Fast Facts on FRI for Faculty

**What is FRI?** The Freshman Research Initiative (FRI) is a nationally recognized model of undergraduate education that joins the core missions of the research university: research and instruction. Educational research has shown that students who get involved in science research early in their undergraduate careers are more likely to develop critical relationships with faculty, complete a science major, graduate from college, and pursue graduate education or careers in science. This is especially true for students from backgrounds that are underrepresented in the sciences. Studies have also shown that research experiences help undergraduates develop scientific skills, knowledge, and identity, as well as ways of thinking that are important for success in science. FRI is unique in providing an avenue for undergraduates to participate in the research at scale.

**How does FRI work?** Over 750 freshmen enter the program each year, joining one of 25+ “research streams,” which are co-directed by a faculty principal investigator and a Ph.D.-level research educator (RE). With day-to-day guidance from the RE and mentorship from undergraduate peer mentors and a graduate teaching assistant, students carry out research projects connected to the PI’s research interest.

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<tr>
<th>Size</th>
<th>Timeline</th>
<th>Credit</th>
<th>Space</th>
<th>Summer research</th>
<th>Support</th>
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<td>Streams involve up to 40 students at a time</td>
<td>Students start in spring of freshman year, through summer and into fall of their sophomore year, making progress on their projects and producing publishable research.</td>
<td>Students typically earn lower-division credit in spring, and upper-division or independent research credit in fall - fulfilling degree requirements.</td>
<td>Students conduct their research in teaching lab space – the lab is open 20 hours per week and students work on research for at least 6-10 hours per week.</td>
<td>A handful of students stay on each summer to work full-time on stream research.</td>
<td>An average stream cost is $80-100k. The instructional budget of the College covers between 50-75% with the rest supported by the PI or external funds.</td>
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F.A.Q.s about FRI:

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<tr>
<th>Question</th>
<th>Answer</th>
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<td>Will the PI be in lab all day with students?</td>
<td>No, the RE, TA and Peer Mentors guide the students</td>
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<td>Will the PI have to grade reports?</td>
<td>No, the Research Educator manages grading and assessment</td>
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<td>Will the PI be ordering supplies and reagents for the students?</td>
<td>No, the Research Educator, through the FRI, maintains the lab</td>
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<td>Will the PI be required to take on a teaching load?</td>
<td>No, the RE teaches the class but the PI participates in some class discussions to provide context about the work and how it ties into the overall research goals</td>
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<td>Will the PI need to track the students for assessment data?</td>
<td>No, the FRI program follows the students and monitors their outcomes</td>
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What can FRI do for you?

- **Broaden the impact of your research**
  FRI has infrastructure in place to involve up to 40 undergraduates per year in your research

- **Prepare a diverse workforce**
  More than 50% of FRI students are from backgrounds that are underrepresented in science – FRI has a disproportionately positive impact on these students

- **Test new ideas and launch new collaborations**
  Streams are a low-risk place to try high-risk ideas and initiate collaborations – think of it as your scientific “sandbox”

- **Prepare REs to pursue diverse career paths**
  Streams are on-the-job training for Ph.D.-level scientists to learn to teach and mentor undergraduates

- **Teach in ways that are known to be effective**
  Research experiences improve students’ understanding of what science is and how science is done, and help students persist in science and find a career fit

- **Establish a pipeline**
  Students from your stream can join your group as skilled interns, already knowledgeable about and interested in your research

What can you do for FRI?

1. Launch your own stream
2. Plan a grant proposal incorporating FRI as a component
3. Collaborate with another faculty member on a stream – each contributing a portion to the overall stream
4. Propose a side project of your own that can be implemented in an existing stream
5. Provide spots in your lab for FRI-trained students to continue active research

I’m interested... what next? Contact .....  
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