

# Collegiate Translational Medicine Program (CTMP)



University of Chicago  
Fellowship Handbook  
2020-21

## Welcome

Congratulations on being selected as an undergraduate fellow with the **Collegiate Translational Medicine Program**, which is funded by the Biological Sciences Collegiate Division! This grant was awarded to the University of Chicago Center for Health and the Social Sciences (CHeSS) to prepare undergraduate students for careers in clinical and translational research.

The Center for Health and the Social Sciences (CHeSS) welcomes you to the CCTMP program and to the wider community of faculty, students, and staff affiliated with the Center.

Your appointment letter includes information on your stipend as well as a brief overview of program requirements. Please review this orientation manual, which includes information on the following:

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The information in this manual and all program requirements are subject to change. You will be notified via email with any updates.

## Section 1. Program Overview and Contacts

### About the program

CTMP is a program that prepares undergraduate students at UChicago for careers in clinical and translational research by provided experiential research experience, faculty mentorship, and didactic training.

CTMP fellows participate in the program for at least 1 year but are highly encouraged to participate for multiple years and may apply for Metcalf Internships to support the second and third year.

### Faculty Leadership

Program Director, CTMP Fanny L. Pritzker Professor of Medicine	<b>David Meltzer, MD, PhD</b>	dmeltzer@medicine.bsd.uchicago.edu
Program Co-Director, CTMP Assistant Professor of Medicine	<b>Micah Prochaska, MD, MS</b>	mprochas@bsd.uchicago.edu

**Additional Contacts** - For questions regarding didactic trainings or faculty mentors, please contact Kelsey. For HP scheduling, please contact Chloe.

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## Section 2. Program Requirements

### Required activities include:

1. Participate in the CTMP program for full-time over 10 weeks in the summer and then approximately 10 hours per week during the academic year.
2. Participate in the following didactic trainings and seminars:
  - The Introduction to Clinical Research series (Summer)
  - Outcomes Research Workshop (ORW) (Summer)
  - CTMP journal club (Academic year)
3. Participate in and achieve benchmarks related to clinical research experience through the Hospitalist Project
4. Complete a faculty mentored research project:
  - Meet regularly with mentor
  - Present research in May 2021
5. Complete training in the Responsible Conduct of Research (RCR)
6. Complete program evaluations and surveys in a timely manner, including:
  - Quarterly trainee reports
  - Pre, mid, end-of-year survey

Changes or updates to the required activities will be announced over email.

## Section 3. Didactic Trainings and Seminars

CTMP fellows are required to attend the seminars listed below.

*For questions regarding didactic trainings, please contact Kelsey.*

### Intro to Clinical Research Seminar Series (Summer)

The Introduction to Clinical Research Seminar series is sponsored by CHeSS and open to all undergraduate research assistants working with the Section of Hospital Medicine during the summer. Zoom links will be announced separately.

- Hospitalist Project: Past, Present, and Future (July 30, 3:30-5:00 pm)
- Informed Consent (August 4, 10-11:30 am)
- Patient and Family Insights Workshop (August 12, 3:00-4:00 pm)
- Introduction to Motivational Interviewing (August 19, 3:00-4:00 pm)

Additional sessions for CTMP fellows may be offered, including topics related to the mentor/mentee relationship and the responsible conduct of research.

### Outcomes Research Workshop (ORW)

CTMP fellows will participate in ORW during Summer Quarter. Outcomes Research Workshop (ORW) is focused on clinical outcomes, health services, and comparative effectiveness research, patient-centered

outcomes research (PCOR), and medical education, with an emphasis on the application or use of social science research methods. The workshop is highly interactive and provides opportunities for trainees, fellows, and faculty to present early-stage research ideas or preliminary results, to practice conference talks, or to use the time as a research or grant preparation working meeting with colleagues and senior faculty.

ORW typically takes place on Wednesdays from 8:30-9:30 am. ORW sessions are listed on the CHES website here.

### **Academic Year Journal Club in Research & Career Development Seminar Series**

CTMP fellows will all participate in a research and career development journal club, held throughout each academic year. The journal club will include panel discussions, faculty presentations, professional development workshops, and social events with students and faculty. Time will also be provided for practice presentations in preparation for the final presentation session in May 2021.

Tentative dates and times for the 2020-21 sessions are listed below. We are planning for all Fall 2020 sessions to occur over zoom. We will determine whether winter/spring dates will be in person or over zoom as the year progresses.

- October 12, 2020, 4:30-6:30 pm
- November 9, 2020, 4:30-6:30 pm
- January 11, 2021, 4:30-6:30 pm
- February 8, 2021, 4:30-6:30 pm
- March 8, 2021, 4:30-6:30 pm
- April 12, 2021, 4:30-6:30 pm
- Final presentation date to be announced!

## **Section 4. Clinical Research Experience with Hospitalist Project**

*Please see UCHP Training Manual for more information*

*For HP scheduling, please contact Chloe.*

The University of Chicago Hospitalist Project (UCHP) is large clinical research infrastructure program that collects longitudinal data on all patients hospitalized on the general medicine services at UC. UCHP was started in 1997 by Dr. Meltzer who is the PI and Program Director. Since its founding, undergraduate research assistants (RAs) from UC and other Chicago area colleges have worked on UCHP daily from 8AM to 8PM for 365 days per year to recruit, consent, and collect patient-reported data through an in-person interview during hospitalization for all patients admitted to the UC general medicine services and collected patient-reported data from these patients by phone 1 month after hospital discharge. This has resulted in over 20 years of continuous patient-reported data from over 100,000 patients.

Beginning in their first summer in CTMP and continuing throughout their time in the program, CCTMP fellows will gain experience as clinical research assistants through the UCHP. Fellows' responsibility and involvement in UCHP will grow over time, so that as they learn and master certain skills and are

challenged with new responsibilities that expose them to the entire process of an active \ clinical research project (patient recruitment/consent, data collection, management, and analysis, and dissemination of research findings).

More information about the Hospitalist Project RA experience, expectations, an responsibilities are detailed in the UCHP training manual.

## Section 5. Faculty Mentored Research Project

Fellows will participate in research teams of 2-3 fellows with a research faculty member who does clinical and/or translational research.

*For questions regarding faculty mentored projects, please contact Kelsey and Dr. Prochaska.*

**Pairing faculty and fellows:** During the first two weeks of the summer, fellows will receive a RedCap form that describes the available projects and mentors. Fellows will rank their project preferences. The CTMP team will match fellows with projects based on preference and availability; most mentorship teams will include 2-3 fellows. Fellows will be notified of their project in week 2 or 3 and will begin meeting with their mentor shortly thereafter.

**Summer:** Mentors will begin meeting with their groups partway through the summer. It is expected that most fellows spend about 10 hours per week in the summer on their research projects. This may vary week to week and group to group somewhat depending on the needs of the project. Please communicate with the HP research coordinators, Dr. Prochaska, and Ms. Bogue if you have concerns about time management between RA responsibilities and research project responsibilities.

**Academic Year:** Fellows will continue meeting with their mentors during the academic year. It is expected that most fellows will spend about 4 hours per week working on their research project and the remaining 6 as HP RAs; since each project is different, the CTMP team will work with fellows and the mentor to set an alternate division of time if need be.

### Mentor and Undergraduate Trainee Expectations

*Adapted from Crockett, E. T. (2014). A research education program model to prepare a highly qualified workforce in biomedical and health-related research and increase diversity. BMC medical education, 14(1), 202*

#### Expectations of mentors:

- Availability: Be able to meet with mentee and participate in research program activities
- Advisor: Help mentee to think, learn, and grow in research
- Advocacy: Help to support mentee in development of career goals
- Honesty: Provide honest and constructive feedback
- Role model: Set an example of values, ethics, and professional practices
- Networking: Help connect mentee with resources to broaden their research and professional networks

### Expectations of mentees:

- Respect: Fully respect the mentor and appreciate the mentoring provided
- Commitment: Fully participate in the mentoring relationship and the research program activities
- Responsibility: Accept responsibility for your own academic career development
- Honesty: Communicate honestly with mentors
- Proactive: Take initiative in seeking help and feedback from the mentor
- Receptive: Be open and listen to mentor's advice and suggestions
- Follow through: Implement feedback and complete expected tasks

**Mentor/Mentee Contracts:** Mentors and mentees will be asked to complete a mentor contract, included at the end of this manual, by the start of the University of Chicago Fall Quarter. Mentees are encouraged to use this contract to have a discussion with their mentor about shared goals, communication preferences, and other expectations. Mentees are encouraged to take notes and draft the contract for the mentor to review, edit, and sign. Teams are welcome to work on this over a google doc and share the link with Kelsey Bogue.

**End-of-year presentation:** Fellows will be expected to present an end-of-year presentation on their research project. Below are tentative guidelines for the final presentation; final guidelines will be confirmed in winter quarter.

### Tentative guidelines:

Each fellow will present for 7-8 minutes to the group on their individual/team project, leaving 1-2 minutes for questions. If a team wishes to present together, the length of their presentation should be increased accordingly (i.e. a team of 2 would present together for closer to 14-15 minutes).

The presentation should be a mini-research talk and broadly cover the following areas below. However, it is understood that each fellow has had a different experience and is in a different stage of their research project at the time of the final presentation. It is reasonable that a fellow may spend more time on background and methods and present on what analyses could or will look like, or vice versa, where more time is spent on the analyses and conclusions. We also understand that with limited time, the presentations will focus on only the key takeaways and may not be able to cover all of the components.

### Presentation components:

- Background
- Research question and hypothesis
- Methods
- Results
- Discussion

### Final Presentation Date

The final presentation date for CTMP fellows is to be determined. It will likely be in late April or very early May, 2021.

Fellows, mentors, and other researchers at UChicago will be invited to attend the final presentation.

**2nd and 3rd Year Scholarly Project:** Although all fellows commit to participating in the program for one year at a time, fellows will be invited to return for a second and/or third year in the program pending

adequate progress in the program and continued support from the fellow's research mentor. In the second and third year, it is expected that fellows will continue to work more independently on their research projects.

## Section 6. Responsible Conduct of Research Training

Training in the Responsible Conduct of Research (RCR) is a critical component of CTMP. Most of the RCR training activities are embedded in the other components of the program, but we list them here to highlight the importance of ongoing training in RCR:

- **Online CITI training:** This is required prior to participation in the UCHP. Fellows complete this training at the beginning of the summer. CITI training covers topics such as protection of human subjects, health information and security and data privacy, ethics of human research, and informed consent.
- **Informed Consent Lecture:** This lecture is offered as a part of the Introduction to Clinical Research Seminar series.
- **Introduction to the Mentorship Relationship Lecture:** This lecture is offered once per summer, prior to the start of the faculty mentored research projects.
- **Writing a Research Paper and Presenting Research Lecture:** This lecture is offered once per year as a part of the academic year journal club.
- **Research Ethics Mentor Discussions:** Fellows and mentors are expected to regularly discuss research ethics during their mentorship meetings. Fellows will be asked to report on ethics related discussions in their quarterly reports.

## Section 7. Program Evaluation and Reporting

### Quarterly reports

Fellows will be required to submit quarterly reports updating the CTMP team on their progress with their research mentor and any challenges related to their project, time management, etc., that arise. These reports will be shared with mentors and CTMP team leaders. More information on the format and how to submit reports will be provided by Kelsey.

### Program evaluations and surveys

Fellows are required to fill out surveys at the beginning of the program, annually, and upon exiting the program. The goal of these surveys is to assess the extent to which CTMP influences fellows' career goals and interests as well as their clinical and translational research skills. These surveys will be sent over RedCap.

### Acknowledgement of funding

Submitted or presented work that was conducted during the traineeship should include the following (or a similar) acknowledgement:

*"This [paper, presentation, etc.] was supported by the Collegiate Translational Medicine Program (CTMP) and the Biological Sciences Collegiate Division."*



## Section 8. Additional training and course offerings

All CTMP fellows are encouraged to take formal elective courses that support their continued academic development in areas of clinical and translational research. Suggested courses at UChicago include:

- PPHA 38300 Health Economics and Public Policy
- CCTS 20400/40400 Health Disparities in Breast Cancer
- CCTS 20500 Machine Learning & Advanced Analytics for Biomedicine
- CCTS 21007/BIOS 29329 Clinical and Health Services Research: Methods and Applications
- CCTS 43000/BIOS 29294 Introduction to Global Health
- CCTS 22003 Global Health Sciences III Biological and Social Determinants of Health
- CCTS 33000 Scientists Advancing the Forefront

## Section 9. Appendix A. Mentor/Mentee Contract

### Undergraduate Mentee Contract

Mentee (print): \_\_\_\_\_

Mentor (print): \_\_\_\_\_

Mentee (print): \_\_\_\_\_

Mentee (print): \_\_\_\_\_

*The purpose of this contract is to outline mutually agreed upon parameters of this mentoring relationship. This contract is meant to serve as a guide throughout the mentored research work. You are welcome to use the same contract for all mentees in a research group or create individual contracts for each mentee.*

**Specific project goals:** What are the objectives of the research work?

**Shared Goals:** What do you hope to generally achieve as a result of this mentored relationship (e.g., skill/career development, knowledge of organizational culture, networking, etc.)?

**Steps to achieving goals:** What will you do to achieve the project and shared goals as stated above (e.g., regular meetings, research collaboration, writing manuscripts/presentations, etc.)?

**Regular meetings:**

- i. **Type(s) of meetings** (e.g., lab, one-on-one, etc.):
- ii. **Frequency of meetings:**
- iii. **Duration of meetings:**
- iv. **Location of meetings:**

**Communication:** What are the preferred modes of communication (e.g., phone, email)? Is there a research lab manager or co-mentor whom the mentee(s) should contact for day-to-day questions and/or scheduling?

**School year plan:** It is expected that the mentee(s) will work at least \_\_\_\_\_ hours per week on the project during the academic year. *(Most fellows work ~4 hours per week during the school year with their mentor; please let Kelsey know if you need more or less time)*

- i. The mentee(s) will propose a weekly schedule to the mentor by the \_\_\_\_\_ week of each quarter.
- ii. This will be re-evaluated quarterly based on the project's needs.
- iii. If the mentee(s) must deviate from this schedule (e.g., because of an exam), then the mentee will communicate this to the mentor at least \_\_\_\_\_(weeks/days/hours) before the change occurs.
- iv. If the mentor must deviate from this schedule, then the mentor will communicate this to the mentee(s) at least \_\_\_\_\_(weeks/days/hours) before the change occurs.

**Effectiveness of mentored relationship:** What is your plan for evaluation (e.g, bi-annual reviews, quarterly reviews, etc.)?

*CHESS will ask for brief updates from the mentees and mentors about their progress at the end of each quarter. Research teams may also suggest their own additional evaluation plans.*

**Standard operating procedures:** What are SOPs for working in this research that all members of the lab must follow (e.g., attend weekly lab meetings, who to notify when supplies are low, etc.)

*By signing the below, we agree to these goals, expectations, and working parameters for this research work. Each party will retain a copy, and provide a copy to trainee program director Kelsey Bogue.*

You may use typed names in place of a signature.

Mentee signature \_\_\_\_\_ Date: \_\_\_\_\_

Mentee signature \_\_\_\_\_ Date: \_\_\_\_\_

Mentee signature \_\_\_\_\_ Date: \_\_\_\_\_

Mentor signature \_\_\_\_\_ Date: \_\_\_\_\_