REU Student Orientation

These slides are on our GitHub page.

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 24 August 23 (9 weeks)
- Office Space: Dearborn 1st 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 ©

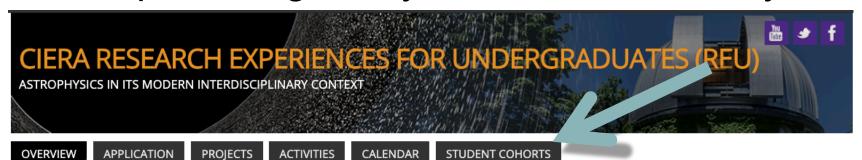
Professional Development

- Python programming workshops (6 sessions)
- 2-hour Quest tutorial
- GitHub tutorials (2 sessions)
- 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 22)
 Adler Planetarium poster session (August 23)
- Journal article for RNAAS (let's publish!)
- Research website
- Keep working with your advisor remotely!



Community Building

June 24, 3:30-5:30pm : Dearborn 'Meet & Greet' + Solar Observing, followed by group dinner

June 28: Lunch with previous REU students now @ NU

June 29 : Field trip to Adler Planetarium + Millenium Park

July 12: BBQ at NU beach

July 23: Field Trip to Fermilab

Also check here:

https://www.northwestern.edu/norris/arts-and-recreation/summer-at-norris/index.html

Faculty Mentors & Projects

Student	Advisor(s)	Project subject area
Devin Becker	Fred Rasio, Mario Spera, Kyle Kremer	Stellar/planetary dynamics, Black holes
Andrew Bowen	Aaron Geller	Eclipsing binaries, star clusters, LSST
Melissa Cashion	Fred Rasio, Mario Spera	Stellar/planetary dynamics, Black holes
Mercedes Collins	Seth Jacobson	Planet formation and dynamics
Owen Eskandari	Wen-fai Fong, Kerry Patterson	Stellar explosions, LSST
Xander Hall	Adam Miller, Aaron Geller	Variable stars, Zooniverse, LSST
Nathan Hung	Adam Miller	Variable stars, flare stars, LSST, LIGO
Emma Kaufman	Sasha Tchekhovskoy, Ian Christie, Aris Lalakos	Black holes accretion disks
Camille Liotine	Vicky Kalogera, Christopher Berry	Black holes, gravitational waves, LIGO
Nik Prusinski	Vicky Kalogera, Christopher Berry	Black holes, gravitational waves, LIGO
Andrew Santos	Andre DeGouvea	Neutrinos
David Sten	Raf Margutti, Giacomo Terreran	Stellar explosions, LSST
Sophia Taylor	Claude-Andre Faucher-Giguere, Luke Kelley	Galaxy evolution
David Velasco	Eric Dahl, Rocco Coppejans	Dark matter, experimental physics

Day 1 (Monday, June 24)

- 9:30-11am: CIERA REU Orientation
- 11-12: Campus Tour
- 12-1pm: Lunch (you bring/buy)
- Sometime between 1-3:30pm:
 - Meet with mentor(s)
 - Complete I-9 form with Katherine Lamb, Tech F-233 (~5 minutes, Mon. 1:00-3:30pm, or Tues 3-4pm)
- 3:30-5:30pm: Dearborn 'Meet & Greet'
- 5:30pm: Dinner (CIERA buys)

Research Project Best Practices

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

Diversity, Bias & Stereotypes

Our Code of Conduct: https://github.com/ageller/CIERA_REU/blob/master/orientation/CodeOfConduct.pdf

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)

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/Unconscious_bias_training)

Stereotype Threat :

A situational 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)

See also:

https://csma.aas.org/ , https://cswa.aas.org/unconsciousbias.html , http://www.astrobetter.com/wiki/Diversity , https://www.aura-astronomy.org/diversity/

Self Care

Actively take care of your body and mind!

- Sleep well and enough
- Exercise (even just going for a walk)
- Keep up with personal hygiene
- Set a schedule and stick to it
- Set <u>realistic</u> goals for yourself
- Schedule non-work activities
- Talk with your cohort about things other than work
- Be kind to yourself

Safety Reminders

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Let's go see your office!

