Polytechnic Research Impact Area Graduate Recruiting Program
2020-2021 Academic Year

In preparation for the 2020-2021 academic year, this recruiting program offers Polytechnic faculty the ability to recruit graduate students through selected interdisciplinary and collaborative projects. The Research Advisory Council will use a proposal process to select 4-6 projects competitively. Project leads will be given the opportunity to recruit and hire at least 1 new graduate student as a Research Assistant for the 2020-2021 academic year (9 month appointment). The premise of this program is to enable faculty to recruit and increase the number of exceptional new graduate student applicants to the Ph.D. in Technology program. The longer term goal is to increase the research productivity of the Polytechnic – with more peer-reviewed publications and more externally funded projects.

Phase I: Polytechnic faculty submit written proposals due November 6, 2019, 5:00pm

Proposals should be 12 pt font, with 1-inch margins and include:
- Project Summary (1-page maximum)
    - Project Title
    - List of PIs involved, home departments, Research Impact Area(s)
    - Project summary (including problem statement, research questions, and approach)
    - References (not included in page limit)
- Impact Statement (1-page maximum)
    - Expected impact to PI/co-advisors
    - Expected impact on the Polytechnic
    - Broader impact to society
    - Strategies for generating new, extramural grant support
- Recruitment strategy (1-page maximum)
    - Message to recruits
    - Activities (i.e. advertising venues, visits to universities)
    - Diversity plan
- Results from prior internal support received in last 3 years (July 1 2016 – current), including but not limited to seed grants, equipment grants, travel support, post-doc support, graduate student support, undergraduate student support, summer support (1-page maximum)

Guidelines:
- All project advisors/co-advisors should be active members of at least 1 Research Impact Area. Projects should directly align with one of the relevant Research Impact Area's vision statements (listed below).
- Preference will be given to proposed projects that are clearly interdisciplinary and have 2 or more co-advisors. 1 Advisor should be designated as the lead.
- Preference will be given to projects who are led by a junior faculty member.
- Prior or existing seed grants do not automatically exclude a PI from proposing a new (and different) project.

Funding support:
- The Research Office will provide funding support for a doctoral student's 1st year through a 9-month research Research Assistantship.
- The Research Office will competitively award 2nd year funding to a sub-set of students through a 9-month Research Assistant. Graduate students who are not awarded a Research Assistantship in their second year may be provided Teaching Assistantships through a relevant Polytechnic department.

Project Proposal Review:
- Proposals will be reviewed by administrators and Research Impact Area Fellows based on the novelty of the idea, likelihood to stimulate new external funding, the collaborative and interdisciplinary nature of the team, strength of the problem statement and approach, relationship of the research to the relevant Research Impact Area.

Phase II: Student application to the PRIA graduate program
Students will apply to the PRIA graduate research assistantship program through the Graduate School Application process. Each student must attach a separate PRIA form and essay to their application as a "Supplemental Material." The PRIA form will be available upon request.

Review:
- Submitted applications will pass through the normal university, college, and academic program application review process and issue doctoral program acceptance letters.
- The relevant awarded faculty project lead must be willing to chair the doctoral committee of the selected student.
- Students will be reviewed by the Research Office to ensure quality and adherence to the PRIA research assistantship application guidelines.
- For any project that receives more than 1 acceptable application, the lead PI will select the student to fill the open position.

RIA Vision Statements
Future Work and Learning
Technological advances like artificial intelligence, automation, and digitalization are changing the work landscape and displacing workers at all levels. Organizations are critically suffering from the lack of employees who possess competencies needed to excel in a rapidly changing workplace while increasing numbers of unemployed or underemployed individuals cannot adequately support themselves. Neither decision-makers nor researchers fully understand the interconnected factors or solutions that will enable society to successfully take advantage of these technological advances. Therefore, we will scientifically study the intersection between work, learning, and technology to enable an inclusive and cutting-edge workplace of the future through participation, engagement and lifelong learning.

Holistic Safety and Security
Population growth and innovation are driving increasingly complex socio-technical infrastructures and system sustainability and resiliency are needed. But there continues to be inquiry into the safety, potential threats, and security of people and systems. HSS RIA has the unique capacity to bridge the gaps between theory and application, the flexibility of expertise and approaches, and a proven record of innovation. Therefore, our vision is to bring a holistic approach to create an increasingly sustainable, safe, and secure society by applying and integrating innovative State of the Art technologies into applications in the real world

Realizing the Digital Enterprise
Computing systems and manufacturing are increasingly embedded in our physical world, with automation, intelligence, scale, and interconnectedness bridging the physical and digital worlds through visible and invisible infrastructure. However, this interconnectedness brings unanticipated social consequences and volatile patterns of acceptance and use that impact personal and collective well-being. Our vision is to pair technological capability and social responsibility to create successful cyber–physical experiences.

Submit all proposals as a single PDF document to Felicia Anderson, fanderso@purdue.edu, by Wednesday, November 6, 5:00pm.