



# What can Harvard Catalyst do for you?

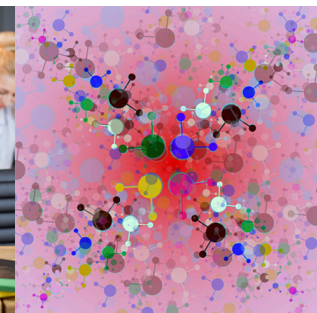
**Noelle Huntington, PhD**

Director of Connector and Network Programs, Harvard Catalyst

[noelle\\_huntington@hms.harvard.edu](mailto:noelle_huntington@hms.harvard.edu)

October 4, 2021

THE HARVARD CLINICAL &  
TRANSLATIONAL SCIENCE CENTER

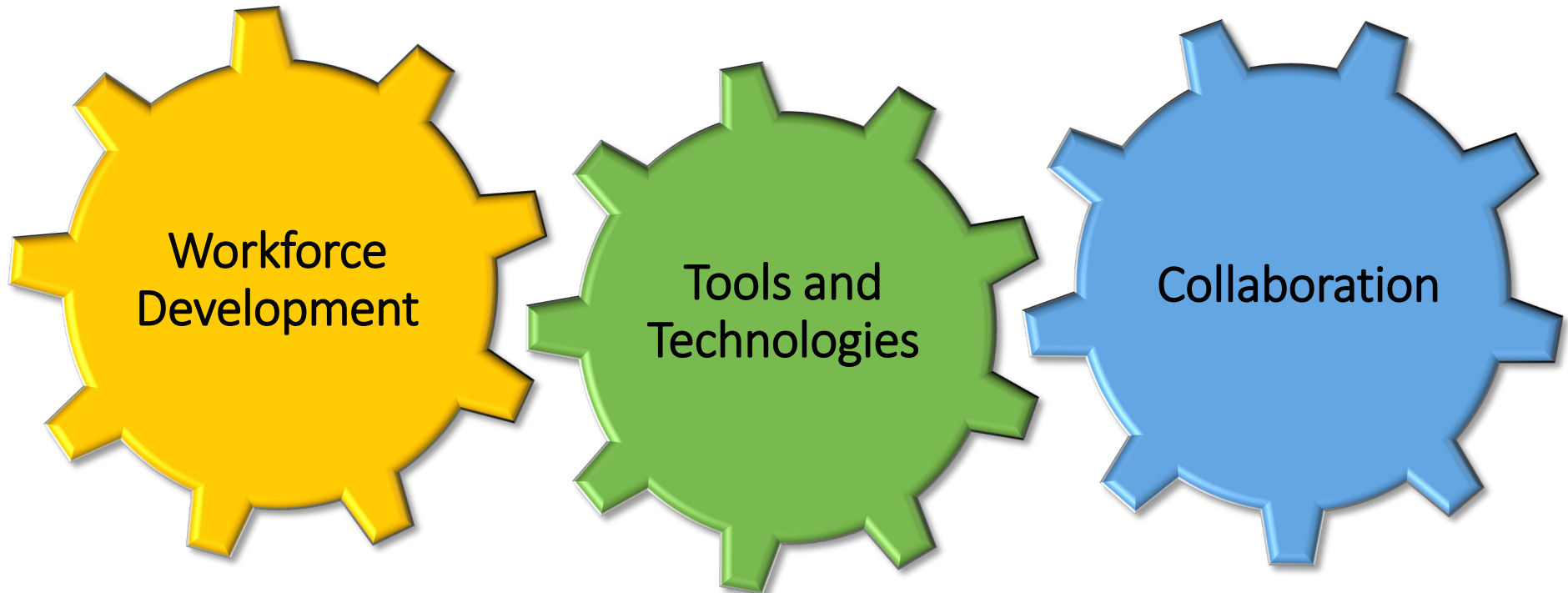




**HARVARD  
CATALYST**

# Mission

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





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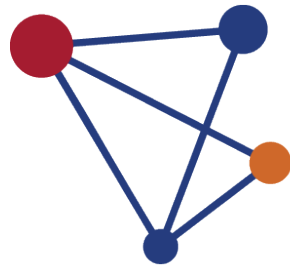
# Funding

- 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





# HARVARD CATALYST



**Train**

Courses and Educational Programs



**Connect**

Tools and Services to Support Collaboration



**Support**

Guidance and Funding for Trainees and Investigators



**Include**

Community Engagement and Diversity Inclusion

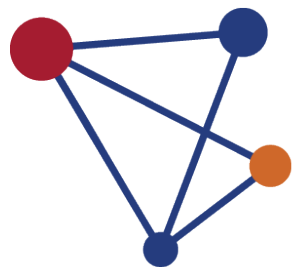


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catalyst.harvard.edu







# HARVARD CATALYST



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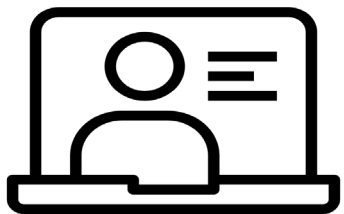
Guidance and Funding for Trainees and Investigators



**Include**

Community Engagement and Diversity Inclusion

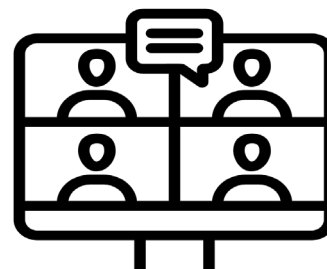
# Post-Graduate Education



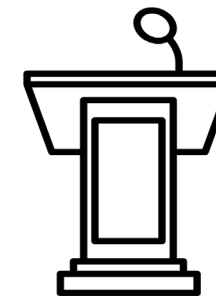
Online Courses



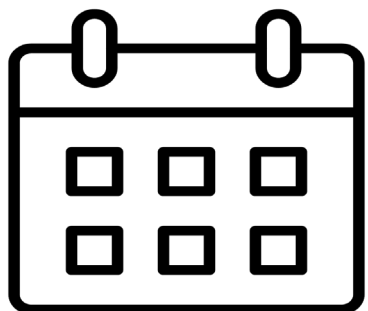
Hybrid Courses



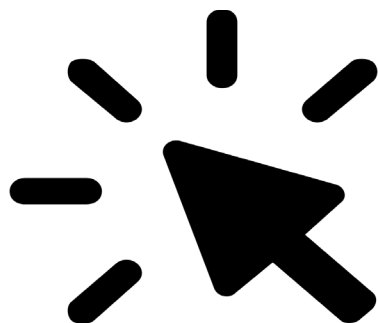
Webinars



Face-to-Face Courses\*



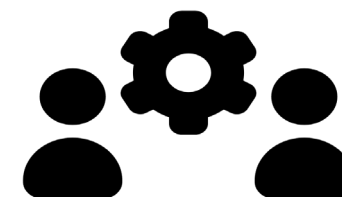
Longitudinal Programs



Always Available Content



Faculty Development



Customization and  
Coaching



# Boundary- Crossing Skills For Research Careers

**Launching late fall 2021**

## 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





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# How to Design a Clinical Trial: Principles and Protocol Development

**Next session in  
spring 2022  
(most likely)**

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

For trainees or junior faculty in the early- or 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

Table of Contents > Unit 2B - T2-T3 > T2/T3 - Ethics and Regulatory Requirements > Data Safety and Monitoring Board (DSMB) and Conflict of Interest (COI)

### Data Safety and Monitoring Board (DSMB) and Conflict of Interest (COI)

T2-T3 Ethics and Regulatory Requirements  
[2 of 3 Videos]

Additional Resources

Click [here](#) to read the NIH's full guidelines for DSMBs

**Next session begins  
February 22, 2022**

**Applications open on  
November 1<sup>st</sup>**



# Newly Updated: Certificate in Applied Biostatistics

- Comprehensive 35-week overview of biostatistics in C/T research
- Audience: MD, PhD, or equivalent
- Offered annually, September-June

**\$2100 for Harvard-affiliated learners.**

**Videos from prior version of the course available for free in the video archive.**

Participants who complete this course will be able to:

- choose an appropriate study design
- calculate the required sample size
- analyze collected data
- communicate the results from an experiment

Introduction to biostatistics	Study design and statistical communication	Regression techniques	Correlated outcomes	Time to event outcomes and additional topics
<ul style="list-style-type: none"><li>•What is Biostatistics?</li><li>•Probability</li><li>•Confidence Intervals for Estimates and Hypothesis Testing</li><li>•ANOVA</li><li>•Nonparametrics</li><li>•Analysis of Proportions</li><li>•Linear Regression</li></ul>	<ul style="list-style-type: none"><li>•Elements of Study Design</li><li>•Sample Size and Power</li><li>•Writing the statistical sections for a research proposal or report</li><li>•Observational Study Designs</li><li>•Clinical Trials</li><li>•Agreement Studies</li><li>•Factorial Designs</li></ul>	<ul style="list-style-type: none"><li>•Multiple Linear Regression</li><li>•Regression Diagnostics</li><li>•Multiple Linear Regression and Partial F-Tests</li><li>•Interpretation of Interaction Terms</li><li>•Stepwise Selection/Alternative Model Selection Approaches</li><li>•Logistic Regression</li><li>•Model Diagnostics for Logistic Regression</li></ul>	<ul style="list-style-type: none"><li>•Introduction to Longitudinal Data</li><li>•Analysis of Response Profiles</li><li>•Fitting Curves to Longitudinal Data</li><li>•Mixed Effects Models</li><li>•Multilevel Models</li><li>•Handling Missing Data</li><li>•Repeated measures analysis with dichotomous outcomes</li></ul>	<ul style="list-style-type: none"><li>•Survival Analysis</li><li>•Comparison of Survival Curves</li><li>•Cox Proportional Hazards Regression</li><li>•Power Analysis/Study Design with Survival Outcomes</li><li>•Multiple Comparisons</li><li>•Meta-Analysis</li><li>•Factor Analysis/Path Analysis</li></ul>



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# LearnResearch Online Catalog



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## LearnResearch

A searchable compilation of current course listings, archived topical videos, and other educational resources for clinical and translational researchers.

I'm looking for...

[Clear](#)

### Browse By:

Expand All Clear all

- > Subject Area
- > Institution
- > Courses with Videos

Filter

Filter

Search for a specific term using the search box above, or browse the listings on the left.

1145 results. Records per Page: 10 Page 1 of 115

Type	Name	Institution	Date Info
	Open Source Model	Harvard School of Engineering and Applied Sciences	9/5/14 19:52
	Metabolomics	Harvard Catalyst	6/25/18 18:41
	Introduction to T1 Research: Early Clinical Trials	Harvard Catalyst	10/18/12 15:47
	Empowerment Through Communication and Feedback	Harvard Catalyst	9/29/15 19:17
	Ethical Issues in Participatory Research/IRB Review	Harvard Catalyst	10/18/12 15:47
	Thwarting Nature: The Inside Story of a Direct Attack on Cystic Fibrosis	Harvard Catalyst	10/18/12 15:47

Filter options

Open-text search



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# Course Listings

*Click for  
more  
information*



OFFERING ^	DESCRIPTION ^	DURATION ^	DEADLINE ^
<b>Applied Biostatistics Certificate: Methods &amp; Applications</b>	Online course on the principles and methods of biostatistics	42 weeks	8/18/2021 (Closed) <input checked="" type="checkbox"/> <a href="#">Notify me when available.</a>
<b>Bioinformatics Workshops</b>	Workshop series on how to manage and analyze sequencing data for gene expression analysis	Varies	9/9/2019 (Closed) <input checked="" type="checkbox"/> <a href="#">Notify me when available.</a>
<b>Biostatistics Essentials: Video Subscription</b>	Series of short videos on topics in medical biostatistics	varies	12/31/2021
<b>Biostatistics Training</b>	A 60-credit HSPH master of science program in applied biostatistics	60 credits	12/31/2021
<b>Boundary-Crossing Skills for Research Careers</b>	A webinar series providing practical tools for navigating scientific careers	Ongoing	Ongoing
<b>Career Catalyst</b>	A program that matches junior investigators with senior faculty who serve as developmental mentors	10 months	7/8/2021 (Closed) <input checked="" type="checkbox"/> <a href="#">Notify me when available.</a>
<b>Clinical and Translational (C/T) Research Academy</b>	Advanced training program that offers a pathway to conducting independent research	2 years	1/29/2021 (Closed) <input checked="" type="checkbox"/> <a href="#">Notify me when available.</a>
<b>Community-Engaged Research</b>	Online course preparing researchers and community members to partner in health research	10 weeks	10/1/2021
<b>Effectively Communicating Research</b>	Intensive course designed to provide researchers with the skills necessary to express their science clearly to diverse audiences	2 days	1/28/2020 (Closed) <input checked="" type="checkbox"/> <a href="#">Notify me when available.</a>
<b>Fundamentals &amp; Applications of Clinical and Translational Research</b>	Online course that offers an overview of clinical research and the T spectrum	18 weeks	1/28/2022
<b>Fundamentals of Comparative Effectiveness Research: Data Sources &amp; Methods</b>	Overview of CER methods	12 weeks	3/5/2021 (Closed) <input checked="" type="checkbox"/> <a href="#">Notify me when available.</a>

# Training Programs and Fellowships

## CT Academy

Advanced training program that offers a pathway to conducting independent research

Audience	Details	Program Requirements
MD, DMD, PhD; fellow in a Harvard-based training program working with a Harvard-based mentor  Must have 75% protected time made available	Program Length: <i>Two years</i>  Salary Support: <i>n/a</i>	Participation in a full-time four-week summer program, a weekly longitudinal seminar, elective courses, mentor-based research, and an extensive array of Harvard Catalyst-funded resources

## KL2

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

Audience	Details	Program Requirements
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 years</i>  Salary Support: <i>50-75% of salary</i>	Must be able to commit 75% of professional effort to the program (surgeons may be eligible to commit 50% time)





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 Career Catalyst

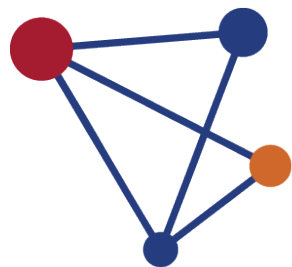
Apply in the  
Summer

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



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# Profiles



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

[Home](#) | [About](#) | [Help](#) | [History \(0\)](#)

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

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


**Profiles Stats**

24111 People  
717503 Publications  
15527 Grants

**Recent Updates**

 [Amitoj Singh](#)  
January 2, 2019  
made "photo"public

 [Franziska Plessow](#)  
January 2, 2019  
added a publication from:  
The International journal  
of eating disorders

 [Ruben Hoogeveen](#)  
January 2, 2019  
added a publication from:  
Gut

[See more updates](#)

[Find People](#) | [Find Everything Else](#)

## Find People by Research Topic or Name

Research Topics

☐ Search for exact phrase

and / or

Last Name

First Name

Institution

None selected

All except the one selected

Department

None selected

All except the one selected

Faculty Type

Other Options

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[pleural effusion](#)  
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[Receptor Fibroblast Growth Factor Type 2](#)  
[Rheumatology](#)  
[biology](#)  
[Pathological](#)  
[Nanomedicine](#)



# Profiles (Individual Profiles)

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 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 (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) | May 1, 2018 - Apr 30, 2023 |
| 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)

Clonal Anergy  
B-Lymphocytes  
Bone Marrow Transplantation  
Antigens, Neoplasm  
T-Lymphocytes

Explore

### Co-Authors (112)

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

Explore

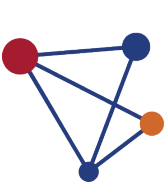
### Similar People (60)

Freeman, Gordon  
Tsokos, George  
Sayegh, Mohamed  
Ferrone, Soldano  
Sharpe, Arlene

Explore

### Same Department

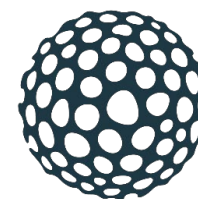
Holm, Ingrid  
Huntington, Noelle  
Merchant, Roland  
Mukamal, Kenneth  
Polumbo, Genoa



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# Research Tools

The Harvard Catalyst Core Facilities Database is powered by the **eagle-i Network**, a free, searchable tool. Use eagle-i to find thousands of biomedical research resources including cell lines, model organisms, antibodies, plasmids, core facilities and more from Harvard and other participating institutions.



eagle-i.net



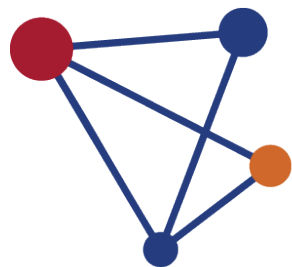
Harvard Catalyst supports **SMART IRB**, a national platform to enable IRB reliance and advance collaborative research across the nation.

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.



**The ACT Network**

Powered by NCATS CTSA Program



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# Grant Writing Resources 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.**

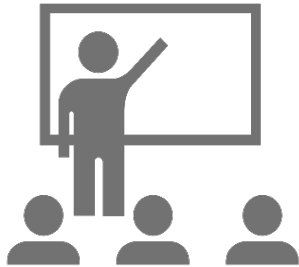
*\*this program is by invitation only through competitive application*



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# Grant Writing Resources

## 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



### Elements of Grant Writing

- Writing tips and tools
  - Work plans
  - Expectations form
- *Resource available to those outside the GRASP program using HarvardKey*



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# Grant Writing Resources

## Online Course Series

**Funding Your  
Research:**  
NIH

**Funding Your Research:**  
Non-NIH Government  
Agencies

**Funding Your Research:**  
Foundations and  
Philanthropy

**Funding Your  
Research:**  
Industry

**Government Funding**

**Non-Government Funding**

### Techniques to Writing a Competitive Grant

#### Goals:

- Know the **preliminary components** needed to apply for any grant funding.
- Appreciate the importance of **communicating** grant ideas clearly.
- Understand the **basic construction of a grant** and how to address each section.
- Understand the **budget** process and its implications.
- Understand the aspects of a general **peer review** process and what happens after the application leaves your hands.



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# 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

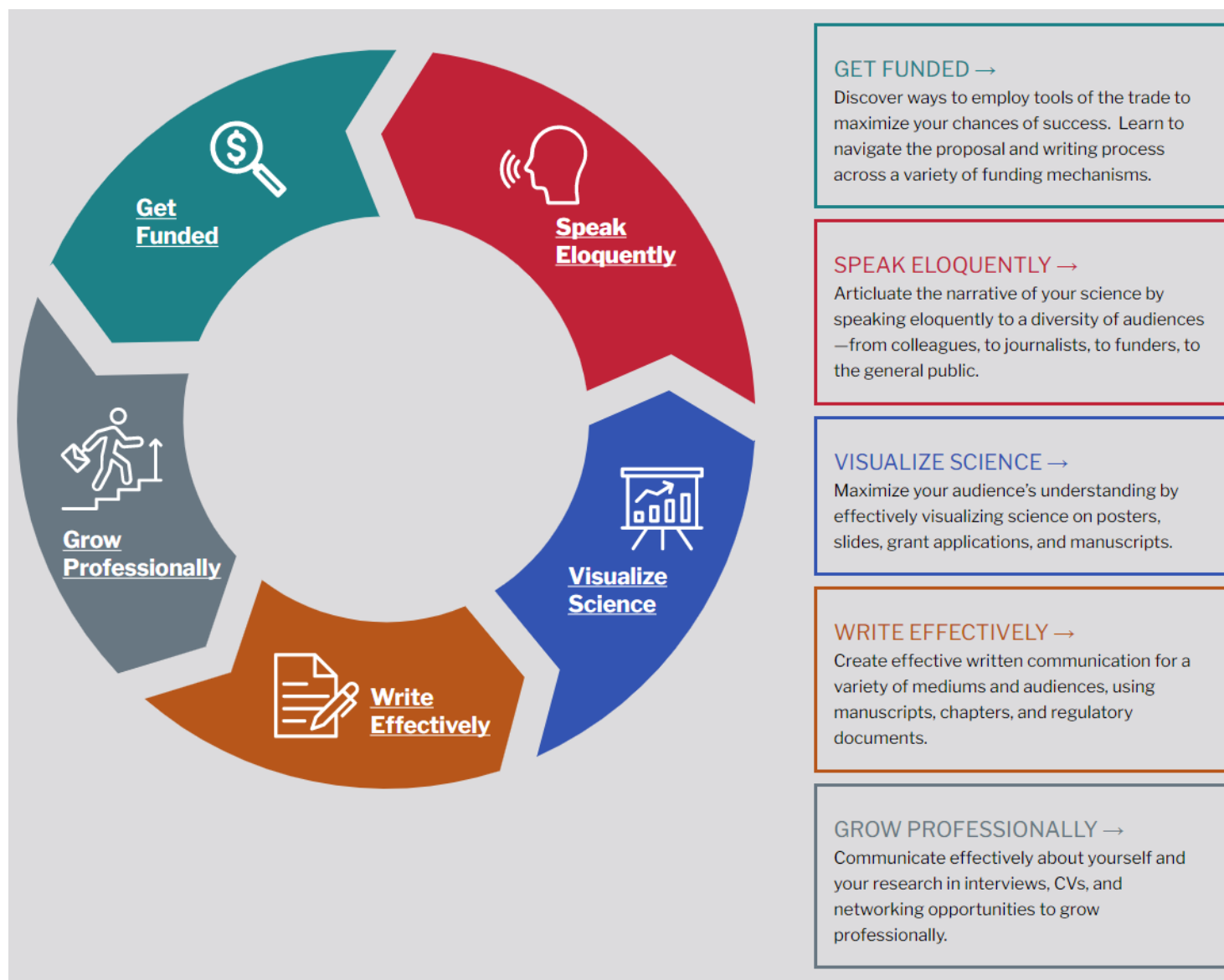
<https://catalyst.harvard.edu/programs/regulatory>



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

# Writing and Communication Center





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# Consulting Services



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

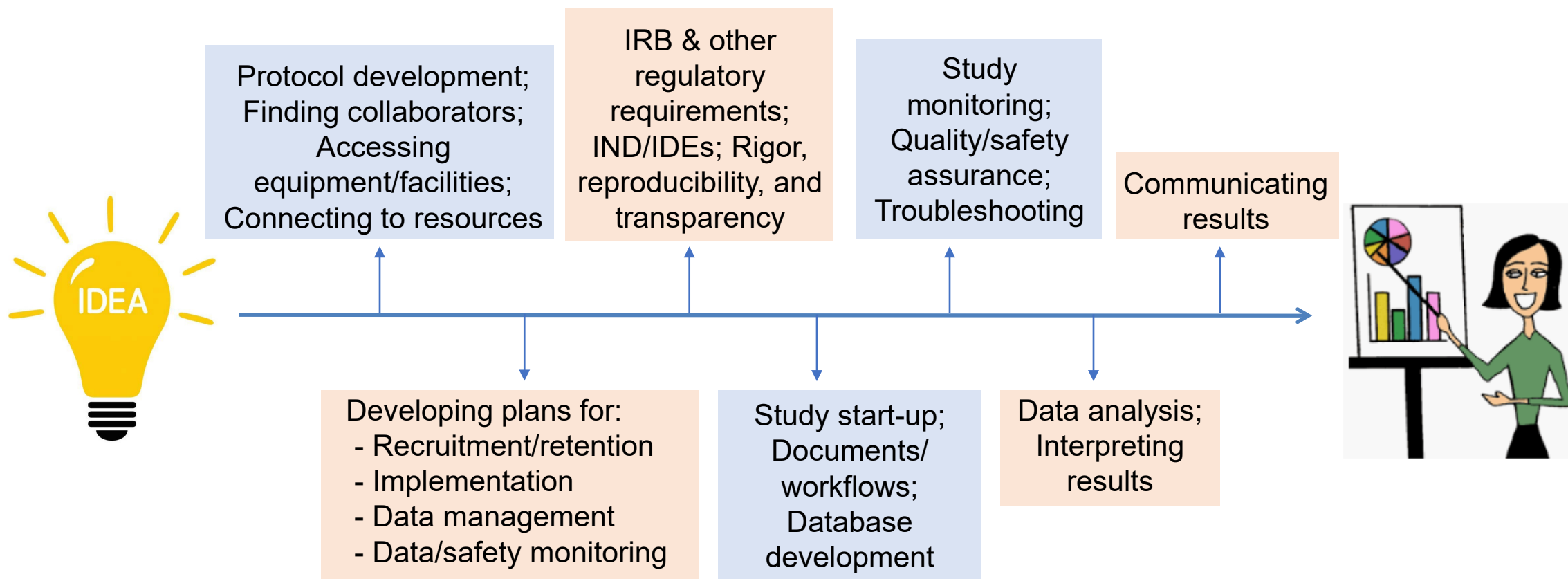
Free for clinical and translational researchers in the Harvard community





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# Connector Consultation and Support



MASSACHUSETTS  
GENERAL HOSPITAL



BRIGHAM AND  
WOMEN'S HOSPITAL



Beth Israel Deaconess  
Medical Center



**Boston  
Children's  
Hospital**

Until every child is well™



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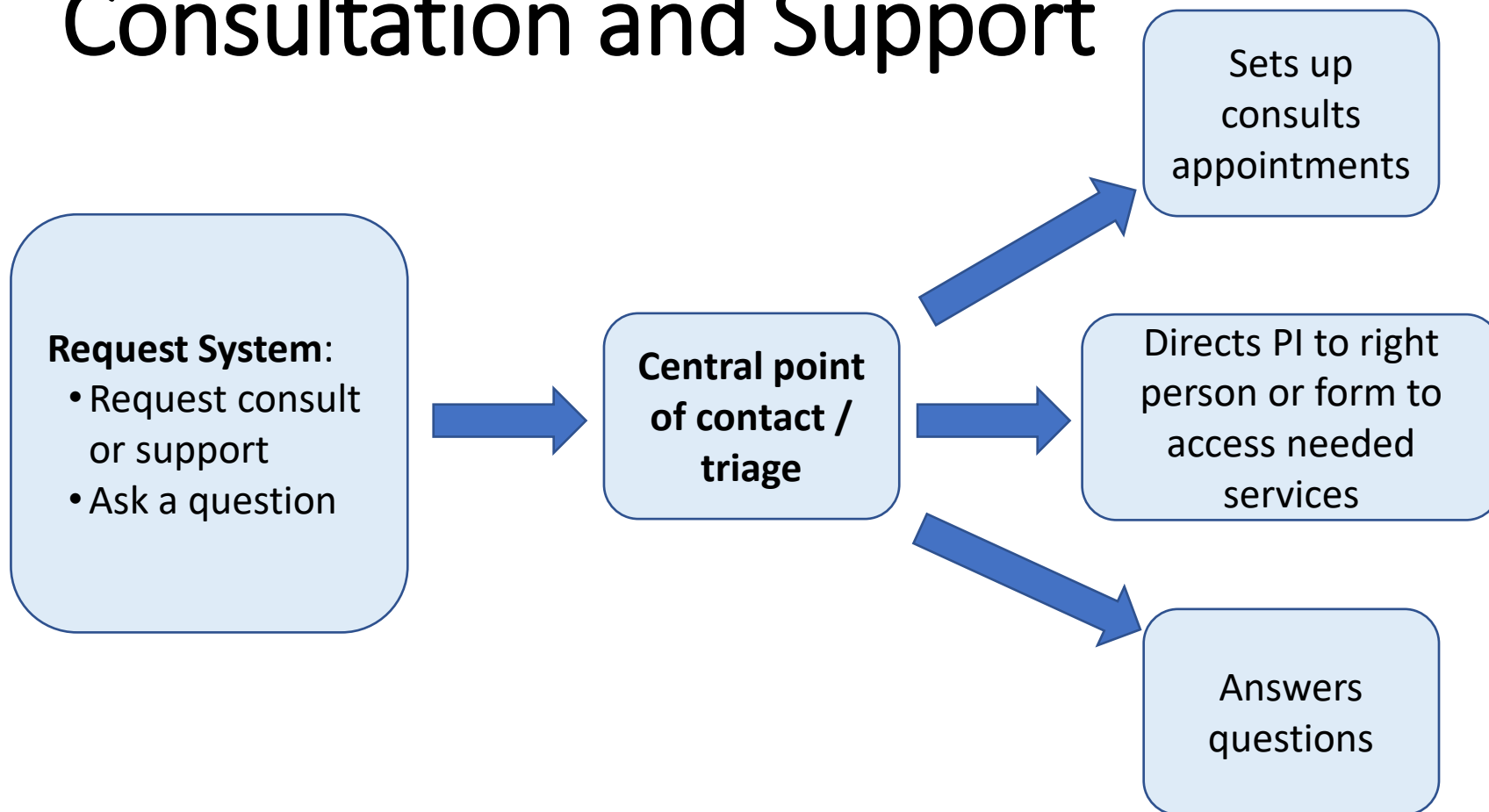
# Connector Consultation and Support

## Translational Navigation Teams

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

## Services

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



MASSACHUSETTS  
GENERAL HOSPITAL



BRIGHAM AND  
WOMEN'S HOSPITAL



Beth Israel Deaconess  
Medical Center



**Boston  
Children's  
Hospital**

Until every child is well™

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## Translational and Clinical Research Center

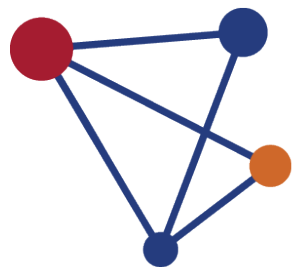
[tcrcinfo@mgh.harvard.edu](mailto:tcrcinfo@mgh.harvard.edu)

## Division of Clinical Research

[Request a consultation >](#)

Clinical trials and other CT research:  
Protocol development; IRB  
submissions; recruitment plans;  
DSM plans; study documents;  
recruitment and consent;  
troubleshooting, etc.

Biostatistics; Community  
Engagement Research; Comparative  
Effectiveness Research; Drug  
Discovery; Global Health Research;  
Qualitative and Mixed Methods;  
Survey Research, etc.



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# Community Engagement Studios

## Past Priorities and Pilots

Cancer disparities

Gene-environment interactions

Informatics and “big data”

LGBTQ health

Healthy child weight

Eating disorders

Sleep health

Spirituality and health

Stress and mental health

# 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.

*Participants may take modules in succession or individually.*

## Module 1

Describe the aims and key concepts of community-engaged research.

## Module 2

Illustrate how to cultivate an effective collaboration between community partners and researchers.

## Module 3

Identify how to incorporate community-engaged principles into research studies and practice settings.

Next offering: October 13-December 17, 2021  
Registration deadline: October 1, 2021





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# Stay in Touch

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**Harvard Catalyst**  
The Harvard Clinical and Translational Science Center  
401 Park Drive, Boston, MA 02215  
[Map & directions](#)  
Tel: 617.432.7800 Fax: 617.432.7823

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**Desire2Learn**  
Trying to access our course platform?  
Email [education@catalyst.harvard.edu](mailto:education@catalyst.harvard.edu)

**Media and Communications**  
For media inquiries & communications questions,  
email [Harvard Catalyst Communications](#)

**Finance and Grant Management**  
For financial & grant management questions  
Email [Lucy Kolessin](mailto:Lucy.Kolessin) or call 617.998.5375

**Pilot Grants**  
For questions about Pilot Grants, email [grants@catalyst.harvard.edu](mailto:grants@catalyst.harvard.edu)

Newsletter  
Sign-up





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# Stay in Touch

The screenshot shows the Harvard Catalyst website's 'Calendar' page. The top navigation bar is dark red with links for 'About', 'News & Highlights', 'Calendar' (highlighted with a blue box), and 'Contact'. A 'SEARCH' button with a magnifying glass icon is on the right. Below the navigation bar is a dark blue header with the Harvard Catalyst logo and four icons labeled 'Train', 'Connect', 'Support', and 'Include'. The main content area has a light gray background with the word 'Calendar' in large blue text. Below this is a light blue bar with 'List view' (selected), 'Calendar view', and a 'Submit Event >' link. The first event listed is 'Forum: The Dual Impact of Race and Rural Status on Health Care Disparities – September 29', dated 'September 29, 2021'. The description states: 'Forum: The Dual Impact of Race and Rural Status on Health Care Disparities. This session will explore the disparate impact of rurality on health disparities seen in the Southeastern United States compared to other parts of the country.' A 'See more' link is provided. The second event is 'Conference: Precision Psychiatry – September 30-October 1, 2021', dated 'September 30 – October 1, 2021'. The description states: 'Conference: Precision Psychiatry. New annual international conference bringing together the community of scientists, industry partners, and healthcare leaders in the emerging field of precision psychiatry, and advancing interest in the application of precision medicine to psychiatric research and clinical practice.' A 'See more' link is provided. A small promotional image for the 'First Annual CONFERENCE ON PRECISION PSYCHIATRY' is shown in the bottom right corner of the event list.

Calendar

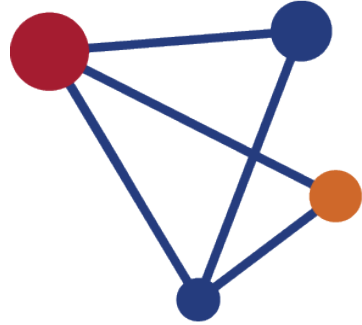
Events  
Calendar

List view Calendar view Submit Event >

**Forum: The Dual Impact of Race and Rural Status on Health Care Disparities – September 29**  
September 29, 2021  
Forum: The Dual Impact of Race and Rural Status on Health Care Disparities. This session will explore the disparate impact of rurality on health disparities seen in the Southeastern United States compared to other parts of the country.  
[See more](#)

**Conference: Precision Psychiatry – September 30-October 1, 2021**  
September 30 – October 1, 2021  
Conference: Precision Psychiatry. New annual international conference bringing together the community of scientists, industry partners, and healthcare leaders in the emerging field of precision psychiatry, and advancing interest in the application of precision medicine to psychiatric research and clinical practice.  
[See more](#)

**CONFERENCE ON PRECISION PSYCHIATRY**  
First Annual  
September 30 - October 1, 2021  
The International Precision Psychiatry Conference will bring together scientists, industry partners, and healthcare leaders in the emerging field of precision psychiatry, and advancing interest in the application of precision medicine to psychiatric research and clinical practice.



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