



The Medical Scientist

A Publication of the University of Illinois at Chicago Medical Scientist Training Program

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Calendar:

Thursday, August 21, 5:30
DINNER SEMINAR
Alexander Mankin, PhD

Tuesday, Sept. 9, 6:00
CLINICAL CONNECTIONS
ORIENTATION DINNER
AT MILES SQUARE

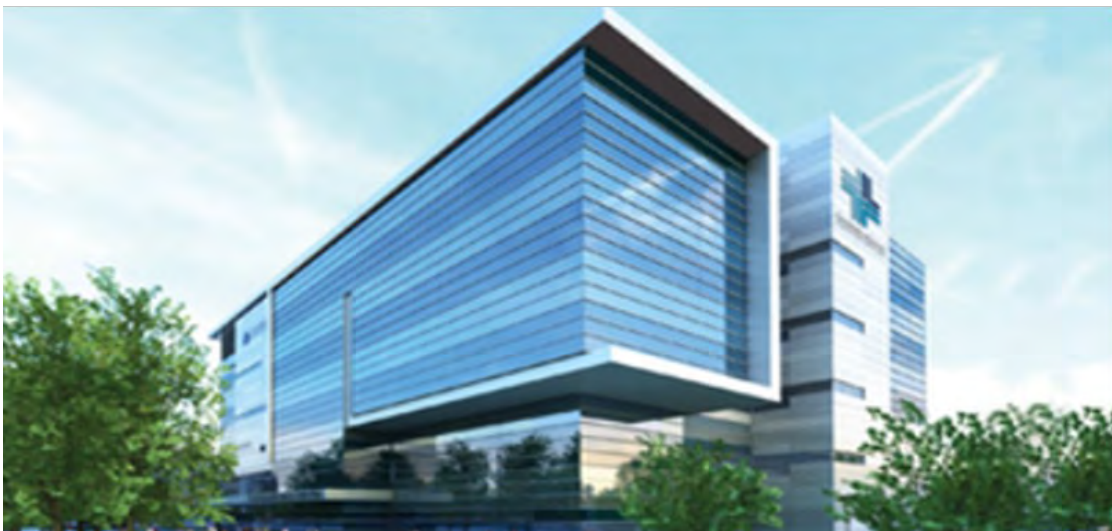
Monday, Sept. 17, 5:30
DINNER SEMINAR
Randal Dull, MD, PhD

Tuesday, October 7, 5:30
DINNER SEMINAR
Joanna Burdette, PhD

SAVE THE DATES
Thurs., November 20
MSTP Research Sym-
posium ORAL
PRESENTATIONS

Fri., November 21
COM Research Forum
POSTERS

The MSTP revamps clinical exposure for graduate students, forms new partnership with the Mile Square Health Center



Starting this academic year the UIC Medical Scientist Training Program (MSTP) is proud to announce a new and exciting partnership with the Mile Square Health Center (MSHC). The new collaboration is designed to provide an opportunity for the MSTP students in the PhD phase of training to maintain the clinical skills gained during the M1 and M2 years. The opening of UIC's new clinic in January 2014 was the inspiration to current students **Alicia Rizzo** (G3), **Tiffani Berkel** (G2) and **Ally Young** (M2) for a new endeavor utilizing the facilities and clinical staff at Mile Square. In the Spring they contacted Kamaron Matthews MD, JD, the Chief Medical Officer at UI Health Mile Square Health Center who has been instrumental in organizing the new initiative.

The new main MSHC site, located on UIC's campus, is recognized as a Federally Qualified Health Center (FQHC). The facility is staffed by UIC faculty in the departments of Family Medicine, Obstetrics and Gynecology, and Pediatrics. The mission of the MSHC "is to provide holistic, quality health services in the midst of an underserved, urban community. The concept of holistic services includes not only actions to restore health, but also to prevent disease, promote healthy life styles and provide personalized support to individuals and families. Community education, outreach, advocacy and caring involvement are important attributes of our mission." The MSTP shares in this mission, which has led to this student-initiated and designed collaboration.

Dr. Matthews received her MD from Johns Hopkins University and her JD from the University of Chicago. She is herself a graduate of the UIC Family Medicine Residency program, where she served as a Chief Resident during the 2009-2010 year. Dr. Matthews brings tremendous expertise in family medicine as well as the unique challenges of providing medical care to underserved populations. She previously served as Site Medical Director of the Division Street site of Erie Family Health Center, a FQHC in Chicago that treats an underserved, Latino patient population.

The collaboration between MSHC and the MSTP will involve pairing MSTP students with physician preceptors at MSHC for a longitudinal experience in Family Medicine, Pediatrics, or Obstetrics and Gynecology, with additional opportunities available at the Urgent Care Center. This experience will provide students with longitudinal mentorship with UIC faculty physicians as well as a longitudinal relationship with patients. The UIC MSTP students are very excited by this opportunity and great success is anticipated for this program!

To inaugurate this new aspect of MD-PhD training, Dr. Mathews will host an orientation presentation with dinner at Mile Square for all students in the program (current M3s and M4s may be excused). The event is scheduled for: **Tuesday, September 9 at 6:00 pm, MSHC, 1220 S. Wood St., 2nd floor.**

The Next Generation of Physician-Scientists: Meet the Newest MSTP Students

We proudly welcome our eight entering students for 2014: four men and four women. Before introducing them individually, we wish to point out some interesting statistics among the class members, which, as was the case in the 2011, 2012 and 2013 entering classes, all deal with the number 2:

1. Two are from Omaha, Nebraska.
2. Two are joining the same lab for their first rotation (as was the case in the last 3 years).
3. Two are musicians (piano /guitar and viola/guitar).
4. Two are interested in neuronal plasticity.

Other facts: The names of this group are very interesting. Four of them have unique names, never before seen in this program: Osama, Artemis, Evguenia (aka Jane), and Cory; while the other four have names with many duplicates: Joseph will be the 3rd current student with that name and the second with the same final initial. Michael will also be the third with that name. And Alex and Allison are the sixth and seventh additions to the current "Alexander group" (including feminine versions Alexandria and Alejandra).

Without further ado, we present the entering class of 2014:



Osama El Sayed

Home town: Bloomfield Hills, Michigan

Degree: BS, Biochemistry, University of Michigan, May 2014

Research Interests: Applied biochemical research; finding treatments for infectious disease and antibiotic resistance in bacteria

2014 Rotation: Lab of Zheng Chen, MD, PhD, Dept. of Microbiology & Immunology

Why UIC?: "I decided to come to UIC because of the pleasant culture I saw among the students in the program when I was interviewing, because of the strong research opportunities, and the great city of Chicago."

Fun Fact: Osama was a founding member of "Health2Africa," an effort designed to send unused medical supplies to underdeveloped nations.

Joseph Geraghty

Home town: West Islip, New York

Degree: BS, BA, Biochemistry and Spanish, SUNY Geneseo, May, 2014

Research Interests: Neuroscience and Infectious Diseases, particularly a biochemical and molecular approach to understanding the development of these diseases as well as effective and novel methods of treatment or prevention.

2014 Rotation: Lab of Douglas Feinstein, PhD, Dept. of Anesthesiology

Why UIC?: "I was drawn to UIC by the quality research taking place, the welcoming atmosphere I encountered with faculty, staff and students, and the opportunity to learn in and explore a new city."

What are you looking forward to?: "Right now, I'm most looking forward to starting classes and being exposed to new colleagues, mentors and friends."



Artemis Gogos

Home town: Lincoln, Nebraska

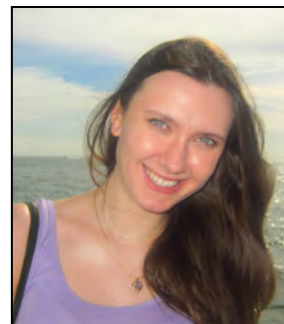
Degree: BA, Biochemistry, Grinnell College, May 2014

Research Interests: Biochemistry & Molecular Biophysics: protein-protein interactions, protein-ligand interactions, biophysical protein analysis, peptide chemistry.

2014 Rotation: Lab of Miljan Simonovic, PhD, Dept. of Biochemistry & Molecular Genetics

Why UIC?: "I chose the UIC MSTP because I really enjoyed the program's environment during my interview and second visit. All the students knew each other well, and you could tell that they interacted and supported each other across class years. I also loved the MSTP suite, and I can't wait to hang out in it all the time."

Fun Fact: Artemis played for the Grinnell Women's Varsity Volleyball team 2010 to 2014.

Evguenia "Jane" Ivakhnitskaia**Home Town:** Falls Church, Virginia**Degree:** BA, Biological Sciences, Cornell University, May 2013**Post-graduate work:** IRTA Fellow, National Institute of Mental Health**Research Interests:** Neuroscience: plasticity in cases of neurologic disorders, development of the visual system, mechanisms behind visual processing.**2014 Rotation:** Lab of Ernesto Bongarzone, PhD, Dept. of Anatomy & Cell Biology**Why UIC?:** "I believe that this is the school that will provide the most nurturing environment for me to develop into a successful physician scientist. I know that [everyone] involved in the program will encourage and guide me to take full advantage of my own potential."**Fun Fact:** Jane served as president of the "Disabilities Service Troop" at Cornell.***Allison Kirchner*****Home Town:** St. Paul, Minnesota**Degree:** BA, Neurobiology & Math, University of Wisconsin, May 2013**Post-graduate work:** Medical Scribe, Emergency Room Dept. of Woodwinds Hospital, Woodbury, MN**Research Interests:** Neuroscience, Molecular Biology; Molecular Neuropharmacology, specifically the effects on neuronal plasticity, including both LTP and LTD.**2014 Rotation:** Lab of John Larson, PhD, Dept. of Psychiatry**Why MD/PhD?:** "I do not see them [MD and PhD] as distinct titles. I chose the MD/PhD dual degree because it integrates both scientific production and implementation."***Cory Reiter*****Home town:** Aurora, Colorado**Degree:** BS, Molecular Biology, University of Denver, November 2011**Post-graduate work:** Research Assistant, U. Colorado Anschutz Medical Campus**Research Interests:** Multiple Sclerosis, Bioengineering, Neurology, Immunology**2014 Rotation:** Lab of Ernesto Bongarzone, PhD, Dept. of Anatomy & Cell Biology**Why MD/PhD?:** "I chose to pursue an MD/PhD because of my upbringing with a mother who had a serious, chronic illness. I watched her go through so many trials and tribulations, particularly because so little was known about her disease. As I grew up, I witnessed the monumental difference physicians, and specifically physician scientists, can make in individual lives. I cannot wait to make similar life-changing contributions for those afflicted by disease and their families."***Michael Sun*****Home town:** Lisle, Illinois**Degree:** BS, Molecular Cellular Biology, University of Illinois Urbana Champaign, May 2014**Research Interests:** Cancer Development: UIC Cancer Center; Cancer Biology, Cancer Targets and Therapeutics; the cellular molecular pathways in the progression of different tumors.**2014 Rotation:** Lab of Asrar Malik, PhD, Dept. of Pharmacology**Why MD/PhD?:** "I think combining both degrees offers a very unique perspective on diseases and the human body."**Why UIC?:** "I chose the UIC MSTP program because it offers me great opportunities for my career goals, and the people I met in the program are awesome."***Alexander Terry*****Home town:** Omaha, Nebraska**Degree:** BA, Biological Sciences, University of Chicago, May 2014**Research Interests:** Molecular/cellular/developmental biology focused on cancer biology, specifically metabolism and extracellular matrix interactions with cells**2014 Rotation:** Lab of Brad Merrill, PhD, Dept. of Biochemistry & Molecular Genetics**Why MD/PhD?:** As the son of two physicians, medicine has always been a big interest of mine.

Once I got to college I fell in love with basic science and research. So, it made perfect sense for me to go into a program that links these two together and will ultimately allow me to participate in both fields. The dual degree provides flexibility for choosing a career in academia or the clinic, but more importantly, it provides me with the best possible training for my future.



Awards, Honors, Presentations – Congratulations!

May 1—Sean M. Blitzstein, M.D., Director, Psychiatry Clerkship and Clinical Associate Professor of Psychiatry, announced the 2014 Gold Humanism Honor Society inductees including rising M4 **Ryan Carr**

May 2—Karen Tye, MS, President, COM Class of 2016 announced the election results for the Class Board for the rising M2 class of 2017. The new Historian will be **Mir (Isaam) Isaamullah**.

July 24—Returning from her honeymoon, **Erin Beisner** found out that she was a recipient of an NIH the F30 Fellowship. Her official Notice of Award was emailed on August 1st,

August 6—Dr. E/ Douglas Lewandowski, Director, Center for Cardiovascular Research Professor, Depts. of Physiology & Biophysics and Medicine (Cardiology) announced that **Joseph Goldenberg** is a finalist in the Center for Cardiovascular Research Young Investigator Awards Competition. The three finalists will present brief oral presentations of their work at 11:30 on August 15, 2014, in Moss Auditorium. H=Joe's presentation is entitled "ACS and gender modulate myocardial transport kinetics of exogenous long-chain fatty acid and intracellular lipid handling." From these oral presentations and a brief question/answer period, a Young Investigator Awardee and two runners up will be determined by the CCVR faculty and Dr. Nadia Rosenthal, our 2014 Gunnar Lecturer. The Young Investigator Award will receive a cash prize of \$250 and each runner up will receive \$150.

Spring-Summer 2014 Thesis Defenses:

May 16, 2014 – **Christine Haddad** Dept. of Microbiology & Immunology: "Divergent Effects of OX40L on Regulatory T Cell Phenotype and Function: Implications for Type 1 Diabetes Therapy". Her thesis advisor is Bellur Prabhakar, PhD, Professor, Dept. of Microbiology & Immunology.

June 5, 2014 – **Cody Rutledge**, Dept. of Physiology & Biophysics: "Regulation of Cardiac Connexin43 by Reactive Oxygen Species". His thesis advisor is Samuel Dudley, MD, PhD, Professor, Brown University (formerly UIC).

June 11 2014 – **P. David McMullen**, Dept. of Microbiology & Immunology: "Factors of the bacterial pathogen *Listeria monocytogenes* which influence niche acquisition within hosts". His thesis advisor is Nancy Freitag, PhD, Professor, Dept. of Microbiology & Immunology.

July 25, 2014 – **Ryan Lahey**, Dept. of Physiology & Biophysics: "Long Chain Fatty Acid Storage Dynamics and Nuclear Receptor Activation in Failing Hearts". His thesis advisor is E. Douglas Lewandowski, PhD, Professor, Dept. of Physiology & Biophysics and Director, Cardiovascular Research Center.

August 1, 2015 – **Jacob Choi**, Dept. of Biochemistry & Molecular Genetics: "The Matricellular Protein CCN1 Regulates Colitis, Colitis-Associated Cancer, and Neutrophil Mobilization." His thesis advisor is Lester Lau, PhD, Professor, Dept. of Biochemistry & Molecular Genetics.

Alumni News: Alumna returns to give graduation banquet seminar

The MSTP welcomed alumna **Uzma Samadani (1999)** as its distinguished guest speaker at the 2014 Graduation Banquet, held May 8 at La Luce Restaurant on Ogden and Lake. Dr. Samadani, Co-Director, Steven and Alexandra Cohen Veterans Center for PTSD and TBI, and Assistant Professor, Departments of Neurosurgery, Psychiatry and Physiology & Neuroscience, New York University School of Medicine, spoke enthusiastically on the topic "Development of an Eye Tracking Biomarker for Concussion". In addition to covering this interesting subject expertly, she skillfully wove her own career story into the discussion. This served as a great inspiration to the graduates embarking on the path of putting their medical and scientific learning into practice as well as first-year and incoming students who saw a successful product of our program as a demonstration of where they can plan on being after a few fast years. By using the concept of metrics, first discussed in terms of the research she performs, but then applied to making life choices, she gave the students a concrete and usable set of guidelines to follow as they forge ahead on their own on their own study and career pathways. Dr. Samadani's "return" as grad banquet speaker followed a precedent started in 2010 with **Todd Druley**, MD, PhD (2002) and was continued in 2013 by Dr. Druley's WUSL colleague, **Ronald (Jake) Jackups**, MD, PhD (2008) The program hopes to welcome more and more alumni back as future guest speakers.

Wedding Bells & Baby Booties



Erin Beisner on her marriage to Jordan Shanker on June 29 in Custer State Park, SD. They honeymooned in Spain. Jordan is an investment banking associate with Citibank.

Joseph Goldenberg on his engagement in May to Rebecca Weinschenker who is an actuary at Blue Cross Blue Shield of Illinois. Wedding plans are pending.

Alumna **Arpita Kadakia Bhasin** (2010) and husband on the birth last year of son Arin Shan Bhasin: "He is the love of our lives."



2014 RETREAT: MSTP HEADS TO STARVED ROCK



Nestled amidst 2,600 acres of the spectacular natural beauty Starved Rock State Park, acclaimed as one of the Illinois' 7 Wonders, the beautiful Starved Rock Lodge and Conference Center was the venue for the 2014 MSTP Retreat, which was hosted on June 23-24, 2014.

After two consecutive years of staying in town for a single day retreat experience, students were itching to get away again, back to nature, with a restful overnight experience. It was also suggested that we move our retreat time forward from the traditional August to June in order to welcome the new students right after their arrival and to avoid conflicts with end-of-summer vacations. Good fortune answered these requests when the opportunity presented itself to team up with the COM's Bridge to the Doctorate program which had booked its annual retreat at Starved Rock for the same dates. Combining forces with the "Bridge" not only made good economic sense for both groups, but moreover afforded the opportunity for broader personal and academic connections. The large facilities of the Conference Center provided plenty of room for each group to have its own ample space for programs particular to its needs but also to let the two groups share plenary sessions that were of interest to both as well as meals and social activities. And a bonus to all that was the ability to afford a luxury motor coach to transport all members of both groups who wished to travel that way.



The retreat convened at 9:30 am on Monday with a joint plenary welcome session. Cheer Leader Supreme **Denise Yates**, Director for Programs of the Office of Graduate Diversity Programs, engaged everyone in a humorous round of self-introductions in which they had to state a phrase to describe their personalities using words beginning with the initials of their names. The MSTP's first breakout session, from 10:30 to Noon, was launched in another humorous vein when **Dr. Nancy Freitag** introduced each of the new students with biographies based on the popular TV show, "Game of Thrones." By morphing their photos into pictures of the various characters in the show, she dressed and armed each of the 8 new students in outlandish warrior costumes ready to do battle with the beasts of the M1 curriculum. Bringing people back to reality, **Dr. Larry Tobacman** then gave his annual "State of the Program" talk, describing lovingly the accomplishments of its students and the program as a whole. The session culminated with scientific presentations by **Jacob Choi** and **Ryan Lahey** on excerpts of their forthcoming thesis defenses.

Following lunch the afternoon session began at 1:00 with a very exciting presentation by **Alicia Rizzo**, **Tiffani Berkel** and **Ally Young** on the prospect of using the new Mile Square Health Center at Wood and Roosevelt as a single venue for all MD-PhD students to engage in Clinical Connections during their PhD phase. The students present were given the opportunity to ask questions and make suggestions (see the front page story on how that proposal has now become reality). The afternoon session continued with our annual Senior Students Panel Discussion on Tips from their Experiences and Cohort Meetings (M1-M2 with Dr. Tobacman, G1-G2 with Dr. Freitag, and Advanced G-M3-M4 with Roberta). A long recreation period, from 3-6, allowed for a variety of recreational activities including a Lodge organized scavenger hunt, hiking on the nature trails, swimming, or just resting and schmoozing.

After this good R&R, everyone in the two groups came together for the Keynote Science Talk by dynamic, charming, engaging **Michael Federle**, PhD, Assistant Professor in the Department of Medicinal Chemistry and Pharmacognosy and the Center for Pharmaceutical Biotechnology. His topic was "Microbial Wikileaks: Bacteria and small molecules that may protect."

At 7:00 a delicious country style dinner was served after which people walked, talked outside on the patio, visited the lounge and just enjoyed each other's company in the beautiful setting and fine weather.

The Tuesday morning session included poster viewing and the annual SAC meeting. Lunch was followed by free time to enjoy again the natural beauty of the area, culminating in a "Death by Chocolate" dessert extravaganza before boarding the coach at 4:00 for the return to the city.

In the Alumni Mailbag



7/17/14—From **Evan Osmundson (2009)**

Things are going well here at Stanford. I have just begun my 5th and final year of Radiation Oncology residency and am really looking forward to being done with formal training.

Professionally, things have been going pretty well. My residency research is maturing and we just submitted a manuscript for publication with two more on the way. I received a few small grants during my residency, one a foundation grant for about 30K to support a translational project of mine in the lab, and another, smaller internal grant for 5K to cover the costs of some fancy computer software and hardware. My plan is to obtain a faculty position in an academic radiation oncology department. Wish me luck!



On a personal level, Sarah and I are doing well. We now have two children: Ethan (Age 4.5 yrs) and Liam (Age 1 yr). Attached you will find a few recent photos. Sarah just finished her fellowship in Maternal Fetal Medicine at Stanford and will be assuming a part time faculty position within her department. We really enjoy living in Northern California and the Bay Area; however the cost of living is very high. We are right in the middle of Silicon Valley with all the tech millionaires and it's amazing how challenging it is for a few lowly physicians to purchase a home here. ;-)

I hope everything is well with you and Dr. T and the rest of the team at UIC MSTP. Please send my regards to all. I will be in Chicago for a meeting in late November (Nov 30 - Dec 5) and would love to grab lunch or coffee if you and Dr. T are around.

Best regards, Evan (Sarah, Ethan, and Liam)

Graduating MSTP student receives College of Medicine research award

At the COM Commencement on May 9, **Jonathan Waxman** was awarded the 2014 Michael and Kate Barany Research Award for outstanding research achievement while enrolled in the UIC College of Medicine at Chicago. This award recognizes the significance of research to medical education. This award has been won by an MD-PhD graduate 8 out of the 13 times since it was initiated in 2002. The previous MD-PhD alumni winners are: Kris Alden (2002), Tatiana Grzeszkiewicz (2003), David Jho (2006), David Moons (2007), Masakatsu Nanamori (2008), Evan Osmundson (2009), Janai Carr (2013).



Turek selected as U. Iowa-Carver research scholar

Joseph W. Turek, MD, PhD (2002) has been selected by the American Association of Thoracic Surgery as one of two recipients of the John H. Gibbon, Jr. Research Scholarship. The scholarship, established in 1985 provides opportunity for research, training and experience for surgeons committed to pursuing careers in academic cardiothoracic surgery. Turek's scholarship period extends from July 1, 2014 until June 30, 2016.

In April Dr. Turek was also named the new Medical Director of the Extracorporeal Membrane Oxygenation (ECMO) program. ECMO is prolonged partial heart-lung bypass for selected critically ill patients with severe, but reversible respiratory failure and/or cardiac disease who have failed other intensive care therapies. In addition to his duties as Assistant Professor in the Departments of Cardiothoracic Surgery and Pediatrics, Dr. Turek will now lead all aspects—neonatal, pediatric and adult—of the ECMO program.

Departments of Cardiothoracic Surgery and Pediatrics, Dr. Turek will now lead all aspects—neonatal, pediatric and adult—of the ECMO program.

Alumni Appointments

[Ed. Note: If we missed anyone's promotion or new appointment, let us know.]

To all alumni: Please keep the updates on your news coming. If you're going to be in Chicago, please stop by for a visit which can be informal or a formal presentation, as you wish.

5th Annual M3 Prep Course Another Huge Success

The 5th annual iteration of the MSTP's return to clinics prep course, held June 9-13, 2014, was another big success, well maintaining the good record of the excellent four previous versions. Thanks to the organizational skills and concentrated efforts of rising M4s **Ryan Carr** and **Marisa Young**, the course, taught voluntarily by some of the best medical and pharmaceutical faculty, prepared rising M3s for transition from their just completed PhD studies into clinic readiness. This year's rising M3 class included **Jacob Choi, Christine Haddad, Ryan Lahey, David McMullen, and Cody Rutledge**.

These MD-PhD students and indeed the whole MSTP are deeply indebted to and appreciative of the superb faculty who graciously gave of their time to help them get up to speed for the start of their clerkships:

Adam Bursua, PhD, Clinical Assistant Professor, Dept. of Pharmacy Practice, COP

William Galanter, MD, PhD, Assistant Professor of Clinical Medicine, Dept. of General Internal Medicine

George Kondos, MD, Professor of Medicine, Dept. of Medicine: Cardiology

Melvin Lopata, MD, Professor of Medicine, Pulmonary, Critical Care, Sleep and Allergy, Department of Medicine

Fred Zar, MD, Program Director, Internal Medical Vice Head, Educational Affairs, Dept. of General Internal Medicine

Each day's schedule started with Morning Report at UIH from 8:00 to 9:00. That was followed on Monday by Pulmonology I with Dr. Lopata from 9:00 to 10:00 and then CPP Q&Z with Dr. Zar from 1:00 to 3:00. Tuesday's schedule offered Biostatistics with Dr. Galanter from 9:00 to 10:00, Pharmacology Atmimicrobilas with Dr. Bursua from Noon to 1:00, Cardiology and a work session on the Harvey patient mannequin heart simulator with Dr. Kondos from 2:00 to 4:00 and an informal chat with rising M4s from 4:00 to 5:00. On Wednesday, Dr. Lopata gave Pulmonology II from 9:00 to 10:00, and Dr. Bursua presented Pharmacology and Antihypertensive * Antidiabetic Drugs from noon to 2:00. On Thursday Dr. Galanter, gave a second presentation on Biostatistics from 10:00 to 11:00, and Dr. Bursua gave his 3rd Pharmacology presentation—on Analgesics and Anticoagulants—from noon to 2:00.

Additional 2014 Grand Rounds Presentations

Following the publication of the Spring 2014 issue of *Medical Scientist* in which we listed four MSTP Grand Rounds presentations that had been scheduled, this additional one was added to the roster. We congratulate the presenters on a fine seminar:

Monday, June 2, 12:30 pm, 5175 COMRB

Topic: "Astrocytoma: Past, Present and Future"

Clinical Presentation: **Jon Waxman, MD, PhD**

2014 graduate, defended doctoral thesis on "Prediction of Pathophysiological Events: Sleep Disordered Breathing, Vigilance Lapses, and Driving Mistakes" in the Dept. of Electrical and Computing Engineering (advisors: David Carley, PhD and Daniel Graupe, PhD)

Research Presentation: **Jason Buhrman**

2013-14 G3, Department of Biopharmaceutical Sciences, focusing on investigating protein drug discovery. (advisor: Richard Gemeinhart, PhD. He plans to defend his thesis in spring 2015).

Autumn 2014 Dinner Seminars

Thursday, August 21, 5:30 pm— **Alexander Mankin, PhD**, Professor and Director, Center for Biopharmaceutical Technology and Professor, Department of Medicinal Chemistry & Pharmacognosy: "New modes of action of old and new antibiotics"

Monday, September 22, **Randall Dull, MD, PhD**, Professor, Dept. of Anesthesiology.

Tuesday, Sept. 9, 6:00 PM, Clinical Connections Orientation at MSHC, 1220 S. Wood Street, 2nd floor.

Tuesday, October 7, **Joanna Burdette, PhD**, Assistant Dean for Research, College of Pharmacy; Associate Professor, Department of Medicinal Chemistry & Pharmacognosy, Department of Biopharmaceutical Sciences.

Thursday, November 20, MSTP Research Symposium in connection with COM Research Day, Nov. 21. **Christine Haddad, David McMullen** and **Cody Rutledge** will present excerpts from their recent thesis defenses.

MSTP Student named Technical Director of Genome Editing Core

Brian Shy co-founded the UIC Genome Editing Core with Professor and thesis advisor **Brad Merrill, PhD**. Shy was named Technical Director of the program. Shy said, "The aim is to help investigators in Chicago get started using CRISPR-based tools [new tools for DNA editing]." The Core will be hosting a "Genome Editing Workshop" on **Wednesday August 27, from 11 AM to 1:30 PM in the MBRB Auditorium** (900 S. Ashland Ave, 1st floor). Shy and Merrill, along with Adam Clore, PhD will be giving presentations. Food and refreshments will be provided.

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Kathleen Kashima, PhD
Senior Associate Dean of
Students

RECENT STUDENT PUBLICATIONS

Baumgarten SC, Convissar SM, Fierro MA, Winston NJ, Scoccia B, and Stocco C (2014) IGF1R signaling is necessary for FSH-induced activation of AKT and differentiation of human cumulus granulosa cells. *JCEM*, PMID: 24848710

Bennett J, **Baumgarten SC**, and Stocco C (2013) GATA4 and GATA6 Silencing in Ovarian Granulosa Cells Affects Levels of mRNAs Involved in Steroidogenesis, Extracellular Structure Organization, IGF1 Activity, and Apoptosis. *Endocrinology*, 154(12):4845-58.

Wu Y, **Baumgarten SC**, Zhou P, and Stocco C. (2013) Testosterone-Dependent Interaction between Androgen Receptor and Aryl Hydrocarbon Receptor Induces Liver Receptor Homolog 1 Expression in Rat Granulosa Cells. *Mol Cell Biol*, 33(15): 2817-28.

Zhou P, **Baumgarten SC**, Wu Y, Bennett J, Winston N, Hirshfeld-Cytron J, and Stocco C. (2013) IGF-I signaling is essential for FSH stimulation of AKT and steroidogenic genes in granulosa cells. *Mol Endocrinol*, 27(3): 511-23.

Thole, J. M., **Beisner**, E. R., Liu, J., Venkova, S. V. & Strader, L. C. Abscisic Acid Regulates Root Elongation Through the Activities of Auxin and Ethylene in *Arabidopsis thaliana*. *G3 (Bethesda, Md.)* 4,1259-74 (2014).

Carr, R.M., Qin, J., Prabhakar, B.S. and Maker, A.V. 2-Deoxy-D- Glucose Sensitizes Colorectal Cancer Cells to TRAIL-induced Apoptosis. Poster Presentation. APSA 9th Annual Meeting. Chicago, IL: April 26th-28th, 2013.

Fettiplace MR, Ripper R, Lis K, Feinstein DL, Rubinstein I, Weinberg G: Intraosseous lipid emulsion : An effective alternative to intravenous delivery in emergency situations. *Crit Care Med* 2014: 42(3); e157-160

J. Frencher, H. Shen, L. Yan, A. Rizzo, N. Freitag, L. Shen, Z. Chen. Infection with HMBPP-deficient IPP-producing *Listeria* mutant alters pulmonary and systemic immune responses, effector functions, and memory polarization of V γ 2V δ 2 T cells. (Accepted) *Journal of Leukocyte Biology*. January 2014.

J. Frencher, B. Ryan-Passeyeur, D. Huang, R. Wang, P. McMullen, N. Letvin, W. Collins, N. Freitag, M. Malkovsky, C. Chen, L. Shen, Z. Chen "SHIV Antigen Immunization Alters Patterns of Immune Responses to SHIV/malaria Co-infection and Protects against Life-threatening SHIV-related Malaria." *J Infect Dis*. 2013 Apr 8.

Gopisetty A, Bhattacharya P, **Haddad C**, Bruno JC Jr, Vasu C, Miele L, Prabhakar BS. 2013. OX40L/Jagged1 cosignaling by GM-CSF-induced bone marrow-derived dendritic cells is required for the expansion of functional regulatory T cells. *J Immunol*. 190: 5516-25.

Smith, B. R.*, Santos, M. B.*, **Marshall, M. S.***, Cantuti-Castelvetri, L., Lopez-Rosas, A., Li, G., . . . Bongarzone, E. R. (2014). Neuronal inclusions of alpha-synuclein contribute to the pathogenesis of Krabbe disease. *J Pathol*. doi: 10.1002/path.4328 *These authors contributed equally to this work

Yang K, **Rutledge C**, Mao M, Bakhshi F, Xie A, Liu H, Bonini M, Patel H, Minshall R, Dudley C. Caveolin-1 Modulates Cardiac Gap Junction Homeostasis and Arrhythmogenicity by Regulating c-Src Kinase CIRC AE June 2014.

Rutledge C, Siong F, Sulkin M, Greener I, Sergeyenko A, Liu H, Gemel J, Beyer E, Sovari A, Efimov I, Dudley S. c-Src Kinase Inhibition Reduces Arrhythmia Inducibility and Connexin43 Dysregulation after Myocardial Infarction. *JACC* Jan 2014.

Rutledge C, Dudley S. Mitochondria and Arrhythmias. *Expert Rev Cardio Ther*. July 2013.

Shy BR, Wu C, Zhang J, Khramstova GF, Olopade OI, Goss KH, Merrill BJ. Regulation of Tcf711 protein stability and DNA binding as principle mechanisms of Wnt/ β -catenin signaling. *Cell Reports*, July 2013 (*Cover).

Shy BR, Wu CI, Khramstova GF, **Zhang JY**, Olopade OI, Goss KH, Merrill BJ: Regulation of Tcf711 DNA Binding and Protein Stability as Principal Mechanisms of Wnt/b-Catenin Signaling. *Cell Reports* (2013), <http://dx.doi.org/10.1016/j.celrep.2013.06.001>

Fang ZJ, **Zhang JY**, He WM: CT features of exophthalmos in Chinese subjects with thyroid-associated ophthalmopathy. *International Journal of Ophthalmology* 2013;6(2):146-149,doi:10.3980/j.issn.2222-3959.2013.02.07

Zhang Y, Köllmer M, **Buhrman JS**, Tang MY, Gemeinhart RA. Arginine-rich, Cell Penetrating Peptide-microRNA Inhibitor Complexes Decrease Glioblastoma Migration Potential.