URBANOWICZ- POSTDOCTORAL RESEARCHER MENTORING PLAN

Dr. Urbanowicz leads the Plant Biopolymers Group (PBG) at UGA's Complex Carbohydrate Research Center. Currently, the group consists of more than 20 members, including 5 graduate students, 6 post-docs, 2 research scientists, 4 full time laboratory technicians and multiple undergraduate research assistants. My training style emphasizes cross-disciplinary research, teaching, and mentorship at all levels. I have mentored seven doctoral students (including five currently in training), have hosted three visiting doctoral students (including a ASBMB PROLAB fellow from Argentina currently in training), and served on seven graduate student committees. In addition, I have trained seven post-doctoral researchers, with six currently in training. Three of my students have been supported by the NIH T32 Glycobiology Training Program here at UGA (Kristen Thorne, Peter Smith, Lubana Shahin). All of my students and postdocs work closely with undergraduate research assistants, and all senior graduate students and post-docs have mentored both undergraduate and rotating graduate students. Group members have obtained national and international travel awards to conferences (e.g. annual Society for Glycobiology meetings, International Plant Cell Wall Meeting, Gordon Research Conference on Plant Cell Walls, Gordon Research Conference on Carbohydrate Active Enzymes, Center for Bioenergy Innovation Annual Meetings) where they have shared their data with the broader community their data in both oral and poster formats.

Training and Technical Skills Development

Breeana Urbanowicz and members of her groups will work closely with the post-docs (PDs), who will be responsible for specific research goals within the overall scope of the proposed studies. Guidance of the PDs will include regularly scheduled (biweekly) and more frequent *ad hoc* meetings to discuss experimental design, interpretation of results, and future research directions. PDs will be expected to take the lead on writing research papers describing their results and to present their data at regular lab meetings and national research meetings. PDs will also be encouraged to spend 10-20% of their time developing and implementing their own ideas within the overall scope of the proposed research program and to supervise undergraduates and graduate students working on the proposed studies, with guidance of the PI. PD training will stress fundamentals of laboratory safety and ethical practices in science, and adhere to the University of Georgia guidelines for hiring and mentoring of post-doctoral associates (http://research.uga.edu/opa/).

The Complex Carbohydrate Research Center at the University of Georgia provides an outstanding training environment. The CRCC is well-equipped for cutting-edge research in carbohydrate science, with diverse types of sophisticated instrumentation and faculty with broad expertise in developing methods to obtain and interpret data from these instruments. The research atmosphere of the CCRC strongly encourages and fosters interaction and collaboration. Major equipment is shared among four research laboratories which are all located in the same building in close proximity to each other.

Communication Skills Development

- Post-doctoral researchers will participate in all-hands meetings for their project team.
- Post-doctoral researchers will also chair and participate in weekly theme-specific virtual meetings with graduate students and their assigned senior personnel/co-PIs and will be expected to present their on-going research.
- Post-doctoral researchers, with assistance from their advisors, will publish their work in journals corresponding to their disciplinary interests.
- Post-doctoral researchers will be required to attend at least one or more national research conferences per year. They will be encouraged to chair/co-chair technical sessions at national conferences.

Leadership Opportunities

- Post-doctoral researchers will be provided opportunities to serve as mentors to undergraduate and graduate researchers; become engaged in reviewing technical manuscripts; and become involved in national professional societies directed at digital agriculture and biomass valorization.

Mentorship (Career Planning & Professional Development)

- Post-doctoral researchers upon joining the PBG will develop an individual development plan (IDP) to assist in developing an actionable career plan. Dr. Urbanowicz and co-mentors are committed to assisting the post-doctoral trainees in reaching their goals and will provide career advice, mentorship, and assistance in identifying local resources which the trainees may leverage to achieve their career goals. Additionally, the PI/Co-PIs and senior personnel for the NIIAB that the post-doctoral trainees are paired with will have bi-annual meetings to discuss the progress of the trainees in achieving the actionable goals laid out in their IDPs.

Grantsmanship

- For those post-doctoral researchers interested in pursuing an academic career, effort will be set aside for post-doctoral researchers to engage in the development of their own or collaborative grant, user facility, and supercomputing allocations proposals. Post-doctoral trainees whose career goals align with seeking academic appointment will be expected to prepare at least one proposal per year.

Mentorship Evaluation

- To ensure post-doctoral trainees are obtaining adequate training from senior personnel/PIs, an annual survey of post-doctoral trainees' experiences will be developed and feedback from surveys will guide training efforts in the following years.