

The CMP Newsletter

Spring 2013



CMP Recruitment, a Springtime Success

Enormous THANKS to all trainers and students who supported this winter's CMP Student Recruitment by participating in one or more of the events held over our recruitment weekends, Feb 24-25 and March 3-4. Special thanks to faculty and students on the admission committee who spent many hours reviewing and scoring this year's applications and to our terrific student recruitment committee, who coordinated rides, escorts, dining guests, as well as numerous other things ...

Also, thanks to CMP students Caitlin MacNair and Gene Uenishi for the lunchtime presentations of their research. This fall we'll be welcoming eight new CMP students as a result of this supreme teamwork!

Three Students Give Spring Seminars

The following senior students did a terrific job presenting their current research as a part of the 2012-13 Department of Pathology/Cellular and Molecular Pathology Weekly Seminar Series. Each prepared a formal 60 minute presentation of their work to share with faculty and peers. Congratulations to the following students for their exceptional presentations!

Ms. Melba Marie Tejera (Suresh Lab): "FoxO1 actively controls effector to memory transition and maintenance of functional memory CD8 T cells: FoxO1's temporal requirement"

Ms. Stephanie Morgan (Liu Lab): "Cell Death and Inflammation in Abdominal Aortic Aneurysm"

Ms. Toni Brand (Wheeler Lab): "Understanding the Role of Nuclear EGFR in Triple Negative Breast Cancer"

NSF Fellowship Awarded to Student



Congratulations to CMP student, Jose Rodriguez Molina, on his National Science Foundation Fellowship Award. Jose would like to acknowledge his mentor, John Svaren, PhD, as well as Zsuzsanna Fabry, PhD, Director, Cellular and Molecular Pathology Graduate Training Program, and the CMP Program in general for their help and support in the NSF application process.

CMP Students Soar Through Spring Semester

Monica Montano Presents IRES Talk

On Wednesday, April 10th, CMP Student Monica Montano presented her talk on “The Ethical Issues of Using Animals in Research”. Monica presented this talk as an IRES fellow. IRES, or Integrating Research Ethics and Scholarship is an initiative, sponsored by the Graduate School, that offers novice and seasoned researchers and scholars educational opportunities and resources that reflect best practices in ethics education and scholarly integrity.

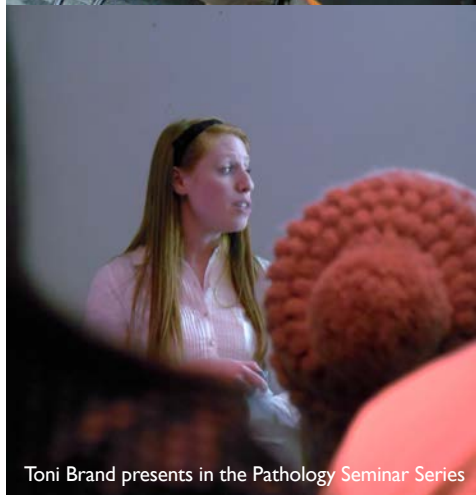


CMP Students enjoy Monica's ethics talk

Incoming 2012 Students Join Labs!

After a semester of rotations, the 2012 incoming class arrived in their new labs.

Adam Bailey.....D. O'Connor Lab
 Matthew Brown..... Burlingham Lab
 Eddie Dominguez.....Rotating (Andes Lab)
 Adam Ericson.....D. O'Connor Lab
 Sarah Franco..... Kent Lab
 Ted Griggs..... Gern Lab
 James Johnson..... Burkard Lab
 Mary Lopez..... Hardin Lab
 Aman Prasad.....Kimble Lab
 Heather Schmitt..... Nickells Lab
 Chelsie Sievers..... Halberg Lab
 Yash Somnay..... Chen Lab
 Bowen Wang..... Kent Lab



Toni Brand presents in the Pathology Seminar Series



Monica Montano presents IRES talk

CMP Students Present at Conferences

CMP students will be heading out for conferences with their posters in tow throughout the spring and summer!

Bahauddeen Alrfaei AACR Meeting, WARF Discovery Challenge Symposium
 Toni BrandAACR Annual Meeting, Wolfsberg Meeting Series
 Ben ClarksonInterntaionl Stroke Conference
 Theodor Griggs.....Positive Strand RNA Viruses Meeting
 Jeffrey HardingAAI Annual Meeting
 Mike Khan.....AAI Annual Meeting
 Caitlin Mac Nair ARVO Annual Meeting
 Margaret Maes ARVO Annual Meeting
 Kaitlin Mitchell..... WARF Discovery Challenge Symposium
 Heather Schmitt..... ARVO Annual Meeting
 Danielle Stewart..... AAI Annual Meeting
 Kran SuknunthaISSCR Annual Meeting
 Qiwei Wang.....ATVB Conference

Graduating to Med School, Melissa Keller

In December 2012 CMP Student, Melissa Keller, (PI, William Burlingham, PhD.) successfully defended her thesis, “The role of collagen V-specific T cell autoimmunity in fibro-obliterative disease”. Melissa now calls New Orleans, Louisiana home as she begins her first semester of Medical School at Tulane. Congrats Melissa!

Congratulations to all our students for their accomplishments this semester, including those unsung, yet so important, advances in your research studies!

CMP Trainers in the News

New Form of Cell Division Found

This year at the annual meeting of the American Society for Cell Biology, in San Francisco, CA, UW Assistant Professor, Department of Medicine, and CMP Trainer, **Mark Burkard, MD, PhD**, presented the discovery of a new form of cell division in human cells, which his research group has named Klerokinesis (Klero is a Greek prefix meaning “allotted inheritance”). As lead researcher on the project, Dr. Burkard described Klerokinesis as a process that the research team believes acts as a natural back-up mechanism during faulty cell division, preventing some cells from going down a path that can lead to cancer. Looking toward possible clinical applications in the future, Dr. Burkard stated “if we could promote this new form of cell division, we may be able to prevent some cancers from developing. If we could push the cell toward this new type of division, we might be able to keep cells normal and lower the incidence of cancer.”

Full story at: <http://www.news.wisc.edu/21364>

Sondel on Pediatric Cancer Dream Team

Stand up to Cancer, the American Association for Cancer Research, and the St. Baldrick’s foundation have awarded a UW team of seven \$340,000/year, for four years, to develop new therapies for high-risk childhood cancers. The advanced studies will focus on novel treatments that use the body’s own immune system to kill cancer. The team consists of six Department of Pediatrics faculty members, including CMP trainer, **Paul Sondel, MD, PhD** (one of only five international Dream Team Principals), and Department of Medicine Faculty member, CMP Trainer, **Peiman Hematti, MD**. Dr. Sondel states, “Research is at a crossroads. We have made strides in understanding the biology of cancer, but have not yet revolutionized therapies. This collaboration is bringing together the fields of genomics and immunotherapy and will accelerate development of novel cancer therapies that have fewer side effects than current treatments.”

Full story at: <http://www.uwhealthkids.org/news-and-events/uw-carbone-cancer-researchers-named-to-pediatric-cancer-dream-team/40668>

Welcome our New Trainers!

Mark Burkard, MD, PhD

Assistant Professor
Department of Medicine

Dr. Burkard is interested in targeted therapy directed at protein kinases. His laboratory seeks to link therapies with their targets within cancer cells using genetic tools, and to identify patients whose cancers are most likely to benefit from particular drugs.

Lixin Rui, PhD

Assistant Professor
Department of Medicine

Dr. Rui’s research focuses on lymphoma biology, with an emphasis on JAK-STAT signaling in lymphomagenesis. In addition, his research interests include investigation of the F-box protein FBXO10, which he has recently characterized as a potential tumor suppressor.

John-Demian (JD) Sauer, PhD

Assistant Professor
Dept of Med Micro & Immunology

Dr. Sauer’s lab is interested in how intracellular pathogens parasitize host cells and how the host, in turn, recognizes these pathogens and defends against them. To understand the complex game of tug and war between the bacteria and the host, the Sauer lab uses genetics, both in the pathogen and in the host, to determine the factors necessary to promote disease (pathogen) and immunity (host).

Spring 2013 Seminar Schedule—Call for 2013-14 speaker nominations coming soon!

March 20	12 PM	K6/I20..... Stephanie Morgan, UW-CMP Graduate Student, Bo Liu, PhD, Adviser Lab
April 3	8 AM	G5/I13..... (Grand Rounds) Xinyu Zhao, PhD, Assoc. Professor, Neuroscience, UWMadison
April 10	12 PM	K6/I20..... Melba Marie Tejera, UW-CMP Graduate Student, M. Suresh, PhD, Adviser Lab
April 17	12 PM	K6/I20..... Tamas Horvath, DVM, PhD, Neurobiology, Yale University
April 24	12 PM	K6/I20..... Toni Brand, UW-CMP Graduate Student, Deric L. Wheeler, PhD, Adviser Lab
May 1	8 AM	G5/I13.....(Grand Rounds) Neil Kay, MD, Hematology, Mayo Clinic
May 8	12 PM	K6/I20.....Richard Ransohoff, MD, Dir. Neuroinflammation Research Ctr, Cleveland Clinic

2012-13 CMP Program Committee Memberships

Steering Committee

Zsuzsa Fabry, PhD (Chair) (i), Anna Huttenlocher, MD (i), Donna Peters, PhD (st), Matyas Sandor, PhD (i), Erik Ranheim MD, PhD (c), Emery Bresnick, PhD (st), Bo Liu PhD, PhD (st), Adel Talaat, MVSc, PhD (i), Ex officio: Joanne Thornton, Graduate Program Coordinator, Student PhD Candidates: Anna Ritter, Holly Hung, Ben Clarkson

Admission & Recruit Committee

Caroline Alexander, PhD (c), Bo Liu, PhD (st), Shelby O'Connor, PhD(i), Matyas Sandor, PhD (i), David O'Connor, PhD (i), Dan Loeb (c), Student PhD Candidates: Utibe Bickham, Stephanie Lawry, Chelsea Hope, Mike Khan, Caitlin McNair, Zulmarie Perez, Maggie Maes, Joe Ollar

Pathology Seminar Series

Erik Ranheim (Chair) (c), Zsuzsa Fabry (i), Matyas Sandor (i), Student PhD Candidates: Stephanie Morgan, Ex officio: Joanne Thornton

1st Year Advising & Orientation

Donna Peters, PhD (Chair) (st), Chris Seroogy, MD (i)

Curriculum

Deric Wheeler (Chair) (c), Zsuzsa Fabry, PhD (i), Erik Ranheim, MD, PhD (c), Craig Atwood, PhD (n), Donna Peters, PhD(st), Student PhD Candidates: Melba Marie Tejera, Melissa Wilking, Ex officio: Joanne Thornton

Ethics

Zsuzsa Fabry, PhD (Chair) (i), Bo Liu (st), Student PhD Candidate: Melissa Wilking, Ex officio: Joanne Thornton

Diversity

Adel Talaat (Chair) (i), Riccardo Lloyd, MD, PhD, Zsuzsa Fabry, PhD(i) Student PhD Candidate: Melba Marie Tejera, Ex officio: Joanne Thornton

CMP External Review Committee

Professor Gail Robertson, Physiology (Chair); Professor Ronald Kali, Ophthalmology & Visual Sciences Center for Neuroscience

Gern Awarded \$5 Million NIH Grant & National Medical Honor Society Membership

James Gern, MD has been awarded a \$5 million grant from the National Institutes of Health, which will be used to study how the Wisconsin farming environment affects immune development in children to reduce the rates of wheezing illnesses and asthma. As part of this grant, there is a collaborative birth cohort study with the Marshfield Clinic Research Foundation, two basic science projects on rhinovirus biology led by Dr. Ann Palmenberg and Dr. John Yin, and a core laboratory led by Dr. Yury Bochkov.

Full story at: <http://www.med.wisc.edu/news-events/james-gern-awarded-5-million-nih-grant/40092>

James Gern, MD was also one of four faculty leaders at the University of Wisconsin School of Medicine and Public Health to be elected to Alpha Omega Alpha (AOA), the national medical honor society, which was founded in 1902 and recognizes scholarship, leadership, professionalism and service in medicine. The Induction Ceremony took place on Friday, April 12, 2013 in Tripp Commons at the Memorial Union.

Sheibani & New Macular Degeneration Therapy

With \$6.2 million over five years awarded from the National Eye Institute, **Nader Sheibani, PhD** is leading a study of new treatments for wet age-related macular degeneration (AMD), the leading cause of blindness among aging Americans. The study collaborates with researchers and scientists from the UW Department of Pediatrics, Northwestern University, and the University of Nebraska. "Dr. Sheibani and his collaborators hope to develop treatments using small peptides that mimic those of the body's own inhibitors of angiogenesis. These treatments will counter VEGF activity and inhibit vascular growth in eyes with exudative AMD while providing an environment resistant to new vessel growth." With this class of drugs mimicking the body's own defenses, the hope is that they will be more effective and have fewer side effects than the treatments already available.

Full story at: <http://www.med.wisc.edu/news-events/uw-scientist-leads-quest-for-new-macular-degeneration-therapy/40560>

Bresnick Wins Award

Emery Bresnick, PhD was one of eight faculty members at UW-Madison to receive the Kellett Mid-Career Award. This award, supported by WARF and chosen by a Graduate School committee, recognizes outstanding mid-career faculty members with each recipient receiving a \$60,000 flexible research award.

Full story at: <http://www.news.wisc.edu/21522>

Let us do some bragging for you!

We would love to feature all of your accomplishments in our newsletter.

Please submit any awards, recognitions, fellowships, grants, events, talks, and more.

Send along your pictures, too!

Let us know about this CMP semester!

- **Brittany Brennan, Editor** -
brennan@wisc.edu

Thank you for your support!

Fabry Elected to the Hungarian Academy of Sciences

In May of 2013, **Zsuzsanna Fabry, PhD** was elected to be a member of the Hungarian Academy of Sciences. The Hungarian Academy of Sciences (MTA) was established in 1825 and since then has been committed to the advancement, shaping and serving of science worldwide. With her election, Dr. Fabry joins an elite group of 193 scientists worldwide.

Fellowships for 2013-2014!

Bartosz Grzywacz, MD
Hematopathology Fellow
Cleveland Clinic, OH

Stacy Hitt, MD
Surgical Pathology Fellow
University of Iowa

Michelle McCaw, MD
Hematopathology Fellow
University of Colorado

Nadia Naderi, MD
Surgical Pathology Fellow
Roswell Park Cancer Center

Matthew Oberley, MD
Hematopathology Fellow
University of Wisconsin
Hospital & Clinics

Jennifer Xiao, MD
Hematopathology Fellow
Washington University
St. Louis, MO

Pathology Resident News



Johnson Receives ASCP Resident Subspecialty Grant

Congratulations to **Karen Johnson, MD**, who spent the month of February in Belize after winning one of six \$2000 grants in Round 2 of the 2012-13 ASCP Resident Subspecialty Grants. The ASCP awards \$22,000 annually to qualified US Medical Residents “to obtain subspecialty experience in pathology by

performing rotations with well-known experts at large centers of study or in other countries where pathology is practiced differently”. Dr. Johnson spent her time in a rural clinic in south Belize, where her contributions included training clinicians on the use of Microscopes, performing basic blood smears, and reading basic Wright Stains.

Full story at: http://www.ascp.org/Newsroom/Residents-Expand-their-Skills-and-Change-Lives-through-ASCP-Subspecialty-Grants.html?utm_source=eNews&utm_medium=email&utm_content=Residents-Expand-their-Skills-through-Subspecialty-Grants&utm_campaign=eNews_March21_2013

Congratulations to **Michelle McCaw, MD**. Michelle is the recipient of the “Outstanding Pathology Resident Award”, presented to her by the University of Wisconsin–Madison, School of Medicine and Public Health, Class of 2013.



Resident Poster Presentations

USCAP 2013–Baltimore

- Mark Moore “Characterization of the Atypical Diagnostic Category in Endoscopic Ultrasound-Guided Fine Needle Aspiration (EUS-FNA) of the Pancreas: A Ten Year Experience”
- Adam Morgan “Peripheral Blood Lymphocytosis: Improving Efficiency While Maintaining Quality”
- Karen Johnson “Finasteride treatment has significant effect on androgen receptor expression in prostate epithelium and on glandular morphology”
- Celina Montemayor-Garcia “Differential Expression of the Epithelial Mesenchymal Transition Regulator ZEB1 in Thyroid Carcinomas.”
- Rong Hu “Role of Percutaneous Needle Core Biopsy in Diagnosis and Clinical Management of Renal Mass: Experience of a Single Institution Clinic”
- Samuel Barasch “Telepathology for Frozen Section Analysis: A Validation of Remote Meeting Technologies (RMT)™ Software”