

# REU Student Orientation

I'll email you the link to these slides.

# Aaron's Role: I'm Here for You!

Includes:

- Support positive mentor-mentee relationships
  - Open door policy for both mentors & mentees
  - Confidentiality
- Office Hours : Tuesdays 12-2pm
- Survey(s)
- IT support / Logistics / Admin
- Running most of the workshops
- Leading the field trips

# Logistics

- Dates: June 25 - August 24 (9 weeks)
- Office Space: Dearborn 1<sup>st</sup> floor round room\*
- Workshop Space: Dearborn 23
- Provided
  - Quest Accounts + NetID (+ laptops)
  - Stipends + dorm housing

*Note: Lost key = \$250*

\* Apologies to those in B-10.... but it should at least be cool down there all summer ☺

# Professional Development

- Python programming workshops (6 sessions)
- Quest tutorial
- Research website making workshop (2 sessions)
- RSG science communication workshops (3 sessions)
- Research seminars by NU researchers
- Writing workshops (2 sessions)
- Grad school + GRE & Career Panel Discussions



# Final Products

- Poster to present at January AAS meeting  
CIERA poster session (August 23)  
Adler Planetarium poster session (August 24)
- Journal article for RNAAS (let's publish!)
- Research website
- Keep working with your advisor remotely!



# Community Building

June 25, 3:30-5:30pm

Dearborn 'Meet & Greet' + Solar Observing,  
followed by group dinner

June 30

Field trip to Yerkes Observatory

July 23

Field trip to FermiLab

August 24

Field trip to the Adler (+ poster presentation)

# Faculty Mentors & Projects

Student	Advisor(s)	Project subject area
Samantha Berry	Shane Larson	Low-frequency gravitational wave astrophysics and space-based interferometers
Andrew Bowen	Aaron Geller	Eclipsing binaries, LSST, HPC
Lexi Detweiler	Seth Jacobson	Planetary interiors and matter at extreme conditions, HPC
Nick Easton	Adam Miller, Aaron Geller	Variable stars, LSST, Zooniverse, HPC
Carlo Esquivia	Wen-fai Fong	Observations of explosive transients
Jack Foster	Chris Pankow, Vicky Kalogera	Localization capabilities of gravitational-wave detectors, and LSST electromagnetic follow up
Sophie Haight	Chris Pankow , Pablo Marchant, Vicky Kalogera	Formation and evolution of high-mass binaries and the formation of double black holes, LIGO, HPC
Sinead Humphrey	Scotty Coughlin, Vicky Kalogera	Searching for gravitational-wave signals from supernovae, HPC
Mitchell Lachat	Fred Rasio, Josh Fixelle	Stellar collisions, globular clusters, HPC
Enrique Leon	Michael Schmitt	Supernovae, Dark Energy, and statistics
Ethan Marx	Adam Miller	LSST related science
Kris Mortensen	Adam Miller, Raf Margutti	LSST related science
Isaac Rivera	Mike Zevin, Chase Kimball, Kyle Kremer, Vicky Kalogera	LIGO, compact objects, and related science
Mahlet Shiferaw	Mike Cronin, Claude-Andre Faucher-Giguere, Alex Gurvich, Aaron Geller	Interactive, data-intensive, astronomy visualizations, and analyzing cosmological simulations
Megan Tillman	Claude-Andre Faucher-Giguere, Sarah Wellons	Mining and analyzing large-scale cosmological simulations of galaxy formation

# Day 1 (Monday, June 25)

9:30-11am: CIERA REU Orientation

11-12: Campus Tour

12-1pm: lunch

Sometime between 1-3:30pm:

- Meet with mentor(s)
- Complete I-9 form with Katherine Lamb, Tech F-233  
(~5 minutes, Mon. 2:30-3:30pm, or Tues 1-4pm)

3:30-5:30pm: Dearborn 'Meet & Greet'

5:30pm: dinner



# Research Project Best Practices

- Communicating with your Mentor(s)
- Optimizing Your Progress
- Developing Independence

# Diversity, Bias & Stereotypes

- **Impostor Syndrome :**

A psychological pattern in which people doubt their accomplishments and have a persistent, often internalized fear of being exposed as a "fraud". Despite external evidence of their competence, those exhibiting the syndrome remain convinced that they are frauds and do not deserve the success they have achieved. Proof of success is dismissed as luck, timing, or as a result of deceiving others into thinking they are more intelligent and competent than they believe themselves to be. ([https://en.wikipedia.org/wiki/Impostor\\_syndrome](https://en.wikipedia.org/wiki/Impostor_syndrome))

- **Unconscious Bias :**

Learned stereotypes that are automatic, unintentional, deeply engrained, universal, and able to influence behavior ([https://en.wikipedia.org/wiki/Implicit\\_stereotype](https://en.wikipedia.org/wiki/Implicit_stereotype), [https://en.wikipedia.org/wiki/Unconscious\\_bias\\_training](https://en.wikipedia.org/wiki/Unconscious_bias_training))

- **Stereotype Threat :**

Asituational predicament in which people are or feel themselves to be at risk of conforming to stereotypes about their social group. Stereotype threat has been shown to reduce the performance of individuals who belong to negatively stereotyped groups. If negative stereotypes are present regarding a specific group, group members are likely to become anxious about their performance, which may hinder their ability to perform at their maximum level. Importantly, the individual does not need to subscribe to the stereotype for it to be activated. ([https://en.wikipedia.org/wiki/Stereotype\\_threat](https://en.wikipedia.org/wiki/Stereotype_threat))

See also :

<https://csma.aas.org/>

<https://cswa.aas.org/unconsciousbias.html>

<http://www.astrobetter.com/wiki/Diversity>

<http://www.aura-astronomy.org/diversity.asp?diversity=resources>

# Safety Reminders

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# Let's go see your office!

