

Beth A. Garvy
Curriculum Vitae

Updated 1/2/2019

Personal Information:

Office Address: UKMC Room MS411, 800 Rose St., Lexington, KY 40536

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Education:

1981, University of South Florida, Tampa, FL, B.A., Biology and Science Education,

1985, The Ohio State University, Columbus, OH, M.A., Exercise Physiology

1991, Michigan State University, E. Lansing, MI, Ph.D., Biochemistry and Exercise Science

Professional Experience:

1981-1983 Science Teacher, Woodrow Wilson Jr. High School, Tampa, FL

1983-1985 Graduate Teaching Assistant, Exercise Physiology, The Ohio State University,
Columbus, OH

1985-1987 Graduate Teaching Assistant, Exercise Physiology, Michigan State University, E.
Lansing, MI

1987-1991 Graduate Assistant under Dr. P.J. Fraker, Michigan State University, E. Lansing,
MI Dissertation title: "Alteration of murine bone marrow B cell development and
function by physiological concentrations of glucocorticoids: A role for programmed cell
death"

1991-1993 Postdoctoral fellow, training under Dr. R.L. Riley, University of Miami School of
Medicine, Miami, FL Research project: Effects of graft-versus-host disease on B cell
development

1993-1996 Research Associate, working with Dr. A.G. Harmsen, Trudeau Institute, Inc.,
Saranac Lake, NY Research project: Host defense against *Pneumocystis carinii*

2005-2006 Circles of Power leadership training, University of Kentucky

2016-2017 SEC Academic Leadership Development Program

Academic Appointments:

1996-1998 Research Assistant Member, Trudeau Institute, Inc., Saranac Lake, NY

1998-2004 Assistant Professor, University of Kentucky, Department of Internal Medicine,
Division of Infectious Diseases, Lexington, KY

2001-2004 Associate Member of the Graduate Faculty, University of Kentucky

2002-2004 Hellman Endowed Professor of Infectious Diseases

2003-2004 Assistant Professor, University of Kentucky, Department of Microbiology,
Immunology, and Molecular Genetics, Lexington, KY

2004-present Associate Member of Graduate Faculty for the Clinical Sciences, University of
Kentucky

2004-2010 Associate Professor, University of Kentucky, Departments of Microbiology,
Immunology, and Molecular Genetics and Internal Medicine, Lexington, KY

2005-present Member of the Graduate Faculty, University of Kentucky

2010-present Professor, University of Kentucky, Departments of Microbiology, Immunology, and Molecular Genetics and Internal Medicine, Lexington, KY
 2011-2012 Interim Chair, Department of Microbiology, Immunology, and Molecular Genetics, University of Kentucky
 2012-present Chair, Department of Microbiology, Immunology, and Molecular Genetics, University of Kentucky

Teaching Activities:

Courses at UK

1999 Lecturer, MI685 Advanced Immunobiology (6 lectures)
 Topics: Complement, Antigen:Antibody Interactions, DTH, CTL

2000-2010 Discussion Leader, MI822, Immunology and Infectious Diseases
 Topics: Fungal Infection, Bacterial Pneumonia/Meningitis, Food borne pathogens; Diarrheal pathogens, Intestinal Bacterial Pathogens

2000-2011 Lecturer, MI685 Advanced Immunobiology (5-7 lectures)
 Topics: Complement, Antigen:Antibody Interactions, DTH, CTL, Immunity to bacteria and viruses

2003 Lecturer, MI822, Immunology and Infectious Diseases (2 lectures)
 Topics: Innate Immunity, Host Response to Intracellular Bacterial Pathogens

2003 Lecturer, MI494G, Immunology (2 lectures)
 Topic: Complement

2005 Lecturer, MI710-002 Microbial Pathogenesis
 Topic: Pneumocystis

2006 Lecturer, MI494G, Immunology (8 lectures)
 Topics: Complement, Antigen:Antibody reactions, B cell maturation

2007-2012 Lecturer, MI710, Microbial Pathogenesis (2-3 lectures)
 Topics: Fungal pathogenesis

2008-2012 Laboratory instructor, MI822 Microbiology laboratory (28 hrs)

2009-2012 Lecturer, OBI828, Immunology and Mycology (2 lectures, 4 hrs)
 Topics: Complement, Antigen:Antibody Interactions, Mycology

2010-2012 Lecturer, MI822, Immunology and Infectious Diseases (5 lectures)
 Topic: Mycology

2012 Lecturer, MI685 Immunobiology, Infection, and Inflammation (2 lectures)
 Topics: Host Response to Bacteria, Host Response to Viruses and memory

2013 Lecturer, MD810, foundations of Infection, Disease, and Therapeutics (3 lectures, 1 2hr case discussion) Topic: Mycology

2013 Lecturer, MI710-002 Microbial pathogenesis (7 lectures)
 Topics: fungal pathogenesis, viral pathogenesis

2013 Lecturer, MD822 Musculoskeletal and skin organ systems (1 lecture)
 Topic: cutaneous and subcutaneous fungal infections

2013 Lecturer, MI720 Microbial Structure and Function (4 lectures)
 Topics: fungal structure and function

2014-2017 Lecturer, MI710-002 Microbial pathogenesis (7 lectures)
 Topics: fungal pathogenesis, viral pathogenesis, immunity to infection

2014-16 Lecturer, MI720 Microbial Structure and Function (4 lectures)

	Topics: fungal structure and function
2014	Lecturer, MD810, foundations of Infection, Disease, and Therapeutics (3 lectures, 1 2hr case discussion) Topic: Mycology
2014-15	Co-director, HON301, Proseminar, Evolution of scientific thought in infectious diseases (19 lectures, attended all 45, mentored 3 groups for oral presentations) Topics: history of virology
2016	Lecturer, MD810 Foundations of Infection, Disease and Therapeutics (4 lectures, 4 podcasts, 2 case discussions) Immunology
2017	Lecturer, MI598 Clinical Microbiology (10 lectures) Immunology (6), Opportunistic Infections, Candidiasis, Cryptococcus, Mucosal Immunology
2017	Lecturer, MI710-002 Microbial Pathogenesis (6 lectures) Fungal pathogenesis, Viruses
2017	Lecturer, MD810 Foundations of Infection, Disease, and Therapeutics (all flipped covering Innate Immunity, Complement, Humoral Immunity, Immunity to Pathogens, Immunity through the Ages, Hypersensitivity, Autoimmunity (8hrs of podcasts, 8hrs in class)
2017	Lecturer, MI720 Microbial Structure and Function, 5 hrs Mycology
2017	Course director and teacher, HON301 Proseminar, Evolution of scientific thought in infectious diseases, taught 42 of 45 hrs
2018	Lecturer, MI598 Clinical Microbiology (4 hrs) fungal infections
2018	Lecturer, MI725 Microbial Pathogenesis (6 hrs) fungal pathogenesis, viruses
2018	Lecturer, MD810 Foundations of Infection, Disease, and Therapeutics (all flipped covering innate immunity, complement, humoral immunity, autoimmunity, immunity to pathogens, immunity through the ages (6 hrs of podcasts, 2 written handouts on cytokines and CD, 7 hrs of class exercises)
2018	Lecturer, MI720 Microbial Structure and Function, (5 hrs) mycology

Division of Infectious Diseases Fellows Conference Series

October 3, 2000	Innate immunity- complement, macrophages, PMN
May 6, 2002	Grantsmanship
August 19, 2002	Research Ethics
August 4, 2003	Introduction of Immunology
October 20, 2003	Grantsmanship
February 2, 2004	Humoral Immunity
October 4, 2004	Grantsmanship
February 7, 2005	Pneumocystis Pathogenesis
October 1, 2007	Humoral Immunity
September 23, 2008	Journal Club
March 2, 2009	T cell Immunology
December 16, 2010	Journal Club
June 20, 2011	Pneumocystis Pathogenesis
July 14, 2011	Chalk Talk
July 28, 2011	Journal Club
December 5, 2011	Humoral Immunity
March 26, 2012	Cellular Immunity

December 3, 2012	Complement
December 13, 2012	Chalk Talk- Host defense to Pneumocystis
December 20, 2012	Journal Club
August 22, 2013	Journal Club
December 16, 2013	Humoral Immunity: Antigen Antibody interactions
January 6, 2014	Cellular Immunity
July 24, 2014	Journal Club
November 13, 2014	Chalk Talk- host defense to Pneumocystis life forms
November 17, 2014	Cell Mediated Immunity
January 8, 2015	Chalk Talk- genetic manipulation of Pneumocystis
December 3, 2015	Journal Club
December 21, 2015	Humoral Immunity
December 19, 2016	Complement and antibody overview
April 24, 2017	Innate Immunity Update
December 18, 2017	Immunity to Pneumocystis

Advising Activities:

Post-doc/faculty Mentor

4/1999 – 6/2004	Mahboob Qureshi, PhD, post-doctoral fellow, currently Associate Professor, Touro University of Nevada, Las Vegas.
6/2000- 6/2003	Alice C. Thornton, MD, BIRCWH scholar UK
12/2005-3/2011	Brian Murphy, MD, junior faculty in Internal Medicine, K30 scholar, currently infectious diseases research director, Medpace
3/2006-11/2009	Jim Temprano, MD, junior faculty in Internal Medicine, Co-Mentor K30/BIRWCH scholar, currently Assistant Professor St. Louis University
11/2010-6/2012	Zhan Ye, PhD, post-doctoral fellow, currently Pathology resident, UK
9/2010-7/2012	Jessica Breslow, PhD, post-doctoral fellow, currently post-doc at Temple Univ.
7/2013-7/2016	Moises Huaman, MD, Assistant Professor, Division of Infectious Diseases, University of Kentucky

Pre-doc Mentor

10/2000-1/2003	N. Nkhwashu, graduate student, Medical University of Southern Africa (co-advisor), PhD awarded 2003.
3/2001-8/2005	David Feola, PharmD, Pharmacy graduate student, earned PhD in 2005, Associate Professor University of Kentucky College of Pharmacy
5/2002-5/2007	Kerry Empey, PharmD, Pharmacy graduate student, earned PhD in 2007, currently Assistant Professor University of Pittsburgh
11/2003-6/2006	Co-mentor for graduate student, Shayyaz Mohammad Inayat, Clinical Laboratory Sciences, earned DSc 2006, graduated Medical School at UK 2011
6/2005-5/2007	Amy Rogosky, graduate student, Microbiology, Immunology, and

6/2005-9/2009	Molecular Genetics, earned MS 2007 Janet Louise Lines, earned PhD 2009, Microbiology, Immunology, and Molecular Genetics, currently post-doc at Kings College, London with Randy Noelle
7/2007-11/2011	Michael Opata, earned PhD 2011, Microbiology, Immunology, and Molecular Genetics, currently post-doc at University of Texas Medical Branch with Robin Stevens
5/2008-7/2012	Samantha Hoskins, PhD candidate, Microbiology, Immunology, and Molecular Genetics, currently Assistant Professor Nevada State University
5/2009-7/2013	Catherine Kurkjian, PhD candidate, Microbiology, Immunology, and Molecular Genetics, currently post-doc position at UNC Chapel Hill with Jenny Ting
5/2010-3/2011	Brittany M. Freeman, graduate student, Microbiology, Immunology, and Molecular Genetics, earned MS 2011, currently ATF agent
5/2012-7/2017	Heather Evans, graduate student Microbiology, Immunology, and Molecular Genetics, currently post-doc Univ Cincinnati with George Deepe
7/2015-present	Luke Heil, MD/PhD student Microbiology, Immunology, and Molecular Genetics

Graduate Committee Member

11/01	External Reviewer for L. Fernandes Dissertation, MEDUNSA
02/02	External Reviewer for N. Nkhwashu Dissertation, MEDUNSA
6/2002-2004	Sarah Goes, Microbiology, Immunology, and Molecular Genetics
6/2004-4/2005	Kristen Emerson, Microbiology, Immunology, and Molecular Genetics student, earned MS in 2005
10/2004-3/2009	Michael Woodman, Microbiology, Immunology, and Molecular Genetics, earned PhD in 2009
1/2005-5/2006	Ryan Mulligan, Microbiology, Immunology, and Molecular Genetics, earned MS 2006
8/2006-5/2007	Andrew Stefka, Microbiology, Immunology, and Molecular Genetics, earned MS in 2007
8/2006-6/2011	Mosoka Fallah, Microbiology, Immunology, and Molecular Genetics, earned PhD in 2011
11/2006	Amanda Gardner, outside examiner, Molecular Biochemistry
6/2007-4/2011	Elsa Bou Ghanem, Microbiology, Immunology, and Molecular Genetics, earned PhD in 2011
6/2007-11/2011	Edward Chang, Microbiology, Immunology, and Molecular Genetics, earned MS in 2011
7/2007-1/2012	Vadim Kuyachuk, Microbiology, Immunology, and Molecular Genetics, earned PhD in 2012
9/2007-12/2007	Kevin White, Medical Sciences, earned MS in 2007
9/2007-12/2007	Sravanthi Kolla, Medical Sciences, earned MS in 2007
12/2007-2012	Jillian Vanover, Molecular Pharmacology did not finish

	dissertation
7/2008-5/2012	Anders Chang, Molecular Biochemistry, earned PhD in 2012
2/2009-4/2009	Randoll Hooper, Medical Sciences, earned MS 2009
9/2010-6/2012	Eric Rogier, Microbiology, Immunology, and Molecular Genetics
8/2011-11/2013	Jeremi Mullins, Microbiology, Immunology, and Molecular Genetics, left program
8/2011-4/2012	Robert Hayman IV, Medical Sciences, earned MS 2012, currently research analyst at University of Kentucky
8/2012-5/2015	Macarena Sanz, Veterinary Science, PhD in May 2015
8/2015-2018	Fernanda Cesar, Veterinary Science, PhD May 2018 currently practicing vet med
8/2013-12/2017	Rene Gonzalez, Pharmacy
8/2012-5/2016	Edita Klimyte, Biochemistry, PhD in May 2016
7/2013-2018	Michelle Pitts, Microbiology, Immunology, and Molecular Genetics, PhD in spring 2018, currently post-doc Univ of Kentucky College of Pharmacy
1/2014-12/2014	Emily Rubenstein, Medical Sciences, earned MS 2014
7/2015-present	Evan Lynch, Microbiology, Immunology, and Molecular Genetics
8/2017-present	Kerri Beth Slaughter, Biochemistry
8/2018-present	Rachel Thompson, Biochemistry

Student seminar Mentor

Autumn, 2004	Mentor for Student Seminar, Michael Woodman
Autumn, 2009	Mentor for Student Seminar, Lauren O'Connor and Gavin Ellis
Autumn, 2013	Mentor for Student Seminar, Will Arnold

Qualifying Exam Committee Chair

2007	Logan Burns
2007	Matthew Troese
2008	Erica Fleishaker
2008	Razvan Arsenescu
2009	Mary Catherine Kermicle
2010	Eric Rogier
2011	Marie Gehman

Undergraduate Bio395, MI397, AgBiotech

William Smith, Tanner Lamb, Laura Briggs, Kristen Pederson, Nicholas Federico, Justin Welden, Gray Bryant, Andrew Simpson, Kareem Spann, Annie Bailey

Administrative Activities and University Service:

10/98-12/11 Member of the VA IACUC
 10/99-9/00, 10/05-12/06, 1/08-12/08, 1/09-12/11 Chair, VA IACUC
 6/98 – 7/12 Coordinator of Research for the Infectious Diseases Fellowship Program

10/00–9/03 Member of VA R&D Committee
 8/01-7/04 Member of the University Senate
 8/01-5/02 Member of Dept. of Physiology Chair Search Committee
 8/01-7/04 Member of Senate Academic Facilities Committee
 11/01-9/03 Member of Internal Medicine Web Site Committee
 10/02-9/03 Chair of VA R&D Committee
 11/02 Member of Division of Infectious Diseases Chief Search Committee
 10/03-1/04 Member of Dept. Microbiology, Immunology, and Molecular Genetics faculty search committee
 9/04- 9/06 Member of Integrated Biomedical Sciences Admissions Committee
 2/05- 9/05 Co-chair of HHMI grant committee
 6/05-6/07 Member of Dept. Microbiology, Immunology, and Molecular Genetics faculty search committee
 7/06-9/11 Director of Graduate Studies, Dept. Microbiology, Immunology, and Molecular Genetics and Chair of Microbiology Education Policy and Procedure committee
 9/07-10/11 Organizer for MIMG Annual Retreat
 9/07-2011 Member of Clinical and Translational Research Program (HHMI Med to Grad) curriculum committee
 9/08-present Alternate Scientific Member of the UK IACUC, VA Liaison to UK IACUC
 10/08-2010 Reviewer for Got Grants, Internal UK Grant program
 3/09-5/09 Member of the Department of Physiology 6 year review committee
 10/09-10/10 Member of Faculty Committee for LCME self-study.
 7/10-6/13 Member of Graduate Council
 9/10-/13 Member Internal Advisory Committee for the UK MD/PhD program
 9/11-7/12 Member Med Curriculum Revision Steering Committee, Intro curriculum, kidney curriculum planning groups
 12/2014- Member VPRs Core Facilities Committee
 2015-present Member, COM committee on Endowed Chairs
 10/15-6/16 Chair, Search Committee for Pharmacology Chair
 1/16-present Chair, Basic Science Chairs and Center Directors, College of Medicine
 9/16-12/16 Member, Search Committee for Director of Division of Laboratory Animal Resources
 9/2017-present Internal Medicine promotions and tenure committee

Honors:

Scholar Athlete Award, University of South Florida, 1977
 Omicron Delta Kappa National Honor Society, 1980
 Invited Speaker, Western New York Flow Cytometry Users Meeting, Nov., 1996
 Travel Award from NIAID to attend the Fourth Workshop in Medical Mycology, Aug., 1997
 Invited Speaker, University of Cincinnati, Feb. 16, 2001
 Invited Speaker, University of Rochester, Nov. 19, 2002
 Invited Speaker, Miami University, Oct. 1, 2003
 Invited Speaker, University of Pittsburgh, Jan. 22, 2004
 Invited Speaker, University of California, Davis, March 29, 2004
 Invited Speaker, Fungal Immunology Symposium at American Society of Microbiology Conference, May 27, 2004

Invited Speaker, Trudeau Institute, Saranac Lake, July 13, 2004 “Host Defense Against *Pneumocystis* in Neonates: Immaturity and Environment”

Invited Speaker, Kentucky HIV/AIDS Conference, Lexington, KY, March 3, 2005 “Grant Writing Skills: Keys to Opportunities”

Invited Speaker, Morehead State University, Morehead, KY, March 29, 2005 “Role of B cells in Host Defense Against *Pneumocystis*”

Invited Speaker, Montana State University, Bozeman, MT, May 7, 2005 “Role of B cells in Host Defense Against *Pneumocystis*”

Invited Speaker, Pneumocystis Symposium/ ATS meeting, San Diego, May 20, 2005 “Host response to *Pneumocystis* in neonatal mice”

Invited Speaker, NHLBI meeting HIV-Associated Lung Infections: Bridging Innate and Acquired Immunity, “Interaction between innate and cellular immunity in response to *Pneumocystis* in neonatal mice”, Bethesda, MD Sept. 27-28, 2005

Invited Participant, Rediscovering B cells, Workshop sponsored by Trudeau Institute, Saranac Lake, NY Oct. 5-7, 2006

Invited Speaker, Loyola University School of Medicine, Chicago, IL, February 22, 2007, “Role of B cells in Host Defense Against *Pneumocystis*”

Invited Speaker, Northwestern University School of Medicine, Chicago, IL, April 27, 2007, “Neonatal pulmonary immunity: balancing defense with danger”

Invited Speaker, University of Kentucky Dept of Clinical and Laboratory Sciences, November 29, 2007

Invited Speaker, University of Miami, Miami, FL, January 17, 2008, “Pulmonary Host Defense in Neonatal Mice”

Invited Speaker, University of Kentucky Dean’s Distinguished Lecture Series, July 10, 2008, “Neonatal Immunity to Pulmonary Pathogens”

Invited Speaker, 11th International Workshop on Opportunistic Protists, Hilo, HI, August, 2010 “Host Defense against *Pneumocystis* in Neonates: Lessons for Adults’

John A. Boezi Memorial Alumnus Award, Michigan State University Department of Biochemistry and Molecular Biology, E. Lansing, MI, April, 2012

Invited Speaker, University of Kentucky Department of Veterinary Science, March 6, 2014, “Neonatal immunity to pulmonary infections: the role of environment and intrinsic deficits of immunity”

Invited Speaker, Oklahoma University Health Sciences Center, March 11, 2014, “Neonatal immunity to pulmonary infections: the role of environment and intrinsic deficits of immunity”

Invited Speaker, Gordon Conference on Fungal Immunity, January 15, 2017

Invited Speaker, University of Kentucky WELD program, August, 2017

Invited Speaker, University of Kentucky WELD program, August, 2018

Invited Speaker, Conference on AIDS-related Mycoses, Cape Town, South Africa, July 10-12. 2019

Professional Activity and Public Service:

Study Sections

6/99	Ad-hoc Reviewer for Cancer Center Grant Program
8/01	Ad-hoc Reviewer for Louisiana Health Excellence Fund program project proposal
02/02	Ad-hoc Reviewer for NIAID Contract

03/02-04 Member, American Heart Association Microbiology and Immunology II Review Board

4/03 Temporary Member, NIH AARR-4 study section

5/03 Ad-hoc Reviewer, The Wellcome Trust

6/03 Ad-hoc Member, NIH LPBA study section

3/04 Temporary Member, NIH AOIC study section

6/04- 6/2008 Regular Member, NIH AOIC study section

3/09 Reviewer, American Heart Association Virology and Immunology review panel

4/09 Reviewer, Special Emphasis Panel, Basic HIV Vaccine Discovery Research, NIH

6/09 Reviewer, Special Emphasis Panel 10ZRG1 AARR-D, ADDT, ACE, AIP member conflicts, NIH

6/09 Reviewer, NIH challenge grants

11/09 Reviewer, Special Emphasis Panel, IDM-A R15, NIH

3/10 Reviewer, Special Emphasis Panel, Basic HIV Vaccine Discovery Research, NIH

3/10-2013 Member of the College of CSR Reviewers

4/10, 4/11 Reviewer American Heart Association Virology and Immunology review panel

4/10-12/10 Reviewer, Special Emphasis Panel AOIC member conflicts, NIH

2/11 Reviewer, Special Emphasis Panel Pathobiology of Emerging Pathogens, NIH

5/11 Reviewer, Special Emphasis Panel Topics in Virology member conflicts, NIH

6/11 Reviewer, HIV Related Host Defense Program Project Grant Application, NIH

12/11 Reviewer, Shota Rustaveli National Science Foundation grants, Tbilisi, Georgia

3/12 Reviewer, Special Emphasis Panel, Member conflicts LCMI/LIRR

4/12 Reviewer, Special Emphasis Panel, Member conflicts, AARR, NIH

6/12 Ad-hoc Reviewer, LCMI, NIH

12/12 Chair, Special Emphasis Panel, Member conflicts, AARR-C, NIH

2/13 Reviewer, NIH VMD study section

7/13 Chair, Special Emphasis Panel, Member conflicts SEP, NIH, Asthma and Lung Host Defense

8/13 Chair, Special Emphasis Panel, Member conflicts, AARR-K, NIH

12/13 Reviewer, NIH VMD study section

2/2014 Reviewer, NIH VMD study section

6/2014 Reviewer, NIH Lung biology study section

11/2014 Reviewer, NIH AOIC study section

6/2015 Reviewer, NIH F07 Immunology study section

7/2015 Reviewer, NIH Special Emphasis Panel, Program Project

4/2015 Reviewer, NIH HIV/HLB study section

10/2015 Reviewer, NIH Lung Biology study section

12/2015 Reviewer, DOD Respiratory review group

2/2016 Reviewer, NIAID Program Project study section

4/2016 Reviewer, NIH HIV/HLB study section

6/2016 Reviewer, NIH IMM-M Special Emphasis Panel

7/2016 Reviewer, NIH- AIDS, Special Emphasis Panel

2/2017 Reviewer, NIH LCMI study section

5/2017 Reviewer, VA INFB study section

7/2017 Reviewer, NIH Special Emphasis Panel

11/2017 Reviewer, NIH F07 Immunology study section

11/2017 Reviewer, NIH Special emphasis panel
6/2018 Reviewer, NIH CMI study section
6/2018 Reviewer, NIH F07 Immunology study section
7/2018 Reviewer, NIH AARR Special emphasis panel
11/2018 Reviewer, NIH F07 Immunology study section

Conferences

11/99 Session Chair, Transplantation, Autumn Immunology Conference, Chicago, IL
9/20/00 Session Chair, RFA Meeting at NIH, Bethesda, MD
11/19/00 Session Chair, Transplantation, Autumn Immunology Conference, Chicago, IL
6/25/01 Session Chair, International Workshop of Opportunistic Protists, Cincinnati, OH
4/25/02 Session co-Chair, FASEB, New Orleans, LA
11/04 Session Chair, Immunity to Bacteria and Parasites, Autumn Immunology Conference, Chicago, IL
4/05 Session Chair, Host Defense and Innate Immunity, FASEB, San Diego, CA
11/06 Session Chair, Immune Response to Pathogens II, Autumn Immunology Conference, Chicago, IL
5/21/07 Block Symposium co-Chair, Host Defense Against Parasitic and Fungal Infections, American Association of Immunology 94th Annual Meeting, Miami Beach, FL
11/07 Session Chair, Immunity to Viruses-Respiratory, Autumn Immunology Conference, Chicago, IL
5/29/08 Session Chair, Host-Pathogen Interactions, 10th International Workshop on Opportunistic Protists, Boston, MA
11/07-3/13 Member, Autumn Immunology Conference Executive Council
11/07-3/09 Liaison to Sponsors
3/09-3/10 Workshop Chair
3/10-3/11 Secretary
3/11-3/12 Chair
3/12-3/13 Councilor
5/15/17 Session Chair, Biomedical Research priorities in the New Administration and Congress, American Association of Immunologists, IMMUNOLOGY2017, Washington DC
5/6/2018 Session Chair, NIH efforts to fund the next generation: Progress, Challenges, and Future Directions, American Association of Immunologists, IMMUNOLOGY2018, Austin, TX

Journal Peer Review

4/01 Ad-hoc Reviewer for J. Leuk. Biol.
5/02 Ad-hoc Reviewer, Eukaryotic Microbiology
9/02; 7/03 Ad-hoc Reviewer, J. Infectious Diseases
9/02-present Ad-hoc Reviewer, J. Immunology
11/02; 9/03; Ad-hoc Reviewer, J. Clinical Investigation
10/04 Ad-hoc Reviewer, J. Clinical Investigation
5/04-present Ad-hoc Reviewer, Infection and Immunity
6/04 Ad-hoc Reviewer, Medical Mycology

6/03 Ad-hoc Reviewer, Infection and Immunity
6/05 Ad-hoc Reviewer, Expert Reviews in Molecular Medicine
9/05 Ad-hoc Reviewer, Eur. J. Immunology
9/05 Ad-hoc Reviewer, Microbial Pathogenesis
11/05-present Ad-hoc Reviewer, J. Leuk. Biol.
7/06 Ad-hoc Reviewer, Parasite Immunology
9/09 Ad-hoc Reviewer, Future Microbiology
11/18 Ad-hoc Reviewer, Plos One
2018 Ad-hoc Reviewer, Plos Pathogens
11/2018 Ad-hoc Reviewer, Scientific Reports

Editorial Board

7/12-6/2016 Associate Editor, Journal of Immunology
1/14-18 Infection and Immunity

Professional Organizations

American Association for the Advancement of Science 1/1999
American Association of Immunology 1/1999
Infectious Disease Society of America 1/2000-2013
American Society of Microbiology 10/2003
Society for Mucosal Immunology 1/2010
Association of Medical School Microbiology and Immunology Chairs 9/2011
American Thoracic Society 1/2014

Service to Professional Organizations

8/2011-2017 Member, American Association of Immunologists Committee for Public Affairs
7/2016-6/2018 Chair, Committee for Public Affairs, AAI
1/2016-present Council member of Association of Medical School Microbiology and Immunology Chairs
7/2018-present Member, FASEB Board of Directors

Volunteer

3/2009-12, 2014-18 Poster judge, Central Kentucky Regional Science and Engineering Fair
3/11-present Member, IACUC at Paratech, Inc.

Research and/or Creative Productivity:

Publications:

Peer-Reviewed

1. Garvy, B.A. and P.J. Fraker (1991) Suppression of the antigenic response of murine bone marrow B cells by physiological concentrations of glucocorticoids. *Immunology* 74, 512.
2. Garvy, B.A., W.G. Telford, L.E. King, and P.J. Fraker (1993) Glucocorticoids and irradiation-induced apoptosis in normal murine bone marrow B-lineage lymphocytes as determined by flow cytometry. *Immunology* 79, 270.
3. Garvy, B.A., L.E. King, W.G. Telford, L.A. Morford, and P.J. Fraker (1993) Chronic elevation of plasma corticosterone causes reductions in the number of cycling cells of the B

lineage in murine bone marrow and induces apoptosis. *Immunology* 80, 587.

4. Garvy, B.A., J.M. Elia, B.L. Hamilton, and R.L. Riley (1993) Suppression of B-cell development as a result of selective expansion of donor T cells during the minor H antigen graft-versus-host reaction. *Blood* 9, 2758.
5. Voetberg, B.J., B.A. Garvy, H.K. Mayer, L.E. King, and P.J. Fraker (1994) Apoptosis accompanies a change in the phenotypic distribution and functional capacity of murine bone marrow B-cells chronically exposed to prednisolone. *Clin. Immunol. Immunopath.* 71, 190.
6. Garvy, B.A. and R.L. Riley (1994) IFN- γ abrogates IL-7-dependent proliferation in pre-B cells, coinciding with onset of apoptosis. *Immunology* 81, 381.
7. Merchant, M.S., B.A. Garvy, and R.L. Riley (1995) B220- bone marrow progenitor cells from New Zealand Black autoimmune mice exhibit an age-associated decline in pre-B and B cell generation. *Blood* 85, 1850.
8. Merchant, M.S, B.A. Garvy, and R.L. Riley (1996) Autoantibodies inhibit IL-7-mediated proliferation and are associated with the age dependent loss of pre-B cells in autoimmune New Zealand Black mice. *Blood* 87, 3289.
9. Gigliotti, F., B.A. Garvy, and A.G. Harmsen (1996) Antibody mediated phenotypic shift in the profile of Glycoprotein A observed in a mouse model of *Pneumocystis carinii* pneumonia. *Infect. Immun.* 64, 1892.
10. Garvy, B.A. and A.G. Harmsen (1996) The importance of neutrophils in resistance to pneumococcal pneumonia in adult and neonatal mice. *Inflammation* 20,499
11. Garvy, B.A. and A.G. Harmsen (1996) The role of T cells in infection-driven interstitial pneumonia after bone marrow transplantation in mice. *Transplantation*, 62, 517.
12. Garvy, B.A. and A.G. Harmsen (1996) Susceptibility to *Pneumocystis carinii* infection: host response of neonatal mice from immune or naive mothers and immune or naive adults. *Infect. Immun.* 64, 3987.
13. Garvy, B.A., R.A.B. Ezekowitz, and A.G. Harmsen (1996) Role of Interferon- γ in the host immune and inflammatory response to *P. carinii* infection. *Infect. Immun.* 65,373.
14. Garvy, B.A., F. Gigliotti, and A.G. Harmsen (1997) Exacerbation of pulmonary interstitial disease by neutralization of IFN- γ following bone marrow transplantation in mice. *J. Clin. Invest.* 99,1637.
15. Aguirre, K.M., B.A. Garvy, and L.L. Johnson (1997) Acquired resistance to *Cryptococcus neoformans* In adult mice vaccinated as newborns. *Infect. Immun.* 65,1688.
16. Garvy, B.A., J.A. Wiley, F. Gigliotti, and A.G. Harmsen (1997) Antibodies generated from either Th1 or Th2 responses are protective against *Pneumocystis carinii* pneumonia. *Infect. Immun.* 65, 5052.
17. Gigliotti, F., B.A. Garvy, C.G. Haidaris, and A.G. Harmsen (1998) Recognition of *Pneumocystis carinii* antigens by local antibody secreting cells following resolution of *P. carinii* pneumonia in mice. *J. Infect. Dis.* 178, 235.
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62. Opata, M.M. and B.A. Garvy (2011) B cells promote CD4 T cell expansion and T cell mediated host defense against the fungal pathogen *Pneumocystis*. 98th Annual Meeting of the American Association of Immunologists, San Francisco, CA
63. Ye, Z., M. Opata, and B. Garvy (2011) B cell-derived TNF α promotes CD4 T cell activation and Tcell-mediated host defense against the fungal pathogen *Pneumocystis*. 40th Autumn Immunology Conference, Chicago, IL
64. Breslow-Deckman, J., D. Feola, and B. Garvy (2011) *Pneumocystis* induced polarization towards an alternatively activated macrophage phenotype is IL-4R α -dependent. 40th Autumn Immunology Conference, Chicago, IL
65. Kurkjian, C.J., B.S. Murphy, and B.A. Garvy (2011) Alternative activation of neonatal macrophages is augmented following a delayed immune response to *Pneumocystis*. 40th Autumn Immunology Conference, Chicago, IL
66. Hoskins, S. and B.A. Garvy (2011) Immature dendritic cells shift T helper polarization in neonatal mice responding to influenza A virus. 40th Autumn Immunology Conference, Chicago, IL
67. Kurkjian, C.J. and B.A. Garvy (2012) NF κ B nuclear translocation is inhibited in neonatal alveolar macrophages in response to *Pneumocystis*. Keystone meeting on NF κ B signaling. Whistler, BC.
68. Kurkjian, C, B.S. Murphy, D.J. Feola, and B.A. Garvy (2012) Activation of Alveolar Macrophages in Response to *Pneumocystis* in Neonatal Mice is Defined by Enhanced Expression of Alternative Markers. IWOP 12, Tarrytown, NY
69. Hollifield, M, C. Kurkjian, J.L. Lines, A. Rogosky, K.M. Empey, M. Qureshi, S.A. Brown, and B.A. Garvy (2012) Alveolar macrophages in neonatal mice are inherently unresponsive to *Pneumocystis* infection. IWOP 12, Tarrytown, NY
70. Kurkjian, C.J. and B.A. Garvy (2012) NF κ B signaling is inhibited in neonatal macrophages in response to *Pneumocystis*. 41st Autumn Immunology Conference, Chicago, IL
71. O'Daniel, H., C. Kurkjian, and B. Garvy (2012). Recognition of the cyst life cycle stage induces a robust immune response to the opportunistic fungal pathogen *Pneumocystis murina*. 41st Autumn Immunology Conference, Chicago, IL
72. Hollifield, M, S. Hoskins, J.L. Lines, and B.A. Garvy (2013) Tregs contribute to the control of influenza A infection in neonatal mice. 42nd Autumn Immunology Conference, Chicago, IL

73. O'Daniel, H. and B.A. Garvy (2013) Recognition of cyst wall β -1,3-glucan drives a differential immune response to the life cycle stages of the opportunistic fungal pathogen *Pneumocystis murina*. 42nd Autumn Immunology Conference, Chicago, IL
74. Evans, H.M. and B.A. Garvy (2014) Recognition of the cyst life cycle stage induces a robust immune response to the opportunistic fungal pathogen *Pneumocystis murina*. 43rd Autumn Immunology Conference, Chicago, IL
75. Evans, H.M. and B.A. Garvy (2014) Recognition of the cyst life cycle stage induces a robust immune response to the opportunistic fungal pathogen *Pneumocystis murina*. 98th American Association of Immunologists Conference, Pittsburgh, PA, won a student travel award.
76. Hollifield, M.L., C.J. Kurkjian, W.S. Witt, and B.A. Garvy (2014) Alveolar macrophages from neonatal mice have deficits in the response to *Pneumocystis* compared to macrophages from adults. American Thoracic Society Meeting, San Diego, CA
77. Evans, H.M. and B.A. Garvy (2015) The trophic stage of the opportunistic fungal pathogen *Pneumocystis murina* suppresses β -1,3-glucan-induced cytokine production, but is sufficient for generating protective CD4⁺ T cell and B cell responses. 99th American Association of Immunologists Conference, New Orleans, LA.
78. Heil, L, S. Oliphant, M. Hollifield, and B.A. Garvy (2016) Differential Tbet, Gata3, and ROR γ t expression in mature and neonatal regulatory T cells during influenza virus infection. 100th American Association of Immunologists Annual Meeting, Seattle, WA
79. Evans, H.M. and B.A. Garvy (2016) The life cycle stages of the opportunistic fungal pathogen *Pneumocystis murina* provoke a differential immune response in antigen-presenting cells. 100th American Association of Immunologists Annual Meeting, Seattle, WA
80. Heil, L., S. Oliphant, M. Hollifield, and B. Garvy (2016) Anti-influenza antibody production is compromised in the absence of Tregs during neonatal influenza virus infection. 45th Autumn Immunology Conference, Chicago, IL
81. Evan, H. and B. Garvy (2016) The trophic life cycle state of *Pneumocystis murina* inhibits critical components of the dendritic cell response to infection. 45th Autumn Immunology Conference, Chicago, IL
82. Heil, L., S. Oliphant, L. Lines, M. Hollifield, and B.A. Garvy (2017) Neonatal dendritic cells alter the immunodominance hierarchy of the CD8 T cell response during influenza infection. IMMUNOLOGY 2017, American Association of Immunologists Annual Meeting, Washington DC.
83. Heil, L., L Lines, S. Oliphant, and B.A. Garvy (2017) Neonates display an altered CD8 T cell immunodominance hierarchy during primary and secondary influenza infections. 46th Autumn Immunology Conference, Chicago, IL
84. Spann, K.R., M.L. Hollifield, and B.A. Garvy (2017) The trophic forms of *Pneumocystis* inhibit production of proinflammatory cytokines by macrophages. 46th Autumn Immunology Conference, Chicago, IL
85. Heil, L.H., S.N. Oliphant, J.L. Lines, M.L. Hollifield, and B.A. Garvy (2018) Dendritic cells influence the altered neonatal CD8 T cell immunodominance hierarchy during influenza virus infection. Immunology 2018, Austin, TX

Grant Support:

Active

NHLBI

Co-I (Chris Waters, PI) 5% effort

RO1 HL131526-02 \$487,415 direct

ASK1 and ventilator-induced lung injury

Submitted

NIAID

PI 10% effort

R21AI146016 \$150,000 direct first year

Role of the trophic forms of *Pneumocystis* in lung response to infection

4/1/2019-3/31/2021

Score 37, will resubmit in January, 2019

NIAID

PI 20% effort

R01AI132380 \$310,866 direct first year

Innate immune interactions with the trophic life forms of *Pneumocystis*

4/1/2017-3/31/2022

Percentile score of 29 12/15/2016

resubmitted June 2017 score 21%ile

NIAID

PI 30% effort

RO1 AI141332 \$381,981 direct first year

Macrophage interactions with the trophic life forms of *Pneumocystis*

7/1/2018-6/30/2023

Unscored, resubmitted 6/2018 unscored

NIAID

PI 20% effort

U01 AI131383-01 \$300,000/yr

Role of Treg cells in neonatal host defense against influenza virus infection

3/01/2017-2/28/2022

Impact score of 45 12/6/2016

NIAID

Co-PI (with Feola, Pennypacker) 5% effort

R21AI139099 \$150,000 first year

Alveolar macrophage response to *Pneumocystis* in neonatal mice

4/1/2018-3/30/2020 score 44, resubmit in March 2018 score 47

NIAID

PI 10% effort

R21 AI140722 \$150,000 first year
Role of Tregs in host response to influenza virus in neonatal mice
7/1/2018-6/30/2020 score 50, resubmit in February, 2019

Pending

In Preparation

R01
Neonatal lung environment drives the immune response to Pneumocystis
Will be submitted in January, 2018

R01
Collaboration with Wally Whiteheart examining platelet and macrophage function in HIV patients. Will be submitted in May, 2019.

Expired

American Lung Association of New York
Research Grant \$25,000
P. carinii-driven pneumonia after bone marrow transplant
July 1, 1997 to June 30, 1998

VA Merit Review
Co-Investigator (Pomeroy, PI) \$138,000/yr
Mechanisms of Exacerbation of GVHD by Murine CMV in BMT
4/01/01 to 3/30/04

NIHLB
PI
R01HL 64524-05 \$200,000/yr
Role of B cells in Resolution of P. carinii Pneumonia
9/1/98 to 8/31/04

Kentucky Lung Cancer Research Program
Co-Investigator (Brown, PI) \$75,000/yr
Radioprotective Agents in NSCLC Therapy
10/01/01 to 9/30/04

University of Kentucky Research Support Grant
Co-Investigator (Clasey, PI) \$19,998
Blue Grass Care Clinic Exercise Intervention Study
1/01/04 to 6/30/05

University of Kentucky Research Support Grant
Co-Investigator (Thornton, PI) \$11,390
Effect of Zidovudine plus Sulfamethoxazole/Trimethoprim on the Immune Response to
Influenza Vaccine in HIV Infected Patients
11/15/04 to 11/14/05

American College of Clinical Pharmacy
Co-Investigator <5% effort (Feola, PI) \$20,000
Immunotoxicity of Zidovudine Plus Sulfamethoxazole-Trimethoprim Exposure
10/1/2006 to 9/30/2007

University of Kentucky Vice President for Research
PI
\$15,000
Lung-specific T cell Responses in Neonatal Mice
4/1/2007 to 3/31/2008

NIH
Collaborator, 5% effort (C. Kaetzel, PI)
R21AI069027-01 \$137,000/yr
Novel in vivo models for cell-type specific MyD88 signaling in the intestine
9/1/2007 to 8/31/2009

NIH
Co-investigator 2.5% effort (Murphy, PI)
R03HL096891-01 \$50,000/yr
Pneumocystis jirovecii and macrophages in COPD
5/11/09 to 4/30/11

NIH
PI 20% effort
R21AI083528-01 \$275,000
Host defense against influenza virus in the lungs of neonatal mice
8/15/2009 to 7/31/2011

PI 40% effort \$250,000/yr
R01HL088989-05 no cost extension
Role of B cells in host defense against Pneumocystis
12/1/07 to 11/30/13

Pfizer, Inc.
Co-investigator 2% effort (Feola, PI)
ASPIRE US-2010 no cost extension
Linezolid's impact upon immune hyporesponsiveness after influenza virus infection
11/1/2010 to 12/30/2012

NIHLB

PI 30% effort
R01HL062053-12 \$225,000/yr
Host Response to *P. carinii* in Neonatal Mice
7/17/2009 to 6/30/2014

American Association of Immunologists Laboratory Travel Award

PI \$2500
To support travel to AAI conference in Seattle for presentations of data.
5/2016

NIAID

Co-investigator 5% effort (Feola, PI)
R01AI09537-05 \$250,000/yr
Alternative macrophage activation in acute *Pseudomonas pneumonia*
7/1/2012-6/30/2017 NCE

NIAID

PI 5% effort
R21AI118818-02 \$150,000 first year
Recognition of *Pneumocystis trophs* by murine dendritic cells
5/1/2015-10/31/2017 NCE

Trainee Fellowship Support

American Lung Association
Post-doctoral Fellowship to Mahboob Qureshi, PhD
Role of Dendritic Cells in Host Defense Against *Pneumocystis carinii* in Neonates
7/1/02 to 6/30/04 \$32,000/yr

American Foundation of Pharmaceutical Education

Pre-doctoral Fellowship to David J. Feola, PharmD
Combination of Sulfamethoxazole/Trimethoprim and Zidovudine:
Investigation of Synergistic Bone Marrow Toxicity in Mice
9/1/03 to 8/31/05 \$6000/yr

American Foundation of Pharmaceutical Education

Pre-doctoral Fellowship to Kerry Empey, PharmD
Response of Neonatal Alveolar Macrophages to Immunostimulation and clearance of
Pneumocystis Infection
9/1/04 to 8/31/07 \$6000/yr

University of Kentucky Graduate School

Academic Excellence Scholarship for In-state Tuition to J. Louise Lines
2006

American Heart Association, Great Rivers Affiliate

Pre-doctoral Fellowship to J. Louise Lines

Neonatal T cell Responses to Influenza Virus
7/1/2007 to 6/30/2009 \$21,000/yr