## Resources for New Researchers

### Introduction to Research & Study Design

- **iBiology:** https://www.ibiology.org/
  - **Planning Your Scientific Journey** https://ibiov2.herokuapp.com/catalog/PYSJ/SP/
    - This course offers concrete tools and practical advice to help you navigate the most challenging aspects of developing and planning a research project.
    - Length: Approx. 6 weeks; 2.5-3 hours/week; self-paced

  - **Strategies for Effective Public Engagement** iBiology Courses (V2)
    - This course comprises 10 short videos that introduce essential concepts and provide practical tips for planning and executing effective public engagement projects.
    - Length: Approx. 3 weeks; 1-3 hours of work per week.

  - **Let's Experiment : A Guide for Scientists Working at the Bench** https://ibiov2.herokuapp.com/catalog/LE/SP/
    - Scientists from a variety of backgrounds give concrete steps and advice to help you build a framework for how to design experiments in biological research.
    - 5 modules; Length: 3 hours/week; self-paced

- **Summer Short Course: Introduction to Clinical and Translational Research at UMB:** https://www.medschool.umaryland.edu/k30/Summer-Short-Course-Introduction-to-Clinical-and-Translational-Research-at-UMB/
  - August 7-11, 2023
  - This week-long course is open to all UMB and Baltimore VA faculty, fellows, residents, students and staff with an interest in clinical and translational research. This course is designed for new researchers, or those looking for a refresher, who struggle with designing good studies and/or writing publishable manuscripts/grants. The course is free of charge.

- **NIH Introduction to the Principles and Practice of Clinical Research (IPPCR)** https://ocr.od.nih.gov/courses/ippcr.html
  - The Introduction to the Principles and Practice of Clinical Research (IPPCR) course trains registrants on how to effectively and safely conduct clinical research. The course focuses on the spectrum of clinical research and the research process by highlighting biostatistical and epidemiologic methods, study design, protocol preparation, patient monitoring, quality assurance, ethical and legal issues, and much more.
  - Non-certificate option – view individual lectures here.

## Introduction to Scientific Writing

- **CARTI Scientific Writing Seminar Series**
  The purpose of this seminar series is to help faculty, fellows and postdocs write clear, well-organized scientific papers. The series consists of ten (10), 1-hour stand-alone sessions, each of which focuses on an important aspect of scientific writing. (To gain access to these materials, email smendoza@som.umaryland.edu)

- **Scholarly Writing Accountability Groups (SWAGs)**
  A virtual SWAG is an active peer-led writing group for UMB junior faculty that meets for 1-hour, once a week over a 10-week period using Microsoft Teams. The purpose of SWAG is to help junior faculty get in the habit of 1) writing in short blocks of time daily or almost every day and 2) identifying and prioritizing feasible writing goals. New groups are being formed on a rolling basis. To participate, complete the following form HERE.

## Introduction to Grant Writing

- **CARTI: Introduction to Grant Writing Seminar Series**
  The purpose of the seminar series is to introduce the basics of identifying and preparing a first grant application. The series consists of three (3), 1-hour stand-alone sessions, each which focuses on how to prepare your first grant application. (To gain access to these materials, email smendoza@som.umaryland.edu).

- **Navigating NIH Funding & Best Practices:** https://nexus.od.nih.gov/all/2023/04/20/navigating-the-nih/
  Resource to help early stage investigators understand the process for preparing and submitting grant applications, including available NIH resources to use when applying for NIH funding.

- **CSR Early Career (ECR) Reviewer Program:** https://public.csr.nih.gov/ForReviewers/BecomeAReviewer/ECR
  *"The program aims to help early career scientists become more competitive as grant applicants through first-hand experience with peer review and to enrich and diversify CSR's pool of trained reviewers."*

- **NIH All About Grants Podcast:** https://grants.nih.gov/news/virtual-learning/podcasts.htm
  Designed for investigators, fellows, students, research administrators, and others just curious about the application and award process, we provide insights on grant topics from those who live and breathe the information. Topics covered include: Preparing to Apply, Developing a Successful Grant Application, Advice for New & Early Career Scientists, Submitting Your Application, Peer Review, Post-Award Activities & Requirements, and Special Programs.

## Identifying Funding

- **Identifying Sources of Funding Consultations**
  **Stacie Mendoza**, Program Director, assists junior faculty and postdocs with identifying sources of funding for their research. To schedule a funding consultation, complete the **Funding Search Request Form** online.

## IRB & Human Subjects

http://www.umaryland.edu/hrp/
- **IRB/HRPO Training**
  - SON Research seminar series: https://www.nursing.umaryland.edu/research/seminar-series/
  - IRB Process videos: https://www.umaryland.edu/hrp/for-researchers/instructional-videos/irb-process-videos/
  - Required training: https://www.umaryland.edu/hrp/for-researchers/required-training/

## Research Resources

- **UMB Institute for Clinical & Translational Research (ICTR):** https://www.umaryland.edu/ictr/
  - **ICTR Research Navigator**
    https://www.umaryland.edu/ictr/investigator-resources/ictr-research-navigator/
    - ICTR Research Navigators are here to help direct researchers to the clinical translational research services they need and advise them on the "next steps."
    - Email: ICTR-Navigator@umaryland.edu

  - **ICTR Biostatistics Core Services**
    https://www.umaryland.edu/ictr/investigator-resources/ictr-biostatistics-core-services/
    - The goal of the service is to assist researchers in the appropriate use of biostatistics in the design, implementation, and interpretation of clinical and translational research studies.
    - Can get up to 25 hours free support

  - **ICTR Informatics Core Services**
    https://www.umaryland.edu/ictr/investigator-resources/ictr-informatics-core-services/
    - Help plan translating your research into practice, access to clinical data, data management, and digital health, to cybersecurity and artificial intelligence/machine learning consultation.
    - Can get up to 25 hours free support

  - **ICTR Voucher Program**
    https://www.umaryland.edu/ictr/funding/voucher-program/
    - Services that may be eligible for up to $5,000 voucher support include those listed at these sites: CIBR, GCRC, NORC, and UMMC* IDS  and HS/HSL Data Visualization services.

  - **UMB ICTR Enrichment Series**
    https://www.umaryland.edu/ictr/education-and-training/ictr-enrichment-series/
    - Recorded lectures on a variety of topics available.
    - Subscribe to the mailing list for upcoming events: https://umaryland.az1.qualtrics.com/jfe/form/SV_bNiHZOhKm2oHG8m

- **Making the Right Moves: A Practical Guide to Scientific Management for Postdocs and New Faculty** https://www.hhmi.org/sites/default/files/Educational%20Materials/Lab%20Management/Making%20the%20Right%20Moves/moves2.pdf


- **Creating a Mentoring Team**

  - **National Center for Faculty Development & Diversity (NCFDD) Mentor Map**

    https://www.facultydiversity.org/ncfddmentormap

  - Mapping a Mentoring Roadmap and Developing a Supportive Network for Strategic Career Advancement

  - Making the most of mentors: a guide for mentees


- **NIH Events & Resources**
  - **NIH Events:** https://www.nih.gov/news-events/events
  - **Mind the Gap Webinar Series:** https://prevention.nih.gov/education-training/methods-mind-gap
    Mind the Gap webinars explore research design, measurement, intervention, data analysis, and other methods of interest in prevention science.

UNIVERSITY of MARYLAND
SCHOOL OF MEDICINE
CENTER FOR ADVANCED RESEARCH
TRAINING & INNOVATION

medschool.umaryland.edu/carti

- **Systematic Review Resources**
  - **HSHSL Library Systematic Review Service**
    - https://guides.hshsl.umaryland.edu/systematic
    - Librarians at the HSHSL are experts in conducting comprehensive literature searches as part of the systematic review process.
    - Request Consultation: http://www2.hshsl.umaryland.edu/hshsl/assistance/systematic-review.cfm

- **CARTI's Microsoft Teams Page!**
  This **page** serves as a hub for CARTI's seminar recordings and slides for the seminar series listed below. To gain access, email Stacie Mendoza at smendoza@som.umaryland.edu
  - **Managing Your Research Program**
  - **Scientific Writing**
  - **Research Skills** *(grant writing, presentations, etc)*
  - **Funding**
  - **Career Skills *Short* Seminar Series** *(30 minute lectures)*