

## Member Spotlight



### Vincent H. Tam, Pharm.D., BCPS (Infectious Diseases)

*Assistant Professor, Dept of Clinical Sciences & Administration  
University of Houston College of Pharmacy*

*Member Since: October 1998*

*Focus: Translational Research*

### Bio

**Vincent H. Tam** received a B.S. from the National University of Singapore, Singapore and his Pharm.D. from Albany College of Pharmacy in Albany, NY. He completed an infectious diseases pharmacy residency at Detroit Receiving Hospital in Detroit, MI and a clinical pharmacology/infectious diseases fellowship at Albany Medical College. He is currently an Assistant Professor at the University of Houston College of Pharmacy in Houston, TX. He is board certified in pharmacotherapy with added qualifications in infectious diseases. Dr. Tam is the (co-) author of over 40 peer-reviewed publications and more than 50 abstracts in antimicrobial pharmacokinetics/pharmacodynamics and infectious disease therapeutics. He is on the Editorial Boards of Antimicrobial Agents and Chemotherapy, and Diagnostic Microbiology and Infectious Diseases. He has also served as a journal reviewer for the American Journal of Health-System Pharmacy, Annals of Pharmacotherapy, Canadian Journal of Hospital Pharmacy, Clinical Infectious Diseases, European Journal of Clinical Investigation and Pharmacotherapy.

### Research Focus

The main theme of Dr. Tam's research is to understand the relationship between antimicrobial agent exposure and the emergence of resistance (i.e., optimal dosing of antimicrobial agents). The research lies at the interface between routine clinical practice and traditional bench top research; his research is translational in nature and the results can be readily applied into clinical practice.

### Key Research Components

1. Population Pharmacokinetics - modeling and simulation of antimicrobial agents disposition under various clinical scenarios (e.g., penetration into the central nervous system, disposition while undergoing continuous renal replacement therapy);
2. Resistance Surveillance - prevalence and mechanisms of bacterial resistance to various antimicrobial agents; and
3. Experimental Therapeutics - determining the optimal drug exposure(s) necessary to suppress bacterial resistance development (alone or in combination) using computer and infection models.

### Current Research Projects

Dr. Tam is working on several ongoing projects including: (1) comparing the susceptibility of various antimicrobial agents to the inoculum effect of *E. coli*; (2) modeling the combined effect of antimicrobial agents against multidrug resistant *A. baumannii*; (3) population pharmacokinetics of polymyxin B in patients with multidrug resistant infections; (4) prevalence of AmpC overexpression in bloodstream isolates of *P. aeruginosa*; and (5) outcomes of patients with *P. aeruginosa* bacteremia.

### Advice- How to Get Involved in Clinical Research

A strong clinical background is valuable in generating clinically relevant questions; a solid training in research methodology (via a post-PharmD fellowship or graduate program) is also critical in addressing these questions. "I do not believe research is for everyone, but one should not shy away from it. For those interested in pursuing translational research (especially those inquisitive young minds who are still early in pharmacy schools), I encourage you to seek an opportunity to experience what it is like to do translational research first hand and pursue a residency upon graduation. Once you have established a sound clinical background and experienced the intellectual challenge in research, you could then make an informed decision on your career path," said Tam. .

### **Opportunities for Clinical Scientists**

Vincent states that we have amassed a huge knowledge base in basic medical sciences in the past decades, but the life expectancy of Americans has not significantly improved. There is a shortage of clinical / translational scientists who are conversant in both clinical practice and the laboratory. He believes we need more trained individuals (both in academia and the pharmaceutical industry) to transform some of the knowledge into solutions for unmet medical needs of our patients.

### **The Value of ASHP Membership**

"I endorse the mission of ASHP - promoting the value of pharmacists in the healthcare system by ensuring safe and optimal use of medications. Being a member of ASHP, I treasure the opportunity to meet and network with other fellow pharmacists / clinical scientists at meetings. I think I can also contribute to the mission of ASHP by advocating evidence-based medicine through my research," said Tam.

For more information contact Vincent Tam; just login to utilize the [Clinical Specialists and Scientists' Online Directory](#).