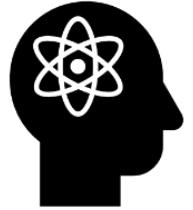




Preparing for Post-Graduate Research and Career Opportunities



Virtual CAIRIBU ARCTICS Community Forum, August 17, 2022

The goal of this CAIRIBU ARCTICS Community forum was to discuss various avenues and opportunities for post-graduate life. Panelists included **Bernadette Zwaans, PhD** (Co-PI, Beaumont Hospital-Oakland University School of Medicine P20 Exploratory Center); **Dale Bjorling, DVM, MS** (Co-PI, UW-Madison KURe K12 Program); **Siobhan Sutcliffe, PhD** (Co-PI, T32 Program in Clinical Outcomes Research Training in Women's Health); and **Li Xin, PhD** (Professor, Pritt Family Endowed Chair at the University of Washington).

This summary consolidates primary themes of the forum.

Postdoctoral Research and Fellowship Opportunities

- Both Drs. Zwaans and Xin currently seek postdoctoral scientists or research scientists for their labs.
 - **Dr. Zwaans'** research focuses primarily on interstitial cystitis, underactive bladder/aging bladder, and radiation cystitis. She started her post-graduate research career with an independent K01 award and has since acquired and maintained funding from multiple sources. She said that a background specifically in urologic research is less important in bringing someone into her lab than key qualities about the candidate, including his/her/their motivation and enthusiasm for research.
 - **Dr. Xin** is interested in tissue homeostasis and signaling and the progression of disease, primarily in the prostate. While he uses mostly molecular biology and cell biology techniques in his research, Dr. Xin concurred that candidates with urologic research backgrounds, let alone experience in the specific methods and techniques he uses in his lab, may be difficult to find. He therefore is interested in identifying motivated individuals willing to learn new techniques and expand their research capacity.
- Drs. Bjorling and Sutcliffe are not currently seeking candidates for their training programs but will likely be doing so in future cycles.
 - **Dr. Bjorling** has led the UW-Madison K12 Multidisciplinary Urologic Research Program for 2 grant cycles and is currently applying for a third. Eligible candidates have completed postdoctoral or fellowship requirements and either already have a position at UW-Madison or will get one in order to be part of the program. Multiple K12 Scholars have successfully transitioned into independent clinical/translational or basic science research careers. The Program aims for a balance between basic and applied research among its scholars; scholars' research span a wide breadth of areas in the genitourinary tract.
 - **Dr. Sutcliffe's** training program at Washington University is slightly different. Hers is a T32 Program, a mechanism soon to be phased out (more details on that below). Dr. Sutcliffe's primary objective is to augment the research training of clinical fellows and, vice versa, the clinical knowledge of PhD researchers. Eligible candidates are post-graduate or post-residency and interested in prevention or health outcomes research related to female lower urinary tract disorders.



Start Preparing Early

All panelists agreed that the earlier a graduate student begins to think about next steps, the better. **Dr. Bjorling** said, “*You don’t want to wait until the last couple of months of your graduate training.*” While it may seem difficult to develop plans amidst completing multiple research projects and other graduate school requirements, all agreed it is important to learn about the different pathways that are available and the basic requirements that each involves. **Dr. Zwaans** suggested talking to PIs and others who are advertising for positions to learn about what they are looking for, even if not necessarily ready to apply for a specific position just yet. All agreed that prospective candidates should demonstrate metrics of their productivity. **Dr. Sutcliffe** said these include publications. While students are working on multiple projects, she said, there should be a goal of achieving at least a few publications prior to graduating. Publications in higher-impact journals are especially significant. For those applying to positions where a research proposal is required (such as a K12 Program), candidates must also be able to write at a level to where the proposal could be reviewed favorably in a competitive setting.

Specific Preparation Strategies

- **Workshops and other events targeted to graduate students.** Students should seek these out. Several panelists, as well as NIDDK Program Officers **Julie Barthold, MD** and **Victoria Spruance, PhD**, touted the benefits of American Urological Association programs such as the [AUA Early-Career Investigators Workshop \(ECIW\)](#). This is an annual event usually held in the fall. Approximately 30 nominees are selected to participate each year. [The Call for Nominations for the 2023 ECIW will open in spring 2023.](#) The AUA covers travel costs, lodging, and meals; nominees pay only the registration fee (which is lower for AUA members).
- **Online AUA course on establishing independence.** **Dr. Xin** is faculty for a virtual AUA course (directed by Dolores Lamb, PhD, HCLD and co-taught by Margot Damaser, PhD) that could benefit students and early-stage investigators. The course is [“Establishing Your Independent Urologic Research Lab,”](#) and is complimentary for AUA members (and \$39 for non-members). It’s an online course in 4 modules – could be viewed individually or in small groups. While it focuses on establishing independence as a urologic investigator, **there are aspects of the course that would help graduate students begin to think about the skills they will eventually need,** which could inform their “next steps.”
- **Writing.** All agreed that writing skills – whether writing manuscripts for publication or research proposals, is an important preparation strategy. As noted earlier, being able to write competitive grant applications is important and requires practice. There are many institutional resources available for this. **Grace Morales**, graduate student at Vanderbilt University, said she took a grant writing course as part of her PhD training at Vanderbilt University, “which has helped SIGNIFICANTLY,” she wrote. Dr. Spruance put a link in the chat to various grant-related podcasts from the National Institute of Neurological Disorders and Stroke (available at <https://ninds.buzzsprout.com>).
- **Learning from others.** **Hannah Miles**, graduate student at UW-Madison and moderator of this CAIRIBU ARCTICS Community forum, said she has benefited from being around others who are further along in their training and learned from their examples.
- **Networking early and often.** Some successful independent investigators have sought out potential mentors at meetings and conferences. Some of these meetings could result in fruitful postdoctoral opportunities. Student could begin by approaching someone at a meeting whose research is interesting and inquiring about current or future postdoctoral opportunities. Drs. Xin and Bjorling reminded to inquire about funding availability.
- **Know where the resources are.** The [CAIRIBU website](#) contains A TON of grant writing, mentoring, and other trainee-specific resources. Look for [“Trainee Resources”](#) on the CAIRIBU website main menu. Some of these are:

- **CAIRIBU ARCTICS Community forums.** The schedule for 2022 forums is available; materials and recordings from prior forums are on the [CAIRIBU YouTube channel](#) and linked on the website.
- **CAIRIBU mentorship network.** The CAIRIBU Interactions Core will seek to match you with a volunteer mentor from CAIRIBU leadership. Materials to help you develop your mentor-mentee relationship are also available, including links to create an Individual Development Plan.
- **Grant writing resources.** There are links to NIH videos that cover the basics of the NIH grants process and the study section process (including a glimpse into a mock review session). There is a link to the NIH “*All About Grants*” podcast and a link to a video that walks viewers through the PHS Human Subjects and Clinical Trials Information Form. Additionally, there are links to sample R01, R03, and K01 grant applications; descriptions of the differences between NIH applications; NIDDK budget data and funding guidelines; a free online “*Introduction to Proposal Writing*” course; and the Center for Scientific Review, which has information on the application process, planning and writing, application deadlines, submission and agreement, and initial review.
- **Stakeholder engagement.** Given the big push by NIH and other funding agencies to involve patients, providers, and other communities of interest in research, the CAIRIBU Interactions Core executed a 4-part workshop series earlier in 2022 led by a stakeholder engagement expert. Many materials related to this initiative – including readings, guides, and other resources – are available on the [”Stakeholder Engagement”](#) page of the “Research Resources” section.