### **REU Student Orientation**

These slides are on our GitHub page.

#### Our Role: We're Here for You!

#### Aaron Geller & Chase Kimball

- Support positive mentor-mentee relationships
  - "Open door" policy for both mentors & mentees
  - Confidentiality
- Aaron Office Hours: 8019, Tuesdays 10am-11am
- Chase Office Hours: 8029, Thursdays 10am-11am
- Survey(s)
- IT support / Logistics / Admin
- Running most of the workshops

### Logistics

- Dates: June 17 August 16 (9 weeks)
- Office(s): 1800 Sherman 8<sup>th</sup> floor
- Workshops: 1800 Sherman 7<sup>th</sup> floor 7-600
- Mentors in 1800 Sherman 7<sup>th</sup> + 8<sup>th</sup> 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 (Monday, June 17)

- 9:30am 11:00am: CIERA REU Orientation
- 11:00am 2:00pm: Campus tour + lunch (you bring/buy)
- 2-5pm: Meet with mentor(s)
- 5:30pm: Dinner (CIERA buys)

# Day 1 (Monday, June 17)

# In your meeting with your mentor, remember to ask (at least) 5 of the questions I posted on Slack

- 1. How did you get started in research?
- 2. What is some advice you got that has really stayed with you? Do you have a story of a time when it was applicable and influenced what you did or wished you had done?
- 3. What hobbies do you have? Do you have one you really miss? Is there one you still make regular time for?
- 4. What is a food that you really like? Why?
- 5. Would you tell me about a time when you did not succeed the way that you wanted to? What did you do or wish you had done then?
  What did you learn from that experience, and how has it shaped what you have done since?
- 6. What have your past students gone on to do career-wise?
- 7. What kinds of questions should I come to ask you vs. asking others in your group? How would you let me know if you think I'm asking a question you're not prepared to answer?
- 8. How do you handle things when something difficult or stressful has happened personally that causes you not to be able to focus? How might you let me know so I can be helpful and work well with you?
- 9. What are some of the other demands on your time this summer? How often would you like us to meet to talk? What do you expect that we will talk about when we meet?

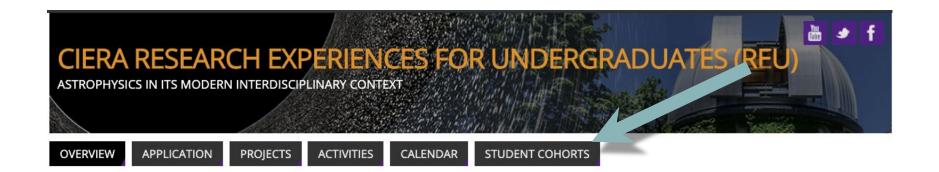
## **Professional Development**

- 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
  - "Experts" poster session in person (August 15)
  - "General" poster session on Zoom (August 16)
- Draft journal article in RNAAS style
- Research website, GitHub repo(s)
- Keep working with your advisor(s) remotely!



# Community/Team Building

June 17 : Group dinner

June 21: Lunch with previous REU students now @ NU

June 27: REU Science Olympics at Notre Dame

July 5: Field trip to the Adler Planetarium

July 19: Picnic at NU Lakefill fire pit with other NU REUs

Aug 2: Field trip to the Yerkes Observatory

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)
Reon Allen	Daniel Lecoanet	Stellar Interiors
Maria Calderon-Marrero	Maggie Osburn	Subsurface Life
Andres Chirino-Segura	Dan Horton	Climate Change / Habitability
Jessica Cotturone	Mike Zevin + Zoheyr Doctor + Vicky Kalogera	Compact Objects / Gravitational Waves
Leah English	Tjitske Starkenburg	Galaxy Evolution
Alina Hussain	Seth Gossage + Zoheyr Doctor + Vicky Kalogera	Stellar / Binary Evolution
Masha Kilibarda	Allison Strom + Noah Rogers	Galaxy Evolution
Farrah Molina	Jason Wang + Sarah Blunt	Exoplanets
Elizabeth Mone	Claude-André Faucher-Giguère + Imran Sultan	Galaxy Evolution
Jonah Mougoue	André de Gouvêa	Neutrinos
Amanda Newton	Fred Rasio + Sanaea Rose	Star Clusters / Black Holes
Sam Solod	Sasha Tchekhovskoy + Deepika Bollimpalli	Black Holes
Lillie Szemraj	Sylvia Biscoveanu + Zoheyr Doctor + Vicky Kalogera	Compact Objects / Gravitational Waves

## **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
- #grousolve
- #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/main/code\_of\_conduct.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 (<a href="https://en.wikipedia.org/wiki/Implicit">https://en.wikipedia.org/wiki/Implicit</a> stereotype, <a href="https://en.wikipedia.org/wiki/Unconscious">https://en.wikipedia.org/wiki/Implicit</a> stereotype, <a href="https://en.wikipedia.org/wiki/Unconscious">https://en.wikipedia.org/wiki/Unconscious</a> 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:

 $\underline{\text{https://aas.org/comms/csma, https://aas.org/comms/cswa/resources/unconsciousbias, http://www.astrobetter.com/wiki/Diversity, https://www.aura-astronomy.org/diversity/}, \underline{\text{https://www.aura-astronomy.org/diversity/}}$ 

### 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!

