

# **Ten Components** of Successful Research Mentoring Programs

University Research Forum





### Who Should Read

Chief Research Officers Research Administrators Research Development Professionals

# Ten Components of Successful Research Mentoring Programs

## Three Ways to Use This Research Brief

- Create a scalable mentorship program in the Office of Research
- Update and improve existing mentorship program
- Create mentorship opportunities specifically focused on research

## **University Research Forum**

Project Director Caitlin Blair

Practice Manager Ann Forman Lippens

Design Consultant Chanel James

Managing Director

John Workman, PhD

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### **Research Mentorship a Historically Ad Hoc Exercise**

Mentorship has long been a critical element of faculty development. Historically, new faculty reached out to senior faculty within their department to get support on career growth. These relationships gave new faculty a venue to receive guidance on research, and occasionally teaching, tenure and promotion, and navigating the department. While some departments and research offices offer training tools or additional support, the ad hoc nature of these relationships means they are largely unstructured. As a result, early-career faculty have varying experiences and support networks. Finding a good mentor can be especially difficult for underrepresented populations, whether related to gender in a specific field, racial minorities, or other groups.

Now, chief research officers (CROs) are increasingly aware that faculty do not always receive the mentorship and support they need from their department. This is particularly worrisome, as competition for funding has increased (as has the complexity of the process to secure grant funding). This impacts new faculty career development and ultimately affects faculty members' ability to develop research opportunities.

### **Current Gaps with Faculty Mentorship**



Faculty left to own devices to select mentor, structure relationship



Inconsistent research funding means increased competition for dollars



Process to secure grants increasingly complex



Underrepresented minorities disproportionately affected by lack of infrastructure

### Target Infrastructure to Support Mentorship—and Ultimately, Career Development

While few research offices have the resources to create mentorship pairings for all active researchers, there are a relatively small number of tactics that have an outsized impact on faculty mentorship opportunities. In fact, some institutions may already have existing training resources (potentially through academic affairs or faculty development office) that research offices can use.

This resource outlines the ten components of effective research mentorship programs that all CROs and research offices should consider. The components are listed below and outlined in greater detail throughout.

### **Ten Components of Successful Research Mentoring Programs**

- 1. Target specific groups of faculty. Focus on specific groups of faculty that might struggle to find a good mentor within their department.
- **2.** Create a time-limited program. A defined time frame ensures a structured environment and clarifies the level of commitment.
- **3. Require mentees to apply.** An application requirement ensures mentee buy-in and commitment to the program.
- **4.** Allow choice in mentor pairing. Allow mentees to select their own mentor, but also be prepared to assist mentees in finding a well-matched mentor.

- **5.** Create a matrixed support network. Develop a matrix of mentors to connect mentees with a support network and access to a variety of perspectives and experiences.
- **6.** Communicate expectations up front. Set clear expectations at the outset and hold mentees and mentors accountable.
- **7. Provide support beyond mentoring.** Consider providing participants with seed funding—or at least extra research services—to encourage them to find and apply for external funding.
- 8. Create planning tools for mentees. Provide resources such as worksheets and planning tools that mentee-mentor pairs can complete and discuss.
- **9. Track mentee progress and activity.** Create mechanisms to track progress and activity to ensure a productive and worthwhile experience for mentees and mentors.
- 10. Regularly evaluate program.

Collect participant feedback and implement changes to the program.

### **Introduction to Profiled Mentorship Programs**

While many institutions have begun to focus more on research faculty development, there are three mentorship programs that are particularly strong. As a result, this brief will largely focus on mentorship programs at three institutions: Indiana University–Purdue University Indianapolis, University of Michigan Medical School, and University of Utah School of Medicine. The table below provides a brief overview of each program.

Institution	Program	Description
<b>UPUI</b> Indiana University- Purdue University Indianapolis (IUPUI)	Enhanced Mentoring Program with Opportunities for Ways to Excel in Research (EMPOWER)	EMPOWER supports underrepresented and/or historically excluded populations in research. The program combines mentoring, internal funding, and research support for faculty members who have not successfully secured external funding. It is one year long and cosponsored by the IUPUI Office for Women.
University of Michigan Medical School	Mentored Research Academy: R01 Boot Camp	The Mentored Research Academy: R01 Boot Camp combines mentoring, peer connections, and grant-writing and proposal development support to increase the success rates of faculty applying for their first R01 Research Grant. The program is 10 months long.
University of Utah School of Medicine	Vice President's Clinical & Translational (VPCAT) Research Scholars Program	The VPCAT Program combines mentorship, leadership training, and grant support with the ultimate goal of keeping participants engaged in clinical and translational research. The program is two years long.

Source: EAB interviews and analysis; IUPUI's <u>Enhanced Mentoring Program with</u> <u>Opportunities for Ways to Excel in Research (EMPOWER);</u> University of Michigan Medical School's <u>Mentored Research Academy: R01 Boot Camp;</u> University of Utah Health Sciences' <u>Vice President's Clinical & Translational (VPCAT)</u> Research Scholars Program.



# **Ten Components of a Successful Research Mentoring Programs**

- Component 1: Target Specific Groups of Faculty
- Component 2: Create a Time-Limited Program
- Component 3: Require Mentees to Apply
- Component 4: Allow Choice in Mentor Pairing
- Component 5: Create a Matrixed Support Network
- Component 6: Communicate Expectations Up Front
- Component 7: Provide Support Beyond Mentoring
- Component 8: Create Planning Tools for Mentees
- Component 9: Track Mentee Progress and Activity
- Component 10: Regularly Evaluate Program

# **Component 1: Target Specific Groups of Faculty**

## Focus on Groups That May Struggle to Find a Mentor

The first component is to target specific groups of faculty. While most faculty have a mentor within their department, these partnerships often focus on the tenure and promotion process and navigating the department, leaving some faculty with limited guidance related to research. Certain groups of faculty may not find departmental support sufficient and can benefit from a more targeted approach. For institutions with increasing research activity, early-career faculty may need to look beyond their department to find a mentor to support them in advancing their research.

Because the research office often does not have the resources to support a mentorship program for all faculty members, it should focus its efforts on specific groups of faculty who may need extra support. This might include faculty in specific disciplines, underrepresented populations, or faculty at certain stages in their career.

The graphic below details the populations that profiled institutions support through their research mentorship programs.

### **Mentorship Program Eligibility Criteria**

### **IUPUI's EMPOWER Program**

- · Supports underrepresented, or historically excluded, populations
- 🔱 IUPUI
- Includes faculty members who are underrepresented in their field or whose population was historically denied admission to higher education
- Prioritizes faculty who have not submitted an application for, or secured, external funding



### University of Utah School of Medicine's VPCAT Program

• Targets junior faculty in the health sciences who are committed to careers in clinical or translational research



### University of Michigan Medical School's Mentored Research Academy: R01 Boot Camp

- Supports faculty who have not been a PI<sup>1</sup> on an NIH R01 grant proposal and who will be prepared to submit an R01 within one year
- Includes faculty members with primary appointments in medical fields (specific schools, colleges, and departments)

For a full version of the University of Utah School of Medicine's VPCAT Eligibility Determination Checklist, please see pages 20–21.

# **Component 2: Create a Time-Limited Program**

## Program Requires Start and Stop Dates, Structured Time Commitment

The second component is to structure the mentorship program to be time-limited. This requires the research office to determine a standard duration and define start and end dates. This gives mentors and mentees a clear understanding of the time commitment from the outset. A set program duration also gives the research office the dedicated time, and captive audience, to provide additional programming for mentors and mentees.

Research mentorship programs should last for one to two years. This time frame allows mentorship pairs to establish a relationship while not being overly burdensome on their time. It also enables mentees to participate in additional programming activities dedicated to growing their research skills in areas such as finding funding, proposal development, and grant-writing skills. (Note that the program structure and research office support should still encourage mentors and mentees to maintain a relationship after the program ends.)

The graphic below details the program timeline for University of Michigan Medical School's Mentored Research Academy: R01 Boot Camp. This program focuses on submitting a specific proposal (R01), so the mentoring and training (including a grant-writing workshop) is tailored to that specific grant. In addition to workshops and events, mentees meet monthly with their mentors and peer group to work on their grant proposal. All told, the program lasts eleven months.

### University of Michigan Medical School's Mentored Research Academy: R01 Boot Camp Program Timeline



<ul> <li>January</li> <li>Program kickoff</li> <li>Meet peer group and coach</li> <li>Create and discuss research roadmaps</li> </ul>		<ul> <li>May</li> <li>Boot camp manager sends mid-program progress report to participant's department chair</li> <li>Begin final proposal writing</li> </ul>		October/November • Mock panel review • Closing ceremony • Deadline for new R01 proposals • Program evaluation • Final progress reports	
		<ul> <li>Spring Semeste</li> <li>Workshops on w proposal, budget biostatistics</li> <li>Research presen department</li> <li>Draft proposal and peer editing</li> </ul>	er riting R01 :s, and tation to development g	Summer/Early Fall Semester • Proposal writing • Submit proposa external review	l for

### **Ongoing Program Activities:**

- · Peer group meetings
- Internal Subject Matter Expert (ISME) consultations

# **Component 3: Require Mentees to Apply**

## Application Process Ensures Mentee Buy-In and Commitment

The third component is to require faculty interested in becoming mentees to apply to the program. The application process should be comprehensive enough that the research office can gauge legitimate interest while also filtering for applicants who do not currently have capacity to participate or who are not serious about using the program to help grow their research.

While different programs will require different pieces of an application, a few common components can help research offices evaluate prospective mentees:

- Cover letter
- CV/resume or biosketch
- Letter of support/recommendation
- Research/project plan

A cover letter or statement of interest provides mentees the opportunity to communicate why they are interested in the program, explain gaps in current mentorship opportunities, or detail how they would benefit from participation. A CV, resume, or biosketch enables the research office to learn more about the faculty member as a scholar and, if needed, help identify a mentor who could be a good match for the mentee. A letter of support or recommendation from someone in the mentee's home department, such as a department chair, serves not only to make the research office aware of his or her participation but also to show support in helping the faculty member succeed. Requiring a research/project plan requires applicants to enter the program with something tangible that they can build on with the support of a mentor and the research office.

In addition to many of the components listed above, University of Utah School of Medicine's VPCAT application includes sections on career plan and long-term goals, as well as a mentoring plan that describes who the mentee will work with and how he or she will use that person's time and expertise.

Research offices will need to determine their own program capacity when reviewing applications, considering factors such as budget and availability of mentors. Initially, research offices may choose to accept all applications; however, as program popularity and reputation grow, the office may need to create a more rigorous application review process.

For a full version of University of Utah School of Medicine's VPCAT application instructions, please see pages 22–24.

# **Component 4: Allow Choice in Mentor Pairing**

## Offices Should Be Prepared to Occasionally Assist in Mentor Selection

The fourth component is to allow mentees choice in selecting a mentor. The mentor has a major impact on each mentee's experience, especially when the program uses a traditional one-on-one model. While there are many factors contributing to the mentorship success, the foundation of this experience is a good mentor-mentee match.

Research offices have three options for how to assign mentors. Mentorship programs can match all mentee/mentor pairs, allow for some mentees to select a mentor while helping pair others, or ask all mentees to select their own mentor. The graphic below details the pros and cons of each approach.

All Mentees Assigned Mentors	Some Mentees Pick, Some Mentees Assigned	Require Mentees to Pick Mentors	
Pros	Pros	Pros	
<ul> <li>Research office can ensure all mentors are trained and committed to helping their mentees succeed</li> </ul>	<ul> <li>Mentees can continue to work with a mentor with whom they have already connected</li> </ul>	<ul> <li>Mentees have total control over the pairing, putting less burden on the research office to find the perfect match</li> </ul>	
Cons	<ul> <li>Mentees who have struggled</li> </ul>	Cons	
<ul> <li>Increases workload for research office (identifying, selecting, and training</li> </ul>	to find a mentor on their own can be paired with someone who is likely a good match	<ul> <li>Research office cannot ensure that mentors are well suited to help mentee succeed</li> </ul>	
mentors)	Cons	<ul> <li>May result in very different</li> </ul>	
<ul> <li>Risks increasing possibility of mentee dissatisfaction with program and research office based on a poor match</li> </ul>	<ul> <li>Difficult to ensure all mentee/mentor pairings have the same expectations</li> </ul>	experiences if mentors have different levels of commitment	

All three profiled programs have adopted the middle mixed model. Applicants to IUPUI's EMPOWER program can either apply with a mentor already selected or they can apply to be matched with a mentor by the research office. 14141414141414 41414141414141 60%

Percentage of IUPUI's EMPOWER mentees who applied to the program with a mentor selected

# **Component 5: Create a Matrixed Support Network**

## Faculty Benefit from Broad Support Network, Access to Many Perspectives

The fifth component is to create a matrixed support network for participants. While a one-to-one mentorship can be incredibly beneficial, it also puts a lot of pressure on one individual to provide all the support that a mentee needs. To address this issue, several institutions have adopted a system of matrixed support for mentees.

University of Utah School of Medicine's VPCAT program utilizes a mentoring matrix model that provides mentees with a network of mentors who can support them in different areas. University of Michigan Medical School's Mentored Research Academy: R01 Boot Camp also connects program participants with a variety of mentors and subject matter experts. The graphics below detail the different roles that mentors play for participants.

## University of Utah School of Medicine's VPCAT Program Matrix Mentoring Model



### **VPCAT Senior Mentor**

Experienced in research and mentoring

- Selected by VPCAT program
  - Works with 2–3 mentees
     Meets at least quarterly with mentee



### **Staff Mentors**

 Research office staff provide support in proposal development and connect mentees to other resources on campus



### Scientific Mentor

- Track record of funding in mentee's field
- Existing working relationship with the mentee
- Meets at least quarterly with mentee



### **Peer Mentors**

 Cohort of early-career faculty who participate in program activities for two years

### University of Michigan Medical School's Mentored Research Academy: R01 Boot Camp Support Network

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### Peer Cohort and Faculty Coach

Participants are placed in groups of 3–4 with one faculty coach



### Internal Subject Matter Expert (ISME)

Participants select an expert faculty member in their field to advise them during the program





### External Subject Matter Expert (ESME)

ISMEs help participants identify an external expert to review a near-final copy of the proposal

Source: EAB interviews and analysis; Byington, MD, Carrie L.; Heather Keenan, MD, PhD; John D. Phillips, PhD; Rebecca Childs; Erin Wachs; Mary Anne Berzins; Kim Clark; Maria K. Torres; Jan Abramson; Vivian Lee, MD, PhD, MBA; and Edward B. Clark, MD. Academic Medicine, April 2016. "A Matrix Mentoring Model That Effectively Supports Clinical and Translational Scientists and Increases Inclusion in Biomedical Research: Lessons From the University of Utah"; Paniccia, Aida, PhD. Frontiers in Pediatrics, February 2016. "An Inclusive Mentorship Model for a Better Science"; University of Utah School of Medicine's Vice President's Clinical & Translational Scholars Program.



# **Component 6: Communicate Expectations Up Front**

## Goal Is to Hold Mentors and Mentees Accountable

The sixth component is to communicate program expectations up front to both mentors and mentees. For mentees, expectations should be easy to find, either within the application itself or on the program's website. In addition to including expectations in the application, research office staff and mentors should also discuss these expectations at the start of the program. Understanding these expectations allows for more productive conversations about progress throughout the program.

Setting expectations for mentors is equally important. Research offices must create and document expectations not only to provide guidance for mentors but also to hold them accountable. Research office staff should intervene when the mentor is not participating at the level he or she agreed to.

### Create Accountability with Mentees



# State Expectations for Mentees in the Application

IUPUI's EMPOWER Program application sets expectations for mentees, including event attendance, submitting progress reports, and submitting an external proposal within 12 months.

University of Utah School of Medicine's VPCAT Program eligibility determination checklist outlines specific program requirements around event attendance, submission, and peer reviewing.

### Create Checkpoints and Incentives to Monitor and Promote Activity

IUPUI's EMPOWER Program requires mentees to submit mid- and end-ofprogram reports. Mentees receive additional internal funding only after they have demonstrated that they are making progress on their research.

### Create Accountability with Mentors



# Define Expectations for Mentors in Writing

University of Michigan Medical School's Mentored Research Academy: R01 Boot Camp ISMEs<sup>1</sup> are required to sign a contract confirming their understanding of program expectations. This contract includes expectations for time commitment, advising duties, and proposal support. ISMEs receive compensation at the end of the program, following the submission of their mentees' R01.

University of Utah School of Medicine's VPCAT Program has a scientific mentor requirements document that outlines mentor responsibilities, including meeting attendance, accessibility expectations, and oversight of midand end-of-program reports.

For a full version of IUPUI's EMPOWER Application Requirements, see page 25. For University of Utah School of Medicine's VPCAT Eligibility Determination Criteria, see pages 20–21. For Utah's VPCAT Scientific Mentor Responsibilities, see page 26. For University of Michigan Medical School's Internal Subject Matter Expert Contract, see pages 27–29.

> Source: EAB interviews and analysis; IUPUI's EMPOWER <u>Application Requirements</u>; University of Utah School of Medicine's VPCAT <u>Eligibility Determination Checklist</u>; University of Utah School of Medicine's VPCAT <u>2019 Scientific Mentor Responsibilities</u>; University of Michigan Medical School's Mentored Research Academy: R01 Boot Camp <u>Internal Subject Matter Expert Contract 2018</u>.

# **Component 7: Provide Support Beyond Mentoring**

## Some Programs Offer Seed Money to Advance Research Efforts

The seventh component is to consider providing support beyond mentoring. All profiled institutions center their programs around mentorship but include additional support activities to stimulate mentee research. This additional support can take a number of forms. The most common support is to provide additional opportunities to work directly with research office professionals to find funding and enhance proposals. For example, the University of Michigan Medical School's Mentored Research Academy: R01 Boot Camp provides mentees with workshops on grant writing, budgets, and biostatistics. It also hosts additional events around data management and communicating science. University of Utah School of Medicine's VPCAT Program provides similar research support, including a series of monthly research-focused educational sessions. Additionally, it provides financial support for participants to attend leadership seminars hosted by the University of Utah.

A more resource-intensive (but potentially more impactful) option is to provide additional research funding. This funding can support mentees in seeking and securing external funding sources. Participants in IUPUI's EMPOWER program are eligible to receive up to \$10,000 in funding. They receive the first \$5,000 when they are accepted into the program. Participants receive the next \$5,000 once they have demonstrated progress on developing an external proposal.



### Supplemental Support in University of Utah School of Medicine's VPCAT Program



Leadership Development

Participants eligible for financial support to attend University of Utah leadership seminars



Research office offers grant-writing and grantmanagement seminars to program participants



Research Skills

VPCAT program curriculum includes monthly educational sessions for participants



### **IUPUI's EMPOWER Mentees Receive \$10K in Internal Funding to Grow Their Research**

- Participants receive \$5,000 at the beginning of the program
- The remaining \$5,000 is distributed later in the program, once the mentee has demonstrated progress on an external proposal
- · Mentees may use the funds only for one month of summer salary
- Mentees cannot apply for other internal funding from the Office of Research during the program

Source: EAB interviews and analysis; University of Michigan Medical School's Mentored Research Academy: R01 Boot Camp <u>Activities & Resources;</u> IUPUI's <u>Enhanced</u> <u>Mentoring Program with Opportunities for Ways to Excel in Research (EMPOWER);</u> University of Utah School of Medicine's VPCAT <u>Frequently Asked Questions (FAQ)</u>.

# **Component 8: Create Planning Tools for Mentees**

## Provide Worksheets and Tools for Pairs to Complete Together

The eighth component is to create planning tools for mentees to use during conversations with their mentors. Research offices can create standardized worksheets, project-planning tools, and templates to help mentor/mentee pairs form a longer-term research plan. These handouts create more structure for mentorship conversations and ultimately help ensure that mentees have a positive experience in the program.

The University of Oklahoma's Center for Research Program Development and Enrichment (CRPDE) created the Individualized Research Plan (iRep) program to help each faculty member develop a plan for his or her research career. This program combines small group meetings with tailored support from research development professionals. At the University of Oklahoma, faculty work with research professionals to complete and discuss these tools, but a mentor could provide similar guidance. The graphic below outlines the key elements of Oklahoma's iRep program.

### University of Oklahoma's iRep Program Resources

### iPlan



Lay out ideas, goals, objectives, and other aspirations for the next 2–3 years, tenure, and 10 years

### **Project Timeline Schedule**



Create a plan with project deadlines and details

### **Time Management Schedule**



Plan weekly work and personal schedules

### **Funding Calendar**



Organize and track potential funding opportunities

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### A Road Map for Research

University of Michigan Medical School's Mentored Research Academy: R01 Boot Camp participants create a research road map and discuss it with their faculty coach and peer group. To create the road map, mentees answer a series of questions about their larger career goals and how they plan to achieve them.

For a full version of the University of Oklahoma's iRep program resources, please see pages 30–32. For the University of Michigan Medical School's Scholarly Road Map Questions, please see page 33.

# **Component 9: Track Mentee Progress and Activity**

## Create Mechanisms to Ensure a Worthwhile Experience

The ninth component is to track mentee activity and progress. While this offers a number of benefits, the primary one is to ensure that mentees receive sufficient attention and support from their mentors. Research offices have varying levels of resources to devote to training and compensating mentors, so it is critical to monitor the mentee experience through progress reports. This enables research office staff to intervene early if they notice a pairing is not working out well.

A number of institutions currently use progress reports to track the mentor/mentee relationship. At the University of Michigan Medical School, the Mentored Research Academy: R01 Boot Camp manager compiles midpoint and endpoint progress reports for each participant to share with his or her department chair.

IUPUI monitors both progress and activity so staff can quickly intervene if mentees are having a suboptimal experience. Mentees in IUPUI's EMPOWER program are required to submit midyear and year-end progress reports to the research office. They also log their activities with their mentors in a file shared with research office staff. This allows staff to ensure mentors are spending adequate time with their mentees.

#### 



Mentees Track Progress

Mentees are required to submit midyear and program-end reports



Staff Monitor Activity

Mentees log activities with mentor so staff can monitor activity and intervene if necessary

# **Component 10: Regularly Evaluate Program**

## Leverage Feedback to Implement Changes

The final component of a successful mentorship program is to regularly evaluate the program. Since the primary goal of research mentorship is to stimulate faculty research activity, research offices must have a mechanism in place to evaluate the success of current offerings. Program evaluations should take place annually, with a more holistic evaluation occurring every three to five years.



The annual evaluation should solicit feedback from mentees, mentors, and staff. Questions should focus on logistics, resource allocation, and programmatic offerings (as well as providing space for free response). Beyond program structure, the evaluation should also evaluate the success of mentor/mentee pairings.

Every three to five years, the research office should conduct a full program evaluation that focuses on longer-term impacts. It should answer questions such as "Have mentees grown their external funding since completing the program?" and "Have mentees maintained relationships with their mentors?" Ultimately, feedback from both evaluations will allow research offices to ensure that participants have the support they need and that the program has the maximum impact.



# Appendix

- University of Utah School of Medicine VPCAT Eligibility Determination Criteria (page 20)
- University of Utah School of Medicine VPCAT Application Instructions for Scholars (page 22)
- IUPUI EMPOWER Application Requirements (page 25)
- University of Utah School of Medicine VPCAT Scientific Mentor Responsibilities (page 26)
- University of Michigan Medical School Internal Subject Matter Expert Contract (page 27)
- University of Oklahoma iRep Program Resources (page 30)
- University of Michigan Medical School Scholarly Roadmap Questions (page 33)

# University of Utah School of Medicine VPCAT Eligibility Determination Criteria

	Eligibility Determination Checklist
orde	er to submit an application for the VPCAT Program, the candidate needs to be able to that he or she meets each of the following criteria.
ac	andidate for the VPCAT Program, I:
	Hold a doctoral level degree (PhD, MD, DO, PharmD, DNP, DNS) Hold a junior faculty position in Health Sciences (typically Instructor or Assistant Professor at the University of Utah or an equivalent rank at an affiliated health institution Am within five years of completing clinical or post-doctoral training by January of the
П	year following application submission That I have <b>not</b> previously been a principle investigator (or equivalent) on any of the
1	following: • An NIH research project grant (R01, U01, U10) • A subproject of a program project (P01) • A center grant (P50, U54) or equivalent PHS grant quard
	That I have <u>not</u> been the recipient of an externally-funded, multi-year career development award (K-series or equivalent)
	Have at least one scientific mentor with the research expertise, extramural funding track record, and available time required to support my project and efforts to obtain extramural career development funding and beyond (e.g., NIH R grant or equivalent)
ac	andidate for the VPCAT Program, I can demonstrate:
	I have the full, acknowledged support of my Dean/Department Chair who is willing to provide:
	<ul> <li>A minimum of 30% protected time to commit to research, career development, and scholarly activities each year I'm in the program</li> </ul>
	<ul> <li>Committed time for me to attend a mandatory VPCAT Orientation training day, two 3-day Leadership Programs, and monthly lunchtime and supplemental curricular sessions</li> </ul>
	I have a committed interest in seeking extramural funding for the research project I will be proposing to the VPCAT Program
	I am willing to work as a group with my scientific mentor(s), my VPCAT Senior Mentor, ar all staff mentors in accomplishing the requirements of this program
	I have a commitment to furthering the interests of clinical or translational research, including:
	<ul> <li>A track record of research-related work in my proposed field of study</li> <li>A track record of applying for and/or receiving internal career development, pilot, or foundation grants</li> </ul>
	<ul> <li>Peer-reviewed publications with my scientific mentor</li> </ul>

# University of Utah School of Medicine VPCAT Eligibility Determination Criteria (cont.)

	THEALTH
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s a p	otential VPCAT Scholar, I can and will comply with the program requirements as outlined
	I will participate in Orientation (mandatory), Leadership Training, and Research Career Survival Skills (RCSS) sessions
	I will meet with the VPCAT Mentoring team (VPCAT Senior Mentor, scientific mentor(s), and program staff) for my initial meeting at program start.
	I will organize meetings with my VPCAT Senior Mentor as required
-	I will also meet regularly (at least quarterly) with VPCAT Senior Mentor
1	I will meet with my scientific mentor as outlined in my application's Mentoring Plan.
E	I will submit Career Development Plans, program reports, and other information as
	I will submit at least one extramural grant application during the two years of the
-	program
	I will attend a campus-based arant writing workshop (facilitated by the program) prior to
	proposal submission
	I will submit proposals to my mentors and the Utah Center for Clinical and Translational
	Science (CCTS) Peer Grant Review Program prior to agency submission
	I will share full submitted grant proposals and associated summary statements with
	VPCAT staff
	I will share reviewer feedback with the VPCAT Program and mentors
	I will submit at least two research manuscripts during the two years of the program
	I will submit at least one research abstract at a professional society meeting each year
	I will regularly attend appropriate Research-In-Progress and/or Utah CCTS K-Club
	meetings, and present at the meetings at least once each year of the program
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# University of Utah School of Medicine VPCAT Application Instructions for Scholars



eab.com

# University of Utah School of Medicine VPCAT Application Instructions for Scholars (cont.)



# University of Utah School of Medicine VPCAT Application Instructions for Scholars (cont.)



### Application requirements

- · The mentoring program will be one calendar year in duration.
- Mentees are required to attend an initial workshop/orientation on mentoring, a mid-program meeting, an endof-program meeting, and are encouraged to attend campus professional development opportunities available on campus from Academic Affairs, the Office for Women and the Office of the Vice Chancellor for Research. Mentees may also consult with staff from these offices on specific research and professional development topics and needs such as accessing proposal writing services, finding funding, finding potential collaborators, identifying and addressing biases in the academy, etc.
- Mentees are required to submit a plan for research goals and objectives. The mentee and the mentor agree
  on the goals to be realized during the period of the grant.
- For both categories, a letter of support is required from the mentee's department head or dean, addressing the mentee's eligibility for this mentoring program, and indicating how this program is expected to benefit the mentee's research and professional growth.
- Submission of a proposal to an external funding source must occur no later than 12 months from the end of the award period. Failure to meet this requirement may result in the applicant becoming ineligible to receive support from OVCR in the future.
- · Mentees are required to submit a mid-year report and program end report.
- Mentees cannot apply to any other OVCR internal grant program during the calendar year of EMPOWER.
- · A mentee can receive this award once.
- During the calendar year of the program, the mentor is expected to spend at least 30 hours with the mentee.
- Mentors are required to attend an initial workshop/orientation on mentoring, a mid-program meeting, an endof-program meeting, and meet on a regular basis with their mentees.
- Priority will be given to mentees that have yet to submit an external proposal or have yet to receive external funding.

Application sections include:

- Cover page
- Budget and justification
- · Project plan not to exceed five pages
- · Biosketch or CV not to exceed five pages, include funding history
- · Letters of support from department chair or dean for mentees
- IRB, IACUC, and/or IBC forms if applicable

# University of Utah School of Medicine VPCAT Scientific Mentor Responsibilities



# University of Michigan Medical School Internal Subject Matter Expert Contract

UNIVERSITY OF MICHIGAN					
<b>R%1 BOOT CAMP</b>					
University of Michigan Medical School Office of Research R01 Boot Camp - Internal Subject Matter Expert Contract 2018					
You have been asked to participate as an Internal Subject Matter Expert for a mentee of the <u>UMMS</u> <u>Mentored Research Academy: R01 Boot Camp</u> . In compensation for the completion of this role (i.e., once the mentee has submitted a carefully developed and well-reviewed NIH R01 application), you will receive a \$1,000 salary supplement.					
Your agreement to the responsibilities listed below is requested.					
Contact R01 Boot Camp with any questions.					
Please indicate your response to each of the following statements and click "Submit" below:					
First Name:					
Last Name:					
Degrees:					
Uniqname:					
Phone Number:					

# University of Michigan Medical School Internal Subject Matter Expert Contract (cont.)

Department:
Division (if applicable):
Name of
Administrative Assistant:
Administrative Assistant:
Name of Mentee:
First Name:
Last Name:
Lundersten dahet the total estimated time commitment for commitments on an Internal Cubic of
I understand that the total estimated time commitment for serving as an internal Subject
Matter Expert is between 16-20 hours (excluding optional components), and I am prepared to
make this commitment.
I will advice my mentee of the annuantistances of the proliminary data and the energies aimer
I will advise my mentee of the appropriateness of the preiminary data and the specific amis,
I will review drafts of sections of the R01 proposal as they are being developed; I will guide
the mentee on a timeline to complete the proposal.
I will advise the mentee on preparing a Chalk Talk in his or her department, suggest
participants to attend, attend myself, and provide a written summary (and tentative NIH
Impact score,
if possible).
O T Agree
I will help the mentee determine an appropriate NIH study section and provide advice on
contacting a program officer.

# University of Michigan Medical School Internal Subject Matter Expert Contract (cont.)



# University of Oklahoma iRep Program Resources

iRep / iPlan	_		
	2-3 years	Tenure	10 years
Ideas			
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<u>Goals</u>			
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Objectives			
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Other Aspi	rations		
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Research Q	uestions:	Awards & Recognition	
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# University of Oklahoma iRep Program Resources (cont.)



Funding Calendar					
Agency / Fdn	Due Date	Scope / Summary	OU Lead / Others	Tasks	TBD by when
Other possibilities (long-term):					

Work Schedule, e.g.							
	Monday	Tuesday	Wednesday	Thursday	Friday		
6 – 7a	Write (home)	Write (home)	Write (home)	Write (home)	Write (home)		
7 – 8a	Shower / Arrive @	Shower / Arrive @	Shower / Arrive @	Shower / Arrive @	Shower / Arrive @		
	work	work	work	work	work		
8 – 9a	Email / phone calls	Email / phone calls	Email / phone calls	Email / phone calls	Email / phone calls		
9 — 10a	<b>External Proposals</b>	PDS Weekly	<b>External Proposals</b>	External Proposals	External Proposals		
10 – 11a	External Proposals	External Proposals	External Proposals	External Proposals	External Proposals		
11a –	READ (Agency	READ (Agency	READ (Agency	READ (Agency	READ (Agency		
12p	guidelines;	guidelines;	guidelines;	guidelines;	guidelines;		
	grants.gov; pivot)	grants.gov; pivot)	grants.gov; pivot)	grants.gov; pivot)	grants.gov; pivot)		
12 – 1p	Lunch	Lunch	Lunch	Lunch	Lunch		
1 – 2p	Develop Junior	Develop Fellowship	Develop Junior	Develop Fellowship	Develop Junior		
	Faculty iRep (all	Calendar (or	Faculty iRep (all	Calendar (or	Faculty iRep (all		
	components)	Fulbright bios)	components)	Fulbright bios)	components)		
2 – 3p	Develop Junior	Develop Fellowship	Develop Junior	Develop Fellowship	Develop Fellowship		
	Faculty iRep (all	Calendar (or	Faculty iRep (all	Calendar (or	Calendar (or		
	components)	Fulbright bios)	components)	Fulbright bios)	Fulbright bios)		
3 – 4p	Diversity	Diversity	Diversity	Diversity	Diversity		
4 – 5p	Faculty Meeting /	Faculty Meeting /	Faculty Meeting /	Faculty Meeting /	Faculty Meeting /		
	<b>External Proposals</b>	External Proposals	External Proposals	External Proposals	External Proposals		
5 – 6p	Leave / home	Leave / home	Leave / home	Leave / home	Leave / home		
6 – 7p	Leave / home	Leave / home	Leave / home	Leave / home	Leave / home		

# University of Michigan Medical School Scholarly Road Map Questions



The University Research Forum is grateful to the individuals and organizations that shared their insights, analysis, and time with us. We would especially like to recognize the following individuals for being particularly generous with their time and expertise.

### Etta Ward

Indiana University– Purdue University Indianapolis Indianapolis, IN Jill Jividen University of Michigan Medical School Ann Arbor, MI Alicia Knoedler University of Oklahoma Norman, OK **Michael Rubin** University of Utah School of Medicine Salt Lake City, UT

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