

2018 GCC Annual Conference

Member-Generated Sessions Abstracts



1. **Title** - Graduate STEM Education for the 21st Century: Findings and Recommendations

Presenters – Alan Leshner

- a. **Room** - 325/326
- b. **Abstract** - In this session, Dr. Leshner will follow up on his 2017 GCC session and present the findings and recommendations from the recently released National Academy of Sciences, Engineering, and Medicine 18-month consensus study Graduate STEM Education for the 21st Century, which identifies policies, programs and practices that could better meet the diverse education and career needs of STEM graduate students in coming years, both masters and PhD. This involved a thorough investigation of policies, practices, and strategies to improve the alignment of graduate education courses, curricula, labs, and fellowship/traineeship experiences for students with the needs of prospective employers, and the reality of the 21st century workforce landscape. Ultimately, the report creates a set of national goals for graduate STEM education that can be used by research universities, Congress, federal agencies, state governments, and the private sector to guide graduate-level programs, policies, and investments over the next decade. The findings and recommendations contained in this report released in May 2018 are designed to help the nation's STEM graduate programs better meet the needs of their students and the prospective employers of their graduates, as well as the national needs for STEM expertise to address our toughest challenges. For this session, Dr. Leshner will provide his overview of the report, inviting considerable participation and questions from the audience.

2. **Title** - Part 1: Using ImaginePhD on Your Campus

Presenters – Teresa Dillinger, Annie Maxfield, Sarah Peterson

- a. **Room** - 213
- b. **Abstract** - Using ImaginePhD on Your Campus - A Train the Trainers Session for GCC Members. This session will introduce you to ImaginePhD, a free and confidential online career exploration and planning tool for the humanities and social sciences. You will gain information on how to present this tool to your graduate students on your campuses and receive workshop materials. Join us to learn how to make the most of ImaginePhD at your campus or institution. By the end of this session you will:
 - i. Have a working knowledge of ImaginePhD's function, brief history, and design
 - ii. Learn how students, faculty, and staff are currently using the site
 - iii. Engage with workshop curricula for use with graduate students, postdocs, and alums
 - iv. Discuss strategies for rolling out the tool on your campus
 - v. Gain information about plans for an ImaginePhD 2.0 version

To make the most of this session, please bring a laptop or tablet.

3. **Title** - Professional Development Course for PhD Candidates: A Case Study at Okinawa Institute of Science and Technology

Presenters – Remi Moss

- a. **Room** - 335
- b. **Abstract** - Okinawa Institute of Science and Technology (OIST) is a new graduate university that was established to increase Japan's presence in the international science community. To meet this goal, the university internationally recruits talented faculty, researchers, and PhD students and provides training and resources to help them succeed in academia and beyond.



A few years ago, OIST decided to incorporate professional development as part of the PhD program requirements. Credit-bearing multi-year Professional Development courses aim to train and prepare graduate students for life after the PhD program.

My goal in this presentation is to introduce the Professional Development courses and their structure and curriculum. I also plan to candidly discuss benefits of having a professional development course and the challenges that we face in managing it. Through OIST's case study, I hope to offer insights to other institutions that are entertaining the idea of implementing a required professional development course.

Structure of the presentation:

5 minutes: Introduction of the presenter and her institution

15 minutes: Professional Development courses at OIST

Professional Development 1 - How to succeed as graduate students

Professional Development 2 - It consists of two stages: Exploration and Skill Building. First-year PD2 students are encouraged to explore career options through workshops and information sessions. The objectives of this stage are for students to analyze and assess interests and values and to learn as much about different options that are available. At the end of the first year, we require students to select their career tracks from three options: Faculty/Postdoc, non-academia, or Innovation/Entrepreneurship. Based on the tracks that students have selected, second- and third-year PD2 students attend skill-building sessions that are relevant to their career tracks.

At the end of PD2, each student creates and submits individual PD2 portfolio. This portfolio is there to help students organize their thoughts on skills that they have acquired.

5 minutes - Presenting benefits of having the PD curriculum

- 1) Forces students to think about professional development early on
- 2) Forces students to explore options
- 3) Providing students the structured framework for professional and career development

10 minutes - Presenting challenges with which the PD curriculum struggles

The program could be beneficial to students and for the university, but it is not free from some challenges:

- 1) Faculty buy in - Some faculty consider this to be a waste of time
- 2) Attendance - I have encouraged students to own the professional development process, but maybe not the best approach as seen in low attendance in some sessions
- 3) Continuity - Making sure staffing is properly allocated to ensure continuity
- 4) Evaluation - How to evaluate if it's working or not

Being honest about the challenges for people who may want to replicate this at their institutions.

15 minutes - Discussion sessions on the challenges and general feedback

Participants discuss if this is something that's feasible at their institutions. If yes, also brainstorm how would they go about implementing this. If not, discuss the impediments.



4. **Title** - Satisfying Student Demand for Graduate Level Internships

Presenters – Robbie Ouzts, Kenneth Little, Jana Stone

a. **Room** - 309

b. **Abstract** - There is an increased interest in internships and multi-semester co-ops by master's and doctoral students from a variety of disciplines in recent years. This is particularly true of students preparing for non-academic careers. Although graduate students are highly motivated, many need guidance on their career options and how to land an internship or job. Compounding the need for career education is that many graduate students are international scholars holding visas. This session will discuss how Georgia Tech addresses the demand and career development needs through its Graduate Co-op/Internship Program. Our program enrolls 1000+ graduate co-ops/interns each year, including students from liberal arts, design, and sciences, in addition to our technical strengths in engineering and computing. Our graduate co-ops/interns work for employers that range from start-ups, non-profits, government agencies, the film and music industry, and biotech, to the big recruiters like consulting firms, Intel, Amazon, Google, and Apple.

KEY CONCEPTS:

- All graduate students are eligible; master's and doctoral students from all six colleges participate in the graduate co-op/internship program.
- Growth and diversification of interest; doctoral and masters students outside of engineering and computing are actively seeking internship opportunities, resulting in an increase in registrations in recent years.
- Starting early; as soon as students arrive for graduate orientation, they are guided in career development and how to seek an internship.
- Campus buy-in; partnerships with academic programs are the key to graduate-level career development and experiential learning success.
- Serving international students; 900+ co-op/internships registered each year are international students, requiring a close partnership with our Office of International Education.
- Flexibility within program requirements; part-time internships, multi-semester co-ops, and other special circumstances are navigated via discussions with all stakeholders.

The format of the session will be a presentation, followed by Q&A.

Breakout Session 2 - 6/27 11:15am-12:05pm

1. **Title** - An Early-Phase Graduate Career Development Curriculum that Engages Students With Interactive Labor Market Scanners

Presenters – Elizabeth Wilkins, Gary Baker

a. **Room** - 309

b. **Abstract** - For a graduate student, the ability to stand out in the job market is more competitive than ever before. This is even more so for international students who are facing unprecedented challenges due to governmental decisions affecting visas. Because of such challenges, our institution uses real-time labor market analytics to capture shifting occupations and career-related skills at the master's and doctoral levels. This has allowed our institution's Graduate Career and Professional Development (C&PD) office to think in newer, more cutting-edge ways about how to deliver career-related curricular support. We have built two interactive labor market scanners that allow students to explore occupations and specialized skills using back-end data from Burning Glass Technologies. This presentation will showcase these scanners and how our students are using them to structure their career planning.



Additionally, session attendees will be given a guest account that will allow them to access the scanners and apply some of the workflows we use with students in our early-phase curriculum.

What makes the scanners unique is that they serve as the catalyst for driving our entire C&PD curriculum and its organization. Our graduate students access the scanners using an intranet, identify occupations of interest, and create a core list of skills around various criteria (e.g., growth projections of skills, most requested skills, salary data, length of job postings). Then, a core list of skills is added to the student's IDP, followed by the student developing an action plan to obtain training in skills that are not part of their academic program. In addition to consultation with the student's research advisor/program coordinator, our C&PD office also provides one-on-one advising with students to help them with their action plans based on extended conversations using data generated by the scanners. Action plans integrate resources from Lynda.com and the AAAS course catalog (our students have free access to both), and include courses outside the department, internships, and various online certificate programs. The core list of skills driving the action plan help optimize the student's resume and LinkedIn profile for job occupations of interest.

Another part of our early phase curriculum is the alumni piece. Students identify skills from their core lists and vet them with key alumni to see if those skills proved useful for them. This helps to validate skills (beyond labor market analytics outcomes) and empowers the action plans.

In summary, the labor market scanners empower students with the ability to explore their 'best fit' in the job market. Their integration into an early-phase curriculum that connects scanner outcomes to IDPs, LinkedIn profiles, resumes, and alumni ensures continuity and gives necessary structure to career planning. The curriculum is being piloted this semester with formal, non-credit rollout planned for fall 2018. As a result, it is still too early to assess its impact on graduate students in getting the jobs they want. That will come. In the interim, student response to the pilot has been highly positive and supportive of the new curriculum.

2. **Title** - Enhancing Postdoc Preparedness with 6-month Engagement Interviews

Presenters – Jean Branan, Xinrui Li

a. **Room** - 335

b. **Abstract** - In the Fall of 2017, The Scripps Research Institute (TSRI) launched a new initiative to enhance the career and professional development of incoming postdocs. The 6-month Engagement Interview is a touch-base meeting which gives postdocs the opportunity to build personal rapport with the Career & Postdoctoral Services Office (CPSO) and to enhance trainees' awareness of career planning. The meeting also encourages postdocs to take a proactive attitude toward seeking resources early on in their postdoctoral training. Like many other institutes, TSRI provides information on CPSO services during new-hire orientation, but the importance of career development tends to be overlooked due to the large amount of information given during the short orientation period. With postdocs settling into their lab life and the campus community, a face-to-face discussion with staff is scheduled to offer support and guidance, and to ensure that the postdoc is on the pathway to success.

Though the focus of this meeting is to guide them through their professional development journey and to initiate the steps in this process, the postdoc engagement interview is also an opportunity for the PDO to point them in the right direction in their early months at their institution. Staff can direct them to the appropriate department (e.g. counseling, the ombudsperson, human resources, or the international services office, etc.), which could prevent any potential issues the new postdoc has before they become larger problems. PDO staff can serve as a sounding board - especially if the postdoc is



unable to speak with colleagues or their mentor about career development-related topics. In addition to guiding them toward resources, these meetings confirm that they are aware of all PDO events, activities and opportunities the trainee may have otherwise missed.

This new program has received a 100% positive rating on helpfulness since its implementation. The office staff has witnessed increased participation in workshops and networking events from individuals receiving these interviews. Many postdocs have also requested follow-up meetings on various topics, including how to improve communication with their mentor, exploring different career options, fellowship applications, and more.

In this session, staff from TSRI's Career & Postdoctoral Services Office will walk attendees through the steps they took to launch this program at their institution. By the end of this session, participants will:

1. Identify individuals at their institution who could serve as interviewers in this process
2. Examine different scenarios for developing similar models that work for their specific institution
3. Construct a list of 5-10 questions to ask postdocs at a six-month engagement interview

The presenters will share common findings, roadblocks, lessons learned and will share data on findings to date.

3. **Title** - Entrepreneurial Thinking in Graduate Career Development

Presenters – Stephanie Warner

a. **Room** - 325/326

b. **Abstract** - Diversifying graduate career development is a pressing issue, with several reports showcasing the variety of career paths for Canadian graduate students after graduation. Data also supports that we have entered the era of the gig economy and the side hustle. Preparing graduate students for this new market through entrepreneurial training (starting a business or developing a technology) and entrepreneurial thinking (attitudes that allow one to identify and capitalize on opportunities) is now a necessity.

The University of Calgary has been incorporating entrepreneurship into graduate student training in a variety of ways, and this is a key focus throughout the 2018 – 2023 academic plan. An entire pillar of the plan is driving innovation, wherein we will continue to create and reinforce cross-faculty collaborative initiatives and programs, and continue to develop innovative new programs, including practice-based PhDs with a focus on entrepreneurial thinking.

The session will showcase three key opportunities available to UCalgary graduate students:

1. In partnership with our school of business, graduate students from all programs can apply to take two courses, Introduction to Entrepreneurship and Venture Creation. In these courses, graduate students work in groups with MBA students to build from basic concepts to hands-on development of a new venture. Graduate students can also apply to participate in a four-month, industry-supported incubator (Summer Inc.) program to move their idea to market. Since 2015, almost 100 graduate students have taken advantage of these courses, with 32 participating in the Summer Inc. Results from this training are already being realized, with students embarking on ventures that range from providing support to industry on the placement of oil and gas wells,



to developing software that helps physiotherapists automate processes. Based on the drive to help all graduate students develop an entrepreneurial mindset, and the success of these courses, individual departments are now developing their own program-specific entrepreneurship courses.

2. We have also created a strong web presence to provide information about starting a business. A graduate student assistant was hired for a short-term project to pull together diverse resources, which are housed at <https://www.ucalgary.ca/mygradskills/starting-business>, and have been accessed over 1500 times in the last 12 months.
3. With the 2018 launch of the Hunter Hub for Entrepreneurial Thinking, we have also begun to launch a variety of free programs and events that are especially relevant for graduate students. Toolkit Tuesdays put students in direct contact with local entrepreneurs who provide first-hand information and mentoring, as well as local networking opportunities. We also partner to create graduate student-specific networking sessions to allow PhD and Master's students to discuss innovative ways to think about their graduate degree, with PhDs who are already working with an entrepreneurial mindset.

During the session, we will:

- Define entrepreneurship and entrepreneurial thinking
- Discuss the value of this training for empowering graduate students to succeed in their future careers
- Have round-table discussions about how entrepreneurial thinking is being, or can be, feasibly incorporated into graduate professional development at different institutions to produce a versatile and innovative workforce

4. **Title** - Part 2: Using ImaginePhD to Engage with Faculty, Staff and Advisors to Catalyze Culture Change

Presenters – Teresa Dillinger, Sarah Peterson, Annie Maxfield

a. **Room** - 213

b. **Abstract** - Using ImaginePhD to Engage with Faculty, Staff and Advisors to Catalyze Culture Change. In this session we will explore ways to introduce ImaginePhD to faculty, staff and others who provide career mentorship to graduate students and postdoctoral scholars in the humanities and social sciences. Many advisors feel unprepared to mentor their students in careers beyond their own experiences. We will discuss best practices for using ImaginePhD to engage faculty in conversations around career diversity and move the needle forward on creating greater acceptance around the variety of career paths and planning for career success both within and beyond academia.

In this session we will:

- i. Discuss best practices for engaging faculty and administrators using ImaginePhD
- ii. Learn how students, faculty, and staff are currently using the site
- iii. Engage with workshop curricula for use with a faculty or administrator audience
- iv. Discuss plans for a Mentor Interface in the ImaginePhD version
- v. Explore strategies to avoid pitfalls when working towards culture change around the issue of career diversity

To make the most of this session, please bring a laptop or tablet.



1. **Title** - Collaborating to Enhance Career Tracking and Taxonomy Efforts Across Disciplines

Presenters – Chris Pickett, Parmesh Ramanathan, Tammy Collins, Abby Stayart, Melanie Sinche, Adriana Bankston

a. **Room** - 309

b. **Abstract** - Optimal tracking of career paths for graduate students and postdocs will enable mentors, funders, and institutions to better prepare trainees for various careers they might embark on following their training. Furthermore, accurate career outcomes data will empower trainees to make more informed career decisions. Thus, an effective collaboration between groups collecting such data in particular disciplines (including STEM and humanities) is necessary. This session aims to bring together representatives from these groups, including GCC member representatives from the humanities disciplines, and those within STEM fields-including members of the Coalition for the Next Generation Life Sciences (CNGLS) in addition to representatives from other sectors. The session will also invite input from junior and senior scientists as well as academic administrators who are considering how to incorporate these data into training mechanisms. Speakers will discuss successes and challenges in obtaining this type of data. We aim for this to be a collaborative session between multiple groups in this space, including the GCC, Rescuing Biomedical Research (RBR), NIH Broadening Experiences in Scientific Training (BEST), and Future of Research (FoR).

This session aims to specifically discuss whether it is feasible to apply already-existing STEM career taxonomies to humanities disciplines, or whether new taxonomies need to be devised for the latter. At the conclusion of this session, we will compile the obtained information into a report that can be shared with the community at large and devise a plan of action for moving forward together. This session will contain three parts: 1) the first will focus on career outcomes tracking efforts, and include presentations from CNGLS representatives and those in humanities; 2) the second will focus on career taxonomies in various disciplines, and will similarly include representatives from these disciplines; 3) the third will be an interactive discussion, focused on brainstorming to discuss major themes and common barriers and solutions related to both of these efforts in the form of breakout sessions on particular topics. As part of this session, we will compare how particular questions are asked by different survey instruments, and what results are obtained from those (one example is how longitudinal surveys are performed in specific disciplines). The session will conclude with a call to action centered around ideas about how the current assessment methods need to change, as well as potential plans to achieve these changes in multiple disciplines.

2. **Title** - Designing an Evidence Based Career Development Practice

Presenters – Michelle Alexandrowicz, Christine Kelly

a. **Room** - 213

b. **Abstract** - Designing an evidence based practice takes intention and time. Last year, we presented on designing an evidence based career office. This year, we want to offer up part 2! We learned so much this past year around evidence based practices and want to share what we learned and expand on the conversation. The intention of this program is to briefly review last year's presentation on building evidence based practices, and share how we applied lessons learned as we built out our program this past year.

- We will revisit the initial stages of how to build a model for your office: the purpose of the model, how to use it, and ultimately how to measure the model of your program.



- We will discuss the feedback we received from different stakeholders and how we adjusted (or didn't adjust) based on their feedback.
- We will also discuss lessons learned: mistakes to avoid and what to expect when developing and growing a program.
- Finally, we will share the evaluation plan we will implement next academic year to measure the impact and outcomes of our programs.

Our hope and goal with this program is to help validate the work career offices' do everywhere and everyday by teaching how to show our impact. Evaluation of our work is critical and necessary. We want to spend time discussing how to be successful in this complex process.

3. **Title** - Experiential Education Models for PhD's: Data-Oriented Outcomes and Recommendations

Presenters – Audra Van Wart, Janice Morand, Thi Nguyen, Julie Tetzlaff, Terri O'Brien

a. **Room** - 335

b. **Abstract** - Experiential Education Models for PhD's: Data-oriented outcomes and recommendations. Until recently, 'experiential education' was not a term you heard in doctoral education circles. But in keeping with the creativity and resourcefulness long demonstrated by our profession, a number of GCC members have recently tried innovative approaches, designed to help our PhD students and postdocs gain the experience they need to explore a broad array of career options, gather enough information to choose confidently from among those options, and build the skills and networks necessary to be successful as they transition toward rewarding, post-training careers. Importantly, these approaches were developed with explicit evaluation protocols, allowing for the assessment of outcome metrics.

In this panel discussion, we will present four different experiential education models that have been piloted successfully for PhD-level students and postdocs. We will take an evidence-based approach to examining these learning interventions and address common questions and concerns including: Will students and postdocs invest the time required by experiential education opportunities? Will faculty accept the concept of experiential education? What exactly will students learn from the various models of experiential education and will it be deemed worth the time and effort? Does participation in experiential education extend the time in training? What difference does participation make? Will participation in experiential education programs contribute to confident career decision making?

We will share data collected from each experiential education model, along with information about our evaluation methods, and offer resources and recommendations based on our results. Panelists will also discuss challenges we've experienced with data collection, analysis, and reporting, particularly as it relates to career outcomes, time to degree, faculty buy-in for programs, and publishing results.

4. **Title** – Innovations in Promoting Diversity and Inclusion Through Mentorship for Grad Students and Postdocs: The National Research Mentoring Network

Presenters – Kristen Mighty, Steve Lee, Christine Pfund, Stephanie House

a. **Room** - 325/326

b. **Abstract** - Academia is firmly based on the mentorship model, where a faculty mentor trains graduate students and postdocs (i.e. trainees) in their academic field. While this model has been established for centuries, recently it has been under increased scrutiny given growing concern for holistic trainee development, the increasing diversity of the trainee population, and lack of formalized mechanisms to prepare them to train and mentor the next generation of scholars.



Within this context, the NIH established the National Research Mentoring Network (NRMN) in 2014, a nationwide consortium of biomedical professionals and institutions collaborating to provide all trainees across the biomedical, behavioral, clinical, and social sciences with evidence-based mentorship and professional development. NRMN's model emphasizes the benefits and challenges of diversity, inclusivity and culture within mentoring relationships, with the goal of enhancing diversity and broadening participation within the NIH-funded research workforce.

This presentation will provide an introduction to NRMN and the many innovative resources, activities, and concepts that can benefit the graduate students, postdocs, staff, and faculty at your institutions. We will share how you can get involved with NRMN, and help your trainees to enhance their mentoring skills and be prepared to mentor the next generation of scholars. This presentation will also include interactive activities as examples from the trainings. Although NRMN focuses on NIH-funded disciplines, these foundational resources and concepts are broadly applicable across other fields.

NRMN employs evidence-based mentor and mentee training curricula which have been shown to improve mentored research experiences and mentoring relationships. Entering Mentoring (Handelsman, et al. 2005, 2014) is based on seven principles of effective mentoring relationships: maintaining effective communication, aligning expectations, assessing understanding, addressing equity and inclusion, fostering independence, promoting professional development, and cultivating ethical behavior. This training provides an often absent, but key component, of professional development for advanced graduate students and postdocs as they begin to train other students. One of NRMN's more recent innovations includes an extensive stage 2 training module on Culturally Aware Mentorship (CAM). This training helps participants to identify the personal assumptions, biases, and privileges that are at play in their research mentoring relationships, while providing concrete strategies for change.

As NRMN's approach is founded on addressing mentoring from both sides of the relationship, Entering Research (Branchaw, Pfund, and Rediske 2010) was also developed to provide guidance to mentees in scientific research while providing resources to promote growth and self-advocacy. The same framework is integrated into the novel concept of "mentoring up" (Lee, McGee, Pfund, Branchaw 2015), which was adapted from "managing up," as introduced in Gabarro and Kotter's classic paper in the Harvard Business Review (1980). It encourages and equips mentees to pro-actively manage their relationship with their faculty mentors.

We will share and engage participants in interactive activities and practical tools that have been used in both mentor and mentee training. We will further provide examples of how the NRMN is working to catalyze change at the institutional level, such as the CIC Academic Network (CAN).

Breakout Session 4 - 6/27 2:00-2:50pm

1. **Title** - Best Practices in Interpretation and Application of a Three-Tiered Career Outcome Taxonomy
Presenters – Abby Stayart, Patrick Brandt
 - a. **Room** - 309
 - b. **Abstract** - All universities face the challenge of tracking and reporting the career outcomes of their alumni, independently struggling to create an intuitive and comprehensive taxonomy that succinctly and unambiguously describes the types of careers that their alumni have pursued. In recognition of this challenge, several academic institutions and national organizations collaboratively generated and agreed to adopt a common three-tiered taxonomy of career outcomes (1, 2). The taxonomy is sufficiently robust to be useful in many practical applications, including alumni surveys and internal administrative classification. However, there exists significant potential for differing interpretations of the taxonomic



categories. In light of the fact that institutions across the nation are immediately adopting the taxonomy and in recognition of an urgent need for recommendations to standardize implementation, a working group within the BEST consortium designed an experiment to identify types of career outcomes that are particularly difficult to classify. Using a sample set of 600 alumni records, six career development professionals from six BEST institutions coded the set according to the common taxonomy; standard inter-rater reliability analyses identified specific categories of jobs that resulted in low concordance within the group of experienced and naive coders. After minor revisions of coding recommendations, the group of coders (including several individuals who were new to the project) approached a second set of alumni records to evaluate whether the modified guidelines improved concordance in application of the taxonomy.

The session will briefly introduce the common taxonomy and its structure and demonstrate the significance of the inter-rater reliability experiment. The majority of the session will involve hands-on engagement in small-group coding projects so that participants will gain comfortability with application of the taxonomy to alumni data and develop an appreciation for the challenges inherent in applying a set of definitions to nuanced data. Session leaders will present their recommendations for handling challenging job titles and, through small and large group discussion, we will address common concerns about undertaking alumni data collection projects and share lessons learned. We hope that academic administrators and career development professionals beyond the BEST Consortium will consider adoption of the common taxonomy and, as a result of participating in this 50-minute workshop, will implement the taxonomy with a full understanding of its strengths and challenges.

Citations

1: Stayart, et al. Constructing a Taxonomy for Career Outcome Reporting. Poster presented through AAMC icollaborative in lieu of GREAT 2017 (Orlando, FL)
(<https://icollaborative.aamc.org/resource/4454/>)

2: Pickett, C. (2017, October 6). Improving transparency in PhD Career Outcomes. Retrieved from <http://rescuingbiomedicalresearch.org/rbr-actions/improving-transparency-ph-d-career-outcomes/>

LEARNING OBJECTIVES

1. After participating in this session, attendees will be able to define the three tiers of the common taxonomy and compare their functions within the taxonomy.
 2. After participating in this session, attendees will be able to identify potential pitfalls in application of the taxonomy and implement evidence-based recommendations for resolving those pitfalls.
 3. Through participating in this session, attendees will develop a strategy for implementing the common taxonomy in their office/department/institution.
2. **Title** - Charting Their Own Course: Leadership Development for Graduate Students and Postdocs
Presenters – Melissa Bostrom, Brian Rybarczyk
- a. **Room** - 335
 - b. **Abstract** - How can we create leadership development programs that meet the unique needs of a graduate student and postdoc audience? Using UNC's Leadership Development Scholars program and Duke's Emerging Leaders Institute as examples, we'll explore options for program design and implementation, grounded in research on the competencies graduate students and postdocs need to develop in order to succeed as leaders. In this session, we'll discuss program goals, assessment, and



challenges of cohort-based models in an interactive workshop facilitated by Tobacco Road rivals. Whether you're implementing a new program or seeking ways to improve an existing one, we welcome you to join the conversation so we can all learn from each other.

3. **Title** - Funding Graduate Student Internships: How to Institutionalize Support for Non-Academic Career Experiences

Presenters – Lana Smith-Hale, Shawn Warner-Garcia

a. **Room** - 213

b. **Abstract** - Internships can unlock countless opportunities for graduate students to develop transferable skills that cannot be gained through their graduate studies but are nonetheless crucial to their career success. Moreover, a recent survey by the University of California indicates that having robust career prospects is the best predictor of life satisfaction among UC graduate students. The reality, however, is that many graduate students face acute financial constraints that prevent them from pursuing valuable skills-building experiences beyond the academy. This can create a significant gap between graduate students, who often feel that their degree will be their main qualification when entering the non-academic job market, and the vast majority of employers who say that they prefer to hire applicants with related experience. As graduate career professionals, it is therefore crucial for us to provide institutional support so that graduate students can pursue these experience-building opportunities during their graduate programs.

Come learn how UC Santa Barbara's Career Services has partnered with the Graduate Division and the Graduate Student Association to develop the Graduate Student Internship Fellowship, an innovative program that connects graduate students to the vital career experiences they need to be successful after graduation. In this session, we will discuss how our campus envisioned, implemented, and assessed this new program, as well as how to build a similar coalitional model on your own campus to empower graduate students in gaining career experience. This hands-on workshop will address:

- Why is it important for campuses to support graduate students in pursuing low-paying and non-paying internship opportunities outside the academy?
- What types of funding models are possible when creating institutional support for graduate student internships?
- How can a Graduate Student Internship Fellowship program be structured in order to ensure maximum impact?
- What sorts of barriers are common when establishing such a program and how can they be overcome?

Join us for this engaging discussion and sharing of best practices!

4. **Title** - The Psychology and Counseling Skills of Career Development

Presenters – Michelle Alexandrowicz

a. **Room** – 325/326

b. **Abstract** - Most career counselors spend their days interacting with students by educating and teaching them the skills necessary to launch and maintain their careers. But at the heart of career counseling is the ability to connect with an individual navigating through a challenging time in their life. As a clinician, I would like to share and teach some counseling skills I use regularly in my sessions with students. Some of these skills include knowing how to deal with resistant students, how to guide students through reflection (without having to do the work for them), and counseling theories and frameworks that I have found to be very helpful.



In addition to some counseling tips and tricks, there are some core psychological competencies vital to the career development process: adaptability, proactivity, self-awareness, and self-efficacy. Research directly supports the relationship between these psychological concepts and career outcomes. I will discuss each of these competencies and how to integrate them into your sessions and work with students. Lastly, I will briefly integrate some positive psychology concepts and activities you can use in counseling sessions or workshops to help support the psychological development of students in their career development.

Breakout Session 5 - 6/28 10:30-11:20am

1. **Title** - Cross-Campus Collaborations in Career and Professional Development: Best Practices, Opportunities, and Challenges: A Think-Tank Workshop

Presenters – Laura Schram, Shoba Subramanian, Michelle Repice, Thi Nguyen

a. **Room** - 313

b. **Abstract** - Graduate student and postdoctoral learners receive support for career and professional development from disparate sources within their campuses. These sources typically range from campus units (e.g., career centers, writing centers, teaching and learning centers, international student offices, centers for entrepreneurship/innovation) and academic units (e.g., graduate schools, college/academic units). Student success underpins the mission and vision of these units, but common challenges include over-programming, overlap, and budgeting. Opportunities for collaborative programming between two or more such units can be beneficial for obvious reasons such as in reaching broader audiences and in cost-sharing. But an even more important outcome of collaborative programming is innovation in program design and implementation. Such programming needs careful planning and may have unique challenges to be considered.

In this think-tank style, interactive group workshop, the presenters will briefly describe career and professional development resources within their campuses and provide 4-5 examples of ongoing collaborative programming. Following that, participants will be divided into groups to share and discuss 2 questions:

What are the best practices in providing the optimum infrastructure for student success on collaborative programming?

What are the challenges of collaboration, and what lessons have been learned to overcome common challenges?

Groups will report back the top points from their discussions. The program presenters will share these data with a best practices guide on the GCC database for our community to peruse.

As a final activity, participants in the session will post their contact information on large stickies to offer advice on how to forge successful collaborations of different types (e.g., alumni engagement, career panels, industry partnerships, working with student/postdoc groups, etc.).

2. **Title** - Defining and Developing a Profession: Empowering Future Generations of Leaders in the Field

Presenters – Amy Pszczolkowski, Christine Kelly, Natalie Lundsteen, Bill Lindstaedt

a. **Room** - 325/326

b. **Abstract** - For over three decades, GCC members have shaped and refined the emerging field of Ph.D. and postdoctoral career services. From all accounts, the field has exploded in the last six years! Many



stakeholders in higher education and specifically in graduate education are now recognizing the unique work we have been doing over the years; however, if we are honest, many (faculty and upper administrators) still do not know that we exist on campus. So, how do we define our field as separate, unique and necessary with all the noise entering the scene lately? What are the strategic ways GCC members, the leaders in the field, may influence key stakeholders to effect change on their campuses? A panel discussion with longtime GCC members and leaders who have shaped the conversation at their universities and nationally will share their ideas on advocacy, strategic planning, funding opportunities, and creating career advancement in this growing field. Members will come away with 1) ideas for advancing the conversation and how to adapt these strategies for their own campus, 2) creative funding opportunities to consider in order to help launch new initiatives, 3) feeling empowered to do great work locally and nationally to continue to advance the field.

3. **Title** - Treks, Trips, and Travel. Site Visits as a Mechanism for Career Exploration.

Presenters – Briana Konnick, Ashley Brady, Abby Stayart, Patrick Brandt

a. **Room** - 309

b. **Abstract** - Fewer than 15% of today's PhD-trained biomedical scientists go on to traditional tenure-track faculty appointments at academic research institutions, which means that the other 85% of these highly-trained scientists are pursuing a wide variety of unique career paths (Nature 472, 276-279 (2011)). Even though their broad training in critical thinking, problem solving, and communication provides them with valuable transferable skills, many biomedical PhDs find it challenging to identify a career path that aligns well with their skills, interests, and values. For these individuals, career exploration can take many forms, including, but not limited to, reading about different career paths, engaging in informational interviews, attending career-focused job-shadowing, and participating in internships. This session will focus on site visits as a part of a trainee's professional development process. Site visits are a highly effective mechanism to experience the culture and environment of a specific location, learn about the daily activities of employees at that company, and develop a broader network of professionals in a potential field of interest. These visits can occur in the home city of your institution or can be planned for other locales where a particular industry or career track may be better represented.

In this session, we will describe three such site visit programs developed at our respective institutions: ASPIRE on the Road at Vanderbilt University, myCHOICE Treks at the University of Chicago, and ELITE Site Visits at the University of North Carolina at Chapel Hill. ASPIRE on the Road has coordinated three site visits over the past several years focusing on college teaching, STEM policy, and the pharmaceutical and biotechnology industry. The University of Chicago has developed four treks since 2016, focusing on science policy, biotech and biopharmaceutical research, and data science and computational biology research. ELITE participants have visited a dozen different for-profit and not-for-profit employers in the Research Triangle Park area for half day experiences that involve networking with C-level management, scientists, and HR professionals.

In all three cases, these programs were developed with support from NIH BEST grants awarded to Vanderbilt University (1DP7OD018423), University of Chicago (1DP7OD020316) and University of North Carolina (DP7OD020317). However, with long-term program sustainability in mind, all three institutions approach site visits as invaluable opportunities to enhance alumni relations, with the potential outcome of further engaging this base in philanthropic giving to support future programming.

During this session, we will describe several site visits in depth, highlighting the goals, agendas, logistical considerations involved in each visit, how we prepped trainees for the experience, and professional outcomes of individuals who participated. We will also outline our current and future funding models. By the conclusion of this session, participants will have developed a framework for how to build similar programs at their institution that are feasible for their location, trainee population, and budget.



1. **Title** - DEI Professional Development Programming and Best Practices

Presenters – Laura Schram, Deborah Willis

a. **Room** - 313

b. **Abstract** - There is a rapidly growing movement among employers to require job applicants to demonstrate both commitment and contributions to diversity. Diversity, equity and inclusion (DEI) aptitude is now highly valued by employers, both within and outside academe, as evidenced by the increasing number of requests for diversity statements accompanying applications for faculty positions nationwide and employers asking DEI-related questions in the interview process. National Association of Colleges and Employers defines global/intercultural fluency as a career readiness competency, and increasingly, graduate schools are including DEI-related skills in their core competency models (including University of Wisconsin-Madison, University of Michigan, Stanford, etc.)

At the University of Michigan, we have developed an innovative certificate program to empower students in both developing and demonstrating their commitment to DEI. The program includes training on intercultural development, microaggressions, unconscious bias, bystander intervention, and articulating and demonstrating your commitment to DEI (for either academic or non-academic careers). Students are required to reflect on learning and next steps after every training session. In addition to these core training sessions, students develop additional skills in specialization tracks, including teaching, research, service/engagement, or leadership. Through these tracks, the program is tailored to the student's unique DEI capacities and commitments. Students are required to both pursue additional training in these areas, as well as take action related to DEI in their specialization track (e.g., by leading a workshop, facilitating a program, conducting an information interview, etc.).

To assess impact of the certificate program, participants take the intercultural development inventory (IDI) assessment to evaluate their growth during the program. As a capstone project, participants write a diversity statement or reflection blog upon completion of the program. We developed a rubric to evaluate these statements and provide students feedback and guidance on their written work. In the pilot year, we had 170 students enroll in the program from 18 schools and colleges.

In addition to our innovative certificate program, we have developed a set of pedagogical best practices for all of our workshops to make them more inclusive and appeal to our diverse student body. For example, we use liberating structure techniques, gender pronoun nametags, workshop discussion guidelines and other inclusive teaching practices in our programming. These best practices help us to empower all students to participate in professional development with the support and modeling by our entire team.

In this session, we will share materials from our certificate program, model inclusive pedagogies for workshops, and disseminate lessons learned for best practices in establishing DEI professional development programming for graduate students. We will engage participants in the session by modeling several inclusive workshop practices, and have participants reflect on the ways that they demonstrate their own commitment to DEI in their work using a worksheet we developed for graduate students. Participants in this session will gain ideas for DEI professional development programs and practices to enact on their own campuses.

2. **Title** - GCC Test Kitchen: (Re)-Discovering Ingredients (AKA Materials) for Empowering PhD Career Development



Presenters – Blessing Enekwe, Clarence Anthony Jr., Susan Martin, Amruta Inamdar

- a. **Room** – Lowell Dining Room, Lowell Center
- b. **Abstract** - Are you interested in seeing some tried and true materials developed just for use with PhDs online and in group and individual settings? There is no need for GCC members to reinvent the wheel when it comes to useful handouts and worksheets for use in group and with individual students. This interactive session creates a dedicated space during the conference for attendees to share and obtain materials that can be adapted for use immediately at other campuses. Attendees will have the opportunity to share their favorite career planning and exploration, networking skill-building and job search materials in an engaging speed swap format. In addition, the facilitators will assemble an e-book of handouts solicited from GCC members prior to the conference. This session ultimately empowers us to further develop our own toolbox of materials and network of colleagues so we can effectively empower the doctoral students and postdocs we serve to manage and implement satisfying careers beyond the PhD and postdoc experience.

Outcomes:

Participants in this session will:

1. Expand their inventory of handouts and worksheets specifically designed for use with PhDs
2. Discover new ways to engage PhDs through these handouts that can be adapted on their campus.
3. Increase their ability to effectively empower the students/postdocs to explore career options and implement their career goals.
4. Expand their professional network through small group interactions about effective materials

Session Plan:

1. Introduction of facilitators and attendees at tables
2. Roundtable Presentation of Resources (three rotations of 15-20 minutes each). Participants will be resorted into new groups for each topic to maximize interactions.
 - Career Exploration tools
 - Networking Skill-building
 - Job Search Topics
3. Review of the e-book assembled by facilitators
4. Session evaluations

3. **Title** - How do we know that our approach is effective? Building an evidence basis for professional development programs

Presenters – Richard Tankersley, Cynthia Fuhrmann

- a. **Room** – 325/326
- b. **Abstract** - Students and postdocs may enjoy a professional development program or find it valuable, but how do we know whether the program is in fact effective at reaching the desired outcomes? We are in a time of rapid expansion of career development programs--at universities, disciplinary societies, and



other organizations, in the U.S. and internationally. This growing investment in our field provides the opportunity (and enhances the urgency) to identify and disseminate evidence-based practices. However, how do we define and measure outcomes to develop this evidence basis? This interactive session will introduce the logic model, a framework commonly used for facilitating backward design of educational programs and guiding the development of a program evaluation strategy. We will provide examples of logic models developed for career development programs. Then, participants will work in pairs to create logic models for their own programs. Finally, we will discuss challenges and solutions for testing short- and long-term outcomes and impacts of programs, drawing from experience of speakers and attendees. This session is designed to (a) enhance our skills in using the logic model as a tool for program design, evaluation, communication, collaboration, and grant proposal development and (b) connect GCC members who have a shared interest in program evaluation and research.

Breakout Session 7 - 6/29 9:50-10:40am

1. **Title** - Faculty Career Partners by Organic Design

Presenters – Kay Gruder

- a. **Room** – Capitol Ballroom A, Madison Concourse Hotel
- b. **Abstract** - As professional societies expand to provide more extensive career preparation to their members, and as graduate students become acutely aware of job market challenges and opportunities, there is perfect alignment for career professionals to cultivate conversations with faculty around the topics of career preparation and career diversity. In this interactive session, you will learn about a multi-faceted model that offers and integrates career preparation by organic design within departments across STEM, humanities, and social sciences. There will be partnered activities to inventory pain points (such as a department struggling with how to advise doctoral candidates in the writing of diversity statements) and also time to reflect on areas where you observe momentum around career preparation. You will gain insight into failed attempts and victories in building faculty collaborations, contribute to discussion about best practices, and begin crafting a plan to expand and/or deepen your faculty career partner network. The end user of our services are the students, but when we begin to think of faculty as the clients we gain both credibility and enhanced relationships.

2. **Title** - GRADFair: A Career Fair for Graduate Students and Postdocs

Presenters – Michael Tessel

- a. **Room** – Madison Ballroom, Madison Concourse Hotel
- b. **Abstract** - Career fairs are commonplace for undergraduates and for certain types of graduate professional schools. For academic graduate students, even when they have access to these events on campus, they often find that employers are not prepared to meet advanced degree candidates with their background. Responding to student demand, UChicago piloted with the first GRADFair in October of 2015, a career fair exclusively for graduate students and postdocs, across academic disciplines. Over the last three years, GRADFair has grown to be a flagship event for UChicagoGRAD, with over 700 students participating in 2017 and 50 employers.

The event requires significant staff time to plan, but unlike other large-scale events, requires no net operational expenses. This session will foster a discussion about the unique opportunities and challenges associated with a graduate-specific career fair, and how different universities can borrow from this model to fit their specific circumstances.



One element that makes GRADFair different from other career fairs is strategic faculty engagement. Recognizing that bringing graduate-level employers to campus presents a unique opportunity to help faculty learn about what employers seek in advanced degree candidates. Therefore, an important feature of GRADFair has been to connect these employers with supportive faculty through a pre-fair event that has evolved over the three years.

The growth of data science and data analytics as career options for graduate students and postdocs has helped attract many employers to GRADFair. In this session, we will discuss how to take advantage of the demand for quantitative skills to help connect graduate students with employers. We will also address some of the differences between these employers and the distinct sub-populations of graduate students that they seek.

International students were among the most vocal in requesting a graduate student career fair prior to the first GRADFair in 2015. However, we found that many in this population were unfamiliar with the exact conventions of the format and some had unrealistic expectations for outcomes. Additionally, employer receptiveness to international students was another factor that required management. In this session, we will discuss the series of preparatory workshops that we held for students as well as the employer engagement strategies relating to international student hiring.

Despite successes in growing this program, significant challenges remain. Attracting the right balance of employers, motivating humanities students to attend, and managing student/postdoc expectations are just a few of these challenges. The model of our program continues to grow and adapt as we learn from experience. We hope this session provides you with new ways to think about employer engagement on your campus and fosters a productive exchange of ideas for connecting graduate students with professional opportunities.

