



Preparing people to lead extraordinary lives

FYRE Program

FIRST YEAR RESEARCH EXPERIENCE LIVING/LEARNING COMMUNITY

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What is FYRE?

- Funded by the Howard Hughes Medical Institute
- Freshmen STEM majors join a full-year research-intensive STEM learning community (First Year Research Experience (FYRE)):
 - Academic and social support services
 - Introduction-to-research second semester freshman seminar course
 - Three-week summer research residency following their first year



FYRE in the 2014-2015 School Year

- 80 freshmen STEM majors from over 200 applications
 - 65% female
 - 15% Asian, 5% Black, 17% Hispanic, 1% Hawaiian/Pacific Islander, 9% Multi-ethnic, 50% White, 2% Unknown
 - Average ACT 27.1



FYRE in the 2014-2015 School Year

- Recruited in Fall 2014
- Introduction-to-research second semester freshman seminar course
 - Biology, chemistry, physics, environmental science, mathematics, statistics, computer science
- Three-week summer research residency following their first year



Impact

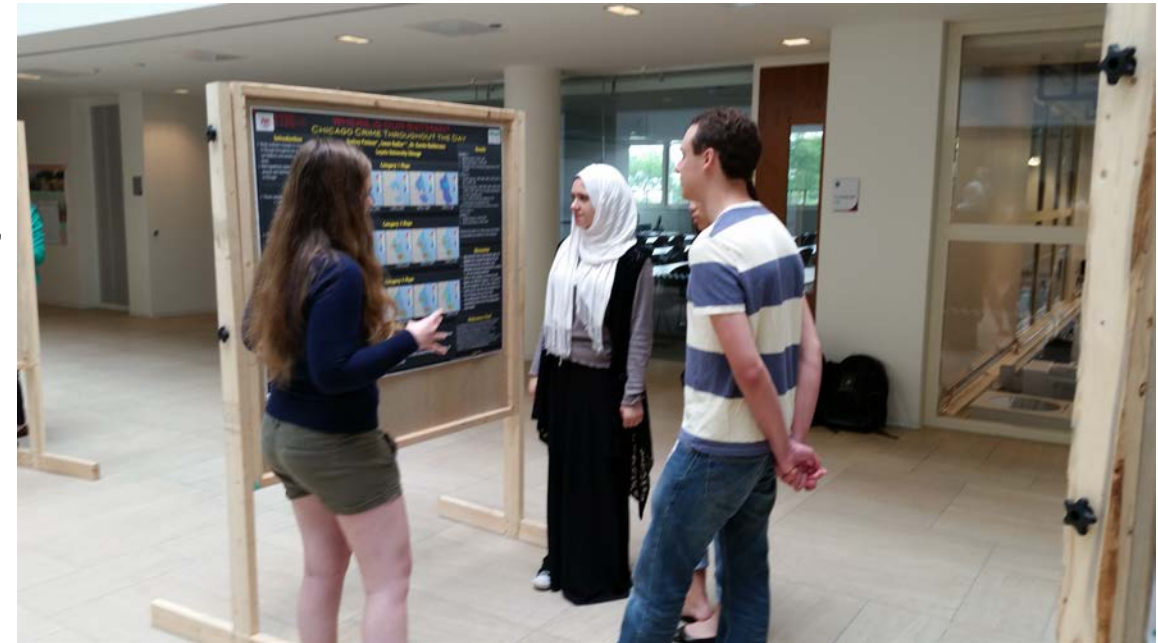
- At least seven students continued research with their mentor throughout the summer or during this school year.
- Fourteen students signed up to be online mentors to high school students conducting research.
- Two students applied to McNair Program.
- Students attended information sessions on applying for Loyola Undergraduate Research Opportunity Programs (LUROP).

Impact

- Maintained positive views or improved their views in several categories:
 - Communicate with professors
 - Discuss course content with students outside of class
 - Work on a professor's research project
 - Make at least B average
 - Graduate with a STEM major
 - Join a club related to a STEM major
 - Get tutoring help in specific courses

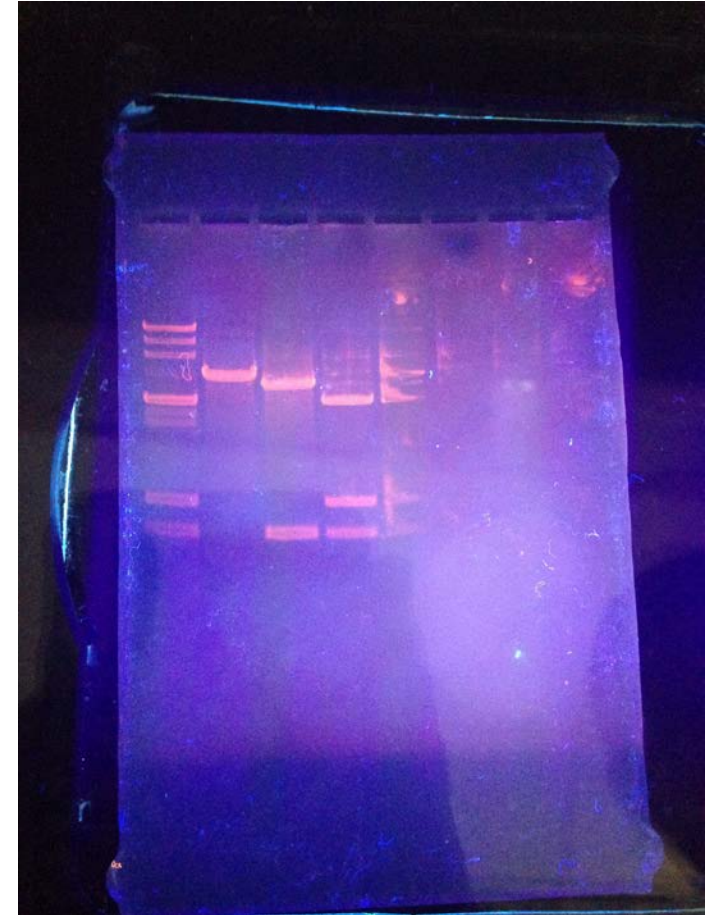
FYRE in the 2015-2016 School Year

- 118 freshmen STEM majors from 130 applications
 - 70% female
 - 34% Asian, 5% Black, 11% Hispanic, 1% Native American, 1% Hawaiian/Pacific Islander, 4% Multi-ethnic, 45% White
 - Average ACT 27.2



FYRE in the 2015-2016 School Year

- Recruited with application for housing.
- Full program: Learning Community, Introduction to Research, 3-week Summer Research Experience
 - Biology, chemistry, physics, environmental science, neuroscience, mathematics, statistics, computer science



FYRE Living/Learning Community

Learning Outcomes:

As a result of participating in the FYRE Learning Community, all students will:

- Demonstrate an increased understanding of research and the skills necessary to conduct research.
- Analyze how researchers use evidence to draw conclusions and to discuss further research questions through reading scientific articles.
- Increase their knowledge of available careers in STEM fields.
- Present their ideas to their colleagues both orally and in writing.
- Apply norms of ethical research and know the responsibilities of researchers in ensuring that research is carried out in an ethical manner.
- Form identities as members of the scientific community.
- Develop an increased understanding of self and others with regard to socially constructed identities as well as power and privilege.

FYRE Living/Learning Community

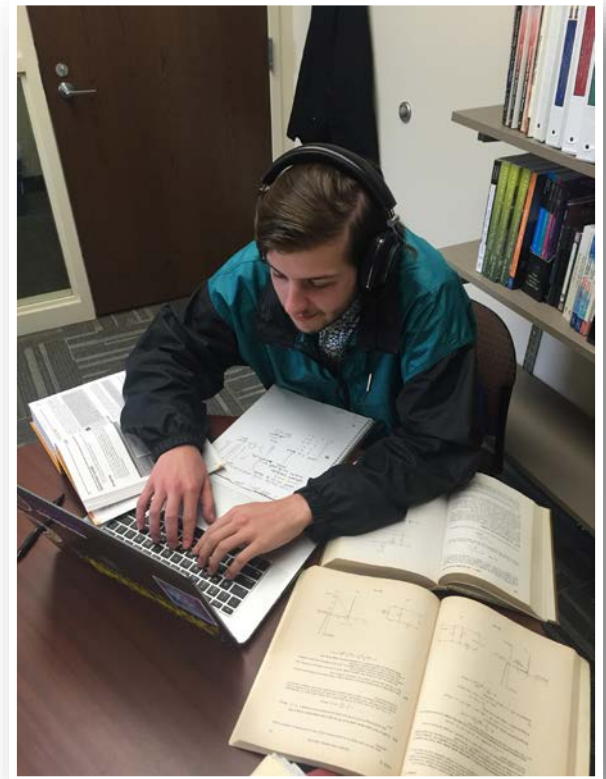
Monthly Meetings:

- Centered on themes to provide developmentally appropriate growth for students in their understanding of STEM.
 - Scientific Reading
 - Scientific Writing
 - STEM Careers
 - Scientific Research
 - Scientific Communication
 - Career Development
- Learning Community Assistants, RA's, Faculty, and Resident Director provide content that relates directly to the themes.



Introduction to Research Course

- Second semester
- UNIV 102: First Year STEM Research Intensive Seminar
- An introduction to research practice, ethics, and career opportunities in STEM fields as well as to the projects being conducted by Loyola faculty, staff, and students right here on campus or at the Loyola University Retreat and Ecology Center (LUREC).



3-Week Research Residency

Overall goals:

- Build a community of STEM students, faculty, and professionals that support young STEM majors as they form identities as members of the scientific community, thus improving the likelihood that they will persist in STEM majors.
- Continue research beyond in one of LUC's existing research programs or as an undergraduate intern.



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