



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



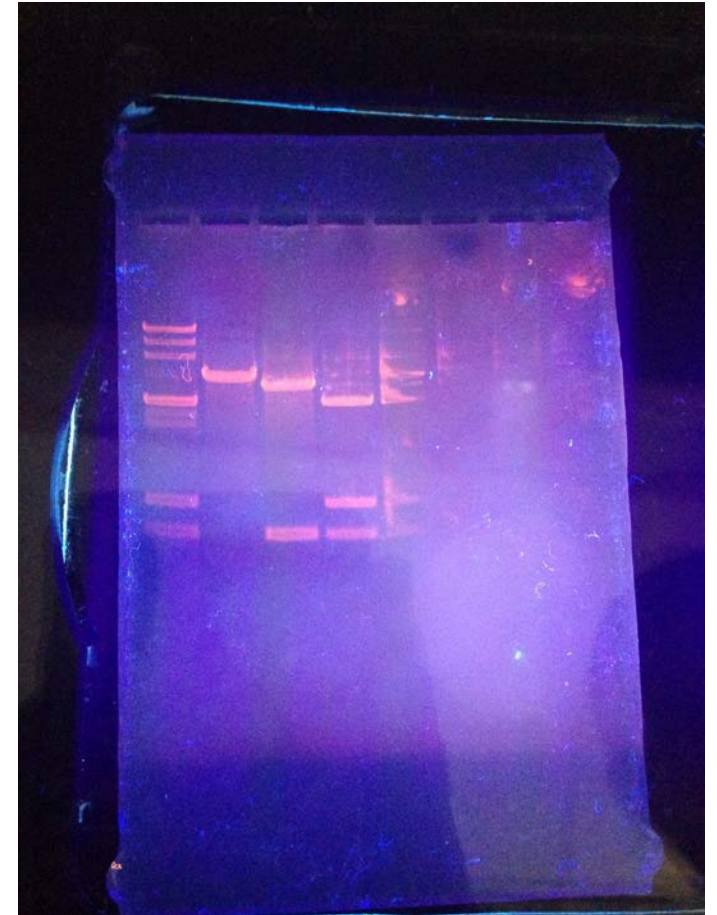
FYRE 2014-Present

- STEM Majors
- 2014-2015: 80 freshmen recruited in fall 2014
- 2015-2016: 118 freshmen recruited in spring 2015
- 2016-2017: 157 freshmen recruited in spring 2016



FYRE Experience

- Recruited as they are selecting Loyola.
- Apply with application for housing.
- Learning Community, Introduction to Research, 3-week Summer Research Experience
 - Biology, chemistry, physics, environmental science, neuroscience, mathematics, statistics, computer science



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.



Three-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.



Impact

- At least 30 students continued research with their mentor throughout the summer or during the following school year.
- Fourteen students signed up to be online mentors to high school students conducting research.



Impact

- Five students applied to McNair Program.
- Students attended information sessions on applying for Loyola Undergraduate Research Opportunity Programs (LUROP).
- Over 50 students applied for LUROP programs, to REUs, or for internships at Loyola or other sites.



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 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.

Acknowledgements

Father Justin Daffron

Dr. Dale Tampke

Kelsey Plunk

Scott Harris

Faculty who served as mentors: Mark Albert, Earvin Balderama, Miguel Ballicora, Daniel Becker, Brian Cannon, Paul Chiarelli, Hee Yeon Cho, Jacob Cizek, Rodney Dale, James Devery, Hariklia Dimitropoulos, Chad Eichman, Alanah Fitch, Daniel Graham, Ping Jing, Laurie Jordan, Roberta Lammers-Campbell, Wei-Tsung Lee, Dali Liu, Carolyn Martsberger, Jennifer Mierisch, Joseph Milanovich, Stephen Mitten, Ken Olsen, Agnieszka Orlof, Robert Polak, Lamya Saleh, Martina Schmeling, Bree Sines, Zachary Waichman, Weronika Walkosz

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