



The DACCPM leads the world in research underlying clinical anesthesiology. Five of 23 (22%) ASA Excellence in Research Awards since 1996 went to MGH researchers (Keith Miller, Warren Zapol, Clifford Woolf, Jeevandra Martyn, and Emery Brown). The interplay of patient care and science at MGH has stimulated translational developments such as inhaled nitric oxide, short acting non-depolarizing muscle relaxants and new medical devices that benefit patients worldwide. The MGH receives more NIH research funds than any other independent teaching hospital. Learn more about DACCPM research [here](#).

MGH DACCPM Research Statistics for 2018

- 55 faculty appointees spend over 50% effort in research
- 50 other faculty appointees contribute to research
- 35 faculty researchers are clinically active physician-scientists
- 60 research fellows work with DACCPM PIs
- 47 NIH Research Grants totaling \$11M direct funding to DACCPM PIs
- \$22M annual DACCPM research expenditures
- 34,000 sq. ft. of DACCPM research space
- DACCPM researchers published over 300 scholarly journal articles in 2018

MGH DACCPM Research Areas of Excellence (PIs)

- Anesthetic Pharm. (Brown, Cotten, Forman, Ishizawa, Miller, Purdon, Raines, Solt, Xie)
- Biomedical Engineering (Barbieri, Cooper, Goldman, Purdon, Sims)
- Cardiovascular (Hobai, Ichinose, Rhee)
- Critical Illness (Berra, Kaneki, Martyn, Wiener-Kronish, Vidal-Melo, Zapol)
- Genetics (Saxena)
- Neurobiology (Brenner, Brown, Ishizawa, Johnson-Akeju, Mao, Marota, Purdon, Solt, Wainger, Xie)
- Quality & Safety (Nanji, Pian-Smith)
- Pain (Brenner, Chen, Houle, Mao, Shen, Turner, Wainger, Zhang)
- Pulmonary (Berra, Bloch, Roberts, Venegas, Vidal-Melo, Winkler, and Zapol)
- Simulation & Human Performance (Cooper, Pian-Smith, Raemer, Rudolph)

DACCPM also has an exceptional record of developing young physician-scientists to become innovators and research leaders. DACCPM residents have many opportunities to contribute to research and scholarship, and develop as academic leaders.

MGH DACCPM Resident Scholarship Statistics (2018-19)

- 57 unique presentations
- 10 published peer-reviewed papers
- 4 textbook chapters
- 49 presentations at national meetings (ASA, AUA, IARS, SCA, SCCM, SOAP, SPA)
- 5 scientific meeting abstracts



MGH DACCPM Research Info for Residency Applicants



During residency, we provide support in a variety of structured and unstructured ways to help develop our residents as investigators and scholars.

- The **Pathway to Research Independence with Mentorship and Education (PRIME)** residency option is for residents with prior research experience who plan to make research part of their future academic careers. During residency, PRIME residents receive research mentoring, contribute to research, and attend local and national research meetings, and are expected to continue mentored research training after residency.
- **Levy Resident Research Grants**, established by a generous alumnus donation, aim to support the career development of outstanding DACCPM residents who wish to improve patient care through research. Recipients receive guidance and up to \$3,000 to support a mentored research project. In order to provide residents experience applying for funding, the process is intended to model that of a typical grant application.
- Our **CA3 Research Track** comes with six months dedicated to research during the final year of residency. Basic, translational, and clinical options are complimented by top-notch statisticians, an innovations lab and engineering group, and plenty of opportunities for presenting your work. This program is designed to function as an on-ramp to a career as a clinician-scientist, typically with mentored research training on the Harvard T32 as the next step (see below).
- Our **Travel Support Program** provides financial assistance to cover costs of meeting travel, lodging and registration for participating residents. Residents participating in any capacity can take advantage of this during residency. Residents who are presenting original research can take advantage of this yearly.

Transitioning to Faculty on the Mentored Scientist Research Track (MSRT)

The MSRT provides early stage DACCPM faculty researchers with the support they need to achieve research independence. This includes mentoring and salary supplements from the **DACCPM Research Endowment** that minimize financial sacrifices associated with research training. Salary supplements are available to DACCPM faculty in the **Harvard Anesthesia Research Training Fellowship (T32)**, which supports up to 8 trainees from Harvard anesthesia departments (NIH grant 5T32-GM007592), or supported by other **Mentored Research Training Grants** from NIH (K-awards) or foundations such as FAER, IARS, NSF, AHA, etc.. Faculty members may also receive research training on the **DACCPM Health Services Research Fellowship**. Early stage faculty researchers devote 75–80% of their effort to research and career development (required by external funders). Suitable mentors may be found at Harvard University, Harvard Medical School, affiliated research hospitals and institutes, Massachusetts Institute of Technology, or other Boston research institutions.

Harvard Research Training Fellowship (T32) Alumni Statistics (2004-19)

- 32 graduates, 23 from MGH (72%)
- 25 (78%) received external grants
- 70 grants: 14 NIH R awards, 13 NIH K08s, 14 FAER grants, 2 IARS grants, 27 other
- 1069 publications since starting T32 training

For more information about DACCPM research opportunities during and after residency, or to reach out to specific DACCPM researchers, contact either [Dr. Daniel Saddawi-Konefka](#) (residency program director): or [Dr. Stuart Forman](#) (T32 program director).