





MD Anderson and Zambia Virtual Clinical Research Training Program (MOZART)

Mentorship Compact Between Cancer Diseases Hospital Registrars and Their Mentors

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Adapted from the AAMC Compact Between Postdoctoral Appointees and Their Mentors (2017), The University of Texas MD Anderson Cancer Center Mentoring Handbook for Faculty (2017), and "Mentoring Up" from "The Mentoring Continuum: From Graduate School to Tenure" (2015).



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Core Tenets of the MD Anderson and Zambia Clinical Research Training Program (MOZART)

The CDH clinical oncology training program is 4 years in length and the overarching goal of *MOZART* is to impart the clinical research skills necessary to complete a research project/thesis by the time of graduation, which will be presented at an internal symposium, national/international conference, and/or submitted as a manuscript to a peer-reviewed journal. Please refer to the "Mentorship Milestones" document for guidelines on expected research project progress at various timepoints throughout the program.

A mentorship group typically consists of:

- \Rightarrow CDH clinical oncology registrar
- \Rightarrow MD Anderson resident/fellow peer mentor
- \Rightarrow CDH faculty mentor
- \Rightarrow MD Anderson faculty mentor

All members of the mentorship group should attempt to be present at regularly scheduled meetings (i.e. every 3-4 weeks) but at a minimum, the CDH registrar, MD Anderson peer mentor, and one faculty mentor should be present.

In-between the regularly scheduled meetings, the CDH registrar should engage in one-on-one communication with the peer and/or faculty mentors for more specific questions and guidance. Regularly scheduled group meetings should be utilized for project updates and "big picture" questions and discussion. In the past, mentorship groups have found it useful for the CDH registrar and MD Anderson peer mentor to communicate briefly but frequently outside of meeting times on more detailed issues before convening with the larger group.

The strengths and roles of the CDH faculty and MD Anderson faculty mentors should be utilized – for example, the CDH faculty mentor might be more aware of the particular logistics at CDH, such as patient populations, data availability and structure, various stakeholders required to complete a project, and IRB processes, whereas the MD Anderson faculty mentor might be more aware of current trends in research and what might pose a novel research question to pursue.

Virtual Curriculum

A strength of the virtual curriculum is the ability to access resources on-demand and reference them at a future time of need. While mentors should be available for teaching of research skills, CDH registrars should take advantage of the virtual curriculum to review relevant concepts prior to approaching mentors in order to maximize the utility of mentorship time.

The full virtual curriculum, which includes the (1) course syllabus, (2) Zoom links for the live lectures and statistical office hours, (3) 17 recorded weekly lectures, (4) self-assessment questions, (5) handbook of statistical concepts in clinical research, and (6) additional resources



can be accessed at <u>canvas.mdanderson.org</u>. All registrars should already have access. Please email <u>kdiao@mdanderson.org</u> to request access.

Logistics of the Mentorship Program

Zambia (CAT) is +8 hours ahead of Houston (CST) time during non-daylight savings parts of the year (November-March) and +7 hours ahead during daylight savings time (March-November). It is often most convenient for international mentorship groups to meet in the afternoon of Zambia and in the morning of Houston (for example, 8 am Houston time and 3 pm Zambia time). Zoom is the platform of choice for our virtual curriculum and can be used for virtual mentorship meetings as well, although other options are acceptable. It is often preferred to create a recurring meeting (i.e. every 3-4 weeks) with all invited, and to reschedule the meeting to a later time as necessary, in order to reduce administrative burden and encourage regular meetings.

For communication outside of meetings, email and WhatsApp can be used. All Zambian registrars have email, and most though not all use WhatsApp as well. Please discuss within your group the preferred method(s) of communication and meeting.

Commitment of Registrars

- ⇒ I understand that I am primarily responsible over my own professional development, including that of my clinical research skills and project.
- ⇒ I understand that my mentorship team and course resources are available to help me achieve my career and research goals.
- \Rightarrow I will develop a realistic, well-defined, and achievable research plan with my mentors early on in the research process.
- ⇒ I will assume leadership and ownership over my research project and be an active contributor and collaborator in all research activities.
- ⇒ I will accept increasing responsibility over the technical aspects of my research project as I progress in my training, commensurate with my level of training.
- ⇒ I will perform responsible research and respect research ethics in all my activities according to institutional and governmental guidelines as they relate to privacy and human subjects research, authorship, data ownership, reporting, and sharing.
- \Rightarrow I will respect mentors, faculty, peers, and other staff that I work with in all research activities.
- ⇒ I will communicate in a timely manner with my mentors regarding my research progress and research findings.
- ⇒ I will actively read scientific literature, attend scientific meetings, interact with leaders in the field, and consider applying for awards, fellowships, and grants that help my transition to independent research with the support of my mentorship team.



- ⇒ I commit to "paying it forward" by using my acquired experience and knowledge to mentor other trainees who come after me during my professional career.

Commitment of Mentors

- \Rightarrow I will provide my mentee with accessible, timely mentorship with clear communication.
- ⇒ I will work to ensure my mentee has sufficient guidance, opportunities, resources, and technical skills necessary to complete a research thesis by the time of graduation from their training program.
- ⇒ I will work with my mentee to develop a realistic and individualized research development plan, taking into consideration their professional goals and interests.
- \Rightarrow I will give regular feedback on research performance and career planning.
- ⇒ I will maintain a relationship with my mentee based on mutual respect and create an environment that is safe, supportive, and intellectually stimulating.
- ⇒ I will support my mentee's ownership over their own research project and allow for graduated responsibility commensurate with their training experience to ensure a transition to an independent career.
- ⇒ I will encourage independent thinking and interests while also providing guidance and facilitation where needed.
- \Rightarrow I will model ethical standards in the conduct of research according to institutional and governmental regulations and clearly define expectations for responsible research.
- ⇒ I will ensure that appropriate credit is given to the mentee for work performed as it relates to abstracts, presentations, publications, and/or intellectual property.
- \Rightarrow I recognize that multiple career pathways exist and will support my mentee in their career goals, whether academically or clinically-focused, to the fullest of my ability.





MD Anderson and Zambia Virtual Clinical Research Training Program (MOZART) Mentorship Milestones

Year 1 – "didactic learning and formulating a research question"

<u>September - February</u> Exempt from mentorship program, focus on didactic learning from weekly lectures, selfassessment questions, and additional resources from the virtual curriculum

<u> March - July</u>

Explore areas of research interest, perform initial literature review, and develop potential research questions with CDH faculty members

<u>August</u>

Submit research question of interest and specific objectives to training program in order to be paired with appropriate MD Anderson peer and faculty mentors



Year 2 – "developing the research protocol"

<u>November</u> Initial meeting between registrar, peer mentor, and faculty mentors Summarize formal literature search and review

<u>December</u>

Presentation and discussion of research question Write the "literature review" section of the research proposal

<u>January</u>

Refine and finalize research question Write the "research question" section of the research proposal

February

Write the "introduction", "statement of the problem", "rationale/justification" sections of the research proposal

<u>March</u>

Develop the research methodology with consideration of study design, patient population, sample size and sampling methods, data collection, storage, and data analysis plan

<u>April</u>

Write the "research aims/specific objectives" and "methodology" sections of the research proposal

<u>May</u> Focus on ethical considerations and timeline of research project

<u>June</u> Final research proposal completed Format and submit proposal for IRB approval, if applicable



Year 3 – "collecting and analyzing data"

<u>November</u> Initial re-meeting between registrar, peer mentor, and faculty mentors Review and discuss research proposal with emphasis on data analysis plan Identify practical steps to prepare for data collection, overcome any barriers to accessing data, initiate data retrieval

<u>December</u> Create data collection tool i.e. in Microsoft Excel, REDCap, or other platform

January Begin data collection

<u>February</u> Continue data collection

<u>March</u> Data collection completed Review quality of data and format properly in preparation for analysis

<u>April</u> Meet with statisticians to discuss data analysis plan

<u>May</u> Work on data analysis in partnership with statistician

June Complete and review data analysis results



Year 4 – "write-up and final product"

<u>January</u> Initial re-meeting between registrar, peer mentor, and faculty mentors Begin drafting research thesis, write "introduction" and "methods" sections

February

Review data analysis results and write "results" section of research thesis

<u>March</u> Discuss and contextualize results and write "discussion" section of research thesis

<u>April</u> Finalize citations and bibliography

<u>May</u>

Submit research thesis to program, consider submission to conferences (i.e. internal CDH symposium, national Zambian cancer conference, or AORTIC) and/or peer-reviewed journals