

◀ *P. falciparum* sporozoite in a mosquito midgut



# Infectious Diseases

Washington University in St. Louis  
SCHOOL OF MEDICINE

DIVISION NEWSLETTER

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## ID NEWS & NOTES

**Washington University School of Medicine  
Infectious Diseases Division  
Faculty and Fellows  
Reunion**

**at the 49th Annual Meeting of the  
IDSA  
in Boston, Massachusetts**

**Saturday, October 22, 2011  
Alcott Room  
Westin Boston Waterfront  
6:30 pm to 9:00 pm**

**Please RSVP to Alicia Cicerelli at  
acicerel@wustl.edu by October 14, 2011**

We are interested in your achievements, clinical and/or research activities, and other personal news since leaving WUSM. Please contact Dr. Gerald Medoff at [gmedoff@dom.wustl.edu](mailto:gmedoff@dom.wustl.edu) with any information you would like to share.

All division newsletters can be found at:  
ID Division Newsletters

## Epidemiology of Surgical Site Infections

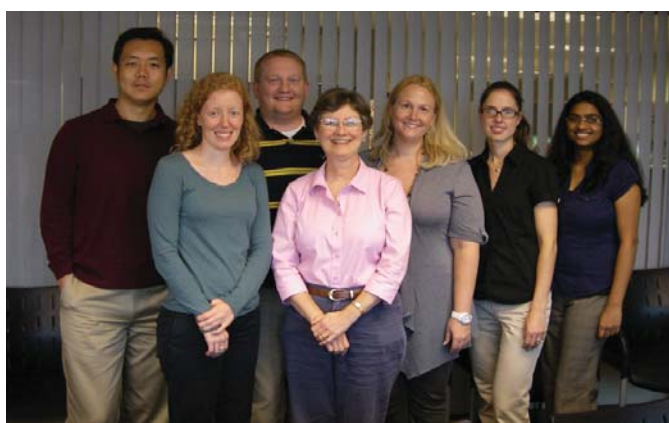
Margaret A. Olsen, Ph.D., M.P.H.



Margie Olsen, PhD, MPH

The main focus of my current research is to use very large administrative and/or claims databases to study the epidemiology of surgical site infections after a variety of different operations. The administrative databases give the advantage of large numbers of surgical procedures and infections, which are difficult to accrue with data from a single hospital. The other advantage of the administrative databases is the variation in operations and surgical practice because of the inclusion of data from many different hospitals (and therefore many different surgeons). This allows us to study infectious outcomes after a variety of surgical procedures in a more real-world environment including rural, community, and tertiary care hospitals rather than focusing solely on the types of procedures performed in an academic setting.

My research team is using Medicare claims data to identify surgical site infections and determine risk factors and outcomes of these infections after spine surgery in the elderly. Dr. David Warren and I are also using the Medicare data to determine the incidence and outcomes of device-associated infections after pacemaker/implantable cardioverter defibrillator (AICD) procedures. We are using private insurer data in collaborative studies with HealthCore, Inc. to determine the incidence of surgical site infection after mastectomy with and without immediate breast reconstruction, and the incidence of infection after delayed breast reconstruction. The HealthCore data is richer than Medicare claims data, since it also includes pharmacy claims and laboratory results for about one-quarter of beneficiaries and is a better source of data to study outcomes of breast reconstruction in younger women. Drs. Warren, Erik Dubberke, and I are also using the HealthCore claims, pharmacy, and laboratory data to determine the incidence of surgical site and *Clostridium difficile* infection and infection costs after several surgical procedures performed in both hospital and ambulatory surgery settings. We hope to develop an algorithm that can be used as the basis for national surveillance of ambulatory surgery-associated infections in this study.



Jiuqing Zhao, MSPH, Kelly Ball, MPH, Nick White, MPH, Margie Olsen, PhD, MPH, Kerry Bommarito, MPH, Katelin Nickel, MPH, Harini Subramaniam, MS

Above image (*P. Falciparum*): CDC/Dr. Mae Melvin (PHIL #2704), 1973. == Licen(sin). Masthead image: Ute Frevert; false color by Margaret Shear; Copyright: © 2005 Frevert et al.

# Welcome...Jacco Boon, Ph.D.



**Erin K. Quirk, M.D.**  
with daughters Elizabeth and Katie, and husband, Nathan

Much has happened in the 6 years since I left my post at Washington University as a clinical instructor in the ID Division. In 2005, I accepted a position in the infectious diseases clinical research department at Merck and Co., Inc and moved to the Philadelphia, PA area. During my 5 years at Merck, I worked on Phase I and 2 studies of experimental HIV vaccines as well as clinical trials of new small molecule direct HCV inhibitors. In 2010, my family relocated to the San Francisco Bay Area where I now work as a senior director of clinical research in the HIV therapeutics group at Gilead Sciences. I currently design and oversee clinical trials of antiretroviral agents, both new drugs in development and approved agents commonly used in the treatment of HIV. I am grateful for the excellent training in the conduct of clinical research that I received at Washington University which I use every day and which helps me be a part of advancing new and innovative products for the prevention and treatment of life-threatening infections.

I have had a number of developments in my personal life as well since my time at Washington University. When I left St. Louis, my daughter Elizabeth was 1 year old. She is now 7 and recently started 2nd grade. In January 2010, my husband Nathan and I welcomed our 2nd daughter Katie. We moved to a new house in Pleasanton, CA in July 2011 and enjoy spending as much time as we can outdoors at the California beaches, in the redwood groves and the mountains.



**Adrianus (Jacco) Boon, Ph.D.**

I am a new faculty member in the Infectious Diseases Division, Department of Internal Medicine. I joined the division in February of 2011 coming from St. Jude Children's Research Hospital. Originally I am from the Netherlands where I completed a Masters in Medical Biology at the University of Amsterdam, Amsterdam, NL. I continued as a graduate student in the laboratory of Prof. Dr. Ab Osterhaus at the Erasmus Medical Center in Rotterdam, NL. As a graduate student, I developed my passion for influenza virus studying the cellular immune response to influenza virus in the human host.

In 2005, I became a Postdoctoral Fellow in the Lab of Dr. Richard Webby at St. Jude Children's Research Hospital. As one of the few Centers of Excellence on Influenza Research and Surveillance in the country, I was able to continue my studies on influenza virus identifying a role for the host genetic polymorphisms in highly pathogenic H5N1 influenza pathogenesis. During my six years at St. Jude Children's Research Hospital, we established the importance of host genetics on influenza disease severity and have started to unravel the mechanism of severe disease.

At Washington University I intend to continue my studies on host genetics and viral pathogenesis identifying genes and polymorphisms associated with severe disease. Most of these studies involve highly pathogenic H5N1 influenza A viruses, also known as bird flu, which requires the newly constructed enhanced Biosafety level 3 laboratory at Washington University. Another focus point of the laboratory is to determine the mechanism of influenza reassortment; a process responsible for the creation of the previous three pandemic influenza viruses. Finally we are interested in defining the determinants of pathogenesis of avian influenza viruses in the mammalian host.

## Congratulations . . .



*Stephen Liang, M.D. (ID Fellow) and his wife, Philana, welcomed a baby girl, Hannah Liang, on July 27, 2011.*

*Hannah joins brothers Ethan and Daniel.*

*Nur F. Önen, MD and Jörn C. Albring, M.D., Ph.D., welcomed their second child, a boy, on September 15, 2011. Oscar joins big sister, 17 month old Elaria.*



*Mike Lane, M.D. and his wife, Laura, welcomed a baby boy, Alexander Patrick, on September 21, 2011.*

*Alexander joins big sister, three year old, Sara.*

# Awards & Announcements

## RECENT AWARDS

PRINCIPAL INVESTIGATOR	AWARD	PROJECT TITLE
Steven Liang, M.D.	KM1 CER Career Development Award	Population-level Epidemiology, Healthcare Utilization, and Outcomes of Post-traumatic Osteomyelitis; mentors Margaret A. Olsen, Ph.D., M.P.H. and David K. Warren, M.D., M.P.H. 4/1/12 – 4/1/13

## Special Recognition

**Makhawadee (Joy) Pongruangporn , M.D.** was invited to present a case at the 49th Annual Meeting of the Infectious Diseases Society of America (IDSA) in Boston, Massachusetts hosted on October 20 - 23, 2011. Joy is the recipient of an IDSA Fellow's Travel Award to attend this meeting.

## UPCOMING EVENTS



### Eleventh Annual Symposium

Please join us for the  
Washington University School of Medicine  
Infectious Diseases Division  
Faculty & Fellows

### *2011 Reunion at IDSA*

Location: Westin Boston Waterfront  
Room: Alcott  
Date: October 22, 2011  
Reception Time: 6:30 pm - 9:00 pm

**RSVP to Alicia Cicerelli at  
acicerel@wustl.edu by October 14, 2011**

The Infectious  
Diseases  
Division  
Department of  
Medicine  
Presents

Management of  
Common Problems in  
Infectious Diseases

Saturday  
November 19, 2011  
8:00 am to 4:00 pm

Engineers' Club of St. Louis  
St. Louis, Missouri

CME/CE Accredited

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# welcome to our 2011 fellows



## **Courtney D. Chrisler, M.D.**

Originally from St. Louis, Courtney graduated from and completed her residency training at Washington University School of Medicine.

### **Why did you choose an ID fellowship?**

I'm still trying to figure out a distinct area of focus. I'm interested in infection control but chose ID more because I had good role models early in my training within

the department that I felt were excellent internists. I think it's both intellectually challenging and rewarding to have the opportunity to be more of a primary care provider and a specialist at the same time.



## **Fernando Echaiz, M.D.**

Fernando is from Lima, Peru. He completed an internal medicine residency at the Henry Ford Hospital in Detroit, MI.

### **Why did you choose an ID fellowship?**

I chose Infectious Diseases because of the interesting interaction between infectious organisms and the human body. Infections present in many different ways and can involve every organ/sys-

tem challenging the skills of a physician. I am interested in infection control and hospital-acquired infections.



## **Gerome V. Escota, M.D.**

Gerome is originally from the Philippines. He graduated cum laude and class salutatorian from the University of the Philippines in 2004. He completed residency in internal medicine at the Philippine General Hospital in 2008 and topped the internal medicine board examination that same year. He moved to the US in 2008 and completed another internal medicine residency program at

Rush University Medical Center in Chicago in 2011. At Rush, he was bestowed the most outstanding resident-teacher award at the end of his residency. He was also the captain of the team that won the 2011 American College of Physicians Doctor's Dilemma (Medical

Jeopardy) held in San Diego last May 2011, beating 45 other teams from across the nation.

**Why did you choose an ID fellowship?** My research interest is broad but I hope to focus on HIV and opportunistic infections. I also want to pursue studies on international health and tropical medicine



## **Cindy Johnson, M.D.**

Cindy was born and raised in St. Joseph, Missouri. She completed her MD/PhD at the University of Texas Southwestern Medical Center in Dallas. Her thesis

project while there involved the intracellular molecular antiviral defense mechanisms and how they are abrogated by Hepatitis C virus, and

specifically the protease. She was able to show that HCV protease inhibitors, recently FDA approved for HCV therapy, restored the host immune response. She then went on to residency here at Washington University and Barnes-Jewish Hospital.

**Why did you choose an ID fellowship?** While here for my Infectious Disease fellowship, I would like to delve more deeply into the host antiviral innate immune response and novel ways viruses combat it.



## **Shadi Parsai, M.D.**

Shadi was born in Kalamazoo, Michigan but raised in Louisville, Kentucky. After the completion of her undergraduate studies at the University of Louisville, she proceeded to complete her medical education at Midwestern University, the Chicago College of Osteopathic Medicine in 2007. She completed her

residency training in Internal Medicine at Northshore University Health Systems (formerly Evanston Northwestern Hospital) in July 2010. Shadi received the Resident of the Year award from her peers and faculty in June 2010.

**Why did you choose an ID fellowship?** I chose Infectious Diseases as a subspecialty as it allows the opportunity to encounter complex and challenging patients across a variety of specialties and subspecialties. While my interests within the field are diverse and varied, I would like to focus further on nosocomial infections.