

Enhancing Institutional Data Science Capacity

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Training, Workforce Initiatives, and Community Engagement (TWICE)

NIH Office of Data Science Strategy (ODSS)



Unlocking the Power of
BIG DATA
IN HEALTH
Empowering Scientific and
Healthcare Communities with
Data Analytics



**5TH NATIONAL BIG DATA
HEALTH SCIENCE CONFERENCE**
February 2-3 2024 | Columbia, SC

February 2, 2024

**NIH's interest and commitment
to workforce development
among underrepresented
minority groups**

NIH's Notice of Interest in Diversity

NIH's Notice of Interest in Diversity ([NOT-OD-20-031](#)) identifies groups underrepresented in the biomedical, clinical, behavioral, and social sciences, including **women** and:

Race/Ethnicity

- Blacks or African Americans
- Hispanics or Latinos
- American Indians or Alaska Natives
- Native Hawaiians and other Pacific Islanders

Disability

- Physical or mental impairment that substantially limits one or more major life activities

Disadvantaged Background

- Homeless
- Foster care system
- First generation w/ Bachelor's degree
- Federal Pell Grants
- Special Supplemental Nutrition Program
- Rural or low income/access areas

NIH Research Training and Career Development Programs

<https://researchtraining.nih.gov/>

NIH programs help to prepare the skilled, creative and diverse biomedical research workforce of tomorrow



Undergraduate and Postbaccalaureate Education

Predocctoral Training/Clinical Doctorate

Postdoctoral Training/Clinical Residency

Early Research Career Development

Investigator Development and Mentoring

Recent Funding Announcements

[International Research Scientist Development Award \(IRSDA\) \(K01\) Independent Clinical Trial Not Allowed](#) ^{NEW}

Jan 22, 2024

[International Research Scientist Development Award \(IRSDA\) \(K01\) Independent Clinical Trial Required](#) ^{NEW}

Jan 18, 2024

[NIDA Mentored Clinical Scientist Development Program Award in Substance Use and Substance Use Disorder Research \(K12 Clinical Trial Optional\)](#) ^{NEW}

Jan 3, 2024

[NIDDK Education Program Grants \(R25 Clinical Trial Not Allowed\)](#) ^{NEW}

Dec 21, 2023

NIH Research Training and Career Development Programs

NIH programs help prepare individuals for careers in biomedical, behavioral, social, and clinical research.

- Learn more about how [NIH Institutes and Centers](#) may vary in research and training
- Contact [NIH extramural research training representatives](#) to discuss how specific programs fit your training and career goals.
- Explore this website for resources for training program leaders and individuals seeking research support at various career stages.

Research Career Pathways

Interactive guides describe NIH programs and links to support training and career development of biomedical scientists:

- [Physician-Scientist Infographic](#)
- [Veterinarian-Scientist Infographic](#)
- [Dentist-Scientist Infographic](#)
- [Research-Scientist Infographic](#)

[CAREER DEVELOPMENT KIOSK](#)

[RESEARCH TRAINING KIOSK](#)

[FELLOWSHIP KIOSK](#)

[OTHER TRAINING-RELATED KIOSK](#)

[EXTRAMURAL DIVERSITY KIOSK](#)

NIH Office of Intramural Training & Education

Programs by educational level

High School Students



College Students or Recent College
Graduates




Doctoral Students



Postdoc Fellows




Contact

 oite@nih.gov

 301-496-2427

Latest

 [OITE on YouTube](#)

 [OITE blog](#)

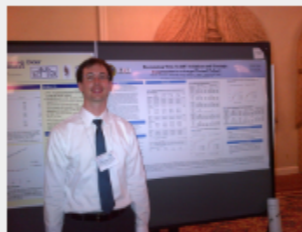
<https://www.training.nih.gov/research-training/>

Back to: [Home](#) > Office of Clinical Research Training and Medical Education

Training the Next Generation

The NIH Clinical Center offers training to help prepare the next generation of translational and clinician scientists. The innovative programs include summer internships, postbaccalaureate fellowships, clinical elective rotations, medical student research programs, graduate medical education, and continuing medical education.

An [interactive virtual tour](#) of the NIH Clinical Center is available.



Office of Clinical Research Training and Medical Education

For Students

- Summer Internships
- Medical Research Scholars Program
- Clinical Electives Program

For Recent Graduates

- Postbac Program

For Residents/Fellows

- Graduate Medical Education
- Elective Rotations
- Clinical Fellows Corner
- Loan Repayment Program
- FDA Rotation for NIH Fellows [PDF](#)

Staff and Professionals Educational Opportunities

- Continuing Medical Education
- Responsible Conduct of Research Training
- Other NIH Educational Resources

NIH Clinical Center Department Fellowships and Opportunities

- Bioethics Fellowship Opportunities
- Critical Care Medicine - Fellowship Opportunities for Physicians
- Critical Care Medicine - Other Professional Opportunities
- Imaging Sciences Training Program
- Laboratory Medicine - Fellowship Programs
- Nursing - Professional Opportunities
- Nutrition - Dietetic Internship Program
- Pharmacy - Training Programs
- Social Work - Education and Training
- Transfusion Medicine - Education and Training

NIH-Wide Training Opportunities

- Courses in Clinical Research - NIH Office of Clinical Research
- NIH-Duke Master's Program in Clinical Research [↗](#)
- Research Training and Career Development - NIH Office of Extramural Research
- Training Opportunities - NIH Office of Intramural Training and Education

OCRTME News and Contacts

NIH Office of Clinical Research Training and Medical Education

<https://www.training.nih.gov/research-training/>

**Core Competencies considered
to be important in healthcare,
research, and research-related
careers**

Core Competencies in Careers

- Career readiness
- Ethics and responsible conduct
- Leadership and management
- Communication
- Teaching and mentoring
- Well-being and resilience

Career readiness

Knowing how to explore educational and career paths in your field, gain necessary credentials, prepare application materials, and interview for positions.



Communication

Developing oral and written communication skills and the ability to adjust your communication for experts and non-experts.



Ethics and responsible conduct

Understanding ethical behavior in research and in interpersonal relationships and staying informed about the rules, rights, and responsibilities now and in your chosen career.



Teaching and mentoring

Learning teaching and mentoring skills useful within your research group, the classroom, and other educational settings.



Leadership and management

Being an inspiring and supportive leader on research and other teams, includes cultivating talent of diverse individuals and supporting principles of diversity, equity, and inclusion.



Well-being and resilience

Learning to manage your stress and handle setbacks in helpful ways and developing the ability to support the well-being and resilience of others.



<https://www.training.nih.gov/skills/>

Social and Emotional Self-efficacy in Employment

- **Social Self-Efficacy**

- Social self-efficacy tends to be referred to the capability of an individual to respond proficiently during interpersonal circumstances.

- **Emotional Self-Efficacy**

- Emotional self-efficacy is believed to be one's ability to survive with negative emotions.

Armum, P., & Chellappan, K. (2016). Social and emotional self-efficacy of adolescents: measured and analysed interdependencies within and across academic achievement level. *International Journal of Adolescence and Youth*, 21(3), 279-288.

<https://doi.org/10.1080/02673843.2015.1067894>

ODSS Training, Workforce Initiatives, and Community Engagement (TWICE) Team and Contact



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- **Contact:** ds-workforce@nih.gov ←
- **ODSS webpage:** <https://datascience.nih.gov/>
- **Data science funding opportunities:** <https://datascience.nih.gov/research-funding>
- **Repositories for sharing scientific data:** <https://sharing.nih.gov/data-management-and-sharing-policy/sharing-scientific-data/repositories-for-sharing-scientific-data>
- **Data science job opportunities at NIH (federal):** <https://datascience.nih.gov/jobs>