

Building Interdisciplinary Research Careers in Women's Health (BIRCWH)

INTRODUCTION AND PROGRAM OBJECTIVES

The purpose of the Building Interdisciplinary Research Careers in Women's Health in Pittsburgh (BIRCWH@Pitt) program is to equip talented Univ. of Pittsburgh faculty Scholars to be independent investigators in interdisciplinary research in women's health. The program encompasses basic, translational, clinical, behavioral, engineering, and health services research in reproductive sciences and women's health, spanning embryonic life to advanced age.

Scholars are supported for a minimum of two years and are able to take advantage of the extraordinary environment at the Univ. of Pittsburgh Schools of the Health Sciences and Magee-Womens Research Institute as they work with a personalized mentorship team and supportive program advisory committee members and current BIRCWH scholars to develop a research program that is not only relevant to the Scholar's research interests in women's health, but will serve as the foundation for the Scholar's independence.

ELIGIBILITY CRITERIA

At the time of the appointment, BIRCWH Scholar candidates must:

- Have a clinical doctorate or PhD degree or its equivalent;
- Have completed any postgraduate training normally expected for a faculty appointment in their field (including clinical or postdoctoral fellowship training, or residency if they have chosen not to subspecialize);
- Have no more than eight years of research or research training experience beyond their last doctoral degree;
- Hold, or be scheduled to start a faculty appointment within the Univ. of Pittsburgh's six Schools of the Health Sciences (Grad School of Public Health, School of Dental Medicine, School of Health and Rehabilitation Sciences, School of Medicine, School of Nursing, and School of Pharmacy), or Bioengineering by the time of the BIRCWH appointment (May 1, 2025);
- Be able to spend at least 9 person months (or at least 6 person months for surgical-specialties) of full-time professional effort conducting research and research career development activities;
- Not be or have been a PD/PI on an R01 or subproject of a Program Project (P01), center (P50, P60, U54) grant, independent mentored career development (K-series) grants, or other equivalent grant awards; except for R03 and R21; and
- Be a U.S. citizen or noncitizen national, or must have been lawfully admitted for permanent residence and possess an Alien Registration Receipt Card (I-151 or I-155) or some other verification of legal admission as a permanent citizen. Individuals on temporary or student visas are not eligible

SCHOLAR SUPPORT

1. **Scholar's salary:** The BIRCWH program will provide salary support for 75% of a scholar's salary up to \$100,000, plus fringe benefits, annually. If the Scholar's salary exceeds available NIH funding, the Scholar's department must supplement the BIRCWH salary contribution to a level that is consistent with that department's salary scale. Departmental supplementation of a salary cannot require duties or responsibilities that would interfere with the purpose of BIRCWH or the requirement that 75% effort be spent on women's health research or related career development activities. BIRCWH research effort may be reduced to 50% FTE for faculty in surgical specialties such as general surgery, neurosurgery, etc.
2. **Scholar's research and professional development:** The BIRCWH program provides funds to support the scholar's research, including supplies and reagents, equipment, core research services and technical personnel, travel to one scientific meeting, and education funds. Current FY funding for individual scholar development is \$33,100. See budget form for more detail.
3. **Other support:** The department supporting the candidate must be able to demonstrate a commitment to the development of the candidate as a productive, independent investigator. The candidate's department must agree to protect 75% of the Scholar's time for the BIRCWH project (50% allowable for surgical specialties), and cover any of her/his salary and necessary research expenses in excess of the NIH limit. This agreement is needed to ensure that the scholar has a salary commensurate to that of other junior faculty in the relevant department, to ensure provision of the appropriate technical support and supplies necessary to establish a productive research program, and to ensure that the total funds allocated to support each young investigator are within the program guidelines. In addition to salary and protected research time, the department must provide office space and appropriate research space for the Scholar

PROGRAM ACTIVITY AND EXPECTATIONS

Scholars work with a personalized mentorship team and supportive program advisory committee members to develop a research program that is not only relevant to the Scholar's research interests in women's health but will serve as the foundation for the Scholar's independence. Key activities in the program include:

Research

Scholars will conduct interdisciplinary (as noted above) research in women's health, executing experiments, analyzing and preparing data for publication in peer-reviewed journals and presentations. The research experience is intended to provide opportunities for career development as a productive researcher.

Mentorship

Scholars will engage with a dedicated mentorship team to achieve research and career development goals. The Scholar will work with the primary mentor to submit the application's research plan and budget. There will be at least one other research mentor with an interest in a relevant scientific discipline different than that of the primary mentor, thus enhancing the interdisciplinary aspects of the research plan. A third member of the mentoring team serves mainly as a career mentor. The BIRCWH Advisory Committee may make further recommendations to the appointed Scholar in strengthening the mentoring team. Scholars and primary mentors should meet not less than once every two weeks, on average; weekly meetings are encouraged when possible. The scholar and full mentorship team must meet at least three times during the year. A brief, written summary of the full team meeting will be submitted with progress report materials prior to Advisory Committee Meetings.

A list of program mentors is provided below. However, **additional mentors can be added based upon project needs**, with the advisory committee's approval. The mentor should be recognized as an accomplished investigator in the proposed research area and have a successful record in training independent investigators.

BIRCWH @ Pitt Program Mentors (names are hyperlinked to websites)

Judith Yanowitz, PhD	Professor of OBGYN-RS, PI/Director, BIRCWH Program, School of Medicine (SOM)
Steve Abramowitch, PhD	Professor of Bioengineering, Swanson School of Engineering (SSE)
Lisa Bodnar, PhD	Professor of Epidemiology, Psychiatry and OBGYN-RS, School of Public Health (SPH)
Sonya Borrero, MD, MS	Director, Center for Women's Health Research and Innovation and Professor of Medicine, SOM
Jennifer Brach, PhD, PT	Professor of Physical Therapy
Daniel Buysse, MD	Distinguished Professor of Psychiatry, Medicine, and CTSI, SOM
Janet Catov, PhD	Associate Professor of OBGYN-RS and Epidemiology, SOM
Terence Dermody, PhD	Physician-in-Chief and Scientific Director, Children's Hospital of Pittsburgh Vira I. Heinz Professor and Chair, Department of Pediatrics, SOM
Heidi Donovan, PhD, RN	Professor of Health & Community Systems and Vice Chair, Research, School of Nursing (SON)
Sharon Hillier, PhD	Professor of OBGYN-RS and Microbiology and Molecular Genetics, SOM
Marian Jarlenski, PhD	Associate Professor and Vice Chair for Practice, Health Policy and Management, SPH
Elizabeth Krans, MD, MSc	Associate Professor of OBGYN-Reproductive Sciences, SOM
Adrian Lee, PhD	Professor of Pharmacology and Chemical Biology, Director, Institute for Precision Medicine, SOM
Mellissa Mann, PhD	Associate Professor of OBGYN and Reproductive Sciences, SOM
Mary Marazita, PhD	Professor and Co-Director of the Center for Craniofacial and Dental Genetics, School of Dental Health (SDH)
Elizabeth Miller, MD, PhD	Professor of Pediatrics, Chief, Division of Adolescent Medicine, SOM
Pamela Moalli, MD, PhD	Professor of OBGYN-RS and Bioengineering, SOM
Ann Newman, MD, MPH	Professor of Epidemiology, Medicine and CTSI, Director Center for Aging and Population Health, SPH
Kyle Orwig, PhD	Professor of OBGYN-RS, SOM
Lisa Rohan PhD	Professor of Pharmaceutical Science and OBGYN-RS, School of Pharmacy (SOP)
Gerald Schatten, PhD	Professor of OBGYN and Reproductive Sciences, SOM
Shroff, Sanjeev, PhD	Interim Dean and Professor of Bioengineering and Gerald E. McGinnis Chair in Bioengineering, SSE

BIRCWH Program Interactions

Every two months, the scholar will attend the BIRCWH Advisory Committee Meetings. In addition to presentation of their own progress, mentorship, plans and future goals, scholars contribute during discussion of other projects, and provide suggestions and recommendations on resources, approaches and opportunities for collaboration. The

primary mentor must attend every other meeting with the scholar. The scholar will attend monthly peer-mentoring discussions with the current scholars and research director. The scholar will also participate in regular (weekly) MWRI conferences and special events, such as “K Club” scholar enrichment activities, Grant-in-Progress Meetings, MWRI’s Annual Research Day, and the BIRCWH National Meeting at the NIH. The scholar will prepare reporting materials prior to the Advisory Committee meetings and for annual program reporting to the NIH.

Workshops and Coursework

BIRCWH Scholars are expected to complete coursework to advance their professional development and, per NIH guidelines, they must also complete 8 hours of instruction related to responsible conduct of research, and training on rigor and reproducibility. The training may be tailored to the scholar’s experience and research project. The University of Pittsburgh’s Clinical and Translational Science Institute (CTSI) and Office of Academic Career Development (OACD) provide free workshops on a broad range of topics that fulfill this requirement; tuition-based courses are available via the Institute for Clinical Research Education (ICRE, see recent offerings below). Scholars are strongly recommended to pursue academic coursework that expands their scientific and research knowledge. Tuition and course materials may be charged to BIRCWH. As University faculty, scholars qualify for 10% tuition rate at Pitt.

Required Professional Development Coursework through ICRE

Univ of Pittsburgh ICRE, to be charged to BIRCWH, <https://www.icre.pitt.edu/courses/courses.aspx>

Medical Writing and Presentation Skills Advanced Grant Writing Making the Most of Mentoring

Required Responsible Conduct of Research Workshops through CTSI

Free, zoom 1-hour sessions, <https://ctsi.pitt.edu/education-training/responsible-conduct-of-research-training/>

Responsible Conduct of Research Principles and Application	<i>As applicable</i>
Conducting Ethical Human Participant Research	Laboratory Safety: Beyond Bloodborne Pathogens and Chemical Hygiene
Community Partner Research Ethics Training: A Strategy for Improving Recruitment and Retention	Using Animals Responsibly in Biomedical Research
Author’s Responsibilities: Publication and Authorship	
Best Practices for Reproducible Science	<i>Course offerings vary from year-to-year, comparable or more advanced substitutions may be completed as applicable.</i>
Managing Up, Down, and All Around	
Managing Conflict of Interest: Protecting the Integrity of Research	

NIH Required Modules on Rigor and Reproducibility

Free online <https://grants.nih.gov/policy/reproducibility/training.htm>

Module 1: Lack of Transparency	Module 3: Biological and Technical Replicates
Module 2: Blinding and Randomization	Module 4: Sample Size, Outliers, and Exclusion Criteria

Recommended Coursework *(Representative offerings from recent semesters, selection of these and other courses should be tailored to scholar experience and research project, and costs charged to BIRCWH)*

ICRE Training in the Conduct of Research

Principles & Practices of Research Technology
Strategic Leadership in Academic Medicine
Cost Effectiveness Analysis in Health Care
Intro to Research on Disparities in Health Care
Seminar in Health Systems Leadership
Fundamentals of Clinical Trials
Clinical Decision Analysis
Statistical Methods and Issues in Clinical Trials
Special Topics in Clinical Trials
Qualitative Research Methods
Fundamentals of Implementation Science for Healthcare Practice and Innovation I & II

Behavioral & Community Health Science

Overview of Health Equity
Dimensions of Aging: Culture and Health
Intro to Community Health
Intro to Community Based Participatory Research
Translating Research for Policy and Practice
Concept Mapping: A Participatory Research Method
Public Health Approaches to Women’s Health
Intro to Community Based Participatory Research

Bioethics

Health Policy & Management

Computer Methods in Decision and Cost Analysis
Current Topics in Health Economics
Managing Health Programs and Projects
Health Policy Analysis

Human Genetics

Molecular Basis of Human Inherited Disease
Bioethics
Applications in Public Health Genetics and Genomics
Genomic Data Processing and Structure
Human Population Genetics

Infectious Disease & Microbiology

Human Diversity and Public Health
Epidemiology and Control of Sexually Transmitted Infections

Gender Health

Overview of LBGT Health Disparities
Advanced Topics in LBGT Research
Global Perspectives on Women’s Health: Empowerment, Gender, Equality, and Health
Gender and Science
Gender and Medicine

<p>Bioethics Theoretical Foundations of Applied Ethics</p> <p>Statistics/Biostatistics Intro to Statistical Methods 1 & 2 Clinical Trials: Methods and Practice SAS for Data Management and Analysis Intro to Health Data Science Introductory High-Throughput Genomic Data Analysis: Data Mining and Applications Statistical Methods for Omics Data Introductory Statistical Learning for Health Sciences Regression and ANOVA Intro Systematic Review and Meta-Analysis</p> <p>Environmental & Occupational Health Environmental Health and Disease Principles of Toxicology</p> <p>Epidemiology Pathophysiology Across the Life Span Chronic Disease Epidemiology Reproductive Epidemiology Epidemiology of Aging-Methods Design and Conduct of Clinical Trials Epidemiology of Women's Health</p>	<p>Gender, Trauma and Disability</p> <p>Pharmacology & Chemical Biology Principles of Pharmacology Molecular Pharmacology</p> <p>Immunology Comprehensive Immunology Experimental Basis of Immunology Immunology and Human Disease</p> <p>Interdisciplinary Biomedical Graduate Program Experiments and Logic in Cell Biology Molecular Pathobiology Basics of Personalized Medicine Model Organisms Stem Cells Cell Biology of Normal and Disease States Cell Therapy Intro to Tissue Engineering Extracellular Matrix in Tissue Biology and Bioengineering</p> <p>Academic Development Health Sciences Leadership Academy Writing Winning NIH Grant Proposals Workshop</p>
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APPLICATION SUBMISSION

The application must be submitted via email (Word or PDF attachments) to Lori Rideout at rideoutl@mwri.magee.edu. **The application deadline is 9:00 am on Monday, March 3, 2025.**

Candidate's documents	
Completed application form	See last 2 pages of this document
Current curriculum vitae	In Pitt format; pending funding (with anticipated effort) must be included
Research plan (5 pages)	Address hypothesis, innovation and approach, (up to 5 pages, excluding bibliography, 11 pt Arial or Helvetica font, 0.5" margins).
Research training and career development plan (3 pages)	Address overarching research and professional goals, and the interdisciplinary nature and reproductive sciences-women's health focus of the proposed training, Provide a detailed plan of activities (including courses, meetings, etc) and describe how the proposed research will promote education and development as an independent investigator (up to 3 pages, 11 pt Arial or Helvetica font, 0.5" margins).
Annual budget (see Excel template) <i>Departmental support for any expenses not covered by BIRCWH must be confirmed in writing. See required letter below.</i>	The below expenses must be considered. A brief justification may be included. <ul style="list-style-type: none"> Scholar salary and fringes Research expenses Travel to scientific meetings Tuition/coursework/fees/materials
Primary mentor's documents	
Mentor's statement/letter of support (2 pages)	Address the following: <ul style="list-style-type: none"> Assessment of the candidate's qualifications and potential for a research career Confirmation of mentor's support and contributions to the scholar's proposed career development plan Description of the research environment, and the availability and quality of needed research resources
NIH biosketch	Personal statement section should describe mentor's past mentoring experience and current research focus
Past/current trainees	Provide a list or table of up to 5 past or current trainees, which includes: Name, degree(s), dates, where trained, title of project, academic level, and present position and institution.

Letter confirming department support

Department chair's letter	<p>Confirm the following:</p> <ul style="list-style-type: none"> • Seventy-five percent of the candidate's full-time professional effort will be protected for the development of his/her research program under the BIRCWH award (if reduced for surgical specialties at least 50% time must be protected for BIRCWH). • Departmental resources, including research facilities, resources, training opportunities, and faculty capable of productive collaboration with the candidate, will be available for the candidate's planned career development and research program. • The proposed budget is approved by the department, and the department will cover the remaining salary/fringe and research expenses in excess of the BIRCWH NIH funding available.
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Additional letters of support (up to 2)

Additional letters (1 page each)	<p>In addition to the primary mentor's statement/letter and the department chair's letter, up to two letters of support from those familiar with the candidates' research may be submitted with the application. These may include letters from supporting mentors (1 page each, please alert Lori Rideout if these will be submitted directly from the recommender).</p>
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Candidate Evaluation

Proposals will be reviewed by the PI and Program Coordinator for adherence to application criteria prior to full review by the entire Advisory Committee. Selected candidates may be invited to provide a presentation of their proposal to the Advisory Committee.

The expected start date of the Scholar's appointment is **May 1, 2025**.

Building Interdisciplinary Research Careers in Women's Health (BIRCWH)

Name	 <i>Last, First, Initial</i>		Start date	
Business Address		Home Address		
Phone	 <i>Work</i>	 <i>Home</i>	 <i>Cell/pager</i>	
Email address				
Personal	 <i>Date of birth</i>	 <i>Place of birth</i>		
	 <i>Country of Citizenship</i>	 <i>If Non-US Citizen, then do you have a permanent US resident visa (Green Card)?</i>		
Education	Institution, Location	Dates	Degree/field of training	
Undergraduate				
Graduate				
Post-graduate				
Project title				
Proposed mentors (name, academic titles, department affiliation)				
Primary mentor				
Supporting mentor				
Supporting mentor				

DEMOGRAPHIC INFORMATION

What is your race (you may select more than one)?

<input type="checkbox"/> African American	<input type="checkbox"/> Alaskan Native	<input type="checkbox"/> American Indian
<input type="checkbox"/> Asian	<input type="checkbox"/> Pacific Islander	<input type="checkbox"/> White
<input type="checkbox"/> Do not wish to provide	<input type="checkbox"/> Other (describe):	<input type="text"/>

Are you Hispanic?

<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Do not wish to provide
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What is your gender?

<input type="checkbox"/> Female	<input type="checkbox"/> Male	<input type="checkbox"/> Do not wish to provide
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Do you have a disability?

<input type="checkbox"/> Yes (describe below)	<input type="checkbox"/> No	<input type="checkbox"/> Do not wish to provide
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