



Plant Science for Global Food Security (PSGFS)

An international research experience for undergraduates

NSF IRES # 2106718

2022-2024



What is PSGFS?

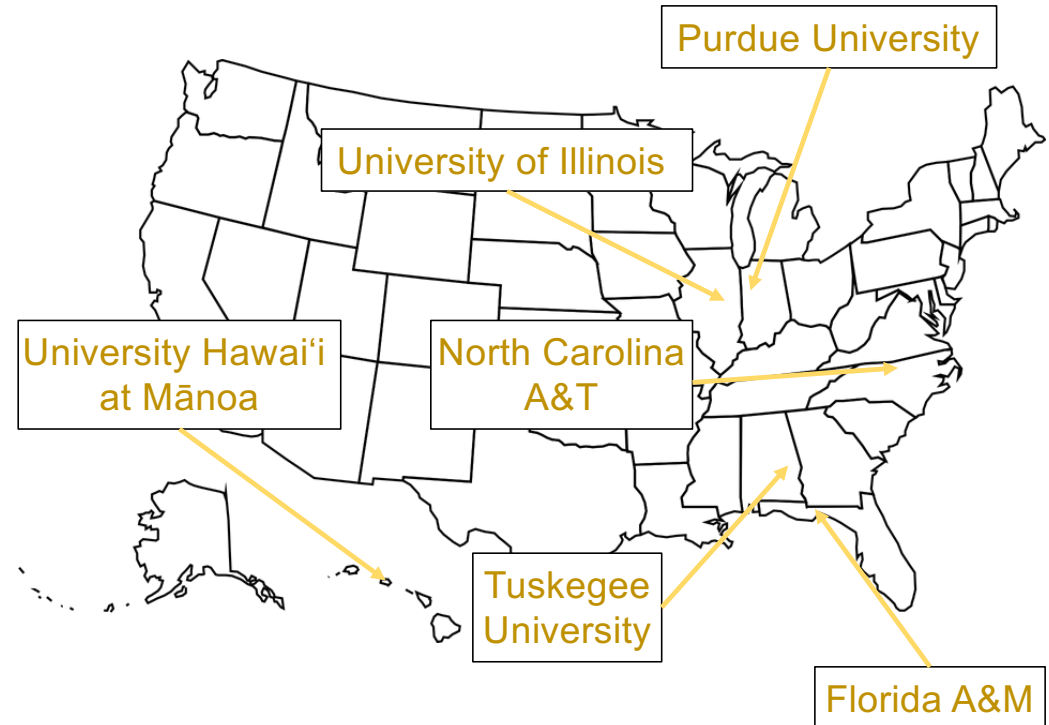
- Hands-on research experience and training program in international agriculture and plant science focusing on rice
- Six-weeks long and hosted by the International Rice Research Institute (Philippines) during summer break
- Funded by the National Science Foundation
- Led by Purdue University
- Recruits students from six U.S. universities



PURDUE
UNIVERSITY



Where we recruit from:



What does PSGFS offer?

You will experience three weeks of hands-on research in a multi-cultural setting

and

participate in a three-week training course on all aspects of rice research and production

Moreover, you will make new friends from far and near, get a taste of the challenges and rewards of international agriculture research, and experience how science can make an impact in the quest for global food security.

How about costs?

In terms of costs, we cover pretty much everything!

This includes:

- Airfare and lodging for your six-week program
- Research materials and fees
- Cost of training course
- Overseas per diem (for meals and local travel)
- Insurance, passport, and visa

Am I qualified to apply?

- Applicants must be U.S. citizens
- Students must be enrolled at university during the academic year *after* the summer participating in PSGFS
- We are targeting **current sophomores and juniors**, but outstanding freshman will be considered as well
- Successful applicants will have an interest in international agriculture, research, and plant science
- Under-represented minority students especially encouraged to apply

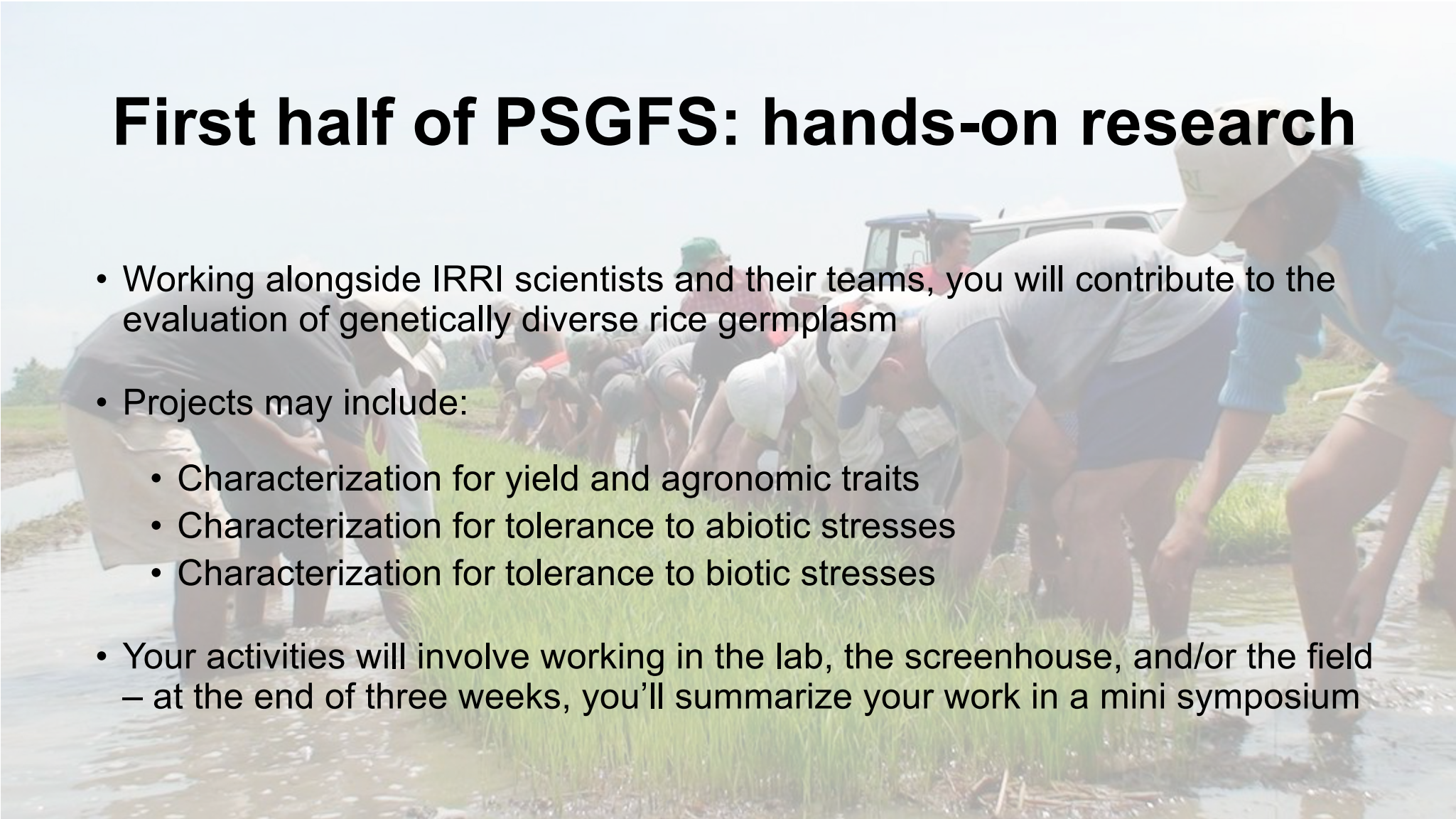
The background image shows the International Rice Research Institute (IRRI) building, a long, modern structure with a glass facade and a central entrance. The building is surrounded by a large, open area with dry grass and several tall palm trees. The sky is clear and blue. The title "International Rice Research Institute" is overlaid on the right side of the image in a large, bold, black font.

International Rice Research Institute

- IRRI (pronounced the same as the “Erie” in Lake Erie)
- The world’s foremost research organization in rice science
- Located in Los Baños, Philippines
- Home to 103 internationally recruited scientists and 877 nationally recruited scientists (2020)
- Historically receives around 300 international scholars (e.g., interns, graduate students and postdoctoral associates)

First half of PSGFS: hands-on research

- Working alongside IRRI scientists and their teams, you will contribute to the evaluation of genetically diverse rice germplasm
- Projects may include:
 - Characterization for yield and agronomic traits
 - Characterization for tolerance to abiotic stresses
 - Characterization for tolerance to biotic stresses
- Your activities will involve working in the lab, the screenhouse, and/or the field – at the end of three weeks, you'll summarize your work in a mini symposium



Second half of program: RR2P training course

- Rice: Research to Production (RR2P) is a short-course hosted at IRRI
- A long history of participation by U.S. students (previously supported by NSF Plant Genome Research Program and led by S. McCouch of Cornell Univ.)
- Brings PSGFS participants together with other RR2P attendees from around the world



RR2P overview

- Field experiences in rice cultivation
- State-of-the-art lab techniques
- Seminars and lectures by IRRI scientists
- Visits to partner agricultural organizations and socio-cultural sites



Some course highlights...



Getting your feet wet with traditional and modern land preparation techniques



Hiking the Banaue Rice Terraces



Interviewing rice farmers



Mastering crossing methods

***We hope to see
you soon!***

TO APPLY:

<https://ag.purdue.edu/department/ipia/where-we-work-pages/psgfs.html>



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