

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

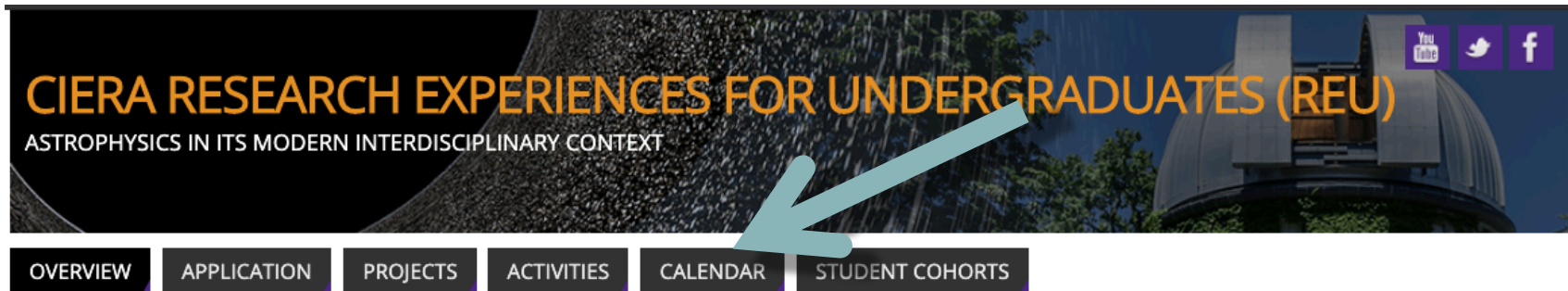
- Dates: June 24 - August 23 (9 weeks)
- Office Space: Dearborn 1st floor round room*
- Workshop Space: Dearborn 23
- Provided
 - Quest Accounts + NetID (+ laptops)
 - Stipends + dorm housing

Note: Lost key = \$250

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

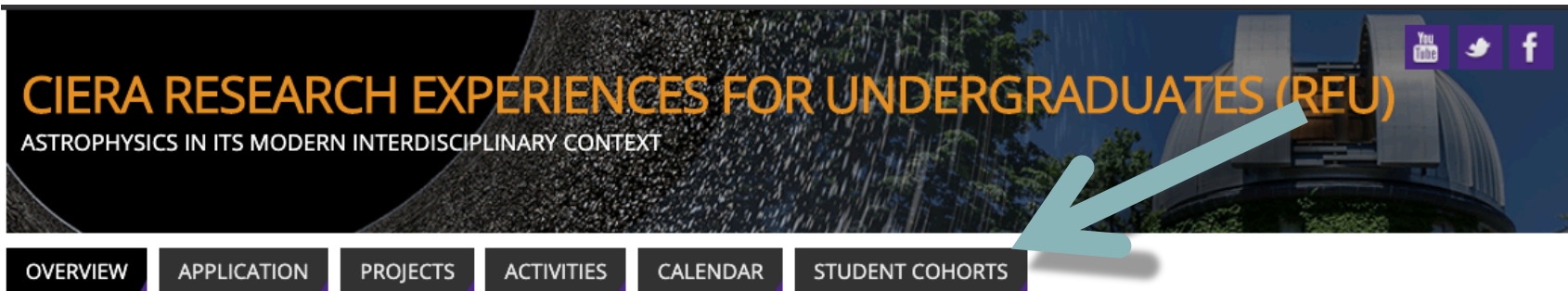
Professional Development

- 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 + Navy Pier

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 realistic 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!

