

REU Student Orientation

These slides are on our [GitHub page](#).

Our Role: We're Here for You!

Aaron Geller & Emily Leiner

- Support positive mentor-mentee relationships
 - “Open door” policy for both mentors & mentees
 - Confidentiality
- Aaron Office Hours : 8019, Tuesdays 10am-11am
- Emily Office Hours : 8047, Thursdays 11am-12pm
- Survey(s)
- IT support / Logistics / Admin
- Running most of the workshops

Logistics

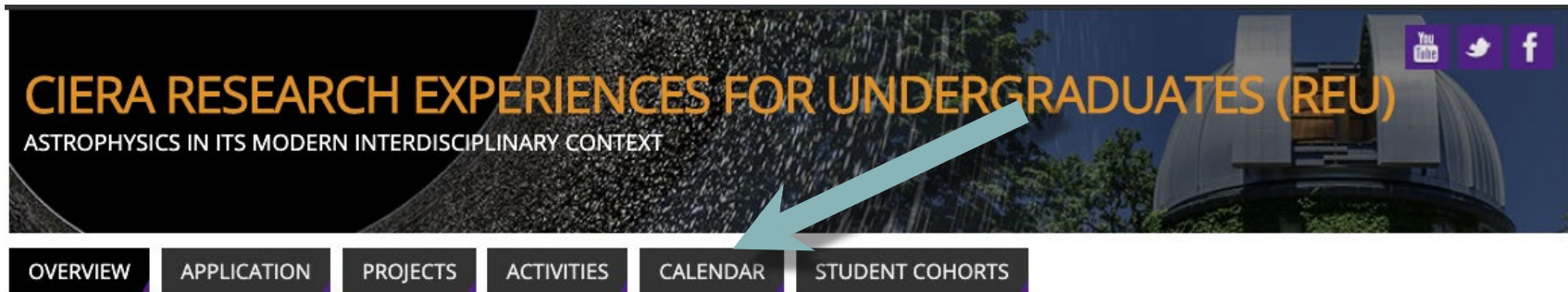
- Dates: June 20 - August 18 (9 weeks)
 - Office(s) : 1800 Sherman 8th floor
 - Workshops: 1800 Sherman 7th floor 7-600
 - Mentors in 1800 Sherman 8th floor or Tech
 - Slack + Email (+ Zoom)
 - Provided:
 - Quest Accounts + NetID (+ laptops)
 - Stipends + dorm housing
- Note: Lost electronic key = \$25, lost physical key = \$250, lock-out = \$10 (we will cover this within reason)*

Day 1 (Tuesday, June 20)

- 9:30am - 11:00am: CIERA REU Orientation
- 11:00am - 2:00pm: Campus tour + lunch (you bring/buy)
- 2-5pm:
 - Meet with mentor(s)
 - Complete I-9 form : 1800 Sherman, 1st floor 1-100
- 5:30pm: Dinner (CIERA buys)

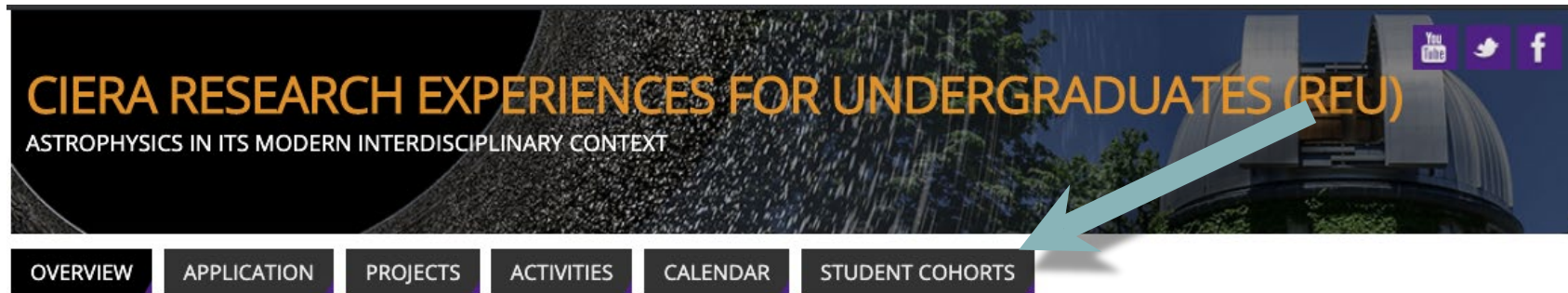
Professional Development

- Python programming workshops
- Quest, GitHub, command line tutorials
- Research website, and data visualization workshops
- RCTP science communication workshops
- Research seminars by NU researchers
- Writing workshops
- Grad school + GRE & Career Panel Discussions



Final Products

- Poster to present at January AAS meeting
 - Joint presentations with bio REUs (August 11)
 - “Experts” poster session (August 17)
 - “General” poster session (August 18)
- Draft journal article in RNAAS style
- Research website, GitHub repo(s)
- Keep working with your advisor(s) remotely!



Community/Team Building

June 20 : Group dinner

June 27 : Lunch with previous REU students now @ NU

June 30 : Field trip to Fermilab

July 17 : REU Science Olympics at Notre Dame

July 21 : Field trip to the Adler Planetarium

July 28: Picnic at NU Lakefill fire pit with BIO REUs

Also check here:

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

Mentors & Projects

Student	Advisor(s)	Project subject area (general)
Sebastian Banaszak	Adam Miller + Caitlin Witt	Variable Stars, Transients
Mars Bell	Wen-fai Fong + Charlie Kilpatrick	Supernovae, Transients
Woodkensia Charles	André de Gouvêa	Neutrinos
Elizabeth Cogan	Elvira Mulyukova	Planetary Dynamics / Interiors
Vishnu Gade	Vishal Baibhav + Vicky Kalogera	Black Holes, Stellar / Binary Evolution
Owen Gonzales	Claude-André Faucher-Giguère + Jason Sun	Galaxy Evolution
Juan Guerrero	Jason Wang	Exoplanets
Dean Kousiounelos	Seth Gossage + Vicky Kalogera	Stellar / Binary Evolution
Anurathi Madasi	Aaron Geller	Star Clusters / Binary Stars
Amelia Marengo	Aaron Geller	Star Clusters / Binary Stars
Rujuta Purohit	Fred Rasio + Giacomo Fragione	Star Clusters / Black Holes
Jacob Schimp	Alvin Bayliss	Astrobiology
Emma VanderKooi	Hooman Mohseni	Quantum Optoelectronic Sensors
Justyce Watson	Aaron Geller	Star Clusters / Binary Stars
Guangyi Zhang	Sharan Banagiri + Vicky Kalogera	Black Holes, Stellar / Binary Evolution

Intro Activity

Two Truths and a Lie

Communication Options

Ask your mentor(s) their preferred form of communication.

We will use the following:

- **Slack**
 - Quick response time, short entries
 - Cohort channel
- **Email**
 - Longer wait time, but more permanent
 - Easier to search
- **Zoom + in-person**
 - Meetings, office hours, etc.

Communication Options

Slack Use: Channels

- #general
- #announcements
- #reu2023
- #code and #research
- DMs

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 ingrained, 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://aas.org/comms/cswa/resources/unconsciousbias_, <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

Our Role: We're Here for You!

Aaron Geller & Emily Leiner

- Support positive mentor-mentee relationships
 - “Open door” policy for both mentors & mentees
 - Confidentiality
- Aaron Office Hours : 8019, Tuesdays 10am-11am
- Emily Office Hours : 8047, Thursdays 11am-12pm
- Survey(s)
- IT support / Logistics / Admin
- Running most of the workshops

Let's go see your office!

