

The logo features the word "RUTGERS" in a large, red, serif font. Below it, "THE STATE UNIVERSITY OF NEW JERSEY" is written in a smaller, black, sans-serif font. The background is a large, faint, circular seal of Rutgers University, showing a sunburst design and the university's name around the perimeter.

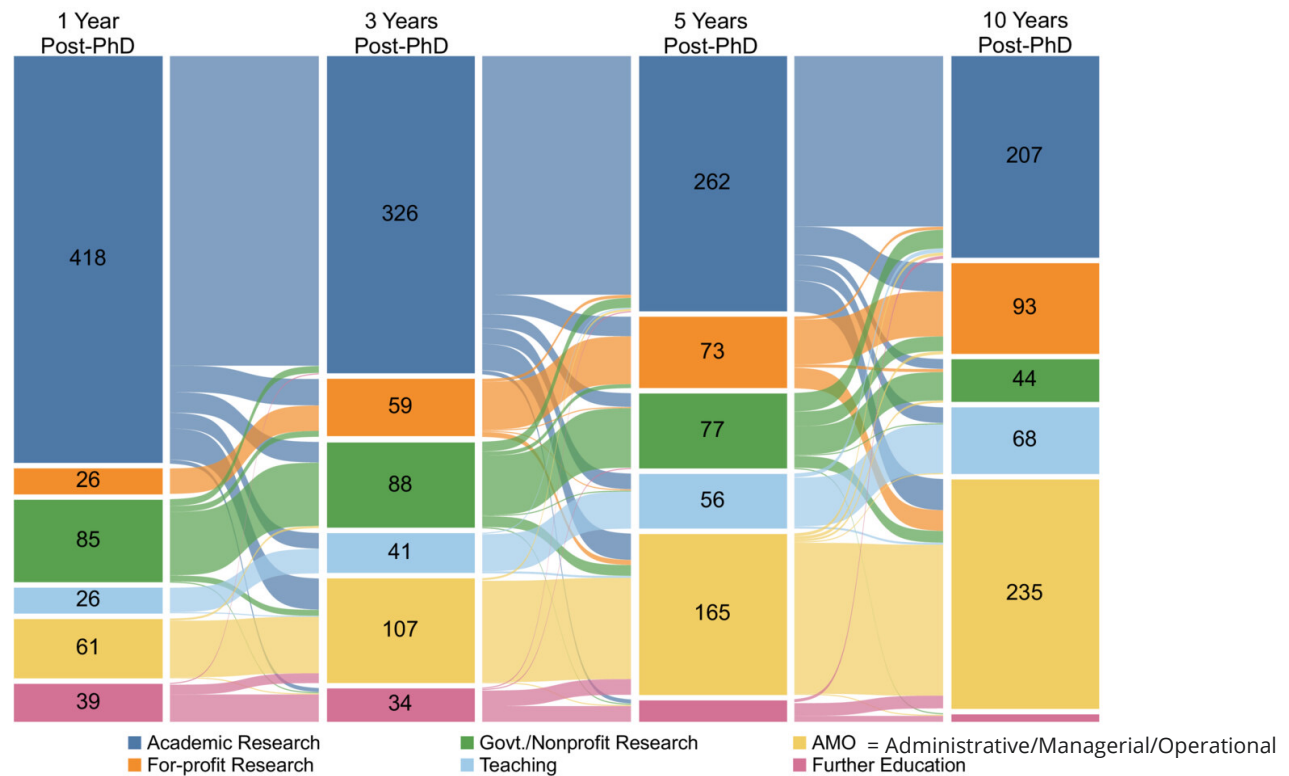
RUTGERS
THE STATE UNIVERSITY
OF NEW JERSEY

Rutgers iJOBS Update

January 2024



Longitudinal study of biomedical sciences PhD careers shows only 30% in academia 10 years post-PhD



NIH BEST Grant that Inspired Rutgers iJOBS

17 Universities
\$2 million for 5 years (2014-2019)

1. Cornell U
2. Emory/Georgia Tech
3. NYU
4. U Mass Worcester
5. UC Davis
6. UCSF
7. U Colorado Denver
8. Vanderbilt U
9. Virginia Polytech
10. Wayne State



11. Rutgers U
12. U Chicago
13. U North Carolina
14. U Rochester
15. UC Irvine
16. Boston U
17. Michigan State

iJOBS Participants

RUTGERS

Rutgers Graduate Students

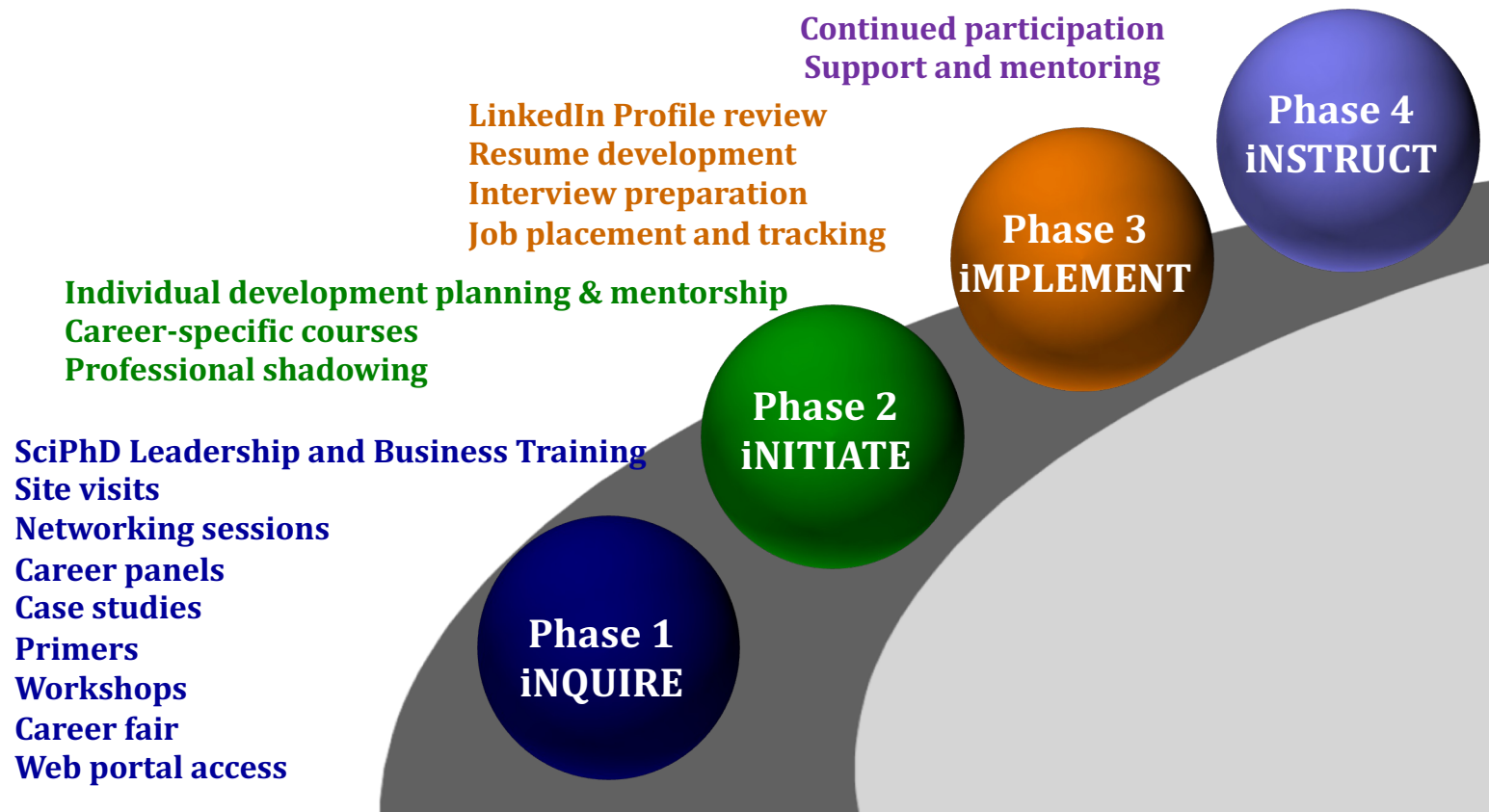
- SGS (New Brunswick/Piscataway/Newark)
- GSN (Newark)
- GSC (Camden)

Rutgers Postdocs

- RWJMS
- NJMS
- SAS New Brunswick
- SoE
- SoP
- SEBS
- SAS Newark
- SAS Camden



Flexible and Phased Programming





Phase 1



Phase 1
iNQUIRE

Representative Career Panels

- Faculty position at R1 institution
- Faculty position at Primarily Undergraduate Institution
- Bench research in Pharma and Biotech
- Medical Devices
- Postdocs in Industry
- Contract Research Organizations
- NIH
- FDA
- Computational Biology
- Data Science
- Consulting
- Science and Health Policy
- Patent Law
- Tech Transfer and Business Development
- Clinical Research
- Regulatory Affairs
- Scientific Writing and Medical Communications
- Medical Affairs
- Non-profit and Foundations
- Finance and Equity Research
- Publishing
- Food and Fragrance Industry
- Journalism
- Teaching Education Outreach
- Entrepreneur
- Plant and Agriculture Industry
- Non-faculty Jobs in Academia
- Tech and Sales Support



Representative Site Visits

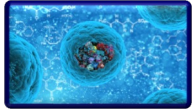
- Admera Health
- Genmab
- Amgen
- WuXi Biologics
- Pfizer
- Becton Dickinson
- Siemens Healthineers
- Stryker (3)
- IPG Health (3)
- Genewiz/Azenta (4)
- Merck (6)
- Wiley Publishing (2)
- Bristol-Myers Squibb (9)
- Novartis (4)
- GlaxoSmithKline (3)
- Regeneron (4)
- Eli Lilly (3)
- Celgene (2)
- Janssen (3)
- Commercial Center for Innv Tech (2)
- Inst for Life Sci Entrepreneurship (2)
- Enterprise Development Center
- Sanofi Aventis
- Covance
- Kashiv
- Hovione
- NJ Dept. of Health (3)
- Ferring Pharmaceutical
- Colgate-Palmolive (2)
- Envigo
- Ethicon
- J&J Consumer
- Bayer (2)
- PTC Therapeutics
- Nanion Technologies



Representative Workshops



- Navigating Career Transitions
- Primer in Drug Discovery through Pre-Clinical Development



- Agile Project Management and Microsoft Project



- Python and Genomics Data Analysis by Data Carpentry

- Self assessments (Clifton Strengths)



- Targeted Resumes

- Value Proposition and LinkedIn Profiles



- Finding and applying for an internship

- Emotional Intelligence and influencing others




- Job search using staffing agencies

SciPhD: Leadership and Business Skills for Scientists

Provided by Human Workflows, LLC

Every Jan/Feb since 2015 - 35 hours

January 10th (1-5pm), 11th (9am-5pm) and 12th (9am-5pm) 2024

- 
- The Business of Science
 - Major Leadership Styles
 - Successful Communications as a Scientist
 - Developing Your People
 - Networking and the Interview Process
 - Team Performance Tools
 - Negotiations
 - Financial Literacy
 - Strategic Project Management for Scientists

SciPhD LinkedIn Testimonials



Mahjabeen (Mim) Rahman (She/Her) · 1st
PhD student | Climate Modeler | Crop Modeler | Environmental S...
3d · 🌐

Grateful to share that I've recently attended the SciPhD certificate program, an enriching journey where [Randall Ribaud](#) and [Larry Petcovic](#) from [SciPhD.com](#) imparted invaluable business & leadership skills. The workshop was indeed a game-changer, offering tools & insights for success in both industry and academia. Heartfelt thanks to the program leaders & [Janet Alder](#) too for guiding me through this transformative experience. Excited for the journey ahead! 🙏🌟
[Rutgers Graduate School of Education](#)



Zakiyah Henry · 1st
Toxicologist in Training | 2022 SMDP Biotech Scholar | Liver Lov...
4d · 🌐

Last week, I had the opportunity to participate in the SciPhD Leadership and Business Skills for Scientists Workshop. This was a fantastic two and a half day session that helps trainees (PhDs and postdocs) assess their current skill set, express it in business-friendly language as well as recognize/fill gaps in areas such as [#communication](#), [#leadership](#), [#teambuilding](#), [#negotiation](#) and [#projectmanagement](#). Thank you to [Randall Ribaud](#) and [Larry Petcovic](#) for running this great workshop and to [Janet Alder](#) for organizing this and so many other wonderful Rutgers iJOBS events that are so impactful! 🙏



Practice Interviews and Resume Reviews

- Merck
- Bristol Myers Squibb
- J&J
- Novartis



Behavioral based interview questions with PhD level employees to practice STAR responses and network



Phase 2



Phase 2
iNITIATE

Representative Career Track Skill Classes

Drug Development from
Concept to Market

From Science to Pharma
Medical Science Liaison
Training

One 40-Hour Class

Communicating Science

Technology Transfer

Principles of Finance
and Accounting

Fundamentals of
Regulatory Affairs

Business of Science:
Molecules to Medicine

Project Management

Python Methodologies

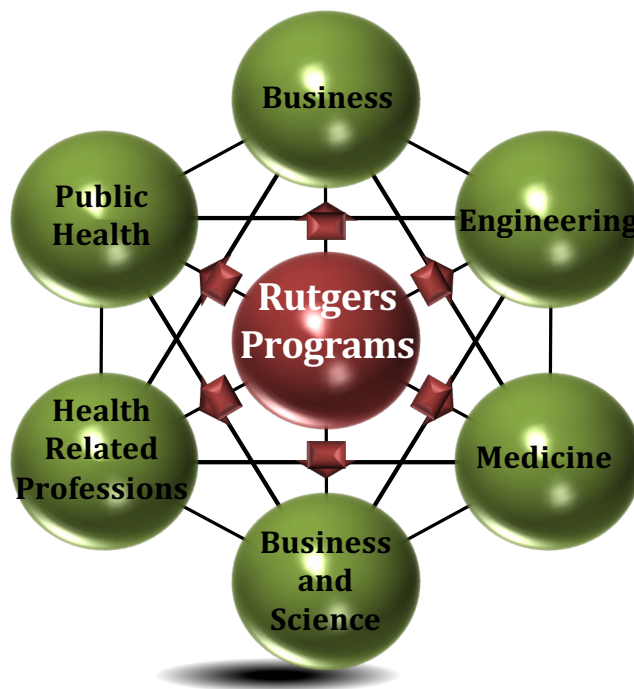
Pharma Product
Management

Practical Aspects of
Clinical Trial Design

Organizational Behavior

Fundamentals of
Regulatory Affairs

Innovation and
Entrepreneurship



Professional Shadowing and Mentoring



- Each trainee is matched to a professional for a shadowing opportunity relevant to their chosen track with industrial, institutional or governmental partners. 72 hours over a whole semester.
- Each trainee is assigned a professional mentor and uses the Individual Development Plan (IDP) as a framework for growth.



Phase 3



Phase 3
iMPLEMENT

Job Search Preparation

- One on one mentoring sessions with Juliet Chin Hart to refine resume and cover letter
- LinkedIn Counseling with Penny Pearl at 2Actify
- Strategize on job search approach
- Prepare for interviews

HART&CHIN
EMPOWERING SCIENTISTS
AS INFLUENTIAL LEADERS

2Actify™



Dissemination, Evaluation and Outcomes

Unsolicited iJOBS Testimonials

From: Sierra Swords <sierraswords413@gmail.com>

Subject: iJOBS has been so valuable!

Date: August 14, 2023 at 7:16:57 PM EDT

Hi Janet,

Just wanted to write a quick note to let you know how valuable the iJOBS program, particularly the shadowing experiences, have been to me. I have interviewed with two medical affairs/ med comms agencies and both have wanted to hear quite a bit about my experiences at GSK and MSL shadowing. They like knowing that I have an idea of what the job entails, as I don't think many people coming out of PhD programs necessarily would! I am also so grateful I was able to do these internships- not just for interview fodder, but for myself- I finally found a career path I am excited about!

Thank you for all you do for the students at Rutgers. I really think the iJOBS program is the best reason to do a phd at rutgers.

Best,
Sierra

On Apr 28, 2023, at 11:41 AM, DANIELLE KOZLOSKY <dlk123@scarletmail.rutgers.edu> wrote:

I am writing to inform you that my internship with Greenberg Traurig has come to an end. I am grateful for the opportunity to have worked with such a talented and supportive team. The experience has been invaluable, and I have learned so much during my time here.

I would like to express my sincere appreciation for the guidance and mentorship you have provided me throughout iJOBS, my career development process, and for securing me with my internship. Your constant support has helped me grow both personally and professionally.

As I move forward, I am excited to share that I will be defending my PhD in June. The skills and knowledge I gained during my internship will undoubtedly be beneficial in my future endeavors. I am confident that the experience I gained at GT will be an asset to me in my future legal career.

Communication Platforms

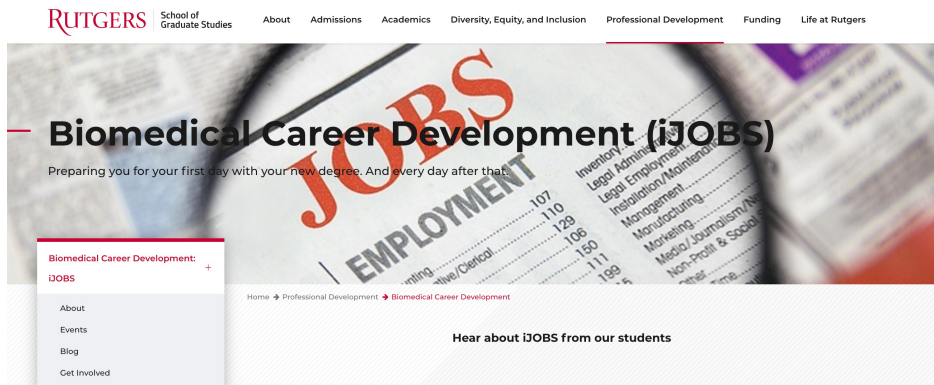
Email listserve: 1500 members



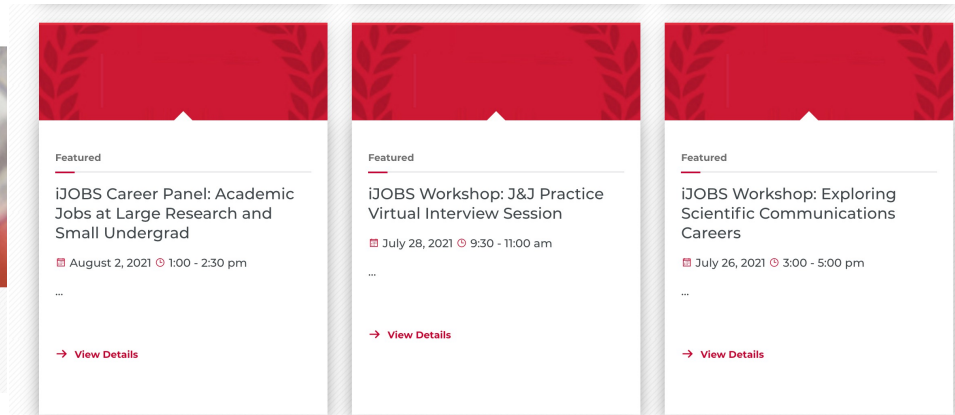
Trainee run blog:
grad.rutgers.edu/ijobs/blog



Website: ijobs.rutgers.edu



iJOBS Past Events with Recordings

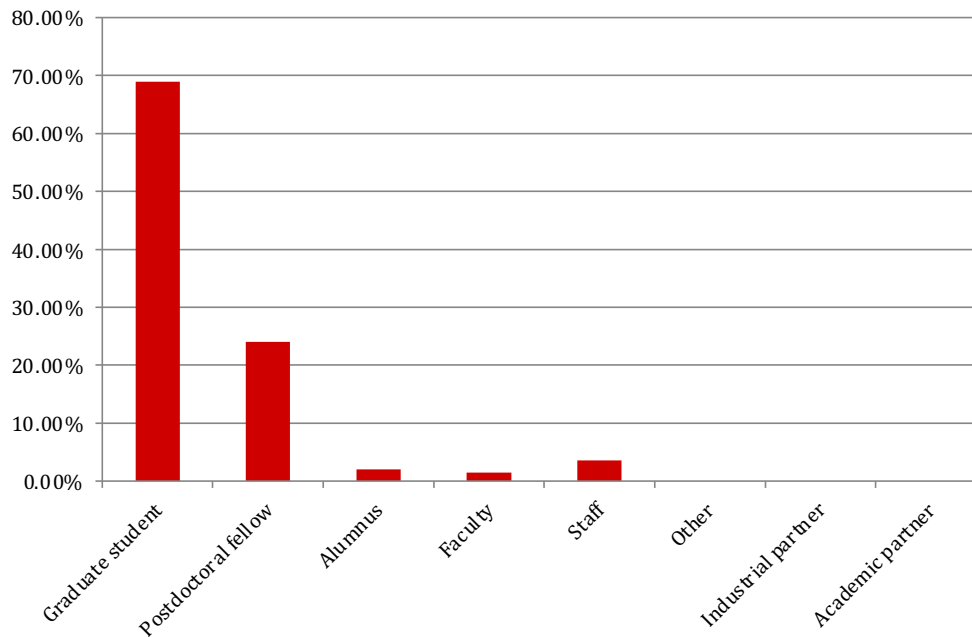


iJOBS Cohort Participation

From Sept 2020- Oct 2023, we have hosted 133 events with over 2,700 attendees

Trainee Academic Standing n = 1388

What best describes your position?

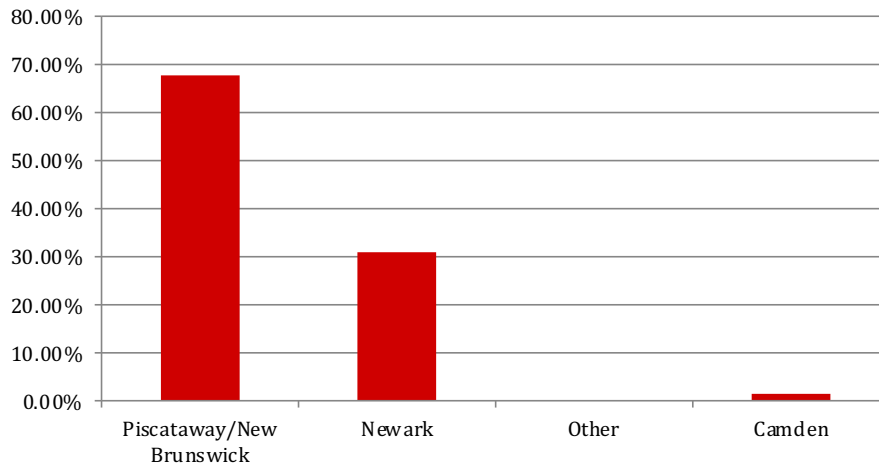


Total pool
68% predoc
32% postdoc

Participation by Campus Location

Predocctoral Students

Campus location



Total pool

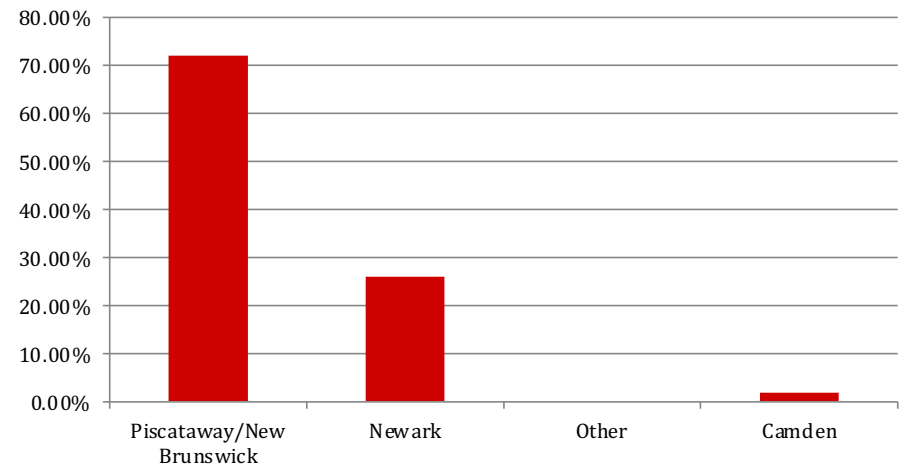
New Brunswick/Pisc 68%

Newark 31%

Camden 1%

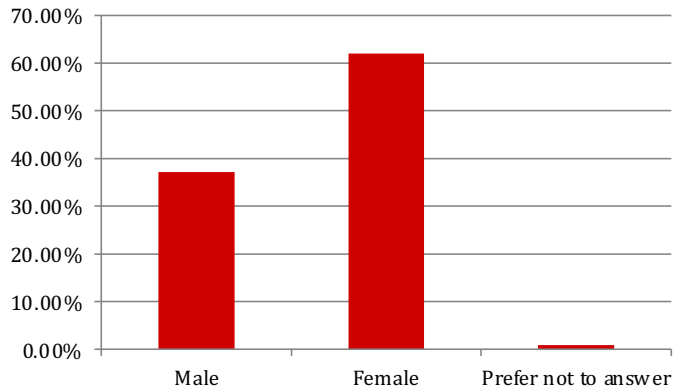
Postdoctoral Fellows

Campus location

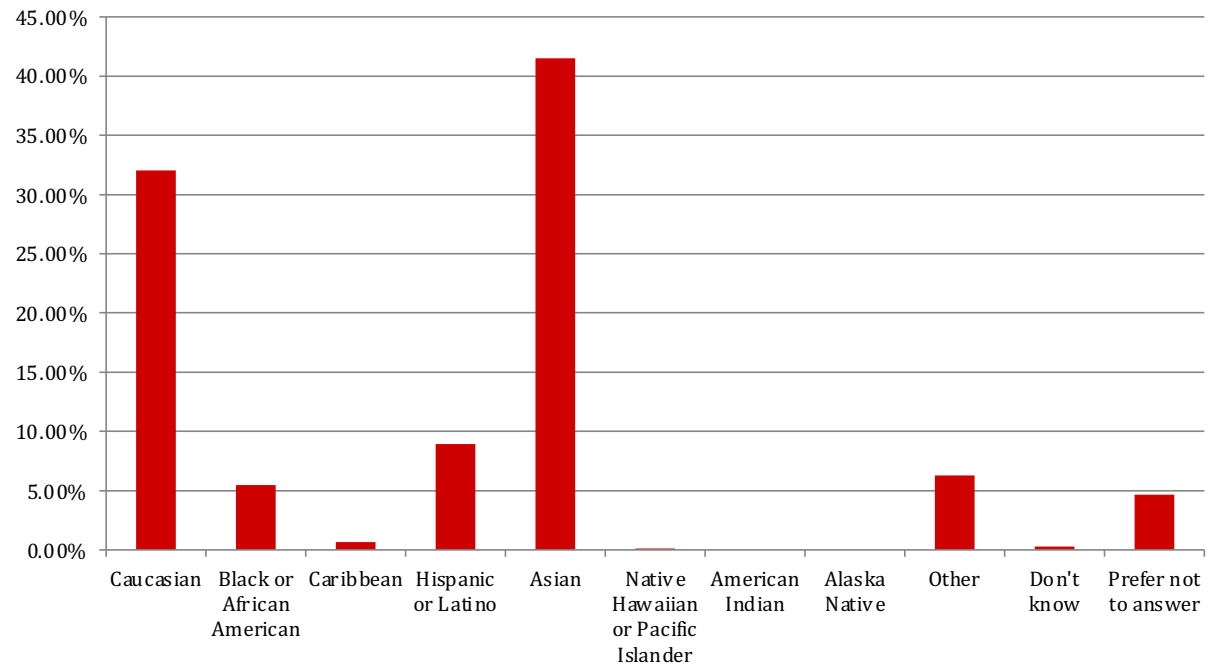


Gender and Ethnicity Data

Gender

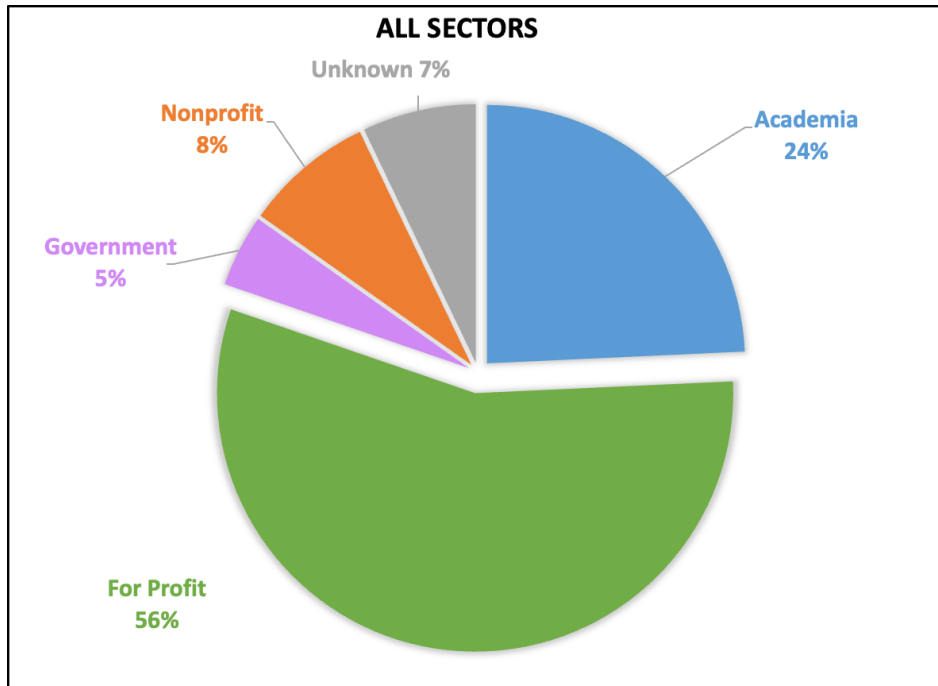


Please describe your race/ethnicity.

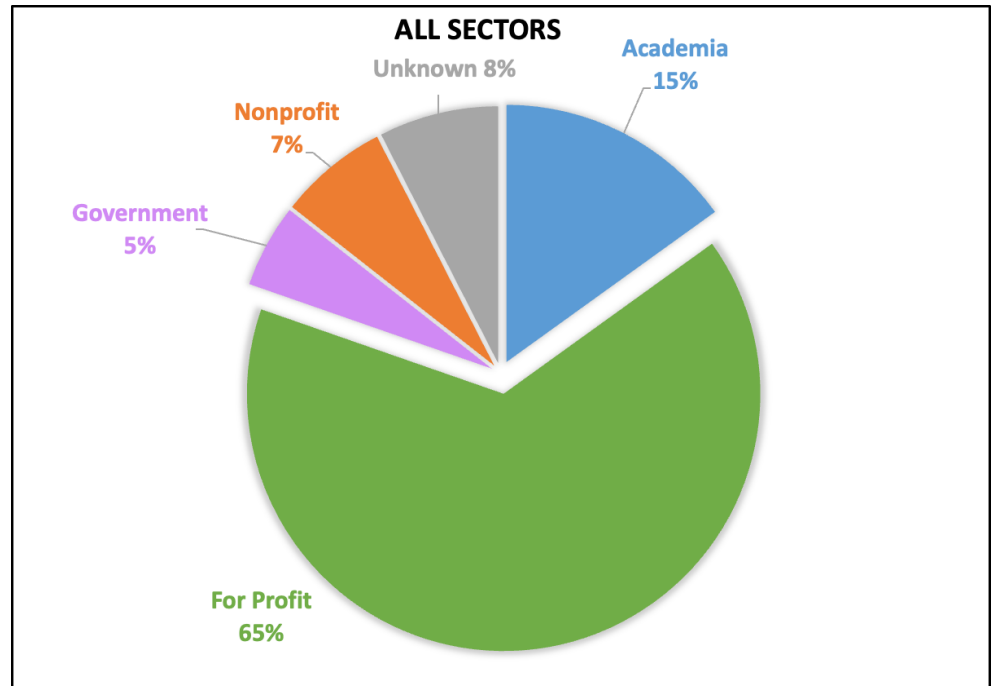


Positions of SciPhD Participants (n = 310)

First Position



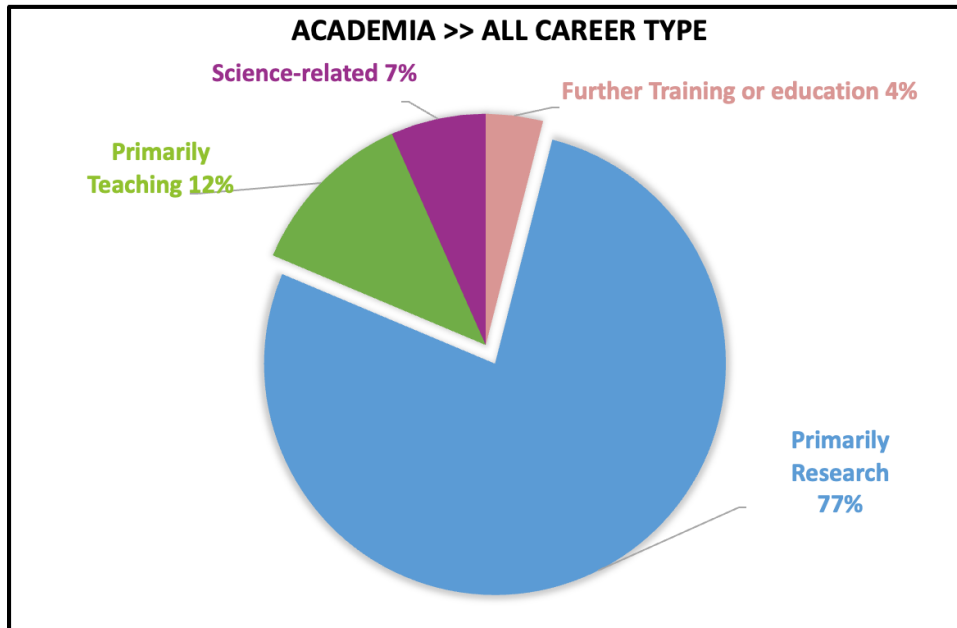
Current Position



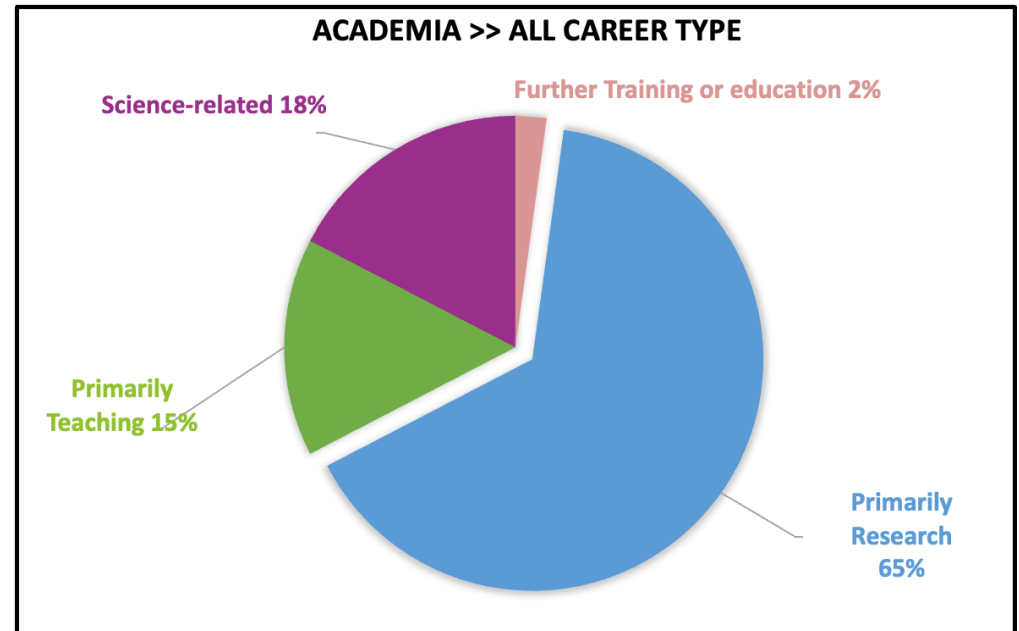
Data analyzed by Janell Mason and Tracy Scott

Academia - All Career Types

First Position



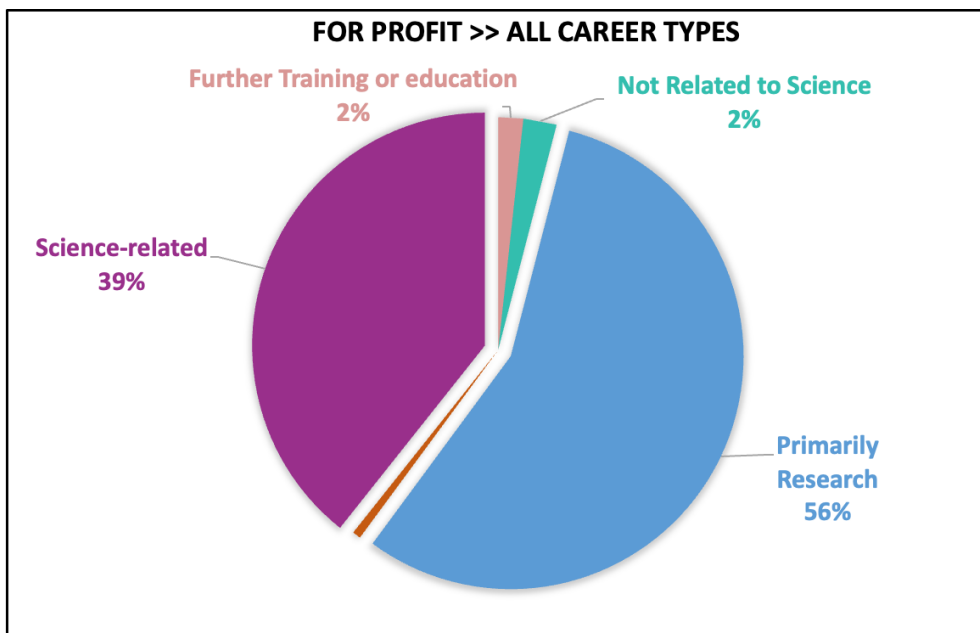
Current Position



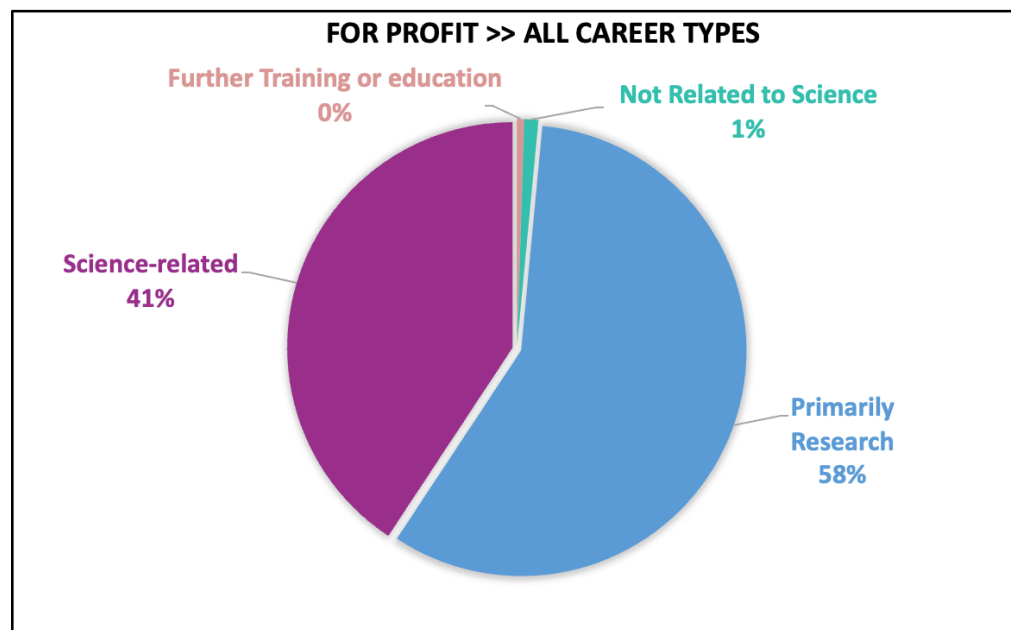
Data analyzed by Janell Mason and Tracy Scott

For-Profit – Research vs Science-Related

First Position



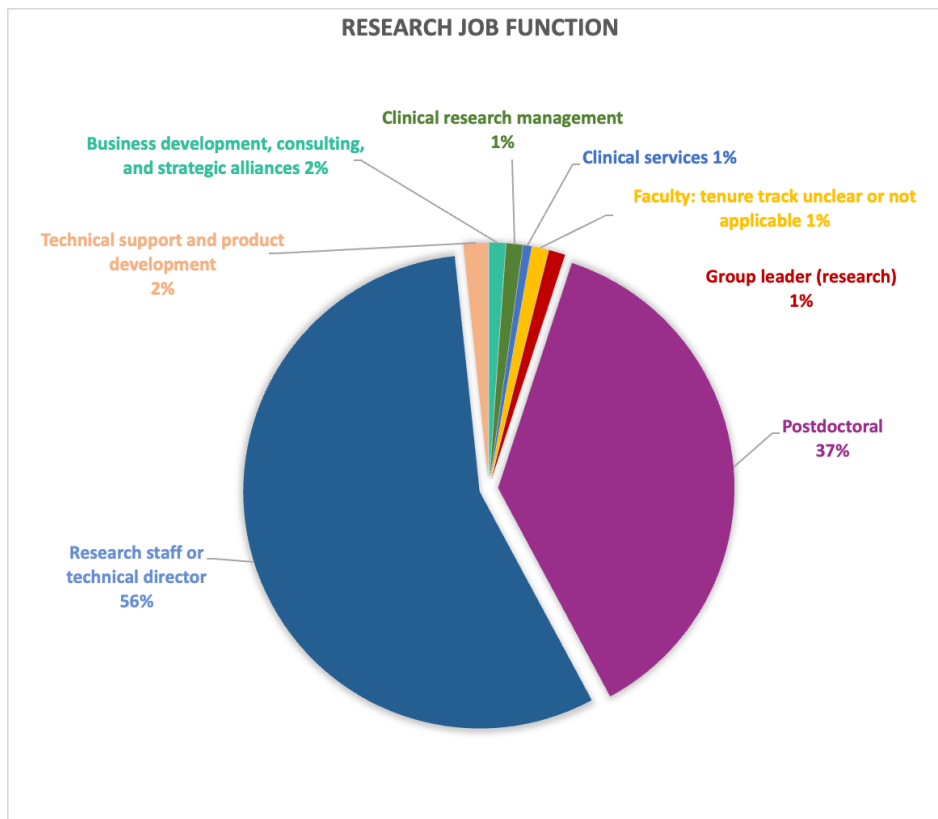
Current Position



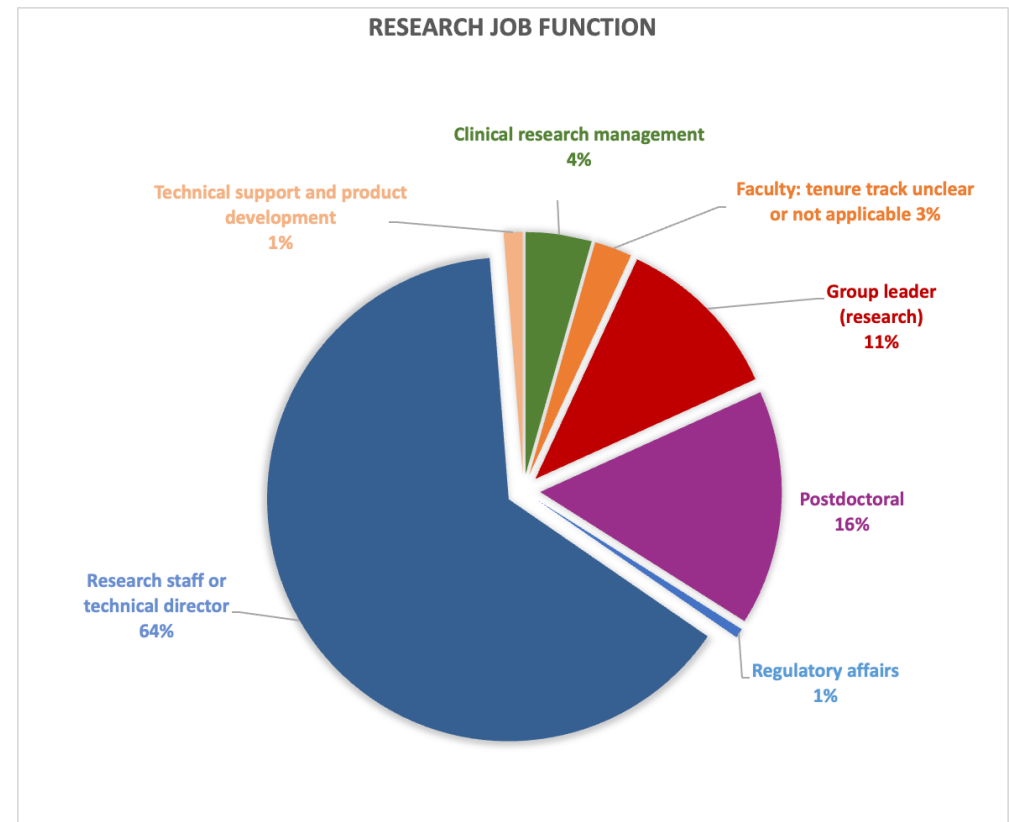
Data analyzed by Janell Mason and Tracy Scott

Research Job Functions

First Position



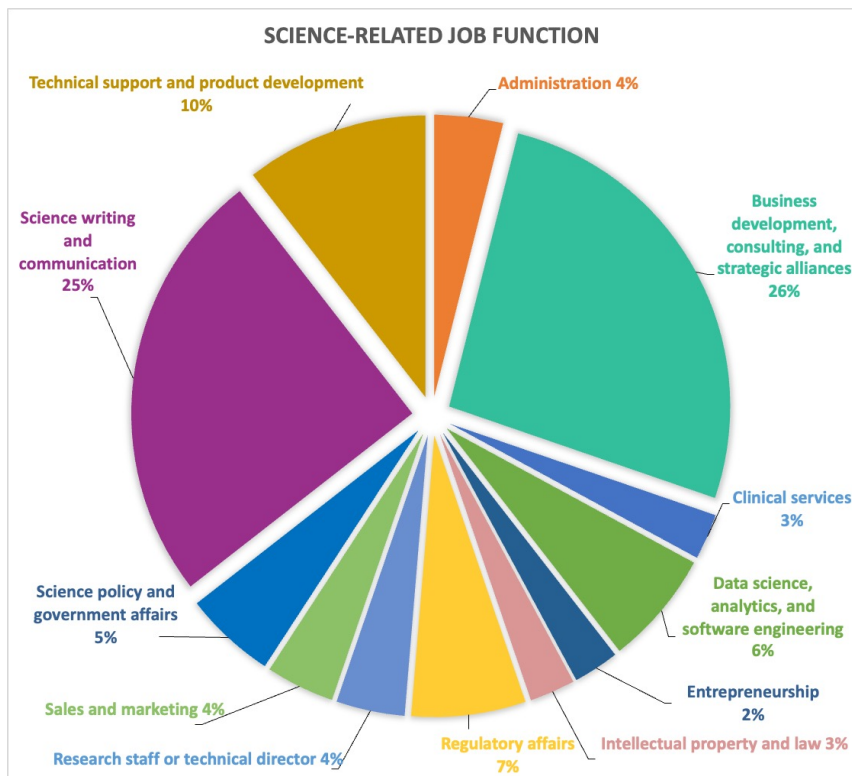
Current Position



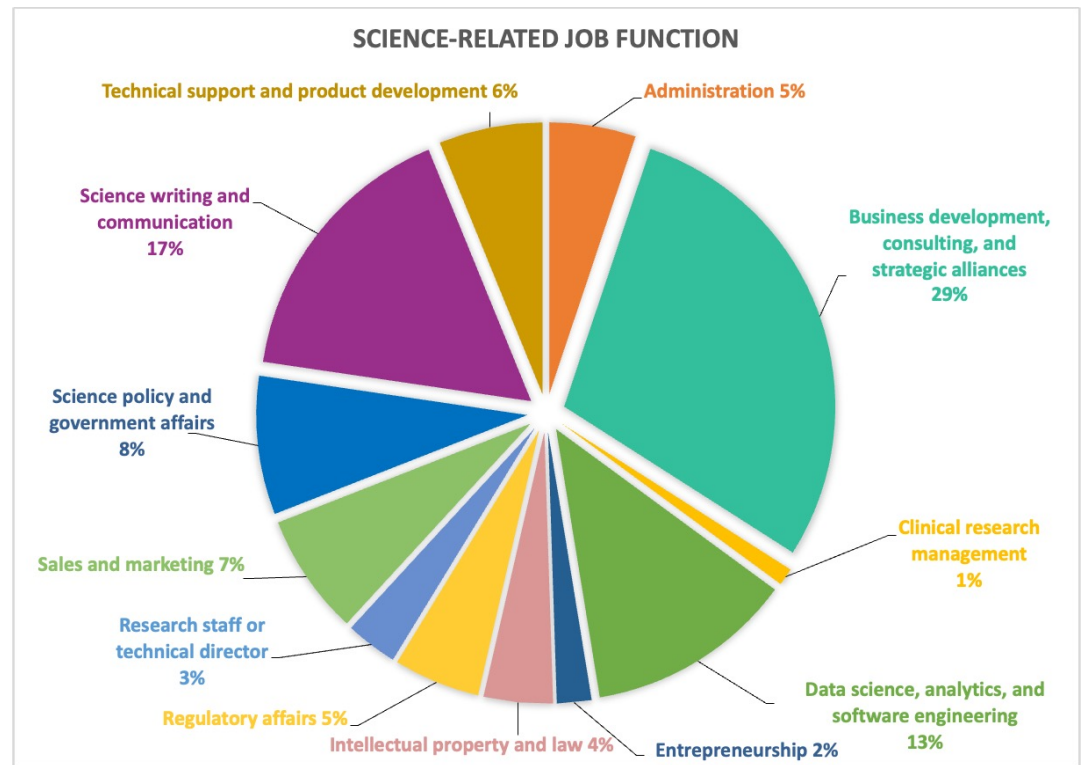
Data analyzed by Janell Mason and Tracy Scott

Science-Related Job Functions

First Position



Current Position



Data analyzed by Janell Mason and Tracy Scott

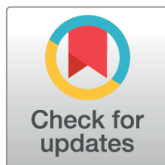
META-RESEARCH ARTICLE

A cross-institutional analysis of the effects of broadening trainee professional development on research productivity

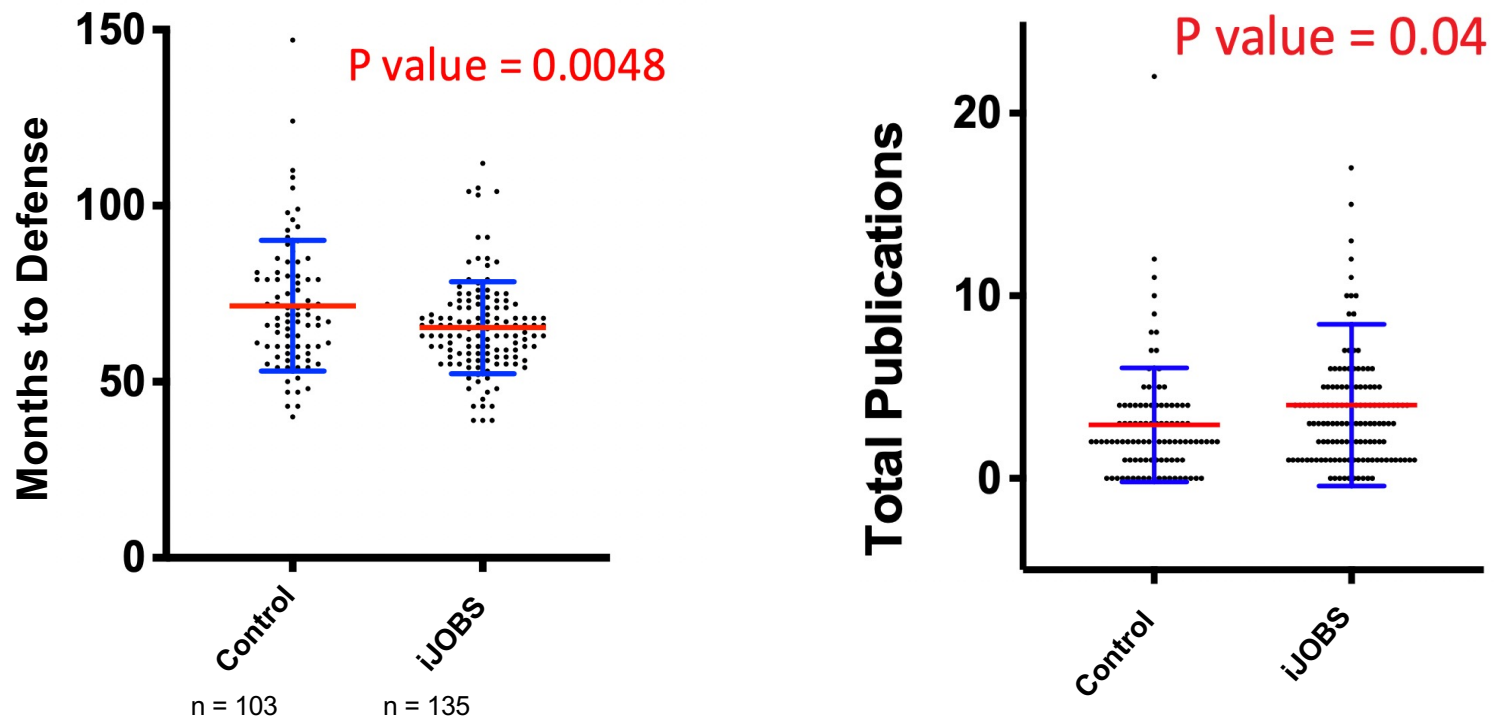
Patrick D. Brandt^{1*}, Susi Sturzenegger Varvayanis², Tracey Baas^{3^{aa}}, Amanda F. Bolgioni^{4^{mb}}, Janet Alder⁵, Kimberly A. Petrie⁶, Isabel Dominguez⁴, Abigail M. Brown⁶, C. Abigail Stayart⁷, Harinder Singh⁸, Audra Van Wart^{9^{ac}}, Christine S. Chow¹⁰, Ambika Mathur^{10^{aa}}, Barbara M. Schreiber⁴, David A. Fruman⁸, Brent Bowden⁹, Christopher A. Wiesen¹, Yvonne M. Golightly¹, Chris E. Holmquist¹, Daniel Arneman¹, Joshua D. Hall¹, Linda E. Hyman^{4^{ad}}, Kathleen L. Gould⁶, Roger Chalkley⁶, Patrick J. Brennwald^{1^{ee}*}, Rebekah L. Layton^{1^{ee}*}

1 University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, United States of America, **2** Cornell University, Ithaca, New York, United States of America, **3** University of Rochester, Rochester, New York, United States of America, **4** Boston University, Boston, Massachusetts, United States of America, **5** Rutgers University, New Brunswick, New Jersey, United States of America, **6** Vanderbilt University, Nashville, Tennessee, United States of America, **7** University of Chicago, Chicago, Illinois, United States of America, **8** University of California-Irvine, Irvine, California, United States of America, **9** Virginia Polytechnic Institute and State University, Blacksburg, Virginia, United States of America, **10** Wayne State University, Detroit, Michigan, United States of America


July 2021



iJOBS Participants Have Decreased Time to Defense and Increased Total Publications



Measuring Effects of Trainee Professional Development on Research Productivity: A Cross-institutional Meta-analysis, Brandt et al., PLOS Biology, 2021









Applying Experiential Learning to Career Development Training for Biomedical Graduate Students and Postdocs: Perspectives on Program Development and Design

Audra Van Wart,^{†‡§} Theresa C. O'Brien,^{‡§¶*} Susi Varvayanis,[¶] Janet Alder,[#] Jennifer Greenier,[@] Rebekah L. Layton,^{} C. Abigail Stayart,^{††} Inge Wefes,^{‡‡} and Ashley E. Brady^{§§}**

[†]Fralin Biomedical Research Institute and Virginia Tech Carilion School of Medicine, Virginia Tech, Roanoke, VA 24016; [¶]University of California San Francisco, San Francisco, CA 94143; [¶]Cornell University, Ithaca, NY 14853; [#]Rutgers University, Rutgers, NJ 08854; [@]University of California Davis, Davis, CA 95616; ^{**}University of North Carolina, Chapel Hill, Chapel Hill, NC 27599; ^{††}University of Chicago, Chicago, IL 60618; ^{‡‡}University of Colorado Denver–Anschutz Medical Campus, Aurora, CO 80045; ^{§§}Vanderbilt University School of Medicine, Nashville, TN 37232

RESEARCH ARTICLE

Using stakeholder insights to enhance engagement in PhD professional development

Deepti Ramadoss¹ ^{*}, Amanda F. Bolgioni² , Rebekah L. Layton³ , Janet Alder⁴, Natalie Lundsteen⁵ , C. Abigail Stayart⁶ , Jodi B. Yellin⁷, Conrad L. Smart⁸, Susi S. Varvayanis⁹ 

1 School of Medicine Office of Graduate Studies, University of Pittsburgh, Pittsburgh, PA, United States of America, **2** Department of Medical Sciences & Education, Boston University, Boston, MA, United States of America, **3** Office of Graduate Education, University of North Carolina, Chapel Hill, NC, United States of America, **4** Department of Neuroscience and Cell Biology and School of Graduate Studies, Rutgers University, Piscataway, NJ, United States of America, **5** Graduate School of Biomedical Sciences, UT Southwestern Medical Center, Dallas, TX, United States of America, **6** Office of Graduate and Postdoctoral Affairs, University of Chicago, Chicago, IL, United States of America, **7** Association of American Medical Colleges, Washington, D.C., United States of America, **8** Laboratory of Atomic and Solid State Physics, Cornell University, Ithaca, NY, United States of America, **9** Graduate School, Cornell University, Ithaca, NY, United States of America

Peer Communication and Benchmarking



- **Susan Engelhardt**
- Provides an instructional guide for institutions wanting to create or supplement their career and professional development offerings
- Contains perspectives from administrators from the 17 Broadening Experiences in Scientific Training (BEST) institutions
- Addresses what graduate students and postdoctoral populations can implement now to help broaden career outcomes
www.elsevier.com/books/BEST/9780128207598

Editors: Lorena Infante Lara, Laura Daniel, Roger Chalkley

Paperback ISBN: 9780128207598

Imprint: Academic Press

Published Date: 1st February 2020

Page Count: 308

iJOBS Benefits

Rutgers University

- Recruiting of graduate students
- Takes burden off of faculty for advising towards careers with which they are not familiar
- Student mental health, motivation, productivity
- NIH Training grants require career development component
- Increased interaction between Rutgers and industry

Industry Partners

- Access to highly trained local talent pipeline
- Ability to influence curriculum
- Vet potential hires through shadowing/externship
- Promotion of company brand
- Interactions with academia
- Community and education outreach/service

**Teaches leadership, business, teamwork,
and communication skills necessary for
ALL careers.**