



New Jersey Alliance for Clinical and Translational Science (NJ ACTS) Translational Workshop

Workforce Development

10/25/2024

Olga F. Jarrín Montaner, PhD, RN, FAAN

<http://njacts.rbhs.rutgers.edu/education-training/workforce-development>





Workforce Development Team & Goals



Olga Jarrín,
PhD, RN, FAAN



Lauren Aleksunes,
PharmD, PhD, DABT



Barbara DeMarco,
PhD



Nadina Jose, MD



Yasheca Ebanks, MS



Penelope Georges, Barbara Tafuto, PhD
PhD



Dantong Yu, PhD



Richard Marlink, MD

1. Develop and implement tailored training programs designed for diverse clinical research professionals.
2. Improve readiness of advanced trainees and early career faculty to pursue CTS as principal and co-investigators.
3. Advance Clinical and Translational Science knowledge and skills among undergraduate, graduate, and professional students from diverse and underrepresented backgrounds.



Specific Aims Group

- **Goal:** Develop compelling specific aims pages for K- and R- series grants
- **Who:** Senior Postdocs and Faculty Members
- **Where & When:** Zoom, 9am once a month
- **Facilitators:** Lauren Aleksunes & Suzie Chen
- **Focus:** Salesmanship and Study Design
- **Format:** Submit specific aims page 24 hours prior to the meeting. Everyone reviews and discusses each Aims page.
- Next sessions: November 21, December 19



Lauren Aleksunes,
PharmD, PhD, DABT



Suzie Chen, PhD

NIH K/R Grant Writing Group

Learn from two Grant Writing Coaches how to craft compelling Specific Aims Pages through peer review.



Who can participate?

Postdocs and faculty members working towards career (K) and research (R) grants for submission to NIH.



What is the commitment?

Two hours each month. We meet for 1 hr each month. You will need 1 hr to prepare by reading the Aims pages that will be discussed.



Are participants successful in obtaining NIH grants?

YES! Some Examples:
K99ES034053 K99ES032473
K23AI159396 R01DE032216
R01ES032144 R01DK131214 R21ES032047



65%

GRANT FUNDING
RATE IN 2021-22

We Discuss All Types of Research



Preclinical
Science



Clinical &
Translational
Science



Population &
Behavioral
Science

Come Join Us Even if You Are
Early in Thinking About a
Grant Application. Sign Up:



All meetings
are at 9 am EST
on Zoom

Questions? Email Lauren Aleksunes at aleksunes@eohsi.rutgers.edu
<https://njacts.rbhs.rutgers.edu/education-training/workforce-development/grant-writing-training/>





Grant Writing Mini Course

Topics Covered

- ✓ Getting Started with Your NIH Application
- ✓ Crafting Compelling Specific Aims Pages
- ✓ Developing Your Research Strategy
- ✓ Targeting Your Application for Peer Review
- ✓ Aligning Training Plans for K Grants
- ✓ Interpreting Summary Statements
- ✓ Resubmitting Your Application



Lauren Aleksunes,
PharmD, PhD, DABT

Grant Writing 101: NIH Grant Bootcamp

Learn from grant writing coaches, recent awardees, and experienced peer reviewers.



Who can participate?

Postdocs, residents, fellows, faculty, instructors, and clinicians working towards career (K) and research (R) grants for submission to NIH.



When and where?

*Rutgers Busch Campus,
Piscataway, NJ
In-Person only*

July 10th
9am-5pm

Welcome to All Types of Research



Preclinical
Science



Clinical &
Translational
Science



Population &
Behavioral
Science

**SPOTS ARE
LIMITED !**

*Submit your
application
to the bootcamp:*



RUTGERS

Environmental and Occupational
Health Sciences Institute | EOHSI

Questions?

Email Lauren Aleksunes at
aleksunes@eohsi.rutgers.edu



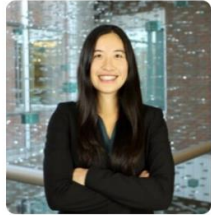
Other opportunities at:

<https://njacts.rbhs.rutgers.edu/education-training/workforce-development/grant-writing-training/>





Wall of Honor NIH K and R Grant Examples



Dr. Stephanie Shiau
Assistant Professor
R01HD111550

Maternal Inflammation in Relation to Offspring Epigenetic Aging and Development

Scientist Highlight coming soon!

[Linked in](#)



Dr. Hiroko Nobuta
Assistant Professor
R21NS132013

Spatial and Single Cell Transcriptomics Approach to Understand Neuron-Oligodendrocyte Communication in Human Synaptic Development

Scientist Highlight



Dr. Nicole Torosin
Postdoctoral Associate
F32GM140669

3D Genome Organization and Gene Expression in Drosophila

Scientist Highlight

[Linked in](#)



Dr. Outi Keinaenen
Postdoctoral Fellow
K99ES034053

Harnessing PET to Study the In Vivo Fate and Health Effects of Micro- and Nanoplastics

Scientist Highlight

[Linked in](#)



Dr. Chintan Dave
Assistant Professor
R01HL163163

Evaluating the Role of Multimorbidity in Modulation Medication Effects in Older Adults

Scientist Highlight

[Linked in](#)



Dr. Modupe Coker
Assistant Professor
R01DE032216

HPV, HIV, and Oral Microbiota Interplay in Nigerian Youth

Scientist Highlight



Dr. Navaneeth Narayanan
Clinical Associate Professor
K23AI159396

Gut Microbiome and Pharmacokinetic Variability in Tuberculosis and Diabetes

Scientist Highlight coming soon!

[Linked in](#)



Dr. Ley Cody Smith
Postdoctoral Fellow
K99ES032473

Estrogen Receptor Signaling, Inflammation and Ozone Toxicity

Scientist Highlight

[Linked in](#)



Dr. Tetsuya Nakamura
Assistant Professor
2210072

The Function of Gli Proteins in the Specification of Ossification Pathways in Pectoral Girdle Development and Evolution

Scientist Highlight

[Linked in](#)

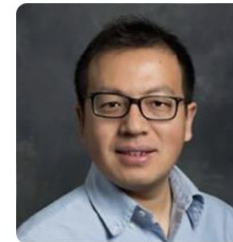


Dr. Zorimar Rivera-Nunez
Assistant Professor
R21ES032047

Emerging Mycoestrogens: Impacts on Placental and Early Childhood Growth and Genetic Variation in the Placental Barrier: Impact on Child Environmental Health Studies (ECHO)

Scientist Highlight

[Linked in](#)



Dr. Shuo Xiao
Assistant Professor
R01ES032144

An Ovary-on-a-Chip to Identify Ovarian Toxicity

Scientist Highlight

[Linked in](#)



Dr. Luigi Brunetti
Associate Professor
R01DK131214

Mechanistic Evaluation of Melatonin as a Protectant against Antibiotic Associated Kidney Injury

Scientist Highlight

[Linked in](#)

COMMUNITY



Fellowship Writing Group

**Goal: Build and Submit NIH
NRSA Fellowship Applications**

10-Week Intensive Program

**Format: Weekly Assignments; Peer Review;
Peer Discussion, Instruction, and Q&A with
Coach on Zoom**

Outcomes

- 74% Submitted Applications
- 54% Funded as NRSA, Diversity Supplement, or by a Foundation
- Over 90% Recommend Program



**Lauren Aleksunes,
PharmD, PhD, DABT**

NIH Fellowship Writing Group

Under the guidance of a Grant Writing Coach, construct your NIH fellowship application this Fall.



Who is this Writing Group for?

PhD and MD/PhD students and Postdocs preparing NIH NRSA fellowship applications for the December 2023 or April 2024 deadlines. We typically accept ~35 participants each year.



What is the weekly commitment?

This is an interactive group. You will need to submit application sections each week – and – peer review sections from other participants in addition to the 1-hr live meeting. ~6 to 8hr effort each week

Where and when do I sign up?

Sign up at the QR code. Limited spots!



Are participants successful in obtaining their NIH fellowship?

Yes! Successful examples are available to participants. Some recent awardees include:

F32GM140669 F31HL160196 F31ES034269
F31ES032319 F31NS122438

**Mark Your
Calendars Now!**



**All meetings are
Thursdays 1 pm EST
starting Sept 14th**

Note: Applicants for NIH fellowships must be a US citizen or permanent resident to apply. Questions? Email Lauren Aleksunes at aleksunes@eohsi.Rutgers.edu





Wall of Honor Fellowship Grant Examples



Chelsea Cary
PhD Student

Uteroplacental Vasculature and Fetal Growth after Plastic Particle Exposure

Scientist Highlight coming soon!

[LinkedIn](#)



Kate Lubina
PhD Student

Scientist Highlight coming soon!

[LinkedIn](#)



Danielle Kozlosky
PhD Student

F31ES032319

Impact of the Placenta Barrier on Fetal Nutrition and Growth Restriction

[LinkedIn](#)



Nimit Shah
PhD Student

F31HL160196

Barriers and Predictors of Physical Fitness among Volunteer Firefighters

Scientist Highlight

[LinkedIn](#)



Sean Stratton
PhD Student

F31ES035633

Creating Pb Risk Mitigation Using Source Apportionment in an EJ Community

Scientist Highlight coming soon!

[LinkedIn](#)



Zakiyah Henry
PhD Student

F31DK137451

The Tissue-Specific Functionality of the Farnesoid X Receptor in NASH Development

Scientist Highlight coming soon!

[LinkedIn](#)



Kaiden Power
PhD Student

F31NS122438

Role of a NIMA-related Kinase in Neuronal Microtubule Stability and Transport

Scientist Highlight

[LinkedIn](#)



Carolyn Kinkade
PhD Student

F31ES034269

Exposure to Zearalenone and its Impact on Maternal and Fetal Health

Scientist Highlight





Machine Learning with Python – Basic Course

Topics Covered in Basic Course

- ✓ Introduction to Data Mining
- ✓ Introduction to Predictive Modeling
- ✓ Cross-Industry Standard Process for Data Mining
- ✓ Supervised Segmentation (Decision Trees)
- ✓ Discriminant Function
- ✓ Model Performance Analysis & Evaluation Metrics
- ✓ Support Vector Machine / Support Vector Regression

NJacts **MACHINE LEARNING WITH PYTHON: A HANDS-ON APPROACH**

Practice with real-life Machine Learning examples and see how it affects society in ways you may have not guessed!

LIVE! Basic Training June 20th & Advanced Training June 22nd 10a-2p

Each participant must fulfill the following criteria:

- Review fundamental workshop course module descriptions [here](#).
- Prerequisite: Review 9 hours of basic and advanced Machine Learning pre-recorded lessons
- Have a Google ID to access the Google Cloud Platform.

REGISTER HERE!

NJIT New Jersey Institute of Technology

INSTRUCTOR & DATA SCIENTIST: DANTONG YU, PhD

New Jersey Institute of Technology
NJ Alliance for Clinical and Translational Science
Workforce Development Core

RUTGERS For more information about this training series workshop, please contact Yasheca Ebanks, NJ ACTS Project Manager at yebanks@shp.rutgers.edu.

PRINCETON UNIVERSITY **NJIT**

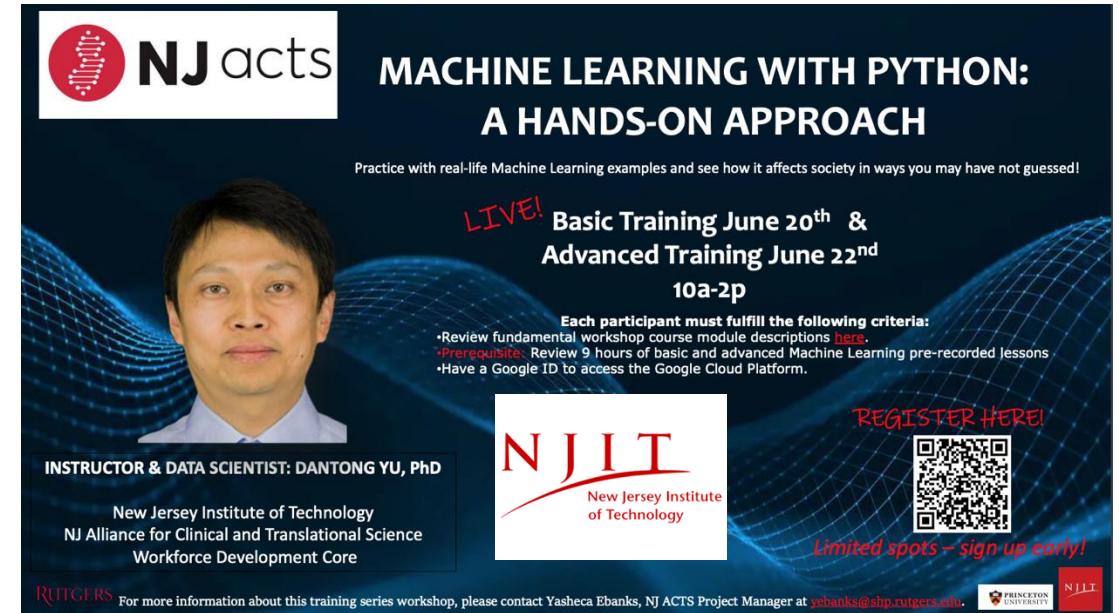
Limited spots – sign up early!



Machine Learning with Python – Advanced Course

Topics Covered in Advanced Course

- ✓ Support Vector Machine / Support Vector Regression
- ✓ Prediction via Evidence Combination
- ✓ Text Mining and Sentiment Analysis
- ✓ Unsupervised Learning Algorithms
- ✓ Deep Learning
- ✓ Causal Inference
- ✓ Large Language Models (i.e., BioGPT)



NJacts **MACHINE LEARNING WITH PYTHON: A HANDS-ON APPROACH**


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INSTRUCTOR & DATA SCIENTIST: DANTONG YU, PhD

New Jersey Institute of Technology
NJ Alliance for Clinical and Translational Science
Workforce Development Core

NJIT
New Jersey Institute of Technology

RUTGERS For more information about this training series workshop, please contact Yasheca Ebanks, NJ ACTS Project Manager at yebanks@shp.rutgers.edu.





Science Communication

- **Who:** Graduate Students and Postdocs
- **Where & When:** Zoom, November 11, 2pm
- **Facilitator:** Penelope Georges, PhD
- Watch for additional workshops in 2025



New Content Coming Soon...

**EFFECTIVE SCIENCE COMMUNICATION:
Balancing Simplicity and Impact**

PRINCETON UNIVERSITY

November 11, 2024
2:00-3:30 PM
via Zoom

This workshop will offer tools for effectively communicating complex scientific discoveries to diverse audiences, with a focus on distilling research projects into clear, simple, and impactful messages.

open to graduate students & postdoctoral trainees

Register

NJacts COUNCIL ON SCIENCE AND TECHNOLOGY 3 YEARS

The poster features a blue and white color scheme with various icons representing science, communication, and technology, such as a lightbulb, a folder, a speech bubble, a Wi-Fi symbol, and a laptop.





Study Coordinator Training

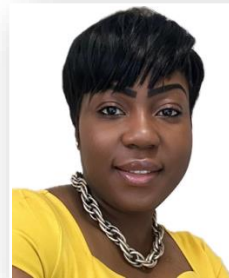
Topics Covered

- ✓ Scientific Concepts & Research Design
- ✓ Ethical & Participant Safety Considerations
- ✓ Investigational Products Development & Regulation
- ✓ Clinical Study Operations and Site Management
- ✓ Data Management and Informatics

Self-paced 6-week (30 hours) online course



Barbara DeMarco, PhD



Yasheca Ebanks, MS



RUTGERS
BIOMEDICAL AND
HEALTH SCIENCES



Clinical Research Coordination Level-1 Badge

Interested in an Entry-level Position as a Study Coordinator?

Crafted by the Rutgers Biomedical Health Sciences (RBHS), the largest free-standing health sciences university in the nation, this 6-week online and asynchronous academic badge was developed in collaboration with the School of Health Professions and the New Jersey Alliance for Clinical and Translational Sciences (NJ ACTS). This badge is specially designed for Clinical Research Professionals, novice Investigators, and students with little to no clinical research or pharmaceutical experience who would like to participate in clinical research at an Academic Medical Center (AMC) functioning as a “study coordinator.” Participants will be assessed on competencies related to five domains outlined by the Joint Task Force for Clinical Trial Competency.

The course is self-paced, takes about 30 hours to complete, and is structured to fit into the busy schedules of working professionals while maintaining the highest degree of academic rigor. Enrollment course fees for each participant are as follows: Undergraduate/Graduate Students (\$25), Post Doc and Fellows (\$35), Faculty Members/Staff/Residents/Researchers (\$100), Other CTSA Hubs, and Academic Institutions (\$200).

A 6-week Program Covering the Following Training Areas:

- Scientific Concepts and Research Design
- Ethical & Participant Safety Considerations
- Investigational Products Development & Regulation
- Clinical Study Operations and Site Management
- Data Management & Informatics



Registration Now Open!

For more information about the Clinical Research Coordinator Level-1 Badge visit:
<https://rbhs.rutgers.edu/education-training/level-one-development/badge/>
or if you happen to have any questions, contact yebanks@rbhs.rutgers.edu, NJ ACTS Project Manager





Clinical Trials Principal Investigator Training

Topics Covered

- ✓ **Protocol: Development, budgeting, costing, contracting, tracking expenditures**
- ✓ **Compliance: Human subjects, informed consent, patient engagement**
- ✓ **Adherence: Safety reporting, risk management, mitigation**
- ✓ **Study Design: Statistical methods, primary & secondary outcomes, eligibility criteria**
- ✓ **Diversity: Engagement of diverse populations, managing diverse teams**
- ✓ **Non-Trial Research: Learning health systems, health services, epidemiology**
- ✓ **Inspection: Readiness, quality management, data quality, PI accountability**
- ✓ **Business of Being a Principal Investigator: Soft skills & securing funding**
- ✓ **Local Resources: OnCore, Deep6, CRDW, EPIC, etc.**



Nadina Jose, MD

COMING SOON

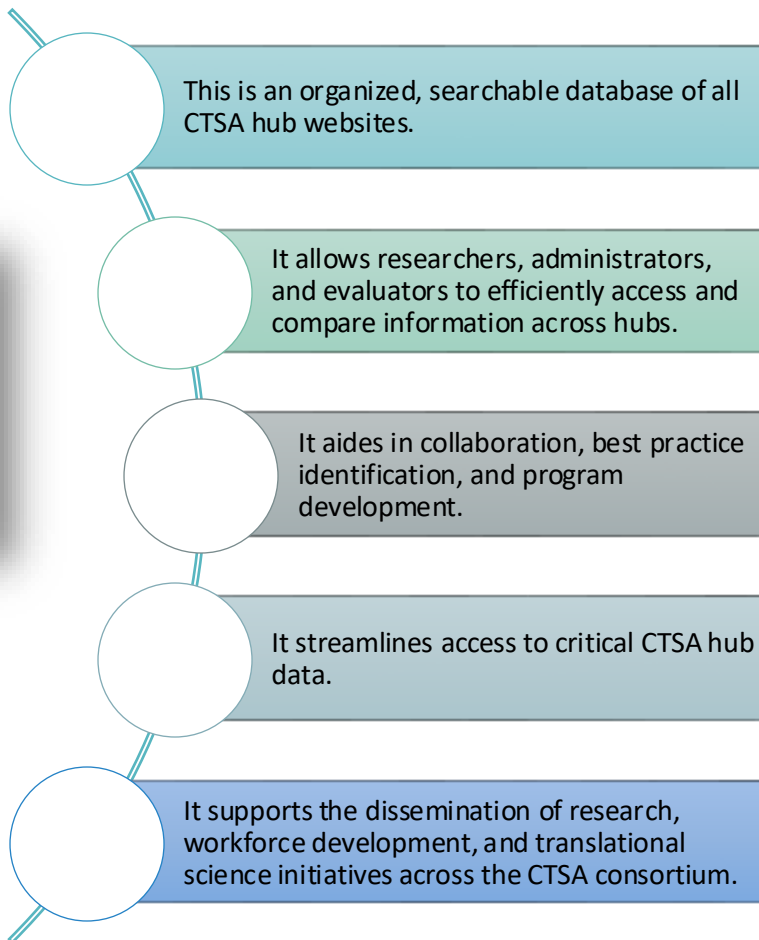




CTSA Search Solutions



Barbara Tafuto, PhD



RUTGERS BIOMEDICAL AND HEALTH SCIENCES | CTSA Search Solutions | <https://ctsa-search.rutgers.edu/>

Home Search News Team About Structured Search Terms

Search here...

COVID-19 Categories

- Select all
- Covid-19 Main Page
- Covid-19 Research
- Funding
- In The Community
- In The News
- Vaccine Information
- Zero Public Links Identified

Regions

- Select all
- Mid West
- North East
- Pacific
- Rocky Mountains
- South East
- South West

States

- Select all
- Alabama
- Alaska
- Arizona
- Arkansas
- California
- Cleveland
- Colorado

Albert Einstein College of Medicine | Block Institute for Clinical and Translational Research

Region: North East | State: New York | Hub Age: Year 05 | [Visit Hub Website](#)

COVID-19 Activities

- [Covid-19 Main Page](#)
- [In The News](#)

CTSA Main Activities

- [Community and Stakeholder Engagement](#)
- [Health Informatics](#)
- [Pilot awards](#)
- [Resources - BERD](#)
- [Resources - Regulatory support](#)
- [Special Populations](#)
- [Workforce Development](#)

Additional Topics

No Additional Topics

Training and Education

- [Training Information](#)

Boston University | Clinical and Translational Science Institute

Region: North East | State: Massachusetts | Hub Age: Year 07 | [Visit Hub Website](#)

COVID-19 Activities

- [Covid-19 Main Page](#)
- [Covid-19 Research](#)
- [Funding](#)
- [In The Community](#)
- [In The News](#)
- [Vaccine Information](#)

CTSA Main Activities

- [Community and Stakeholder Engagement](#)
- [Evaluation/ Impact](#)
- [Health Informatics](#)
- [Pilot awards](#)
- [Resources - BERD](#)
- [Resources - Regulatory support](#)
- [Workforce Development](#)

Additional Topics

- [Calendar \(Events\)](#)
- [In the News](#)
- [KL2](#)
- [TL1](#)

Training and Education

- [Training Information](#)





Questions?

