

**PhD Career Exploration Fellowship  
Participating Centers  
*2021***

## **Bucks County Community College**

Established in 1982, the Bucks County Community College Foundation's mission is to advance the College as a diverse community of learners with exemplary, accessible educational opportunities and the personal connections that foster success. In its quest, the Foundation approaches local, regional, and national supporters to create partnerships and raise funds, assistance, and awareness in support of both new and existing educational opportunities.

The Alumni Association has provided leadership and means for Bucks alumni to unite in their efforts to support and strengthen the institution since 1983. The Foundation and Alumni Association will be a model for fundraising excellence locally and nationally and be recognized as partners committed to advancing the College as a vibrant center for community engagement and learning that provides innovative paths that inspire educational, career, and personal fulfillment.

Most graduates of the College's transfer program have attended Pennsylvania's four-year colleges or other State-related institutions. The College also offers more than 50 certificate programs and 1,100 courses each year in health care, business, information technology, general interest, and more. Bucks serves over 7000 students every semester from the main campus in Newtown, satellite campuses in Bristol and Perkasie, and the Bucks Online Campus. The College also serves about 60,000 non-credit students in workforce development, continuing education, and public safety training.

The College's Grants Office is part of Bucks County Community College Foundation & Alumni Relations. We receive external funding awards (totaling over \$1.5 million in FY20) from public (local, state, & federal government agencies) and private (corporate and family foundations) funders. These awards support institutional projects that benefit our students directly, grow the capacity of our faculty and staff, and provide resources for the College. Additionally, the Grants Director facilitates an internal funding stream from the President's Office and the Foundation called "Strategic Initiatives" as well as provides programmatic support for the PA Educational Improvement Tax Credit (EITC) Program that receives donations from area businesses. The Grants Director also works with community partners that collaborate with the College on community-based projects, including social service agencies and K-12 School partners in the County.

### **The fellow may have the opportunity to:**

- Informational interviews with the Grants Director at Bucks County Community College (BCCC) and other members of the BCCC Foundation & Alumni Relations and College administration (depending on area(s) of interest).
- Informational interviews with other relevant stakeholders, identified together with the Grants Director, who may help expand the candidate's network and career interests. Interviews can be arranged with community partners that collaborate with the College e.g. Bucks County Agency Directors or School District Superintendents and Principals.
- Attend relevant meetings on fundraising strategies, advisory groups, college-wide initiatives, and community collaborations.
- Gain understanding of fundraising for institutions of higher education and community college administrative functions, as well as cross-sector community partnerships in the County.

*The fellow will work primarily with Patricia Smallacombe, Director of Grants who holds a PhD in Sociology from the University of Pennsylvania.*

## **Center for Teaching and Learning (CTL)**

The Center for Teaching and Learning promotes teaching excellence at the University of Pennsylvania. CTL works to help instructors at Penn excel in their teaching, to enhance the culture of teaching at the university, and, in turn, to increase the quality of education at Penn.

CTL consults individually with instructors considering diverse teaching challenges or ambitions, and offers a wide array of teaching workshops and discussions. To encourage instructors to reflect on their own teaching and engage with each other, CTL brings faculty and other instructors together for collegial, often faculty-led, conversations.

Instructors at all levels of experience and expertise — from senior faculty to new teaching assistants, from those acclaimed to those struggling — participate. Instructors from across Penn are welcome at CTL programs and can consult with CTL about their teaching.

Students applying for the CTL externship ought to have an interest in and enthusiasm for thinking about, discussing, and improving teaching methods. Students interested in investigating research questions pertaining to teaching methods are especially welcome.

### **This fellow may have the opportunity to:**

- Meet and shadow a variety of CTL staff members
- Attend select CTL meetings and/or workshops
- Partake in planning sessions for CTL workshops
- Conduct a small research project investigating a particular teaching question
- Connect with Penn alums doing similar work at other institutions

*This fellow will work primarily with Ian Petrie, Senior Associate Director who holds a PhD in South Asian History from the University of Pennsylvania.*

## **Children's Hospital of Philadelphia (CHOP) - Department of Biomedical and Health Informatics**

The Children's Hospital of Philadelphia's (CHOP's) Research Institute is developing an initiative called Arcus to link clinical and research data in order to accelerate and enable secure, collaborative, reproducible, and computational research.

The Arcus project includes work from teams focusing on application development, library science, data science, data education, privacy analysis and protection, systems architecture, communications, and clinical data management and transformation, to build a system that is responsive to the needs of current and future researchers.

Arcus offers a platform, privacy and data training, a data catalog and archive, and more, with the goal of positioning scientists to be at the forefront of emerging research questions in pediatric medicine.

Arcus is being developed within CHOP's Department of Biomedical and Health Informatics (DBHi), which comprises professionals from a variety of background, including researchers, postdoctoral fellows, librarians, and developers from academic backgrounds.

### **The fellow may have the opportunity to:**

- Shadow an Arcus developer who entered the development and data science domains from a doctoral background in the social sciences.
- Sit in on meetings related to policy creation, development, and implementation for the Arcus project.
- Speak with DBHi staff about current needs and expectations in a fast paced, collaborative healthcare and development environment.

*The fellow will work with Jacob Levernier, an Analyst / Programmer within the DBHi. Prior to becoming part of CHOP, Jacob completed a PhD in Personality and Social Psychology with a Supporting Area in Data Science, followed by a postdoctoral Data Science fellowship in the University of Pennsylvania Libraries as the Bollinger Fellow in Library Innovation.*

## **The Franklin Institute**

In the spirit of inquiry and discovery embodied by Benjamin Franklin, the mission of The Franklin Institute is to inspire a passion for learning about science and technology. As the most visited museum in Pennsylvania, The Franklin Institute is one of the leading science centers in the country and provides resources that help people to connect with science and technology in creative ways that resonate with learners of all ages and backgrounds. The Institute directly reaches more than 1 million people each year with informal learning experiences that engage students, adults, and families. Though its historic museum is a central learning space, the Institute has evolved to provide people with educational resources in their own neighborhoods through hands-on activities in classrooms, workshops in libraries, community centers, and other settings, and through ways to interact online. The Franklin Institute works toward this mission via:

- 1) Offering 12 world-class permanent exhibits that provide hands-on learning experiences and hosting renowned traveling exhibits that draw local, national, and international visitors to the museum.
- 2) Partnering with cultural organizations and corporations support unique collaborative outreach initiatives and events, including youth programs and the annual Philadelphia Science Festival.
- 3) Presenting public lectures and opportunities for discussion of current science events as they unfold throughout the year to create an informal and educated dialogue about the most important science issues facing the public.
- 4) Holding curatorial collections—particularly those related to Benjamin Franklin and the Wright Brothers—that are considered national treasures. At nearly 200 years old, The Franklin Institute Awards program is America's oldest and most prestigious recognition of achievement in science, technology, and industry.

### **The fellow may have the opportunity to:**

- Create virtual content (e.g. blog post, informational carousel for social media, video, etc.) for The Franklin Institute's digital channels
- Participate in informational interviews with members of the Institute's science, evaluation, or educational programs teams
- Sit in on meetings related to Institute initiatives (for instance, planning meetings related to the Institute's exhibits, public programs, professional development workshops, or digital content)
- Learn about The Franklin Institute's vision and master plan to reimagine the museum experience with changing science and technology in the next 10 years

*The fellow will work with Jayatri Das, Director of Science Content and Chief Bioscientist who holds a Ph.D. in Ecology & Evolutionary Biology.*

## **Education and Professional Development at Penn Engineering**

Programs for students in Penn Engineering are run through the school, departments, centers and institutes, and specific grant-funded projects. This fellowship will offer the opportunity to learn about a staff position that straddles the research and education missions of the university and how a STEM PhD may be used in positions that play critical roles in the universities research and education missions. The fellow may be able to contribute to a discrete part of a project/program, depending on the goals of the fellow.

This fellowship may be particularly relevant for students who are unsure of what path they want to take. It may stimulate creative ways of reflecting on skills/motivations/goals and as evidence that not all paths are planned or conventional.

*This fellow will work with Director of Education and Professional Development, Kristin Field, who holds a PhD in Behavioral Ecology. Kristin spends half of her time as co-PI and manager on an NSF grant run out of the Materials Science and Engineering Department that supports student research opportunities abroad and the other part of her time on educational/professional development programs for the Singh Center for Nanotechnology.*

## **Facebook- User Experience Research**

Facebook employs a diverse and collaborative team of quantitative, qualitative, and mixed methods researchers who work to deliver human-centered insights that shape the future of Facebook. Research spans every step of the product life cycle, from understanding people's latent needs before we build products, to assuring the products we build deliver world class user experiences, to measuring the impact of our products once they are in use. If you are passionate about understanding people, curious about the relationship between technology and society, comfortable in a flat, fast-moving organization, excited to collaborate, open-minded about learning new skills and methods, and interested in influencing the future of Facebook, this may be the right mentorship opportunity for you.

### **This fellow may have the opportunity to:**

- Receive career mentorship and coaching by a senior researcher from the News team at Facebook
- Meet cross-functional leaders from Facebook (e.g., product management, engineering) to learn more about how researchers work with stakeholders from different functions
- Connect with experienced UX researchers and managers at Facebook from various teams

### **We ask that this fellow have the following qualifications:**

- Interested in tackling complex problems together with cross-functional experts
- Is seen as a thought leader in domain of research or a specific method
- Interested in a career in user experience research at Facebook

*This fellow will work primarily with Quantitative Researcher, Anneke Buffone, who holds a PhD in Social Psychology from the University of Buffalo.*

## **Gender, Sexuality and Women's Studies at Penn**

The Gender, Sexuality and Women's Studies Program and the Alice Paul Center for Research on Gender, Sexuality and Women work to advance feminist and queer research, learning, and practice at Penn. The GSWS Program offers an undergraduate major and minor in the School of Arts and Sciences, and a graduate certificate for graduate students enrolled in programs across the University. The Alice Paul Center collaborates with Departments and Centers at Penn and with organizations in the broader Philadelphia community to provide programming and funding for innovative feminist and queer research, artistic work, and pedagogical practices.

### **The fellow may have the opportunity to:**

- Virtually shadow the Associate Directors of GSWS and APC
- Sit in on Center and Program meetings, attend GSWS and APC seminars and workshops
- Take part in planning meetings for GSWS and APC programming.

### **Possible projects for the fellow might include:**

- Assisting with drafting grant proposals
- Assisting with undergraduate and/or graduate curriculum development
- Conducting research into feminist pedagogical practices
- Helping with the launch of the trans oral history project.

*The fellow will work primarily with Gwendolyn Beetham, Associate Director of GSWS, who holds a PhD in Gender from the London School of Economics and Political Science and Maria Murphy, the Interim Associate Director of APC, who holds a PhD in Musicology from the University of Pennsylvania.*

## **Janssen-Immunology Translational Sciences**

Janssen Research and Development is a member of Johnson and Johnson's Family of Companies, where we focus on treating, curing, and preventing some of the most devastating and complex diseases of our time. Janssen Immunology has a long history of bringing life-changing therapies to patients with immune-mediated diseases. The Translational Sciences team uses human based data to support the end to end portfolio, bridges between Discovery Research and Clinical Development, and provides the necessary scientific expertise to advance novel small molecules and biologic agents to address unmet need in immune-mediated diseases. Leveraging the translational datasets from internal and external sources and broad data analytical capabilities, Translational Sciences team works with cross-functional groups to enhance disease understanding, guide target selection and indication prioritization, develop novel decision-making biomarkers for early clinical trials, and support regulatory filings.

### **The fellow will have the opportunity to:**

- Participate in informational interviews with members of Immunology Translational Sciences team and other collaborating groups
- Network with Ph.D. scientists with expertise in immunology, translational research, pharmacology, and computational biology, to gain perspective of work scopes and responsibilities
- Gain insight into the critical roles of translational research in supporting clinical programs

*The fellow will work primarily with Sheng Gao, Director, Immunology Translational Sciences who holds a PhD in Genetics from the University of Wisconsin.*

## **Herbert D. Katz Center for Advanced Judaic Studies at Penn**

The Herbert D. Katz Center for Advanced Judaic Studies at the University of Pennsylvania supports research in Jewish history and culture that spans all periods of Jewish history, from antiquity through to the present day; it reaches into every part of the globe where Jews have lived, and it is grounded in a wide range of disciplines and approaches. It is the preeminent institution of its kind globally.

Each year the Center offers fellowships to 20 international scholars who come to live in Philadelphia and do research on a shared theme. In addition to the fellowship program the Center also publishes an academic journal and book series as well as organizing a wide range of public and academic programs.

### **The fellows may have the opportunity to learn about:**

- The academic administration of a center
- Basics of public scholarship and building outreach programming
- Thinking about fund raising
- Running an academic journal and academic publishing
- Editing
- Building international networks

*The fellow will work with both Steve Weitzman, the Katz Center director, and a professor of Religious studies and Jewish studies who holds a PhD in Near Eastern Languages and Civilization from Harvard and with Natalie Dohrmann, Katz Center associate director and coeditor of the Jewish Quarterly Review who also teaches in the departments of Religious Studies and History and holds a PhD in History of Judaism from the University of Chicago.*

## **Kleinman Center for Energy Policy – Communications**

The mission of the Kleinman Center is to create the conditions for policy innovation that support a just and efficient transition to sustainable energy. Our vision is an energy system that optimizes productivity through smart demand, sustainable supply, and compensated externalities. Much of our work is structured around writing, story-telling, relationship building, and partnerships—through our digital channels. The Kleinman Center focuses on projects that:

- 1) *Foster thoughtful and impactful energy-related research.* We support Penn research through a variety of programs and bring distinguished energy leaders and scholars to Penn for visits and residencies.
- 2) *Develop the next generation of energy leaders.* We engage student learners by providing energy related courses, a certificate program, lectures, internships, and grants for research and professional development.
- 3) *Create conditions for energy policy stakeholders to explore options and develop agendas.* We convene thought leaders with diverse interests in settings that foster productive conversations and action.

### **This fellow may have the opportunity to:**

- Attend virtual meetings
- Review and help produce content for our website and social media platforms
- Help with social media campaigns and online events
- Assist with the planning and promotion of events
- Help read and copyedit publications before they go to print
- Look at our web traffic and newsletter data to help make new recommendations
- Explore and assess tools or apps that improve our process or output

### **We ask that this fellow have the following qualifications:**

- an interest in energy policy
- experience or interest in communications and public outreach.

*Fellows will work primarily with Lindsey Samahon, Communications Director, who holds an M.S in Journalism from Northwestern University.*

## **The Laboratory on the Research and Structure of Matter- Education and Outreach**

The Laboratory for Research on the Structure of Matter (LRSM) is host to the National Science Foundation supported Materials Research Science and Engineering Center (MRSEC) at the University of Pennsylvania. The MRSEC at the University of Pennsylvania pursues a multidisciplinary approach to solve fundamental materials problems that are likely to underlie future technologies, and thereby, substantially impact the research and educational needs of society. The primary goal of the LRSM *Education & Outreach* efforts is to attract more Americans to STEM fields and take them to the highest educational level possible, with emphasis on underrepresented minorities, women, and the disabled. A second goal is to increase awareness in the general public about materials science & engineering and its societal relevance.

### **This fellow may have the opportunity to:**

- Assist with design of educational programs for all groups (k-12, undergraduate, graduate, faculty, and general public). This could include:
  - Designing calendar of events
  - Designing presentations for professional development workshops
  - Creating and/or modifying program assessment tools
  - Creating demos and kits for outreach projects
- Benchmarking best practices in STEM education. This could include:
  - Best practices for teaching and/or training across virtual platforms
  - Researching undergraduate STEM education trends at Ivy+ institutions as they relate to underrepresented groups
  - Researching latest practices in student experiences for STEM undergraduates at PWIs and comparing to minority serving institutions
  - Researching and developing effective recruitment strategies
  - Researching effective and relevant pedagogical methods in STEM disciplines
- Review and edit program guides for programs. This could include:
  - Checking for inconsistencies, editing, and updating guides
  - Creating a user-friendly format from student perspective
  - Compiling and archiving past versions

### **We ask that this candidate have the following qualifications:**

- a background in the STEM fields and/or in education
- interest in improving participation of groups traditionally underrepresented in STEM, inclusivity, teaching culture, and student affairs is highly desirable
- willingness to participate in open-ended project work with regular meetings to determine progress, and firm deadlines.

*This fellow will work primarily with Dr. Ashley Wallace, Assistant Director of Education and Outreach for the LRSM, who holds a PhD in Chemistry from Ohio State University.*

## **Merck-Digital Analytics and Technologies**

The speed at which digital health is evolving offers a significant opportunity to overhaul clinical trials. The objective of the Global Digital Analytics and Technologies (GDAT) Department is to transform clinical trials through pre-competitive collaboration, the evaluation and introduction of new technologies into the clinical trial paradigm to reduce patient burden, improve adherence, enable higher quality, faster, more frequent data collection, and obtain a more meaningful understanding of patients outside of the clinical site.

The Internet of Things (IoT) technologies can provide metrics utilizing active (prompted) or passive (unnoticed) measurements, offering considerable flexibility in approach and unprecedented insights into both behavior and disease. Integrating these devices will provide objective measures of biological processes and improve how we derive clinical endpoints today. More importantly, this strategy will help us identify novel biomarkers to support the ever-increasing complexity of tomorrow's drug discovery efforts. Our focused approach is aligned with neuroscience, particularly movement-related disorders such as Parkinson's Disease (PD).

### **This fellow may have the opportunity to:**

- Sit in on informational session(s) outlining the drug discovery and clinical trial process at Merck.
- Tour Merck's West Point campus and the Digital Innovation Laboratory.
- Participate in informational interviews with GDAT scientists on various topics, including current digital health devices to support ongoing projects, the design of trials that will utilize digital health devices, and the data analysis and interpretation of results from digital-enabled clinical trials.
- Shadow scientists perform non-lab responsibilities, including attending cross-functional team meetings, administrative duties, etc.
- Observe data analyses to explore relationships between digital health/sensor data, disease state, and clinical endpoints, leveraging statistical, and predictive algorithm approaches.

*This fellow will work primarily with Bryan J. Hansen, Associate Principal Scientist, Merck Global Digital Analytics and Technologies who holds a PhD in Neuroscience from the University of Texas.*

## **Merck-Infectious Disease and Virology**

Merck has a long-standing history of discovering, developing, and manufacturing innovative medicines and vaccines to prevent and treat infectious diseases. Merck has pioneered scientific breakthroughs leading to novel interventions against infectious pathogens, including bacteria, viruses and fungi, and continues to deliver on the mission of improving human health and saving lives.

At Merck, we leverage diverse thinking, skills and technologies to be on the leading edge of science and fuel novel drug & vaccine discovery and development. Scientists in the Infectious Disease and Vaccines Department at Merck interrogate pathogen and host biology to gain a deeper understanding of infection and pathogenesis, and to identify, characterize and validate targets for therapeutic interventions. We work across functions and sites, combining biology, immunology, virology, microbiology, chemistry, engineering, and pharmacology to investigate these targets and advance molecules and vaccines into clinical study.

### **The fellow may have the opportunity to:**

- Participate in informational interviews with members of the Infectious Disease & Vaccine department and collaborating departments.
- Meet with junior and senior staff to gain perspectives on work duties, such target identification, chemical screens, vaccine design, bioengineering, immunological assays and resistance testing, formulations, and clinical study.

*The fellow will work primarily with Bonnie Howell, Executive Director in Infectious Disease and Vaccines who holds a PhD in Cell and Molecular Biology from Lehigh University.*

## **Merck- Neuropharmacology**

Merck Discovery Neuroscience works broadly across diseases of the brain and peripheral nervous system. We are seeking new approaches for the treatment of serious diseases with high unmet need, significant societal burden and urgency to develop symptomatic or disease modifying treatments. This includes Alzheimer's disease (AD), Parkinson's disease (PD), amyotrophic lateral sclerosis (ALS), pain, sleep disorders and mental health disorders such as depression and schizophrenia.

- Neuropharmacology works to understand the relationship between pharmacodynamic and pharmacokinetic data in the pursuit of clinically translatable biomarkers of disease
- Our group helps to build and support Research Operating Plans (ROPs) to advance early leads to advanced compounds that have the desired biological and chemical properties to constitute preclinical candidates
- We utilize our unique *in vivo* capabilities to support mechanism of action, target validation and biomarker development for the Neuroscience department

### **This fellow may have the opportunity to:**

- Gain insight into how Neuropharmacology leverages its *in vivo* experimental capabilities to support the Neuroscience pipeline targeting neurodegenerative disorders, neuropsychiatric disease, pain, and sleep disorders
- Understand how our unique expertise in techniques such as cognition, behavior, electrophysiology, transgenic models, quantitative EEG, and complex data acquisition and automation support our disease targets
- Network with Ph.D. level staff to better understand aspects of their workday including the design and execution of experimental studies, data analysis, the process of program team decision making as well as to ask questions about individual's career paths and advise they may have for you.

*This fellow will work primarily with Steve Grauer, who has worked in the biopharmaceutical industry for 28 year as a behavioral pharmacologist and who holds a MS in Neuroscience from Rutgers.*

## **Merck-Quantitative Biosciences**

The Quantitative Biosciences department at Merck engages with and supports all therapeutic areas (oncology, neuroscience, cardiometabolic, vaccines, infectious diseases, etc.) represented across our discovery portfolio. We serve as members of cross-functional program teams, offering both experimental and theoretical program support through the various phases of pre-clinical drug discovery, including Target Validation, Hit-to-Lead ID, and Lead Optimization efforts, ultimately resulting in a pre-clinical candidate for first-in-human studies. The department consists of both *in vitro* and *in vivo* scientists with various backgrounds and expertise.

### **This fellow may have the opportunity to:**

- Attend informational session(s) outlining the drug discovery process at Merck.
- Participate in informational interviews with both Quantitative Biosciences and other functional area department members with expertise in pharmacology, computer modeling, structural biology, biochemistry, biophysics, assay operations, cell biology, chemical biology, and *in vivo* biology, as well as current Postdoctoral Fellows exploring a career in drug discovery.
- Tour Merck's West Point campus and Quantitative Biosciences facilities and observe *in vitro* and/or *in vivo* experiments performed by Quantitative Biosciences department members (if feasible, given pandemic status).
- Virtually shadow scientists in the performance of non-lab responsibilities, including attending cross-functional team meetings, administrative duties, etc.

*This fellow will work primarily with Marla L. Watt, Principal Scientist, Merck Quantitative Biosciences who holds a PhD in Molecular Pharmacology from Purdue University.*

## **Penn Liberal and Professional Studies- Masters of Behavioral and Decision Sciences**

Penn's Master of Behavioral and Decision Sciences (MBDS) is informed by contemporary theories and research methods of behavioral economics, decision sciences, network analysis and public policy. Our program equips students with theoretical and practical tools to address a variety of real-life problems, putting you ahead of the curve in a growing field of study.

In its fourth cohort, this entrepreneurial and interdisciplinary degree prepares you to understand how individuals and groups make decisions, and how to affect those decisions. Our world-renowned faculty and researchers are also leading practitioners in their fields. With their expertise, you are guided to apply what you learn to real-life problems in areas such as social and public policy, law, education, business and medicine.

As part of UPenn Liberal and Professional Studies the MBDS program is a professional masters with a strong applied approach and multiple experiential opportunities for the students. In addition to the 9 official courses, students are encouraged to join Design Challenges, group activities in pods of 10, sprint/bootcamps and other innovative programming curated and organized by MBDS.

See our website at <https://www.lps.upenn.edu/degree-programs/mbds> for more details about our curriculum and our [Industry Affiliates page](#).

### **This fellow may have the opportunity to:**

- Learn about how to develop and implement programs, using their knowledge on curriculum building and translating academic discourse to non-experts
- Learn about Partnership building between academia and industry: how to turn ideas into plans and actions
- Learn about the field of behavioral and decision sciences from a higher-ed perspective (how to run programs, landscape of the field, Ivy league structure and management)
- Be coached on how to position their academic degree outside academia.

### **We ask that this fellow have the following qualifications:**

- Active interest in the field of behavioral sciences and/or innovative programs in higher ed
- Curiosity and willingness to adapt your academic knowledge in other industries/fields.
- Have flexible schedule (some meetings may occur during the weekend or outside 9-5 schedule)

*This fellow will work primarily with Daniella Diniz, Associate Director of MBDS, PhD in Latin American Studies.*

## **Penn Center for Innovation (PCI) - Ventures**

PCI Ventures within the Penn Center for Innovation provides a path for faculty, staff and students that have an interest in being entrepreneurial but don't have the resources to pursue that interest on their own. Since 2009, we have built several programs designed to meet the varying needs of different projects with varying amounts of service from our team. Our suite of services and hands-on support promote entrepreneurship activities and incubate early-stage technology-based businesses as they make their way towards commercial success. PCI Ventures has created several company formation programs and accelerators for the Penn community to tap into, including UPSTART, UPADVISORS, and UPtheOdds.

See our website at <https://www.pci.upenn.edu/pciventures/> for details on these programs.

### **This fellow may have the opportunity to:**

- Network with entrepreneurs, CEOs and others in the venture community
- Participate in weekly round table discussion of ongoing activities at portfolio companies
- Participate in board meetings for portfolio companies
- Advise companies on developing their deck and practicing their pitch

### **We ask that this fellow have the following qualifications:**

- Passion for and commitment to entrepreneurship
- Availability on some Fridays from 9-12.

*This fellow will work primarily with Mike Dishowitz, Director of UPstart, PhD in Bioengineering from Penn.*

## **Penn Libraries – Academic Engagement**

The Academic Engagement Group includes all subject librarians (collections and outreach to specific schools, centers, and departments) at the Penn Libraries. In addition, a core group of five librarians manage the Libraries “LibAnswers/LibChat” program. This January, Academic Engagement is working with the Libraries’ 50 subject specialists to rollout a program of support to support (primarily) graduate students, faculty, clinicians, and researchers as they engage in the publishing process. This will include workshops for specific and general audiences, building documentation for authors/creators and librarians through online [library guides](#) and [other materials](#). Subject librarians also provide individual and group research consultations to students and faculty at all levels, build collections, and investigate new tools and services.

### **This fellow may have the opportunity to:**

- Collaborate in providing a workshop that supports some aspect of scholarly publishing
- Participate in discussions with the Academic Engagement Council and the Academic Engagement core group
- Collaborate in the development of new services and investigate workflow tools
- Meet with subject librarians working in multiple disciplines
- Bring their expertise and knowledge to the table to inform the Libraries as we introduce this new and developing program.

### **We ask that this fellow have the following qualifications:**

- Interest and comfort in bringing their experience as a graduate student to the discussion
- Comfort in public presentation
- Some flexibility in scheduling and interest in attending a few group meetings (mentioned above)
- Ability to learn to work with a simple online Web based product

*This fellow will work primarily with Rebecca Stuhr, Director of Academic Engagement and Librarian for Classical Studies and Russian and East European Studies.*

## **Penn Libraries – Area Studies**

The Penn Libraries supports a broad range of research and learning through its diverse collections and services, striving to offer representatively global resources to Penn patrons on campus and beyond. Materials in hundreds of languages and scripts are acquired from around the world to build inclusive, unique repositories of scholarship. These regionally-focused collections – referred to as Area Studies – are overseen by specialist librarians who have earned advanced subject degrees.

Duties of Area Studies librarians include collection development, budget management, cataloging, research support, liaison activities, instruction, and more. They work closely with library colleagues in a variety of positions, and liaise with faculty, students, and staff across globally oriented departments and centers. Though tending towards the humanities and social sciences, Area Studies offers diverse interdisciplinary support, including STEM, business, design, and law.

### **This fellow may have the opportunity to:**

- Revise and expand online research guides
- Assist with cataloging or inventorying collection materials
- Write a blog post about special materials in a collection
- Survey and report on acquisitions trends
- Conduct background research for a collection development initiative
- Learn how to develop, maintain, and promote research collections
- Understand workflows for acquisitions and cataloging

### **We ask that this candidate have the following qualifications:**

- Regional expertise in an area outside of the United States or Western Europe
- Reading knowledge of at least one relevant language
- Research background in the humanities or social sciences

*This fellow will coordinate with Jef Pierce, who holds a PhD in Religious Studies from the University of Virginia and serves as the South Asian Studies Librarian at Penn Libraries. Depending on region of interest, fellows may also work closely with other Area Studies Librarians: Joe Holub (Latin America), Heather Hughes (Middle East), Rebecca Mendelson (Japan and Korea), Lauris Olson (Africa), and Brian Vivier (China).*

## **Penn Libraries - Educational Technology and Learning Management (ETLM)**

How do we promote the use of current and emerging technologies across classroom, online, other learning environments to enhance the teaching mission of the University? What does effective programming for innovative learning spaces such as the Weigle Information Commons, the Education Commons and the Collaborative Classroom look like? And how do we get students to take advantage of the expertise, spaces, and technologies the Library has to offer? Educational Technology and Learning Management is tasked with increasing student engagement with the libraries and creating interesting and engaging ways for students to develop critical literacies through programming and initiatives to get the Penn community engaged through technological exploration, information and digital literacy, and partnerships with offices around campus.

### **The fellow will have opportunities such as:**

- Participate in program planning with members of the ETLM team around potential topics such as gaming, XR, Digital Identity, and Information Literacy
- Planning and facilitation and moderation of informal learning and other student engagement activities such as workshops, online communities, and learning cohorts
- Engage in conversations around the return to campus and what that means for our learning spaces like WIC, Vitale Media Lab and Hechtman Recording Studio, and TinkerLab (Maker Space).
- Gain knowledge in translating strategic plans into assessable goals by participating in meetings and interviews with ETLM staff members

### **We ask that this fellow:**

- Have a commitment to student engagement
- Pursuing a degree in a humanities- or communication-related discipline

*This fellow will work with Dr. Jade E. Davis, Director of Educational Technology and Learning Management*

## **Penn Libraries - Kislak Center**

The Kislak Center for Special Collections, Rare Books and Manuscripts is a vibrant center of research, teaching, and learning at Penn. It houses hundreds of thousands of books, manuscripts, ephemera, and digital facsimiles from across the world and from time periods ancient to modern. This fellowship is designed to introduce students to some of the many facets of working in a special collections library. The fellowship will be conducted remotely in 2021.

### **This fellow may have the opportunity to:**

- Meet curatorial staff and to be introduced to current and ongoing projects in the Kislak Center
- Discuss the research process and patron services in the Reading Room
- Explore collections relevant to the fellow's own scholarship
- Assist with pedagogy (online classes and tours)
- Understand gifts of donor collections
- Learn about digital humanities projects
- Attend online lectures and workshops

Projects and scheduling arrangements will be negotiable.

*This fellow will work primarily with John Pollack, Curator of Research Services, PhD in English, and Eric Dillalogue, Assistant Director of Operations.*

## **Penn Libraries- Museum**

The Museum Library in the Academic Wing of the Penn Museum is one of the nation's premier libraries for anthropology and archaeology. It houses over 145,000 volumes on archaeology throughout the world, biological anthropology, cultural and linguistic anthropology, and medical anthropology, as well as archaeological sciences and cultural heritage management. As part of the Penn Libraries, its collections, spaces, services, and programs serve Penn students, faculty, and staff but also independent researchers and visitors to the Penn Museum.

### **The fellow may have the opportunity to:**

- Learn about the myriad roles of a subject specialist in library-related instruction, reference, collections development, digital projects, and community engagement.
- Work on an optional project, developing a web-based LibGuide for students and researchers on a topic that will be selected in discussion with the Head of the Museum Library (for example, Arts and Antiquities of Africa guide for Penn students and museum visitors).

*The Fellow will work primarily with Deborah Brown Stewart, Ph.D. in Classical and Near Eastern Archaeology from Bryn Mawr College, who serves as the Head of the Museum Library and Penn Libraries' specialist for anthropology and archaeology*

## **Penn Libraries- Research Data & Digital Scholarship**

Digital scholarship opens new ways for institutions to fulfil their research and learning mission, enabling researchers to explore, analyze, present, visualize, and share cutting-edge scholarship, bring together digital images, text, 3D models, and sound, to create transferable learning outcomes for students. As an inclusive set of practices with entry points for people with any level of expertise, digital scholarship offers Penn community members the opportunity to live up to the Penn Compact 2022, to contribute in innovative ways to projects that matter in the 21st Century—projects that can positively impact their local and global communities, whether by recording and transcribing the histories of underrepresented groups; analyzing social protest through social media; modeling emerging topics of interest in medical research; un hiding and remapping the people and places that have been omitted by official versions of history; collectively transcribing and exhibiting the letters of civil rights icons; training algorithms to detect bias in housing markets; or digging into election data to uncover stories about social inequities and injustice.

This fellowship is designed to introduce students to some of the many facets of working in a digital scholarship unit in a library. The fellowship will be conducted remotely in 2021.

### **This fellow may have the opportunity to:**

- meet unit staff and faculty partners, and be introduced to current and ongoing projects, including strategic planning work for a new digital scholarship center
- explore digital scholarship tools and methods (digital exhibits, websites, GIS, text mining, visualization, etc.)
- learn about funder mandates for open data and open scholarship
- assist with pedagogy (online workshops and tutorials)
- learn about the project management process behind a digital scholarship project
- attend online lectures and workshops

*This fellow will work primarily with Nicky Agate, Assistant University Librarian for Research Data and Digital Scholarship (PhD in French Literature). Other team members include Digital Humanities Librarian Scott Enderle (PhD in English) and Digital Scholarship Librarian Jennifer Garçon (PhD in History).*

## **Penn Museum – Academic Engagement**

The Academic Engagement Department of the University of Pennsylvania Museum of Archaeology and Anthropology supports instructional use of the Museum's galleries and collections for university classes and public audiences, student research on the collections, and extra-curricular programming for university audiences.

### **The fellow may have the opportunity to:**

- Attend Academic Engagement team meetings
- Take part in discussions regarding academic and programmatic offerings at the Museum
- Attend planning meetings with faculty and staff across campus for Penn Museum-related events and courses
- Assist with day-to-day tasks, such as course planning, program management, exhibition update meetings
- Meet and connect with other museum professionals at the Penn Museum

### **We ask that this fellow have the following qualifications:**

- An interest in museum collections and research, object-based learning, and/or university and public engagement.

*Fellows will work primary with Anne Tiballi, Director of Academic Engagement at the Penn Museum, PhD in Anthropology from Binghamton University, or with Sarah Linn, Research Liaison at the Penn Museum, PhD in the Art and Archaeology of the Mediterranean World from the University of Pennsylvania.*

## **Penn Online Learning Initiative**

Penn's Online Learning Initiative (OLI) cultivates the integration of online programs across campus, supporting Penn's schools in the creation of online degree and non-degree programs. The University offers a range of online educational opportunities including certificates, continuing education, microcredentials, and six online degrees.

As the nexus for information and resources on online teaching and learning at Penn, OLI contributed to the pivot to remote learning last spring and towards planning for, and support of, the current academic year.

### **The fellow may have the opportunity to:**

- Participate in university-wide working groups focused on supporting online learning as part of the COVID response.
- Participate in university-wide working groups focused on digitalization of learning in general. These include groups focused on instructional design, marketing, and student services support.
- Read and discuss industry focused research on online learning.

*This fellow will work primarily with Rebecca Stein, Executive Director, Ph.D. in Economics from Northwestern University.*

## **Penn Sustainability**

The Office of Sustainability at Penn is housed in Facilities and Real Estate Services. Penn Sustainability is a University-wide initiative to advance environmental sustainability at the University of Pennsylvania, and coordinate programs to develop a more sustainable campus. President Amy Gutmann's signing of the Presidents' Climate Commitment in 2007 charged Penn to develop a strategic plan outlining the University's goals for carbon reduction. In October of 2019, Penn Sustainability released the third iteration of this strategic plan, the *Climate and Sustainability Action Plan 3.0 (CSAP 3.0)*.

### **This fellow may have the opportunity to:**

- work with Penn Sustainability to expand a web-based dashboard for waste reporting and analysis in support of specific tactics within CSAP 3.0.
- Experience developing web applications using R Shiny preferred.

*This fellow will work primarily with Natalie Walker, Sustainability Manager who holds a Master's of Science in Sustainable Engineering from Villanova University.*

## **Philadelphia Museum of Art- Library and Archives**

How do we sustain long-term infrastructure, discoverability, and access to research and scholarly information in general in today's digital world? Led by the Arcadia Director of the Library and Archives, the Library and Archives at the Philadelphia Museum of Art is working to create a sustainable, institution-wide information culture that will benefit data creation, access, and preservation, and ultimately make our data more accessible to the public. We analyze and document how our art information is created, used, and stored. Based on museum priorities, we work with staff to find ways to improve workflows, processes, and the leveraging of our art information.

We accomplish this foundational work through exploratory and active institution-wide initiatives such as the Art Information Commons, a project supported by The Andrew W. Mellon Foundation, implementing digital asset management and a system across the institution, as well as exploring linked data through a Duchamp Research Portal collaboration with the Centre Pompidou and Association Marcel Duchamp.

### **The fellow may have the opportunity to:**

- Informational interviews with the Arcadia Director of the Library and Archives and key members of the Art Information Commons, Digital Asset Management, and Duchamp Research Portal teams;
- Informational interviews with other relevant stakeholders, identified together with the Arcadia Director, who may help expand the candidate's network and career interests
- Attend relevant meetings on strategy development, metadata creation and workflows, and collaborative idea generation
- Gain understanding of data sustainability and infrastructure opportunities and challenges for museums

*Preference will be given to students outside library, archives and information science.*

*This fellow will work with Kristen Regina, Arcadia Director of the Library and Archives.*

## **Philadelphia Museum of Art—Publishing**

The Publishing department at the Philadelphia Museum of Art supports the museum's mission to extend the reach of its collections and exhibitions to a diverse audience as a source of delight, illumination, and lifelong learning. It furthers scholarly study through the publication of in-depth collection and exhibition catalogues, both in print and online, and develops popular books and handbooks for visitors of all ages. Members of the Publishing department collaborate closely with content experts, including museum curators and outside authors, in shaping and executing book projects in a variety of scales. Current projects include exhibition catalogues on contemporary art, photography, and time-based media, a scholarly systematic catalogue of the museum's collection of American silver, a volume reevaluating and reinterpreting the Indian Temple Hall installed in the museum's East Asian galleries, and development of the museum's program of online scholarly publications.

### **The fellow may have the opportunity to:**

- Meet with the Interim Head of Publishing, Editorial, and other members of the department's editorial and production staff to learn about current projects
- Meet with an editor in the adjacent Editorial and Graphic Design department to learn about their work
- Meet with the Deputy Director for Digital Resources and Content Strategy (formerly director of the Publishing department) to discuss her goals and role in overseeing five museum departments
- Gain understanding of the field of museum publishing and art publishing in general, including the various roles and positions available
- Learn the nuts and bolts of publishing books, from early planning, through editorial and design, to production and distribution
- Gain understanding of digital publishing opportunities and challenges for museums
- Edit text(s) for object pages on the museum's website (web labels) under that project's manager

*The extern will work with Kathleen Krattenmaker, Interim Head of Publishing, Editorial who holds PhD in Classical and Near Eastern Archaeology from Bryn Mawr College.*

## **Poverty Solutions-University of Michigan**

Poverty Solutions is a research initiative at the University of Michigan that aims to prevent and alleviate poverty through action-based research that informs policymakers, community organizations, government entities, and practitioners about what works in confronting poverty. Poverty Solutions focuses on partnerships with community organizations, government entities, practitioners and policymakers at every level to build creative solutions to address a real-world agenda. Poverty solutions provides data driven, interdisciplinary approach to determine needs and formulate policy responses. See our website at <https://poverty.umich.edu/> for more information about our group.

### **This fellow may have the opportunity to:**

- Learn how their PhD skills are applicable to work in public policy, community organizations, non-profits, and foundations
- Gain a deeper understanding of public policy related careers and the range of options that are available
- Network with professionals that do applied real world research in both the private and public sector
- Get advice on the myriad career paths within public policy

### **We ask that this fellow have the following qualifications:**

- A desire to use their skills to have a real-world impact.
- Some knowledge of analytic techniques—quantitative or qualitative.

*This fellow will work primarily with Amanda Nothaft, Senior Data and Evaluation Manager, Poverty Solutions at the University of Michigan who holds a PhD in Sociology from the Penn.*

## **Price Lab for Digital Humanities-1**

The Price Lab for Digital Humanities at the University of Pennsylvania supports innovative uses of technology in the study of history, art, and culture. We work in close partnership with the Penn Libraries and Penn Museum of Archeology and Anthropology to help train faculty and students in the latest digital tools and methods, encourage development of new computing-intensive humanities courses, and promote collaborative faculty-student experiments and research projects. The Price Lab serves as a central node of communication and exchange across Penn's many departments, centers, and schools with expertise and interest in the digital humanities.

Through seminars, workshops, lectures, and symposia, the Price Lab provides forums for presentation and discussion of work by leading scholars from on campus and around the country. Through curricular initiatives, we also oversee development of courses in digital methods specifically aimed at humanities majors and graduate students. These courses are designed to enhance students' ability to use computational tools, improve their collaborative learning and research skills, and better position them for 21st-century careers.

### **This fellow may have opportunities such as:**

- Informational interviews with digital humanities scholars and staff using a variety of disciplinary and technical approaches
- Collaborating on a Price Lab project
- Learning how to see a DH project through from conception to a finished project, such as a publication, website, or conference presentation
- Gaining a sense of the scope of current DH work, the skills valued in the current market, and resources for acquiring those skills

*Prior digital humanities (or coding) experience is not required.*

*This fellow will coordinate with J.D. Porter, who holds a PhD in English from Stanford and is a DH Project Specialist at the Price Lab.*

## **Price Lab for Digital Humanities-2**

As the centerpiece of the School of Arts and Sciences strategic initiative Humanities in the Digital Age, the Price Lab supports innovative uses of technology in the study of history, art, and culture. We work in close partnership with the Penn Libraries and Penn Museum of Archeology and Anthropology to help train faculty and students in the latest digital tools and methods, encourage development of new computing-intensive humanities courses, and promote collaborative faculty-student experiments and research projects.

Established in 2015 with a gift from Michael and Vikki Price, as well as additional support from the Mellon Foundation, the Lab is located alongside the Wolf Humanities Center on the 6th floor of Williams Hall. The Price Lab serves as a central node of communication and exchange across Penn's many departments, centers, and schools with expertise and interest in the digital humanities.

Through seminars, workshops, lectures, and symposia, we provide forums for presentation and discussion of work by leading scholars from on campus and around the country. We are also pleased to host fellowships for undergraduates, graduates, postdocs as well as teaching faculty and research staff. Through our curricular initiatives, we oversee development of courses in digital methods specifically aimed at humanities majors and graduate students. These courses are designed to enhance students' ability to use computational tools, improve their collaborative learning and research skills, and better position them for 21st-century careers.

### **Externs may have the opportunity to:**

- Sit-in on virtual meetings related project planning and development
- Gain first-hand knowledge about the process of managing a digital project from beginning to end
- Work collaboratively or individually to build a simple digital humanities project such as an online exhibit, digital map, or interactive timeline

*Externs will work primarily with Stewart Varner, Managing Director of the Price Lab, PhD in American Studies from Emory University and Masters in Library and Information Science.*

## **The Science Outreach Initiative**

The Science Outreach Initiative (SOI) serves faculty and other researchers in the University of Pennsylvania's School of Arts and Sciences by helping them develop outreach program ideas and proposals, locating potential partners, and promoting information and resource exchange among all of Penn's STEM outreach programs.

The SOI was established in 2012 to encourage and support faculty participation in initiatives towards the development of research efforts which will more broadly impact public understanding of science. Advancing the frontiers of science through research is crucial to our Nation's future, as is the development of a more scientifically literate citizenry. Major external funders like the National Science Foundation now place an emphasis on "Broader Impacts" -- initiatives which work towards this scientific literacy goal. The SOI staff will guide interested researchers through the process of effectively responding to outreach requirements of funding agencies, including the "Broader Impacts" criterion.

### **This fellow will:**

- Read and discuss background articles on the origins of Broader Impacts Criterion
- Understand the basis for BI requirements
- Practice brainstorming and developing BI plans
- Conduct informational interviews with other BI professionals

### **This fellow may have the opportunity to:**

- Review and produce content for SOI's website and social media platforms
- Assist with communication and outreach efforts
- Collect data and create databases
- Assist with grant proposals

### **We ask that this fellow have the following qualifications:**

- background in the natural sciences
- some level of experience with volunteer work and/or public outreach.
- interest in relationship building and partnerships, as this is what much of SOI's work is structured around

*Fellows will work with Kristen Coakley Ashare, Assistant Director of SOI, PhD in Biomedical Sciences from UC San Francisco.*

## **Walmart- Applied Behavior Science**

The Applied Behavioral Science (ABS) team is an interdisciplinary innovation team of Behavioral Scientists, Data Scientists, and Economists who collaborate to solve some of the most impactful and difficult business problems at Sam's Club and Walmart. We focus on marketing innovations and emerging (often ill-defined) business problems, but also work in HR related areas, such as associate onboarding, welfare, and relationship. All ABS team projects are evaluated based on numbers, e.g. incrementality, cost savings. The core values of the team is creativity.

### **This fellow may have the opportunity to:**

- Connect with experienced personnel in various departments of large companies
- Participate in selected tasks and field experiments (Non-disclosure agreement required)
- Be mentored by team members on the ABS team

### **We ask that this fellow have the following qualifications:**

- Not afraid of complex and undefined business problems
- Excited about using an interdisciplinary approach to discover creative solutions
- Patient and organized

*This fellow will work primarily with Min Gong, Director of Applied Behavioral Science, PhDs in Psychology and Economics from Penn.*