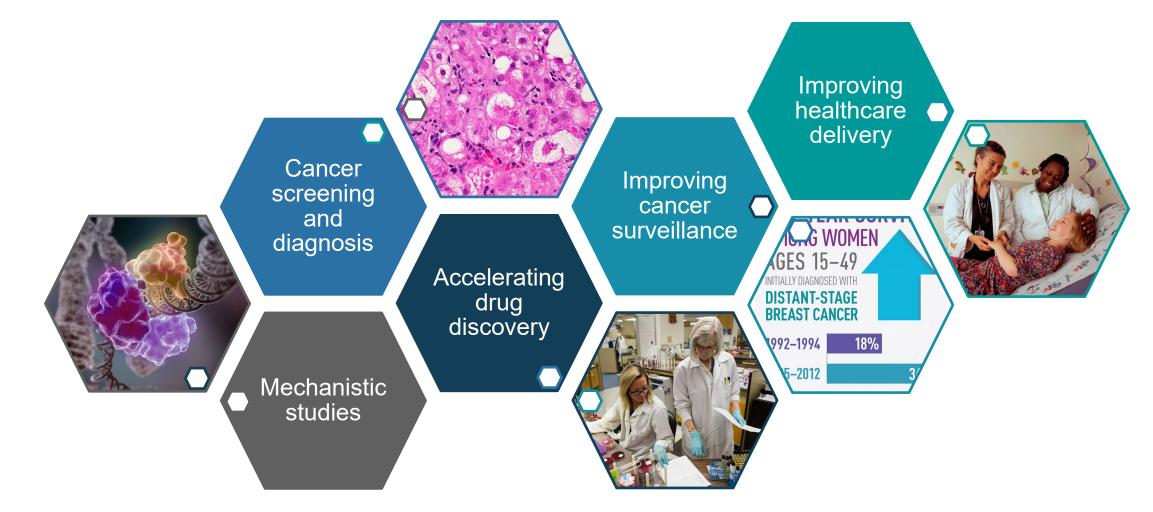
## Bringing a Broader Perspective to Biomedical Data Science

Jennifer Couch



17 October 2024

## The Biomedical Research Continuum: Artificial Intelligence (AI) and Data Science are Everywhere



# **Cancer AI Conversations**

July 23, 11:00 AM ET Title: *AI and Cancer Health Disparities* Moderator: Veronica Rotemberg, MD, PhD, Memorial Sloan Kettering Panelists: Emma Pierson, PhD, Cornell University; Edmondo Robinson, PhD, MPH, Moffit Cancer Center

#### September 24, 2024 11:00 AM ET

**Title:** *AI and Global Oncology* **Moderator:** Judy Wawira Gichoya, MD, MS Emory University **Panelists:** Sameer Antani, PhD, NLM; Ajay Aggarwal, MD, PhD, King's College London

Register at: <u>https://events.cancer.gov/nci/cancer-ai-conversations/registration</u>

Complex Research Questions Need Trans-disciplinary Teams: supporting trans-disciplinary researchers throughout the career continuum



Support across and between multi-disciplinary basic research consortia:

- Cancer Systems Biology Consortium (CSBC)
- Physical Sciences-Oncology Network (PSON)
- Cancer Tissue Engineering Collaborative (TEC)
- Metastasis Research Network (MetNet)
- Cellular Cancer Biology Imaging Research (CCBIR)



### NCI Junior Investigator Annual Meeting

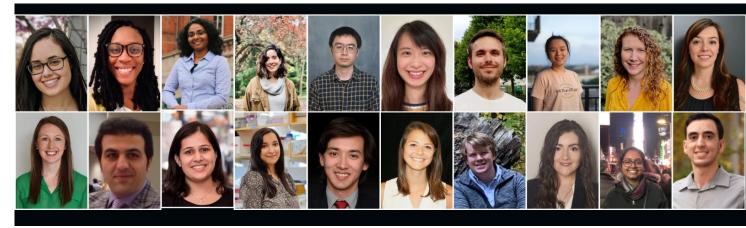
2-day meeting provides opportunities for junior investigators to share their science and network with colleagues.

Planned by and for Junior Investigators

#### **Convenes interdisciplinary cancer researchers to**

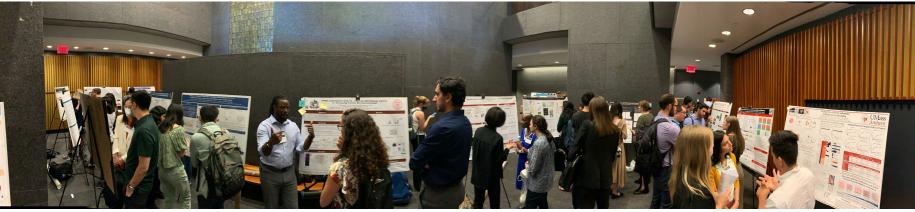
- build community
- share ideas
- develop professional skills
- tackle current issues facing JIs

Junior Investigators: late-stage graduate students, postdocs, and early career faculty.



Sponsoring NCI programs support interdisciplinary & quantitative research

Cancer Systems Biology Consortium (<u>CSBC</u>) Cancer Tissue Engineering Collaborative (<u>TEC</u>) Cellular Cancer Biology Imaging Research (<u>CCBIR</u>) Innovative Molecular Analysis Technology (<u>IMAT</u>) Informatics Technology for Cancer Research (<u>ITCR</u>) Metastasis Research Network (<u>MetNet</u>) Patient-Derived Models of Cancer Program (<u>PDMC</u>) Physical Sciences - Oncology Network (<u>PS-ON</u>) Synthetic Biology and Cancer





# **Starting Earlier**

- High-school internship program Moffitt Integrated Mathematical Oncology
- Created to develop the next generation of great thinkers through interdisciplinary research in mathematical oncology, research methods, and translational cancer care.
- 1:1 mentoring from leading mathematical oncologists.
- Students conduct their own research projects creating mathematical models that predict progression and treatment response of cancer.
- o \$1000 stipend!

#### **MC<sup>2</sup> CENTER**

### Diversity Supplement Virtual Matchmaking Event

Chairs Dr. Jason Somarelli, Dr. Claudia Ludwig

Connecting eligible diversity supplement candidates with funded faculty mentors

#### January 2025

- Most NIH Grants are eligible for Diversity Supplement (K, F and T awards excepted)
- Diversity Supplement candidates can be postbaccalaureate - post-doctorate
- This event will recruit eligible supplement candidates and match them with eligible funded faculty for a meet and greet
- Each participant will ideally meet 3-5 corresponding participants



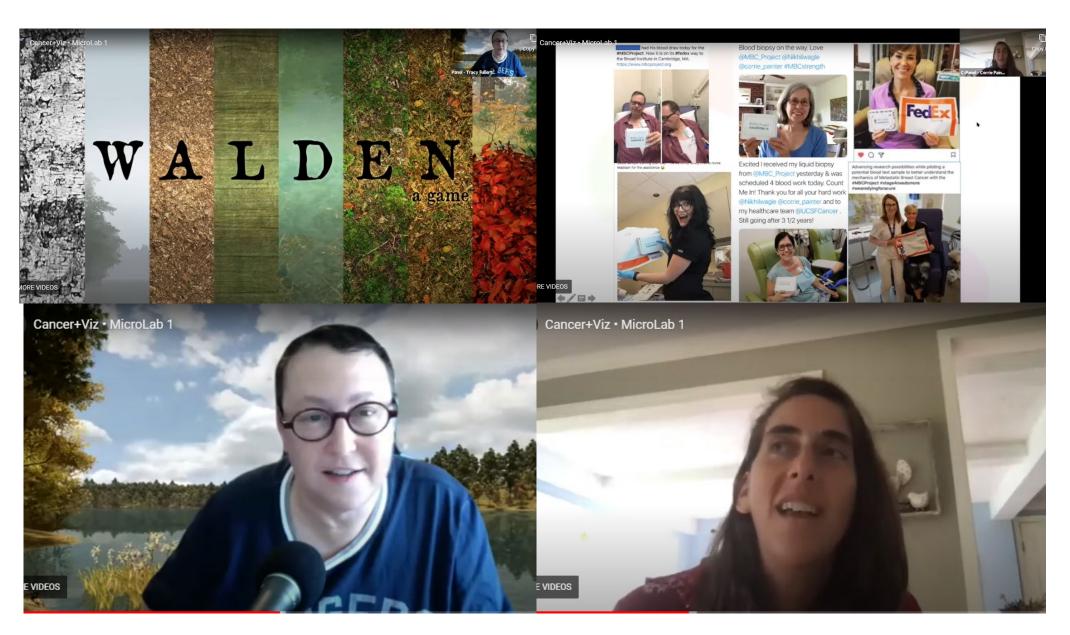


## Meeting People Where They are: games, citizen/community science & innovation labs

Games utilize sophisticated data science to

- Show complexity, multiple scales, render imagery in real time
- Enable real-time collaboration
- Open exploration and discovery
- Can they lead us to "aha moments"?
- Citizen science and community science: creativity, insight and interest are everywhere





View the Conversations: https://www.cancer.gov/about-nci/organization/dcb/news/dataviz4cancer



# Quantum Computing: New Frontiers in Biomedical Research Innovation Lab

### Application Deadline: October 13, 2024

https://apply.knowinnovation.com/quantum-biomed/?cid=eb\_govdel In-person, December 2-6, 2024 Jennifer Couch couchj@mail.nih.gov



17 October, 2024