

CURRICULUM VITAE

Anthony T. Maurelli, Ph.D.

(Updated October 9, 2019)

BIOGRAPHICAL INFORMATION

TITLE: Professor of Environmental and Global Health

ACADEMIC ADDRESS: Department of Environmental and Global Health
University of Florida
College of Public Health and Health Professions
1225 Center Drive
PO Box 100188
Gainesville, FL 32610
Telephone: (352) 294-5029 FAX: (352) 273-6070
Email: amaurelli@phhp.ufl.edu

LABORATORY ADDRESS: Emerging Pathogens Institute
University of Florida
2055 Mowry Road
PO Box 100009
Gainesville, FL 32610-0009

WEB SITE: [https://
egh.phhp.ufl.edu/profile/maurelli-anthony/](https://egh.phhp.ufl.edu/profile/maurelli-anthony/)

DATE AND PLACE OF BIRTH: September 15, 1952, Philadelphia, Pennsylvania

CITIZENSHIP: United States of America

EDUCATION AND TRAINING

B.S. in Biology, May, 1974
Villanova University, Villanova, Pennsylvania

Ph.D. in Molecular Cell Biology, June 1983
University of Alabama in Birmingham, Birmingham, Alabama
Ph.D. Advisor: Dr. Roy Curtiss III, Department of Microbiology

Postdoctoral Fellow, September 1983 – August 1985
Service des Entérobactéries, Institut Pasteur, Paris, France
Advisor : Pr. Philippe J. Sansonetti

PROFESSIONAL POSITIONS HELD

August 1985 – June 1986 Chargé de Recherche
Service des Entérobactéries
Institut Pasteur
Paris, France

June 1986 – May 1992 Assistant Professor
Department of Microbiology
F. Edward Hébert School of Medicine
Uniformed Services University of the Health Sciences
Bethesda, Maryland

May 1992 – August 1999 Associate Professor
Department of Microbiology and Immunology
F. Edward Hébert School of Medicine
Uniformed Services University of the Health Sciences
Bethesda, Maryland

July 1994 – June 2003 Associate Professor of Molecular and Cell Biology
(secondary appointment)
F. Edward Hébert School of Medicine
Uniformed Services University of the Health Sciences
Bethesda, Maryland

August 1999 – December 2015 Professor
Department of Microbiology and Immunology
F. Edward Hébert School of Medicine
Uniformed Services University of the Health Sciences
Bethesda, Maryland

May 2001 – December 2015 Professor of Emerging Infectious
Diseases (secondary appointment)
F. Edward Hébert School of Medicine
Uniformed Services University of the Health Sciences
Bethesda, Maryland

June 2003 – December 2015 Professor of Molecular and Cell Biology (secondary appointment)
F. Edward Hébert School of Medicine
Uniformed Services University of the Health Sciences
Bethesda, Maryland

January 2016 – present Professor
Department of Environmental and Global Health

College of Public Health and Health Professions
University of Florida
Gainesville, Florida

April 2016 – present Joint Professor
Department of Molecular Genetics and Microbiology
College of Public Health and Health Professions
University of Florida
Gainesville, Florida

July 2017 – present Associate Chair
Department of Environmental and Global Health
College of Public Health and Health Professions
University of Florida
Gainesville, Florida

HONORS AND AWARDS

Postdoctoral Fellowship: La Fondation pour la Recherche Médicale, Paris, FRANCE
October 1983 – March, 1984.

Postdoctoral Fellowship: L'Association pour le développement de l'Institut Pasteur, Paris,
FRANCE, April 1984 – October 1984.

Postdoctoral Fellowship: European Molecular Biology Organization (EMBO),
November 1984 – October 1985.

Fellowship: L'Association pour le développement de l'Institut Pasteur, Paris, FRANCE,
November 1985 – June 1986.

The Society for General Microbiology Lecture of the Year, Trinity College, University of
Dublin, Dublin, IRELAND, April 28, 1994

Elected Fellow of the Infectious Diseases Society of America, 2000

Henry Wu Award for Excellence in Basic Science Research, Faculty Senate Research Day,
Uniformed Services University, Bethesda, MD, May 13, 2004

The Arkansas Medical Society Distinguished Speaker Lecture Series, The University of
Arkansas for Medical Sciences, Little Rock, AR, February 21, 2008

Elected Fellow of the American Academy of Microbiology, January 2008

Elected Secretary-Treasurer, Chlamydia Basic Research Society, 2015-2019

Inducted into Beta Upsilon Chapter of Delta Omega Honorary Society in Public Health,
University of Florida, April 2017

MEMBERSHIPS IN PROFESSIONAL SOCIETIES

1978-present Member, American Society for Microbiology
1986-present Société Française de Microbiologie
2000-present Fellow, Infectious Diseases Society of America
2002-present Member, Chlamydia Basic Research Society
2008-present Fellow, American Academy of Microbiology
2016-present Member, American Society of Tropical Medicine and Hygiene

RESEARCH INTERESTS

Graduate Research: Dissertation title: Studies on the Genetics of Pathogenicity of *Shigella flexneri* 2a

Postgraduate Research: Cloning and characterization of the genes required for invasion of HeLa cells by *Shigella flexneri*

Temperature regulation of virulence gene expression by *Shigella flexneri*

Present Areas of Research: Pathogenic mechanisms of *Shigella flexneri*

- Evolution and emergence of Shiga toxin-producing *Shigella flexneri*
- Role of type III secretion system components in post invasion phenotypes of *Shigella* virulence
- Drug and vaccine discovery applying “black hole” and anti-virulence gene technology to *Shigella*

Pathogenic mechanisms of *Chlamydia*

- Development of genetic tools for studying *Chlamydia* spp. and their application to analysis of pathogenic mechanisms of *Chlamydia* spp.
- Cell wall metabolism and cell division processes of *Chlamydia* spp.
- Mechanisms of antibiotic resistance in *Chlamydia* spp.
- Characterization of transporters of essential metabolites for chlamydial growth
- Pathway “hole filling” – identification and characterization of genes involved in critical metabolic processes of *Chlamydia* intracellular growth

Surveillance of non-HIV sexually transmitted infections in Haiti

- Surveillance of Chlamydia, syphilis, gonorrhea, and trichomoniasis in urban and rural settings; survey of sexual behaviors and other risk factors
- Laboratory capacity building

Water quality and public health in Haiti

- Impact on women's health in urban and rural communities

TEACHING

GRADUATE STUDENTS TRAINED – USU

Alexander E. Hromockyj, Ph.D. granted 1991	Andrea J. McCoy, Ph.D. granted 2005
Maj. Gerard P. Andrews, Ph.D. granted 1992	Christina Faherty, Ph.D. granted 2009
Francine C. Rogers, M.S. granted 1999	Kimberly Bliven, Ph.D. granted 2015

POST DOCTORAL FELLOWS TRAINED – USU

Daniel L. Rowley, Ph.D., 1990 – 1991	Aishwarya Vivek Ramaswamy, Ph.D., 2006–10
Catherine O'Connell, Ph.D., 1993 – 1996	Derek J. Fisher, Ph.D., 2006 – 2011*
Robin C. Sandlin, Ph.D., 1993 – 1999	Ana Kolin, Ph.D., 2007 – 2008
Michael A. Davis, Ph.D., 1995 – 1998	James Henkel, Ph.D., 2009 – 2012
Raymond Schuch, Ph.D., 1995 – 2001	Sabrina S. Joseph, Ph.D., 2009 – 2013
William A. Day, Ph.D., 1998 – 2001	Styliani Antonara, Ph.D., 2009 – 2011
Colleen D. Kane, Ph.D., 1998 – 2004*	Jennifer Joseph, Ph.D., 2010 – 2012
Anita Verma, Ph.D., 2000 – 2003	Aja Gore, Ph.D., 2010 – 2011
Yasuko Homma, M.D., Ph.D., 2002 – 2004	Patricia Pelczar-Rossi, Ph.D., 2011 – 2014
John Rose, Ph.D., 2002 – 2004	Manon Rosselin, Ph.D., 2011 – 2014
Chieko Mitsuata, D.D.S., Ph.D., 2004 – 2006	Mathanraj Packiam, Ph.D., 2012 – 2015
Andrea J. McCoy, Ph.D., 2005 – 2006	Amy Kullas, Ph.D., 2013 – 2014
Daniel V. Zurawski, Ph.D., 2004 – 2008	Erica Raterman, Ph.D., 2012 – 2015
Anne-Laure Prunier, Ph.D., 2005 – 2008	Miranda Gray, Ph.D., 2011 – 2016
Rachel Binet, Ph.D., 2000 – 2009	George Liechti, Ph.D., 2012 – 2016*
Yuda Anriany, Ph.D., 2006 – 2010	

*Ruth L. Kirschstein National Research Service Award Postdoctoral Fellow

GRADUATE STUDENT THESIS ADVISORY COMMITTEES – USU

Judy Chow, 1986 – 1990	Amy Sims, 2000 – 2005 (Chair)
Lawrence M. Sung, 1986 – 1990	Joseph Larson, 2002 – 2004
Wei-Yang Zhang, 1987 – 1992	Jessica Giddings, 2006 – 2009

Christopher Coker, 1990 – 1996 (Chair)	Kathleen Jones, 2006 – 2011
Amy Bordner, 2000 - present	Rachel Vonck, 2007 – 2011
Ann Jerse – University of Maryland at Baltimore, 1990 (external member)	Christopher Doyle, Stony Brook Medical Center, 2011 – 2014 (external member)
Maria Scott, 1995 – 1999	Anita Marinelli, 2011 – 2014 (Chair)
Louise Teel, 1998 – 2002 (Chair)	Ryan Johnson, 2013 – 2015 (Chair)
Angel A. Soler-Garcia, 1998 – 2002	

Faculty advisor, American Society for Microbiology USU Student Branch, 2008 – 2014

TEACHING EXPERIENCE – USU

Lecturer in medical student courses:

- Medical Microbiology and Infectious Diseases (MMID)
 - Bacterial Genetics/Physiology and Pathogenic Bacteriology sections, 1986 – 2013
 - Laboratory Instructor/Discussion Facilitator in MMID, 1986 – 2013
- Selected topics in Fundamentals, Cardiopulmonary/Respiratory, and Musculoskeletal blocks, 2013 – present
 - Gene Transfer; Mutations and Mutagenesis
 - Atypical Pneumonia; Tuberculosis
 - Antibiotics that Affect Cell Wall Synthesis

Lecturer in graduate student courses:

- Pathogenic Mechanisms, 1987 – present
 - Topics taught (2015): Locally Invasive Pathogens: *Shigella* spp.
- Genetics, 1996 – 2012, Course Director and Instructor
- Bacterial Genetics and Physiology, Course Director and instructor 2012 – present
 - Topics taught (2014): Mutations, Mutant Isolation and Genetic Analysis
 - Culture and Growth of Bacteria in the Research Laboratory (lecture and lab)
 - Genetic Analysis, Gene Transfer and Mapping
 - Bacteriophage Genetics
 - Mobile Genetics Elements, Plasmids and Transposons
 - Transposable Elements and Gene Fusions as Genetic Tools
 - Evolution of Microbes
- Advanced Prokaryotic and Eukaryotic Cell Biology and Genetics, 1988 – present; Course Director 2000 – present
 - Topics taught (2012): Negative regulation: the *lac* operon
 - Conjugation
 - Plasmid addition
 - Hypothesis building

Techniques

Inside the room: What happens at Study Section

- Models of Emerging Infectious Diseases, 2014 – Cholera in Haiti: a Personal Perspective
- Grant Writing – Experimental Design, 2002

UNIVERSITY COMMITTEE SERVICE – USU

Member, Committee on Acquisition, 1987 – 1992
Chair, University Safety Committee, 2003 – 2008
Member, Institutional Biosafety Committee, 2003 – present
Member, BIC Genomics Faculty Advisory Committee, 2009 – 2015
Search Committee for Commandant, 2013

SCHOOL OF MEDICINE COMMITTEE SERVICE – USU

Comparability Committee of the Faculty Senate, 1987 – 1988
Student Awards Committee, 1989 – 1992
Basic Sciences Curriculum Subcommittee, 1989 – 1993
Curriculum Committee, 1990 – 1993
Merit Review Committee, 1994 – 1998; 2008 – 2009
Biomedical Instrumentation and Imaging Committee, 1995 – 1997 (Chairman, 1996 – 1997)
Chairman, Curriculum Review Genetics Subtopic Committee, 1997
Graduate Education Committee, 1999 – 2013 (Chairman, 2008 – 2013)
Search Committee for Chair, Department of Medical and Clinical Psychology, 1999
Search Committee for Chair, Department of Anesthesiology, 2000
Committee on Appointments, Promotion and Tenure, 2001 – 2004
Graduate Education Subcommittee to develop M.D. / Ph.D. Training Program, 2001 – 2002
M.D. / Ph.D. Advisory Committee, 2004 – 2006
Search Committee for Director, Graduate Program in Emerging Infectious Diseases, 2005
Search Committee for Chair, Department of Biochemistry, 2006
Search Committee for Chair, Department of Pharmacology, 2006
Ad hoc Committee on the Establishment of a Teaching Academy, 2005 – 2006
Outstanding Biomedical Educator Award Committee, 2009 – 2013
School of Medicine Space Committee, 2010 – present

DEPARTMENTAL COMMITTEE SERVICE – USU

Microbiology and Immunology Graduate Admissions Committee, 1987 – 1999 (Chairman, 1991 – 1999)
Microbiology and Immunology First Year Graduate Student Advisory Committee, 1987 – 1999
Director, Graduate Program, Microbiology and Immunology, 1999 – 2005
Search Committees, Assistant Professor, Department of Microbiology and Immunology, 2001,

2002, 2003 (Chair for 2003 search), 2004, 2005
 Space Committee, 2009 – present

TEACHING – UF

GRADUATE STUDENTS TRAINED

Louise Ball, Interdisciplinary Program, Ph.D. candidate, 2017-present	Andrew Rainey, EGH, Ph.D. candidate, 2019-present
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GRADUATE STUDENT THESIS ADVISORY COMMITTEES

Tyler Kury, MPH, 2016	Alexandra Burne, Ph.D. candidate (Vet. Med.), 2016-present
John Vann, MPH, 2016-2018	Jessica Jacob, Ph.D. candidate (Vet. Med.), 2018-present
Molly Falcone, MPH, 2017-2019	Debra Brunson, Ph.D. candidate (Dentistry), 2019-present
Abriana Johnson, MPH candidate, 2017-present	Joseph Shaffer, MPH candidate, 2017-present
Ashton Creasy, Ph.D. candidate, 2018-present	Daniel Mendez, MHS candidate, 2018-present
Morgan Ingram, MPH candidate, 2018-present	Brent L. Moore, DVM, MPH candidate, 2019-present
Morgan Palmer, MPH candidate, 2019-present	

POST DOCTORAL FELLOWS TRAINED

Dev K. Ranjit, Ph.D., 2016-2019	Jessica Slade, Ph.D., 2016-present
Raghuvveer Singh, Ph.D., 2016-2019	Natasha Weatherspoon-Griffin, Ph.D., 2016-2018

Undergraduate teaching:

- HSC4930: The M^{en}age à Trois of Emerging Infectious Diseases (3 credit hours); Spring 2018; 3 credit hours; Course Director
- PHC3440: Global Public Health, guest lecture; “*Sexually Transmitted Infections in Haiti*”
- SPA4956 Overseas Studies, Study Abroad Program: UF in Haiti – Environmental and Global Health; survey of water quality in Haiti, Summer 2018; Faculty Co-Director and in-field Instructor

Graduate teaching:

- PHC6937: The M^{en}age à trois of Emerging Infectious Diseases; Spring 2019; 3 credit

hours

- PHC6937: Environmental and Global Health Journal Club, Summer C, 2019; 1 credit

COLLEGE OF PUBLIC HEALTH and HEALTH PROFESSIONS SERVICE

Department representative, College Tenure and Promotion Committee, June 2016 – present

DEPARTMENTAL COMMITTEE SERVICE

Search Committees (* indicates Chair of committee)

Research Assistant/Associate Professor, Environmental and Global Health and Center for African Studies (#497868), July 2016*

Research Associate/ Full Professor, Environmental and Global Health (#501228), February 2017*

Assistant Professor, Environmental and Global Health (#501225), February 2017

Associate/Full Professor, Occupational Health (#44883), April 2019*

Assistant Professor, Environmental and Global Health (#50659), August 2019*

Study Abroad Planning Committee, 2016

One Health Certificate working group, 2016

Development Task Force, 2016 – present

EDITORIAL EXPERIENCE

Mini-reviews Editor, *Infection and Immunity*, 2009 – 2019

Member, Editorial Board, *Microbial Pathogenesis*, 1990 – 2013

Member, Editorial Board, *Infection and Immunity*, 1991 – 2005

Ad hoc reviewer for other journals – *Journal of Bacteriology*, *Molecular Microbiology*, *Proc. Natl. Acad. Sci. USA*, *Cellular Microbiology*, *Microbiology*, *Infection and Immunity*, *Nature Reviews Microbiology*, *mBio*, *Journal of Infectious Diseases*, *PLoS Pathogens*

PEER REVIEW ACTIVITIES (last 15 years)

- Member, Henry M. Jackson Foundation Research Support Awards Committee, 2002 – 2016
- Ad hoc reviewer, Host Interactions with Bacterial Pathogens (HIBP) Study Section, NIH, June 20 – 21, 2005
- Ad hoc reviewer, Cooperative Research Partnerships for Biodefense, NIH, NIAID, January 24, February 8, 2006
- Ad hoc reviewer, Host Interactions with Bacterial Pathogens (HIBP) Study Section, NIH, February 27 – 28, 2006
- Ad hoc reviewer, Host Interactions with Bacterial Pathogens (HIBP) Study Section, NIH, June 29 – 30, 2006

- Member, Special Emphasis Panel, Minority and Disability Predoctoral Fellowship Applications, NIH, March 7 – 8, 2007
- Ad hoc reviewer, Clinical Research and Field Studies of Infectious Diseases Study Section, NIH, June 7, 2007
- Subject Matter Expert, NIH Recombinant DNA Advisory Committee, June 19-21, 2007
- Ad hoc reviewer, Host Interactions with Bacterial Pathogens (HIBP) Study Section, NIH, October 2, 2008
- Ad hoc reviewer, Special Emphasis Panel (SEP) ZRG1 IDM-T (02) - Member Conflicts in Microbiology, NIH. January 8-9, 2009
- Ad hoc reviewer, Bacterial Pathogenesis (BACP) Study Section, NIH, February 19-20, 2009.
- Ad hoc reviewer, Bacterial Pathogenesis (BACP) Study Section, NIH, June 18-19, 2009.
- Member, Bacterial Pathogenesis (BACP) Study Section, NIH, September 2009 – June 2013 (Chair, 2011 – 2013)
- Member, Topics in Bacterial Pathogenesis IDM-B (80) Study Section, NIH, October 29-30, 2015
- Member and Chair, Topics in Bacterial Pathogenesis IDM-B (81) Study Section, NIH, July 13, 2016
- Member, Member Conflict: Topics in Mechanisms of Bacterial Virulence and Pathogenesis, ZRG1 IDM-V (02) M, Study Section, NIH, December 2, 2016
- Member and Chair, Member Conflict: Topics in Bacterial Pathogenesis and Host Interactions, ZRG1 IDM-V (02) Study Section, NIH, November 3, 2017
- Member and Chair, Bacterial Member Conflict Special Emphasis Panel (SEP), ZRG1 IDM-V 02 Study Section, NIH, March 16, 2018
- Member and Chair, Topics in Bacterial Pathogenesis IDM-B (80) Study Section, NIH, July 16, 2019

HUMAN SUBJECTS RESEARCH AND SAFETY MONITORING

- Member, Institutional Review Board, Naval Medical Research Center, Silver Spring, MD, 2000 – 2010
- Member, Data and Safety Monitoring Committee for Protocol 09-0009, “Safety and Immunogenicity of Two Live, Attenuated Oral *Shigella sonnei* Vaccines.” National Institutes of Health, National Institute of Allergy and Infectious Diseases, Division of Microbiology and Infectious Diseases, April 2012 – February 2015
- Member, Data and Safety Monitoring Board for Protocol 17-0112: “A Double-Blind Placebo Controlled Phase 2 Trial to Evaluate the Safety, Reactogenicity and Immunogenicity of a Live-Attenuated *Shigella sonnei* Vaccine, WRSS2 and Determine its Efficacy in a Challenge Model of *S. sonnei* 53G in Healthy Adults.” National Institutes of Health, National Institute of Allergy and Infectious Diseases, Division of Microbiology and Infectious Diseases, January 2019 – present

COMMUNITY SERVICE

American Physical Society-Montgomery County Public Schools TeacherScientist Alliance
– designed exercises to supplement elementary school science curriculum, 1997 – 1998
Scientific advisor, Microscope Training for elementary school teachers, Montgomery
County Public Schools, 1998
Scientist Volunteer – organized in-classroom microbiology experiments, Sligo Creek
Elementary School, Silver Spring, MD, 1999 – 2006
Career Day Presenter, Silver Spring International Middle School, Silver Spring, MD, 2006
Assistant Coach, Nelson Youth Ice Hockey Association, Laurel, MD, 2002 – 2009
Volunteer, Medical and Educational Missions to Baradères, Haiti – January 2008, January 2009,
January 2012, February 2013, March 2014

OUTSIDE ACTIVITIES

Member, Scientific Advisory Board – Innatrix

Member, Board of Directors – Gift of Water

CURRENT EXTRAMURAL RESEARCH SUPPORT

- National Institute of Allergy and Infectious Diseases grant R01 AI123300-01, Principal Investigator. Title: Peptidoglycan Assembly, Degradation, and Function in Pathogenic *Chlamydia*. December 5, 2016 – November 30, 2021. Direct costs 12/05/2018 – 11/30/2019 \$250,000

PAST RESEARCH SUPPORT

- USUHS Research Protocol R0738511. Title: Isolation of *Shigella* Virulence Gene Products by *lacZ* Protein Fusions. October 1, 1986 – September 30, 1997. Annual direct costs \$16,200. Competitively renewed in 1989 and 1992.
- USUHS Research Protocol R0738517. Title: Intracellular Expression of *Shigella* Virulence Genes. October 1, 1997 – September 30, 2003. Annual direct costs \$16,200.
- USUHS Research Protocol H073KB-01. Title: Genetics of *Shigella* Virulence: Analysis of Post-invasion Virulence Phenotypes. October 1, 2003 – September 30, 2006. Annual direct costs \$16,000.
- National Institute of Allergy and Infectious Diseases grant R21 AI061058-01, Principal Investigator. Title: Metabolic Modeling of Invasive Bacteria and HeLa Cytosol. July 14, 2004 – June 30, 2007. Annual direct costs \$150,000.
- USUHS Research Protocol R073QB-01, Principal Investigator. Title: Molecular Mechanisms of *Shigella* Escape from Infected Cells. January 1, 2009 – September 30, 2011. Annual direct costs \$20,000.

- National Institute of Allergy and Infectious Diseases grant R01 AI044033-11, Principal Investigator. Title: Molecular Genetic Analysis of *Chlamydia* Pathogenicity. December 1, 1998 – September 17, 2012.
- National Institute of Allergy and Infectious Diseases grant R56 AI044033-11, Principal Investigator. Title: Molecular Genetic Analysis of *Chlamydia* Pathogenicity. September 18, 2012 – July 31, 2013 (bridge award). Annual direct costs \$250,000.
- National Institute of Allergy and Infectious Diseases grant U19 AI08044-04, Principal Investigators Patrik Bavoil and Jacques Ravel. Title: Eco-pathogenomics of Chlamydial reproductive tract infection. September 21, 2009 – August 31, 2014. Annual direct costs \$192,089.
- National Institute of Allergy and Infectious Diseases grant R01 AI024656-23, Principal Investigator. Title: Molecular Genetic Analysis of *Shigella* Pathogenicity. July 1, 2009 – June 30, 2014. Originally funded January 1, 1988 and competitively renewed in 1992, 1998, 2003 and 2009.
- USUHS Research Protocol R073300915. Title: *Chlamydia trachomatis* Susceptibility and Response to Host-Derived Oxidative Stress. October 1, 2014 – September 30, 2015. Annual direct costs \$20,000.
- Armed Forces Health Surveillance Branch-Global Emerging Infections Surveillance and Response System grant PO216_14_HS, Co-Principal Investigator. Title: Sexually Transmitted Infections Surveillance in Urban and Rural Communities in Haiti. October 1, 2015 – September 30, 2016. Direct costs 10/01/2015 – 08/31/2017 \$205,500. Funded since October 2013.
- National Institute of Allergy and Infectious Diseases grant R01 AI044033-12, Principal Investigator. Title: Molecular Genetic Analysis of *Chlamydia* Pathogenicity. August 1, 2013 – July 31, 2018. Originally funded December 1, 1998 and competitively renewed in 2006 and 2013. Direct costs 08/01/2016 – 07/31/2018

PATENTS AWARDED

“Method of Detecting *Shigella* or *Shigella mxiM* DNA”. **Anthony T. Maurelli**, Raymond Schuch, and Robin C. Sandlin. U.S. Patent number 6,342,352 B1, issued January 29, 2002.

“Methods of Identifying Bacterial Genes that are Incompatible with Bacterial Pathogenicity, and the Use of Such Genes, Such as *cadA*, to Reduce Pathogenicity in a Bacteria or to Combat Pathogenic Bacterial Infections”. **Anthony T. Maurelli**, Reinaldo E. Fernández, Craig A. Bloch, and Alessio Fasano. U.S. Patent number 6,344,201 B1, issued February 5, 2002.

U.S. Patent number 6,780,414 B2, issued August 24, 2004.

Australian Patent number 763993, issued November 20, 2003.

“A Plasmid Expressing the Minimal Invasion Genes of *Shigella* and its Use in a Vaccine Strain”.
Anthony T. Maurelli. U.S. Patent number 9,434,772 B2, issued September 6, 2016.

INVITED PRESENTATIONS (last 10 years)

“*Shigella* and *Chlamydia*: Vive la difference”

International Conference “A tribute to Professeur Philippe Sansonetti and his School of Cellular and Tissular Microbiology”

Sainte Gemme Moronval, FRANCE, April 9-10, 2009

“*Shigella* and *Chlamydia* Pathogenesis”

Symposium in Honor of Roy Curtiss III

Phoenix, AZ, May 30, 2009

“Black Holes, Windows to *Shigella* Virulence”

FASEB Summer Research Conference, Microbial Pathogenesis: Mechanisms of Infectious Diseases

Snowmass Village, CO, July 19-24, 2009

“Anti-apoptosis in *Shigella* and Survival in a Host Cell”

Bortree Lecture Series, Department of Veterinary and Biomedical Sciences

Pennsylvania State University

University Park, PA, November 20, 2009

“Metabolic Virulence Genes: A New Paradigm to Study Intracellular Bacterial Pathogens”

Department of Medicine, Division of Infectious Diseases and International Health

University of Virginia School of Medicine

Charlottesville, VA, March 8, 2011

“Metabolic Virulence Genes: A New Paradigm to Study Intracellular Bacterial Pathogens”

Department of Molecular Genetics and Microbiology

The University of New York Stony Brook Health Sciences Center

Stony Brook, NY, May 17, 2011

“Metabolic Virulence Genes: A New Paradigm to Study Intracellular Bacterial Pathogens”

Mucosal Biology Research Center

University of Maryland School of Medicine

Baltimore, MD, June 1, 2011

“Metabolic Virulence Genes: A New Paradigm to Study Intracellular Bacterial Pathogens”

Department of Cell Microbiology and Molecular Genetics

University of Maryland
College Park, MD, November 4, 2011

“How to Grow within a Mammalian Cell: Lessons learned from *Chlamydia*”
Department of Microbiology and Molecular Genetics
University of California, Irvine
Irvine, CA, November 30, 2011

“Metabolic Virulence Genes: A New Paradigm to Study Intracellular Bacterial Pathogens”
Department of Microbiology
University of Colorado School of Medicine
Aurora, CO, March 2, 2012

“Metabolic Virulence Genes: A Powerful Tool for the Study of Intracellular Bacterial Pathogens”
Department of Microbiology and Immunology
Virginia Commonwealth University School of Medicine
Richmond, VA, April 19, 2012

“Using Metabolic Virulence Genes to Study Intracellular Bacterial Pathogens”
Department of Veterinary Medicine
Virginia-Maryland Regional College of Veterinary Medicine, University of Maryland
College Park, MD, May 10, 2012

“Evolution of *Shigella*: Gene Gain and Gene Loss (and Gene Gain?)”
Emerging Pathogens Institute
University of Florida
Gainesville, FL, November 15, 2012

“Evolution of *Shigella*: Gene Gain and Gene Loss (and Gene Gain?)”
Department of Microbiology
University of Pennsylvania
Philadelphia, PA, January 11, 2013

“Gene Loss, Gene Reduction and Bacterial Pathogenesis”
European Course on Microbial Evolution and Molecular Epidemiology
Ecole Normale Supérieure de Lyon and the Université Claude Bernard
Lyon, FRANCE, January 21, 2013

“Another Brick in the Wall: Peptidoglycan Synthesis in *Chlamydia*”
Department of Microbiology
University of Georgia
Athens, GA, September 5, 2013

"Infectious Disease Surveillance in Haiti: Projects for Sabbatical Leave and Beyond"
Department of Microbiology and Immunology
Uniformed Services University of the Health Sciences
Bethesda, MD, September 16, 2013

"Emergence of a Strain of *Shigella flexneri* that Produces Shiga Toxin 1"
Weekly Webinar, National Biosurveillance Integration Center
Department of Homeland Security, Office of Health Affairs
Washington, DC, September 18, 2013

"All the Bricks in the Wall: How *Chlamydia* Synthesizes and Degrades its Peptidoglycan"
Gordon Research Conference on Bacterial Cell Surfaces
Mount Snow Resort, West Dover, VT, June 22-27, 2014

"My Sabbatical in Haiti: Lessons Learned doing Science in Hard Places"
Department of Microbiology and Immunology
Uniformed Services University of the Health Sciences
Bethesda, MD, October 6, 2014

"Prevalence of Stx1a-producing *Shigella* Species Isolated from French Travelers Returning from the Caribbean: An Emerging Pathogen with International Implications"
49th U.S.-Japan Conference on Cholera and Other Enteric Bacterial Infections
Gainesville, FL, January 14-16, 2015

"Sexually Transmitted Infections Surveillance in Haiti: Doing Science in Hard Places"
Henry F. Jackson Foundation Council of Directors Regular Meeting
Bethesda, MD, January 21, 2015

"Finding the Peptidoglycan in *Chlamydia trachomatis* and Resolving the Chlamydial Anomaly"
Département de Biologie Cellulaire et Infection
Institut Pasteur
Paris, FRANCE, February 10, 2015

"Finding the Peptidoglycan in *Chlamydia trachomatis* and Resolving the Chlamydial Anomaly"
Keynote Address
German Chlamydia Workshop
Vienna, AUSTRIA, February 11, 2015

"*Chlamydia* Cell Wall Biogenesis: An Historical Perspective"
Seventh Biennial Meeting of the *Chlamydia* Basic Research Society
New Orleans, LA, March 29 – April 1, 2015

"From Paris to Bethesda, from *Shigella* to *Chlamydia*: Mentoring Junior Faculty"
Molecular Pathogenesis of Infectious Diseases Mini-Symposium Celebrating the Career of
Randall K. Holmes, M.D., Ph.D.
University of Colorado School of Medicine
Aurora, CO, September 25, 2015

“Finding the Bricks in the Wall: Peptidoglycan Synthesis in *Chlamydia*”
Lambda Lunch, National Institute of Child Development and Health
Bethesda, MD, November 19, 2015

“All the Bricks in the Wall: Peptidoglycan Synthesis and Structure in *Chlamydia*”
Department of Microbiology and Cell Science
University of Florida Institute of Food and Agricultural Sciences
Gainesville, FL, March 14, 2016

“Peptidoglycan synthesis in *Chlamydia*: Balancing immune evasion with requirements for cell division”
Society for General Microbiology Annual Conference 2016
Liverpool, ENGLAND, March 21-24, 2016

“All the Bricks in the Wall: Peptidoglycan Synthesis and Cell Division in *Chlamydia*”
Department of Molecular Genetics and Microbiology
University of Florida College of Medicine
Gainesville, FL, April 5, 2016

“All the Bricks in the Wall: Peptidoglycan Synthesis and Cell Division in *Chlamydia*”
Department of Chemistry
Lehigh University
Bethlehem, PA, May 4, 2016

“A Bacterium Builds a Wall: Peptidoglycan Synthesis and Cell Division in *Chlamydia*”
Department of Infectious Diseases and Pathology
University of Florida College of Veterinary Medicine
Gainesville, FL, February 14, 2017

“The How and Why of Cell Wall Synthesis in *Chlamydia*”
Department of Cell Biology, Microbiology and Molecular Biology
University of South Florida
Tampa, FL, February 24, 2017

“Shiga toxin-producing *Shigella* Species Isolated from Travelers Returning from the Caribbean: An Emerging Pathogen with International Implications”
Department of Global Health
University of South Florida College of Public Health
Tampa, FL, October 10, 2017

“One Health Lessons in Sexually Transmitted Infections – Even when it’s not about sex, it’s about sex”
One Health Center of Excellence
University of Florida Emerging Pathogens Institute

Gainesville, FL, January 11, 2018

“How *Chlamydia* uses a Primordial Enzyme to Build its Cell Wall: A New 2-for-1 Drug Target?”

Infectious Diseases & Global Medicine Group

University of Florida College of Medicine

Gainesville, FL, April 25, 2018

“A Brief History of *Shigella*”

Keynote Address, 62nd Annual Wind River Conference on Prokaryotic Biology

Estes Park, CO, June 14, 2018

“Shiga toxin-producing *Shigella* Species in Travelers Returning from the Caribbean: A One Health Approach to Studying Emerging Pathogens”

Walter Reed Army Institute of Research

Silver Spring, MD, July 19, 2018

“Roadmap for Research, or How to Find Your Niche in Science”

Department of Environmental and Global Health

University of Florida College of Public Health and Health Professions

Gainesville, FL, September 18, 2018

“Pathway Hole Filling and Moonlighting Enzymes to Build a *Chlamydia* Cell Wall”

Keynote Address, Department of Oral Biology Departmental Retreat

University of Florida College of Dentistry

Gainesville, FL, November 9, 2018

“How *Chlamydia* uses a Primordial Enzyme to Build its Cell Wall: A New 2-for-1 Drug Target?”

Department of Molecular Genetics and Microbiology

University of Florida College of Medicine

Gainesville, FL, November 13, 2018

“In the Beginning, there was a Plasmid, A Very Big Plasmid (and a very small lab)”

International Symposium: A tribute to Philippe Sansonetti and the Microbial Molecular Pathogenesis Team

Institut Pasteur

Paris, FRANCE, April 25, 2019

“A Brief History of *Shigella*”

CATALySES: Emerging Pathogens Summer Institute

University of Florida Center for Precollegiate Education and Training

Gainesville, FL, June 17, 2019

ABSTRACTS

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