

What can Harvard Catalyst do for you?

Noelle Huntington, PhD

Director of Connector and Network Programs, Harvard Catalyst

noelle_huntington@hms.harvard.edu

October 4, 2023

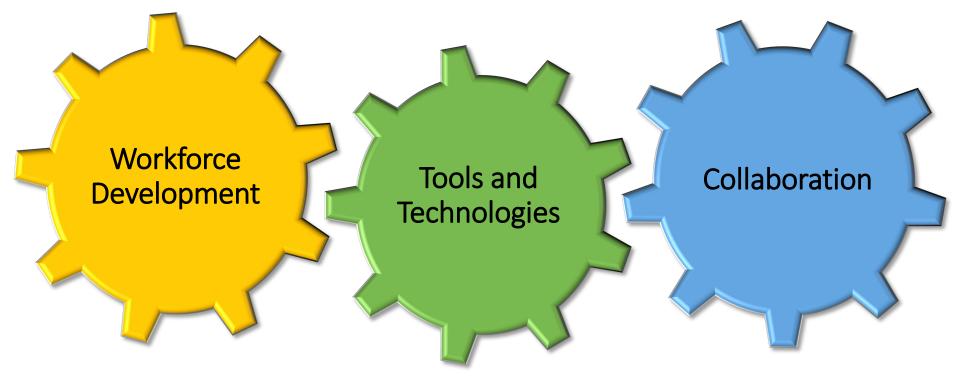
THE HARVARD CLINICAL & TRANSLATIONAL SCIENCE CENTER





Mission

Harvard Catalyst brings together the intellectual force, technologies, and clinical expertise of Harvard University and its affiliates and partners to improve human health.





Funding

- NIH National Center for Advancing Translational Sciences (NCATS) CTSA
- Harvard University
- Harvard Medical School
- Harvard T.H. Chan School of Public Health
- Beth Israel Deaconess Medical Center
- Boston Children's Hospital
- Brigham and Women's Hospital
- Dana-Farber Cancer Institute
- Massachusetts General Hospital



National Center for Advancing Translational Sciences







Train

Courses and Educational Programs

Tools and Services to Support Collaboration



Support

Guidance and Funding for Trainees and Investigators



Community Engagement and Diversity Inclusion



HARVARD

CATALYST

catalyst.harvard.edu







Train

Courses and Educational Programs

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Connect

Tools and Services to Support Collaboration

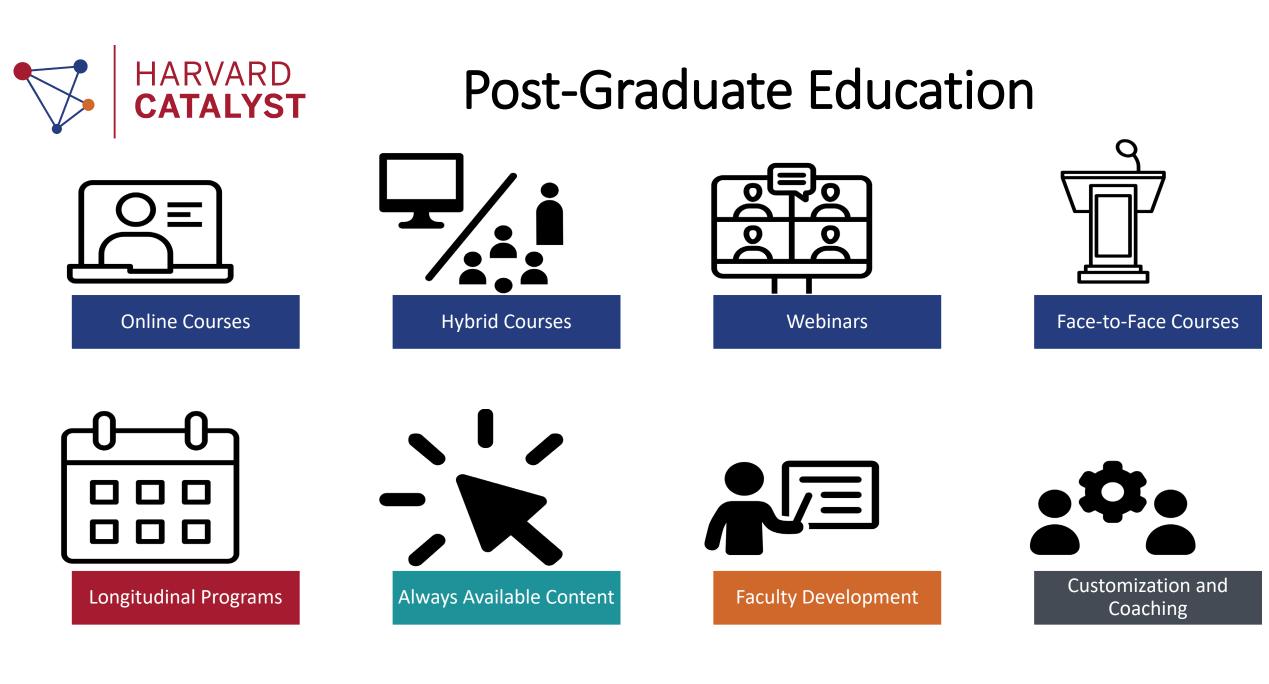


Support

Guidance and Funding for Trainees and Investigators



Community Engagement and Diversity Inclusion





Boundary-Crossing Skills For Research Careers

Ongoing

Team science

Build, engage in, and sustain diverse teams

Mentorship

Establish effective mentoring relationships

Project management Create, manage, and deliver projects

Communication

Advocate for yourself, your team, and your science

Leadership

Manage yourself and others

Funding research

Sustain your career through diverse funding



How to Design a Clinical Trial: Principles and Protocol Development

9-week hybrid course on the design and implementation of clinical trials:

- How to design a protocol
- IRB and other regulatory topics
- Trial implementation
- Budgeting
- Data Management
- Statistical analysis

Next session in spring 2024 (most likely)

For trainees or junior faculty in the earlyor mid-states of study design

Combines on-demand videos with live virtual sessions

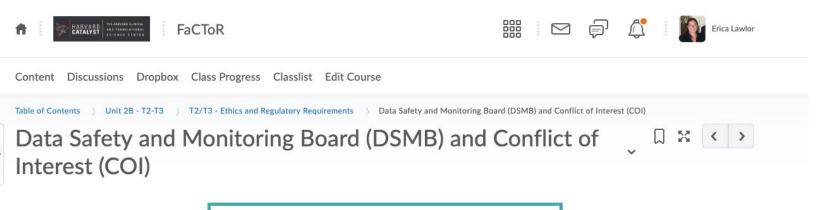
Provides personalized guidance for creating a complete protocol by end of course



Fundamentals of Clinical and Translational Research (FaCToR)

12-week online course to enhance CT research skills:

- Designing rigorous studies
- Selecting appropriate tools for data acquisition and storage
- Identifying and addressing ethical issues
- Operating within regulatory frameworks
- Communicating your findings
- Funding your research





Currently running



Essential Skills in C/T Research

7-week course on the practical skills needed for running a study:

- Protecting the integrity and safety of a study
- Ethical considerations in study management
- Project management
- Successfully working within a team
- Communication and collaboration

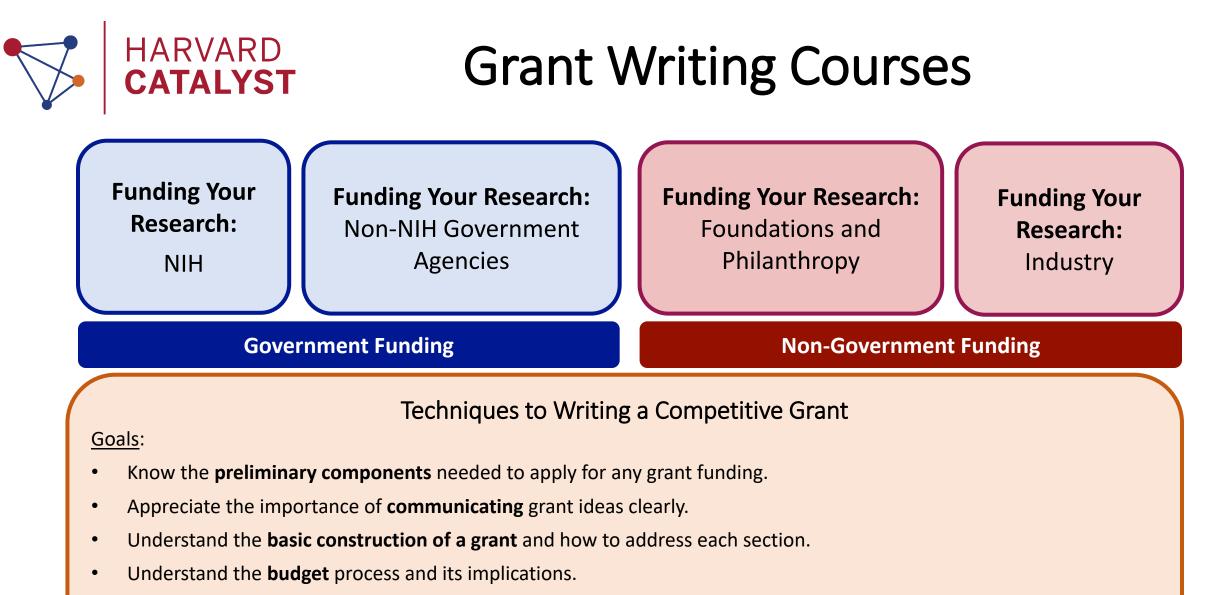
Essential Skills for Conducting Clinical & Translational Research

Online course that offers effective ways to conduct clinical and translational research

For research staff or for trainees and junior faculty who are new to conducting C/T Research

Combines on-demand videos with weekly casestudies discussed on a message board

Next session in spring 2024



• Understand the aspects of a general **peer review** process and what happens after the application leaves your hands.



Course Listings

Click for

more

information

Applied Biostatistics Certificate: Methods & Applications	Online professional certificate program on the principles and methods of biostatistics	42 weeks	8/18/2023 (Closed) Notify me when available.
Authorship: Best Practices	Webinar on best practices around the topic of authorship.	1 day	2/28/2023 (Closed) Notify me when available.
Biostatistics Essentials: Video Subscription	Series of short videos on topics in medical biostatistics	varies	Ongoing
Biostatistics Training	A 60-credit HSPH master of science program in applied biostatistics	60 credits	Ongoing Receive
Boundary-Crossing Skills for Research Careers	A webinar series providing practical tools for navigating scientific careers	Ongoing	Ongoing notifications
Career Catalyst	A program that matches junior investigators with senior faculty who serve as developmental mentors	10 months	6/30/2023 (Closed) Notify me when available.
Career Transitions: Academia to Industry	A panel discussion on transitioning from a career in academia to industry.	1 Day	5/9/2023 (Closed) Notify me when available.
Clinical and Translational (C/T) Research Academy	Advanced training program that offers a pathway to conducting independent research	2 years	1/28/2022 (Closed) Notify me when available.
Community-Engaged Research	Online course preparing researchers and community members to partner in health research	10 weeks	9/24/2023 (Closed) Notify me when available.

Harvard Catalyst 2023

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LearnResearch Online Catalog

		LearnResearch A searchable compilation of archived top	pical videos for clinical and translation	al researchers.	
	Keywords	Home > VideosPage 1			
	✓ Communicating Your Research (24)		•		0
	Collection	Communicating Your Research $ imes$			Open-text search
	Introduction to Translational Medicine (1)	VIDEO	SPEAKER	DATE INFO	
	Institution Harvard Catalyst (24)	Creating posters with IMPACT	Beth Beighlie, et al.	October 18, 2012	$\overline{\ominus}$
Filter	Speaker	Effectively Communicating Research: Why it Matters	Naomi Fisher, MD	February 28, 2018	$\overline{\bigcirc}$
options	 Melissa Marshall, MA (5) Graham McMahon, MD, MMSc, MRCPI (4) 	Examining a Manuscript from an Editor's Perspective	Graham McMahon, MD, MMSc, MRCPI	August 28, 2014	$\overline{\bigcirc}$
☐ Jeff ☐ Jose PhD ☐ Nao ☐ Alla	 Elliott Antman, MD (3) Jeffrey M. Drazen, MD (3) Joseph Loscalzo, MD, 	Exploring Career Opportunities in Translational Science	Donald M. Thea, MD, et al.	June 26, 2018	$\overline{\bigcirc}$
	PhD (2) Naomi Fisher, MD (2) Allan J Walkey, MD, MSc (1)	Honing a Standard Research Talk	Naomi Fisher, MD	February 28, 2018	$\overline{\bigcirc}$
	Amanda Rayno (1)	How to Deliver a Scientific Presentation Workshop, Part 1	Melissa Marshall, MA	August 29, 2014	$\overline{\bigcirc}$



In Development Catalyst on Demand

- Many courses will be converted to a self-learning, fully asynchronous format, available anytime
- Learners can work through course from start to finish or jump to sections with particular relevance
- Will still offer quizzes and cases to test your knowledge and challenge your thinking skills (with answers provided afterwards)
- Begin rolling out sometime in 2024; first out will be grant writing courses



Longitudinal Programs

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Certificate in Applied Biostatistics

Paid version:

Includes course interactions, study cases, and exercises and provides a certificate of completion. Track 1: \$1750 Track 2: \$2800

Free version:

Access to the lecture videos only; requires a Harvard key login

- Comprehensive year-long overview of biostatistics in C/T research
- Audience: MD, PhD, or equivalent
- Track 1: September-April: core curriculum
 - Track 2: September-July: core curriculum plus advanced topics

Introduction to biostatistics	Study design and statistical communication	Regression techniques	Correlated outcomes	Time to event outcomes and additional topics
 •What is Biostatistics? •Probability •Confidence Intervals for Estimates and Hypothesis Testing •ANOVA •Nonparametrics •Analysis of Proportions •Linear Regression 	 Elements of Study Design Sample Size and Power Writing the statistical sections for a research proposal or report Observational Study Designs Clinical Trials Agreement Studies Factorial Designs 	 Multiple Linear Regression Regression Diagnostics Multiple Linear Regression and Partial F-Tests Interpretation of Interaction Terms Stepwise Selection/Alternative Model Selection Approaches Logistic Regression Model Diagnostics for Logistic Regression 	 Introduction to Longitudinal Data Analysis of Response Profiles Fitting Curves to Longitudinal Data Mixed Effects Models Multilevel Models Handling Missing Data Repeated measures analysis with dichotomous outcomes 	 Survival Analysis Comparison of Survival Curves Cox Proportional Hazards Regression Power Analysis/Study Design with Survival Outcomes Multiple Comparisons Meta-Analysis Factor Analysis/Path Analysis

Harvard Catalyst 2023

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Matches early-career investigators with senior faculty developmental mentors who offer guidance on overall career development.



Program runs September through June.

- 3:1 mentee to mentor ratio
- Twice-monthly meetings

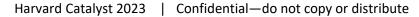


K12 Training Program/Fellowship

K12

A mentored research and education program for junior faculty and senior fellows

	Audience	Details	Program Requirements
Applications due in the spring.	Research or health- professional doctoral degree Junior faculty within the first three years of appointment or senior fellowship appointment at a Harvard Catalyst-affiliated institution	Program Length: <i>Two</i> <i>years</i> Salary Support: <i>50-75% of</i> <i>salary</i>	Must be able to commit 75% of professional effort to the program (surgeons may be eligible to commit 50% time)





Grant Writing: GRASP



Grant Review And Support Program

Program Goal: To position K and KL2 awardees to obtain NIH R01 grants or K grants (or equivalent independent researcher awards) and/or alternative sources of research funding by providing grantsmanship guidance, training and ongoing

support.

Applications due in the summer.

*this program is by invitation only through competitive application



Grant Writing: GRASP



Orientation and Grant Writing Workshop

- Mechanics of writing an NIH K or R grant application
 - NIH grant review process
 - Elevator pitch
 - Funding beyond the NIH

Long-term Guidance and Participation

- Work plan reviews
- Specific Aims review sessions
- Ongoing grant writing support from GRASP faculty and staff
 - Refresher workshops

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Elements of Grant Writing

Writing tips and tools
 Work plans

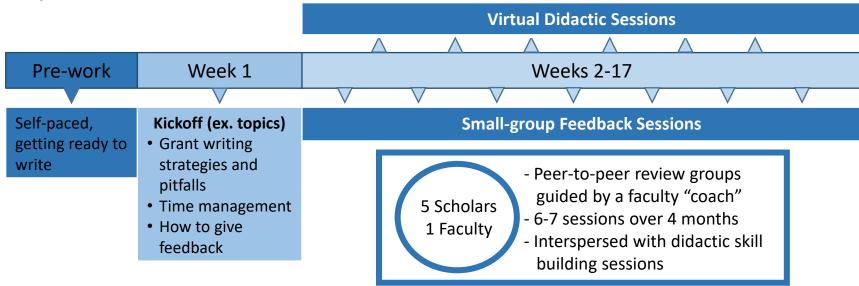
•Expectations form

•Resource available to those outside the GRASP program using HarvardKey



In Development CT Research Academy *First-Grant Bootcamp*

Experiential grant writing program for new investigators ready to write their first grant application (e.g., F32, foundation, or professional society grant)



First session launching in early 2024





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Tools and Services to Support Collaboration



Support

Guidance and Funding for Trainees and Investigators



Community Engagement and Diversity Inclusion



Profiles



Harvard Catalyst Profiles

Contact, publication, and social network information about Harvard faculty and fellows.

Profiles Stats	Find People	Find Everything Else			
24111 People 717503 Publications 15527 Grants	Find People	by Research	Topic (or Name	Most viewed (today) Receptor Fibroblast Growth Factor Type
Recent Updates Amitoj Singh January 2, 2019	Research Topics	Search for exact phrase		Q Search	2 pleural effusion Molecular Pathological cardiovascular
made "photo"public			and / or		department
Franziska Plessow January 2, 2019	Last Name First Name				JOSEPH virology Robert Andrew
added a publication from: The International journal of eating disorders	Institution	None selected	•	All except the one selected	Most viewed (month Holoenzymes
	Department	None selected	-	All except the one selected	Yoga
Ruben Hoogeveen January 2, 2019	Faculty Type	None selected	•		Acupuncture biotechnology geriatrics
added a publication from: Gut	Other Options	None selected	-		Receptor Fibroblast Growth Factor Type



Profiles (Individual Profiles)

Home About Help History (1)

Search Profiles (people, publications, concepts, etc.) Q

Login to edit your profile (add a photo, awards, links to other websites, etc.)

Lee Marshall Nadler, M.D.

Title	Dean for Clinical and Translational Research
Institution	Harvard Medical School
Department	Clinical and Translational Science Center
Address	Dana Farber Cancer Institute
	Adult Oncology
	44 Binney St
	Boston MA 02115
Phone	617/632-3331
Fax	617/632-3541
Email	lee_nadler@dfci.harvard.edu
vCard	Download vCard (login for email)
Other Positiv	

Other Positions

Title Virginia and D.K. Ludwig Professor of Medicine Institution Dana-Farber Cancer Institute Department Medicine

groups | research activities and funding | selected publications

Affiliation

🗆 groups

HARVARD

CATALYST

Harvard Catalyst (Member)

Research

□ research activities and funding

The research activities and funding listed below are automatically derived from NIH ExPORTER and other sources, which might result in incorrect or missing items. Faculty can login to make corrections and additions.

Most Recent | List All

1. UL1TR002541 (NADLER, LEE MARSHALL) NIH/NCATS The Harvard Clinical and Translational Science Center Role: Principal Investigator Nadler's Networks Click the Explore buttons for more information and interactive visualizations! Concepts (852) ② Clonal Anergy B-Lymphocytes Bone Marrow Transplantation Antigens, Neoplasm T-Lymphocytes

Co-Authors (112) @

Freeman, Gordon Freedman, Arnold Boussiotis, Vassiliki Guinan, Eva Weisskopf, Marc

Explore

Similar People (60) @ Freeman, Gordon Tsokos, George Sayegh, Mohamed Ferrone, Soldano Sharpe, Arlene



Same Department (2) Holm, Ingrid Huntington, Noelle Merchant, Roland Mukamal, Kenneth Polumbo, Genoa

May 1, 2018 - Apr 30, 2023



Research Tools

The Accrual to Clinical Trials (ACT) Network is a web-based query tool that allows investigators to determine the aggregate number of patients seen at participating hospitals who meet clinical criteria of interest.





Harvard Catalyst supports **SMART IRB**, a national platform to enable IRB reliance and advance collaborative research across the nation.

In Development

Catalyst Connect is a searchable compendium of research resources for conducting research, research education, and building your research career. Includes resources from Harvard's AHCs and Harvard Catalyst as well as publicly available resources from outside the Harvard system. (launching in 2024)







Courses and Educational Programs

Tools and Services to Support Collaboration

Guidance and Funding for Trainees and Investigators



Community Engagement and Diversity Inclusion



Regulatory Resources

Regulatory Foundations, Ethics, and Law Program

Provides Guidance and Materials

Templates, trainings and tools

Advocates for Research Subjects

Educates researchers and patients on research subject rights and protections

Promotes Collaboration and Interoperability

Coordinates agreements and institutional harmonization to support multisite research

Reduces Barriers

Facilitates data-sharing and compliance

https://catalyst.harvard.edu/programs/regulatory



A comprehensive collection of tools, trainings, and resources that empower C/T investigators to better articulate their science

Writing and Communication Center



GET FUNDED \rightarrow

Discover ways to employ tools of the trade to maximize your chances of success. Learn to navigate the proposal and writing process across a variety of funding mechanisms.

SPEAK ELOQUENTLY \rightarrow

Articluate the narrative of your science by speaking eloquently to a diversity of audiences —from colleagues, to journalists, to funders, to the general public.

VISUALIZE SCIENCE \rightarrow

Maximize your audience's understanding by effectively visualizing science on posters, slides, grant applications, and manuscripts.

WRITE EFFECTIVELY \rightarrow

Create effective written communication for a variety of mediums and audiences, using manuscripts, chapters, and regulatory documents.

GROW PROFESSIONALLY → Communicate effectively about yourself and your research in interviews, CVs, and networking opportunities to grow professionally.

HARVARD CATALYST Writing and Communication Center

NIH K Grant Specific Aims Consultation Service

- → Available to anyone in the Harvard Catalyst community
- → Participants commit to reviewing content highlighted in the Writing and Communication Center to prepare their aims pages for review

https://writingcenter.catalyst.harvard.edu/consultations



NIH K GRANT APPLICANTS: APPLY TO HAVE YOUR SPECIFIC AIMS PAGE REVIEWED

APPLY HERE

Apply to be a part of our pilot Specific Aims Page Consultation Service! The pilot will run from August 2022 through January 2023. This consultation service provides individualized feedback on draft Specific Aims pages to applicants who are applying for NIH K grants. Harvard faculty who have demonstrated recent success in NIH grant funding will serve as consultants, offering edits and feedback on submitted draft aims. The consultations will occur remotely.

Eligibility To be considered for the service, applicants must

be from a Harvard-affiliated school or institution.
be planning to submit a NIH K grant application.
be at least 2 months out from their grant submission deadline (applicants with fewer than two months until their deadline will not be considered).
have a full-written draft of their Specific Aims page ready to submit.

Preparation

Applicants should be prepared to attach a fully-written draft of your Specific Aims page to the application. Before applicants submit their draft Specific Aims they must review the recommendations laid out on the **Grant Writing Tips** resource on the website. In particular, their draft Specific Aims page should follow the guidance on the following pages:



Write Your Specific Aims Page
 Use Style Tips
 Common Grant Writing Mistakes



Consulting Services

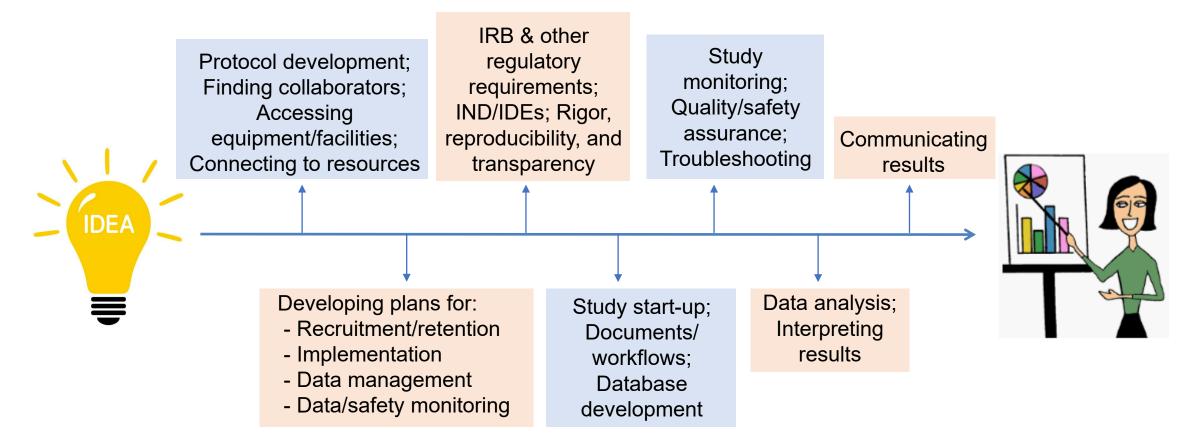


- Biostatistics
- Bioinformatics
- Investigational New Drug (IND) and Investigational Device Exemption (IDE)
- Quality Assurance/Quality Improvement (QA/QI)

Free for clinical and translational researchers in the Harvard community



Connector Consultation and Support







Beth Israel Lahey Health Beth Israel Deaconess Medical Center

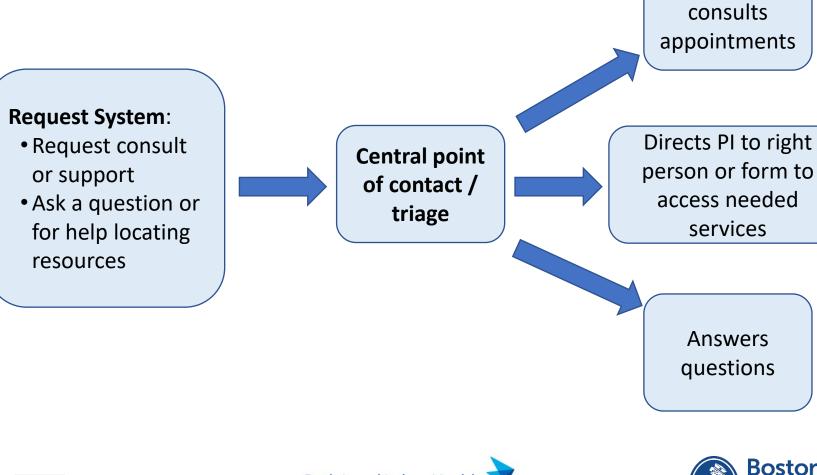




Connector Consultation and Support Sets up

Clinical Research Teams

- Medical research officers
- Project coordinators
- Recruitment specialists
- Research resource specialists



Services

Navigation

MGH

- Consultations (free)
- Instrumental support (free or fee for service)

MASSACHUSETTS GENERAL HOSPITAL



Beth Israel Lahey Health Beth Israel Deaconess Medical Center

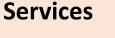




Connector Consultation and Support

Clinical Research Teams

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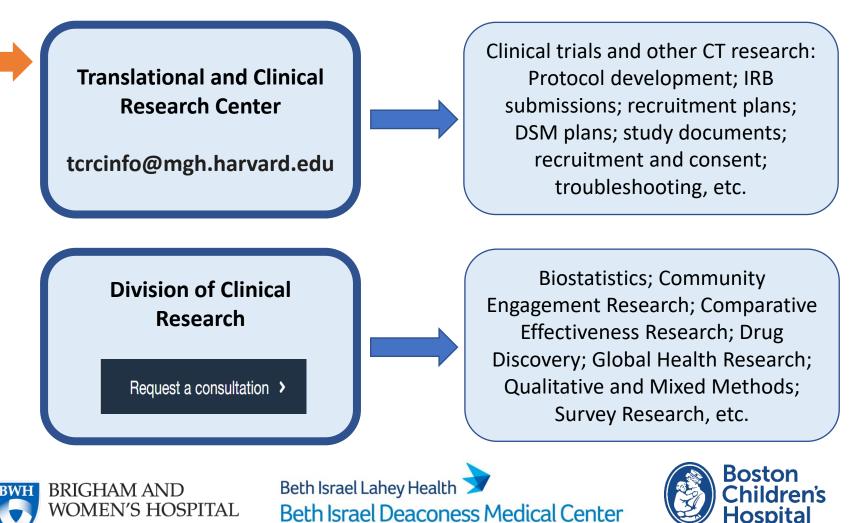


Navigation

MGH

- Consultations (free)
- Instrumental support (free or fee for service)

MASSACHUSETTS GENERAL HOSPITAL



Until every child is well"



Connector Laboratory Services

Joint Contract with Quest

- Discounted/bulk pricing on 1000s of lab tests
- Local projects
- Multi-site national projects

Options

- Pickup samples from site
- Blood-draw centers
- Batch testing of stored samples

Beth Israel Lahey Health

Beth Israel Deaconess Medical Center

catalyst.harvard.edu/connector/lab-services/

















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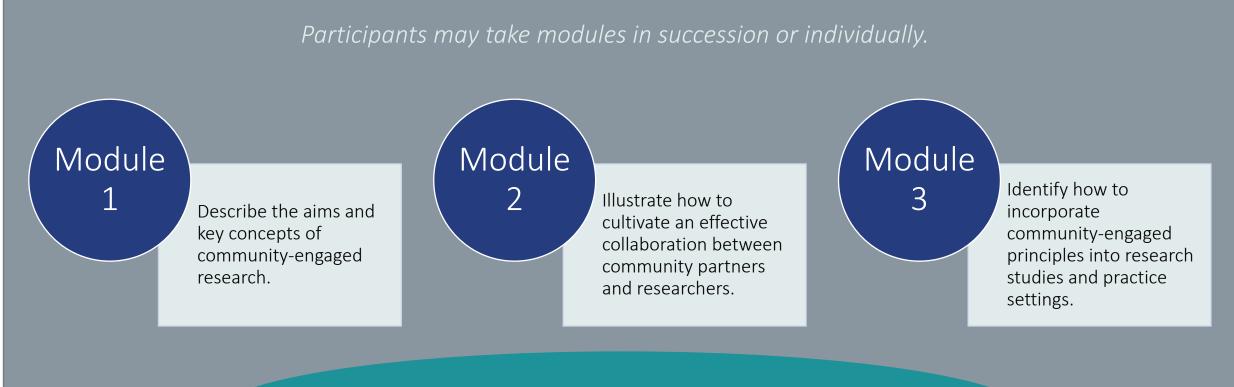


Community Engagement and Diversity Inclusion



Community-Engaged Research

This new online course aims to build the skills of researchers to develop trusting relationships and impactful research with the community and to prepare community partners to engage in health research.



Currently Running

HARVARD CATALYST Community Coalition for Equity in Research



The Problem Research efforts tend to engage communities after studies have been designed. This makes it hard to change the studies to address community needs or concerns.



Our Solution A standing, trained community coalition that provides feedback on research during development.

Co-led with community and clinical partners.

Email <u>community@catalyst.harvard.edu</u> if you are interested in having your study reviewed by our coalition

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contact@catalyst.harvard.edu.





Events Calendar



Conference: Precision Psychiatry: Innovation to Implementation - September 29-30

September 29 - September 30, 2023

Conference: Precision Psychiatry: Innovation to Implementation. Virtual conference bringing together clinicians, researchers, trainees, students, investors, and industry leaders from across the globe to explore the latest advancements in Precision Psychiatry.

See more

BIOSTATISTICS Biostatistics Short Course: An Introduction to the Analysis of Incomplete Data – October 6

October 6, 2023

Biostatistics Short Course: An Introduction to the Analysis of Incomplete Data. In-person short course led by Ofer Harel, PhD, University of Connecticut.

See more

Lecture: Primary Spine Care: An Initiative to Address the Extreme Health Burden of Spinal Care – October 10

October 10, 2023

Lecture: Primary Spine Care: An Initiative to Address the Extreme Health Burden of Spinal Care. Scott Haldeman will present an overview of The Global Spine Care Initiative (GSCI), convened by the World Spine Care group of charities, which included a literature review and a consensus of 68 clinicians and researchers from 24 countries.

See more

BIOSTATISTICS

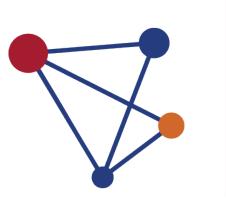
Biostatistics Journal Club: Modeling and Joint Prediction of Semi-Competing Risks – October 11

October 11, 2023

Biostatistics Journal Club: Modeling and Joint Prediction of Semi-Competing Risks. Discussion led by Harrison Reeder, PhD, Massachusetts General Hospital.



An Introduction to the Analysis of Incomplete Data





http://catalyst.harvard.edu @HarvardCatalyst

