

RADCollaboratory.Rutgers.edu

RAD Collaboratory Inaugural Networking Event January 22nd 2025

Stephen K. Burley, M.D., D.Phil. University Professor and Henry Rutgers Chair Interim Director, RAD Collaboratory

Director, RCSB Protein Data Bank
Founding Director, Institute for Quantitative Biomedicine
Department of Chemistry & Chemical Biology
Rutgers Cancer Institute
Rutgers, The State University of New Jersey



- Introduce the RAD Collaboratory Structure and Priorities
- Activity No. 1: Solicit input for Undergraduate Research Programming
- Activity No. 2: Solicit input for March 5th Data Science-focused Event
- Activity No. 3: Solicit input for April 8th AI/ML-focused Event
- Activity No. 4: Craft RAD Collaboratory Vision Statements
- Activity No. 5: Craft RAD Collaboratory Mission Statements
- Activity No. 6: Networking Reception (Proteomics Lobby: 3-4pm)

What is the RAD Collaboratory?

The RAD Collaboratory was established as a New Brunswick Chancellor-reporting Signature Initiative to serve as a hub that fosters Data Science and Artificial Intelligence/Machine Learning (AI/ML) research collaborations, student and postdoctoral programming, and community engagement in synergistic partnerships with related initiatives across the University.

Who Supports the RAD?

<u>Interim Director</u>: Stephen K. Burley, SAS - Chemistry & Chemical Biology

Steering Committee:

Benjamin R. Lintner, SEBS - Environmental Sciences

Dimitris Metaxas, SAS - Computer Science

Elizabeth Torres, SAS - Psychology

Jaideep Vaidya, RSB - Management Science & Information Systems

Bo Yuan, SOE - Electrical & Computer Engineering

Business Manager: Jon Hackett, Institute for Quantitative Biomedicine

Rutgers - New Brunswick OVPR Leadership: Denise Hien, Wendie Cohick

What are the Current RAD Research Areas?

- 1. RCSB Protein Data Bank (RCSB.org; Area Lead: SKB)
- 2. Institute for Quantitative Biomedicine (Area Lead: SKB)
- Artificial Intelligence for Society (Area Lead: TBD)
 Cyberinfrastructure and AI for Science and Society (CASS)
 Socially Cognizant Robotics for a Technology Enhanced
 Society (SOCRATES)
 Critical AI @ Rutgers
- 4. Artificial Intelligence Grand Challenge Under development

What are the RAD Priorities for 2025?

- 1. Foster the growth of an ecosystem to support a vibrant community of Rutgers Faculty, Postdoctoral Fellows, and Students focused on interdisciplinary AI/ML and Data Science research and training
- 2. Deploy allocated RAD financial/human resources to maximum effect
- 3. Raise additional funds to support RAD infrastructure and AI/ML and Data Science research collaborations bridging Schools, Institutes, etc.
- 4. Promote sustainability, best practices, and FAIR-sharing of Rutgers-assembled data repositories suitable for use with AI/ML tools

What will the RAD do in Spring 2025?

- Host Hands-on Training in AI/DL Tutorials: Save-the-Date in your packet
- Recruit a RAD Research Programmer: Rutgers Posting No. 25FA0062
 Supporting RAD Research Teams with cyberinfrastructure and AI/ML expertise to develop competitive interdisciplinary research programs
- RAD submission of large Multi-PI Federal Grant Applications
 Indirect cost revenues will help support RAD initiatives and PIs
- Award Five RAD Postdoctoral Fellowships: Rutgers Posting No. 25FA00624
- Establish a RAD Undergraduate Research Program: Under development
- Host two additional Networking Events: March 5th, April 8th (1-3pm Eastern)

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Activity No. 1: What would you like included in our Undergraduate Research Program? (15')

- 1. The meeting scribe will capture the substance of our discussion.
- 2. Individuals wishing to provide input separate from the general discussion can use the QR Code link to a Qualtrix form on each table.
- 3. Follow Up: Steering Committee will review/distill the scribe's record of the general discussion and individual feedback for circulation.
- 4. RAD Collaboratory members will be notified as to how the Summer 2025 undergraduate program will be organized.

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Activity No. 2: What would you like included in our March 5th Data Science-focused Event? (15')

- 1. The meeting scribe will capture the substance of our discussion.
- 2. Individuals wishing to provide input separate from the general discussion can use the QR Code link to a Qualtrix form on each table.
- 3. Follow Up: The Steering Committee will review/distill the scribe's record of the general discussion and individual feedback for circulation.
- 4. RAD Collaboratory members will be notified as to how the March 5th Data Science Event will be organized.

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Activity No. 3: What would you like included in our April 8th AI/ML-focused Event? (15')

- 1. The meeting scribe will capture the substance of our discussion.
- 2. Individuals wishing to provide input separate from the general discussion can use the QR Code link to a Qualtrix form on each table.
- 3. Follow Up: Steering Committee will review/distill the scribe's record of the general discussion and individual feedback for circulation.
- 4. RAD Collaboratory members will be notified as to how the April 8th AI/ML-focused event will be organized.

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What is the purpose of a Vision Statement?

A high-level, inspirational statement of an idealistic, emotional future for the organization Brevity is the soul of wit!

Some Effective Vision Statements:

- TED: "Spread ideas"
- Patagonia: "We're in business to save our home planet"
- LinkedIn: "To create economic opportunity for every member of the global workforce"
- Nike: "To bring inspiration and innovation to every athlete (if you have a body, you're an athlete)"

How do you Craft a Vision Statement?

Answer these four questions with your Vision Statement

- Q1 Outcome: What will the RAD do for Rutgers?
- Q2 The Twist: What is the unique selling point of the RAD?
- Q3 Quantification: What is the idealistic future impact of the RAD for Rutgers?
- Q4 Human Connection: What real-life benefit will "Rutgersians" derive from the RAD?

Adapted from https://www.cascade.app/blog/examples-good-vision-statements

Activity No. 4: Craft RAD Vision Statement (15')

- 1. Appoint a Scribe to enter the information using the QR Code link to a Qualtrix form on each table.
- 2. Work as a team to craft a Vision Statement for our RAD Collaboratory
- 3. Scribe enters the Vision Statement crafted by the Table using the Qualtrix Form
- 4. Follow Up: Steering Committee will distill/review Table-crafted Vision Statements and send a Preference Ranking Poll to all Participants to help the Interim Director make the final selection

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What is the purpose of a Mission Statement?

A short statement of why an organization exists, its overall goal(s), and time-bounds the goal(s) as appropriate

Some Effective Vision Statements:

- JFK: "I believe this nation should commit itself to achieving the goal, before this decade is out, of landing a man on the Moon and returning him safely to Earth"
- American Red Cross: "To prevent and alleviate human suffering in the face of emergencies by mobilizing the power of volunteers and the generosity of donors"

How do you Craft a Mission Statement?

Mission=Clear Goal + How + Time Frame + Value Craft your Mission Statement in four easy steps

Step 1 – Clear Goal: What will the RAD deliver for Rutgers?

Step 2 – How: How will the RAD deliver for Rutgers?

Step 3 – Time Frame: When will the RAD deliver for Rutgers?

Step 4 – Value Proposition: What value will RAD deliver for Rutgers?

Adapted from https://medium.com/hackernoon/write-useful-mission-statements-in-3-easy-steps-929deae26092

Activity No. 5: Craft RAD Mission Statement (15')

- Appoint a Scribe who will enter data using the same Table Qualitrix Form (Dedicated QR Code attached to each Table)
- 2. Work as a team to craft a Mission Statement for our RAD Collaboratory
- 3. Scribe enters the Mission Statement crafted by the Table using the Qualtrix Form
- 4. Follow Up: Steering Committee will distill/review Table-crafted Mission Statements and send a Preference Ranking Poll to all Participants to help the Interim Director make the final selection

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Please send any RAD feedback to the Interim Director using SKB104@IQB.Rutgers.edu

Acknowledgements/Thanks

RAD Steering Committee:

Benjamin R. Lintner, Dimitris Metaxas, Elizabeth Torres, Jaideep Vaidya, Bo Yuan

Office of the Vice-Provost for Research:

Denise Hien (SVPR), Wendie Cohick (VPR), Sheila Borges Rajguru, Melissa DiNovelli, Tracy Higgins, Amy Mandelbaum, Rubia Serra

RAD Collaboratory Business Office:

Jon Hackett, Michael Joy, Michelle Sanghera, Shamara Whetstone, Hank Wojciechowski

RECI Announcement

Climate, Energy and Al Convergence Café
Thursday, February 6 @ 10:00 am - 2:00 pm EST

Please Register at https://rcei.rutgers.edu/event/climate-energy-and-ai-convergence-cafe/

Let's work together as the **RAD Collaboratory to facilitate RADICAL changes for Rutgers** through transformational applications of Data Science and **Artificial Intelligence!**