The Communicator

Harvard Medical School

Scholars in Clinical Science Program

Spring 2011

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Above: Graduate Dr. Lynda Vrooman (right) accepting her diploma from Program Director Dr. Paul Conlin

Left: Dr. Danny Muehlenschlegel delivers his valedictory speech
advisors and mentors in attendance were honored with autographed copies of The Checklist Manifesto, a book by BWH surgeon Dr. Atul Gawande.

Where Are They Now?

Through March of 2011 the Scholars Program has graduated one hundred seven (107) students from the program, many of whom are promoted to faculty at HMS upon graduation. Successful outcomes for our graduates include faculty appointments in academic medical centers, careers in the pharmaceutical and biotechnology industry, and research-related positions in government (e.g., FDA). Below is a chart showing the status of our graduates as documented in our program database. After the graduation of our tenth cohort in May of 2011, we hope to provide in future newsletters a more complete report on their career outcomes.

Scholars in Clinical Science Program
Status of Graduates (n=107), 2002–2010

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Faculty</td>
<td>60%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
</tr>
<tr>
<td>Industry/FDA</td>
<td>11%</td>
</tr>
<tr>
<td>Fellows/Residents</td>
<td>14%</td>
</tr>
</tbody>
</table>

Of faculty, 60% have K23 or equivalent funding.
Alumni Spotlight
As we monitor the progress of our graduates along their career pathways, we are impressed with the noteworthy successes many of them have achieved. In this feature we report on several of our alumni/ae and their most recent accomplishments:

Dr. Hara Levy, Class of 2003, Assistant Professor of Pediatrics at Medical College of Wisconsin, is the recipient of a prestigious 2010 NIH Director’s Innovator Award. The grant represents total funding of $2.25m over 5 years, which she is utilizing to integrate genomics with genetics in the study of molecular phenotypes for cystic fibrosis (CF) lung disease.

Dr. Pankaj Agrawal, Class of 2003, Instructor in Pediatrics at HMS, received the Children’s Hospital Faculty Career Development Fellowship through the Eleanor and Miles Shore Fellowship Program for Scholars in Medicine at HMS.

Dr. MingMing Ning, Class of 2005, Assistant Professor of Neurology at HMS, is the 2011 recipient of the Robert G. Siekert New Investigator Award in Stroke from the American Stroke Association. A former K23 recipient, she now has R01 funding for her research, “Proteomic Profiling of Patent Foramen Ovale Related Neurovascular Injury.” One of her mentees, Dr. Sherry Chou, Class of 2009, Instructor in Neurology at HMS, just received her K23 award, “Biomarkers of Vasospasm and Outcome Following Subarachnoid Hemorrhage.”

Dr. George Washko, Class of 2006, Assistant Professor of Medicine at HMS and former K23 recipient, received R01 funding this year for his research on chronic obstructive pulmonary disease (COPD), “Computed Tomographic Characterization of Subjects Enrolled in the STATCOPE Investigation.” He is also the PI of the COPD Clinical Research Network.

Dr. Shamsah Kazani, Class of 2007, Instructor in Medicine at HMS, was accepted as a Harvard Catalyst KL2 MeRIT awardee in 2010 for her research on pharmacogenetics and biomarkers of the leukotriene pathway polymorphisms in asthma.

Dr. Bindu Chamarthi, a 2009 graduate and Instructor in Medicine at HMS, received the Brigham and Women’s Hospital Department of Medicine Fellowship through the Eleanor and Miles Shore Fellowship Program for Scholars in Medicine at HMS. Dr. Chamarthi was also accepted as a Harvard Catalyst KL2 MeRIT awardee in 2010 for her evaluating urinary free cortisol as a genetically determined intermediate phenotype of essential hypertension.

Dr. Tamara Isakova, Class of 2009, Assistant Professor at University of Miami Miller School of Medicine, received a K23 award in 2010 for her research, “Calcium Handling and Secondary Hyperparathyroidism in Chronic Kidney Disease.”

Dr. Lynda Vrooman, a 2010 graduate, Instructor in Pediatrics at HMS, is the recipient of the Dana-Farber Cancer Institute Fellowship through the Eleanor and Miles Shore Fellowship Program for Scholars in Medicine at HMS.

Dr. Maryam Afkarian, Class of 2010, received a K23 award in 2010 for her research, “Identifying Urinary Biomarkers for Early Type 2 Diabetic Nephropathy.” She is currently an Assistant Professor at the University of Washington in Seattle.

Dr. Jessica Lee, Class of 2010, is now Medical Officer in the Division of Gastroenterology Products at the Center for Drug Evaluation and Research at the FDA, while retaining an adjunct faculty appointment at Children’s Hospital Boston. She also received a Crohn’s and Colitis Foundation of America Career Development Award in 2010.

In addition to his accomplishments in the HBS course (see page 8), Dr. Nazem Atassi, Class of 2010, Instructor in Neurology at HMS, received a Career Development Award from the Muscular Dystrophy Association for Comparative Effectiveness in ALS Symptomatic Management.

Class of 2012
In the summer of 2010 we welcomed sixteen (16) new students to the program. Their names, affiliated institutions, and mentors are listed below:

Westyn Branch-Elliman (BIDMC, Dr. Sharon B. Wright)
Helena Canhão (BWH, Dr. Daniel Solomon)
Alicia Demirjian (CHMC, Dr. Marvin Harper)
Barbara Goldstein (BWH, Dr. Karen Costenbader)
Alexander Krug (BWH, Dr. Gail Adler)
Kate Madden (CHMC, Dr. Adrienne Randolph)
continues page 7
Images of 2010
Graduation Dinner and Ceremony

This page, clockwise from top: Dr. Juan Celedón, who was honored for his 2010 A. Clifford Barger Excellence in Mentoring Award; Graduate Dr. Gang Li (left), with wife, Andrea, and parents; Dr. Andrew Nierenberg, mentor to graduate Dr. Michael Ostacher; Program Advisor Dr. Dick Grand of Children’s Hospital

Next page clockwise from top left: Dr. Michael Ostacher (right) accepting his diploma; Graduate Dr. Serena Masciari with her husband and daughter; Class Valedictorian Dr. Danny Muehlschlegel (right), with his wife, Dr. Susanne Muehlschlegel; Graduate Dr. Tina Hermos ponders the evening’s program; Keynote Speaker Dr. Gordon H. Williams, founding Program Director
This page, clockwise from top left: Graduate Dr. Jessica Lee and husband, Dr. Robert Lim; Graduate Dr. Alvaro Laga and his wife, Dr. Nicte Mejia; Group photograph of the 2010 Graduates of the Scholars in Clinical Science Program

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Dr. Helena Canhão was accepted into the program as the first recipient of the Senior Clinical Research and Career Development Award from the HMS-Portugal Program, which was created in 2007 through a Memorandum of Understanding between HMS and the Portuguese Ministry of Science, Technology and Higher Education. The goal of the program is to encourage “internationalization and cooperation between Portuguese schools of medicine and major national research centers working in biomedical and health sciences.” More information about the program can be found at www.hmsportugal.org.

Committee on Mentoring News

Last year our Committee on Mentoring (COM) welcomed Caren Solomon, MD MPH, as its new Chair. Dr. Solomon is an Associate Professor of Medicine at BWH and Deputy Editor of the New England Journal of Medicine. The members of the COM act as program advisors on the Scholars’ thesis committees. The other current members of the COM and their affiliated institutions are listed below in alphabetical order:

- Gail Adler, MD PhD (BWH)
- David Borsook, MD PhD (McLean)
- Paul Conlin, MD (BWH)
- Gary Curhan, MD ScD (BWH)
- Barry Eisenstein, MD (BIDMC)
- Donald Goff, MD (MGH)
- Richard Grand, MD (CHMC)
- Steven M. Greenberg, MD PhD (MGH)
- Steven Grinspoon, MD (MGH)
- Igor Koralnik, MD (BIDMC)
- David M. Nathan, MD (MGH)
- Russell Phillips, MD (BIDMC)
- Steven Schachter, MD (BIDMC)
- Rochelle Walensky, MD MPH (MGH)
- Gordon Williams, MD (BWH)

Course and Curriculum News

With the departure of Dr. Juan Celedón last summer to the University of Pittsburgh, Benjamin Raby, MD MPH, who had been co-teaching Genetics in Clinical Investigation with Dr. Celedón for several years, assumed the role of course director. Dr. Raby, Assistant Professor of Medicine at HMS, is a pulmonologist and genome scientist at the Channing Laboratory at BWH. He received his MD from McGill University and came to Boston in 2001 to join the Respiratory Environmental and Genetic Epidemiology group at the Channing Lab to train with Dr. Scott Weiss and continue his postdoctoral research in genetic epidemiology. He received his MPH from the Harvard School of Public Health and joined the Channing faculty in 2003. Benji’s research focuses on using a variety of genomic approaches to define the molecular underpinnings of asthma and other lung disease. One such approach is expression quantitative trait (eQTL) mapping, which integrates genome-wide genetic data with microarray gene expression measurements to identify genetic variants that regulate gene transcription. His group is also studying the role of copy number variation in the development of asthma.

The 2010 HBS Project Fair, New Business from New Science – Projects from Commercializing Science, was held on Wednesday, 8 December 2010, on campus in the Spangler Center. The titles of the team projects and the Scholars who participated on the teams are listed below:

- **BCP21 – Novel Anticancer Drug** / Cesar Castro
- **Complement Activation for Oncology & Virology** / Vahid Entezari
- **Detection of Glycated CD59 for the Diagnosis of Impaired Glucose Tolerance** / Anand Vaidya
- **Hup A – A Fast Track Drug Candidate**
- **Addressing Markets in Pain & Epilepsy** / Scott Nielsen, Liana Billings
- **Injectable Polymer Gels for Ischemic Disease Treatment** / John Tsay
- **Mobile Urinalysis – Using iPhone as a Urine Analyzer** / Colin Carter
- **Surgical Probe Technology for Tumor Detection** / Al Hassanein
- **Targeted Cell Therapies** / Jonathan Gaffin, Geoffrey Walford, Rachael Grace
- **Using Math to Cure Jetlag & Maximize Human Performance** / Natalie Shaw, Andrew Lim
Harvard Catalyst Website Update

The Harvard Catalyst website has a new banner, called the Pathfinder, designed to help users navigate the site, which continues to offer a rich array of resources to clinical and translational scientists, trainees, and educators in the Harvard community. The on-line application for the SCSP is now accessible via the Catalyst site, which also includes an article about the Harvard Business School (HBS) project pursued by two of our 2010 graduates, Dr. Nazem Atassi and Dr. Karine Scheuermaier. Their team project won the Life Science Track prize and the Audience Choice award for best business plan idea at the 2010 MIT 100K Competition. The project acquired $30,000 in seed money for a startup company dedicated to developing novel methods for the treatment of amyotrophic lateral sclerosis (ALS). The course that Scholars are required to take at HBS is directed by Professor Vicki Sato, who was featured in our last newsletter. Go to http://catalyst.harvard.edu/services/scholars to access the SCSP portion of the Catalyst website for more news and information.

Fifth Round of Clinical and Translational Science Awards (CTSAs) and New K30s Funded

In 2010, the NIH awarded CTSAs to nine academic health centers, expanding the total number of these awards to 55 member institutions in 28 states and the District of Columbia. The nine new awardees are listed below in alphabetical order:

- Children’s National Medical Center (Washington, DC)
- Georgetown University with Howard University (Washington, DC)
- Medical College of Wisconsin (Milwaukee, WI)
- University of California, Irvine
- University of California, Irvine
- University of California, San Diego
- University of Massachusetts (Worcester, MA)
- University of New Mexico Health Sciences Center (Albuquerque, NM)
- University of Southern California (Los Angeles, CA)
- Virginia Commonwealth University (Richmond, VA)

The sixth and final round of funding will increase the number of CTSA awards to a total of 60. The deadline for proposals was 14 October 2010. We hope to announce the final five awardees in our next newsletter.

In addition to the new CTSAs, the National Center for Research Resources (NCRR) awarded 8 new 3-year K30s. Only institutions that did not have CTSAs were considered. The goal of this round of K30 funding was to bridge those academic health centers with continuing support while preparing their CTSA applications. The applications were open to institutions that had never had a prior K30 as well as those that had received K30 funding in the past. The 8 new K30 awardees are listed below in alphabetical order:

- Baylor College of Medicine
- State University of New York Stony Brook
- University of California Los Angeles
- University of Connecticut School of Medicine and Dentistry
- University of Kansas Medical Center
- University of Maryland Baltimore
- University of Miami School of Medicine
- University of Vermont and State Agricultural College

Association for Clinical Research Training (ACRT) and Society for Clinical and Translational Science (SCTS)

Last April the ACRT and SCTS held their first joint annual meeting in Washington, DC, and in 2011 the American Federation for Medical Research (AFMR) will join as an additional partner. The Association for Patient-Oriented Research (APOR) also contributes to the meeting by sponsoring workshops and various presentations. Dr. Ellen Seely, Professor of Medicine at HMS and frequent mentor in our program, is the current President of APOR. Dr. Vahid Entezari, Class of 2011, attended the 2010 meeting with the help of a Burroughs-Wellcome Travel Award. As an institutional member of ACRT, the SCSP offers free membership to all of its trainees. Please contact Lauren Dewey Platt, who is a member of the board of the ACRT, for more information about the association and its annual meeting.
Program Office News

Paul R. Conlin, MD, Associate Professor of Medicine at HMS and SCSP Program Director, has assumed two important roles at the Veterans Administration (VA) Boston Healthcare System, where he is Chair of the Department of Medicine. He is now serving as Chair of the Executive Committee, VA Diabetes Quality Enhancement Research Initiative, whose role is to disseminate and integrate clinical research findings into clinical practice of diabetes care. He also acts as Chair of the VA Diabetes-Endocrinology Field Advisory Committee, which serves in an advisory capacity to the VA Office of Patient Care Services on clinical policies and programs promoting the delivery of high-quality diabetes care.

Lauren Dewey Platt, PhD, Program Manager of the SCSP and the Harvard Catalyst KL2 MeRIT Program, recently was appointed to faculty as Lecturer on Medicine at HMS. In 2010 she co-authored a paper with her ACRT colleagues on translational research and its implications for training, which appeared in Academic Medicine, and she has been taking courses on participant-centered learning at Harvard Business School.

Since the Program Office has assumed responsibility for the KL2 admissions process, we have been updating and refining the KL2 on-line application and website content. Second-year Scholars students and Scholars graduates in the Harvard community who are within three years of the first faculty appointment are eligible to apply for KL2 support. Please check the Harvard Catalyst website for more information about KL2 MeRIT.

Gordon H. Williams, MD, Chair of the Committee on Admissions, is the recipient of the 2010 American Heart Association Clinical Research Prize. Dr. Williams was chosen for this award in recognition of his many important contributions to our knowledge of the role of hormones in hypertension and other cardiovascular diseases. Throughout his career Dr. Williams has studied the underlying causes of hypertension, while simultaneously focusing his advocacy efforts on garnering support for and education of patient-oriented investigators, which he has accomplished through his leadership roles in the Scholars in Clinical Science Program at HMS and the Center for Clinical Investigation at BWH. We congratulate Gordon on being selected for this prestigious award and on his many prior and ongoing contributions to our program.

Save the Date!
The 2011 Graduation Dinner and Ceremony will be held on 27 May 2011 in the Third Floor Rotunda of The Joseph B. Martin Conference Center at HMS. With the graduation of our tenth cohort this year, we are pleased to report that Myles Wolf, MD MMSc, a member of our first cohort of students and a 2002 graduate, will attend as the keynote speaker. Dr. Wolf is an Associate Professor of Medicine and Assistant Dean for Translational and Clinical Research at University of Miami Miller School of Medicine. Invitations to the event will be arriving by mail soon!