

The Rutgers Health Center for Biomedical Informatics & Health Artificial Intelligence (BMIHAI) presents

Rutgers Health Roadmap Initiative

2025 Request for Proposals <u>Funding for multi-disciplinary projects to support</u> <u>Postdoctoral Health AI Research (PAIR) Fellows</u>

Funding Opportunity Purpose:

This RFA solicits project applications from inter-disciplinary teams of investigators at Rutgers University, with the specific goal of providing funding and inter-disciplinary mentorship in Biomedical Informatics and Health AI for postdoctoral researchers.

Release Date: Feb 12th, 2025

Information Webinar: March 3, 2025, from 2:00–3:00 p.m. (host: Antonina Mitrofanova, Rutgers Health Roadmap co-lead, SHP) Webinar recording or additional webinars will be available upon request. Register here: <u>https://rutgers.zoom.us/meeting/register/1pJYlmYsRueiORvTDhAQwQ</u>

Letter of Intent Deadline: March 24, 2025

Application Deadline: April 25, 2025

Award Notification: May - June, 2025

Earliest Start Date: June, 2025 (dependent on regulatory approvals)

Table of Contents

I. Overview of the Program	3
II. 2025 RFA requirements	4
III. Application Process	5
Eligibility Confirmation	
 Letter of Intent (LOI) Application Submission Institutional Review Requirements Application Requirements Budget Guidelines Regulatory Approvals Proposal Review 	
IV. Post-Award Management	8
 Budget and Financial Management Award Recognition Other Notices 	

I. Overview of the Program

The Rutgers Health (RH) Center for Biomedical Informatics & Health Artificial Intelligence (BMIHAI) is proposed as a Rutgers Roadmaps Initiative to serve as the catalyst for a transformative effort that establishes Rutgers as a national and international leader in computational medicine and health AI. The overarching goal of this initiative is to bring together substantial existing, but currently siloed, strengths in the broad area of biomedical informatics, including in bioinformatics, clinical informatics, clinical research informatics, public health informatics, translational bioinformatics, etc., and substantially expanding them, especially in the area of health AI, making them collectively much more than the sum of their parts. Rutgers Health Roadmap initiative is co-led by Drs. Tobi Gerhard, David Foran, Antonina Mitrofanova, and Evan Johnson.

Multi-disciplinary Projects to support Postdoctoral Health AI Research (PAIR) Fellows is one of the many Rutgers Health Roadmap Initiatives and will provide 2-4 postdoctoral fellowships per year with joint multi-disciplinary co-mentoring across the Chancellor Led Units (CLUs). The objective of this mechanism is twofold. First, this mechanism is intended to support new inter-disciplinary projects and teams that would lack funds to pursue their proposed project and hire a postdoctoral fellow otherwise. At the same time, it supports a new generation of postdoctoral fellows who will be trained and mentored by multi-disciplinary teams of experts in cutting-edge cross-disciplinary Health AI-related fields. Collaborative teams are expected to include at least one expert in Biomedical Informatics, Data Science, Computational Biology, Health AI, or related fields. Other team members/mentors could hold complementary expertise, including but not limited to experimental biology, clinical practice, chemistry, physics, engineering, rehabilitation and movement sciences, nutrition, public health, statistics, etc., based on the needs of the project. Such collaborative teams are required to submit a project proposal, alongside a mentoring plan and plan for seeking extramural funding and use the funds to support a postdoctoral fellow who will lead the project and benefit from joint multidisciplinary co-mentorship. The Primary Mentor and/or the team would be responsible for supporting a postdoctoral fellow beyond the period of this fellowship.

II. Requirements for 2025 RFA

Letter of Intent (LOI)

- LOI application should list all team members, postdoctoral fellow can be left as TBD
- LOI should include an abstract and/or specific aims
- LOI will be utilized to recruit application reviewers
- LOI should be submitted by **March 24, 2025**, using the following link, which will then allow access to full application portal: <u>https://form.jotform.com/250344612044143</u>

Information Webinar

Information webinar will be hosted to explain proposal requirements, as well as review and selection process. The webinar will be held on March 3, 2025, from 2:00–3:00 p.m. (host: Antonina Mitrofanova, Rutgers Health Roadmap co-lead, SHP) Webinar recording or additional webinars will be available upon request. Register here: https://rutgers.zoom.us/meeting/register/1pJYlmYsRueiORvTDhAQwQ

Application

- The research team applying for funding must be multi-disciplinary, with the Primary Mentor as a full-time Rutgers Health faculty. Co-mentor(s) can be from any Rutgers University School, Institute, or CLU.
- There must be one Primary Mentor and at least one secondary Co-mentor for each application.
- Research teams must include at least one senior-level researcher from Rutgers University at the level of Associate Professor or above, preferably with mentorship experience. Note that this does not need to be the Primary Mentor.
- Research teams must include at least one expert (Primary Mentor or Co-mentor) in Bioinformatics, Data Science, Computational Biology, Health AI, or related field.
- Research teams should include faculty with complementary expertise to provide multidisciplinary training and mentorship for a postdoc.
- Newly developed projects are required for this application, with no evidence of prior funding for proposed projects.

Funding Amount and Duration

- Awards are for \$63,968 in salary per year with up to 45.36% fringe for existing or new post-doctoral candidates (Class 1) and can be requested for either one or two years (which should be indicated in the application). Collaborative teams are expected to cover postdoctoral salary beyond this period with either the Primary Mentor's or Comentors' funds. Primary Mentor will be responsible for coordinating this coverage.
- Depending on duration requests, 2-4 postdoctoral fellowships will be awarded.

III. Application Process

Eligibility:

- Primary Mentor should hold a full-time faculty appointment at Rutgers Health.
- Co-mentors and other investigators can be from any Rutgers University School, Institute, or CLU.
- There must be (exactly) one Primary Mentor, and at least one Co-mentor declared.
- Each research team must include at least one expert (Primary Mentor or Co-mentor) in the field of Bioinformatics, Data Science, Computational Biology, Health AI, or related field. Note that this does not need to be the Primary Mentor.
- Other team members/mentors could hold complementary expertise, including but not limited to experimental biology, clinical practice, chemistry, physics, engineering, rehabilitation and movement sciences, nutrition, public health, statistics, etc., based on the needs of the project.
- Each team must include at least one senior-level researcher from Rutgers University at the Associate Professor level or above, preferably with mentorship experience.
- Primary Mentors are limited to one application per cycle, but Co-mentors may participate in several applications.
- Awarded teams will be responsible for posting a postdoctoral position, identifying candidates, and hiring postdoctoral fellows (Class 1), who can be current or new hires, and either domestic or international postdocs.
- If a new hire, postdoctoral candidates must be hired within 1 year from notification of award.

Letter of Intent:

All applicants are required to submit a Letter of Intent (LOI) by **March 24th**, **2025**, using the following link: <u>https://form.jotform.com/250344612044143</u>. The LOI information form will include Primary Mentor and Co-mentor(s) names, titles, and institutional affiliations. LOI should include a project abstract or specific aims (limited to 1 page). The Primary Mentor will serve as the contact PI. LOIs do not require institutional review before submission. The goal of the LOI process is to ensure timely recruitment of application reviewers.

Application Submission:

Final applications must be submitted by the **April 25th**, **2025** deadline. Link for application will be released following receipt of LOI.

Institutional Review Requirements:

This is an internal application and <u>does not</u> require review by Rutgers Office of Research and Sponsored Programs (ORSP).

The application may require approval of the Dean/Chair of the Primary Mentor/Co-mentor(s) based on school/departmental policy or if the project involves in-kind support.

Application Requirements:

	Page Limits
Multi-disciplinary Projects to support PAIR Fellows	online form
Aims	1 page
Research Strategy (NIH R21 style formatting), not including references	4 pages
References	unlimited
Mentorship Plan, signed by Primary Mentor and Co-mentors	up 1 page
Plan for extramural funding and continuous support of postdoctoral	up 1 page
fellow	
NIH Style Biosketch for Primary Mentor and Co-mentors and other key	up to 5 pages
personnel (as one document)	each Biosketch
Justification of overlap with existing funded projects, if any	unlimited
Support letter from the Unit/Department chair	as needed
Budget and Justification	1 page

A proposal must contain the following elements:

- Aims page should follow NIH format and include Significance, Rationale, Hypothesis, Specific Aims, Innovation/Impact etc.
- Research Proposal should adopt NIH R21 style and should include Background and Significance, Innovation and Impact, Research Approach, and Timeline sections. No preliminary data are required.
- Mentorship plan must describe the role that postdoctoral fellow will play in the proposed project, list of activities for career development and inter-disciplinary mentorship, as well as prior mentorship experiences of the members of the collaborative/mentorship team.
- Plan for extramural funding and continuous support of postdoctoral fellow must include details on prospective extramural grant applications that the team will pursue to support continuation of the proposed project, as well as the postdoctoral fellow, beyond the fellowship period.
- Budget and justification should indicate postdoctoral fellow salary at \$63,968 and

justification for a 1- or 2-year request. If one-year fellowship is requested, mentoring team should provide evidence of funding available for year two.

• If Primary Mentor or Co-mentor(s) have a funded project with similar aims/objectives, justification for application funds must be provided (as "Justification of overlap with existing funded projects" document). This could include Other Support document if needed.

Font and Margin Requirements: 0.5" margins and Arial 11 Font, single spaced.

Budget Guidelines:

- Requested project period/fellowship can be one or two years.
- Postdoc salary is \$63,968 per year with up to 45.36% fringe.
- All funds awarded must be used for postdoctoral fellow salary and fringe.
- One no-cost extension of 1 year is permitted, assuming sufficient progress to date and reasonable justification.

Regulatory Approvals:

- If needed, awardees must obtain all regulatory approvals (e.g. IRB, IACUC, or Radiation Safety) and meet all compliance requirements prior to Postdoctoral Fellow recruitment or start of relevant work (whichever comes first) and maintain approvals during the entire length of the award, as necessary.
- When the team applies for IRB approval, it should indicate that their research is supported by the Rutgers Health PAIR Postdoctoral Fellowship.
- The team must keep their IRB approval current and active for the duration of the award period. Copies of the approval letters need to be sent to the Rutgers Health PAIR postdoctoral fellowship administrator at <u>BMIHAI_Postdoc@shp.rutgers.edu</u>.

Proposal Review Process:

The review process includes administrative review for completeness of the application and meeting eligibility requirements, solicitation of expert reviews, and final review by the Award Committee.

Awarded teams will be responsible for posting a postdoctoral position, identifying candidates, and hiring postdoctoral fellows (Class 1), who can be either current or new hires, and either domestic or international postdocs.

IV. Post-Award Management

Budget and Financial Management:

• If the postdoctoral salary budget (including salary and fringe) runs over budget, Mentors' departments/schools are responsible for the charges and will be asked to provide an alternate project number for those costs.

Reporting Requirements:

- Primary Mentor and Co-mentors will be expected to complete an annual report that summarizes progress on the project and postdoctoral training, as well as all abstracts, presentations, publications, and proposals/funded awards that resulted from this funding mechanism. This is required for reporting and evaluation purposes.
- Failure to submit required progress reports will result in the funding being terminated and Mentors/Co-mentors with outstanding final reports may not be allowed to compete for any other program in Rutgers Health Roadmap Initiative.

Additional Requirements:

• Postdoctoral fellows will be expected to have oral/poster presentations at the Annual Rutgers Health Symposium for Biomedical Informatics and Health AI.

Award Recognition:

Any publication or patent that results from this funding should include the following language, receive a PMCID number, and be linked in My Bibliography:

"Research reported in this publication was supported by Rutgers University through the Rutgers Health PAIR Postdoctoral Fellowship. The content is solely the responsibility of the authors and does not necessarily represent the official views of the institution."

Other Notices:

- Abstracts and names of Primary Mentors/Co-mentors for the selected projects may be posted on an institutional website
- Awards are not transferable or renewable.

<u>Ouestions/Inquiries:</u>

For Inquiries, please email: <u>BMIHAI_Postdoc@shp.rutgers.edu</u>