

Vice President's Clinical and Translational (VPCAT) Research Scholars Program

-- Overview of Formal Participation in the VPCAT Program --

The VPCAT program was established to provide a robust infrastructure for mentorship and training to support early-career faculty engaged in clinical and translational science. Recognizing the vital role of mentorship, we developed the innovative mentoring framework called the **Matrix Mentoring Model** that includes 5 synergistic types of mentorship: *Self, Scientific, Peer, Staff, and Senior*. Together, this infrastructure and framework serve as the cornerstones of a successful mentoring program driven by the participation of interdisciplinary faculty from across the University of Utah.

This document provides an overview of participation in the VPCAT program and the formal agreement to which our offices would adhere, including guidelines for service obligations, responsibilities, fixed costs, and potential benefits of participation.

SERVICES PROVIDED BY VPCAT TO ACCEPTED SCHOLARS

- A **senior mentor** to serve in a career and research mentor capacity who fulfills the roles and responsibilities as outlined in the *Responsibilities and Expectations of Senior Mentors* section below
- A structured ½-day **curriculum** every 2nd and 4th Wednesday of each month focused on: Scientific Career Development, Grant Writing and Management, and Leadership
- Support for access and costs associated with multiple institutional resources
 - **Utah Clinical and Translational Science Institute (CTSI) Population Health Research (PHR):** Consultations for an analysis plan, study design, collection of data, etc. for up to approximately 30 hours per year
 - **Utah CTSI Workforce Development Foundations:** Up to 2 Master of Science in Clinical Investigation (MSCI) courses per year through Continuing Education
 - **Data Service Fees:** Support data costs (*i.e.*, UPDB, Data Science Services, etc.) on a case-by-case basis
 - **Department of Pediatrics hosted Grant Writing Workshop:** Attend 1 workshop per year
 - **Utah CTSI and Grant Writers Seminar and Workshop (GWSW) Sponsored Training Series**
- Access to VPCAT senior research manager for pre-award and grant management mentorship
 - **Grant Editing and/or Formatting Review Opportunity:** During three annual 4-6-week cycles, current and past scholars may reserve up to 2 days of the manager's time to complete pre-submission edits, formatting, and/or general documentation review for new or resub applications
 - **Initial Grant Submission Consultation Opportunity:** Team consultations between scholars and their pre-award admin to review and prepare for an upcoming proposal including a tailored application folder system containing checklists, examples, templates, and training modules
 - **Information and Resource Access:** Multiple online resources (*e.g.*, VPCAT Newsfeed, Grant Repository, VPCAT Victories Newsletter, etc.) providing up-to-date opportunity notices, events, policy updates, etc.
- Support for additional learning and career development opportunities including, but not limited to: the VPCAT Translational Science National Conference Travel Stipend and the SVPHS Education Unit's *Leadership & Career Development Seminar Series* and *Relational Leadership Initiative* seminars
- Communicating scholar success with senior leaders, including progress reports to scholars' department chairs and deans, access to the monthly VPCAT Victories Newsletter, and invitations to key program events

RESPONSIBILITIES AND EXPECTATIONS OF ACCEPTED SCHOLARS

- A **minimum of 30% effort** dedicated to their research and career development
- Attend and participate in mandatory VPCAT Research Scholars Program activities
 - **Orientation:** 1½-day orientation on Monday and Tuesday of the 2nd week in December in their initial year
 - **Structured Curriculum:** A minimum of 80% at the ½-day curricular sessions per year
 - **Scholar/Senior Mentor Meetings:** A minimum of 3 meetings with VPCAT senior mentor over the duration of the program period (*e.g.*, VPCAT Initial Team Meeting and the Mid- and Final Mentor/Mentee Review Meetings), though more frequent meetings (monthly or quarterly) are strongly encouraged

- **Leadership and Career Development Seminar series:** Offered by the SVPHS Education Unit
- Complete and submit **program documents** including scholar contract, self-assessments, program evaluations at 6, 12, 18, and 24-months, VPCAT Scholar Career Development Plan (VS-CDP) at 3 intervals, and updated CVs submitted with their Mid- and Final Program Reports at 12 and 24-months, which includes updates on scholar's *Plan for Transition into an Independent Investigator*
- Inform, provide, and/or share **grant related items**
 - Updates on grants submitted, grants funded, manuscripts published, and other career successes
 - Full grant applications and summary statements/reviews
 - Upon funding, share applications and summary statements in the SVPHS Education Unit's Grant Repository
- Take advantage of **career development opportunities and resources**
 - Attend SVPHS Education Unit's Leadership & Career Development Seminar Series
 - Submit posters and attend the annual, 1-day Utah CTSI Translational Research Trainee Symposium
 - Consult with the Utah CTSI PHR Core members
 - Apply for and attend the Department of Pediatrics hosted Grant Writing Workshop
 - Attend clinical and translational research coursework offered by the Utah CTSI MSCI program
 - Attend the Utah CTSI and Grant Writers Seminars and Workshops co-hosted, 1 ½-day seminar
 - Present at appropriate RFPs or the Utah CTSI K-Club at least once per year, as well as regular attendance
 - Submit proposals for consideration through the Utah CTSI PGR Program and, as appropriate, participate in the Utah CTSI K to Research Success Program
- **Advance their research career** over the program period by submitting:
 - At least 1 extramural grant application (we highly advise scholars work with their VPCAT senior mentor and the VPCAT research manager to review application drafts)
 - At least 2 research manuscripts
 - A research abstract for consideration for presentation at a national scientific conference each year
 - A research poster for presentation at the Utah CTSI Translational Research Trainee Symposium each year
 - An abstract to the Association for Clinical and Translational Science (ACTS) Translational Science National Conference and apply for the annual VPCAT Translational Science National Conference Travel Stipend
- **Continued engagement and participation** in VPCAT after graduation in support of "paying it forward"

RESPONSIBILITIES AND EXPECTATIONS OF SENIOR MENTORS

- A **minimum of 10% protected time** dedicated to their roles and responsibilities in the program
- Attend and participate in mandatory VPCAT Research Scholars Program activities
 - **VPCAT Application Review and Selection Activities:** Serve as application reviewer (6-7 applications as 1st or 2nd reviewer) each year at the beginning of October, provide NIH styled written critiques, and serve as a selection committee member participating, in-person, at the ½-day VPCAT Selection Meeting anticipated to be held the morning of the 3rd Friday each October
 - **Scholar Mentorship:** On average, senior mentors are paired with **3 scholars per year**; the scholars are typically distributed across the two scholar cohorts so that mentors have at least one scholar per cohort
 - **Scholar/Senior Mentor Introduction:** After scholar acceptance notification email, mentors schedule and facilitate an informal introduction meeting prior to orientation
 - **Orientation:** 1½-day orientation on Monday and Tuesday of the 2nd week in December each year
 - **VPCAT Initial Mentor Meeting(s):** Within the first 3 months of the program, facilitate discussions and review scholars' self-assessment, *Plan for Transition into an Independent Investigator*, and the VPCAT Scholar Career Development Plan (VS-CDP) in order to assist scholars' in setting/ adjusting their SMART goals
 - **Quarterly Mentor Meetings:** Regularly attend and participate, in-person
- Utilize their senior experience as a grant-funded investigator and expertise in the grant review process and mentorship to ensure scholars receive **quality career development and grant writing guidance**, including
 - Assisting in the identification of suitable scientific mentor(s), as needed
 - Facilitating access to and utilization of institutional resources
 - Assisting in the expansion of a scholar's research and academic networks
 - Evaluating alignment of time allocation relative to a scholar's priorities
 - Reading/editing a scholar's research proposal(s)
 - Providing advice/guidance concerning promotion, retention, and tenure
 - Listening and providing support, as well as celebrating scholars and their achievements

- Serving as a scholar's advocate
- Guiding scholars in assessing their *Plan for Transition into an Independent Investigator* and VS-CDP to develop short- and long-term SMART goals
- Complete and submit **program documents**, including VPCAT program evaluations at 6, 12, 18, and 24-months and written Mid- and Final scholar reports at 12 and 24-months
- **Utilize senior expertise** to present and participate in VPCAT program curriculum, orientation, and events
- Inform, provide, and/or communicate scholar progress through evaluations and emails to program director

ASSOCIATED FIXED COSTS

The associated annual cost for participation in the program by non-health sciences programs is \$12,000, which covers the participation of up to 2 scholars per year. If the non-health sciences school or college agrees to nominate a senior, qualified faculty member to serve a minimum of two years as a VPCAT senior mentor, the \$12,000 would be paid to the mentor to cover approximately 10% of their effort for VPCAT mentoring. If no mentor is nominated, the \$12,000 would be paid directly to the VPCAT program.

BENEFITS OF PARTICIPATION

The VPCAT program exists to support the development of successful, independent early-stage investigators, which advances our ultimate goal of building and retaining a well-rounded corps of principal investigators at the University. The success of each individual scholar increases satisfaction, ensures better faculty retention, and helps to raise the profile of departments, colleges, and the University as a whole. We work with our partners to ensure the greatest returns on their investments in faculty, which in turn helps to build stronger department research programs and attract future recruits.

On completion of the program, our scholars are better equipped to understand their short- and long-term goals, utilize mentorship and resource networks, and better function as principal investigators and leaders through the development of leadership and management skills related to personnel and grants. Since July 2007, 202 scholars (53% female) have benefited from the program and, as of January 2021, 162 scholars (54% female) have graduated. Of these University of Utah graduates, 79% remain at the University. Overall, 98% of graduates remain engaged in clinical and translational research connected with academic medicine, 89% have received extramural funding, and 66% have received federal extramural funding, including 57 federal K awards, 13 K equivalent awards, 19 R01s, 16 R03s, 13 R21s, 8 U01s, and 37 other federal awards.

A strength of our program is guiding scholars in the submission of National Institutes of Health (NIH) applications. NIH is one of the largest funders of clinical and translational science research and supports indirect costs. Since FY2008, VPCAT Scholar graduates have received **626 new awards and \$179 million in total new proposal funding**. Since our expansion in FY2013, the \$3.8 million in program expenses have been offset by **more than \$28 million in total indirects** awarded to our scholars and their colleges or schools, with an overall return on investment of nearly 7 to 1.

Table. University of Utah, **Graduated** VPCAT Scholar Data

College/School	Number of Scholars		\$ Awarded Grants			Award Average Per Scholar	
	Total	Total Awarded as PI on Extramural Award	Directs	Indirects	Total	Total	\$ Indirect
Health	10	10	\$8,750,431	\$2,126,049	\$10,876,480	\$1,087,648	\$212,605
Humanities	1	1	\$47,500	\$0	\$47,500	\$47,500	\$0
Medicine	123	108	\$122,679,997	\$27,639,756	\$150,319,753	\$1,391,850	\$255,924
Nursing	10	9	\$3,598,349	\$535,039	\$4,133,388	\$459,265	\$59,449
Pharmacy	2	2	\$3,887,268	\$1,087,859	\$4,975,127	\$2,487,564	\$543,930
Social & Behavioral Science	7	6	\$6,099,644	\$2,336,058	\$8,435,702	\$1,405,950	\$389,343

Our VPCAT senior research manager has experience with a broad range of extramural funding agencies in addition to NIH. She has successfully supported numerous proposals to the Veterans Administration (VA), United States Department of Agriculture (USDA), Department of Defense (DoD), as well as foundations including the American Cancer Society, American Heart Association, Bill & Melinda Gates Foundation, Robert Wood Johnson Foundation, Doris Duke Charitable Foundation, Primary Children's Health Foundation, and others.