Learning Outcomes

Upon the completion of the program, graduates will be prepared to:

- Practice as an advanced dietetics practitioner for individuals, communities, and/or clinical populations with expert level competency in assessment, diagnosis, implementation and evaluation of clinical nutrition care plans using the Nutrition Care Process model, standardized language, and evidence based practice guidelines.
- Conduct a comprehensive nutrition-focused physical examination and interpret results relative to nutritional well-being using nutritional diagnostic reasoning and standardized language.
- Incorporate knowledge of body composition and nutritional physiology to guide clinical decision making in the assessment of healthy and medically complex patients with acute, chronic and terminal illnesses.
- Assimilate knowledge of drug-nutrient, and drug-dietary supplement interactions and associated pharmacokinetics and pharmacodynamics in patient care.
- Apply a global perspective to professional practice by incorporating scientific, clinical and cultural implications of food and nutrition into clinical practice.
- Apply critical thinking skills in communication, information management, problem solving and resource utilization to foster professional autonomy in clinical practice.
- Collaborate with other members of the healthcare team, industry and academia as the nutrition expert.
- Mentor and teach clinical nutrition practice to students and colleagues across diverse health care arenas.
- Analyze current nutritional interventions using an evidence-based approach.
- Become life-long learners, using self-assessment and continuing education to continuously advance individual knowledge and skills.
- Comply with the Code of Ethics of the Academy of Nutrition and Dietetics and display ethical behavior in practice, education, and scholarly activities.
- Demonstrate competence in the interpretation and critique of scientific healthcare literature using an evidence analysis approach; apply and integrate findings into practice settings.

- Design, conduct, analyze, and author papers on clinical nutrition research.
- Present and defend research findings to professional audiences and develop a manuscript worthy of publication to a peer-reviewed journal.

Additional Program Information

The Department of Nutritional Sciences at Rutgers is a Continuing Professional Education (CPE) Accredited Provider (#UN001) with the Commission on Dietetic Registration. Each course hour is equivalent to one CPE credit hour. For more information on the continuing education course we offer visit the Institute for Nutrition Interventions website

http://shp.rutgers.edu/dept/nutr/programs/doc_clinnutr.html

Curriculum

The courses are offered in an **online** learning environment, supplemented with face-to-face virtual meetings and a minimum of three on-campus visits.

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Admission to Program

Prospective students must be Registered Dietitian Nutritionists (RDNs). International applicants must hold an equivalent credential that meets US standards by the Commission on

- Dietetic Registration (www.cdrnet.org).
- A master's degree, preferably in nutrition or a health-related field (with a minimum GPA of 3.4).
- Must have at least three years of professional experience as a clinical RDN.
- Application materials include:
- SHP application, which is available at http://shp.rutgers.edu/prospective_students/admissions/ online_app. html
- An official copy of the transcripts from the highest degree earned
- If the highest degree is not in nutrition, the transcripts from the nutrition degree must be included
- Copy of RDN card
- Resume or curriculum vitae
- A letter of intent describing reasons for pursuing the DCN program, research interests and short and long-term goals for completing the DCN program
- One letter of recommendation from an individual with a doctoral degree who is familiar with your professional work

Applicants who are foreign-trained must take the Test of English as a Foreign Language (TOEFL) and must submit an official copy of a transcript evaluation prepared by a recognized transcript evaluation agency such as: World Education Services Inc., PO Box 5087, Bowling Green Station, New York, NY, 10274-5087, http://www.wes.org/; or similar transcript evaluation service. Foreign trained applicants who have completed a master's degree in the U.S. are eligible for a waiver from this requirement.

Applicants who meet the admission criteria will be scheduled for an interview with select faculty in the Rutgers SHP Graduate Programs in Clinical Nutrition (GPCN).

Non-Matriculated Status

Master's prepared RDNs who are considering making the commitment to a graduate program, or who wish to advance knowledge and skills, may take up to 12 credits on a non-matriculated basis.

Options for non-matriculated students can be viewed online.

Please visit our website:

http://shp.rutgers.edu/dept/nutr/programs/doc_clinnutr.html

GPA minimum requirement/credentialing requirement

A minimum GPA of 3.4 and current registration with the Commission on Dietetic Registration are required.

For more information about admissions, please contact the Office of Admissions: **SHPadm@shp.rutgers.edu** or 973-972-5336.



Dietetic Internship Program

Degree Options

• Post Baccalaureate Certificate

Nutrition and Dietetic Profession

The Registered Dietitian Nutritionist (RDN) are credentialed experts in food and nutrition and provide nutrition care to individuals and groups. Registered dietitian nutritionists (RDN) work in a variety of health care settings, in fitness, business and industry, community/public health, education, research, government agencies and private practice. In clinical settings, the RDN assesses nutritional needs of individuals and groups throughout the lifespan and developments, implements, monitors and evaluates plans to meet these needs. They also provide nutrition education in these settings to consumers and professionals as well as develop to assume leadership positions.

The U.S. Bureau of Labor Statistics anticipates increasing career growth for RDNS because of an increased emphasis on health promotion and disease prevention across employment settings. For more information about the role of an RDN, please click here: Eatrightpro.org RDN Role.

Program Description

The Dietetic Internship Program is an intensive full time program with a concentration in Medical Nutrition Therapy in Clinical & Community Dietetics. We are accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND), Academy of Nutrition and Dietetics through July 2022.

Our program offers two tracks:

Track One: Dietetic Internship only through Rutgers School of Health Professions (SHP)

A maximum of 16 students (dietetic interns) are admitted into Track One on an annual basis and complete the program as SHP students. Students are admitted for summer session (July 1 annually) and complete a single, **ONLINE** learning environment summer course. The on-site requirements begin in late August and continue through the first week of May of the following year. Upon successful completion of the program, graduates are awarded a certificate from SHP, and receive a "Verification Statement" to become eligible for active membership in the Academy of Nutrition and Dietetics and take the Commission on Dietetic Registration's (CDR) Credentialing Examination for Dietitian Nutritionists.

Track Two: Dietetic Internship through Rutgers SHP and a Master of Science Degree through Rutgers Graduate School-New Brunswick (GSNB)

Students in Track Two are admitted into both SHP and GSNB and are required to meet the admissions and graduation requirements for both schools. This track has a maximum enrollment of four students. Students are admitted for summer session at SHP (July 1 annually) and complete a single **ONLINE** learning environment summer course. They begin an on-site with Track One students in late August and continue through the fall semester at SHP completing half of the required supervised practice hours. The next three (spring, summer, fall) semesters are dedicated to graduate courses and Master's thesis research at GSNB. Students return to SHP in the spring of the second year to complete the second half of the supervised practice hours. Upon completion of the supervised practice requirements, students are awarded a certificate from

Nutritional Sciences Department

Program Director: M. Geraldine McKay

mckayge@shp.rutgers.edu

P. 908-889-2488

Primary Campus Location

Newark

Academic Affiliates

Academic institutions with articulation programs at the Rutgers School of Health Professions.

Rutgers – New Brunswick

Major Clinical Affiliates

Clinical sites are located throughout New Jersey.

- Hackensack Meridian Health Hackensack University
 Medical Ctr., Hackensack
 Jersey Shore University
 Medical Ctr., Neptune
 Mountainside Hospital,
 Ocean Medical Ctr., Brick
- University Hospital, Newark The Valley Hospital, Ridgewood St. Peter's University Hospital, New Brunswick JFK Medical Ctr., Edison Morristown Memorial Hospital, Morristown

Accreditation

Accreditation Council for Education in Nutrition and Dietetics (ACEND) 120 S. Riverside Plaza Chicago, Illinois 60606-6995 P. 312-899-5400.

Status: 2012 for 10-year period

SHP, and receive a "Verification Statement" to become eligible for active membership in the Academy of Nutrition and Dietetics and take the CDR Credentialing Examination for Dietitian Nutritionists. In the following summer, students return to GSNB to complete the writing and defense of the Master's thesis. Fulfillment of the academic requirements for the Master of Science Degree are then completed at GSNB with the conferral of the degree granted at that time.

Interns enrolled in both tracks spend more than 1200 hours of supervised practice in diverse sites in New Jersey. They spend four days of the week in supervised practice and the fifth day is a full class day. Clinical rotations provide experiences with individuals across the lifespan in health and disease.

Concentration Description:

Medical Nutrition Therapy in Clinical and Community Dietetics.

The Rutgers Dietetic Internship Program builds on previously acquired knowledge of food, nutrition and biological sciences. Course instruction focuses on theory and techniques of nutritional evaluation, management and care, and the scientific principles upon which to plan medical nutrition therapy. Since many of the implementation strategies used by a dietitian require communication, counseling and educational skills, classroom instruction emphasizes these principles and techniques.

Dietetic interns have opportunities to work collaboratively with a variety of other health professionals and diverse learning experiences are provided in areas such as:

Acute clinical care including medical, surgical, renal, intensive care/nutrition support; ambulatory nutrition care; obstetric and pediatric rotations, rehabilitation, geriatrics, oral health, diabetes, community education and food access, management and delivery of community health promotion, multi-skilling, food service systems management, retail supermarket and specialty dietetics practice.

Throughout the internship year, the interns plan and prepare teaching aids for use in patient instruction or community based health promotion and disease prevention programs, utilize a variety of current technologies, and participate in research projects and inter-professional activities.

Graduates of the program can assess the nutritional needs of individuals and groups. Based upon this assessment, a nutrition care plan determines the type of nutrition therapy required, the treatment modality, intervention strategies, and educational needs. Implementation of the nutrition care plan occurs through the provision of appropriate foods or other forms of nutrition support, individual client counseling or community education, and follow-up evaluation.

Academic Standing

Full-time and Part-time Status

This is a full-time program.

For more info

For additional information about the Dietetic Internship Program, contact SHP Admissions:

Admissions SHPadm@shp.rutgers.edu P. 973-972-5336

Learning Goals

Program Mission:

Our unique mission is consistent with the preparation of entry-level registered dietitian nutritionists. The program is dedicated to the pursuit of excellence in Dietetics and Nutrition by providing the clinical and didactic education necessary to train competent, critically thinking, and compassionate dietetic practitioners.

Goals of the Dietetic Internship Program for Tracks One and Two:

- To provide clinical and didactic learning experiences reflecting the breadth of dietetic practice that allows dietetic students to become competent entry-level Registered Dietitian Nutritionists (RDN) and graduates with the skills necessary to assume expanding roles in the health care environment.
- To expand the knowledge and skills needed to develop practitioners who
 can actively participate in the application and practice of research, public
 policy and legislative issues and development and implementation of
 public presentations.
- To foster attitudes and behaviors consistent with ethical, professional
 practice that will instill a sense of commitment and involvement in the
 profession and life-long learning.

Additional Goal for Track Two (DI/MS):

 To provide students with the skills required for critically evaluating and actively conducting research in nutritional sciences through completion of the Master of Science Degree in Nutritional Sciences.

Learning Outcomes (Track One and Two)

The competencies for the concentration in Medical Nutrition Therapy in Clinical and Community Dietetics are:

- Integrates pathophysiology, applies and interprets principles of medical nutrition therapy in patients with complicated disease states and conditions.
- Conducts individualized comprehensive counseling and education sessions for patients/clients with diabetes and renal disease.
- Develops, implements, and evaluates a comprehensive, interactive community-based food and nutrition education program targeting adolescents located in a school setting.
- Practice in compliance with current federal regulations and state statutes and rules, as applicable and in accordance with accreditation standards and the Scope of Dietetics Practice and Code of Ethics for the Profession of Dietetics. (CDR 2.1)
- Perform the Nutrition Care Process and use standardized nutrition language for individuals, groups and populations of differing ages and health status, in a variety of settings. (CDR 3.1)
- Assess the nutritional status of individuals, groups and populations in a variety of settings where nutrition care is or can be delivered. (CDR 3.1a)
- Perform management functions related to safety, security and sanitation that affect employees, customers, patients, facilities and food. (CDR 4.2)
- Conduct projects using appropriate research methods, ethical procedures and data analysis. (CDR 1.5)
- Conduct projects using appropriate research methods, ethical procedures and data analysis. (CDR 1.5)

- Integrates pathophysiology, applies and interprets principles of medical nutrition therapy in patients with complicated disease states and conditions. (CC 1)
- Establish collaborative relationships with other health professionals (e.g. physicians, nurses, pharmacists, etc.) and support personnel to deliver effective nutrition services facilitate individual and organizational goals.
 (CDR 2.1)

Program Measures and Results:

90% of the students will complete the program requirements within 150% of the time planned for completion.

- Track One: expected completion within 10 months with a maximum completion of 15 months.
- Track Two: expected completion within 24 months with a maximum completion of 36 months.

85% or more of graduates who seek employment in dietetics or related fields will be employed within 12 months of graduation.

85% of graduates will be expected to take the Commission on Dietetic Registration's (CDR) Credentialing Examination for Dietitian Nutritionists within 12 months of graduation.

At least 80% of graduates over a five-year period will pass the CDR Credentialing Examination for Dietitian Nutritionists within one year following their first attempt.

50% or more of graduates will participate in: Public Policy/Legislative Issues and/or Public and Professional presentations over a five-year period.

90% of employers who are reached via a graduate employer survey or who participate in a phone or in person interview will rate the graduates' performance as meeting or exceeding expectations for practice and meeting ethical practice behaviors.

25% of graduates who respond to an alumni survey or who participate in a phone interview will report that they have enrolled in an advanced degree program and/or achieved certification in a specialty area of practice at five-years post-graduation of program.

Additional Program Measures and Results for Track Two (DI/MS)

90% of students enrolled in this track will complete the MS Degree Requirements within four years following completion of the supervised practice requirements.

Lifelong Learning

With a strong commitment to lifelong learning, Rutgers SHP offers a Master of Science Degree in Clinical Nutrition exclusively for the Registered Dietitian.

Graduates of the Dietetic Internship Program who maintain a 3.2 GPA or better are granted admission into this graduate program after submitting a complete application and interviewing with the program faculty. In addition, graduates are granted six credits toward the M.S. Degree if they begin the Master's program within 5 years of completing the Internship Program.

Additional Program Information

Students in Track Two complete the same Requirements for Graduation listed under the program "Dietetic Internship". In addition, they meet the requirements of the Master of Science in Nutritional Sciences Program at GSNB.

Additional programmatic information is available on-line at http://shp.rutgers.edu/dept/nutr/dietetic/index.html

Curriculum

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Admission to Program

Track One - Prospective students

- Must have a minimum of a baccalaureate degree from an accredited college or university in nutrition, dietetics, or a related field Must have fulfilled didactic requirements in dietetics as specified by the Accreditation Council on Education in Nutrition and Dietetics (ACEND), Academy of Nutrition and Dietetics.
- An overall grade point average of no less than 3.0 (on a scale where 4.0 equals A)
- 3. Submit a statement online as to why they are applying to the program and submit an SHP application
- Application materials are submitted electronically and must comply with the Dietetic Internship Centralized Application System (DICAS) and Computer Matching procedures with D & D Digital Inc.
- 5. Applicants are interviewed either in person or via telephone.

Track Two – Prospective students

- 1. Must meet all the requirements for admissions to the Dietetic Internship program as outlined above under Track One.
- 2. Must meet the admissions requirements of to the Graduate Program in Nutritional Sciences at Rutgers which include:

One year General Chemistry with lab
One year Organic Chemistry or one semester Organic
Chemistry plus one semester Biochemistry

At least twelve (12) additional credits in the advanced sciences

- 3. Completion of GRE's
- 4. Submission of Rutgers University Graduate School Application and fee

Selection of students for admission to the Dietetic Internship program is a competitive process and is the responsibility of the Dietetic Internship Admissions and Selection Committee. The decisions of the committee are based on a composite of the applicants overall academic ability, with emphasis on aptitude and abilities in professional and science courses; the ability of the candidate to express self orally and in writing; professional goals; personal characteristics including leadership potential; and both life and work experiences.

GPA minimum requirement/credentialing requirement

Track One: A minimum of a 3.0 GPA

Track Two: A minimum of a 3.0 GPA and GRE Examination

For more information about admissions, please contact the Office of Admissions: **SHPadm@shp.rutgers.edu** or 973-972-5336.

Department of Primary Care



School of Health Professions **shp.rutgers.edu**

Physician Assistant Program

Degree Options

- Master of Science
- Master of Science/Master of Public Health

Physician Assistant Profession

The physician assistant, in collaboration with a physician supervisor, takes patient histories; performs physical examinations; performs and interprets diagnostic procedures and laboratory work; and provides medical treatment in private homes, hospitals, long-term care facilities, and private practitioners' offices.

The ability to relate to people, good judgment in emergency situations, and a genuine desire to help others are among the necessary qualities of a physician assistant. Considering the public's ever-increasing demand for high quality health care and the accepted concept of team medicine, the physician assistant can expect to find many challenging and varied employment opportunities, a high degree of professional mobility, and ample opportunity for advancement.

Program Description

The program is a three-year graduate program with two options for entry. Students may be admitted directly into the professional program after earning a baccalaureate degree and completing the prerequisite coursework or students may enter the BA/MS degree program articulated with Rutgers or affiliated universities. This option includes three years of undergraduate liberal arts and basic science education followed by three years of professional physician assistant education. Students who are accepted into the professional program begin this phase at the beginning of their senior year. At the end of the senior year these students receive a Bachelor of Arts or Science degree conferred by the affiliated university. After completion of the remaining two years of the Physician Assistant Program, graduates receive a Master of Science degree awarded by Rutgers. Direct entry students are awarded a Master of Science degree by Rutgers. Graduates are eligible to sit for the Physician Assistant National Certifying Examination.

Physician assistant students will be expected to devote themselves to graduate level learning while in the Program. Classes are held during the day, 5 days/per week. Clinical rotations may require students to spend evenings, overnights and/or weekends at a clinical site. Students must have a reliable vehicle for transportation when on clinical rotations.

In addition, The Rutgers, School of Health Professions (SHP) offers a dual degree MS/MPH option. This is offered by the Physician Assistant Program in conjunction with the Rutgers School of Public Health leading to a Master of Science and a Master of Public Health. The program allows physician assistant students to complete both their graduate Physician Assistant studies and MPH degree in four

Primary Care Department

Program Director: Jill Reichman E. reichmji@shp.rutgers.edu P. 732-235-4445

Primary Campus Location

Piscataway

Academic Affiliates

Academic institutions with articulation programs at the Rutgers School of Health Professions

- Caldwell College
- Felician College
- Kean University
- Montclair State University
- New Jersey Institute of Technology
- Ramapo College
- Rutgers New Brunswick
- Saint Peter's University
- Rutgers School of Public Health
- William Paterson University

Accreditation

Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA) 12000 Findley Road, Suite 150 Johns Creek, Georgia 30097 Phone: 770-476-1224

The Accreditation Review
Commission on Education for the
Physician Assistant (ARC-PA) has
granted Accreditation-Continued
status to the Rutgers University
Physician Assistant Program
sponsored by Rutgers University.
Accreditation-Continued
is an accreditation status granted
when a currently accredited
program is in compliance with the
ARC-PA Standards.

years (including summers). Application to this program is limited to students who have already been accepted to the Physician Assistant Program and have taken the GRE. Students accepted into this dual degree track would attend the Physician Assistant Program part time for two years while attending the MPH Program part time. Students may begin this Program in the summer prior to beginning the Physician Assistant Program or in the first fall semester.

During the third and fourth years of the Program, the student will attend the Physician Assistant Program full time and complete their fieldwork for the MS and MPH. Students may choose to study in one of the following divisions in the School of Public Health: Health Education and Behavioral Science; Environmental and Occupational Health; or Health Systems and Policy.

For more information about our MS/MPH option, please contact the PA Program Office at (732) 235-4445.

Academic Standing

- The academic progress of students enrolled in the didactic phase of the Program will be evaluated in terms of successful passage of courses as determined by the standards established by each respective course director.
- 2. Semester Probation is assigned to students as follows:
 - Less than a cumulative grade point average of 2.0 in semesters 1 or 2 or summer following the first year and 2nd year for part-time students.
 - Less than a cumulative grade point average of 2.3 in the third semester (fall of the second year), fourth semester (spring of the second year) or the summer following the second year
 - Less than a cumulative grade point average of 2.5 in the fifth and sixth semesters (fall and spring of the third year) of the Program.

If the student fails to receive the required cumulative grade point average by the completion of a given semester, they must do so by the end of the next semester enrolled or the student may be dismissed.

Full-time and Part-time Status

The PA program is predominantly full-time; a part-time daytime curriculum is also offered where the first full time year can be completed over two years for a total Program length of four years.

Learning Goals

- To prepare graduates to assume the expanding roles and responsibilities expected of PAs in clinical practice.
- To assure that graduates understand the role and limitations of PA practice.
- To prepare graduates to provide humanistic health care with an emphasis on beneficence.
- To enable graduates to enhance their personal and professional growth by continuing their education through formal offerings and voluntary independent study.
- To foster the concept of a team approach to the practice of medicine.

For more info

For additional information about the Physician Assistant Program, contact:

Admissions E. pa-info@shp.rutgers.edu P. 732-235-4445

Learning Outcomes

- Implement core knowledge about established and evolving biomedical and clinical sciences and the application of this knowledge to patient care in their area of practice.
- Demonstrate a high level of responsibility, ethical practice, sensitivity to a diverse patient population, and adherence to legal and regulatory requirements.
- Demonstrate interpersonal and communication skills that result in effective information exchange with patients, patients' families, physicians, professional associates, and other individuals within the health care system.
- Assess, evaluate, and manage safe, high quality patient care.
- Analyze the pathophysiology, physical and laboratory findings, differential diagnosis and patient presentation to determine effective treatment and patient management
- Demonstrate excellence in patient care including surgical and medical procedures.
- Analyze clinical practice experiences, the medical literature, and other information resources for the purposes of self and practice improvement.
- Formulate a plan to promote health and disease prevention.

Additional Program Information

Additional programmatic information is available on-line at http://shp.rutgers.edu/dept/primary care/paweb/index.html

Curriculum

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Admission to Program

Applicants must have a baccalaureate degree or be attending one of our affiliated Universities. The applicant must have completed the following prerequisite coursework with a grade of "C" or better: two semesters of general biology with laboratory; two semesters of general chemistry with laboratory; one semester of organic chemistry; one semester of statistics; two semesters of English (one semester must be composition); and one semester of general psychology.

The PA Program participates in CASPA (https://portal.caspaonline.org/). All applications with supporting documents must be submitted to CASPA by the PA Program deadline of September 1 prior to the academic year for which the application is made.

Note: The CASPA process DOES NOT APPLY TO BS/MS applicants who apply directly to the PA Program by June 1 of the sophomore year.

Interviews will be required of those applicants being considered for admission. Competition for available spaces in the Program is very keen. Meeting the minimum requirements does not guarantee an invitation for an interview.

For more information about admissions, please contact the Physician Assistant Program Services: pa-info@shp.rutqers.edu or 732-235-4445.

Department of Psychiatric Rehabilitation & Counseling Professions



School of Health Professions **shp.rutgers.edu**

Occupational Therapy Assistant Program

Degree Options

Associate of Science

Occupational Therapy Assistant Profession

The Occupational Therapy Profession was established in 1917, and in 1958 the American Occupational Therapy Association's leadership recognized the role of the Occupational Therapy Assistant (OTA). OTA's work in collaboration and under the supervision of occupational therapists in healthcare, educational, and community settings to help develop, restore or enhance occupational performance of persons who are challenged by disability, trauma, and/or the aging process. There are employment opportunities for OTA's in hospitals, rehabilitation centers, long term care facilities, community mental health centers, and public and private schools. Occupational Therapy Assistant's must receive supervision from occupational therapists to deliver occupational therapy services. The responsibilities of the Occupational Therapy Assistant include:

- Contributing to the process of evaluating a client by gathering information and administering selected assessments
- Assisting with the development of client centered intervention plans
- Providing occupational therapy interventions to individuals and groups
- · Documenting occupational therapy services provided

Program Description

The 74-credit joint Associate of Science Degree Program in Occupational Therapy Assistant is offered by Rutgers School of Health Professions in collaboration with our Partner Colleges. Students complete at least 32 general education credits at

a College Partner as pre-requisite to the 42 credits of professional coursework at Rutgers, on the Scotch-Plains campus. Admission to the professional phase of the Occupational Therapy Assistant Program at Rutgers is competitive; completion

of the pre-professional curriculum at an approved Partner College does not guarantee admission (see academic affiliate list in column to the right).

Supervised fieldwork education is provided by Rutgers clinical partners in healthcare, educational, and other community settings (see major affiliate list in column to the right on the next page).

The professional coursework supports the program's mission emphasizing human occupation and adaptation, the process of becoming an OT professional, and the required competencies and contextual influences of OT practice.

The program uses web-enhanced design for most courses and one course is conducted exclusively by web-based instruction requiring:

- · Ability to perform basic operations of the computer
- Ability to connect, access, and browse the internet using a high-speed connection

Psychiatric Rehabilitation & Counseling Professions Department

Program Director: Catherine Colucci E. coluccn@shp.rutgers.edu P. 908-889-2474

Primary Campus Location

Scotch Plains

Academic Affiliates

Academic institutions with partnership programs at the Rutgers School of Health Professions.

- Camden County College
- County College of Morris
- Cumberland County College
- Hudson County Community College
- Mercer County Community College
- Ocean County College
- Passaic County Community College
- Raritan Valley
 Community College
- Salem Community College
- Sussex County Community College
- Thomas Edison State University
- Warren County Community College

Major Clinical Affiliates

Clinical sites are located throughout New Jersey.

- Alaris Health
- Atlantic Health System
- Bergen County Special Services
- Burlington County
 Special Services

- Use of software applications such as Microsoft Word and Power Point
- Ability to use on-line communication tools
- Software installation for security and virus protection

The Occupational Therapy Assistant Program at Rutgers, The State University of New Jersey is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, Suite 200 Bethesda, MD 20814-3449.

ACOTE's telephone number c/o AOTA is (301) 652-AOTA and its Web address is www.acoteonline.org

Academic Standing

Students enrolled in the OTA Program must maintain good academic standing by earning a grade of C (73%) or better and maintain a cumulative grade point average of 2.3 to graduate.

Full-time and Part-time Status

The 42-credits completed at Rutgers include academic and fieldwork education that can be completed on a full-time (16 months/fall enrollment) or part-time (24 months/spring enrollment) basis. The final four months of the program consists of 16 weeks of full-time fieldwork education for all students.

Learning Goals

The OTA program prepares students to serve people of all ages who experience illness, disease, disability, and challenging life circumstances to adapt by participating in meaningful occupations. The curriculum prepares the OTA to practice as a dynamic and inter-professional team member working under the supervision of an occupational therapist, within health care, educational, and other community settings.

The OTA program is dedicated to the pursuit of excellence in undergraduate education in collaboration with other New Jersey colleges, industry partners, and fieldwork educators. The program faculty contributes to scholarship that supports healthcare education and occupational therapy practice. The program faculty and students participate in service to underserved persons as part of the educational program.

Learning Outcomes

Upon completion of the Occupational Therapy Assistant Program the graduate will:

- Become a Certified Occupational Therapy Assistant (COTA) by successfully
 passing the certification exam administered by the National Board for
 Certification in OT (NBCOT) within six months of graduation
- Demonstrate the roles and responsibilities of the OTA as defined by the American Occupational Therapy Association (AOTA), consistent with state licensure regulations for an OTA (New Jersey or elsewhere)
- Communicate effectively in an understandable and professional manner with clients, families, colleagues, and the public.

- Cape May County
 Special Services
- Cedar Crest Community
- Celebrate the Children
- Cerebral Palsy Center of Middlesex County
- Cerebral Palsy of New Jersey; Jardine Academy
- Cerebral Palsy of North Jersey (CPNJ)
- Children's Specialized Hospital
- Collaborative Support Programs of New Jersey
- ECLC of New Jersey
- Fellowship Senior Village
- · Fox Rehabilitation
- Genesis
 Rehabilitation
 Services
- Greystone Park
 Psychiatric Hospital
- HCR Manorcare
- Health South
 Rehabilitation Hospital
- Intensive Therapeutics
- JDT Rehab Resort and Villa
- JFK Johnson Institute for Rehabilitation
- Kennedy Health Systems
- Kessler Institute for Rehabilitation
- Little Egg Harbor School District
- Manchester Township School District
- Matheny Health and Educational Center
- Meridian Health System
- Montgomery Public School District
- Mount Olive Public School District
- New Beginnings
- New Jersey Institute for Disabilities
- Occupational Therapy Consultants
- Positive Steps
- Premier Therapy Services

- Produce clear and understandable documentation according to the requirements of the facility, federal and state laws, regulatory and payer requirements, and AOTA documents
- Deliver occupational therapy services under the supervision of an occupational therapist in accordance with the AOTA Practice Framework
- Contribute to the delivery of high-quality, cost-effective and integrated care as a team member in health, education, and community settings
- Participate as an occupational therapy professional in local, state, and national organizations

Additional Program Information

For more detailed information on the profession, requirements, curriculum please visit the program's website:

http://shp.rutgers.edu/dept/psyr/programs/asdota/index.html

Curriculum

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Admission to Program

Admission to the OTA Program is competitive and meeting the minimal requirements does not guarantee admission. Applicants apply directly to Rutgers-School of Health Professions by June 1 for Fall admission to the full-time program, and by November 1, for Winter/Spring admission to the part-time program. Please read and follow specific guidelines for application and admission by reading below** and referring to the Program website:

http://shp.rutgers.edu/dept/psyr/programs/asdota/index.html

Individuals interested in applying to the Occupational Therapy Assistant Program at Rutgers must first apply and enroll in the pre-professional phase of the OTA program at an approved Partner College. Individuals who have completed some of the pre-professional courses* may be able to transfer (some) of these credits to a Partner College. Each Partner has an established policy regarding transfer credits and residency requirements at their institution.

Individuals who have completed 26 or more of the 32 pre-professional credits may apply directly to Rutgers OTA Program. If accepted into the professional program at Rutgers, these individuals will be connected to Thomas Edison State University (TESU) where they will complete 6 credits of coursework on-line and secure TESU as their partner program.

*The 32 credits of required prerequisite coursework are listed below:

English Composition I 3 credits
English Composition II 3 credits
Anatomy and Physiology I with lab 4 credits
Anatomy and Physiology II with lab 4 credits

- Prime Rehabilitation
- Randolph Public School System
- Robert Wood
 Johnson University
- Somerville Public School District
- St. Joseph's Healthcare System
- Sunny Days Sunshine Center
- Tandem
 Management
 Company
- The Phoenix Center
- Trinitas Children's Therapy Services
- Universal Institute for Rehabilitation
- University Behavioral Health Care
- Union County
 Educational Services
 Commission Westlake
 School
- University of Princeton
- Warren Public School District
- Winslow Township Public School District

Accreditation

The Occupational Therapy Assistant (OTA) Program at Rutgers, The State University of New Jersey is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, Suite 200 Bethesda, MD 20814-3449. ACOTE's telephone number c/o AOTA is (301) 652-AOTA and its Web address is www.acoteonline.org

For more info

For additional information about the Occupational Therapy Assistant Program, please refer to the program website

http://shp.rutgers.edu/dept/ psyr/programs/asdota/index.html.

For information about admissions, contact SHP Admissions:
Admissions
E. SHPadm@shp.rutgers.edu
P. 973-972-5336

General Psychology 3 credits Developmental Psychology (lifespan) 3 credits Introduction to Sociology

3 credits

College Math, Algebra, or Statistics 3 credits
Ethics or Philosophy 3 credits
Diversity Studies 3 credits

Applicant must observe an OT or an OTA providing occupational therapy for at least 20 hours and submit documentation signed by the OT or OTA with application.

Applicant must submit two letters of recommendation using the OTA Applicant Recommendation Form available on the program web site. One letter of recommendation must be from an Occupational Therapy Practitioner and the other from a professional such as a college advisor. Applicant must write and submit an essay justifying OT as a career choice, reflecting on OT observation experience, pre-professional coursework, and any other community service.

Selected applicants are invited to participate in an on-site meeting with the OTA Program Admission Committee and must complete an on-site writing sample.

Applicants who did not attend secondary school in the US or have not completed enough college level English courses are required to take the Test of English as a Foreign Language (TOEFL). Acceptable scores for TOEFL are as follows: 550 and above for paper based test and 79 for Internet based test. All results must be forwarded directly to SHPR from the testing agency.

Please note: a felony conviction may affect a graduate's ability to sit for the NBCOT certification examination or attain state licensure. An individual who is considering entering an OT educational program or who has already entered an OT educational program can have his or her background reviewed by requesting an Early Determination Review. The fee for this review is \$100.00. For information on candidate code of conduct, character, and early review contact:

Credentialing Services at NBCOT 12 S. Summit Avenue, Suite 100 Gaithersburg, MD 20877 (301) 990-7979

GPA minimum requirement/credentialing requirement

The Admissions Committee considers the cumulative grade point average for the prerequisite coursework (32 credits). A cumulative GPA of 2.5 in the prerequisite coursework is the committee's benchmark, however each applicant's entire application portfolio is reviewed to assess the candidate's ability to complete the program requirements and become an effective, contributing member of the OT profession.

The applicant must have achieved a minimum GPA of (2.0) in each prerequisite course.

For more information about admissions, please contact the Office of Admissions: SHPadm@shp.rutgers.edu or 973-972-5336.

^{**}Applicant transcript must document that courses in Developmental Psychology/ Lifespan and Human Anatomy and Physiology have been completed during the past five years.

School of Health Professions shp.rutgers.edu

Psychosocial Rehabilitation & Treatment Program

Degree Options

Associate of Science

Profession

Psychosocial rehabilitation, also known as psychiatric rehabilitation, promotes recovery, full community integration and improved quality of life for those who have been diagnosed with a mental health condition that seriously impairs their daily life activities. Psychiatric rehabilitation practitioners focus on helping individuals develop skills and access resources needed to increase their capacity to be successful and satisfied in the living, working, learning and social environments of their choice.

Program Description

The AS degree program at Rutgers, School of Health Professions (SHP) is one of the few model programs of this type throughout the nation and the first undergraduate degree-granting program in this field in New Jersey

The AS in Psychosocial Rehabilitation Program prepares students to facilitate the recovery of people living with mental illnesses. In the classroom, students will learn from faculty with many years of clinical and research experience. Students will also gain hands-on experience in Clinical Practicum courses by working in a community mental health program under the supervision of program faculty and agency staff.

Graduates of the program are eligible to take the credentialing examination from the Psychiatric Rehabilitation Association to become Certified Psychiatric Rehabilitation Practitioners (CPRP).

Department of Psychiatric Rehabilitation & Counseling Professions

Program Director: Peter M. Basto, Ph.D., CPRP E: bastopm@shp.rutgers.edu P. 908-889-2550

Primary Campus Location: Most courses are offered in the traditional classroom setting. Some courses are web-based or web-enhanced.

- Scotch Plains
- Blackwood

Academic Affiliates

8 affiliate schools:

- Middlesex County College https://www.middlesexcc.edu/
- **Union County College** http://www.ucc.edu/
- Warren County Community College http://www.warren.edu/
- **Cumberland County College** http://www.cccnj.edu/
- **Passaic County Community** College http://www.pccc.cc.nj.us/
- Raritan Valley Community College

https://www.raritanval.edu/

- Ocean County College https://www.ocean.edu/conten t/public.html
- Sussex County Community College http://sussex.edu/

For more info

For additional information about the Psychosocial Rehabilitation and Treatment Program, contact SHP Office of Admissions:

SHPadm@shp.rutgers.edu or 973-972-5336.

Contact the affiliate school for admission information and general education course requirements for the program.

Academic Standing

- Students need to maintain a GPA of 2.5 or greater
- Psychiatric Rehabilitation majors need a final grade of C or better.

Full-time and part-time status

Full- and part-time courses of study are available, including day and evening classes. Full-time students complete the program during three semesters: Spring, Fall, Spring, or Fall, Spring, Summer.

Learning Goals

The AS in Psychosocial Rehabilitation is dedicated to creating skilled and knowledgeable graduates who are ready to work in entry level mental health settings as part of an interdisciplinary team. The program is also dedicated to preparing students to transfer to baccalaureate degree programs

Upon completion of the AS in Psychosocial Rehabilitation and Treatment program, graduates will:

- 1. Develop competencies to work effectively with people who have psychiatric disabilities as outlined by the Psychiatric Rehabilitation Association.
- 2. Utilize communication techniques in a professional capacity with individuals, families, team members, and people in the community.
- Work effectively as a team member to provide wellness and recovery focused rehabilitation services.

Learning Outcomes

Graduates are expected to become Psychiatric Rehabilitation Practitioners as described by the Psychiatric Rehabilitation Association and will have the following learning outcomes:

- Differentiate between the different types of serious mental illnesses with a wellness and recovery approach.
- Learn about different community resources including entitlement programs.
- Describe evidenced-based Psychiatric Rehabilitation Practices.
- Identify key areas for personal growth and professionalism.
- Apply rehabilitative and clinical skills at practicum site.
- Facilitate skills based group sessions.
- Conduct assessments, recovery plans, and writing progress notes.
- Facilitate rehabilitation groups.
- Demonstrate the ability to adapt treatment and rehabilitation efforts for individuals based on personal history, developmental factors, and current medical & psychiatric history.
- Develop comprehensive and individualized recovery plans.
- Practice in an ethical manner.
- Work as a team member at practicum site.
- Describe and utilize evidence based psychiatric rehabilitation practices.
- Complete documentation requirements to meet state and federal insurance regulations.

Additional Program Information

- Full time students are on campus two days a week for the first semester, and one day a week for the second and third semester.
- The program is classroom-based with two online courses available.
- 480-hour Clinical Practicum Internship (240 hours for two semesters) where students are placed at a psychiatric rehabilitation program gaining hands on experience in the field.

- Transfer opportunities upon graduation to the BS in Health Sciences, Psychiatric Rehabilitation Track at Rutgers-SHP, or to a dual major program in Psychology and Psychiatric Rehabilitation between Rutgers-SHP and Rutgers Newark, Kean University, Felician University, and Georgian Court University.
- Employment opportunities for AS Psychosocial Rehabilitation graduates are available
 in a variety of rehabilitation programs and, mental health settings such as outreach
 teams, housing programs, supported employment, supported education, and partial
 care/day treatment programs.

Curriculum

A total of 61-68 credits are required. The 31-38 credits of general education courses are provided by the affiliated community college. Some of them will accept credits transferred from other schools. To apply for admission to the professional phase of the program, students must have successfully completed general education courses required by the affiliate school (the number of credits needed for admission depends on affiliate school). The 30 credits of Psychosocial Rehabilitation and Treatment courses are provided by the School of Health Professions.

The Psychosocial Rehabilitation and Treatment courses include 15 credits of traditional classroom instruction, 3- 6 credits of web-based instruction, and a 12-credit clinical practicum sequence that includes 480 hours of fieldwork. The eight courses are described in detail in the course descriptions listed on-line.

PSRT1101	Introduction to the Principles of Psychiatric Rehal	bilitatio	on 3
PSRT1102	Communication Techniques		3
PSRT1103	Group Interventions for People with Disabilities		3
PSRT1204	Clinical Principles in Psychiatric Rehabilitation		3
PSRT2121	Community Resource Management		3
PSRT2131	Emerging Topics in Psychiatric Rehabilitation		3
PSRT1019	Clinical Practicum in Psychiatric Rehabilitation I		6
PSRT2019	Clinical Practicum in Psychiatric Rehabilitation II		6
		Total	30 credits

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Admission to Program

The admissions process is competitive and meeting the minimal requirements does not guarantee admission.

- Students must complete the general education requirements at the affiliate school before applying to the program
- A GPA of 2.5 or higher is required
- Applicants apply directly to the Rutgers School of Health Professions (Rutgers SHP) by May 15 for fall admission, and by October 15 for spring admission to the professional phase of the program.
- Fall and Spring admissions

For more information about admissions, please contact the Office of Admissions: **SHPadm@shp.rutgers.edu** or 973-972-5336.

School of Health Professions shp.rutgers.edu

Psychiatric Rehabilitation and Psychology Program

Degree Options

- Bachelor of Science in Psychiatric Rehabilitation and Psychology-Dual Major Program
- Bachelor of Science in Health Sciences Psychiatric Rehabilitation track

Psychiatric Rehabilitation Professions

Psychiatric rehabilitation, promotes recovery, full community integration and improved quality of life for persons who have been diagnosed with any mental health condition that seriously impairs functioning. Psychiatric rehabilitation practitioners focus on helping individuals develop skills and access resources needed to increase their capacity to be successful and satisfied in the living, working, learning and social environments of their choice.

As New Jersey and other states continue to downsize state psychiatric institutions and redirect public mental health funding to community-based alternatives, employment opportunities for program graduates continue to expand. The knowledge and skills of the psychiatric rehabilitation practitioner qualify her/him to conduct rehabilitation assessments, provide supportive counseling, case management services, and vocational rehabilitation interventions. The practitioner is also prepared to facilitate individual and group skills training sessions, as well as illness management and support groups.

Program Description - Bachelor of Science in Psychiatric Rehabilitation and Psychology

The dual major program in Psychiatric Rehabilitation and Psychology is a joint degree program with Rutgers Newark College of Arts and Sciences, Kean University, Georgian Court University, and Felician College. This unique program offers a **dual major** in psychiatric rehabilitation and psychology and provides educational and clinical preparation for professional roles in psychiatric rehabilitation and community mental health settings. Graduates are employed by programs that provide services to individuals living with serious mental illnesses. These include assertive community treatment (PACT) teams, case management programs, partial care programs, supported employment programs, and supported housing programs. Students are also prepared to pursue a variety of graduate degree options.

Students enter the program during their sophomore or junior year at the partner school where they fulfill their psychology and general education requirements. At SHP, they complete a 21-credit core in psychiatric rehabilitation, a 12-credit practicum sequence, and a minimum of 12 credits of electives in upper level psychiatric rehabilitation courses, for a total of 120 -142 credits. The number of required credits depends on the partner school's requirements, for example, the joint program with Kean University requires a total of 124 credits.

Psychiatric Rehabilitation & Counseling Professions Department

Program Director: William Waynor E. waynorwr@shp.rutgers.edu P. 908-889-2548

Primary Campus Location

- Blackwood
- Scotch Plains
- ONLINE: web-based program

Most courses are offered in the traditional classroom setting. Some courses are web-based or web-enhanced.

Major Clinical Affiliates

Clinical sites are located throughout New Jersey.

- Bridgeway Rehabilitation Services
- Collaborative Support Programs of NJ
- Triple C Housing
- Volunteers of America
- Project Live Inc.
- UBHC

For more info

For additional information about the Bachelors of Science degree in the Psychiatric Rehabilitation and Psychology Program, contact SHP Admissions:

Admissions E. SHPadm@shp.rutgers.edu P. 973-972-5336

Program Description - Bachelor of Science in Health Science (BSHS) Psychiatric Rehabilitation Track

Like the Dual Major BS Program in Psychiatric Rehabilitation and Psychology, the BSHS Psychiatric Rehabilitation Track prepares health care professionals with the knowledge and skill competencies needed to assist individuals living with a serious mental illness. Graduates can become employed at the community mental health settings described above and can also continue their education in a variety of graduate level programs related to human services.

Applicants must possess an associate of science degree in a related allied health profession (such as human services) from an accredited institution. The exact number of credits required depends on the courses that students are transferring in from their associate's degree. Students may have to take additional general education courses if they do not already have all the SHP core curriculum requirements.

Option 1: All students in the BSHS Psychiatric Rehabilitation Track take 15 credits of core interdisciplinary studies (IDST) courses and an IDST 4 credit practicum course, at a psychiatric rehabilitation setting chosen in conjunction with a faculty adviser. Additionally, students with an AS Degree in human services, or a related field, also take 45 credits of psychiatric rehabilitation coursework, including a 12-credit clinical practicum sequence in psychiatric rehabilitation.

Option 2: Students entering the BSHS Psychiatric Rehabilitation Track Program with SHP's Associate of Science Degree in Psychosocial Rehabilitation and Treatment degree (ASPSRT) take 15 additional credits of psychiatric rehabilitation coursework including a core course in Case Management and other courses that focus on vocational rehabilitation, independent living, family support and intervention strategies. In addition, Students choose an 18-21 credit IDST composite Track in one of two areas: Aging or Health Services Management & Education. ASPSRT graduates can complete all the BSHS requirements ONLINE. Currently those with other associate degrees take many of their courses ONLINE, however some are offered on either the Scotch Plains or Blackwood Campuses.

Academic Standing

Students must maintain a GPA of at least 3.0 in their psychiatric rehabilitation, psychology and health sciences courses to maintain academic standing in the program.

Full-time and Part-time Status

Full-time and part-time courses of study are available for both programs, including day and evening classes. Classes are taken during fall, spring, and summer semesters.

Learning Goals

The overall goal of the Joint Psychiatric Rehabilitation and Psychology Bachelor's degree program is to prepare competent individuals to work in the Psychiatric Rehabilitation field; with the primary objective of working with individuals who have psychiatric disabilities to achieve their goals and needs in their living, learning, working and social environment of choice. In accords with clinical, legal, ethical, and regulatory guidelines. Additionally, this program is also designed to prepare students to pursue graduate course work in Rehabilitation Counseling, Social Work, Psychology or other related fields of study.

Learning Outcomes

- Identify and assess psychiatric rehabilitation service modalities
- Create wellness and recovery plans to assist in managing symptoms and functional deficits of serious mental illness
- Describe community resources including housing, entitlement, and other essential resources
- Adapt treatment and rehabilitation efforts for individuals based on personal history, developmental factors, and current medical & psychiatric history
- Utilize communication techniques in a professional capacity with individuals, families, team members, and people in the community.
- Plan and facilitate rehabilitation groups.
- Provide psychiatric rehabilitation interventions to promote skill development and resource acquisition.
- Work effectively as part of an interdisciplinary team to provide wellness and recovery focused rehabilitation services.
- Describe and utilize evidence based psychiatric rehabilitation practices.
- Describe and utilize intervention strategies that target specialized populations such as persons with co-occurring disorders.
- Complete documentation requirements that meet state and federal insurance regulations.

Additional Program Information

Additional programmatic information is available online http://shp.rutgers.edu/dept/psyr/programs/bachelors.html

Curriculum

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Admission to Program

- An overall GPA of 2.5. with a GPA of 3.0 in all psychology courses (and any PSRT courses taken prior to admission)
- Two letters of reference
- Written essay related to psychiatric rehabilitation
- For the dual major program with Kean, completion of at least 40 semester hours (including at least 3 psychology and/or psychiatric rehabilitation courses)
- For the dual major program with Rutgers NCAS, Georgian Court University, and Felician College: Completion of all required psychology and general education courses
- For the BSHS Psychiatric Rehabilitation track, completion of the ASPSRT Degree or an Associate Degree in a related Allied Health discipline, such as Human Services, from an accredited institution

GPA minimum requirement/credentialing requirement

Students must maintain a minimum GPA of 3.0 in psychiatric rehabilitation and psychology courses.

Directions for applying to the program

Students begin the process by applying to one of the four partner schools. To obtain an application for admission contact:

Kean University, 1000 Morris Avenue, Union, NJ 07083 P. 908-737-7100, E. admitme@kean.edu

Georgian Court University, 900 Lakewood Avenue, Lakewood, NJ 08701 P. 800-458-8422, E. admissions@georgian.edu

Felician College, 262 South Main Street Lodi, NJ 07644 P. 201-355-1465, E. admissions@felician.edu

Rutgers NCAS, Office of Admissions, 140 University Avenue Englehard Hall, Room 101 Newark, NJ 07102
P. 973-353-5205, newarkadmissions@ugadm.rutgers.edu

For more information about admissions, please contact the SHP Office of Admissions: **SHPadm@shp.rutgers.edu** or 973-972-5336.



School of Health Professions

shp.rutgers.edu

Psychiatric Rehabilitation Program

Degree Options

• Ph.D. Psychiatric Rehabilitation

Psychiatric Rehabilitation Professions

The overall goal of the doctoral degree in Psychiatric Rehabilitation (PsyR) is to prepare competent educators, scholars, researchers, and leaders in psychiatric rehabilitation to work in academia, research institutes, state and county level mental health divisions, community mental health agencies, and managed care industries with the primary objectives of educating, researching, evaluating, and advocating for effective interventions, services, and supports for individuals living with psychiatric conditions.

Program Description

The curriculum consists of 76 credits from the areas of research, PsyR, rehabilitation methods, and teaching. Written and oral communications skills are stressed. In addition, there is a strong emphasis on practical applications of knowledge and skills in seminars, independent studies, and original research. Students are required to carry out research projects both individually and as a member of a team.

There is a liberal transfer credit policy. In addition, with faculty approval, students may develop portfolios to receive credit for specific areas of professional expertise. Students are required to sit for a qualifying examination after completing a minimum of 36 core credits and prior to entering candidacy for the doctorate.

A sample of courses specific to the doctoral program include:

PSRT6301 Advanced Doctoral Seminar, PSRT6025 Tests and Measurements, PSRT6107 Multivariate Statistics, PSRT6322 Evaluation Research, PSRT6120 Advanced Theories of Counseling, and PSRT7005 Dissertation Research.

Academic Standing

To remain in good academic standing a student must maintain a minimum GPA of 3.0.

Full-time and part-time status

The program is designed to accommodate the working professional; as such it is available three semesters per year (fall, spring, summer) on a part-time basis. Classes are typically offered on weekday evenings.

Psychiatric Rehabilitation and Counseling Professions

Program Director: Ann Murphy PhD E. <u>murphyaa@shp.rutgers.edu</u> P. 908-889-2734

Primary Campus Location

Scotch Plains

For more info

For additional information about the Psychiatric Rehabilitation Program, contact SHP Admissions:

Admissions
E. SHPadm@shp.rutgers.edu
P. 973-972-5336

Learning Goals

This program trains doctoral level professions who will contribute to the PsyR knowledge base, design and lead innovative, effective and efficient services, and educate and train current staff and new professionals in the field and the classroom with the overall goal of improved services and supports for people with serious psychiatric conditions.

Students earning the PhD in Psychiatric Rehabilitation are expected to be leaders in the field. As such they will have a comprehensive understanding of PsyR goals, values and principles, as well as, services. In addition, they will have basic knowledge of research methods covering the areas of statistics, psychometrics, applied and formal research, and program evaluation. Finally, through guided, rigorous study and dissertation research they will be an expert in one or more aspects of the field.

Learning Outcomes

Students of this program will be able to:

- identify and describe the core goals, values, and principles of PsyR.
- identified evidence-based practices.
- design and conduct an original research study that contributes to the PsyR knowledge base and utilizes appropriate univariate and multivariate qualitative or quantitative statistical techniques.
- articulate a coherent teaching philosophy and develop and deliver a teaching curriculum that incorporates effective teaching strategies based in higher education learning theory.

Additional Program Information

Additional programmatic information is available on-line at:

http://shp.rutgers.edu/dept/psyr/programs/doctoral.html

Curriculum

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Admission to Program

- Bachelor's or master's degree in a related field from an accredited institution
- Experience with individuals with psychiatric conditions
- Current Resume or Curriculum Vitae
- Three (3) letters of recommendation
- Personal statement identifying interest in this degree, future professional plans, and research interests
- Official transcripts from undergraduate and graduate (if applicable) education
- Graduate Record Examination Verbal and Math scores (within the last five years)

GPA minimum requirements/credentialing requirement

The minimum GPA requirement is 3.0.

For more information about admissions, please contact the Office of Admissions: **SHPadm@shp.rutgers.edu** or 973-972-5336.

School of Health Professions **shp.rutgers.edu**

Psychiatric Rehabilitation

Degree Options

Ph.D. Psychiatric Rehabilitation
 Counselor Education & Supervision track

Counselor Education and Supervision Professions

The goal of the Counselor Education and Supervision Track is to prepare graduates to work as educators in graduate level counseling and other programs, clinicians, clinical supervisors, researchers, and leaders and advocates within the counseling field. This track will prepare graduates to positively impact general counseling services and those specific to individuals with serious psychiatric conditions by fostering the development, implementation and evaluation of evidence-based and promising approaches, teaching future counselors, and providing clinical supervision. The curriculum is designed so that doctoral students will: 1) develop advanced counseling expertise in working with people with serious psychiatric conditions; 2) establish collaborative relationships with faculty in the areas of counseling and clinical supervision, teaching, research, professional writing, and service to the profession and the public; 3) contribute to and promote scholarly research related to counseling; and 4) actively participate in professional counseling organization(s) as part of developing leadership and advocacy skills.

Program Description

The curriculum consists of 64 credits taken in the areas of counseling practice and clinical supervision, research, teaching, leadership and advocacy, practicum, and counseling individuals with serious psychiatric conditions. These credits must be taken after the completion of a master's degree from a CACREP (Council for Accreditation of Counseling and Related Educational Programs) or equivalent program. Additional credits (by advisement) may be required to fulfill CACREP requirements.

A sample of courses specific to this program include:

PSRT6120 Advanced Theories of Counseling, PSRT6000 Fundamentals of Clinical Supervision, PSRT7000 Teaching in Counselor Education, and PSRT7101 Advanced Doctoral Practicum in Counseling.

Academic Standing

To remain in good academic standing a student must maintain a minimum GPA of 3.0.

Psychiatric Rehabilitation and Counseling Professions

Program Director: Ann Murphy E. murphyaa@shp.rutgers.edu P. 908-889-2734

Primary Campus Location

Scotch Plains

For more info

For additional information about the Psychiatric Rehabilitation Program – Counselor Education and Supervision track, contact SHP Admissions:

Admissions
E. SHPadm@shp.rutgers.edu
P. 973-972-5336

Full-time and part-time status

The program is designed to accommodate the working professional; as such it is available three semesters per year (fall, spring, summer) on a part-time basis. Classes are typically offered on weekday evenings.

Learning Goals

The mission of the PhD program in Counselor Education and Supervision is to prepare counselor educators, clinical supervisors, researchers, and leaders and advocates within the counseling field. This track specializes in counseling approaches and techniques for individuals with psychiatric conditions.

Students earning the PhD in Counselor Education and Supervision are expected to be leaders in the field. As such they will have a comprehensive understanding of counseling, counselor education, and clinical supervision. In addition, they will have basic knowledge of research methods covering the areas of statistics, psychometrics, applied and formal research, and program evaluation. Finally, through guided, rigorous study and dissertation research they will be an expert in one or more aspects of the field.

Learning Outcomes

Students of this program will be able to:

- identify and describe the major counseling theories.
- evaluate the evidence for related practices.
- develop and articulate a personal theoretical counseling orientation.
- evaluate models and theoretical frameworks of clinical supervision, apply clinical supervision theory and skills, and develop a personal style of clinical supervision.
- design and conduct an original research study that contributes to the counselor education and supervision knowledge base and utilizes appropriate univariate and multivariate qualitative or quantitative statistical techniques.
- articulate a coherent teaching philosophy and develop and deliver a counselor education teaching curriculum that incorporates effective teaching strategies based in higher education learning theory.
- analyze the legal ethical and multicultural issues related to counseling, counselor education, clinical supervision, and leadership and advocacy within the field.
- develop and apply leadership and advocacy skills related to the counseling profession and the individuals who participate in counseling services.

Additional Program Information

Additional programmatic information is available on-line at: http://shp.rutgers.edu/dept/psyr/programs/PhDPSRCounEduSupTrk.html

Curriculum

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Admission to Program

- Completion of graduate level coursework including:
 - a. CACREP entry-level core curricular standards
 - b. CACREP entry-level professional practice standards, and

- c. CACREP entry-level curricular requirements of a specialty area (any missing content can be completed before or concurrently with initial doctoral coursework).
- Experience with individuals with psychiatric conditions preferred
- Current Resume or Curriculum Vitae
- Three (3) letters of reference
- Personal statement identifying interest in the degree, future professional plans, and research interests
- Official transcripts from undergraduate and graduate education
- Graduate Record Examination Verbal and Math scores (within the last five years)

GPA minimum requirements/credentialing requirement

The minimum GPA requirement is 3.0.

For more information about admissions, please contact the Office of Admissions: **SHPadm@shp.rutgers.edu** or 973-972-5336.



School of Health Professions shp.rutgers.edu

Rehabilitation Counseling Program

Degree Options

Master of Science in Rehabilitation Counseling
 Clinical Mental Health Counseling track

The Counseling Profession: Rehabilitation and Clinical Mental Health Counseling Specializations

Master's level counselors find employment in many settings including community agencies, state and federal government agencies, the insurance industry, and private practice. They provide individual or group counseling and frequently work with families of individuals seeking services. Counseling is one profession with several specializations. This degree provides the student with specializations in both rehabilitation counseling and clinical mental health counseling.

Rehabilitation Counselors are counselors who possess the specialized knowledge, skills, and attitudes needed to collaborate in a professional counseling relationship with people who have disabilities to achieve their personal, psychological, social, and career goals. Currently, there is high demand in New Jersey, the surrounding regions and nationally for master's level rehabilitation counselors.

Mental health counselors help people manage or overcome mental and emotional disorders and problems with relationships. Examples of what mental health counselors do include encouraging clients to discuss their experiences and process reactions to them to adjust to changes in life, guiding clients through the process of making decisions about their future, counseling clients about developing strategies and skills to change their behavior or cope with difficult situations, and coordinating services with other professionals such as psychiatrists. While some disorders can be overcome, many others need to be managed. Mental health counselors work with clients to develop strategies and skills to minimize the effects of their disorders or illnesses including developing and implementing strategies to encourage wellness.

Program Description

This degree is designed to enhance the career advancement of experienced people already working in the human services field as well as prepare people to enter the field. Our program emphasizes approaches based on cognitive behavioral counseling, focusing on helping clients to understand harmful thoughts, feelings, and beliefs and replace them with positive, life-enhancing ones as well as teaching clients to eliminate unwanted behaviors and replace them with more productive ones. The program also focuses on the use of evidence-based and promising practices for counseling and service delivery, in particular, those designed to provide counseling and other services for individuals with severe mental illness.

Psychiatric Rehabilitation and Counseling Professions

Program Director: Janice Oursler E. ourslejd@shp.rutgers.edu P. 908-889-2462

Primary Campus Location

Scotch Plains

Major Clinical Affiliates

The program maintains clinical affiliations with over 50 agencies in New Jersey and the surrounding region. Affiliations include state and federal government agencies that provide mental health and rehabilitation services, community mental health agencies, and community rehabilitation provider agencies.

Accreditation

The Council on Rehabilitation Education (CORE) for an eight-year term through the 2020-2021 academic year.

The Council for the Accreditation of Counseling and Related Educational Programs (CACREP) in Clinical Mental Health Counseling Track through March 31, 2019.

For more info

For additional information about the Rehabilitation Counseling Program, contact SHP Admissions:

Admissions E. SHPadm@shp.rutgers.edu P. 973-972-5336 Completion of the degree requires 60 credits. Students complete a common core of 13 counseling courses (39 credits). This course work provides students with a solid foundation in content areas such as theories of counseling, techniques and methods for counseling individuals and groups, human growth and development and the impact of disabilities, and ethical and legal standards of the profession. Additionally, all students complete a practicum of at least 100 hours including 40 hours of direct service and an internship of at least 600 hours including 240 hours of direct service. These clinical experiences total 9 credits. Students also take four courses (12 credits) in the area of Clinical Mental Health Counseling.

Academic Standing

To maintain good academic standing, students must maintain a GPA of 3.0 each semester.

Full-time and part-time status

Students may complete the degree on either a full-time or part-time basis. The degree can be completed in two years of full-time attendance or three years of part-time attendance. Students attend classes three semesters a year: Fall, Spring and Summer. Students can begin the program in either the Fall or the Spring semester. We do not accept applications to start the program in the Summer semester.

Learning Goals

The mission of the program is to educate individuals to be socially responsible counseling professionals who will work competently, creatively and collaboratively with and within the community in an environment of diversity so that persons in the community including those with psychiatric and other disabilities are empowered to pursue personally important goals including career with success and satisfaction. To accomplish the mission of the program and to prepare program graduates to work in a variety of settings including community agencies, government agencies, and other community based services, we seek to provide students with a broad knowledge of the counseling field including theory, research, ethical practices and decision-making, a well-developed set of interpersonal and counseling skills as applied to the helping relationship, and specialized knowledge of working with the community in an environment of diversity and of counseling individuals with psychiatric and other disabilities in the community. The curriculum is designed to educate students in the knowledge base of the field including current research combined with supervised clinical experience in counseling to practice that knowledge base. At the conclusion of degree studies, program graduates are expected to have the skill set of an entry level counseling professional.

Learning Outcomes

As part of the program's self-evaluation process, we collect information on Student Learning Outcomes. Outcomes are defined by program faculty and are related to specific School of Health Professions (SHP) Student Learning Outcomes as well as outcomes related to accreditation standards. Student learning outcomes to be evaluated are updated per SHP standards and changes in accreditation standards. Examples of current learning outcomes are below.

- Student completes an internship in an approved agency in the community for a minimum of 600 hours including 240 hours of direct service
- Student demonstrates ability to conduct an intake interview and document information from the interview.
- Student selects counseling interventions based on client concerns and evaluates effectiveness.
- Student organizes and leads a group based on psychiatric rehabilitation principles.
- Student adheres to professional and ethical standards.

Additional Program Information

http://shp.rutgers.edu/dept/psyr/programs/msrehab.html

Curriculum

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Admission to Program

Requirements for admission include:

- Completed Application for Admission form with application fee.
 Applications are accepted only online. Apply online at http://shp.rutgers.edu, select Prospective Students.
- Bachelor's degree from an accredited institution. Official Transcripts for the degree must be submitted.
- Written statement describing career goals, personal goals, and experiences as related to the program
- Two letters of recommendation. Letters can be submitted electronically or mailed to the Office of Admissions
- Personal interview by faculty.

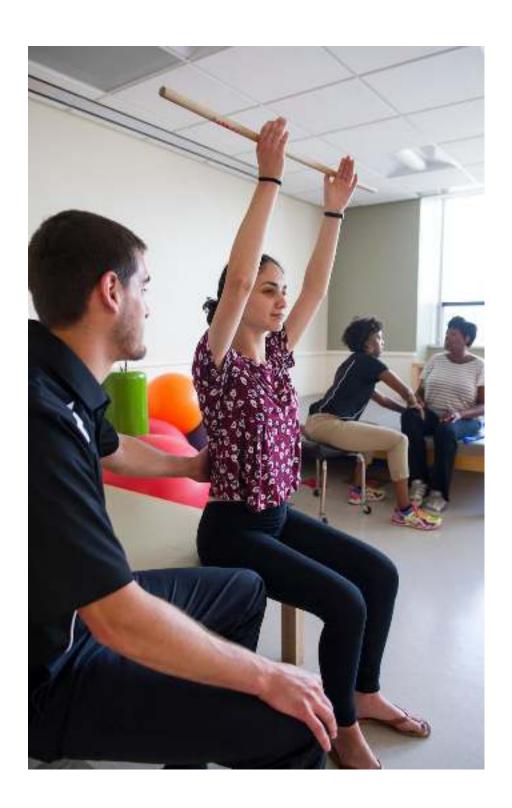
In addition to the academic requirements for the program, students must be able to perform the essential functions required for a career in the health services field. Applicants should review the SHP Essential Functions available at http://shp.rutgers.edu, select Prospective Students, then Admissions Office, and scroll down to Essential Functions. Applicants considering careers in the counseling field must be able to form effective interpersonal relationships both with individuals and in the context of small groups, engage in critical thinking, work with diverse populations, and follow ethical standards of the profession.

We encourage applications from individuals from diverse backgrounds interested in studying for this degree. We recognize the need for diversity as part of preparing to serve clients in our pluralistic society and welcome applications from a wide variety of personal, social, ethnic, cultural and educational backgrounds.

The program's selection committee makes admission decision recommendations. The applicant's academic background, ability to perform essential functions, and experience in human services, whether volunteer or paid, are considered in making admission decisions. The Office of Admissions notifies applicants of admission decisions.

For more information about admissions, please contact the Office of Admissions: SHPadm@shp.rutgers.edu or 973-972-5336.

Department of Rehabilitation & Movement Sciences



School of Health Professions shp.rutgers.edu

Physical Therapy Program – North

Degree Options

• Doctor of Physical Therapy

Physical Therapy Professions

Physical therapy is a dynamic profession with an established theoretical base and widespread clinical applications in the preservation, development, and restoration of optimal physical function. Physical therapists in the United States:

- Diagnose and manage movement dysfunction and enhance physical and functional abilities.
- Prevent the onset and progression of impairment, functional limitation, disability, or changes in physical function and health status resulting from injury, disease, or other causes.
- Restore, maintain, and promote overall fitness, health, and optimal quality of life.

As essential participants in the health care delivery system, physical therapists assume leadership roles in rehabilitation services, prevention and health maintenance programs, and professional and community organizations. They also play important roles in developing health care policy and appropriate standards for the various elements of physical therapist practice to ensure availability, accessibility, and excellence in the delivery of physical therapy services. Practice settings include but are not limited to, hospitals, rehabilitation centers, extended care centers, industry, schools, and private practices. As clinicians, physical therapists engage in an examination process that includes taking a comprehensive history, conducting a systems review, and administering tests and measures to identify potential and existing problems.

To establish diagnoses and prognoses, physical therapists perform evaluations that synthesize the examination data. Physical therapists provide interventions (the interactions and procedures used in treating and instructing patients/ clients), conduct re-examinations, modify interventions as necessary to achieve anticipated goals and desired outcomes, and develop and implement discharge plans. Physical therapy includes the services provided by physical therapists and those rendered under physical therapist direction and supervision (American Physical Therapy Association). Physical therapists continue to be in demand throughout the United States. Employment opportunities are available in a variety of health care settings, educational settings and geographic locations. (Adapted from the Guide to Physical Therapist Practice, 3.0 APTA, 2014).

Program Description

Applicants to the Doctorate of Physical Therapy Program in Newark must have a minimum of a Bachelor's degree. The program also collaborates with Montclair State University, Ramapo College of New Jersey, William Paterson University, Felician College, Fairleigh Dickinson University, New Jersey Institute of Technology (NJIT) Yeshiva University (N.Y), and St. Peter's College to offer a joint Bachelors/DPT degree. Additionally, seats are reserved conditionally for students from Rutgers School of Arts and Sciences, Department of Kinesiology & Health. The entry-level curriculum is a full time three-year program that prepares a student to take the licensing exam and upon successful completion, enter the physical therapy profession as a clinician capable of practicing in

Rehabilitation and Movement Sciences

Program Director: Nancy Kirsch E. kirschna@shp.rutgers.edu P. 973-972-2371

Primary Campus Location

Newark

Academic Affiliates

Academic institutions with articulation programs at the Rutgers School of Health Professions.

- Fairleigh Dickinson University
- Felician College
- Montclair State University
- New Jersey Institute of Technology
- Ramapo College
- Saint Peter's University
- William Paterson University
- Yeshiva University

Accreditation

Commission on Accreditation in Physical Therapy Education 1111 N. Fairfax Street Alexandria, VA 22314 P: 703-706-3240

Contact: Sandra Wise, PhD, Director

Status: Full accreditation, April 2010 – 2019

For more info

For additional information about the Physical Therapy Program, contact SHP Admissions:

Admissions E. SHPadm@shp.rutgers.edu P. 973-972-5336 an autonomous and ethical manner. The graduates have skills in differential diagnosis, and advanced clinical and management practices. They are able to understand and apply research presented in various formats to clinical decision making and practice and are expected to help lead the profession in the changes needed for effective practice in the 21st century. The program also has a joint DPT/PhD program in collaboration with the Graduate School of Biomedical Sciences. The physical therapy department has a rich tradition of academic excellence in education, research, patient care and community service. Our programs have been accredited by the Commission on Accreditation in Physical Therapy Education since 1980.

Academic Standing

Students must maintain a GPA of 3.0 and must not receive a grade lower than a B to remain in good academic standing

Full-time and part-time status

Students are only accepted for full-time study. Full-time students are accepted for entrance into the program each Spring to start classes at the beginning of August. Students normally complete the degree requirements in three years.

The Program has over 400 contracts with clinical sites across the United States and Europe at which students complete their clinical experiences.

Learning Goals

The Doctoral Program in Physical Therapy-North, in concert with the mission of Rutgers School of Health Professions, strives to graduate entry-level physical therapists who embody the core values of our profession (accountability, altruism, compassion, caring, excellence, integrity, professional duty and social responsibility) as well as the behaviors and skills to practice competently and collaboratively across clinical, educational, professional and community settings. Graduates will have the knowledge and skills as movement specialists to use best evidence to optimize function and promote wellness across the lifespan.

Vision

The Vision of the Rutgers University Doctor of Physical Therapy Program North is:

- To transform society by preparing physical therapists who will be leaders in best clinical practices, education, scholarship, and service.
- To achieve faculty recognition as worldwide leaders and innovators in physical therapist education, research, practice and service.
- To be an integral and valued component of the RBHS aspiration statement to be recognized as one of the best academic health centers in the United States.

Learning Objectives

Graduates of the DPT North program will:

- Demonstrate competent, evidence based practice as movement specialists who use sound clinical decision making to deliver safe and effective comprehensive patient-centered management across the lifespan and continuum of care.
- 2. Demonstrate responsible practice guided by ethical, legal and regulatory principles
- 3. Demonstrate collaborative client management, consultation, education and advocacy across all health care delivery settings

 Demonstrate skills to maintain currency in practice through reflection and self-evaluation.

Learning Outcomes

Expected Outcomes; The DPT North graduate will:

- use best evidence to support clinical decision-making to address patient participation, activity, body structure and function, prevention and education needs and goals;
- 2. demonstrate entry-level knowledge for managing patients across the lifespan and the continuum of care;
- 3. demonstrate entry-level skills including selecting, performing, documenting and interpreting appropriate tests, measures, interventions, and practice patterns;
- present evidence based reports and scientific findings across relevant venues:
- demonstrate the ability to analyze movement and use movement analysis for decision making and intervention;
- adapt to the individual needs of patients, clients, families/caregivers and consumers of service;
- 7. recognize and interpret the legal and regulatory tenets that impact service delivery, at national, state and practice specific levels;
- 8. reflect and self-evaluate as a basis for life-long learning;
- 9. participate and present (as appropriate) at professional meetings
- 10. use evidence-based practice principles and processes to answer clinical questions and maintain currency with the literature; and
- 11. determine one's strengths and limitations through self-assessment that leads to applied professional development strategies.

Additional Program Information

For more information on these degrees, please contact the Program by phone at (973) 972-9484 or via email at the contact listed below. You may visit the website at http://shp.rutgers.edu/dept/PT/north/index.html

Curriculum

See database for program requirements and course descriptions: http://coursecatalog.shp.rutgers.edu

Admission to Program

There are several routes of entry into the Rutgers program. College graduates with a bachelor s degree may apply directly to Rutgers. High school seniors or transfer students may apply to one of the articulated state or private colleges (Fairleigh Dickinson University, Montclair State University, Ramapo College of New Jersey, New Jersey Institute of Technology (NJIT) William Paterson University, Felician College, Yeshiva University, St. Peter's College.)

Up to 65 full-time students are enrolled each year. Clinical Experiences are scheduled at affiliated sites throughout the country. Transfer and non-matriculated students are generally not accepted into the program

The program is open to any qualified applicant regardless of race, religion, color, age, gender, national origin, handicap, sexual preference or financial status. The nature of the curriculum and the profession of physical therapy necessitate the ability to perform skills that require physical strength and endurance.

Prerequisites:

Human Anatomy and Physiology w/lab	8 credits
General Chemistry w/lab	8 credits
Psychology	3 credits
General Physics w/lab	8 credits
Statistics	3 credits
Math (pre-calculus, calculus, trig or geometry)	3 credits

Applicants Criteria for Selection:

- Satisfactory grade point average (A-B range)
- Satisfactory scores on all three sections (verbal, quantitative and analytical/written) of the Graduate Record Examination. The institution code for Rutgers is 7636.
- Knowledge of the field through actual work or volunteer experience
- Three letters of recommendation: two from physical therapists you worked or volunteered for and one from anyone other than a family member.
- · Evidence of community service
- A personal interview may be required

Applicants are expected to have basic computer literacy, including file management, use of word processing and spreadsheet programs, use of e-mail and the Internet. For Admissions information contact Denise Raney, Program Secretary Bergen Building Room 720 65 Bergen Street, Newark, NJ Phone: (973) 972-9484 email: raneyde@shp.rutgers.edu

GPA minimum requirement/credentialing requirement

Students should have a minimum GPA of 3.0 to apply. Students are required to achieve and maintain on their own CPR and First Aid certification throughout their enrollment in the program.

For more information about admissions, please contact the Office of Admissions: **SHPadm@shp.rutgers.edu** or 973-972-5336.

School of Health Professions **shp.rutgers.edu**

Physical Therapy Program— South

Degree Options

Doctor of Physical Therapy

Physical Therapy Professions

Physical therapy is a dynamic and ever-changing field. Physical therapists are health professionals who examine, diagnose, and provide interventions for people with a variety of impairments, functional limitations, and disabilities. Physical therapists assess the musculoskeletal, neurological, integumentary, cardiopulmonary, and other systems of the body. In consultation with the patient or client, physical therapists develop goals based on examination findings and individual needs. Physical therapists screen patients for medical conditions and may refer patients to other health professionals. Physical therapists also work in wellness, health promotion, and disease prevention settings.

Physical therapy is a people-oriented profession. Physical therapists have many opportunities to improve the quality of their clients' lives. Physical therapists must have excellent observational skills, psychomotor skills, cultural awareness, and clinical decision-making abilities.

Physical therapists are involved with restoring function and independence at all levels. Physical therapists practice in a variety of settings, including hospitals, nursing homes, community health centers, private physical therapy offices, sports facilities, rehabilitation centers, clients' homes, schools, pediatric centers, and academic institutions. Physical therapists provide patient care, conduct research, teach, engage in scholarly work, and provide community service.

Physical therapists are valuable members of the interprofessional health care team. Patients come to physical therapists directly or by referral from physicians, podiatrists, or dentists depending upon the jurisdiction. New Jersey is one of the many states that allows for direct access to physical therapy services.

The American Physical Therapy Association is the professional organization for physical therapists. The APTA website (http://www.apta.org) is a valuable source of information about the profession of physical therapy.

The Federation of State Boards of Physical Therapy (http://www.fsbpt.org) is the professional organization that represents the individual jurisdictions that license physical therapists. This web site is a valuable resource for physical therapy licensure.

Rehabilitation and Movement Sciences

E. Program Director: Marie Koval Nardone, PT, MS, EdD dptgradm@shp.rutgers.edu P.856-566-6456

Primary Campus Location

 Rutgers at Camden County College, Blackwood

Major Clinical Affiliates

The DPT Program has an extensive network of clinical sites across the United States at which students complete their clinical experiences. Students should be prepared to travel outside south Jersey for their clinical affiliations.

Accreditation

The Doctor of Physical Therapy Programs at Rutgers the State University of New Jersey School of Health Professions are accredited by: Commission on Accreditation in Physical Therapy Education (CAPTE) 1111 N. Fairfax Street Alexandria, VA 22314 P:703-706-3245 Email: accreditation@apta.org; Website: http://www.capteonline.org Questions regarding the physical Therapy program's accreditation Should be directed to the Program Director, Dr. Marie Koval Nardone, or to the Commission on Accreditation in Physical Therapy Education (CAPTE). The process for an individual to File a complaint with CAPTE for any Accredited physical therapy education program is available on the CAPTE website(http://www.capteonline.org / Complaints/)

Status: DPT program full accreditation 2009-2019

Program Description

The Doctor of Physical Therapy degree program is offered by Rutgers, School of Health Professions (SHP). The Physical Therapy degree program is located on the Blackwood Campus of Camden County College. Most didactic courses are taught on that campus. The Neuroscience course meets on the Rutgers-Camden Campus. The Anatomy course meets on the Rowan-SOM Stratford Campus.

The Program's primary mission is to educate students to become generalist physical therapists engaged in contemporary practice with faculty and students committed to humanistic principles through education, scholarship, service and practice.

The program is designed to prepare health professionals who function competently and creatively in a dynamic health care environment. The curriculum is designed to provide a student's first degree in physical therapy. The curriculum builds upon liberal arts education and integrates the humanities, scientific theory and clinical experiences to provide entry level competence in patient care, management, health care programming, community education and service, and scientific inquiry.

Physical Therapy Program faculty members focus upon the growth and development of each individual student. They represent a broad spectrum of physical therapy practice. The faculty includes board-certified clinical specialists in the areas of hand, orthopedic, neurologic, and pediatric Students participate in a number of small group activities, including visits to local clinical facilities for patient observations and examination and intervention sessions under the direction of academic and clinical faculty. Students participate in community service projects, which provide learning experiences and the opportunity to make health care accessible to individuals who are often underserved.

Academic Standing

Physical therapy education is an academically rigorous experience. It is extremely difficult to maintain employment while matriculating in the Program. Students must comply with all program policies during the enrollment period and assume costs for scheduled clinical internships. Students must maintain an overall average of 3.0 while enrolled in the curriculum, may earn no more than 2 grades of C or C+ in the curriculum, and must earn a grade of 80 or better in all practical examinations of patient assessment skills. Students must complete a capstone project under the direction of a faculty advisor and perform satisfactorily on a comprehensive examination. Students must complete all scheduled clinical internships and required immunizations, criminal background checks, and medical examinations.

In general, students in the DPT Program are expected to complete the degree requirements in thirty-six months. The graduation rate (ratio of graduates to initially enrolled students) for the class of 2014 as reported to the Commission on Accreditation in Physical Therapy Education (CAPTE) in the 2016 Annual Accreditation Report (AAR) was 90%. Full-time clinical affiliations are scheduled at affiliated sites throughout the country.

In order to graduate from the program, students must earn an overall grade point average of 3.0 and complete all program requirements. Students who complete the requirements for graduation earn a Doctor of Physical Therapy Degree from Rutgers, The State University of New Jersey. Students must meet the requirements and complete the application process for licensure in the state of their choice in order to practice physical therapy.

For more info

For additional information about the Physical Therapy Program, contact the DPT- South Program:

E. dptgradm@shp.rutgers.edu P.8565666456

Our program's ultimate 2-year (2014-2016) pass rate on the licensure exam as reported by the Federation of State Boards of Physical Therapy (FSBPT) was 100% % (downloaded from fsbpt.org on 5-11-17). Graduates of our program are employed in a variety of educational and practice settings through- out the country. One hundred percent (100%) of program graduates in the Class of 2016 who sought employment within six months of passing the licensure exam have found employment as a physical therapist.

Full-time and part-time status

This is a full-time, block-scheduled program. One class enters the program each year in May. Transfer and nonmatriculated students are generally not accepted into the program.

Learning Goals

The Doctoral Program in Physical Therapy-South, in concert with the mission of Rutgers School of Health Professions, strives to graduate entry-level physical therapists who embody the core values of our profession (accountability, altruism, compassion, caring, excellence, integrity, professional duty and social responsibility) as well as the behaviors and skills to practice competently and collaboratively across clinical, educational, professional and community settings. Graduates will have the knowledge and skills as movement specialists to use best evidence to optimize function and promote wellness across the lifespan."

Learning Outcomes

- Demonstrate appropriate content knowledge as required by entry-level practice.
- Demonstrate clinical, research, and technical skills necessary for successful performance as a physical therapist.
- Organize relevant educational content for a variety of target audiences.
- Use systematic search techniques and summarize literature and other sources of evidence to answer research and practice questions.
- Exhibit professional behavior in all interactions.
- Identify roles and responsibilities of interprofessional team members in the provision of patient and client care.
- Maintain and/or adhere to professional ethics and legal requirements.
- Recognize and respond appropriately to various situations within physical therapy regarding clinical, cultural, psychosocial quality improvement and/or administrative problems.

Mission Outcomes:

Graduates

- Demonstrate the ability to function as a generalist physical therapist.
- Recognize the principles of autonomous practice and demonstrate characteristics of progression to autonomous practice.
- Display commitment to humanistic principles through education, scholarship, community service, and clinical practice.

Outcomes of the DPT Program:

Graduates

 Create effective therapeutic and collegial relationships that balance scientific knowledge, humanistic values, critical thinking, clinical decision making and reflection in the examination, evaluation, diagnosis, prognosis

- and intervention of patients/clients with functional limitations, physical impairments and disabilities.
- Contribute to the advancement of the Physical Therapy profession through dynamic and responsible participation in delivery of services, reflection, lifelong learning, interdisciplinary care, community service, and scholarly activities.
- Demonstrate the elements of professional behavior in providing services
 to physical therapy patients and clients, including commitment to
 learning, interpersonal skills, communication skills, effective use of time
 and resources, use of constructive feedback, problem solving,
 professionalism, responsibility, critical thinking, and stress management.
 Professionalism will be consistent with the core values of professionalism
 in physical therapy: accountability, altruism, compassion/caring,
 excellence, integrity, professional duty and social responsibility.
- Practice at the level consistent with the Vision Statement 2020 of the American Physical Therapy Association.

Additional Program Information

The clinical education program for physical therapy students is designed to parallel and enrich coursework. It offers a practical, hands-on experience for graduate students to apply academic knowledge in the clinical environment and focuses on providing each student with supervised practice opportunities in a variety of clinical environments. Four full-time clinical experiences that total 38 weeks are required.

Clinical placement is based upon the students' educational needs and the clinical experiences that are available. Clinical internships that are within 1.5 hours of the program are considered local. Clinical internships may also include sites that are out of state. Travel to clinical sites that are affiliated with the University is required and is the responsibility of the student. Physical therapy students are Responsible for costs incurred during clinical affiliations, including travel and living expenses. For more information please visit the website at http://shp.rutgers.edu/dept/PT/south/clined.html

Curriculum

See database for program requirements and course descriptions: http://shp.rutgers.edu/dept/PT/south/curr.html

Admission to Program

The admissions process is competitive. Applicants utilize the Physical Therapy Centralized Application Service(http://www.PTCAS.org) to apply. Submission of the online application, all supplemental materials, and responses to the school-Specific questions are required. Qualified applicants will be invited for an interview with Program faculty as part of the admissions process.

Applicants self-manage their application in order to ensure that all materials are submitted in a timely manner. They should follow all instructions provided in both the PTCAS application materials and the Program Profile. A summary is provided at: http://shp.rutgers.edu/dept/PT/south/PTCAS.htm
Please refer to the list of admissions requirements and supporting documentation.

GPA minimum requirement/credentialing requirement

A baccalaureate degree must be earned by the time of initial matriculation in May. An undergraduate grade point average(GPA) of at least 3.0 is recommended. The GRE test must be taken within five (5) years prior to the application date.

Applicants must submit their official GRE scores using the Program code 6976 as instructed at the PTCAS website.

The program is open to any qualified applicant regardless of race, religion, color, age, gender, national origin, handicap or sexual preference. The nature of the curriculum and the profession of physical therapy necessitate the ability to perform skills that require physical strength and endurance and to demonstrate specific cognitive, professional behavioral and communication/interprofessional skills.

Applicants must be able to meet the SHP General Essential Functions (http://shp.rutgers.edu/prospective_students/documents/SHRPWideEssentialFunctions7-13.pdf) and the DPT specific functions (http://shp.rutgers.edu/prospective_students/documents/DPTEssentialFunctionsDecember2015.pdf) Students who request reasonable accommodations in order to meet the essential standards should consult: (http://shp.rutgers.edu/current_students/disability_services/register_ds.html)

For more information about admissions, please contact the DPT- South Program: dptgradm@shp.rutgers.edu or 856 566 6456.

