**Clinical Track Faculty Pathways**

**University of Michigan Medical School**

**Department of** Click or tap here to enter text.

Starting as a faculty member in a major academic department and institution can be overwhelming. With so many options and possibilities, it is often difficult to develop your personal scholarly path when starting your career. As a part of the University of Michigan, the Medical School uses a single “clinical track” for faculty but will recognize that there are multiple pathways for promotion possible within this track. Pathway identification will serve to facilitate faculty progress towards promotion and may be identified in the promotion materials to assist in the evaluation of the faculty member.

All clinical track appointment and promotions should recognize the achievements of individuals who have demonstrated:

* Outstanding clinical work; teaching / educational contributions   
  AND
* Contributions to their field or profession in scholarship / academic areas, which may include the scholarship of:
  + Education
  + Implementation
  + Quality improvement
  + Patient Safety
* Service contributions will also be recognized

The goal of this resource is to provide—at the departmental, institutional, and national levels—a consolidated inventory of resources for each of the clinical track pathways. This resource also provides an example of a career development plan for each pathway, from Assistant Professor to Associate Professor. Departments can tailor the templates with their own departmental specific information.

The faculty pathways are:

**Clinician-Educator:** for the faculty member whose primary interest is in teaching residents, fellows, and other trainees.

**Clinician-Researcher:** for the faculty member whose primary interest is in the opportunity to advance medical and scientific knowledge through research and scholarship.

**Clinician-Patient Safety/Quality Assurance Advocate:** for the faculty member whose primary interest is in the opportunity to have an impact on improved patient safety through systems-based analysis of adverse outcomes, the development of safety initiatives, or health policy.

**Clinician-Leader/Administrator:** for the faculty member who is interested in developing as a leader or major administrator in a department or institution (oftenoverlaps with one of the above pathways).

**Clinician-Individualized Portfolio:** for the faculty who has interests and accomplishments in all aspects of the mission: education, scholarship and service/ administration.

The process of promotion in the medical school is driven by standards originating at the *central campus* of the University of Michigan. As such, the common currency of all faculty promotion at the institution is scholarship, and sustained scholarly productivity is required for *all* pathways to move beyond the level of Clinical Assistant Professor (see [the Promotion Process section](http://faculty.medicine.umich.edu/appointments-promotions/promotion-process) of the Faculty Affairs and Faculty Development website for the most current and comprehensive information about promotions). Since each set of skills is valuable there is a natural overlap among these pathways, however, the pathways program encourages focused development around one of these skill sets.

The purpose of the pathways program is to facilitate career development for junior faculty members who must balance clinical care and academic productivity. It does so by providing guidelines for a coherent set of professional resources and activities that centers around an important theme of academic medicine. This fosters focus, which is critical for career development at a major academic teaching hospital, and enhances satisfaction through the development of expertise

The promotion pathways reflect the major missions of any academic center or department: outstanding clinical care (facilitated through patient safety efforts), developing the next generation of physicians and scientists (through education and mentorship), developing new knowledge (through research), and developing future leaders.

For a list of frequently asked questions and their answers, please review the [Clinical Track Pathways FAQ document](http://faculty.medicine.umich.edu/clinical-track-pathways-faq) on our website.

**Clinician-Researcher Pathway**

For the faculty member whose primary interest is in the opportunity to advance medical and scientific knowledge through research and scholarship.

***Departmental Resources & Involvement***

**Mentorship & Contacts**

The following individuals in your department can serve as contacts for ongoing research initiatives, general career advice, and mentorship.

Individual department information here.

**Activities**

The first step in the development of a research career, is to identify your broad methodological interests: clinical, translational, or basic science. The second step is to identify a specific focus of inquiry. The third step is to identify a mentor and obtain departmental support for your activities. ***Appropriate focus and active mentorship are essential to a successful research career***. Working through these steps requires ongoing meetings *at the beginning of your career* with the Chair, Associate Chair for Research, Research Directors, Associate Chair for Faculty Affairs, and/or appropriate Division Directors/Division Research Directors.

Once you have identified your research direction, focus, and mentor, it is time to identify a project. If you are conducting basic or translational research, talk to your mentor about ongoing projects that may provide a platform for early research engagement.

Individual department information here.

If working with humans or clinical data, you will need to complete the appropriate compliance training before beginning your research ([PEERS](http://my.research.umich.edu/peerrs/) and [HIPAA](http://www.med.umich.edu/u/compliance/area/privacy/training.htm)). If you are working with animals, you will also need to complete the appropriate compliance training (through [UCUCA](http://www.ucuca.umich.edu/train.htm)) before beginning your research.

**Committee Involvement**

Individual department information here.

***Institutional Resources & Involvement***

**Mentorship & Contacts**

For mentoring and coaching resources, visit the Faculty Development website [here](http://faculty.medicine.umich.edu/faculty-career-development/skill-development/mentorship/find-mentors) for opportunities on how to use our network of mentors and mentoring facilitators across the Medical School.

**Resources**

The [Research Route Map](http://www.med.umich.edu/medschool/research/routemap/docs/2017UMMS_RouteMap_securePrint.pdf) will direct you through all research processes with Michigan Medicine and includes the starting point of contacting your departmental research administrator.

[MICHR](http://www.michr.umich.edu/)is an outstanding resource for pilot study grants, study planning, statistical assistance and mentorship**.**

[Clinical Trial Support Units](https://clinicaltrials.med.umich.edu/clinical-trial-support-units-ctsus) (CTSUs) are business units that partner with investigators and their teams to ensure the timely and efficient activation and execution of clinical trials at Michigan Medicine.

The Michigan Research Data Center ([MRDC](https://community.isr.umich.edu/public/mcrdc/Home.aspx)) is a joint project of the U.S. Bureau of the Census and the University of Michigan. It enables qualified, confidentiality-abiding researchers with approved projects to access non-public, unpublished Census Bureau data. The Census Bureau’s Center for Economic Studies has developed and put into practice the concept of Research Data Centers (RDCs). The RDCs provide a secure Census Bureau environment where researchers may have limited access to non-public demographic, economic, and public health microdata, with appropriate safeguards to protect data confidentiality.

The [University of Michigan Office of Research](http://www.research.umich.edu/research-um/office-research) advances the excellence of research, scholarship and creative activity across all three campuses by fostering new research and providing central services in research policy; compliance, contract development and negotiation; federal relations; technology transfer; business engagement; and communications. They maintain a [Grant Proposal Sampler](https://wiki.med.umich.edu/display/UMRPG/Office+of+Research) which is a repository of sample proposal and proposal sections from successful grant applications from UMMS faculty. They also developed [Michigan Experts](https://experts.umich.edu/), a searchable database of research expertise across disciplines from several schools/colleges or institutes at the University of Michigan. [Competition Space](https://umms.infoready4.com/) is an innovative online platform that streamlines the process of finding, and applying for, funding opportunities at the Medical School.

**Metadata Resources**

UMHS Dataset Catalog: The UMHS Data Set Catalog is a listing of data sets available to various constituents within the University, along with associated metadata that describes what each data set contains, how it can be accessed, who its stakeholders are, and what its history has been. Link: [https://datasetcatalog.med.umich.edu/](https://www.google.com/url?q=https%3A%2F%2Fdatasetcatalog.med.umich.edu%2F)

Clinical Data for Research: Research Data Warehouse

* Data Office (DOCTR): offers a menu of resources to assist U-M researchers with compliant, secure access to patient health data. <https://medicine.umich.edu/medschool/research/office-research/data-office-clinical-and-translational-research>
* Data Direct: self-service tool that facilitates Cohort Discovery [https://datadirect.med.umich.edu](https://datadirect.med.umich.edu/). Requires level 2 credentials and completion of PEERRS Human Subjects module certification.
* EMERSE: enables users to search clinical notes (dictated or typed) from our electronic medical record (CareWeb and Michart) for terms. <https://emerse.med.umich.edu/emerse/login.html>. To obtain access, see: <http://project-emerse.org/contact.html>.

**Activities**

Ongoing development of your research skills and techniques is critical to achieving expertise. To facilitate this development, the [**Office of FacultyDevelopment**](http://faculty.medicine.umich.edu/) at the Medical School has regular offerings for a number of research-related workshops and other activities. See their website for more details: <http://faculty.medicine.umich.edu/>

Some relevant workshops include:

* Statistics from 32,000 feet (Parachute Included): A Gentle Introduction to Data Analyses
* Navigating Institutional Data Resources Available
* Agile Approaches: An Introduction to Qualitative Research
* Part-time Research for the Busy Clinician

The **Center for Statistical Consultation & Research (**[**CSCAR**](http://www.cscar.research.umich.edu/about/)**)** is a great resource for individual consultation as well as a number of helpful statistical workshops.

**Institutional Review Boards (IRBMED)** is charged with protecting the rights and welfare of participants in clinical trials and other human subjects research studies. IRBMED is responsible for monitoring compliance with federal and state laws, university policies, and ethical principles (particularly those articulated in the Belmont Report).

IRBMED offers a variety of educational opportunities, both in-person and online. Click [here](https://research.medicine.umich.edu/office-research/institutional-review-boards-irbmed/education) for more information about their course offerings and schedules.

**Committee Involvement**

Medical school committee involvement regarding research is typically reserved for more seasoned researchers and will be defined by your specific field of interest and expertise.

You may consider joining one of the IRB boards as a reviewer. If you are interested in joining IRBMED, they can be contacted at [irbmed@umich.edu](mailto:irbmed@umich.edu) or 734.763.4768.

**Formal Curricula**

The University of Michigan has a number of formal curricula related to research and statistical analysis.

[**The IHPI Clinician Scholars Program**](http://ihpi.umich.edu/csp) offers unique clinical and community-based research training through intensive mentorship for clinicians as change agents driving policy-relevant research and partnerships to improve health and healthcare.

**UM On-job/On-campus (OJOC)** [**Masters in Clinical Research Design and Statistical Analysis**](https://sph.umich.edu/biostat/programs/crdsa.html): this is an intensive Masters program that takes place one weekend/month for two years. Departmental alumni of this program include: Individual department information here.

\*\**Participation will be at the discretion of the Chair and Clinical Director—the Masters program is best started during fellowship or immediately thereafter*\*\*

[**UM Certificate in the Foundations of Public Health**:](http://www.sph.umich.edu/distance/) this is a program that covers basic biostatistics, epidemiology and other topics related to public health.

***National Resources & Involvement***

**Organizations**

The **American Association for the Advancement of Science** ([AAAS](http://www.aaas.org/)) is one of the premiere scientific organizations in the country and is associated with the journal *Science*.

Specialty-specific information here.

**Activities**

There are a number of national centers that provide valuable research experiences on a periodic basis. Scientific experiences offered by [Cold Spring Harbor](http://meetings.cshl.edu/courses.html), [Woods Hole](http://www.mbl.edu/), and [Jackson Laboratory](http://courses.jax.org/index.html) can be highly beneficial to the developing scientist.

One important national/international activity relates to journal service. After publishing in a certain field and particular journal, you will no doubt be asked to review articles as an *Ad Hoc* Reviewer. This can be time consuming, but highly valuable. After exploring different opportunities, consider focusing on one journal and reaching out to the Editor to request further involvement—this can lead to an editorial board position.

**Committee Involvement**

Joining a national committee is an excellent way of contributing to the field, networking, and establishing contacts/collaborators that can enrich professional life and be helpful in the promotion process. You should start with your subspecialty society, which is the best way to “break in” to national committee involvement. Typically, these societies are eager for volunteers, creating a great opportunity for more junior faculty to start playing a role at the national level.

Specialty-specific information here.

***WEB-BASED Resources***

A number of distance learning/online Master’s degree courses in clinical research are available. One such example includes the [MSc program from the University of London’s School of Public Health.](http://www.londoninternational.ac.uk/courses/postgraduate/lshtm/clinical-trials-msc-postgraduate-diploma-postgraduate-certificate%20() This site also includes information on diplomas/certificates in clinical trial research. A search of the Internet will reveal many other distance learning opportunities.

***EARLY CAREER GOAL SETTING + DEVELOPMENT PLAN***

***Clinician-Researcher Pathway***

***To be completed with your mentor***

Year 1 Goals:   
*Examples*

* Identify research focus and mentor
* Join a laboratory
* Join departmental specific committees
* Obtain commitment from the department

Year 2 Goals:  
*Examples*

* Continue research activities
* Complete and publish an article
* Explore mentored training grant opportunities through MICHR, the **National Institutes of Health** K-series awards ([NIH](http://www.nih.gov/)), or through other specialty specific groups

Years 3-4 Goals:

***Note:*** *After 3 years as Clinical Assistant Professor it is suggested that you meet with the Assistant Dean for Clinical Track Faculty for a review of your career progression and promotion progress. Discuss your career progress with your departmental leadership as well.*

*Examples*

* Continue research activities, with a focus on developing data for independent grant funding
* Focus on involvement in a prominent journal (with goal for editorial board)
* Focus on national lecture opportunities (through specialty specific organizations, visiting professorships)
* Apply for membership in national organizations
* Join a national committee

Year 5 Goals:   
*Examples*

* Continue research activities
* Apply for independent grant funding through internal sources or foundations.

Years 6-8 Goals:   
*Examples*

* Continue research activities
* Apply for promotion to ClinicalAssociate Professor (6-7 years after appointment as Clinical Assistant Professor)

Potential leadership positions on a research pathway can include (on a departmental level):

Departmental Specific Information here

For the most current and comprehensive information about promotions, please visit <http://faculty.medicine.umich.edu/appointments-promotions/promotion-process>.