

WELCOME TO ELSS – EMERGING LEADERS SCIENCE SCHOLARS

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The [Emerging Leaders Science Scholars Program \(ELSS\)](#) was designed to attract high-achieving students from populations historically underserved by Purdue, providing them the skills and tools needed to succeed in their academic careers and beyond. We are training the next generation of experts in the Sciences while growing opportunities for access to students from diverse backgrounds and offering the benefits of diversity in perspectives, experiences, and talent to the entire Purdue population. ELSS was launched by the College of Science (CoS) as a pilot in 2020 [attracting a record number of 88 students](#). 52 students were recruited by the CoS in 2021, and 47 in 2022, and the program is expanded to include multiple Purdue Colleges with support from the Office of the Vice Provost for Diversity and Inclusion.

ELSS students are high achieving as measured by number of years of high school Math, Science, English, and foreign language as well as high school GPA, SAT and/or ACT scores. In order to maintain the award students are required to maintain a cumulative 3.0 GPA, participate in High Impact Summer Experience (study abroad, research, internship or summer courses), engage in both peer and faculty mentoring programs, enroll in a minimum of 12 credit hours per semester, and continue to pursue an undergraduate degree from Science. The program includes a scholarship, financial support opportunities for study abroad, summer experiences such as internships or summer courses and acceptance in a learning community. Students are provided with a network of support including Academic Advisors, Peer Mentors (through the [BoilerMentor program](#)) and Faculty Mentors. Our goal is to ensure student success and increase diversity among future leaders in the Sciences.

FACULTY MENTORS FOR ELSS

Faculty Mentors play an important role in student success. They nurture the student’s science identity and serve as role models for academic success. They help students persevere throughout their academic career and provide psychosocial or emotional support. Mentors can help students articulate their short-term and long-term goals as well as design a plan of action for the Mentee to achieve those goals. The focus of mentoring could include mastering specific skills, competency development, and career development. Mentors should make use of inclusive approaches such as cultural responsiveness, moving beyond “colorblindness”, intentionally considering how social structures may lead to impostor feelings, and reflecting on how their own biases and prejudices may affect mentoring relationships.

Mentoring is about getting to know the individual student through active listening and building a relationship of trust.

Therefore, Mentors are expected to meet with students on a regular basis. Meetings can be brief and can occur in person or virtually. The frequency and format will be set by the student and Mentor. However, it is expected that they will occur at least once a month for the first year (with some Mentors opting for short weekly meetings in the first semester) and at least twice each semester thereafter (excluding summer). Mentors will provide

Advising is different than Mentoring.

Advising is instruction or guidance that would benefit any student pursuing a particular educational course.

Mentoring may include some advising. However, it is about providing guidance to the individual student. It includes bilateral engagement and offering of advice based on a deep personal understanding of the Mentee’s prior experiences, strengths and weaknesses, personal aspirations, values, and professional goals.

feedback about student needs to Natasha Harris (CoS Associate Director for Diversity) and the Academic Advisors. They will receive training to orient them to the ELSS program as well as the principles of culturally aware mentoring. Mentors will also be invited to participate in guided discussions throughout the academic year to share best practices, discuss challenges, identify common solutions, and form a community that fosters mentoring at Purdue.

ELSS MENTORING PROGRAM GOALS

- Provide academic role model and help build sense of belonging and science identity for the Mentee
- Recognize and respond to cultural diversity in the mentorship relationship
- Help the Mentee articulate short and long-term goals and design an action plan to achieve these goals
- Monitor Mentee's progress towards achieving short and long-term goals
- Improve the Mentee's leadership, teamwork, creative thinking, decision making, and interpersonal skills
- Explore and discuss with the Mentee different career paths
- Facilitate community building and career advancement for both Mentors and Mentees
- Provide psychosocial support
- Direct Mentee to Purdue resources for student success as needed

Culturally aware mentoring involves mentoring practices in which Mentors recognize their own culturally shaped beliefs, perceptions, and judgements and are cognizant of cultural differences and similarities between themselves and their Mentees.

MEETING YOUR MATCH

Mentors and Mentees will be introduced via email and will be requested to set up their first meeting. This can be virtual or face to face. It can occur in an office or a more relaxed setting (e.g. over coffee or lunch time). During the first meeting, Mentors and Mentees should set ground rules and decide on the frequency and scheduling of future meetings. Short weekly meetings are recommended for the first semester and monthly meetings thereafter. Mentors will be requested to provide feedback about their views on student needs. Mentors and Mentees will be asked to participate in a survey to provide anonymous feedback about the mentoring program on an annual basis. Concerns about students not meeting scholarship expectations of GPA average should be addressed to Natasha Harris, Associate Director of Diversity at the CoS who tracks student progress (see list of contacts).

Here are examples of topics that will help you and your Mentor/Mentee learn about each other (ask questions that you feel comfortable to discuss):

- What is important to you? (E.g., social justice, a healthy lifestyle, volunteering, money...)
- What is your background and professional experience? (I.e., what internships/jobs have you held?)
- What skills do you have and are proud of? (E.g., public speaking, math, writing)
- What training or courses have you taken recently, or plan to take?
- Which professional journals do you subscribe to, or want to subscribe to?
- Which skills do you desire to develop?
- How will a mentoring partnership help develop those skills?
- What attracted you to this program?
- What one thing can I do to ensure a positive experience for you in this partnership?

- What should I expect from you in this mentoring partnership?
- Star Wars or The Lord of the Rings?
- Summer or winter? Dogs or cats?
- Tell me about your most recent vacation.
- If money weren't an object, where in the world would you buy property?
- What is your favorite restaurant?
- **How often will we meet?**
- **What is the best way to communicate with each other?**
- **How should we prepare for each meeting?**

(UCSF Alumni Mentoring Program Guidebook)

Examples of topics to consider throughout the mentoring meetings

- **Setting short-term and long-term goals** and deciding on timeline of goals
- Identifying **action plan** to achieve goals – **monitoring progress on a regular basis**
- Applying for work/internships
- Balance time and priorities
- Building rapport with difficult people
- Career paths
- College experience
- Communication skills (interpersonal, as well as professional posters and presentations)
- Coping with challenges
- Effective presentations
- Gain skills for presenting self as a valuable candidate in the job market
- How to do better in classes and what opportunities should be taken advantage of
- How to look for opportunities (grad school, internships, etc)
- How to write a proposal
- Improve resume – tailoring it
- Interviewing skills
- Learn about their Mentors journey to where they are
- Networking. Online professional presence (ie LinkedIn)
- Professional societies
- Reading scientific papers
- Research opportunities
- Research project – Sr. Thesis and how to accomplish it
- Shadowing/facilities tour
- Study challenges/absorbing information/processing information
- What can you get from a job besides a paycheck
- What is the experience really like when you work in a particular job/field
- Working in a lab/group
- Why are each of you in the program – this can help identify specific needs or goals

(UNM Information for Mentors)

An effective mentoring relationship develops and evolves over time. The student benefits from the Mentor's guidance and support. Later, both Mentor and Mentee deepen their working relationship, perhaps collaborating on projects. Finally, both Mentee and Mentor may redefine their relationship as one of equals, characterized over time by informal contact and mutual assistance, thus becoming true professional colleagues. Thank you

for being part of this important process that can become a life-changing experience for both the Mentee and the Mentor.

REFERENCES

Math Alliance, Mentoring Plan

Purdue University, Department of Mathematics, Graduate Student Mentoring Guidelines

University of San Francisco, Alumni Mentoring Program Handbook

University of Michigan, How to mentor, A Guide for Faculty

University of New Mexico, Student Success Center, Information for Mentors

The science of effective mentorship in STEM. Online guide version 1.0

ACKNOWLEDGEMENTS

Special thanks to **Natasha Harris, CoS Associate Director for Diversity**, and **Dr David Goldberg, Professor of Mathematics and Executive Director of the [National Math Sciences Alliance](#) at the College of Science**.

FURTHER RESOURCES

The science of effective mentorship in STEM. Online guide version 1.0

<https://www.nap.edu/resource/25568/interactive/index.html>

Mentor training to improve diversity in science: A conversation on culturally aware mentoring (video)

<https://www.youtube.com/watch?v=FuDu1BZjvGw>

University of Minnesota online training modules for mentors (free registration for external users)

<https://ctsi.umn.edu/training/mentors/mentor-training>

Skills for successful mentoring: Competencies of outstanding mentors and mentees

https://my.lerner.udel.edu/wp-content/uploads/Skills_for_Successful_Mentoring.pdf

Purdue Center for Intercultural Learning, Mentorship, Assessment and Research – CILMAR

<https://www.purdue.edu/IPPU/CILMAR/>

Purdue Division of Diversity and Inclusion

<https://www.purdue.edu/diversity-inclusion/>

CONTACTS

Emerging Leaders Science Scholars Program	<i>Peristera Paschou</i> <i>Associate Dean Graduate Education & Strategic Initiatives</i> <i>Faculty Director for ELSS</i>	<ul style="list-style-type: none"> ✓ ppaschou@purdue.edu ✓ General Questions regarding Faculty Mentoring Program and ELSS
	<i>Natasha L. Harris</i> <i>Associate Director for Diversity</i>	<ul style="list-style-type: none"> ✓ https://www.purdue.edu/science/Multicultural_Science_Programs/index.html ✓ harri326@purdue.edu ✓ General Questions, connection for EL scholarship, academic advisors, ODOS, etc.

Academic Advising	<i>Lynne Horngren Director of Undergraduate Education and Academic Advising</i>	✓ horngren@purdue.edu
ELSS University Residence	<i>ELSS Learning Community, Harrison Hall</i>	✓ 1-765-494-2640 ✓ harrisonhall@purdue.edu
General Help (for Purdue parents)	<i>From Purdue Office of Dean of Students</i>	✓ 1-765-495-HELP ✓ (1-765-495-4357)
Counseling and Psychological Services (CAPS)	www.purdue.edu/caps/ TEL: 494-6995	✓ psychological testing, individual & group therapies, alcohol & drug programs ✓ medication care & management
Office of the Dean of Students (ODOS)	www.purdue.edu/odos/ TEL: 494-1747	✓ <i>counseling (& intervention) for academic problems</i> ✓ <i>referral to other student services</i>
Purdue University Student Health Center (PUSH)	www.purdue.edu/push/ TEL: 494-1700	✓ Medical appointment, testing ✓ medication care & management
Student of Concern Report	https://cm.maxient.com/reportingform.php?PurdueUniv&layout_id=12&qa=2.87720152.138572491.1625672589-379022442.1570212112	✓ <i>counseling (& intervention) for academic problems</i> ✓ <i>referral to other student services</i>
Financial Support	https://www.purdue.edu/odos/resources/financial.html	✓ <i>website will take you to multiple links about financial aid/support</i>