



Department of Medicine Research and Scholarship Matrix

June 2024

Department of Medicine

DoM Mission Statement / Strategic Plan

- Equitably advancing health and wellness by cultivating a community of diverse physicians who lead through care delivery, discovery, innovation, education, and knowledge implementation.
 - *Optimal Healthcare and Wellness for All*
- Research & Scholarship:
 - Value, support and promote the broad array of research and scholarship contributions of DOM members, including initiatives focused on care delivery, discovery, innovation, education, and/or knowledge implementation
 - Develop the infrastructure needed to support DOM members to pursue quality improvement (QI) and patient safety initiatives that strengthen our health system

Research Matrix Development- Process

- Committee Members were invited by DoM Vice Chair Research and Scholarship from list of candidates proposed by the DoM Head
 - Invited based on varying research portfolios (e.g. basic science, QI, Health Services), as well as considering career stage and EDIA
- Provided the current DOM Matrix for review and feedback (2014)
- 3 x 1.5 hour meetings and follow-up email / One-Drive correspondence and editing (February - May 2024)
- Draft reviewed
 - *unofficially* by colleagues
 - by DoM Head (May 2024)
 - at MSEC (June 2024)
- Matrix revised based on feedback received

Working Group Members

- Chair – Carla Coffin: Professor, Division of Gastroenterology & Hepatology
- Mayur Brahmania: Clinical Associate Professor, Division of Gastroenterology & Hepatology
- Zahra Goodarzi: Associate Professor, Division of Geriatric Medicine
- Justin Chun: Assistant Professor, Division of Nephrology,
- Sachin Pendharkar: Associate Professor; Division of Respiriology
- Carolyn Owen: (Virtual participation); Professor, Division of Hematology

Research Matrix - Rationale

- The purpose of this tool is to provide *broadly applicable* key performance indicators in a standardized format to measure research performance of department members.
- Specifically, this tool is intended to be used by the Department Head and Division Heads during the annual review* of all Department Members within the Academic Medical and Health Services Program (AMHSP) for whom protected research time has been allocated within the Member's Individual Service Agreement (AMHSP Schedule A)
- Open to re-evaluate after implementation
 - *Validate-Implement-Sustain*
- Not punitive but mechanism to provide support
 - Early career researcher (ECR) within 1st few years is not expected to meet all categories

General Considerations and DORA

- Incorporate non-traditional metrics for publications (i.e., DORA - Declaration on Research Assessment) and improve the ways in which researchers and the outputs of scholarly research are evaluated (publication influence, online datasets, scientific impact, not just IF)
- Matrix should generally align with University handbook and promotion criteria but may not be as complete (i.e., expectations for academic promotion, merit, awards etc. will be more rigorous or *above the 'exceeding' end of grid*)
- Career Stage should be considered (i.e., ECR vs. Senior Faculty expectations)
- Recognize supervision of non-graduate students (graduate students need to have thesis; hence clinical trainees/students involved in longitudinal projects with publications is expectation)
- More simplified matrix
- Consider AMHSP Roles / alignment.
 - Clinician Primary Researcher (50-75%)
 - Clinician Investigator (40-60%)
 - Clinician Leader/Clinician Educator (>30% Researcher)



Leader: > 60 % Research Time (Clinician Primary Researcher)

	Exceeding	Meeting
Publications*	>3 senior (or co-senior) and/or 1 st author (or co-1 st author)	1-2 senior or 1 st author OR 3 mid-author (significant contribution)
Funding (current holding)	>1 Tri-Council, NIH, International grant, as nominated PI or co-PI AND leader on team grants (2-3 external peer-reviewed)	1 external peer-reviewed (PI or co-PI) AND Industry/non-peer-reviewed (PI or co-PI) or >1 peer-reviewed as co-I
Presentations	2 International AND 1 National	1-2 National/International AND 3-4 Provincial/Local
Trainees and Mentorship (primary, junior, supervisory committee)	>3 Grad/PDF/Clinical Trainees (longitudinal with papers) AND >2 supervisory committee	>2 Grad/Undergrad/Clinical Trainees (longitudinal projects with abstracts/papers) AND >1 supervisory committee
Other contributions (at discretion of DoM/Div Head)	Research leadership/Chair, patent, commercialization activity, policy work, editorial board, principal Knowledge user, conference organization/Chair, team grant member or collaborator, grant and journal review, community engagement, public speaking, interviews, award or scholarship review (Examples - not exhaustive list; Spectrum to determine if high vs. only meeting)	

-Individuals that are considered exceptional and eligible for Departmental nominations would surpass high end (not only meeting the minimum expectations)

*Peer-reviewed; consider DORA criteria when determining impact; for Basic Science min. is 1 every 2 yrs; look at 1-yr as well as 3-yr window; not Case Reports

- Papers, Funding, Presentations and Trainees are defined and measurable. Other activities should be recorded and acknowledged with Dept Head discretion

Major Contributor: 30 - 60 % Research Time

(Clinician Investigator / Research-Intensive Clinician Educator or Leader)

	Exceeding	Meeting
Publications*	>2 senior and/or 1 st author (or co-1 st or co-senior); 3 mid-author (significant contribution)	1 senior or 1 st author OR 3 mid-author papers (significant contribution)
Funding	>1 External peer-reviewed or Industry / non-peer reviewed as PI	1 Co-PI on an external peer-reviewed or PI on Industry / non-peer reviewed, clinical trials (net positive each year)
Presentations	1-2 National/International AND 3-4 Provincial/Local [#]	1 National/International AND 2-3 Provincial/Local [#]
Trainees/Mentor (as primary supervisor)	>1 Grad/Undergrad/Clinical Trainees/PDF (longitudinal projects and papers) AND >1 supervisory committee member	Any trainee with longitudinal project & papers OR >1 supervisory committee member
Other contributions (at discretion of DoM/Div Head)	Research leadership/Chair, patent, commercialization activity, policy work, editorial board, principal Knowledge user, conference organization/Chair, team grant member or collaborator, grant and journal review, community engagement, public speaking, interviews, award review (Examples - not exhaustive list; Spectrum to determine if high vs. only meeting)	

-Individuals that are considered exceptional and eligible for Departmental nominations would surpass high end

*Peer-reviewed; consider DORA criteria when determining impact; look at 1-yr as well as 3-yr window; Case Reports not as important

- Publications, Funding, Presentations and Trainees are measurable, Other activities should be recorded and acknowledged,

- #Local = Medical Grand Rounds, Research Institute talk, etc.

- Industry Funding is net positive each year

Contributor / Participant: <30% Research

	Exceeding	Meeting
Publications*	1 senior or 1 st author OR 2-3 mid-author papers	>1 publication or abstract (as mid-author OK)
Funding	Any grant funding as PI or Co-PI	Co-I or collaborator on a grant
Presentations	>2 academic presentations (Local/ Provincial/National/International)	>1 academic presentation (Local/ Provincial/National/International)
Trainees	1 (at any level but longitudinal with papers)	1 (short-term, summer studentship, clinical trainee project, etc.)
Other contributions (with DoM / Div Head discretion)	Regular contributor to team research, meetings, recruitment and data entry to trials or registry cohorts, local research leadership, panel participation, journal review, abstract selection committee, (Examples - not exhaustive list; Spectrum to determine if high vs. only meeting)	

- *Peer-reviewed; consider DORA criteria when determining impact; look at 1-yr as well as 3-yr window; Case Reports not as important
- Publications, Funding, Presentations and Trainees are defined and measurable. (Impact Factor, Citations)
 - Other activities should be recorded and acknowledged (i.e., relevant to those with AMHSP Clinician Leader role)

Summary – Revised DoM Matrix

- Transparent and measurable evaluation of scientific research output, training contributions, and knowledge translation
- Mechanism to support advancement and career goals
 - If not meeting research metrics, consider transition to other contributions in teaching, administration and clinical work
- Serves as a “guidance”, and judged at discretion of the DoM Head and Division Heads (*especially in “other” categories*)
- *Open to revision and feedback (i.e., a living document)*
 - *Validate – Implement - Sustain*