

NOMINATION COVER SHEET
2014 Virginia Outstanding Faculty Awards

1. <u>NAME</u> Full (Legal): William Arthur Petri, Jr. Preferred First Name: Bill	
2. <u>INSTITUTIONAL INFORMATION</u> Institution: University of Virginia Rank/Position Title: Professor Year Rank/Title Attained: 1996 Years at Institution: 25 Campus Email Address: wap3g@virginia.edu Campus Phone: 434-924-5621 Campus Mailing Address: P.O. Box 801340 Charlottesville, Virginia 22908 Campus Communications Contact: -Name: David A. Wolcott -E-mail: daw5h@virginia.edu	3. <u>PROFESSIONAL INFORMATION</u> Academic Discipline: Medicine Specialization/Field: Infectious Diseases Type of Terminal Degree: Ph.D., M.D. Year Awarded: 1980, 1982 Awarding Institution: University of Virginia
4. <u>PERSONAL INFORMATION</u>	

Please check only one box:

- RESEARCH/DOCTORAL INSTITUTION NOMINEE:
- MASTERS/COMPREHENSIVE INSTITUTION NOMINEE:
- BACCALAUREATE INSTITUTION NOMINEE:
- TWO-YEAR INSTITUTION NOMINEE:
- TEACHING WITH TECHNOLOGY NOMINEE:
- RISING STAR NOMINEE:

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Signature (President or Chief Academic Officer) _____

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Excerpts from Mission Statement

The central purpose of the University of Virginia is to enrich the mind by stimulating and sustaining a spirit of free inquiry directed to understanding the nature of the universe and the role of mankind in it. Activities designed to quicken, discipline, and enlarge the intellectual and creative capacities, as well as the aesthetic and ethical awareness, of the members of the University and to record, preserve, and disseminate the results of intellectual discovery and creative endeavor serve this purpose. In fulfilling it, the University places the highest priority on achieving eminence as a center of higher learning.

Source: Statement of Purpose and Goals (www.virginia.edu/statementofpurpose/purpose.html)

Summary of Accomplishments

William A. Petri, Jr., M.D., Ph.D. is an internationally renowned scientist in Global Health, Chief of the Division of Infectious Diseases, a practicing physician, inventor and entrepreneur, and acclaimed teacher at the University of Virginia. He bridges the gap between laboratory science and the patient through his creative and cutting edge research, teaching, and clinical service. Petri interacts daily on a one-on-one level with undergraduate, graduate and medical students, interns and fellows whom he mentors at UVA. He is also a University leader who has built Infectious Diseases into the largest research operation at UVA with \$18 million annual grant support and sustained growth in clinical care. As a scientist he is without parallel as the leading investigator in the world of the parasitic disease amebiasis.

1. Teaching. Petri is singled out by virtue of his 25 years of superb teaching and educational leadership at the University of Virginia. He leads by example. Every day students see someone who is as committed to teaching as to caring for a patient and expanding knowledge through research. Not only is he an internationally renowned biomedical scientist (named by *Nature* magazine in 2008 as one of the top 20 NIH-funded scientists in the US), but he is also a superb clinician who freely gives of his time in teaching.

Dr. Petri's teaching responsibilities include guiding the research career development of postdoctoral and predoctoral fellows, medical students and undergraduates in his lab, precepting house staff and medical students on the inpatient medicine and infectious diseases service, serving as a fellow in the Hereford Residential College at UVA, and serving as the Principal Investigator for two NIH T32s and one T35 on infectious diseases and biodefense (these NIH grants that Petri directs altogether provide complete financial support for 7 fellows and 7 graduate students and summer internships for 8 undergraduates). Petri has personally mentored 10 PhD students, 14 fellows and four visiting professors, many of whom are leaders in life science research.

His educational activities reach across the University and World. In addition to mentoring 5 undergraduate students in his lab in a typical semester, Petri solo teaches a class "Bills Bugs" for undergraduates each year, provides inpatient teaching of medical students and house officers three months a year, research training of pre- and postdoctoral fellows in his lab and in India, Pakistan and Bangladesh, and leads the "Issues in Biodefense" graduate school class that he founded. His teaching excellence has not gone unnoticed. He received the 2013 All University Teaching Award, the 2010 "Distinguished Mentor Award" of the Biology Department, and was inducted into the School of Medicine Academy of Distinguished Educators.

Petri is a respected and highly valued also as an educational leader. In an external review of the Infectious Diseases Program that Dr. Petri leads, the site visitors evaluated UVA as "*the most robust and prestigious infectious diseases programs in the country. Very strong support was voiced repeatedly from all academic ranks for the outstanding leadership of Dr. Petri*". The critique of the competing renewal of the NIH-supported Infectious Diseases Training Program included this statement: "*Dr. William Petri, is outstanding as evidenced by his training record, grant support including other training grants, publication record, and professional recognition in his field. It is also noteworthy that the trainees have rated his "accessibility" very high in evaluation questionnaires...Dr. Petri clearly has the scientific background, expertise, and experience that are appropriate to direct, manage, coordinate, and administer the proposed research training program*".

Medical interns and residents have written of his teaching: "*Incredibly skilled at patient interactions. Very well read and up-to-date on clinically relevant literature. Very engaging teacher who always made time each day to teach. phenomenal attending. Made my general medicine experience substantially better. Broke down complex topics in ID into manageable*

chunks of information that made clinical sense”; “Dr. Petri is wonderful to work with. He is incredibly supportive of the resident staff and particularly adept at communicating with attendings of other services when needed to facilitate patient care. He is able to utilize teachable moments with every patient and frequently brings supportive literature to further elaborate on the concepts raised during rounds. I feel very fortunate to have had the opportunity to work with him’.

From an undergraduate student: *“The kind of support you have shown me during the past two years (the trip to Bangladesh, the publication, taking your personal time to get to know me and so much more) is something that students only dream of and is what I am grateful for. The time and effort that you put into your students surpass that of any other professor that I know of. During the two years you have not only been a teacher but also have been a friend and father-like figure to me”.*

Two of Petri’s current graduate students wrote: *“As Dr. Petri’s colleagues and laboratory members can attest, his passion for research has proven highly infectious. To quote Dr. Petri himself, “Science is fun not because of the answers we find, but because of the questions.” This points to Dr. Petri’s thirst for discovery and exploration, which is at the core of the most fervid scientists. We can both recall Dr. Petri’s great excitement at the beginning of our projects and his sense of optimism. His attitude has been instrumental in empowering us to attack our research questions with energy and determination and to explore the application of new techniques and research tools. This stems from another of Dr. Petri’s common remarks: “Never be afraid of the unknown.” Dr. Petri has proven adept at encouraging his students through dark times as well, especially when experiments did not work out or our results were disappointing. In the vein of a superb mentor, his support has proven unwavering and he has always had an open door”.*

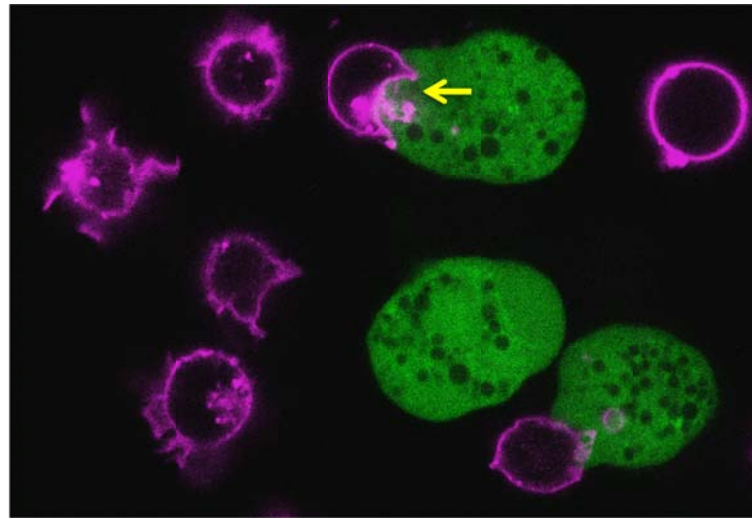
Petri’s former students and fellows are on the faculty of numerous schools of medicine nationally and internationally, and include the Chief of Infectious Diseases at Stanford University, the Dean of the School of Allied Health Sciences, University of Ghana, the Vice Chair of Medicine at UVA and professors at the University of Vermont, UCLA, University of Nagasaki, Japan and Gulhane Military Medical Academy Turkey. The success of his former students is a lasting measure of Petri’s teaching, one that extends into the next generation of faculty.

2. Discovery. William Petri is a pioneer and leader in the study of enteric infections and their consequences on the health of children. He is the most highly cited investigator in the world on amebiasis, which is one of the top 10 causes of diarrhea in children in the developing world. The cause of amebiasis is the single cell parasite *Entamoeba histolytica*. Its species name “histolytica” is aptly coined for its ability to lyse tissue, as the parasite is a voracious killer and eater of human cells (**Figure 1**). Petri’s first discovery in amebiasis was the identification of the Gal/GalNAc-binding lectin of the parasite that enables it to contact and kill of host cells. The lectin has become the most studied molecule in the parasite because of its central role in pathogenesis. Petri cloned and determined the DNA sequence of the lectin, and identified regions or epitopes on it that regulated contact and killing. He demonstrated that it also had important roles in phagocytosis and digestion of human cells, and in providing defense to the parasite from the human complement system that otherwise would destroy the parasite upon invasion into the body. Petri was the first to genetically engineer *E. histolytica* through DNA transformation, and used this approach to knock out the lectin and thereby demonstrate its essential role in causing disease. Not stopping with these laudable accomplishments, Dr. Petri developed the mouse model of amebic colitis which has allowed him to test a lectin-based vaccine against amebiasis.

Figure 1. *Entamoeba histolytica* parasites (green) killing human T lymphocytes (purple).

Petri has discovered that the parasite destroys human cells by eating them alive. The arrow points to purple pieces of the lymphocyte being ingested by the green parasite.

(Amebae are labeled with CMFDA; lymphocytes with DiD)



distinguishing feature of Petri's research, enabled by his M.D. and Ph.D. training, is his ability to move between laboratory studies at UVA and studies in children in Bangladesh. Over the last two decades Petri has defined most of what is understood about amebiasis in children. He started by making a diagnostic test that could sensitively and specifically detect *E. histolytica* in stool. The prior inability to properly diagnose the infection had hampered all previous attempts to study it. He collaborated with TechLab, Inc. in Blacksburg VA to get the test manufactured and FDA-approved. Using the diagnostic in a now 12 year study of 300 children in Bangladesh, he discovered that one in ten children had amebic diarrhea each year, showing how important amebiasis is. Long-term, both malnutrition and childhood developmental delays were more common in children who had suffered from amebiasis.

Amazingly, Petri was the first person to discover that children were immune to reinfection, and that immunity was associated with an IgA antibody response to the Gal/GalNAc lectin that he had discovered years previously. This knowledge forms the basis for the amebiasis vaccine program funded by the NIH that Petri leads. Finally Petri is studying why not every child who is infected by *E. histolytica* gets diarrhea. He has discovered that the obesity hormone leptin plays a critical role in defense of the gut from ameba, with mutations in the receptor for leptin a major determinant of susceptibility to infection.

The Bill & Melinda Gates Foundation has come to Dr. Petri for his assistance because of his expertise in clinical studies in the developing world (**Figure 2**). This has resulted in the international aspect of research being expanded to include studies that Petri leads in the childhood malnutrition, poliovirus and rotavirus vaccination, and development of new diagnostic tests for the developing world (again in collaboration with TechLab, Inc.).

Petri was named by *Nature* magazine as one of the top 20 NIH-funded scientists in the US (<http://www.nature.com/news/2008/080319/full/452258a/box/2.html>). Current extramural support for Dr. Petri's research is approximately \$7 million annually. In addition to two NIH R01 grants and three NIH small business grants, he is the Principal Investigator for three major multi-million studies supported by the Bill & Melinda Gates Foundation: "Study of Risk Factors for Malnutrition Using Molecular and Genomic Tools"; "Oral Polio Vaccine Failure in Bangladesh & India", and "Rapid Immune Assessment of Vaccination". Perhaps the best recognition of Petri's brilliance in science is the renewal in this last year of both of his NIH R01 research grants, both of which were scored in the top 1% of all grants applied for nationally.

His research group publishes an average of seven peer-reviewed original research publications



Figure 2. Dr. Petri at the Nutrition Clinic in Dhaka, Bangladesh. Petri's clinical research studies provide free medical care and nutritional therapy to the participants while monitoring their health.

each year in the areas of molecular parasitology and international health. Petri personally has published over 400 papers, reviews and chapters, and co-authors a major text on medical parasitology. His research has been published in the highest impact journals including *Nature*, the *New England Journal of Medicine*, *Proceedings of the National Academy of Sciences USA*, the *Journal Of Clinical Investigation*, *PLoS Pathogens* and the *Journal of Infectious Diseases*. His work is cited in other publications over 500 times each year, with an H index of 49 (ie he has 49 papers that have been cited at least 49 times).

Research honors that Dr. Petri has received from the University of Virginia include the Dean's Excellence in Faculty Research Award, receipt of the Distinguished Mentor Award of the Department of Biology, the Inventor of the Year Award, and the John Horsley Memorial Research Prize.

National and international recognition includes election as President of the American Society of Tropical Medicine and Hygiene, Editor of *Infection and Immunity* (the major infectious diseases journal of the American Society of Microbiology), receipt of the Squibb Award of the Infectious Diseases Society of America (the Society's highest honor to a mid-career investigator) and award of a Burroughs Wellcome New Investigator and Scholar in Molecular Parasitology (1992-2003) as well as a Lucille P. Markey Scholar in Biomedical Research (1985-2003).

Petri has been elected as a Fellow of the American Academy of Microbiology, the American Society of Tropical Medicine and Hygiene, the Infectious Diseases Society of America and the American College of Physicians, and is a member of the American Society of Clinical Investigation (the highest honor for a junior physician scientist), the Association of American Physicians (the highest honor for a senior physician scientist), Alpha Omega Alpha (the medical honor society), Phi Beta Kappa, has continuously served on advisory committees for the NIH since 1993, and is named a Best Doctor in America.

3. Knowledge Integration. Petri received the All-University Teaching Award of the University of Virginia in 2013 in recognition of his ability to seamlessly integrate scientific discovery in infectious diseases with patient care and teaching. He does this at two levels: by teaching one student at a time through mentoring in the lab and at a patient's bedside, and institutionally as the founder and leader of the Infectious Diseases and Biodefense Training Programs for MD, PhD and graduate students, as well as the Summer Research Internship Program for undergraduate students from under-represented minority groups.

An External Advisory Report cited that: *"These two training grants have provided strong support for one of the most robust and prestigious infectious diseases programs in the country. Very strong support was voiced repeatedly from all academic ranks for the outstanding leadership of Dr. Petri, who is PI of both T32 grants, a truly remarkable feat. In addition, predoctoral and postdoctoral trainees had uniformly very positive opinions of the overall training environment, quality and collegiality of mentors, core facilities, seminars, and opportunities to attend national meetings"*.

Petri's leadership of NIH-supported research training programs is unprecedented at UVA in its magnitude and continued success. He has led and competitively renewed the Infectious Diseases T32 training program since 1996, founded, led and competitively renewed the Biodefense and Emerging Infections T32 since 2003 and the Summer Research Internship Program in Biodefense and Emerging Infections T35 since 2003. It is remarkable that in this era of increasing competition for NIH support that Petri has competitively renewed for another 5 years both of these training grants in the last 12 months!

NIH Peer Review of the T32 grant reported that: *"The Program Director, Dr. William Petri, is outstanding as evidenced by his training record, grant support including other training grants, publication record, and professional recognition in his field. It is also noteworthy that the trainees have rated his "accessibility" very high in evaluation questionnaires...Dr. Petri clearly has the scientific background, expertise, and experience that are appropriate to direct, manage, coordinate, and administer the proposed research training program"*.

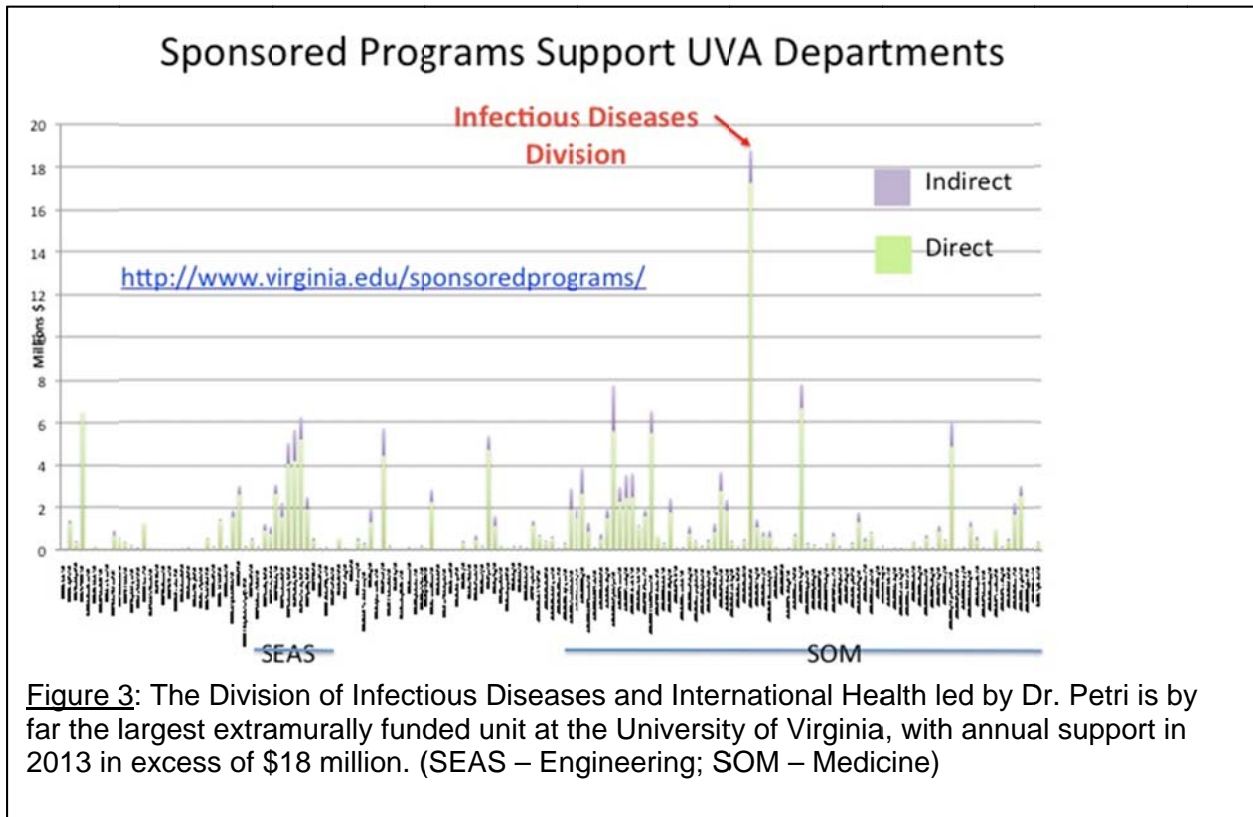
The Petri laboratory currently includes four graduate students pursuing their Ph.D. in Microbiology and ten postdoctoral fellows (two of whom are independently supported by individual fellowships). All are successfully engaged in research. Ten students have received PhDs from his laboratory and they have averaged > 2 first authored papers from their dissertations. Three PhD graduates are currently conducting postdoctoral fellowships, 4 are in scientific positions in industry, and 3 are members of medical school faculties. The seven MD or MD/PhD fellows who have graduated from the lab are all on medical school faculties, with 3/7 currently holding R01 grants (all tenured – one each at UVA, Stanford and U. Vermont) and 4 having received K08 awards. The seven PhD fellows who have graduated from the lab include 5 on medical school faculties (two that are or were PIs for R01s), one in industry and one in a 2nd postdoctoral fellowship. Undergraduate and medical students are always a part of the lab, conducting honors thesis work and summer research projects respectively. Petri is committed to providing these experiences in research, as he views this as how all scientists got their start.

4. Service. Petri is in his 12th year as Chief of the Division of Infectious Diseases and International Health of the Department of Medicine at the University of Virginia. The Division consists of 25 faculty and has clinical, educational and research missions for the School of Medicine. For the clinical mission, Dr. Petri leads by example, with higher than average clinical service (3 months annually), near-perfect medicine intern/resident evaluations of 8.5/9.0 scale, and the highest Press Ganey patient satisfaction scores. Clinic wait times for appointments consistently are less than 3 days, and growth in clinical activities is > 10% annually. He has instituted a robust new quality assurance program with active engagement of faculty and fellows. New clinical initiatives under Petri's leadership include an antibiotic use monitoring, and a musculoskeletal infections program with orthopedics and an HCV-HIV co-infection clinic in collaboration with gastroenterology.

For the research mission, Dr. Petri also leads by example as the highest funded researcher in the School. Under his leadership annual research funding for the Division has increased from 0.5 million to \$19 million (**Figure 3**). Six NIH "K" career development awards are held by junior faculty in the Division. Despite the constraints on resources caused by the Global Financial Crisis, the Division under Dr. Petri's leadership has recruited new junior faculty in TB research, antibiotic stewardship, global health, microbial pathogenesis, host response to infection and HIV vaccine design.

In education Petri promotes strong basic science-clinical science collaboration, with graduate students, basic science joint appointments for faculty, and basic science courses led and taught by ID faculty. The Infectious Diseases Fellowship program has 90% of graduates in academics, including the chairs of infectious diseases at Stanford and Case Western Reserve and the clinical chair at Yale University.

As described in letters of support (below) from Drs. Alison O'Brien and Dyann Wirth, Petri has provided over a decade of professional service to the American Society of Tropical Medicine and Hygiene as Program Chair and President, and to the American Society of Microbiology as Editor of the Journal *Infection and Immunity*. In addition to providing 3 months each year of clinical care in infectious diseases and internal medicine to the community, Petri has coached soccer for the Soccer Organization of Charlottesville-Albemarle for 36 seasons (1992-2012)!



Personal Statement

1. Teaching. My teaching responsibilities at the University of Virginia are rarely in the traditional format of a classroom lecture. In fact I lecture only a half dozen times in a school year (much to the chagrin of my law school professor and friend next door)! This does not however mean that I rarely teach; in fact I am almost continuously teaching. My working day is spent teaching mostly in small groups or one-on-one. For example this Sunday morning, as I write this statement, I have just returned from making rounds in the University Hospital. There, as part of taking care of patients, I discussed with the MD fellow on the infectious diseases consult service the stages of tropical pyomyositis, the necessity for surgical intervention for epidural abscess, and the azole sensitivity of *Candida dubliniensis*. Each patient visited was an opportunity for teaching of the fellow and in many cases also the patient. I in turn was educated by the fellow and even by some of the patients. Interactive teaching that engages the student's and my mind is what builds bridges between student and teacher. To observe a student think through a problem and arrive at a solution is heartening.

The clinical teaching I have described above occurs during the three months out of each year that I am "attending" on the infectious diseases and internal medicine inpatient services. The goal with my teaching in a medical setting is to develop physicians who are adept at the independent management of complex and often critically ill patients. My students are the medical students, interns, residents, fellows and patients, the classroom is often the bedside or a rounding room, and the teaching is every day of the week and from the early morning through the evening. The teaching may begin with my asking the intern how she is thinking about a problem, what the pertinent parts of the history, physical exam and lab findings are, and how she is formulating a differential diagnosis. My relaying information is part of this interaction, but it is more about how to think about a problem, or even about how to garner the needed information to arrive at a decision and plan. And not infrequently the conclusion of our conversation is that the evidence does not exist to reach a conclusion, which highlights areas of research need.

In my laboratory, my time is also spent in one-on-one or small group meetings with the graduate students, M.D. and Ph.D. postdoctoral fellows and undergraduates who are learning to do research. The goal of my teaching here is to develop the next generation of scientists who will advance knowledge and solutions to healthcare problems. In my interactions with students in the lab, I will quite often pose a series of questions that are as routine as essential to their development as independent investigators: what is the most important area of study; what is the hypothesis; what are several independent experimental ways to test the hypothesis; how will you interpret the results; what will you do if you encounter a roadblock? I also emphasize written communication especially with these young scientists, as the ability to express oneself in writing is integral to success.

As an institutional leader, my teaching extends to faculty and can include helping them with their teaching, promoting interdisciplinary conferences, research-in-progress and seminars, and in essence building a tradition of scholarship that values teaching, discovery, knowledge integration and service. There are only so many hours in the day for me to teach, but by enabling others the institutional impact of scholarship is magnified.

2. Discovery. I am a physician-scientist, which for me means that I have an active clinical practice as well as a laboratory research program. This is fairly unusual, with less than 1% of M.D.s in the United States conducting research. To a lay audience I will sometimes try to explain that I do not know the best way to treat nearly every patient I see. I have to quickly add that this is not because I am a bad doctor (!), but instead because there are so many unknown areas of medicine. There is a constant need to discover how to improve the care of the ill.

There have been opportunities for me to abandon either medicine or science (starting when I was a student and constantly asked why I wanted to do both), but my ambition to teach others how to become physician-scientists is motivating.

I am fortunate to lead the largest research program in the University. It can be logically divided into basic, translational and clinical investigation. The basic investigation centers on understanding how microbes cause infectious diseases in humans. The lion's share of this work is on the parasite *Entamoeba histolytica* that I have dedicated 25 years of study. It is one of the important causes of diarrhea in infants and children in the developing world, and causes disease by eating human cells alive! Understanding the molecules the parasite uses to accomplish this will give us approaches to prevent or treat this infection. For example the molecule on the surface of the parasite that initiates eating is now part of a vaccine that we are developing.

Another microbe that we are studying is much more important in Virginia than in Bangladesh. It is called *Clostridium difficile* and is the cause of hospital-acquired diarrhea. On rounds this morning six of my patients have *C. difficile*. Despite how common this infection is, our treatment is woefully lacking, with one in every eight patients dying. I have discovered that in a mouse model of *C. difficile* that the immune response to infection is worse than the infection itself. By neutralizing an immune signaling molecule called IL-23 that we can prevent mice from death. This may one day be part of a better treatment regimen.

Translational research that I direct is largely through a now 20-year collaboration with TechLab, Inc., located in the Corporate Research Park at Virginia Tech. The work is focused on diagnostic test development, and we have succeeded in designing, manufacturing and distributing FDA-approved tests for diarrhea due to amebiasis. Recently this collaboration is encompassing work that I lead to make tests to predict child malnutrition and assess vaccine-induced immunity, funded by the Bill & Melinda Gates Foundation.

Clinical research that I lead is centered in the Indian subcontinent where I currently direct projects in Dhaka, Bangladesh, Kolkata, India and Karachi, Pakistan. Supported by the NIH, DTRA and the Bill & Melinda Gates Foundation, these projects revolve around the health problems of infants growing up in the slums of these mega cities of the developing world. When one realizes that half of these children become malnourished by age two, and that malnutrition increases their risk of death by 60% and leaves them developmentally disabled likely for the rest of their lives, there can be no more compelling set of problems to address.

3. Knowledge Integration. I imagine that it is clear to you from what I have written above that I believe that the dichotomy of teaching and discovery is false. You cannot have one without the other, and their integration drives the highest levels of intellectual thought.

4. Service. Service is of course intrinsic to what I do, as service opportunities, whether they be at the UVA Hospital or in a clinic in Bangladesh are opportunities to teach, discover and integrate knowledge. Outside of my professional service activities however, I am proud of my many seasons of coaching recreational soccer, as that provided me an opportunity to give back to a community that through volunteerism has enriched the lives of each of my five children.

Abbreviated Curriculum Vitae

William A. Petri, Jr.

Education

1985-1988	University of Virginia	Infectious Diseases
1982-1985	Case Western Reserve University	Internal Medicine
1976-1982	University of Virginia	MD, PhD (Microbiology)
1973-1976	University of Wisconsin-Madison	Chemistry (no degree)

Professional Experience

2002-	Wade Hampton Frost Professor of Epidemiology, UVA
2001-	Chief, Division of Infectious Diseases & International Health, UVA
1996-	Professor of Medicine, Microbiology and Pathology, UVA
1992-1996	Associate Prof. (tenured) of Medicine, Microbiology and Pathology, UVA
1988-1992	Assistant Professor of Medicine and Microbiology, UVA

Awards

2013	All-University Teaching Award, University of Virginia
2013	Dean's Excellence in Faculty Research Award, University of Virginia
2013	Best Doctors in America & Castle Connolly Top Doctors
2010	Distinguished Undergraduate Mentor Award, UVA Department of Biology
2003	Inventor of the Year, University of Virginia Patents Foundation
2003	President, American Society of Tropical Medicine and Hygiene
2001	Life Member, American Society of Tropical Medicine and Hygiene
1999	Squibb Award, Infectious Diseases Society of America
1992-2003	Burroughs Wellcome Fund Scholar in Molecular Parasitology
1985-1993	Lucille P. Markey Scholar in Biomedical Research

Notable Active Research Grants

- NIH R01 "Role of Leptin in Innate Mucosal Defense from Amebiasis" (\$375,000 annually; continuously funded 1989-2017)
- NIH R01 "Field Studies of Cryptosporidiosis in Bangladesh" ((\$375,000 annually; continuously funded 1998-2018)
- Bill & Melinda Gates Foundation "Exploration of the Biologic Basis for Underperformance of OPV and Rotavirus Vaccines" (\$3,750,000 annually; funded 2010-2014)

Five Most Cited Publications (total publications 413, total citations 6900, H index 49)

- The Genome Of The Protist Parasite *Entamoeba histolytica*. Loftus, B; Anderson, I; Davies, R et al. Nature 433: 865-868, 2005 (436 Citations)
- Amebiasis. Haque, R; Huston, CD; Hughes, M; Petri WA Jr. New England Journal of Medicine 348: 1565-1573, 2003 (210 Citations)
- Isolation of the Galactose-Binding Lectin That Mediates the in vitro Adherence of *Entamoeba histolytica*. Petri, WA; Smith, RD; Schlesinger, PH et al. Journal Of Clinical Investigation 80: 1238-1244, 1987 (210 Citations)
- Cat-Scratch Disease, Bacillary Angiomatosis, and Other Infections due to Rochalimaea. Adal, KA; Cockerell, CJ; Petri, WA New England Journal of Medicine 330: 1509-1515, 1994 (180 Citations)
- Rat And Human Colonic Mucins Bind to and Inhibit Adherence Lectin of Entamoeba-histolytica. Chadee, K; Petri, Wa; Innes, Dj; et al. Journal of Clinical Investigation 80: 1245-1254, 1987 (180 Citations)

Selected Patents & Licensing Agreements

Petri, W.A. Jr. et al. Diagnosis and prevention of amebiasis. U.S. Patents 5,004,608; 5,272,058; 5,260,429; 5,405,748; 5,401,831; 5,665,565; 5,891,634; 6,165,469

Patent License Agreement: TechLab, Inc. (Blacksburg, VA) and the University of Virginia; technology related to the adherence lectin of *E. histolytica*; initiated 1/93.

FDA - Approved Diagnostic Tests: *Entamoeba* test; FDA 510(k) clearance for *in vitro* diagnostic use, March 9, 1995; *Entamoeba histolytica* test; FDA 510(k) clearance for *in vitro* diagnostic use, September 10, 1996; *Entamoeba histolytica* II test; FDA 510(k) clearance for *in vitro* diagnostic use, December 16, 1999.

Invited Lectures: 135 invited lectures presented, including Virginia Tech, Virginia Commonwealth University, Virginia Biotechnology Institute, Lynchburg College, Hampton U., U. Wisconsin, Harvard, Yale, Cornell, Duke, Vanderbilt, Notre Dame, Johns Hopkins, U. Pennsylvania, U. Chicago, U. Maryland, U. Vermont, U. North Carolina-Chapel Hill, U. Georgia, U. Washington, Washington State, U. Wisconsin, Uniformed Services University, UCLA, UC Davis, Stanford, Washington University in St. Louis, U. Texas-Galveston, U. Nagasaki, NIH, National Institute Infectious Diseases Tokyo, International Centre Diarrheal Disease Research Bangladesh, National Institute for Cholera and Enteric Diseases India, Aga Khan University Pakistan, Tribhuvan U. Nepal, Gulhane Medical Academy Turkey, U. Texas-El Paso, U. Wyoming, U. Texas-San Antonio, New York University, Bill & Melinda Gates Foundation, Burroughs Wellcome Fund, Medical College Wisconsin, Universidad Cayetano Peru, Oklahoma State U., SUNY Buffalo, Boston University, Walter Reed, Case Western Reserve U., CDC

Notable Graduate Students/Fellows (18 fellows, 12 graduate students awarded PhD)

Patrick Ayeh-Kumi, M.Phil. , B.Sc., Ph.D. - Dean, School of Allied Health Sciences, University of Ghana Medical School, Accra, Ghana.

Upinder Singh, M.D. - Chief of Infectious Diseases, Department of Medicine, Stanford University.

Shinjiro Hamano, M.D., Ph.D. – Professor, Institute of Tropical Medicine, Nagasaki University, Japan.

Christopher D. Huston, M.D. – Tenured Associate Professor of Medicine, University of Vermont.

Eric Houpt, M.D. – Harrison Chair and Professor of Medicine, and Vice Chair of Medicine, University of Virginia.

Barbara Mann, Ph.D. – Tenured Associate Professor of Medicine, Wyeth-Ayerst Professor of Infectious Diseases, University of Virginia.

Public and Academic Service

2010-2016 Member, NIAID Microbiology & Infectious Diseases B Subcommittee

2005-2008 Member, NIH Pathogenic Eukaryotes (PTHE) Study Section

2003-2007 Ad hoc Chair, DBBD Minority & Disabil. Predoc.Fellowship Review

2001-2005 Member, NIAID Microbiology & Infectious Diseases Research Committee

1993-1997 Member, NIH Tropical Medicine and Parasitology Study Section

1998-2011 Member, Parasitic Diseases, U.S.-Japan Medical Science Panel

1999-2009 Editor, Infection and Immunity

1993-2001 Board of Directors, American Type Culture Collection

1993-2001 Scientific Program Chair, American Society Tropical Medicine & Hygiene

Honorary Societies

Phi Beta Kappa; Alpha Omega Alpha; Association of American Physicians; American Society for Clinical Investigation; Fellow, Infectious Diseases Society of America; Fellow, American College of Physicians; Fellow, American Academy of Microbiology;

Letters of Support (Excerpted)

1. Teaching

While his research discoveries will be recounted by others, I wish to emphasize the impact that Petri has had on the next generation of tropical medicine scientists. In addition to his international impact on young scientists through his past leadership of the American Society of Tropical Medicine and Hygiene, he has also mentored one-on-one in his lab some of the current leaders. These include Upinder Singh, Chief of Infectious Diseases at Stanford and leader in her own right in amebiasis, Eric Houpt MD who is Vice Chair of Medicine at UVA and works in Tanzania on diarrheal diseases, Shinjiro Hamano who is Professor of Tropical Medicine at Nagasaki University, Patrick Ayeh Kumi who is currently Dean of the School of Allied Health Sciences at the University of Ghana, Barbara Mann Associate Professor at UVA, Chris Huston MD Professor of Medicine at the University of Vermont and developer of medicines to treat cryptosporidiosis, and Katy Ralston Ph.D. who is a newly NIH funded investigator in amebiasis. Petri has realized from the start that the future solutions to global health rest in the hands of today's students. **Marilyn Parsons, Ph.D., Seattle Biomedical.**

2. Discovery

Bill Petri is the pioneer and lead international investigator of the parasite *Entamoeba histolytica*, the cause of the global disease amebiasis. This diarrheal infection affects one in ten children by their first birthday in the urban slums of Bangladesh where Petri works. Petri discovered the Gal/GalNAc-binding lectin of the parasite *Entamoeba histolytica* that mediates contact-dependent killing of host cells. This protein is the lead candidate for a vaccine against amebiasis. He has also pioneered DNA transformation of the parasite, which enables the use of genetics to understand how the parasite causes disease. The mouse model of amebic colitis was also developed by Petri, which has provided the first understandings of the innate and acquired immune responses to amebiasis, allowing for the design and testing of vaccines.

He has brought his research skills to Dhaka Bangladesh where for the last 20 years he has studied amebiasis in infants and children. He has developed the sole FDA-approved diagnostic test for amebiasis. Petri has discovered that children develop immunity to reinfection, giving promise to vaccine development. Breastfeeding was also identified as providing protection to nursed infants, in part by transfer of IgA antibodies from mother to infant. Amebiasis is a common infection in these poorest of the poor children in Dhaka, but Petri's work identifying protective immune responses gives hope for future prevention through vaccination and/or nutrition. **Pradip Rathod, Ph.D. Professor of Chemistry, University of Washington.**

Acquired protective immune responses to amebiasis and cryptosporidiosis in children have been identified by Petri's work. To be the first to identify the existence of acquired immunity for one infectious disease could be perceived as a lifetime accomplishment; Petri has done this for two. There are very practical applications of this work, for example in the case of cryptosporidiosis the association of protection of infants with maternal breast milk IgA against the oocyst suggests that promotion of breast feeding could be a major means of prevention. A fundamental advance in immunology that has resulted from Dr. Petri's research is the identification of leptin signaling in the gut as an innate immune defense from amebiasis. Petri identified a mutation in the leptin receptor that was associated with a 4-fold increased susceptibility to amebiasis, and demonstrated in murine studies that leptin acted at the level of the intestinal epithelium to prevent invasion. Finally he has expanded our work together on enteric infections to encompass the problem of failure of enterically-administered vaccines. He has discovered that malnutrition, decreased duration of breastfeeding, and diarrhea are risk factors for oral polio vaccine (OPV) failure. It is most remarkable that after the administration of literally billions of doses of OPV that Petri is the first to provide an understanding of why the vaccine lacks immunogenicity in the developing world. The beauty of this observation is again

that it may lead to immediate intervention through promotion of breastfeeding, micronutrient supplementation and diarrhea prevention. **Rashidul Haque, M.B., Ph.D., Senior Scientist, International Centre for Diarrhoeal Disease Research, Bangladesh.**

3. Knowledge Integration

William A. Petri, Jr., M.D., Ph.D. and I have had, and continue to enjoy, a collaboration in diagnostic test development that has not only resulted in publications, NIH and Gates Foundation grants, but most importantly in FDA-cleared and internationally marketed devices. When this collaboration began two decades ago the enteric parasites were diagnosed by microscopic examination of stool samples. The visual identification of parasites was not surprisingly prone to mistakes, with one study showing sensitivity and specificity of less than 50%!

Dr. Petri has made three major contributions to improve this situation, in my opinion. First he made monoclonal antibodies that were specific for the pathogenic amoeba *Entamoeba histolytica* that enabled its differentiation from more common nonpathogenic parasites. Second he led our collaborative work to develop these monoclonal antibodies into tests that would identify the parasite in fecal samples. Finally he developed a field research sites in Bangladesh, Germany and Japan that allowed for the testing and eventual FDA clearance for diagnostic devices. The net result has been ELISA and point-of-care rapid tests for amebiasis, giardiasis and cryptosporidiosis. The work is therefore robust, forward looking, full of future potential and I think a great example of translational research. **David Lyerly Ph.D. Vice President, TechLab**

4. Service

Dr. Petri is a remarkable research Leader who heads one of the most productive research groups (arguably the most productive in terms of funding and relevance to Global Health) in the School of Medicine and entire University. Under Bill's tireless leadership and mentorship, numerous fellows, postdocs, and basic and clinical researchers have developed internationally recognized careers (an example is his former fellow, Dr. Upi Singh, who is now Chief of Infectious Diseases at Stanford), not to mention the outstanding faculty, fellows and students he leads in his Division (like Drs. Eric Houpt, Becca Dillingham, Michael Scheld, Brian Wispelwey, Erik Hewlett, Dick Pearson and many others). I must confess that it is Bill's outstanding leadership in both basic and applied science and our record ongoing NIH Training grant and program that attracts the best and the brightest fellows that has kept me productive and here as well. **Richard L. Guerrant, M.D., Founding Director, Center for Global Health UVA.**

Bill Petri served as Editor of *Infection and Immunity* from 1999-2009, a period during which I was Editor in Chief. Petri's responsibilities included overseeing the scientific review of approximately 30 manuscripts each month, encompassing parasitology, immunology, and bacteriology. After an initial read of the manuscript to ensure its suitability for the journal, Petri would identify experts in the scientific discipline and solicit them to critique the work. I recruited Petri in part because his training as a PhD and MD allowed him uniquely to handle the reviews of both fundamental studies and research with human populations. In the latter area he led in increasing representation of these studies. I found over the years that we worked together that he invariably put the interests of the scientists submitting their work to the journal foremost, working daily to ensure accurate fair and timely reviews. This was entirely a volunteer effort for the American Society of Microbiology and the wider scientific community. Even after being as an *Infection and Immunity* Editor for a decade, Petri continues to help with the editing of other scientific journals including currently being the Associate Editor for PLoS Pathogens, and being a member of the Editorial Board of Parasitology International, Parasite Immunology, F1000 Research Editorial Advisory Group. This is an unusual and laudable level of service to the scientific community and society in general. **Alison D. O'Brien, Ph.D., Chair, Microbiology & Immunology, Uniformed Services University.**

William A. Petri, Jr. led the Scientific Program Committee for the Annual Meeting of the American Society of Tropical Medicine and Hygiene from 1992-2001. In this volunteer capacity, Petri built the Annual Meeting into the premier international event in Global Health. It is hard to remember now, but 1992 was 8 years before the Gates Foundation was established, and well before Global Health became the popular field it is today. The ASTMH meeting had hit a low of only 400 presentations the year before Petri took the lead. A decade later under Petri's leadership the meeting had grown 5-fold. It remains today the "can't miss" event for anyone in the world interested in tropical medicine and global health. Petri brought the best science and scientists to bear on the health problems of the poor and disadvantaged internationally. He made application to the meeting more accessible to its international constituency by introducing web-based abstract submission, and kept student participation as a key element through student travel grants and discounted registration. Petri went on to serve as President of the American Society of Tropical Medicine and Hygiene, and had the singular honor of being elected a Life Member of the Society.

Petri remains active and committed to the development of students as the future of global health research, and in an unprecedented act of generosity has donated the funds for the Young Investigator Awards presented at the Annual Meeting, an award that Petri himself received in 1985! **Dyann F. Wirth, Ph.D., Chair of the Department of Immunology and Infectious Diseases, Harvard School of Public Health.**

I have known Dr. William Petri during the past 7 years as he has served continuously as one of the external advisors for our NIH Center of Biomedical Research Excellence grant, which I direct. Bill is a consummate physician-scientist and a true inspiration to our center faculty. His keen intellect and research spans the entire medical spectrum from basic mechanisms of microbial pathogenesis and host response to clinical fieldwork in several aspects of tropical medicine. This breadth of experience gives Bill incredible perspicacity when reviewing our junior faculty each year. He always quickly grasps the essential facts of each model that is presented and then asks brilliantly insightful questions. He can always find the soft underbelly, the weak points in someone's logic, but rather than merely pointing it out, he always offers creative alternative solutions. This has earned him overwhelming respect and admiration from our COBRE faculty. He has been particularly attentive to our most endangered faculty members, the physician-scientists. He successfully mentored one of them through a K08 award and on to their first R01 grant. He helped another junior faculty member develop a highly successful vaccine trials center. Bill is extremely generous with his time and has provided me with numerous suggestions for improving our center and my own management skills.

I have also seen Bill in action in his own surroundings at UVA, when I was an external reviewer for his T32 training grant. Once again I witnessed an extremely accomplished and nurturing individual who is obviously very dedicated to his fellows and faculty. I cannot think of anyone in academic medicine with the intelligence and caring nature of Bill Petri. He has been for me pundit, enthusiast, confidant. He is the mentor's mentor. **Ralph Budd, M.D., Director Immunobiology, U. Vermont**

Additional Documentation

Patents

Ravdin JI and Petri WA Jr. Amebiasis vaccine. U.S. Patent 5,004,608 issued April 2, 1991.

Petri W.A. Jr. and Mann B.J. Recombinant Gal/GalNAc *E. histolytica* lectin. U.S. Patent 5,260,429 issued November 9, 1993.

Petri, W.A. Jr. and Ravdin J.I. Diagnostic methods for *Entamoeba histolytica*. U.S. Patent 5,272,058 issued December 21, 1993.

Petri, W.A. Jr. and Ravdin J.I. Methods to produce antibodies for differentiating pathogenic from nonpathogenic *E. histolytica*. U.S. Patent 5,401,831 issued March 21, 1995.

Petri, W.A. Jr. and Ravdin J.I. Diagnostic methods for *Entamoeba histolytica*. Continuation in part, U.S. Patent 5,405,748 issued April 11, 1995.

Petri, W.A. Jr., Vines R.R., Purdy, J.E., and Mann, B.J. Transfection of Enteric Parasites. U.S. Patent 5,665,565 issued September 9, 1997.

Petri, W.A. Jr., Vines R.R., Purdy, J.E., and Mann, B.J. Transfection of Enteric Parasites. CIP . U.S. Patent 5,891,634 issued April 6, 1999.

Petri, W.A. Jr. and Mann, B.J. Recombinant *Entamoeba histolytica* lectin subunit peptides and reagents specific for members of the 170 kD subunit multigene family. U.S. Patent 6,165,469 issued December 26, 2000.

Petri W.A. Jr. and Mann B.J. Recombinant 170 kD subunit lectin of *Entamoeba histolytica* and methods of use. Australian Industrial Property Organization #71123/94; allowed 7/27/99.

Mann, B.J., Dodson, J.M., and Petri, W.A. Jr. Recombinant *Entamoeba histolytica* lectin subunit peptides and reagents specific for members of the 170 kD subunit multigene family. U.S. Patent 6,187,310, issued February 13, 2001.

Petri WA Jr, Boettner DR. Compositions and Methods for Regulating *Entamoeba histolytica* Function. U.S. Provisional Patent Application Serial No. 60/872,671, filed Dec. 4, 2006.

International Patent Application Serial No. PCT/US2007/085235 filed on December 2, 2008 entitled "Compositions and Methods for Regulating Entamoeba Histolytica Function", naming inventors, William A. Petri, Jr. and Douglas R. Boettner

Petri WA Jr et al. U.S. Provisional Patent Application Serial No. 61/322,088. Filed on April 8, 2010 Title: Innate Resistance to Clostridium Difficile Colitis Mediated by Reg1. UVAPF Reference: Petri-Difficile (01691-01) PCT/US2011/031680; International Filing Date 4/8/2011

Petri WA Jr et al. U.S. Provisional Patent Application Serial No. 61/421,688, Filed December 10, 2010. Title: Compositions and Methods for Diagnosing Preventing and Treating Under-Nutrition".

Petri WA Jr et al. U.S. Provisional Patent Application Serial No. 61/423,188, Filed December 15, 2010. Title: Addendum to Innate Resistance to Clostridium Difficile Colitis Mediated by Reg1

Petri WA Jr et al. U. S. Provisional Patent Application No. 61/548,768 entitled "Compositions and Methods for Preventing and Treating Clostridium Difficile Infections", filed on October 19, 2011.

U. S. Patent Application Serial No. 13/639,993 filed October 8, 2012 National Stage of PCT/US2011/031680 filed April 8, 2011. Title: Method to Detect and Treat Infectious or Inflammatory Diarrhea Based on Reg1. Our Reference: Petri-Difficile (01691-04)

Buonomo E, Okusa MD, Li L, Petri WA Jr. Compositions and Methods for Treating and Preventing Pathogenic Infections. U.S. Provisional Patent 61/803,281. Filed March 19, 2013.

Petri WA Jr, Jiang, N. Method for diagnosing and treating cognitive impairment in children. US provisional patent application no. 61/820,273 titled "Compositions And Methods For Predicting Impaired Child Development" Filed May 7, 2013.

Evaluations by Interns and Residents (unedited, 2011-2013)

Dr. Petri is the perfect attending. He allows residents to manage the service and make decisions, but is available and willing to help whenever needed.

Excellent attending. Provides enough resident autonomy.

Dr. Petri is an excellent teacher, he liked to teach as much as possible. He was also very good at making rounds effective. He is very compassionate about his work.

I enjoyed working with Dr Petri, as he was always available to help with patient issues and encouraged residents to make their own clinical decisions, while supporting them when needed.

I am always impressed by how available Dr. Petri makes himself to help with patient care. He has no trouble with me calling in the middle of the night, in fact, he welcomes it and is always able to provide helpful guidance for patient care at all hours. He has excellent bedside manner and is committed to teaching and in these ways has been a great role model for me.

Really enjoyed working with this attending although the time was brief. He maintained a good balance in terms of helping to deal with patient management decisions and allowing residents the autonomy to develop plans and execute them. He provided excellent teaching sessions and conducted very helpful and efficient rounds.

Excellent attending with great attitude. Passionate and knowledgeable, great teaching style and does a great job of combining the work demands of the wards with academics and teaching. Would love to work with again.

Dr. Petri was great, very hands on and receptive to inquiries about patients at all times. He emailed articles, which was very helpful as now I will have them for future reference.

Dr. Petri is an excellent educator and ward attending. He is available for patient care questions and helps with communicating among different services. He has interesting and relevant teaching sessions which he blends in well on rounds. Pleasure to work with.

From setting aside time during rounds every day for didactics to bringing us dinner while we were on call, Dr. Petri was incredibly thoughtful towards all the members of our team.

Dr. Petri was one of my favorite attendings to work with on the Medicine service. He respects residents as his colleagues, empowering them to learn and lead the team. His teaching sessions and bedside rounds were also excellent.

Great attending. Clearly enjoys teaching and cares about the patients and residents

Evaluations of Graduate Teaching

Microbial Pathogenesis 2011: Hi Bill, Your non-lecture was fantastic today! I've rarely seen anyone engage students in discussion so effectively and seemingly effortlessly. I've taken many notes and hope to implement them in my teaching. I'll try to catch some of the paper discussion tomorrow. Christopher Burns, PhD, Associate Professor of Medical Education, Department of Microbiology.

Student evaluations scored at 4.8 (5 = perfect): "He made everyone feel very comfortable by explaining that he was learning with us. I also appreciated that he presented his own work to tie

back to the topic. Overall, this was my favorite class” “The format for discussion was great and promoting learning and discussion. “ “Keep the format the same. All the papers assigned were helpful and interesting”. “I liked the format that was used...assigned reading with questions that should be obtained from the articles...I thought that worked nicely.” “I thought the instructor was very good at getting everyone in the class involved and participating.” “The instructor was really approachable. He was very knowledgeable and did not go off on tangents. He did a great job in connecting public health issues regarding infectious disease to the importance of understanding the microbiology of these diseases.”

Advanced Immunology (2011): Nominated by one student as “the most effective instructor”; numerical rating by all of the students 2.4 (1 = excellent; 5 = poor).

Comments from Former Fellow

Dear Bill, Good news---I found out today that I was awarded tenure! I wanted you to be the first person to know this news. When I pause a moment to think back and consider the journey to this point, I realize that there is no one who has guided me more than you. I am truly thankful for your constant support and ongoing mentorship. I just hope that I can live up to all the confidence you had in me from the very beginning---even when I was just getting started in the lab and had no skills, no experience, and no guarantee of ever being productive! I appreciate your faith in my abilities--even when I doubted myself. Apart from science I have learned so much from you in terms of mentoring, camaraderie, and collegiality. Thank you again for everything.

Comments from Undergraduate & Medical Students in the Lab:

...thank you for having me as a part of your lab for the past two years. The experience exceeded all my expectations. It made me a better student of biology and I know it will help me as I pursue my career in medicine. I am greatly anticipating my trip to Bangladesh and thank you for giving me that opportunity.

Thank you so much for all that you have done for me in the past few months. I truly appreciate your writing me a letter of recommendation for residency. Also I can't thank you enough for all of your help and guidance with my personal statement and other career decisions. Thank you also for providing me with the opportunity to go to Bangladesh and conduct research in your lab. My time at your lab at UVa has been a great experience and I can't wait to travel to Bangladesh. I am grateful for everything that you have done for me, but most of all I'm grateful to know you.

I wanted to say thank you for all of the opportunities you have given me this year in helping me become a better researcher! I'm sorry I didn't get to say goodbye before I left, although it's not really goodbye because I'm now a graduate student. I look forward to your lectures in class, and I wish you the best.

I was delighted to find out this weekend that I have been elected as a fellow of the IDSA. Among the 90 individuals to receive this honor this year, Upi Singh did as well. I was nominated by Dan Kuritzkes. Also, I was just reminiscing about the RMSF paper we wrote together because I just prepared an annotated bibliography to send to Dan, who is also nominating me for promotion to Clinical Assistant Professor at Harvard Medical School. I wrote the following description of that experience: “In this state-of-the-art paper, we reviewed all clinically relevant aspects of Rocky Mountain spotted fever. Writing this paper was a formative experience for me since it helped me to discover my love of scholarship in the area of infectious diseases as well as my love of teaching using the written word. I was a medical student when I wrote this article”.

One on One Preceptor for Physical Diagnosis:

I had a great experience for my H&Ps. Dr. Petri found some excellent focused cases for me, and not only helped my performance of the H&P, but also helped improve my understanding of the disease etiologies. He was very kind about pointing out areas in which I could improve, and

giving me helpful advice for taking better care of my patients beyond the H&P.

Dr. Petri persuaded me to “step it up” to a higher level with gentle constructive criticism. I appreciated his willingness to give me another chance to do a more thorough and adequate H&P. He provided helpful suggestions for my write-ups and demonstrated physical exam techniques that I needed to improve upon. Overall Dr. Petri was a positive role model to me in teaching and mentoring and I would be grateful for the opportunity to work with him again in the future.

Dr. Petri was a great teacher. I felt he expected more of me than other preceptors expected of their students, but I feel like I got a lot more out of the experience. Dr. Petri repeatedly invited me to round with him. I wish I had more time. Thanks!

Evaluations of the Undergraduate Classes Solo Taught Each Year by Dr. Petri:

Numerical score 5.0 (on a 1-5 scale with 5 best) for the question “Overall the instructor was an effective teacher”

I thought that the class size was great. There was a lot more opportunity for discussion and participation. Also, as a class we grew comfortable with interacting with the professor and fellow classmates.

Student-led classes were often interesting because even though the person leading the class was well informed about the topic, Dr. Petri often gave additional input and this sparked related discussions. Also, this mixture gave the students a chance to work on leadership skills and really absorb a topic of the class.

This was an extremely interesting course with a lot of relevant information and a bearable workload.

Dr. William Petri is such a knowledgeable and effective teacher. He engaged us in conversation even if many of us weren't biology majors or pre-med. I think everyone should take this class, because it gave me a lot of insight into many diseases. I would give the class an A+ and Dr. William Petri an A+ too.

INFECTIOUS DISEASES COMPETING RENEWAL CRITIQUES (Competitively renewed in 2012; Dr. Petri has led this T32 since 1996 and has competitively renewed it 4 times)....Dr. Petri is exceptionally well qualified to direct the training program, with an active and productive research program of his own and an outstanding record of success from his own graduate students, MD fellows, and postdoctoral fellows. He has successfully directed the program since 1996 and under his directorship, the ID research training program at UVA has flourished and expanded significantly...The Program Director, Dr. Petri, is a very strong leader with a long history of training and a clear track record of NIH-funded research. The interdisciplinary component is a strong point that is very unique and offers a wide range of opportunities. There are multiple other training opportunities available, including biodefense and more basic science issues. There is also a surgical infectious diseases and transplantation training program...The Program Director, Dr. Petri, is highly qualified and experienced to serve in this capacity. He has an excellent track record of scientific productivity, success in mentoring predoctoral and postdoctoral trainees, administrative competence, and academic leadership. He also has significant experience in training underrepresented minorities to enter scientific careers.