Academic year 2010 was one of change and growth for the HMS Academy. With the assistance of an advisory council drawn from each of the major HMS affiliates and quad-based departments, a new mission statement was crafted and new criteria were established for Academy membership. Our goals were to make the Academy more responsive to the needs of the faculty, to increase our engagement with physicians whose teaching focuses primarily on residents and fellows in graduate medical education, and to link our work more closely with the priorities of the Program in Medical Education at HMS.

This year, we also enhanced our efforts in support of educational innovation and medical education research. With collaboration across many of our hospital sites, we conducted a two-day course that served as a primer on medical education research, and began a national search to fill a new position, associate director for research, in the Academy. As we grow our infrastructure in support of education research, we hope to leverage resources across the HMS hospitals to enhance collaboration in support of scholarly work centered on educational innovation.

Over 150 faculty members applied for membership in the Academy this year. The criteria for membership were revised to emphasize leadership at both the UME and GME levels. In addition, new requirements to participate in Academy activities were instituted for members; it is our firm belief that the Academy can succeed only if its members play active roles in the planning and implementation of its programs.

Our new Academy members will also be interfacing with growing hospital-based academies and education centers. Recognizing that our clinical faculty members often cannot make it to the quad for professional development activities, we are working with educational leaders at each of the HMS core affiliates to develop programming and support structures to complement what we do centrally. These evolving education centers are open to junior faculty and, in many cases, to residents and fellows who aspire to become better teachers and to have careers as medical educators.

Finally, the Academy is playing an important role in the preparations for the medical school’s Liaison Committee on Medical Education (LCME) accreditation visit, scheduled for March, 2011. The LCME has long recognized the importance of faculty development as a key component to a successful medical school. The HMS Academy hopes to continue to grow and develop to meet the challenges of healthcare in the years to come.
The Academy Center for Teaching and Learning (ACTL) offers, in this current annual report, a review of educational faculty development efforts to enhance teaching skills and student learning at HMS. Ongoing programs for quad-based and hospital faculty provide direct consultation and feedback for those who teach as tutors, lecturers and small group discussion facilitators, as bedside teachers, peer coaches and teachers of cross-cultural care. Along with these offerings, the ACTL has presented a rich program of monthly Medical Education Grand Rounds covering a wide spectrum of topics devoted to a better understanding of the challenges in medical education. The ACTL continues to offer its annual Spring neuroscience symposium, this past year dealing with lessons from the world of cognitive psychology and their application to teaching. The Academy’s web site provides streaming video access to many of its programs which can be accessed at http://hms.harvard.edu/pme/academy.asp.

The Academy Fellowship in Medical Education continues on its successful course, made possible by the reality of the Curtis Prout, Morgan-Zinsser and Jackson Academy Fellowships.

None of these efforts, of course, could exist without the commitment and skill of the members of the ACTL, and various faculty consultants who bring their particular talents in consultation and program development to a variety of relevant educational needs of HMS. Importantly, we benefit from an ongoing dialogue with the Center for Evaluation under the leadership of Dr. Ed Krupat. Throughout its various programs, the ACTL remains committed in its mission to support teaching and learning at HMS, an indispensable ingredient in effective educational program functioning and success.
New Initiatives

In AY 2009-2010 the Academy created several new programs to address a variety of desires and interests among HMS faculty members: a desire for community in which one might share a passion for teaching and educational scholarship; an interest in developing skills in educational research as well as in teaching; and a desire to contribute to educational programs at HMS.

To support an ever growing interest in educational research, the Academy, in collaboration with the Center for Evaluation, offered a short course in research methods (two half-days) in the fall and followed up with several smaller workshops on specific methods (e.g., survey design). In an effort to enhance our infrastructure to support faculty interested in pursuing formal investigations of educational theory and practice, the Academy also created the position of Associate Director for Educational Research, which will be filled in fall 2010.

To foster communication about education innovations, research, and “best practices” across HMS affiliated institutions, the Academy created a new series, The Harvard Inter-hospital Education Collaborative. Scholars from Beth Israel-Deaconess Medical Center, Massachusetts General Hospital, Brigham-Women’s Hospital, Cambridge Health Alliance and Mt. Auburn Hospital, and Children’s Hospital sequentially presented reports on their research and new programs at highly interactive two-hour sessions. These meetings alerted the community to the range of topics under investigation and pilot projects being pursued. However, to gain even greater cross-talk, the format of the 2010-2011 series will change; each session will include presentations from two institutions, rather than one, and efforts will be made to coordinate the focus of the presentations.

As part of its ongoing efforts to support the Program in Medical Education, the Academy directed a task force on classroom teaching.

Composed of Academy staff as well as Fundamentals of Medicine course directors, the task force met throughout the year to explore best practices in large and small group teaching and to propose modifications to current programs and educational strategies. In addition, with the recruitment of new Academy membership and a redefinition of the role of Academy members, “interest” groups formed and began to design curricular and pedagogical materials, as well as professional development sessions to support teachers and teaching at HMS and its affiliated institutions. The foci of these interest groups are: critical thinking, feedback and evaluation, simulation, writing for scholarship, education technology, team based learning, peer review, the resident as teacher and the hidden curriculum.

Academy Membership

The Academy was established to advance the education of physicians and scientists throughout the Harvard Medical School community through the following means:

- Creating and supporting a community of leaders in education and a culture of excellence in teaching and learning.
- Fostering the careers of educators in medicine and science.
- Providing programming to improve the skills of teachers.
- Stimulating and supporting the creation and implementation of innovative approaches to learning and assessment.
- Supporting educational research and scholarship in medical and graduate education.

In addition to sustaining and building upon the work of the Center for Teaching and Learning, the professional development arm of The Academy, we will now be working more closely with the Graduate programs, the Program in Medical Education at HMS, and with the evolving educational centers at many of our hospitals. Among our goals, we hope to support innovation in pedagogical
methods and curriculum, and promote research that focuses on teaching, learning, and assessment at the undergraduate and graduate medical education levels and in the science education of our graduate students.

Academy Interest Groups

At our membership meeting in March, we discussed the importance of the role of an Academy member in making our efforts successful. Members were selected for the Academy because of their leadership roles and commitment to medical education at the UME and GME levels. One of the mechanisms by which they can make a difference in education at HMS is through their participation in one of the Academy “interest groups.”

Based on comments from the spring Academy meeting and feedback on Academy membership applications, we have identified common themes that have emerged for the organization of interest groups. The groups are as follows:

- Peer Review
- Team Based Learning
- Writing for Scholarship
- Feedback and Evaluation
- Education Technology
- Resident as Teacher
- Simulation
- Critical Thinking
- The Hidden Curriculum

We expect that these groups will meet every 4-6 weeks, with a first meeting before the end of academic year ’10 and then starting up again in September. Among the outcomes of the discussions may be one or more of the following:

- Ideas for medical education grand rounds
- Proposals for special faculty development sessions of the Academy
- Proposals for changes in or development of new curricula or assessment procedures.
- Outreach to junior faculty in the hospital-based academies and centers for education.
- Journal clubs focused on their topic.

Interest Group Leaders

Peer Review
Susan Frankl, MD – Co-chair
Lori Newman, EdM – Co-chair

Team Based Learning
Alexander McAdam, MD PhD - Chair

Writing for Scholarship
Jonathan Borus, MD - Co-chair
Susan Pories, MD FACS - Co-chair

Feedback and Evaluation
Jonathan Alpert, MD PhD - Co-chair
Eugene Beresin, MD - Co-chair

Educational Technology
Michael Parker, MD – Chair
Debra Weiner, MD PhD – Co-chair

Resident as Teacher
Tracey Cho, MD MA - Co-chair
Hope Ricciotti, MD - Co-chair

Simulation
James Gordon, MD MPH - Chair

Critical Thinking
Edward Krupat, PhD - Co-chair
Richard Schwartzstein, MD - Co-chair

Hidden Curriculum
Co Chair - Sigall Bell MD
Co Chair - Elizabeth Gaufberg MD MPH
Medical Education
Research & Innovation

Educational Research Methods
November 13, 2009 / November 20, 2009
Graham McMahon, MD

This two-day afternoon course was designed for faculty who are interested in turning their current educational work into publishable experiments, or in initiating new educational research projects. Utilizing an interactive format, we worked through hypothesis generation, selection of appropriate study populations, and design of educational interventions. Individual participants brought their own work (ongoing or contemplated) to use as the basis for discussion. We then examined different trial designs used in educational experiments and considered their strengths and limitations. The next phase of the program focused on the choice of a measurable outcome, and examined basic tenets of survey design and test creation. We briefly looked at qualitative research methods and then discussed how to navigate the institutional review board approval process. An overview of analysis techniques was provided. Resources at HMS to support educational experimentation were reviewed. Participants had the opportunity to engage with experienced faculty and with each other in a peer-review and Q&A format.

Task Force on Classroom Learning

As part of the ongoing work of the Program in Medical Education to improve the teaching and learning of medical students, the Academy convened and directed a taskforce, comprising many of the course directors in the Fundamentals of Medicine portion of the curriculum along with key educators and Academy staff, to examine the pedagogical goals and principles that should apply to teaching in a range of settings. The group, which has been meeting monthly for the past 6 months, is elaborating a set of recommendations that will encompass specific strategies to enhance long-term memory of content and analytical skills to facilitate problem solving, explicit expectations of students and faculty with regard to their preparation for education sessions, and modifications of the physical plant at HMS to provide greater flexibility to meet the educational needs of the 21st century.
# Major Events

## Medical Education Day

**The Role of Performance Assessment in the Development of a Physician**  
October 27, 2009

The Academy at Harvard Medical School and the Program in Medical Education sponsored the eighth annual Harvard Medical Education Day on October 27, 2009 in the Joseph B. Martin Conference Center. All HMS faculty were invited to attend and were eligible to participate in Medical Education Day. The day featured poster and technology presentations of both completed projects in works-in-progress related to the education of medical students, house staff, or faculty in the areas of curriculum development, assessment, faculty development, education research, or use of technology to enhance education. The afternoon also featured workshops/seminars, a plenary session with presentations from faculty and a keynote address.


**Workshops:** Assessment Tools, Ed Krupat PhD & Susan Farrell MD EdM

Medical Knowledge in the Application of Patient Care, Richard Schwartzstein MD & Lisa Breen MD

Teaching and Evaluating Humanistic Competencies in Physicians, Susan Block MD

The Role of the Hidden Curriculum in Physician Professional Development, Elizabeth Gaukberg MD MPH & Sigall Bell MD

**Plenary:** Faculty Development for Evaluating Professionalism, Yvonne Steinert, PhD, McGill University

---

**Symposium on the Science of Learning**

This year’s symposium addressed a topic of immediate importance to HMS teaching faculty: namely, how to maximize learning through lectures. Whether learners are present in the lecture hall or view videotaped lectures remotely, they rely upon aural and visual senses to receive information. Drawing upon research in both cognitive psychology and the neurosciences, the speakers described how adults process visual information and explored with the audience implications for effective lecturing. Presentations were given by David Kraemer, PhD and Stephen Kosslyn, PhD.
Programs

Academy Center for Teaching and Learning
The Academy Center for Teaching and Learning (ACTL) at the Harvard Medical School was established in 2006, to create, implement and evaluate educational faculty development programs, assess faculty teaching and support faculty members’ educational endeavors as a recognized element in academic achievement. The Academy Center for Teaching and Learning is committed to implementing educational programs for teaching faculty that enhance student learning and ultimately provide for the best care of patients. The Center is committed to the educational development of HMS quad-based faculty as well as faculty and residents at HMS affiliated institutions who are involved in core and elective courses that are part of the HMS curriculum. All individuals within the HMS community who teach in classroom or clinical settings are invited to participate in Center activities.

We believe that the central moral responsibility of medical education is the improvement of the health of the society. Toward that end, the Academy Center for Teaching and Learning is committed to implementing educational programs for teaching faculty that enhance student learning and ultimately provide for the best care of patients.

Grand Rounds

Medical Education Grand Rounds comprise a series of one-hour monthly sessions, open to all HMS faculty, that are held throughout the year.

Memorization or Understanding: Are we teaching the right thing?

September 25, 2009
Eric Mazur, PhD, Balkanski Professor of Physics and Applied Physics, Harvard University

Education is more than just transfer of information, yet that is what is mostly done in large introductory courses -- instructors present material (even though this material might be readily available in printed form) to students for whom the main purpose of lectures is to take down as many notes as they can. Few students have the ability, motivation, and discipline to synthesize all the information delivered to them. Yet synthesis is perhaps the most important -- and most elusive -- aspect of education. This event showed how shifting the focus in lectures from delivering information to synthesizing information greatly improves the learning that takes place in the classroom.

Strategies for Effective Teaching and Learning
December 4, 2009
Charlie Hatem, MD, Director of the Center for Teaching and Learning, Harvard Medical School

This discussion focused on an approach to teaching strategies that are designed to engage learners and enhance their learning. The session was interactive and solicited comments from the audience as to their experiences with the strategies presented.

Scientific Foundations for Future Physicians: Report of the AAMC-HHMI Committee
February 5, 2010
Jules Dienstag, MD, Dean for Medical Education
As a component of the HMS Medical Education Reform Initiative, a Working Group on Admissions Requirements considered the way college preparation for medical school should change to meet the needs of our 21st Century medical school curriculum. In their 2004 report, this working group recommended that students enter medical school with a more relevant and more rigorous science preparation, and encouraged colleges to design cross-disciplinary courses that would facilitate the achievement of this end. The impetus for such change has been recognized at medical schools, undergraduate colleges, and by national organizations. In 2009, a Howard Hughes Medical Institute (HHMI)-Association of American Medical Colleges (AAMC) committee issued a report, Scientific Foundations for Future Physicians, in which similar themes were endorsed, including greater focus on the scientific competencies required rather than on specific premedical courses that traditionally defined entry requirements. We reviewed the impact of these recommendations on HMS admissions and present examples of approaches taken by colleges to fulfill these recommendations.

**Great Expectations: How our expectations of medical students influence their professional development (for better or worse)**

April 30, 2010

Edward Hundert, MD, Senior Lecturer in Medical Ethics, Harvard Medical School

Most medical students are not only bright, hard-working, and motivated, but also highly expectation-sensitive. If our admissions process selects for one trait above all, it pulls for talented young people who excel at picking up on the expectations of teachers and meeting those expectations. While some attention has been given to how our expectations as faculty influence medical students’ academic development in courses and clerkships, much less attention has been paid to how our expectations affect their personal development in terms of specialty choice, extracurricular activities, or professional behavior. Much is written about the “hidden” or “informal” curriculum among students and residents. This session reflected on Dr. Hundert’s experience as Associate Dean for Student Affairs for seven years at HMS and provoked discussion about the disparate influences of our hidden curriculum (as faculty and administrators) on our students’ professional development.

**Tutor Development**

**Fostering Critical Thinking in Basic Science Learning**

September 9, 2009

Toni Peters, PhD and Robert Stanton, MD

The facilitators presented a brief overview of research on critical thinking as it relates to basic science learning, and asked participants to describe their experiences with students’ critical thinking during classroom exercises. Together the group constructed a list of approaches faculty might take to encourage students to think critically. Each participant developed one method s/he might use immediately while teaching.

**Introduction to Tutorial for Prospective Tutors**

September 16, 2009 / January 13, 2010

Sam Kennedy, PhD
This was small group session for faculty interested in serving as a tutor in HMS courses. This session introduced the cognitive basis underlying tutorial-based learning and presented strategies for success, specific to the Harvard Medical School use of that format. This session also allowed opportunities for questions of interest or concern from the participants.

**How Learning Occurs in Small Groups**
September 21, 2009 / April 2, 2010  
*Toni Peters, PhD*

Small group process tends to follow a predictable pattern in which participants move from lower to higher order cognitive tasks and move through phases of positive and negative social interaction. Understanding this process helps tutors and others who facilitate small group learning to manage their groups. In this workshop, faculty viewed a videotape of an HMS tutorial and characterized students’ behaviors, and then related those behaviors to what they know about adult learning.

**Learning Theory**
October 7, 2009  
*Toni Peters, PhD*

Participants explored principles of learning and then related them to medical education. Prior to the workshop, participants read an article that describes how a resident learns to insert a central line (a skill). At the workshop, they observed a videotape of a baby learning to walk (a skill). Based on their observations of the tape and their reading, they identified ways in which learning is exhibited by the individual and supported by the teacher and colleagues. They discussed how practice, feedback, verbal learning and reflection help learners develop deeper knowledge, skills, and attitudes.

**Enhancing Feedback during Clinical Teaching**
October 14, 2009  
*Susan Frankl, MD*

After a quick review of the principles of effective feedback, participants described incidents when they have struggled to provide feedback, and then together identified why feedback is difficult, what barriers inhibit effective feedback, and strategies to overcome those barriers. Opportunity to practice holding feedback conversations and peer coaching on feedback were provided.

**Enhancing Feedback in Tutorial**
October 21, 2009 / April 14, 2010  
*Toni Peters, PhD*

This workshop focused on differentiating between approaches to in-group (public) and one-on-one (private) feedback, and feedback about cognitive deficits versus professional behavior. Tutors identified strategies and developed skills through discussion and role play.

**Teaching and Learning in the Laboratory Setting**
November 3, 2009  
*Bernard Chang, MD MMSC*

This workshop examined concerns that students express about learning in the laboratory setting. As a group, participants examined the challenges posed by the laboratory setting and constructed
strategies aimed at enhancing teaching and learning in the laboratory setting.

**Microtutoring-I: Managing Difficult Groups (Quiet or Domineering Students)**
December 7, 2009 / February 17, 2010
*Toni Peters, PhD*
This two-part workshop focused on skills and strategies needed to handle difficult group process. Microtutoring-I dealt with the challenges of managing the quiet as well as the dominating student. During the workshop, participants rotated the roles of tutor and problem student. After each scenario, the group debriefed and collectively generated strategies to manage such groups effectively.

**Microtutoring-II: Managing Difficult Groups (Unprepared students; Integrating Biomedical and Social Sciences)**
December 9, 2009 / February 22, 2010
*Toni Peters, PhD*
This workshop focused on skills and strategies needed to handle difficult group process. Microtutoring-II dealt with unprepared groups and superficial or unidimensional discussions (e.g., an inability to integrate biomedical and psychosocial, cultural, or economic issues). During the workshop, participants rotated the role of tutor. After each scenario, the group debriefed and collectively generated strategies to manage such groups effectively.

**Survey Research**
December 14, 2009 / May 12, 2010
*Toni Peters, PhD*
This workshop addressed basic skills in survey research: establishing the research question and constructing items to answer that question; identifying assumptions that lead to bias; selecting answer options and scales; measuring attitudes versus behaviors with surveys. Participants drafted surveys and received feedback on their items.

**Advanced Technologies in Medical Education: The Theory and Practice of Immersive Clinical Simulation**
February 26, 2010
*James Gordon, MD*
The core emotional experience of doctoring is one of the most powerful forces in anchoring, integrating, and reinforcing medical learning. A process like medical simulation that can safely recreate such an emotional response promises remarkable pedagogical benefits. This presentation explored a unifying theory of cognitive and emotional learning that broadens the view of what is possible, feasible, and desirable with simulation-based medical education.

**Using Cooperative, Competitive, or Individual Learning Structures**
March 22, 2010
*Toni Peters, PhD*
Medical students have demonstrated strength in individual learning throughout their education. Many also competed successfully both academically and in other endeavors such as music and sports. Yet, medicine is a social endeavor that requires clinical teamwork, scholarly collaboration and negotiation with patients. Each approach - cooperation, competition, and individualism - has a
place in medical education. This workshop helped faculty to understand the cognitive and affective advantages and disadvantages to each structure, and practiced designing instructional activities to enhance the benefits of each one.

**Program Evaluation: How to Know if Your Education Project Succeeded**
April 16, 2010
*Susan Farrell, MD EdM*

The goals of this session were to provide a brief overview of program evaluation, with a focus on the Kirkpatrick and the WKKF Outcomes Logic models. Methods for assessing the formative and summative outcomes of programs were compared based on the purposes of the evaluation, the feasibility of evaluation methods, and the intended program outcomes.

**Peer Observation and Coaching**
April 21, 2010
*Toni Peters, PhD*

In this workshop, faculty identified the features of good teaching related to a format of interest to them (e.g., lecturing, bedside teaching, small group facilitation), and then collaborated on drafting a guideline or instrument to assist in performing a structured observation. They observed a videotaped segment of teaching, rated it using the instrument they constructed, and discussed how to coach a colleague productively. The group considered ways to triangulate data from students’ evaluations, peer observations, self-assessment, and reflection.

**Inter-Hospital Collaborative**

**IHC – Beth Israel Deaconess Medical Center**
December 16, 2009

The aim of this session was to share a selection of BIDMC’s educational initiatives, answer questions on the development and implementation of these projects, and identify inter-hospital educational research opportunities. During this first collaborative meeting, BIDMC reported on: Establishment of a procedural curriculum including development of the rating checklist (report by Dr. Christopher Smith and Dr. Grace Huang), the process of determining precise rating standards for the peer observation of medical lectures (Dr. Lori Newman), survey of surgical faculty on best operating room teaching practices (Dr. Charles Vollmer), and establishment of a new pathology elective for third-year students (Dr. Richard Haspel).

**IHC – Children’s Hospital Boston**
January 27, 2010

Debra Weiner, MD PhD presented “CHB Shared Multidisciplinary, Multimedia Linked Electronic Libraries”; Jennifer Kesselheim, MD, and Kate Garvey, MD, presented “Fostering Humanism and Professionalism in Pediatric Residency Training”; Peter Weinstock, MD PhD, presented “The Simulation Program at CHB”; and Elizabeth A. Rider, MD MSW, presented “Enhancing Faculty Teaching of Communication Skills: a Model for Relational Learning.”
IHC – Brigham and Women’s Hospital
March 10, 2010
Graham McMahon MBBCH and Mary Thorndike presented “Effect of a Residency Redesign Initiative on Patient-level outcomes”; Mary Thorndike and Elizabeth Breen MD presented “Interdisciplinary faculty observation to improve teaching quality”; Sarah Peyre EdD and Charles Pozner MD presented “Simulation Research and BWH”; and Graham McMahon MB BCH presented “A comparison of video and text-based cases on students cognition in tutorial.”

IHC – Massachusetts General Hospital
April 28, 2010
“Is There Negative Pedagogic Bias in Psychiatric Medical Education? An International Quantitative and Qualitative Analysis and Suggested Plan of Action” was presented by Steve Schlozman, MD. James Gordon MD MPA presented “Does Simulator-Based Clinical Performance Correlate with Actual Hospital Behavior? The Effect of Extended Work Hours on Patient Care Provided by Medical Interns.” Alberto Puig MD PhD FACP presented “Residents as Teachers: A Clinician Educator Elective at MGH.” Shirley Wray, MD PhD presented “Technology Assisted Learning: Enabling Neurodiagnostic Teaching (TALENT).”

IHC – Cambridge Health Alliance
May 5, 2010
The aim of this session was to share a selection of CHA’s educational initiatives, answer questions on the development and implementation of these projects, and identify inter-hospital educational research opportunities. During this first collaborative meeting, CHA reported on the Cambridge integrated clerkship. The history of the program was reviewed along with data relating to student outcomes. The program included panel discussions that revealed faculty and student views on the program.
Academy Fellowships

The Academy at Harvard Medical School announced a Request for Applications for one-year fellowships in medical education for the period of July 1, 2009 to June 30, 2010. Fellowships provide physician educators with dedicated time to pursue a scholarly project in medical education. In addition to receiving support provided from Academy resources, fellows benefit from funding provided by grants provided by several benefactors:

The Jackson Academy Fellowship (interest: teaching and mentoring) is named for Dr. James H. “Jimmy” Jackson, MD, HMS ’43, through the generous gift of his wife of 57 years, Mrs. Susan M. Jackson.

The Curtis Prout Academy Fellowship (interest: primary care) is named for Dr. Curtis Prout, HMS ’41, through the generous gifts of his past and present patients, colleagues, family and friends.

The Morgan-Zinsser Fellowship (interest: early career development of junior faculty) is named for Dr. Herbert Morgan, HMS ’42, and his mentor, Dr. Hans Zinsser, through the generous gift of Dr. Herbert Morgan.

The Fellows met monthly with Dr. Charles Hatem and Dr. Beth Lown to review the Fellowship Curriculum. The Academy Fellows also convened with their colleagues in the Rabkin and Mt. Auburn Fellowships for a course in the basic elements of research in medical education under the guidance of Dr. Nicholas Christakis, Professor of Medical Sociology in the Department of Health Care Policy, at Harvard University.
Academy Fellows
2009-2010

Emma Eggleston, MD MPH
Curtis Prout Fellow of the Academy
Harvard Pilgrim Health Care, Ambulatory Care & Prevention

“Statistical Analysis Software as a Teaching Tool: Development of a Collaborative Curriculum.”
Mentor – Jonathan Finkelstein, MD

Sunil Sabharwal, MD
Curtis Prout Fellow of the Academy
VA Boston Healthcare System, Physical Medicine & Rehabilitation

“Integrated Cases for the Pre-Clinical Curriculum.”
Mentor – David Cardozo, PhD

Jan Pruszak, MD
Morgan-Zinsser Fellow of the Academy
McLean Hospital, Neuroscience

“A Primer on the Nervous System – A Model for Integrated Teaching of a Functional System in Basic Human Anatomy Courses.”
Mentor – Daniel Goodenough, PhD

Anupama Seshan, PhD
Morgan-Zinsser Fellow of the Academy
Harvard Medical School, Cell Biology

“Identifying Predictors of Success in IN751.0”
Mentor – Randall King, MD PhD

Marc de Moya, MD
Jackson Fellow of the Academy
Massachusetts General Hospital, Surgery

“Impact of Core Clerkship Simulation on Medical Decision-Making.”
Mentor – James Gordon, MD
Academy Fellows
2010-2011

W. Scott Butsch, MD
MS
Curtis Prout Fellow of the Academy
Massachusetts General Hospital, Medicine

“Incorporating Clinical Nutrition into HMS curriculum.”
Mentor – Allan Walker MD

Lara Kothari, MD
Morgan-Zinsser Fellow of the Academy
Children’s Hospital, Pediatrics

“Simulation as a Tool for the Assessment of Critical Thinking”
Mentor – Peter Weinstock MD

Eva Chittenden, MD
Curtis Prout Fellow of the Academy
Massachusetts General Hospital, Medicine

“Palliative Care Education in Medicine Residency: A Competency-based Approach.”
Mentor – Susan Block MD

Katharine Treadway, MD
Curtis Prout Fellow of the Academy
Massachusetts General Hospital, Medicine

“Capstone Course.”
Mentor – Jules Dienstag MD
Resident as Teacher Program 2009-2010

The HMS Academy Center for Teaching and Learning was pleased to announce a new faculty development effort directed at faculty responsible for resident-as-teacher programs within the HMS hospitals. Residents have long been appreciated as vital and central teachers of HMS students in the clinical arenas, and in recent years, there has been an expansion of programs directed at assisting residents to acquire teaching skills relevant to their roles as clinical faculty. The Resident-as-Teacher Faculty Development Program was directed at refining the skills of those directing resident-as-teacher programs.

The Program consisted of monthly 2-hour seminars held at the HMS Academy Center for Teaching and Learning. The seminars were facilitated by Charles Hatem, MD, Director for the CTL, and invited faculty. The curriculum drew, in part, upon materials used in Medical Education Fellowships that have been conducted over the previous decade. Importantly, the selected participants met to define their own educational needs and assist in the definition of the program material. The overall goals of the program were directed at an examination of literature useful in the education of residents to effectively function in their role as teachers. The sessions were one Friday a month, from 9-11 AM. There were 10 sessions held throughout the Calendar Year (January-December), beginning in January 2010 with required assigned reading for each seminar. Participants were offered a stipend of $250 for each session attended.

A maximum of 10 positions was offered, to enable 2 faculty members from each of the major HMS affiliates to participate in the program. It is our expectation that these individuals will serve as local resources and assist faculty from other departments in their institutions to develop and improve Resident as Teacher Programs.

Resident as Teacher Participants

Tracey Cho, MD, MA
Instructor, HMS
Massachusetts General Hospital

Ariel Frey, MD
Instructor of Pediatrics, HMS
Massachusetts General Hospital

Amanda Growdon, MD
Instructor of Pediatrics, HMS
Children's Hospital Boston

Richard Haspel, MD, PhD
Instructor in Pathology, HMS
Beth Israel Deaconess Medical Center

Vivian Mitchell, MD
Instructor in Medicine, HMS
Brigham and Women's Hospital

Dennis Simon, MD
Chief Resident, CH
Children's Hospital Boston

Mary Thorndike, MD
Instructor in Medicine, HMS
Brigham and Women's Hospital

Pamela Vohra, MD
Instructor in Medicine, HMS
Beth Israel Deaconess Medical Center
2009-2010 ACTL
Accomplishments and Activities

In addition to offering a range of programs, the ACTL addressed three major themes in 2009-2010: educational scholarship, lecturing, and community building among HMS faculty.

Educational scholarship. With ever increasing interest in educational scholarship, both through innovative teaching and evaluation of such programs, the ACTL, in collaboration with the Center for Evaluation, has initiated several approaches to supporting this endeavor. Over the past few years, members of both centers have reviewed proposals for educational research that faculty members have submitted to the IRB. The goals have been two-fold: (a) to monitor research to insure that medical students are not over-surveyed, and to identify the range of studies on-going at the school; and (b) to offer advice on research design. In 2009, we determined that the need for consultation on research design was so great that faculty might benefit from a short course on educational research methods. Therefore, two half-days were devoted to such a course in the fall semester. Additionally, follow up workshops on survey design and program evaluation, along with consultations with individual researchers, have supported faculty members’ research.

In the coming year, new members of the Academy, faculty consultants, and the activities of a new Academy associate director for educational research (TBA) will strengthen and broaden support for educational scholarship.

Lecturing. As described in earlier reports, there has been on-going discussion at HMS about the value of lecturing and the variability of student attendance at lectures. Since many students watch videotaped lectures, it behooved us to identify means of presenting lectures effectively for both in-class learning and remote access. The ACTL responded to this challenge several ways. First, in collaboration with the Program in Medical Education, a task force composed of ACTL and Academy staff and course directors met to develop a report on large and small group classroom teaching and learning. The task force determined that active learning was central to the HMS educational philosophy, and will be recommending guidelines for course directors and faculty development for lecturers to ensure this core value can be maintained in lectures.

Second, the Symposium on the Science of Learning (as described later in this report) focused on visual processing of material as presented in lectures. In addition, one Medical Education Grand Rounds was dedicated to the topic of effective lecturing. The Academy Interest Group on Critical Thinking will continue work on this topic next year.

Community building. The ACTL recognizes that it is desirable to build community both across and within all HMS affiliated institutions. Therefore, it offers Quad-based activities such as workshops, symposia, Medical Education Day, and Medical Education Grand Rounds. But, it has also built a resource-rich web-site where faculty may find materials to support their own faculty development initiatives within each institution. These include, for example, workshop designs that faculty may use as a springboard for local activities. Additionally, members of the ACTL, along with faculty consultants, leave the Quad to offer – or to collaborate on – events within the affiliated institutions.

A recent initiative is the Inter-hospital Medical Education Collaborative, which offers a series of sessions in which educational scholars from each institution present their work – whether an educational innovation or research – to faculty from other institutions. Through these presentations and
ensuing discussions, faculty with similar interests can identify possible collaborators or mentors.

Pathways to Success: Career Development as a Clinician Educator
October 2, 2009
Shapiro Institute, BIDMC

Developing a strategic plan for career development in the early years of faculty life is a critical step in the process of establishing a fruitful career in academic medicine. The goals of this half-day retreat were to identify the professional development requirements and strategies faculty need to distinguish themselves as clinician educators and further their career on local, regional, and national levels. Leaders of the session characterized the opportunities and challenges that exist for clinician educators. Through presentations, small group dialogue, and Q&A sessions, participants learned successful ways to negotiate the new HMS promotion process, develop a teaching portfolio, participate in medical education professional development, and engage in educational scholarship. The retreat concluded with a report from the HMS Center for Teaching and Learning on findings from their recent faculty development needs assessment and a discussion of career development resources available to the HMS community.
**Academy Staff Members**

Richard Schwartzstein MD, Director of the Academy

Dr. Richard M. Schwartzstein is the Ellen and Melvin Gordon Professor of Medicine and Medical Education. Since joining the HMS faculty in 1986, Dr. Schwartzstein has been a member of the division of pulmonary and critical care medicine at Beth Israel Hospital and now, Beth Israel Deaconess Medical Center (BIDMC). In addition to his clinical work and research on the physiology of dyspnea, Dr. Schwartzstein has devoted a substantial portion of his career to medical education. He is course director for Integrated Human Physiology, one of the core courses in the first year curriculum, and has served on multiple committees with oversight of the HMS program of studies. In 2004, he was named the vice president for education at BIDMC, where he created the first hospital-based Center for Education in the Harvard system. Dr. Schwartzstein is also the executive director of the Carl J. Shapiro Institute for Education and Research at Harvard Medical School and Beth Israel Deaconess Medical Center. The Institute supports the Rabkin Fellowship in Medical Education, sponsors national conferences on key educational topics biannually, provides a range of professional development activities for physicians, and oversees the Shapiro Simulation and Skills Center. Dr. Schwartzstein has a particular interest in the cognitive processes underlying analytical reasoning and the strategies for teaching and assessing critical thinking.

Charles J. Hatem, MD, Director of the Center for Teaching and Learning

Dr. Charles Hatem is the Harold Amos Professor of Medicine at Harvard Medical School, and Director of Medical Education at Mount Auburn Hospital. Since 1971, Dr. Hatem’s work at Mt. Auburn has involved adult primary care and the development of new medical education programs with teaching responsibilities aimed at students, house staff, fellows and faculty. Dr. Hatem has been involved in establishing the Rabkin Fellowship in Medical Education 1998, and is currently co-teaching with Dr. Beth Lown in the Mount Auburn and Academy Fellowships in Medical Education which are devoted to providing faculty skills needed in the world of the clinician-teacher.

Antoinette S. Peters, PhD, Associate Director of the Center for Teaching and Learning

Dr. Toni Peters is an educational psychologist and associate professor of Ambulatory Care & Prevention. Her expertise lies in curriculum development, faculty development, and program evaluation in medical education. She is particularly
interested in small group teaching and learning, and the relationship between instructional design and learning outcomes. Dr. Peters is an advisor for first-year students who elect the Casebook Project.

Lisa Frontado, MS, EdM, Manager of Academy Programs

Lisa’s interests lie in the development, management, and evaluation of teaching and learning environments. In particular, she is interested in the development of critical thinking skills, reasoning attitudes, problem solving and decision-making in complex environments. She holds an MS from Boston University and an EdM from Harvard Graduate School of Education.

Crystal Chang, Program Coordinator

Crystal is the Program Coordinator and manages the continuing Medical Education (CME) application and reporting process and coordinates documentation requirements for CME courses provided by the Academy and other departments at HMS.

Suzanna Shorey, Program Assistant

Suzanna is the Program Assistant within the Academy Center for Teaching and Learning. Suzanna handles all ACTL program registration for HMS faculty members. She also provides faculty members with detailed information about our different programs and assists in event operations. She has a BA in History from the University of Massachusetts Amherst and is now studying for an MS in Higher Education Administration.
Faculty Consultants

Each year, the Academy provides funding for a small number of “faculty consultants” who provide assistance on specific areas of the curriculum and/or faculty development.

Susan Farrell, MD, EdM
Faculty Consultant for Assessment

Dr. Susan Farrell graduated from Syracuse University and Tufts School of Medicine and trained in emergency medicine and medical toxicology at Medical College of Pennsylvania. She is Director of Student Programs and the Emergency Medicine Clerkship at BWH, and Course Co-Director, Emergency Medical Care, at HMS. Dr. Farrell created and writes “TOX TALKS,” a case-based toxicology newsletter. She teaches in numerous courses at HMS, including an emergency medicine elective for 1st-year students, “Beyond Shadowing.” She participates in the Mentor/Mentee Program, Harvard Affiliated Emergency Medicine Residency, and has been a Macy Scholar and Rabkin Fellow in Medical Education.

Susan Frankl, MD
Faculty Consultant for Clinical Teaching

Dr. Susan Frankl, a community-based general internist, graduated from SUNY, Binghamton, and Stanford Medical School, and trained in internal medicine at University of Washington and Brigham & Women’s Hospital. Dr. Frankl is Deputy Director, Primary Care Clerkship, and a member of the Generalist Education and Faculty Development Leadership Group of the Association of Professors of Medicine and the Teaching for Tomorrow Initiative at U Mass Medical School. She is also involved in faculty development initiatives for ambulatory preceptors, and precepts medical students in her primary care practice. She has been a Harvard-Macy Scholar and a Rabkin Fellow in Medical Education.

James Gordon, MD
MPA
Faculty Consultant for Simulation

Dr. James Gordon graduated from Princeton, University of Virginia Medical School, and University of Michigan School of Public Policy and trained in emergency medicine at University of Michigan Medical Center. As Director of the Program in Medical Simulation for medical students at the HMS quadrangle, he helps design and precepts simulation exercises for numerous HMS courses, including IHP, Human Systems, Pt/Dr II and III, Transition to the Wards, and the surgery and emergency medicine clerkships. He has completed the Harvard Macy Physician Educator and Leadership Programs. In 2001, he was awarded a Morgan-Zinsser Fellowship in the Academy at HMS.

Alexander Green, MD MPH
Faculty Consultant for Cross-Cultural Education

Dr. Green is Associate Director at the Disparities Solutions Center at Massachusetts General Hospital and lecturer at Harvard Medical School. He has authored multiple articles and is a frequent speaker on topics including
cross-cultural education, culturally competent health care systems, and language barriers and interpreters. Dr. Green has been involved in a variety of research projects on racial/ethnic disparities in health, and cultural competence; his research has been funded by RWJF, The Commonwealth Fund, NIH, and HCFA (now CMS). He helped produce a documentary film and education project, “Worlds Apart,” designed to teach health professionals to better care for patients across cultural divides.

Sam Kennedy, PhD
Faculty Consultant for new tutor training

Dr. Kennedy, Lecturer on Cell Biology at Harvard Medical School, has taught as a lecturer and served as a tutor in the HMS Human Body course for more than 20 years, and over that time has served as lecturer in several other HMS anatomy and pharmacology courses. As a faculty member in the New Pathway curriculum, Dr. Kennedy has led sessions as a new tutor trainer for over 15 years and, more recently, has served as a peer observer of faculty in tutorials.

Beth Lown, MD
Co-Director, Academy Fellowships in Medical Education

Beth Lown, a general internist, graduated the Tufts University School of Medicine, and completed her postgraduate training at the Beth Israel Hospital. She is Co-Director of the Harvard Academy Fellowships in Medical Education and Director of Faculty Development and Faculty Fellowships in Medical Education at Mount Auburn Hospital. Dr. Lown is Medical Director of the Kenneth B. Schwartz Center. Dr. Lown has a strong interest in interpersonal and communication skills, and teaches a relationship-centered approach to the psychosocial and emotional aspects of healthcare to learners across the continuum of medical education. She served on the National Board of Medical Examiners’ Task Force on Communication Skills, Committee for Standard Setting, and currently serves on the Case Materials Development for Clinical Skills Step 2 of the United States Medical Licensing Examination. Dr. Lown collaborates with national and international partners in teaching and research in healthcare communication and medical education. She has used mixed methods of research including qualitative and emergent research methods to inform education including curricular design, assessment instruments, and learner and program evaluation.
Academy Members

Membership Criteria & Responsibilities

- **Evidence of Educational Leadership:** Individuals who hold positions of leadership in education, or are actively engaged in educational scholarship, related to medical and/or graduate students at Harvard Medical School (HMS), and/or residents and fellows at HMS affiliated hospitals are eligible to apply.

- **Commitment to participate** (as a learner or instructor) in a minimum of 12 hours of *educational development* sessions each year. Such sessions will include those sessions for which continuing medical education (CME) credit is granted (by HMS or another institution), and sessions designated as meeting this requirement by HMS, hospital or graduate school education leadership (examples include: medical education grand rounds, workshops and seminars offered by the Academy at HMS and the hospitals, as well as courses devoted to education topics such as Harvard-Macy programs and the Shapiro Institute CME course on teaching skills).

- **Commitment to participate** in three of six major *Academy events* every two years.

Members must also commit to participate and be involved in Academy Committees and activities as appropriate.

**Erik Alexander, MD**
Medicine
Brigham and Women’s Hospital

**Jonathan Alpert, MD PhD**
Psychiatry
Massachusetts General Hospital

**Katherine Andriole, PhD**
Radiology
Brigham and Women’s Hospital

**Christian Arbalaez, MD MPH**
Emergency Medicine
Brigham and Women’s Hospital
Children’s Hospital Boston

**Stanley Ashley, MD**
Surgery
Brigham and Women’s Hospital

**Ayse Atasoylu, MD MPH**
Medicine
Harvard Medical School

**Kamran Badizadegan, MD**
Pathology
Massachusetts General Hospital

**Keith Baker, MD PhD**
Anesthesia, Critical Care and Pain Medicine
Massachusetts General Hospital

**Terry Bard, DD**
Psychiatry
Beth Israel Deaconess Medical Center

**Carol Bates, MD**
Internal Medicine
Beth Israel Deaconess Medical Center

**Sigall Bell, MD**
Medicine
Beth Israel Deaconess Medical Center

**Eugene Beresin, MD MA**
Psychiatry
Massachusetts General Hospital
McLean Hospital

**Kriti Bhatia, MD**
Emergency Medicine
Brigham and Women’s Hospital
Peter Biggs, PhD
Radiation Oncology
Massachusetts General Hospital

Susan Block, MD
Psychosocial Oncology & Palliative Care, Psychiatry
Dana Farber Cancer Institute
Brigham and Women’s Hospital

Jonathan Borus, MD
Medical Education
Brigham and Women’s Hospital

Angela Botts, MD
Gerontology
Beth Israel Medical Center

Debra Boyer, MD
Medicine
Children’s Hospital Boston

Elizabeth Breen, MD
Surgery
Brigham and Women’s Hospital

Dara Brodsky, MD
Neonatology
Beth Israel Deaconess Medical Center

Calvin Brown, MD
Emergency Medicine
Brigham and Women’s Hospital

David Brown, MD
Cardiology
Children’s Hospital Boston

Michele Burns-Ewald, MD
Medicine
Children’s Hospital Boston

Susan Burgin, MD
Dermatology
Beth Israel Deaconess Medical Center

Thomas Byrne, MD
Neurology
Massachusetts General Hospital

Michael Cahalane, MD
Surgery
Beth Israel Deaconess Medical Center

Stephen Calderwood, MD
Medicine
Massachusetts General Hospital

Matthew Carty, MD
Surgery
Brigham and Women’s Hospital

Zeina Chemali, MD MPH
Psychiatry and Neurology
Brigham and Women’s Hospital

Clark Chen, MD PhD
Surgery
Beth Israel Deaconess Medical Center

Vincent Chiang, MD
Pediatrics
Children’s Hospital Boston

Eva Chittenden, MD
Palliative Care Service
Massachusetts General Hospital

Tracey Cho, MD
Neurology
Massachusetts General Hospital

Peter Clardy, MD
Pulmonary Medicine, Critical Care & Sleep
Beth Israel Deaconess Medical Center

Charles Day, MD MBA
Orthopedic Surgery
Beth Israel Deaconess Medical Center

Marc De Moya, MD
Surgery
Massachusetts General Hospital

Frank Drislane, MD
Neurology
Beth Israel Deaconess Medical Center

S. Jean Emans, MD
Pediatrics
Children’s Hospital Boston
<table>
<thead>
<tr>
<th>Name</th>
<th>Specialty</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anne Fabiny, MD</td>
<td>Medicine</td>
<td>Cambridge Health Alliance</td>
</tr>
<tr>
<td>Sara Fazio, MD FACP</td>
<td>Internal Medicine</td>
<td>Beth Israel Deaconess Medical Center</td>
</tr>
<tr>
<td>Leonor Fernandez, MD</td>
<td>Medicine</td>
<td>Beth Israel Deaconess Medical Center</td>
</tr>
<tr>
<td>Diane Fingold, MD</td>
<td>Medicine</td>
<td>Massachusetts General Hospital</td>
</tr>
<tr>
<td>Jonathan Fisher, MD MPH</td>
<td>Emergency Medicine</td>
<td>Beth Israel Deaconess Medical Center</td>
</tr>
<tr>
<td>Laurie Fishman, MD</td>
<td>Medicine</td>
<td>Children’s Hospital Boston</td>
</tr>
<tr>
<td>Alice Flaherty, MD PhD</td>
<td>Neurology</td>
<td>Massachusetts General Hospital</td>
</tr>
<tr>
<td>John Fox, MD</td>
<td>Anesthesiology</td>
<td>Brigham and Women’s Hospital</td>
</tr>
<tr>
<td>Susan Frankl, MD</td>
<td>Medicine</td>
<td>Beth Israel Deaconess Medical Center</td>
</tr>
<tr>
<td>Joseph Garfield, MD</td>
<td>Anesthesiology, Perioperative &amp; Pain</td>
<td>Brigham and Women’s Hospital</td>
</tr>
<tr>
<td>Elizabeth Gaufberg, MD MPH</td>
<td>Medicine &amp; Psychiatry</td>
<td>Cambridge Health Alliance</td>
</tr>
<tr>
<td>Leo Ginness, MD</td>
<td>Pulmonary Critical Care &amp; Medicine</td>
<td>Massachusetts General Hospital</td>
</tr>
<tr>
<td>Lior Givon, MD PhD</td>
<td>Psychiatry</td>
<td>Cambridge Health Alliance</td>
</tr>
<tr>
<td>David Golan, MD PhD</td>
<td>Biological Chemistry &amp; Molecular Pharmacology</td>
<td>Brigham and Women’s Hospital</td>
</tr>
<tr>
<td>Stuart Goldman, MD</td>
<td>Psychiatry</td>
<td>Children’s Hospital Boston</td>
</tr>
<tr>
<td>James Gordon, MD MPA</td>
<td>Emergency Medicine</td>
<td>Massachusetts General Hospital</td>
</tr>
<tr>
<td>Arundhati Ghosh, MBBS FRCS FACS</td>
<td>Surgery</td>
<td>Cambridge Health Alliance</td>
</tr>
<tr>
<td>Barbara Gottlieb, MD MPH</td>
<td>Medicine</td>
<td>Brigham and Women’s Hospital</td>
</tr>
<tr>
<td>Alexander Green, MD MPH</td>
<td>Medicine</td>
<td>Massachusetts General Hospital</td>
</tr>
<tr>
<td>Lisa Gruenberg, MD</td>
<td>OBGYN</td>
<td>Brigham and Women’s Hospital</td>
</tr>
<tr>
<td>Richard Haspel, MD PhD</td>
<td>Pathology</td>
<td>Beth Israel Deaconess Medical Center</td>
</tr>
<tr>
<td>Charles Hatem, MD</td>
<td>Director, Center for Teaching and Learning Harvard Medical School</td>
<td></td>
</tr>
<tr>
<td>Emily Hayden, MD</td>
<td>Emergency Medicine</td>
<td>Massachusetts General Hospital</td>
</tr>
<tr>
<td>David Hirsh, MD</td>
<td>Medicine</td>
<td>Cambridge Health Alliance</td>
</tr>
<tr>
<td>Melanie Hoenig, MD</td>
<td>Medicine</td>
<td>Beth Israel Deaconess Medical Center</td>
</tr>
</tbody>
</table>

26
Robert Holzman, MD  
Anesthesiology, Perioperative & Pain  
Children’s Hospital Boston

Grace Huang, MD  
Medicine  
Beth Israel Deaconess Medical Center

Edward Hundert, MD  
Global Health & Social Medicine  
Harvard Medical School

Julie Irish, PhD  
Medicine  
Beth Israel Deaconess Medical Center

Vicki Jackson, MD MPH  
Medicine  
Massachusetts General Hospital

Katherine Johnston, MD MA MSc  
Medicine  
Beth Israel Deaconess Medical Center

Danel Jones, MD MS  
Surgery  
Beth Israel Deaconess Medical Center

Stephanie Jones, MD  
Anesthesia  
Beth Israel Deaconess Medical Center

Joel Katz, MA MD  
Medicine  
Brigham and Women’s Hospital

Sean Kelly, MD  
Emergency Medicine  
Beth Israel Deaconess Medical Center

B. Price Kerfoot, MD MEd  
Surgical Services  
Veterans Boston Healthcare System

Jennifer Kesselheim, MD MEd MBioethics  
Pediatric Oncology & Medicine  
Dana Farber Cancer Institute  
Children’s Hospital Boston

Thomas Kinane, MB BCh BAO  
Pediatrics  
Massachusetts General Hospital

Randall King, MD PhD  
Cell Biology  
Harvard Medical School

Carolyn Kloek, MD  
Ophthalmology  
Massachusetts Eye & Ear Infirmary

Edward Krupat, PhD  
Center for Evaluation  
Beth Israel Deaconess Medical Center

Brian Labow, MD  
Plastic and Oral Surgery  
Children’s Hospital Boston

Alan Leichtner, MD  
Pediatrics  
Children’s Hospital Boston

Howard Libman, MD  
Medicine  
Beth Israel Deaconess Medical Center

Leonard Lilly, MD  
Medicine  
Brigham and Women’s Hospital

Clifford Lo, MD MPH ScD  
Pediatrics  
Children’s Hospital Boston

Beth Lown, MD  
Medicine  
Mt. Auburn Hospital

Bertha Madras, PhD  
Psychiatry  
Massachusetts General Hospital

Melissa Mattison, MD  
Medicine  
Beth Israel Deaconess Medical Center

Alexander McAdam, MD PhD  
Laboratory Medicine  
Children’s Hospital Boston

Daniel McGillicuddy, MD  
Emergency Medicine  
Beth Israel Deaconess Medical Center
Sylvia McKean, MD  
Medicine  
Brigham and Women’s Hospital

Graham McMahon, MD MMSc  
Endocrinology, Diabetes & Hypertension  
Brigham and Women’s Hospital

Eliza Menninger, MD  
Psychiatry  
McLean Hospital

Colleen Monaghan, MD  
Medicine & Pediatrics  
Brigham and Women’s Hospital

George Murphy, MD  
Pathology  
Brigham and Women’s Hospital

Joshua Nagler, MD  
Emergency Medicine  
Children’s Hospital Boston

Russell Nauta, MD  
Surgery  
Mt. Auburn Hospital

Jane Neill  
Associate Dean for Administration  
Harvard Medical School

Lori Newman, MEd  
Medicine  
Beth Israel Deaconess Medical Center

Barbara Ogur, MD  
Internal Medicine  
Cambridge Health Alliance

Toni Peters, PhD  
Associate Director, Center for Teaching and Learning  
Harvard Medical School

Sarah Peyre, EdD  
Surgery  
Brigham and Women’s Hospital

James Philip, MD MEE  
Anesthesiology, Perioperative & Pain  
Brigham and Women’s Hospital

May Pian-Smith, MD MS  
Anesthesia, Critical Care & Pain  
Massachusetts General Hospital

Susan Porries, MD FACS  
Surgery  
Mt. Auburn Hospital  
Beth Israel Deaconess Medical Center

Charles Pozner, MD  
Emergency Medicine  
Brigham and Women’s Hospital

Alberto Puig, MD PhD  
Medicine  
Massachusetts General Hospital

Stuart Quan, MD  
Sleep Medicine  
Brigham and Women’s Hospital

Laurie Raymond, MD  
Psychiatry  
Harvard Medical School

Eileen Reynolds, MD  
Medicine  
Brigham and Women’s Hospital

Hope Ricciotti, MD  
Obstetrics & Gynecology  
Beth Israel Deaconess Medical Center

Elizabeth Rider, MSW MD  
Pediatrics  
Massachusetts General Hospital  
Children’s Hospital Boston

David Roberts, MD  
Medicine  
Beth Israel Deaconess Medical Center

Amelie Rorty, PhD  
Global Health & Social Medicine  
Harvard Medical School
Carlo Rosen, MD  
Emergency Medicine  
Beth Israel Deaconess Medical Center

Christiana Russ, MD  
Pediatrics  
Children’s Hospital Boston

Leon Sanchez, MD MPH  
Emergency Medicine  
Beth Israel Deaconess Medical Center

Thomas Sandora, MD MPH  
Laboratory Medicine  
Children’s Hospital Boston

Sadath Sayeed, MD JD  
Global Heath & Social Medicine  
Harvard Medical School

Lidia Schapira, MD  
Medical Oncology  
Massachusetts General Hospital

Benjamin Schneider, MD  
Surgery  
Beth Israel Deaconess Medical Center

Steven Schwaitzberg, MD  
Surgery  
Cambridge Health Alliance

Christina Scirica, MD MPH  
Pediatrics  
Massachusetts General Hospital

Julian Seifter, MD  
Medicine  
Brigham and Women’s Hospital

Jo Shapiro, MD  
Surgery, Otology & Laryngology  
Brigham and Women’s Hospital

Niraj Sharma, MD MPH  
Medicine  
Brigham and Women’s Hospital

Helen Shields, MD  
Medicine  
Beth Israel Deaconess Medical Center

Amy Ship, MD  
Medicine  
Beth Israel Deaconess Medical Center

Steven Simon, MD MPH  
Population Medicine  
Harvard Medical School

Priscilla Sianetz, MD MPH  
Radiology  
Beth Israel Deaconess Medical Center

David Sloane, MD  
Rheumatology, Immunology, and Allergy  
Brigham and Women’s Hospital

Douglas Smink, MD MPH  
Surgery  
Brigham and Women’s Hospital

C. Christopher Smith, MD  
Medicine  
Beth Israel Deaconess Medical Center

James Stankiewicz, MD  
Neurology  
Brigham and Women’s Hospital

Robert Stanton, MD  
Medicine  
Beth Israel Deaconess Medical Center

Rebecca Starr, MD  
Geriatrics  
Cambridge Health Alliance

Michele Szabo, MD  
Anesthesia  
Massachusetts General Hospital

James Takayesu, MD MS  
Emergency Medicine  
Massachusetts General Hospital

Zaldy Tan, MD MPH  
Medicine  
Brigham and Women’s Hospital

William Taylor, MD  
Population Medicine  
Beth Israel Deaconess Medical Center
Anjala Tess, MD  
Medicine  
Beth Israel Deaconess Medical Center

Ann-Marie Thomas, MD  
Physical Medicine & Rehabilitation  
Spaulding Rehabilitation Hospital

Carrie Tibbles, MD  
Emergency Medicine  
Beth Israel Deaconess Medical Center

David Topor, PhD  
Psychiatry  
Veterans Boston Health System

Katharine Treadway, MD  
Medicine  
Massachusetts General Hospital

Edward Ullman, MD  
Emergency Medicine  
Beth Israel Deaconess Medical Center

David Van Vector, PhD  
Cell Biology  
Harvard Medical School

Kamen Vlasakov, MD  
Anesthesiology, Perioperative & Pain  
Brigham and Women’s Hospital

Charles Vollmer, MD  
Surgery  
Beth Israel Deaconess Medical Center

Debra Weiner, MD PhD  
Emergency Medicine  
Children’s Hospital Boston

Debra Weinstein, MD  
Internal Medicine, GI  
Massachusetts General Hospital  
Brigham and Women’s Hospital

Peter Weinstock, MD PhD  
Anesthesia  
Children’s Hospital Boston

Augustus White, MD PhD  
Culturally Competent Care Education  
Beth Israel Deaconess Medical Center

Beverly Woo, MD  
Medicine  
Brigham and Women’s Hospital

Alan Woolf, MD MPH  
Pediatrics  
Children’s Hospital Boston

Shirley Wray, MD PhD FRCP  
Neurology  
Massachusetts General Hospital

Julius Yang, MD PhD  
Medicine  
Beth Israel Deaconess Medical Center

Stephen Zinner, MD  
Medicine  
Mt. Auburn Hospital

Academy Interest Group Members

Peer Review
Susan Frankl, MD – Co Chair
Lori Newman, EdM – Co Chair
Stanley Ashley, MD
Susan Block, MD
Jon Borus, MD
Stuart Goldman, MD
Graham McMahon, MD MMSc
Sarah Peyre, EdD
Kamen Vlassakov, MD

Team Based Learning
Alexander McAdam MD PhD - Chair
Clifford Lo, MD MPH MSc
Melissa Mattison, MD
Amelie Rorty, PhD
Helen Shields, MD
Kamen Vlassakov, MD
Shirley Wray, MD PhD FRCP

Writing for Scholarship
Jonathan Borus, MD – Co Chair
Susan Pories, MD FACS – Co Chair
Terry Bard, DD
Dara Brodsky, MD
Michele Burns-Ewald, MD
Jonathan Fisher, MD MPH
Joseph Garfield, MD
Vicki Jackson, MD MPH
May Pian-Smith, MD MS
Stuart Quan, MD
Hope Ricciotti, MD
Steven Schwartzberg, MD
Priscilla Slanetz, MD MPH

Feedback and Evaluation
Jonathan Alpert, MD PhD – Co Chair
Eugene Beresin, MD MA – Co Chair
Keith Baker, MD PhD
Terry Bard, DD
Jonathan Borus, MD
Joseph Garfield, MD
Melanie Hoening, MD
Vicki Jackson, MD MPH
Kate Johnston, MD MA M.Sc
Stephanie Jones, MD
Jennifer Kesselheim, M.Ed MD MBioethics
Ed Krupat, PhD
Graham McMahon, MD MMSc
Russell Nauta, MD
Sarah Peyre, EdD
David Topor, PhD

Educational Technology
Michael Parker, MD – Co Chair
Debra Weiner, MD PhD – Co Chair
Katherine Andriole, PhD
Ayse Atasoylu, MD MPH
Matthew Carty, MD
Joel Katz, MD MA
B. Price Kerfoot, MD EdM
Bernard Kinane, MD BCh BAO
Randall King, MD PhD
Leonard Lilly, MD
Priscilla Slanetz, MD MPH

Resident as Teacher
Tracey Cho, MD MA – Co Chair
Hope Ricciotti, MD – Co Chair
Angela Botts, MD
Vincent Chiang, MD
Colleen Monaghan, MD
Alberto Puig, MD PhD
James Takayesu, MD MS
Ann-Marie Thomas, MD

Simulation
James Gordon MD MPA – Chair
Stanley Ashley, MD
Debra Boyer, MD
Calvin Brown, MD
Steve Dawson, MD
Marc de Moya, MD
Alice Flaherty, MD PhD
Dan Jones, MD MS
Joshua Nagler, MD
Sarah Peyre, EdD
May Pian-Smith, MD MS
Charles Pozner, MD
Amelie Rorty, PhD
Douglas Smink, MD MPH
Peter Weinstock, MD PhD

Critical Thinking
Edward Krupat PhD – Co Chair
Richard Schwartzstein MD – Co Chair
Ayse Atasoylu, MD MPH
Keith Baker, MD PhD
Jon Borus, MD
Thomas Byrne, MD
Vincent Chiang, MD
Marc de Moya, MD
Anne Fabiny, MD
Jon Fox, MD
Joseph Garfield, MD
Arundhati Ghosh, MBBS FRCS FACS
Leo Ginns, MD
Stuart Goldman, MD
Barbara Gottlieb, MD MPH
Lisa Gruenberg, MD
Richard Haspel, MD PhD
Grace Huang, MD
Julie Irish, PhD
Bernard Kinane, MD BCh BAO
Sylvia McKean, MD
Joseph Rhatigan, MD
Leon Sanchez, MD MPH
Lidia Schapira, MD
Robert Stanton, MD
Alan Woolf, MD MPH

Hidden Curriculum
Sigall Bell MD – Co Chair
Elizabeth Gaufberg MD – Co Chair
Zeina Chemali, MD MPH
Lisa Frontado, MS EdM
Edward Hundert, MD
Jennifer Kesselheim, MD MEd MBioethics
Ed Krupat, PhD
Toni Peters, PhD
Laurie Raymond, MD
Hope Ricciotti, MD
Elizabeth Rider, MD MSW
Amy Ship, MD
Priscilla Slanetz, MD MPH
Alan Woolf, MD MPH
## Faculty Participation in Academy Programs

### By Degree

<table>
<thead>
<tr>
<th>Degree</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD</td>
<td>391</td>
</tr>
<tr>
<td>PhD</td>
<td>39</td>
</tr>
<tr>
<td>MD/PhD</td>
<td>22</td>
</tr>
<tr>
<td>MB/BCH</td>
<td>6</td>
</tr>
<tr>
<td>MB/BS</td>
<td>4</td>
</tr>
<tr>
<td>MD/MB/BS</td>
<td>4</td>
</tr>
<tr>
<td>PsyD</td>
<td>3</td>
</tr>
<tr>
<td>EdM</td>
<td>3</td>
</tr>
<tr>
<td>BA</td>
<td>2</td>
</tr>
<tr>
<td>BS</td>
<td>2</td>
</tr>
<tr>
<td>DO</td>
<td>2</td>
</tr>
<tr>
<td>DVM</td>
<td>2</td>
</tr>
<tr>
<td>EdD</td>
<td>2</td>
</tr>
<tr>
<td>MA</td>
<td>2</td>
</tr>
<tr>
<td>DD</td>
<td>1</td>
</tr>
<tr>
<td>DDS</td>
<td>1</td>
</tr>
<tr>
<td>DPM</td>
<td>1</td>
</tr>
<tr>
<td>MB</td>
<td>1</td>
</tr>
<tr>
<td>MB/BCH/BAO</td>
<td>1</td>
</tr>
<tr>
<td>MD/DM</td>
<td>1</td>
</tr>
<tr>
<td>MD/JD</td>
<td>1</td>
</tr>
<tr>
<td>MD/ScD</td>
<td>1</td>
</tr>
<tr>
<td>Med</td>
<td>1</td>
</tr>
<tr>
<td>MS</td>
<td>1</td>
</tr>
<tr>
<td>MSW/MA</td>
<td>1</td>
</tr>
<tr>
<td>PhD/DDS</td>
<td>1</td>
</tr>
<tr>
<td>PhD/MB/BCH</td>
<td>1</td>
</tr>
<tr>
<td>ScD</td>
<td>1</td>
</tr>
</tbody>
</table>

### By Academic Title

<table>
<thead>
<tr>
<th>Title</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructor</td>
<td>166</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>111</td>
</tr>
<tr>
<td>Clinical Instructor</td>
<td>51</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>45</td>
</tr>
<tr>
<td>Professor</td>
<td>36</td>
</tr>
<tr>
<td>Clinical Fellow</td>
<td>29</td>
</tr>
<tr>
<td>Research Fellow</td>
<td>19</td>
</tr>
<tr>
<td>Lecturer</td>
<td>14</td>
</tr>
<tr>
<td>Assistant Clinical Professor</td>
<td>10</td>
</tr>
<tr>
<td>Associate Clinical Professor</td>
<td>9</td>
</tr>
<tr>
<td>Clinical Professor</td>
<td>2</td>
</tr>
<tr>
<td>Teaching Associate</td>
<td>2</td>
</tr>
<tr>
<td>Curriculum Fellow</td>
<td>1</td>
</tr>
<tr>
<td>Research Associate</td>
<td>1</td>
</tr>
</tbody>
</table>

### By Institution

<table>
<thead>
<tr>
<th>Institution</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beth Israel Deaconess Medical Center</td>
<td>119</td>
</tr>
<tr>
<td>Brigham and Women's Hospital</td>
<td>106</td>
</tr>
<tr>
<td>Massachusetts General Hospital</td>
<td>102</td>
</tr>
<tr>
<td>Children’s Hospital</td>
<td>48</td>
</tr>
<tr>
<td>Harvard Medical School</td>
<td>41</td>
</tr>
<tr>
<td>Cambridge Health Alliance</td>
<td>26</td>
</tr>
<tr>
<td>Harvard Vangard Medical Associates</td>
<td>10</td>
</tr>
<tr>
<td>HVMA Fenway Boston</td>
<td>10</td>
</tr>
<tr>
<td>McLean Hospital</td>
<td>10</td>
</tr>
<tr>
<td>Mt. Auburn Hospital</td>
<td>8</td>
</tr>
<tr>
<td>Dana Farber Cancer Institute</td>
<td>6</td>
</tr>
<tr>
<td>Harvard School of Public Health</td>
<td>5</td>
</tr>
<tr>
<td>Harvard School of Dental Medicine</td>
<td>4</td>
</tr>
<tr>
<td>Massachusetts Eye &amp; Ear Infirmary</td>
<td>4</td>
</tr>
<tr>
<td>DACP Other</td>
<td>3</td>
</tr>
<tr>
<td>Schepens Eye Research Institute</td>
<td>3</td>
</tr>
<tr>
<td>Spaulding Rehabilitation</td>
<td>3</td>
</tr>
<tr>
<td>Joslin Diabetes Center</td>
<td>2</td>
</tr>
<tr>
<td>Channing Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>Hebrew Rehab Center for the Aged</td>
<td>1</td>
</tr>
<tr>
<td>Massachusetts Institute of Technology</td>
<td>1</td>
</tr>
</tbody>
</table>
1 – Massachusetts Mental Health Center
1 – New England Baptist Hospital

By Department

86 – Medicine, BIDMC
77 – Medicine, Brigham & Women’s
57 – Medicine, Mass General Hospital
39 – Pediatrics, Children’s Hospital
23 – Population Medicine
14 – Pathology
13 – Pediatrics, Mass General Hospital
12 – Surgery, BIDMC
10 – Anesthesia, Brigham and Women’s
10 – Anesthesia, Mass General Hospital
10 – Psychiatry, Cambridge Hospital
10 – Psychiatry, Mass General Hospital
10 – Psychiatry, McLean Hospital
9 – PME Curriculum Support, HMS
7 – Neurology, Mass General Hospital
7 – Obstetrics, Gyno, & Repro, BIDMC
7 – Psychiatry, Brigham and Women’s
6 – Anesthesia, BIDMC
6 – Global Health and Social Medicine
6 - Obstetrics, Gyno, & Repro, BWH
6 – Ophthalmology
6 – Psychiatry, BIDMC
6 – Surgery, Brigham and Women’s
5 – Radiology, BIDMC
5 – Surgery, Mass General Hospital
4 – Anesthesia, Children’s Hospital
4 – Cell Biology
4 - Obstetrics, Gyno, & Repro, MGH
4 – Orthopedic Surgery, BIDMC
4 – PME Educational Development, HMS
3 – Bio Chemistry & Molecular Pharmacology
3 – Neurology, BIDMC
3 – Neurology, Brigham and Women’s
3 – Orthopedic Surgery, MGH
3 – Otology and Laryngology
3 – Physical Medicine and Rehabilitation
3 – Walter Bradford Cannon Society, HMS
3 – Radiology, Brigham and Women’s
2 – Genetics
2 – PME Student Affairs, HMS
2 – Psychiatry, Children’s Hospital
2 – Health Policy and Management, HSPH
1 – Alumni Bulletin, HMS
1 – Armenise – Harvard Foundation
1 – Countway Library of Medicine
1 – Dermatology – Brigham and Women’s
1 – Faculty Affairs, HMS
1 – Health Sciences and Technology
1 – Faculty Group Practice, HSDM
1 – Oral Health Policy & Epidemiology, HSDM
1 – IT e-computing, HMS
1 – Microbiology & Molecular Genetics
1 – Neurology, HMS
1 – Orthopedic Surgery, BWH
1 – PME Medical Education, HMS
1 – Psychiatry, BOVAMC
1 – Radiation Oncology, BWH DFCI CH
1 – Radiation Oncology, MGH
1 – Radiology, Children’s Hospital
1 – Radiology, Mass General Hospital
1 – Resource Development, HMS
1 – Environmental Health, HSPH
1 – Environmental and Occupational Medicine & Epidemiology, HSPH
1 – Surgery, Children’s Hospital
1 – University Health Services, Harvard
1 – VA, Huntington Ave