

In this issue...

2

Community Service Learning

3

Student Spotlight:
Kristine Corkum &
Lauren Szolomayer

4

TUSM's Top Lecturers

6

Faculty Focus:
Doug Jefferson, PhD

7

IDEAS in Medicine

8

Faculty Development
Workshops 2010-2011

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Please direct your comments to Ann Maderer by phone 617-636-2191, or email, ann.maderer@tufts.edu.

Humanism and Excellence in Teaching Awards *Arnold P. Gold Foundation*

On Monday, June 28, 2010, Tufts University School of Medicine held their Student Clinician's Ceremony to honor those residents who exhibited particularly strong teaching skills and are role models for compassionate, relationship-centered care. The ceremony was attended by the incoming third-year class and awards were presented by Dr. Amy Kuhlik, Dean for Students. Each award winner was presented with a certificate, a specially designed gold lapel pin, and a check for \$250 from The Gold Foundation. The awardees will also be showcased on the Accreditation Council for Graduate Medical Education ([ACGME](http://www.acgme.org)) website. A luncheon followed the ceremony. Honored residents selected by TUSM third-year medical class of 2012 are:



Jing (Jeannie) Chen, MD, Amy Kuhlik, MD, Dean of Students, Shana Zandman, MD, Fahad Al Sindi, MD (not shown: Ethan Rowin, MD, Kirsten Sasaki, MD, Paul Whiting, MD)

MEDICINE

Fahad Al Sindi, MD

Royal College of Surgeons of Ireland

Fahad Al Sindi is currently a third-year resident in Medicine at Lahey Clinic in Burlington, Massachusetts and has been nominated to be Chief Resident for the 2011-12 academic year. Fahad's enthusiasm and passion shows and he is known for being an excellent teacher. TUSM students noted that Fahad "is very skilled at using any downtime to enthusiastically tell students about a case and recreate the mystery and excitement of the case." Students appreciate that his Socratic method of teaching is both warm and inclusive. (continued on page two)



Tufts students helping Mississippi communities after Hurricane Katrina.
Photo by Melody Ko/Tufts University Photo

Community Service Learning

A hallmark of the profession of medicine is providing service not just to individual patients but to the community at large (local, regional, national and international). Community Service has been a requirement for Tufts students for more than a decade.

We have posted a FAQ for Community Service Learning: <http://tusk.tufts.edu/view/url/Medical/2044/1027933>. Please read this before considering your CSL experience.

The TUSK CSL website is at: <http://tusk.tufts.edu/view/course/Medical/2232>.

If, after reviewing these sites, you have additional questions, please contact the CSL Coordinators, Ann Maderer and Nicole Love at csl@tufts.edu, 617-636-6934.

Gold Awards (continued from page one)

Ethan Rowin, MD

Tufts University School of Medicine MD/MBA

Ethan graduated last year from Tufts in the combined MD/MBA program and is a second year resident in medicine at Tufts Medical Center. At the end of his internship he received the outstanding intern teaching award based on feedback from the third-year students. Ethan is warm and efficient on the wards and dedicates any spare time to teaching. Students enjoy that “Ethan adds humor and lightness to everything he does without compromising professionalism- this makes him approachable not only to colleagues and to medical students, but to patients as well.”

OBSTETRICS & GYNECOLOGY

Jing (Jeannie) Chen, MD

Columbia School of Physicians and Surgeons

Jeannie graduated from Columbia School of Physicians and Surgeons and is now a second-year resident in OB/GYN at Tufts Medical Center. She is always friendly and has a warm and compassionate bedside manner. Jeannie was nominated by TUSM students for her teaching ability: “From explaining things in the OR, to teaching with every patient on rounds, to allowing [students] to practice IV placement on her, she made sure that the medical student always felt like an active member of the team.”

Kirsten Sasaki, MD

Boston University School of Medicine

Kirsten receives high accolades from students for her calm presence and her ability to prioritize teaching. TUSM students cited Kirsten as “an example to medical students in both her bedside manner and her patience as they learn.” She graduated from Boston University School of Medicine and is a third year resident in OB/GYN at Tufts Medical Center. “She is truly a model resident: smart, organized, hard-working, happy.”

SURGERY

Paul Whiting, MD

Harvard Medical School

Paul, a graduate of Harvard Medical School, is a second year resident in surgery at Tufts Medical Center. Paul was nominated by TUSM students “for his willingness to go above and beyond a typical intern to find interesting cases and learning opportunities for medical students.” In July, he will join the Tufts orthopedic residency.

PEDIATRICS

Shana Zandman, MD

Mount Sinai Medical School

Shana graduated from Mount Sinai Medical School and is a third year resident in Pediatrics at the Floating Hospital for Children at Tufts Medical Center. Shana always made time to go over cases with students and “was also genuine and very kind-hearted - a great role model for the students.” Shana has been asked to stay on as Chief Resident because of her clinical and teaching skills.

Student Spotlight: Kristine Corkum, M'13 and Lauren Szolomayer, M'13

You worked this summer developing on-line modules for the Community Service Learning (CSL) Program at TUSM. Your work was funded by a TUSM Innovations in Medical Education Grant. What motivated you to take on this project?

Kristine: I spent my undergraduate years at Holy Cross where community service was made a priority because of the Jesuit mission of 'men and women for others.' Holy Cross had a great Community-Based Learning initiative and students were actively involved in wide range of service activities geared to improve the campus-community relationship in Worcester, MA. I saw the CSL innovations project as an opportunity to take part in developing a similar program that would help Tufts' medical students prepare for their meaningful service projects within the local Boston communities.

Lauren: I have always thought that community service was not only a duty we have as individuals to give back to our community, but a critical component to one's personal and professional development. In my previous job as an engineer, I led several volunteer activities centered around encouraging girls and underprivileged youth to continue to pursue studies in math & sciences by involving them in fun engineering projects or shadowing engineers. Creating the CSL modules seemed like an excellent way to learn the elements of a successful service project, build the connections between Tufts and the communities that host our campuses, discover how medical students can contribute to the health care in these communities and then share this information with my peers.

What will students find in the modules and how will they use them?

The TUSM modules describe the mission of Community Service Learning (CSL), the importance of CSL to medical student's education, and how it contributes to the overall well-being of Tufts' host

communities. Specific module topics include: guidance on establishing successful community partnerships, developing a sustainable project, and reflecting on the experience. The modules also encourage students to think about the challenges facing our surrounding communities, the assets that may be built upon, and how the community can benefit from their medical knowledge and skills. In the future, students will complete modules before committing to a service project. This will enable them to find the project that is the best fit for them, thereby allowing them and the community partner to gain the most from the experience.



Lauren Szolomayer and Kristine Corkum

You worked closely with faculty from the Tufts University Jonathan M. Tisch College of Citizenship and Public Service on the Medford campus. What should TUSM students know about this remarkable resource?

The faculty at Tisch are dedicated to improving community-campus relations and are a great resource for students who are interested in service initiatives. They are knowledgeable about the challenges our local neighborhoods face and passionate about making a difference. Their ideas about sustainable and meaningful community service were essential to the development of the CSL initiative.
(continued on page four)

Student Spotlight *(continued from page three)*

Tell us about yourself.

Kristine: I am from Ipswich, Mass. and I went to Holy Cross where I received a bachelor's degree in Biology and played Division I women's lacrosse. I am currently establishing a community partnership with the Somerville High School Athletic Department where I plan on helping out with athletic training needs while also developing an educational program for young student-athletes about fitness, nutrition, injury prevention, and rehabilitation.

Lauren: Originally from Ashland, MA, I graduated from Princeton University with a bachelor's degree in Mechanical and Aerospace Engineering. I spent four years working in Systems Engineering at Boeing Satellites in El Segundo, California, before starting medical school. I'll be developing a community service project to work on for this year, but I am looking forward to finishing second-year and getting into the hospital.

Welcome, Christine!

We are pleased to announce that Christine Griffin joined the OEA staff in August in the position of Administrative Coordinator for Evaluation. Her office is located in the Clinical Skills and Simulation Center at 35 Kneeland, 3rd Floor.

Previously, Christine worked as a Library Assistant in the Louis Lasagna Library in TUSM's Center for the Study of Drug Development and had also assisted in the Hirsch Health Sciences Library. Under the supervision of Yung-Chi Sung, Christine is primarily responsible for coordinating the evaluation for all courses, programs, clerkships, and fourth-year rotations.



Chrissie Griffin

Recognizing TUSM's Faculty Lecturers

"Great presentations illuminate, inspire and challenge." Irby further explains that lecture teaching is good at "providing a framework for learning new concepts, modeling thought processes, challenging assumptions and standpoints, and inspiring further learning."

In this issue, we want to recognize a group of TUSM faculty members who, according to student evaluation of faculty teaching, deliver enlightening and inspiring lectures. These faculty lectures ranked in the top 10% of faculty lecturing in the past academic year student course evaluations:

Wayne Altman, MD

Paul Abourjaily, PharmD

Lester Adelman, MD

Michael Barza, MD

Peter Brodeur, PhD

John Castellot, PhD

Augustus Colangelo, MD

Laurie Demmer, MD

Scott Epstein, MD

Scott Gilbert, MD

William Harvey, MD

Thomas Hedges, MD

Carl Heilman, MD

Daniel Jay, PhD

Robert Kalish, MD

Joshua Katz, MD

Arthur Rabson, MD

Steven Ralston, MD

Cathy Rosenfield, MD

Beverly Rubin, PhD

Abraham L. Sonenshein, PhD

Dana Stearns, MD

Geoffrey Sunshine, PhD

David Thaler, MD, PhD

Cheleste Thorpe, MD

David Tybor, MS, MPH

Robert Willson, PhD

The following are some aspects of their lecture teaching that students highlighted as contributing factors to their learning:

Learning Environment

- “Kept the material interesting and relevant.”
- “Makes it interesting, lively, understandable.”
- “Very entertaining and easy to pay attention to.”
- “Enthusiasm is infectious.”
- “Is genuine and passionate about what he does, and this is conveyed through how he talks to us.”

Conveying Content

- “Explained concepts very well and walked us through each logical step.”
- “Emphasized the important information.”
- “Willing to explain concepts in more than one way.”
- “Explained the reasoning behind every test, rather than just presenting the tests.”
- “Good job of combining hard science with more patient-centered approaches to the science.”
- “Extremely relevant stories from own practice [which] really maximized my appreciation of the topics and how important they were clinically”.
- “Played the unbiased role and questions everything. It made us think.”
- “Relevant and important information was discussed while extraneous and overly-detailed information was omitted.”

Presenting the Material

- “Good use of images and movies to illustrate structures and physiological processes of interest”
- “Incorporation of IClickers and clinical cases to review key concepts was very helpful.”
- “Slides were clear and concise”

We also wanted to take this recognition as an opportunity to inspire other faculty teaching. Therefore, we asked this group of faculty to share with us their top recommendations for delivering an effective lecture. The following are words of wisdom on lecturing they shared with us:

- “Keep it simple and clear. Make it personal and tell jokes (good ones if you can).” – Daniel Jay
- “I like to keep the class engaged by asking them questions and soliciting their opinions on interesting ethical scenarios. Showing lots of pictures helps too.” – Laurie Demmer

“Teaching is about connecting with students. It is more than presenting material - it is about revealing its importance and relevance so student engage and participate in the process. This requires a deconstruction and then resynthesis in a way students can grab, comprehend, and then apply.”
– Scott Gilbert



Students in Lecture Hall, 1977
(UA015) Digital Collections and Archives, Tufts University.

“Less POWERPoint or less complicated POWERPoint slides. The slide should show only the issue that you wish to demonstrate, not related attractive but confusing additions; Move away from the podium and interact with the class; Keep it short and keep it simple. Class will not remember complicated concepts.” – Arthur Rabson

“Integrate several ‘scheduled breaks’ into the lecture to allow students to refocus. This might be a brief change in the pace of the lecture by sharing a personal experience that is relevant to the topic, posing a question, or stopping to recap the central concepts just covered.” – Peter Brodeur

Additional faculty teaching tips will be published in the next OEA newsletter.

TUSM faculty teaching efforts are a vital component of our educational mission. We are extremely grateful to our faculty as they continue to enlighten and inspire students and colleagues with their teaching.

Tapes of best faculty lecture practice are available for faculty review at our Faculty Devevelopment website: <http://tusk.tufts.edu/view/course/Medical/1891>.

* Irby, D. (2004). Practical teaching: great presentations every time. *The Clinical Teacher* 1: 5-9.



Faculty Focus:

Doug Jefferson, PhD

Associate Professor of Physiology

Course Director, Core Physiology
Co-Director, Gastroenterology Course
Director, second-year Physiology

Physiology has undergone a substantial change in the new curriculum. The course had been exclusively a first-year course. Now the majority of material is taught in the second- year and is integrated with Pathophysiology, Pathology and Pharmacology. How do you think this will benefit our students? What has been your approach to foster integration with other courses/disciplines?

The teaching of normal medical physiology has always held an important place in the study of medicine. It is only when one understands normal physiology that one can recognize and treat disease. Prior to the 2009-2010 academic year, medical physiology at Tufts was given as a single block of 53 lectures to first-year students, while the study of pathophysiology and pathology occurred in the second-year curriculum. The separation of normal physiology and disease made it challenging for students to fuse these different disciplines together in a cohesive understanding of health and disease. This compartmentalized approach to basic science learning has been replaced with an integrated curriculum that more closely reflects the way in which students will be expected to recognize and address clinical issues in the future.

The design of the new second-year curriculum came out of extensive meetings of the basic scientists and clinicians. These groups made decisions as to what lectures were to be given, the order of the lectures and how to eliminate any redundancy in the information being presented. The group's goal was to produce a curriculum that flowed naturally from normal organ function to disease. This new second-year curriculum provides a logical progression of acquiring knowledge that integrates health and disease. This change in learning is being achieved by providing lectures sequentially on a specific organ or tissue. Typically, the first lecture of the day provides the normal physiology followed immediately by lectures given by clinicians on pathophysiology and pathology. This logical progression of information provides students with a clear picture of how changes in normal physiology lead to disease. Once students master these basic science and clinical concepts and make the connections between health and disease, they will have a solid base upon which to build their clinical skills.

You are the Course Director for Core Physiology (part of MedFoundations II), Co-Director for the Gastroenterology Course (2nd year) and overall Director for 2nd year Physiology. What do you see as the most important aspect of these leadership roles?

My primary goal is to ensure that the courses and materials are well integrated so that students get a total, cohesive view of the subject matter. Once the course is in place, maintaining the integration and cohesiveness can best be assured through direct interaction with lecturers and students. I personally find that going to lectures and following along in the course syllabus allows me to better understand what students are experiencing. Also, talking with students after a lecture provides a quick and effective way to gauge the success of the lectures.

(continued on page seven)

(continued from page six)

Tell us about your research.

There are two main projects we have on-going in the laboratory. The first project involves a collaboration with Dr. Brent Cochran (Physiology Department and Co-Director of the second-year Endocrinology Course). We are working on the detection and possible treatment of glioblastomas. Glioblastoma is a brain tumor; patients with glioblastoma have a median survival of 14 months. Even after successful surgical resection of the bulk of the tumor followed by radiation and chemotherapy, almost all glioblastomas recur. Recently, glioblastoma stem cells have been proposed to be the origin of glioblastomas. These tumor stem cells have the properties of normal adult stem cells but are also capable of initiating tumors in experimental models. We have been successful in culturing these stem cells from tumors resected at surgery. We have made a bank of monoclonal antibodies specific to glioblastoma stem cells and are in the process of screening these antibodies against pathology specimens and patient sera to determine whether there is one or more glioblastoma stem cell marker(s) that can be used for early detection and possibly treatment of human glioblastoma.

The second project involves studies on cystic fibrosis (CF). CF is a genetic disease mainly of the airway but it also involves other tissues. The CF-affected tissue that my studies focus on is the liver. In the normal liver, only epithelial cells that line bile ducts express the cystic fibrosis transmembrane conductance regulator protein (CFTR). It is the absence of CFTR in the plasma membrane of cells that causes the CF phenotype. It is thought that CF associated fibrotic liver disease is due to inflammation caused by blockage of bile ducts. We hypothesize that this bile duct blockage is due to the reduced function of the bicarbonate/chloride anion transporter ($\text{Cl}^-/\text{HCO}_3^-$ exchanger). The $\text{Cl}^-/\text{HCO}_3^-$ exchanger plays an important role in pH regulation of the bile by secreting HCO_3^- into the lumen of the bile duct. Bile components like bile acids precipitate when the bile is not alkaline and could cause blockage of the bile ducts. Our goal is to determine the mechanism(s) by which the lack of CFTR in the plasma membrane causes dysfunction of the $\text{Cl}^-/\text{HCO}_3^-$ exchanger.

Announcing New Innovations in Diversity Education Awards

In recognition of the importance of diversity education at Tufts, Dean Joyce Sackey, MD announces the Innovations in Diversity Education Awards (IDEAS) program.

Designed to support medical or resident education, this program aims to help support faculty members pursuing scholarly and innovative work in the areas of diversity, health care disparity and/or promoting cultural competency among students and trainees.

Applications for these grants will be accepted in parallel with the Innovations in Education Grants cycle, with letters of intent being due on December 30, 2010 and full proposals due on January 31, 2011. Further details will be forthcoming.

For additional information, please contact Jeanine Chisholm (jeanine.chisholm@tufts.edu).



Interns and fourth-year medical students learn to insert a central intravenous line at the Clinical Skills and Simulation Center.

Faculty Development Workshops 2010-2011

We are pleased to announce the series of faculty development workshops that will be offered this academic year. Workshops are free of charge and are held at TUSM, Sackler Building, 145 Harrison Avenue, Boston (unless otherwise noted). If you have questions, or to register for the workshops below, please contact Sharon Freeman at 617-636-0891 (sharon.freeman@tufts.edu).

Giving and Receiving Constructive Feedback: How to Provide Learners with Useful Feedback while Receiving Useful Feedback on your Teaching

Monday, November 15, 2010, 1-3pm, Sackler, Room 114

Faculty: Maria Blanco, EdD

Description: At this hands-on workshop, participants will be able to reflect on and discuss their teaching experiences giving feedback to learners. Participants will analyze feedback scenarios and distill the essential characteristics and components of constructive feedback that promotes lifelong learning. Participants will also identify strategies for seeking useful feedback on their teaching while providing constructive feedback. The essential elements of constructive feedback together with a framework and tips for giving constructive feedback will be reviewed. Participants will have the opportunity to put these tips and framework into practice at the workshop.

Research in Medical Education Grantsmanship: How to Write Effective Grant Proposals

Tuesday, November 30, 2010, 1-3 pm, Sackler, Room 216A

Faculty: Maria Blanco, EdD; Mary Y. Lee, MD

Description: Participants will identify challenges, strategies and guidelines for writing effective medical education research (MER) grant proposals. Criteria for evaluating grant proposals, as well as guidelines for submitting proposals to TUSM Innovations in Education Intramural Grant Program and AAMC Northeast Group on Educational Affairs Innovative Educational Research Grant Program will be reviewed. Participants will have the opportunity to apply these grant writing strategies to their MER projects and receive peer feedback. Practical handouts and

information about other potential funding agencies for MER will be provided.

4th Annual Rising Chief Resident Faculty Development Conference

Monday, April 4, 2011, 12:30-5pm, Sackler 114

Faculty: Laura K. Snyderman, MD; Wayne J. Altman, MD, FAAFP; Maria A. Blanco, EdD; Mary Brown, MD; Priya Garg, MD; Hong-Thao N. Thieu, MD

Description: Rising chief residents will have the opportunity to participate in a curriculum that is focused on teaching, mentoring, mediating, and leadership.

13th Annual Practical Approaches to Precepting

Friday, April 15, 2011, 9am-5pm, TUSM

Description: This conference features hands-on clinical workshops in the morning and interactive faculty development workshops in the afternoon. The conference is geared toward TUSM clinicians who teach medical students in an ambulatory setting. All disciplines are encouraged to attend. Fellows and residents are also welcome. The conference will be a full day; however, participants are welcome to attend any part of the day.



Photo by Patrick O'Connor for Tufts University

Team-Based Learning: How to Use this Instructional Strategy to Promote Learner's Active Learning while Maximizing Faculty Teaching

June, 2011 (day and time tbd)

Invited Scholar: Paul Haidet, MD, MPH. Director, Medical Education Research. Professor of Medicine and Humanities. Penn State Milton S. Hershey Medical Center. Penn State College of Medicine.