

John Charles BOOTHROYD, Ph.D.

*CURRICULUM VITAE [last updated December, 2017]
[Major/current items are in **bold**]*

Burt and Marion Avery Professor
Department of Microbiology and Immunology
Stanford University School of Medicine

Contact Information:

Department of Microbiology and Immunology
Fairchild Science Building, Room D305
299 Campus Drive
Stanford, CA 94305-5124

Telephone: 650-723-7984
Fax: 650-725-6757
Email: john.boothroyd@stanford.edu

Personal:

Citizenship: Canada & U.S.A. (dual)

Education:

- 1972-1975 McGill University, Montreal, Canada.
1972-1974 Human Genetics.
1974-1975 Cell, Molecular and Developmental Biology.
Received B.Sc. (Honours, Class I), 1975.
- 1975-1979 Edinburgh University, Edinburgh, Scotland.
Received Ph.D. in Molecular Biology, 1979.

Employment:

- 1979-1982 Scientist, Immunochemistry/Molecular Biology Department, Wellcome Research Laboratories, Beckenham, Kent, U.K.
- 1982-1988 Assistant Professor, Department of Microbiology and Immunology (formerly Medical Microbiology), School of Medicine, Stanford University, California.
- 1988-1994 Associate Professor, Department of Microbiology and Immunology, School of Medicine, Stanford University.
- 1994-date Professor, Department of Microbiology and Immunology, School of Medicine, Stanford University.**
- 1994-1999 Co-Chair, Department of Microbiology and Immunology, School of Medicine, Stanford University.
- 1999-2002 Chair, Department of Microbiology and Immunology, School of Medicine, Stanford University.

2002-2003 Senior Associate Dean for Research, Stanford University School of Medicine.
2003-2005 Senior Associate Dean for Research and Training, Stanford University School of Medicine.
2008-date Associate Vice-Provost for Graduate Education, Stanford University.
2015-date Director, Stanford-San José State University IRACDA Program

Research:

1974-75 McGill University, Canada. Working with Drs. S.P. Gibbs and R.A. Cattolico on the physiology and biochemistry of the unicellular alga, *Olisthodiscus luteus*.
1975-79 University of Edinburgh, Scotland. Working with Dr. R.S. Hayward on the structure and function of regulatory signals located near the end of the early region of the coliphage T7 genome.
1979-1982 Wellcome Research Laboratories, Beckenham, England. Responsible for the application of recombinant DNA technology to two areas of research: 1. mechanism of antigenic variation in *Trypanosoma brucei*; 2. recombinant vaccines for Foot and Mouth Disease Virus;
1982-date Stanford University, California. Molecular biology of antigenic variation, trans-splicing and gene regulation in *Trypanosoma brucei* (1982-2000); **Molecular basis of *Toxoplasma gondii* pathogenesis (1983-date).**
[1990-1991] M.R.C. Laboratory for Molecular Biology, Cambridge, England. Sabbatical with Dr. Hugh Pelham on the genetics and cell biology of a model system (yeast) in order to bring those approaches to our trypanosome and *Toxoplasma* work.
[1996] Dept. Pathology, Univ. Oxford, England and INSERM Unite 42, Lille, France. Sabbatical with Drs. David Ferguson (Oxford) and Jean-Francois Dubremetz (Lille) on imaging of *Toxoplasma*.

Teaching:

1974-1975 Biology Department, McGill University. Teaching Assistant in developmental biology and gene activity in development.
1975-1978 Department of Molecular Biology, Edinburgh University. Laboratory demonstrator for Dr. R. Hayward and Dr. N. Willetts.
1982-date Stanford University School of Medicine.
Primary lecturer and coordinator for the following courses:
Molecular Parasitology (MI209; 1983-1997)
Microbial Genetics (MI204; 1988-90)
Modern Plagues (MI025; 1997-2008)
Ancient and Modern Plagues (MI199; 1998-1999)
Stanford Graduate Summer Institute:
Using Different Approaches to Solve Complex Problems –
Responding to Pandemics (2007, 2008)
Inside Pandora's Box: A Non-Specialist Look at Five Medical Advances with Spectacular Potential but Enormous Ethical Complexity (2009, 2010)
Management Matters (2012-2015) [a course on managing people for grad students and post-docs]

Preparing for Faculty Careers (2015-date) [a ten-week course with ~100 postdocs and ~40 grad students from all disciplines on how to prepare, apply, interview and negotiate for a diverse array of faculty jobs and then how to thrive in such a role]

Contributing lecturer to:

General Microbiology (MI101; 1983-1993)

Medical Microbiology (MI103; 1983-1990),

Pathogenesis of Viruses, Bacteria and Eukaryotic Parasites (MI210; 1998-date)

Infectious Basis of Disease (MI201; 2001-2002)

Scientific Management for Post-doctoral Fellows (2005-date)

Future Faculty Seminar (2008-2013)

Advanced Immunology II (2011-2013)

Quick Bytes (2012-date) [a course on diverse issues related to academic life as a graduate student (e.g., time management, writing grants, giving talks, etc.)]

Translational Immunology (2014, 2017)

Setting Expectations and Giving Feedback (2012-date) [a series of workshops for Assistant Professors on how to run a research group]

Sponsoring faculty member for a student-run course in:

Professional and Leadership Development (MI 221; 2009-10)

Discussion group leader in:

Cell Biology of Physiological Processes (MCP221; 1996, 1998)

The Responsible Conduct of Research (MED255; 1995, 1997, 2004)

Academic Chats (2009-date)

Research supervisor for a total of twenty-six Ph.D. students and forty-eight post-doctoral fellows (see below for full list).

[1990-1993] Marine Biological Laboratory, Woods Hole, Massachusetts. Course Instructor (1990) and Course Director (1991-93) of an intensive nine-week summer course in "Modern Parasitology" involving about 9 residential faculty, 35 lecturers and twenty graduate/post-doctoral students each year.

Honors and Awards:

1972-1973 Ontario Scholarship, Ontario Government.
1974-1975 University Scholarship, McGill University.
1975-1976 Moyses Traveling Award, McGill University.
1976-1978 Sir Arthur Sims Memorial Scholarship, Royal Society of Canada.
1976-1979 Overseas Science Research Scholarship, Royal Commission for the Exhibition of 1851.
1977 Rennie Bequest, Edinburgh University.
1983-1984 Mellon Foundation Fellow, Stanford University.
1984-1986 Special Fellowship in Molecular Parasitology, Burroughs Wellcome.
1984-1986 Hume Faculty Scholar, Stanford University.
1986-1991 Burroughs Wellcome Scholar in Molecular Parasitology.
1987-1988 Mellon Foundation Fellow, Stanford University
1990-1991 Fogarty Senior International Fellowship
1994 Scaife Lecturer, University of Edinburgh
1994 Nelson Lecturer, Montana State University
1994 Australian Society of Parasitology Invited Lectureship
1994-2004 MERIT Award, NIH

1999 Elected Chair of Gordon Conference on Parasitism
2002 Bass/Dunlevie Family University Fellow in Undergraduate Education, Stanford University
2002-2007 Senior Scholar in Global Infectious Diseases, Ellison Medical Foundation
2005 Meyer Lecturer, University of California, San Francisco
2007 Honors Lecturer, School of Medicine, New York University
2007 Elected Fellow of the American Academy of Microbiology
2008 Leuckart Medal, German Society for Parasitology
2009 Distinguished Lecturer, Centers for Disease Control, Atlanta
2009 Elkan Blout Lecturer, Marine Biological Laboratory, Woods Hole
2009 Elsevier Lecturer, Australian Society of Parasitology
2010 Noble Lecturer, University of Oklahoma
2010 Marian Koshland Lecturer, University of California, Berkeley
2012 Inductee, Inventor Hall of Fame, Stanford University
2012 Keynote Speaker, Molecular Parasitology Meeting, Woods Hole, MA
2012 Rose Lecturer, Columbia University, New York
2013 Willison Lecturer, University of Michigan
2013 Award for Outstanding Service to Graduate Students, Stanford School of Medicine
2013 Officers' Choice Recognition Award, Stanford University Postdoctoral Association
2014 Stanford Biosciences Excellence in Mentoring Award
2014 Ricketts Lecturer, University of Chicago
2015 Burt and Marion Avery Endowed Professor of Immunology, Stanford University
2015 Larsen Distinguished Lecturer, Washington State Univ.
2015 Centenary Speaker, Walter and Eliza Hall Institute, Melbourne Australia
2016 Member, National Academy of Sciences, USA
2016 Outstanding Ally Award, Stanford University Postdoctoral Association

Editorial, Reviewing and Advisory Work:

Editor: **Microbiological Reviews** (ASM) (1992-1997)
Section Editor: **PLoS Pathogens** (2005-2007, 2008-2009)
Curr. Opinion in Microbiology (2002)
Editorial Board Member: **Experimental Parasitology** (1987-1994)
Molecular Biochemical Parasitology (1987-date)
J. Euk. Microbiology (prev. J. Protozool.) (1988-1995)
Annual Review of Microbiology (1993-1998; 2006)
Parasitology Today/Trends in Parasitology (2001-2006)
Faculty of 1000 - Co-head Parasitology Section (2001-2014)
mBio (ASM) (2010-date)
Guest Editor: **Proc. Natl. Acad. Sci. (USA)** (2010)
Study section participant for the following NIH review panels (study sections):
- **PTHE** (Pathogenic Eukaryotes; née, Tropical Medicine and Parasitology; ad hoc member: 10/93, 6/94, 6/97, 6/99, 2/02, 2/05, 10/10, 6/12; **regular member: 7/14 – 6/17**)
- Infectious Etiology of Chronic Disease RFA (10/01)
- AOIC (AIDS Opportunistic Infections and Cancer; 7/06, 7/07, 8/09)
- Microbiology and Infectious Disease F13 (3/08)
- Distinguished Editorial Panel for RC4 (ARRA) (6/10)
NIH Reviewers Reserve (1994-date)
Ad hoc grant reviewer: NSF, Wellcome Trust, USDA, MRC-Canada, MRC-UK, etc.
Member, Joint Steering Committee, Scientific Working Group on African Trypanosomiasis, UNDP/World Bank/WHO (1988-1990).
Member, External Review Committee, ILRAD, Nairobi, Kenya (1988)

Member, WHO Working Group on Toxoplasmosis Vaccine Development and Technology (1990-1996)
Member, University of California – University-wide AIDS Research Program, Clinical Sciences Panel (1995)
Member (1996-1999) and Chair (1999-2001) Advisory Committee, Molecular Parasitology, Burroughs Wellcome Fund
Member, Scientific Review Committee, Seattle Biomedical Research Institute (1999).
Member, Pathogen Sequencing Advisory Group, Sanger Center, Cambridge, UK (2002-2007)
Member, Initial Review Group, Global Infectious Diseases, Ellison Medical Foundation (2003-2005).
Reviewer, Gates Foundation Grand Challenges in Global Health (2004).
Member, Euk. Pathogens and Disease Target Selection Working Group, NHGRI/NIAID (2007-2008).
Member, Selection Committee for C.C. and Alice Wang Award in Molecular Parasitology, American Society for Biochemistry and Molecular Biology (2011-2014)
Member (2012-2013) and Chair (2013-2016), Advisory Committee, Pathogenesis of Infectious Disease, Burroughs Wellcome Fund
Member, Committee on Next Generation Researchers Initiative, National Academies of Sciences, Engineering and Medicine (2016-2018)

Other Professional Activity:

Organizer, West Coast Kinetoplastida Meeting, Asilomar (1988)
Co-organizer, International Toxoplasma Symposium, New Hampshire (1990)
Instructor, Marine Biological Laboratory Summer Course in "Biology of Parasitism", Woods Hole (1990)
Director, Marine Biological Laboratory Summer Course in "Biology of Parasitism: Modern Approaches", Woods Hole (1991-93)
Co-organizer, Society of Protozoology - Toxoplasma Workshop, Cleveland (1994)
Vice-Chair, Gordon Research Conference on Parasitism (1997)
Chair, Gordon Research Conference on Parasitism (1999)
Co-organizer, Functional Genomics of Host-Pathogen Interaction; Cold Spring Harbor Laboratory/Sanger Centre, Cambridge, UK (2004 and 2006)

Supervision of PhD Students and Post-doctoral Fellows:

Ph.D. Students	Year Ph.D. Received	Current Position [funding source for current students]
SUTTON, Richard	1987	<i>Now, Assoc. Prof.</i> , Dept. Medicine (Infectious Dis.) and Microbial Pathogenesis, Yale School of Medicine, New Haven, CT.
BEALS, Thomas	1989	<i>Now, Scientist</i> ; Thorne Diagnostics, Beverly, MA
HOBBS, Maurine	1989	<i>Now, Res. Assist. Prof.</i> , Dept. Internal Medicine, University of Utah., Salt Lake City, UT
OSSORIO, Pilar	1989	<i>Now, Prof.</i> , Schools of Law and Medicine (Bioethics), University of Wisconsin, Madison, WI
NAGEL, Susana	1989	<i>Now, not known.</i>
HSIA, Ru-Ching	1992	<i>Now, Assoc. Prof.</i> , Dept. Neural and Pain Sciences, University of Maryland, Baltimore, MD
BLACK, Michael	1999	<i>Now, Prof.</i> , Dept. Biol. Sci., California Polytechnic State University, San Luis Obispo, CA
McFADDEN, Diane	1999	<i>Now, Program Manager</i> , Center for Research in Diagnostics and Discovery, Columbia University, New York, NY
CAMPS, Manuel	2001	<i>Now, Assoc. Prof.</i> Dept. Environmental Toxicol., University of California, Santa Cruz, CA
CLEARY, Michael	2004	<i>Now, Assoc. Prof.</i> , School of Natural Sciences, University of California, Merced, CA
DUNN, Joe Dan	2006	<i>Now, Post-doc</i> , University of Geneva, Switzerland.
FOUTS, Ashley	2006	<i>Now, Project Manager</i> , Genentech, South San Francisco, CA
RAVINDRAN, Sandeep	2009	<i>Now, Science Writer</i> , Washington, DC
PHILLIPS-HALL, Carolyn [co-mentor]	2009	<i>Now, Associate Biosafety Officer</i> , University of Florida, Gainesville, FL
ANDERSON, Matt	2009	<i>Now, Assist. Prof.</i> , Ohio State University, Columbus, OH
ONG, Yi-Ching	2010	<i>Now, Post-doc</i> , Princeton University, Princeton, NJ
POUKCHANSKI, Anya	2013	<i>Now, Senior Business Development Manager</i> , Metromile, San Francisco, CA
PERNAS, Lena	2013	<i>Now, Post-doc</i> , University of Padua, Italy
SHASTRI, Anjali	2013	<i>Now, Project Manager</i> , 23andMe, Mountain View, CA
FRANCO, Magdalena	2014	<i>Now, Post-doc</i> , Lawrence Livermore National Laboratory, Livermore, CA
NAKAMOTO, Margaret	2017	<i>Now, Post-doc</i> , Depts. Radiology and Electrical Engineering, Stanford University, Stanford, CA
MARINO, Nicole	2017	<i>Now, Post-doc</i> , Dept. Microbiology and Immunology, Univ. California, San Francisco, CA
RASTOGI, Suchita	In progress	[NIH MSTP Training Grant; NIH F30 Individual NRSA Fellowship]
CYGAN, Alicja	In progress	[NSF]
THEISEN, Terence	In progress	[NIH Training Grant; Stanford Interdisciplinary Graduate Fellowship]

FERREL, Abel	In progress	[NIH Training Grant]
--------------	-------------	----------------------

Post-Doctoral Fellows	Years	Major Funding Source; Current Position
CAMPBELL, David, Ph.D.	1983-85	Boothroyd Grant; <i>now</i> Professor , Microbiol./Immunol., UCLA, CA
BURG, Lawrence, Ph.D.	1984-88	Bank of America Giannini Fellowship; <i>now</i> Manager , Assay Development, Instrumentation Laboratory, Bedford, MA
AMAN, Rashid Abdi, Ph.D.	1985-88	Boothroyd Grant; <i>now</i> , Head , Molecular Genetics, National Museum Kenya <i>and</i> Director of Research and Scientific Affairs , KENRIK, Nairobi, Kenya
MUHICH, Michael, Ph.D.	1986-88	NIH-NRSA (individual); <i>now</i> Senior Vice-President (Corporate Development) , Stratagene, La Jolla, CA
POULETTY, Philippe, M.D.	1986-87	Clonatec Fellowship (France); <i>now</i> President & CEO , DrugAbuse Sciences, Inc., CA; Chairman , France Biotech, Paris, France
BUELOW, Roland, Ph.D.	1987-89	DAAD Fellowship (Germany); <i>now</i> Chief Executive Officer , Open Monoclonal Therapies Inc., Mountain View, CA
SIBLEY, David, Ph.D.	1987-91	Merck Fellowship; <i>now</i> Professor , Mol. Micro., Washington Univ., MO
BANGS, James, Ph.D.	1988-92	Damon-Runyon Fellowship; <i>now</i> Grant T. Fisher Professor and Chair , Microbiol. and Immunol., State Univ. of New York, Buffalo, NY
WITTE, Christine, Ph.D.	1988-90	DAAD Fellowship (Germany); <i>then</i> Country Director (Malawi), International Eye Foundation; <i>now</i> Teacher (Chemistry), Baltimore, MD
DORN, Patricia, Ph.D.	1989-92	NIH-NRSA (individual); <i>now</i> Hutchinson Distinguished Professor , Biological Sciences, Loyola Univ., LA
KIM, Kami, M.D.	1990-94	NIH-KO8; <i>now</i> Professor , Medicine, Albert Einstein Coll. Med., New York, NY
SOLDATI-FAVRE, Dominique, Ph.D.	1991-95	EMBO Fellowship; <i>now</i> Professor , Microbiol. and Mol. Medicine, University of Geneva, Switzerland
TOMAVO, Stanislas, Ph.D.	1991-94	Boothroyd Grant; <i>now</i> CNRS Director of Research, 1st Class (~ Professor), University of Lille, France
FIELD, Mark, D. Phil.	1993-94	Boothroyd Grant; <i>now</i> Professor , College of Life Sciences, University of Dundee, UK
SEEBER, Frank, Ph.D.	1993-95	German AIDS Foundation Fell'p; <i>now</i> Professor , Humboldt University, Berlin, Germany
WILSON, Keith, Ph.D.	1992-97	NIH-NRSA; <i>now</i> Director , Discovery, Global Pharmaceutical R&D, Abbott Biotherapeutics Corp., Redwood City, CA
ORTEGA-BARRIA, Eduardo, M.D.	1993-97	NIH-KO8; <i>now</i> Vice President and Head , Clinical R&D and Medical Affairs, Latin America

		and Caribbean, Glaxo-Smith-Kline Vaccines
BONNEFOY, Serge, Ph.D.	1995-97	Institut Pasteur Fellowship; <i>now</i> Chargé de Recherche (~ Assoc. Prof.), Institut Pasteur, Paris, France
HEHL, Adrian, Ph.D.	1995-98	Swiss National Science Foundation Fellowship and Roche Research Foundation Fellowship; <i>now</i> Professor , University of Zurich, Switzerland
MANGER, Ian, D. Phil.	1993-98	Boothroyd Grant; <i>now</i> Director, Science and Technology , SRI International, Arlington, VA
LEKUTIS, Chris, Ph.D.	1997-2001	Bank of America Giannini Fellowship; NIH-NRSA (individual); <i>now</i> , Senior Patent Agent , Morrison and Foerster, LLP, San Francisco, CA
KNOLL, Laura, Ph.D.	1995-2001	Damon-Runyon Fellowship; Burroughs Wellcome Fund Career Development Award; <i>now</i> , Prof. , Mol. Micro/Immunol., Univ. Wisconsin, Madison, WI
SINGH, Upinder, M.D.	1998-2001	Burroughs Wellcome Fund Career Development Award; NIH KO8; <i>now</i> : Prof. and Chief , Infectious Diseases, Stanford Univ., CA
GRIGG, Michael, Ph.D.	1997-2002	Alameda Foodborne Diseases; <i>now</i> Chief (~ Assoc. Prof.) Mol. Parasitology Unit, Lab. Of Parasitic Diseases, NIAID, NIH, Bethesda, MD
BLADER, Ira, Ph.D.	1999-2003	NIH-NRSA (individual); <i>now</i> Professor , Microbiol. and Immunol., SUNY, Buffalo, NY
BRADLEY, Peter, Ph.D.	1997-2003	American Cancer Society; <i>now</i> , Professor , Micro/Immuno./Mol. Genetics., UCLA, CA
ARRIZABALAGA, Gustavo, Ph.D.	1999-2004	NIH-NRSA (individual); <i>now</i> , Assoc. Prof. , Dept. Microbiology, Molecular Biology & Biochemistry, Indiana University, IN
SCHWARZ, Jodi, Ph.D.	2002-04	NIH-NRSA (individual); <i>now</i> , Assoc. Prof. Vassar College, Poughkeepsie, NY
ALVAREZ, Gema, Ph.D., B.V.M.	2004-05	Fellowship, Ministry of Science and Education, Spain; <i>now</i> , Assoc. Prof. Univ. Complutense Madrid, Spain.
ALEXANDER, Dave, Ph.D.	2001-05	NIH-NRSA (individual); <i>now</i> , Assistant Project Scientist , Dept. Biomolecular Engineering, University of California, Santa Cruz, CA
COLLER-MONAREZ, Susan, Ph.D.	2003-06	California UARP Post-doc Fellowship; <i>now</i> , Assistant Director for National Health Security and International Affairs , White House Office of Science and Technology Policy, Washington, DC
KIM, Seon-Kyeong, Ph.D.	2002-07	Boothroyd Grant; <i>now</i> , Variante Scientist , Color Genomics, Burlingame, CA
SAEIJ, Jeroen, Ph.D.	2002-07	California UARP Postdoc Fellowship; <i>now</i> , Assoc. Prof. , Dept. Pathology, Microbiology and Immunology, Univ. California, Davis, MA
BOYLE, Jon, Ph.D.	2003-08	NIH-NRSA (individual); <i>now</i> , Assoc. Prof. , Dept. Biological Sciences, Univ. Pittsburgh, PA
LODOEN, Melissa, Ph.D.	2006-09	Giannini Foundation Post-Doc Fellowship; <i>now</i>

		Assoc. Prof. , Dept. Molecular Biology and Biochemistry, Univ. California, Irvine, CA
ZEINER, Gus, Ph.D.	2004-10	NIH-NRSA (individual); <i>now</i> Chief Scientific Office , Chimera Bioengineering, Menlo Park, CA
TYLER, Jessica, Ph.D.	2006-11	AHA Fellowship; <i>now</i> Senior Research Project Manager , Novartis, Cambridge, MA
CAFFARO, Carolina, Ph.D.	2008-12	AHA Post-doctoral Fellowship; <i>now</i> , Scientist , Synthorx, San Diego, CA
KOSHY, Anita, M.D.	2007-12	HIV/AIDS Research Program; NIH KO8 Grant; <i>now</i> , Assist. Prof. , BIO5 and Dept. Neurology, Univ. Arizona, Tucson, AZ
REESE, Michael, Ph.D.	2006-13	ACS Post-doctoral Fellowship; <i>now</i> , Assist. Prof. , Dept. Pharmacology, University of Texas Southwestern, TX
TREECK, Moritz, Ph.D.	2009-13	German Research Foundation and AHA Postdoctoral Fellowships; <i>now</i> , Group Leader (~ Assist. Prof.), Div. Parasitology, National Institute of Medical Research, Mill Hill, UK
BUCHHOLZ, Kerry, Ph.D.	2008-13	NIH-Training grant (departmental); ACS Post-doctoral Fellowship; <i>now</i> , Senior Research Scientist , Inf. Dis., Genentech, South San Francisco, CA
EWALD, Sarah, Ph.D.	2010-16	Damon Runyon Fellowship; <i>now</i> , Assist. Prof. Dept. Microbiol., Immunol. and Cancer Biology, University of Virginia, Charlottesville, VA
KELLY, Felice, Ph.D.	2011-16	NIH-Training Grant (departmental and individual); <i>now</i> , Senior Research Associate , Oregon Health Sciences University, Portland, OR
PANAS, Michael, Ph.D.	2012-16	NIH-Training Grant (interdepartmental); <i>now</i> , Research Scientist , Dept. Microbiol. and Immunol., Stanford Univ., CA
GUITON, Pascale, Ph.D.	2012-17	NIH Training Grant (interdepartmental); <i>now</i> , Assist. Prof. , Cal. State Univ., East Bay, CA
NAOR, Adit, Ph.D.	2013-	Human Frontier Science Program
SEGEV-ZARKO, Li-av, Ph.D.	2017-	Boothroyd Grant

Stanford University Service

University:

Undergraduate Adviser (1991-2005)

Member, Faculty Housing Committee (1993)

Member, Health and Safety Committee (1996-1997)

Chair, Health and Safety Committee (1997-1998)

Member, Emergency Planning Steering Committee (1997-1998)

Member, Provost's Committee on Equity Holding (2000-2001)

Member, Presidential Commission on Graduate Education (2004-2005)

Senator (2006-2008)

Member, University Advisory Board (2007-2008; 2009-2010)

Associate Vice Provost for Graduate Education (2008-date)

Member, Faculty Advisory Board for Introductory (undergraduate) Seminars (2009-2010)

Member, Board of Overseers, Vice Provost for Undergraduate Education (2010-2011)

Member, Advisory Panel on Investment Responsibility and Licensing (2011-2012)
Member, Search Committee for Dean of the School of Medicine (2011-2012)

School of Medicine:

Member, Faculty Budget Review Committee (1985-1989)
Member, Medical Scientists Training Program (1986-1990)
Member, Radiation Safety (1986-1989)
Member, Medical Scholars Research (1986-1989)
Member, Search for Chairman of Diagnostic Radiology (1987-1988)
Member, Dean's Task Force on Graduate Admissions (1987-1988)
Director, Combined Admissions Mode Program (1988-1990)
Co-director, Combined Admissions Mode Program (1991 - 1993)
Member, Adv. Comm., Prog. in Molecular and Genetic Medicine (1988-2002)
Member, Subcommittee in Graduate Education in Basic Sciences (1990)
Member, Committee on Recruitment of Minority Basic Scientists (1990)
Director, MacArthur Program in Parasitology (1990-1995)
Member, Dean's Committee on Graduate Student Education (1991-1995)
Member, Dean's Faculty Budget Advisory Committee (1991-1992)
Member, Faculty Mentoring Program (Mentor) (1994-2000)
Member, Dean's Steering Committee (1995-1998)
Member (Alternate), Biosafety Committee (1997-1999)
Chair, Search Committee for Chair of Pathology (1997-1998)
Member, Medical Education Development Committee (1999-2000)
Member, Research Council (1999-2001)
Member, Faculty Campaign Planning Committee (1999-2001)
Member, Commencement Committee (1999-2001)
Member, Compensation Board (1999-2002)
Co-Director, HHMI Biomedical Research Support Program (1999-2003)
Member, Finance Committee (1999-2002)
Member, Reserves Committee (2001-2002)
Member, Operating Budget Committee (2002-2003)
Member, Teaching Incentive Committee (2002-2003)
Senior Associate Dean for Research (2002)
Senior Associate Dean for Research and Training (2003-2005)
Member, Faculty Awards Committee (2005-2006)
Member, Faculty Transition Task Force (2007-2008)
Chair, Faculty Advisory Committee for the Veterinary Service Center (2008-2009)
Member, Advisory Committee for Lane Library (2011-2012)
Member, Education Reform Oversight Committee (2012-2013)
Chair, Task Force on Post-doc Mentoring (2013)
Member, MSTP Advisory Committee (2013-date)
Director, IRACDA Program for Postdoctoral Training (2015-date)
Member, Steering Committee of the Teaching and Mentoring Academy (2015-date)
Member, Faculty Advisory Committee on Clinical Research Quality (2016-date)

Department of Microbiology and Immunology:

Member, Undergraduate Studies Comm. (1984-1990); Chair, (1984-1990)
Chair, Graduate Studies Comm. (1984-1988)
Member, Graduate Admissions Comm. (1984-1988; 2007-2008)
Co-Chair, Faculty Search Comm., Parasitology (1987)
Member, Training Grant Steering Comm. (1987-1998); Co-chair (1987-1989)
Co-Chair of Department (1994-1999)

Chair of Department (1999-2002)

Chair, Seminar Committee (2006-2007)

Chair, Faculty Search Committee (2008-2009)

Chair, Annual Retreat Planning Committee (2010-2013)

Co-Director, Graduate Studies (2013-2017)

Invited Talks (since 2007):

2007:

Coral/Dinoflagellate Symbiosis Cell Biology Workshop, Heron Island, Australia
Keystone Symposium on Imaging Immune Responses, Keystone, CO
Honors Lecture, New York University School of Medicine, NY
9th International Congress on Toxoplasma, Chico Hotsprings, MT
Marine Biology Lab, Biology of Parasitism Course, Woods Hole, MA

2008:

Francis Marion University, Florence, SC
University of North Carolina, Dept. Cell and Developmental Biology, Chapel Hill, NC
Leuckart Medal Lecture, German Society for Parasitology, Hamburg, Germany
University of Pennsylvania, Microbiology Seminar Series, Philadelphia, PA
Laboratory of Parasitic Diseases, NIAID, NIH, Bethesda, MD
Marine Biology Lab, Biology of Parasitism Course, Woods Hole, MA
FEBS International Summer School on Pathogen-Host Interplay, Berlin, Germany
Universidade Federal de Rio de Janeiro, Brazil
Toxoplasma Centennial Congress, Buzios, Brazil
University of California, School of Natural Sciences, Merced, CA

2009:

University of California, Santa Cruz, Dept. Micro. and Envtl. Toxicol., Santa Cruz, CA
Laboratory of Malaria and Vector Research, NIAID, NIH, Twin Brooks, MD
Centers for Disease Control, Atlanta, GA
Vassar College, Biology Dept., Poughkeepsie, NY
Marine Biology Lab, Biology of Parasitism Course, Woods Hole, MA
Australian Society for Parasitology, Sydney, Australia

2010:

Harvard School of Public Health, Dept. Immunol. and Infect. Diseases, Boston, MA
University of California, San Francisco, Dept. Micro. and Immunol., San Francisco, CA
EMBO Workshop – Emerging Themes in Infection Biology, Nice, France
Marine Biology Lab, Biology of Parasitism Course, Woods Hole, MA
Noble Lecture, University of Oklahoma, Oklahoma City, OK
California Institute of Technology, Dept. Biology, Pasadena, CA
Marion Koshland Lecture, University of California, Berkeley, CA

2011:

International Congress of Protozoology, Berlin, Germany
11th International Congress on Toxoplasmosis, Ottawa, Canada
Life Sciences Colloquium, Berlin, Germany

2012:

University of Pennsylvania, Dept. Microbiology, Philadelphia, PA
American Society of Biochemistry and Molecular Biology, San Diego, CA
Harry M. Rose Memorial Lecture, Microbiol. & Immunol., Columbia Univ., New York, NY
Rockefeller University, “Molecular Parasitology: The Next Frontier Symposium”, New York, NY
Keynote Speaker, Molecular Parasitology Meeting, Woods Hole, MA
Keynote Speaker, ICB/MBL Biology of Parasitism Course, University of Sao Paulo, Brazil
Keynote Speaker, Southern California Eukaryotic Pathogens Symposium, Riverside, CA

2013:

Willison Lecture, University of Michigan, Dept. Microbiol. & Immunol., Ann Arbor, MI
Oregon Health Sciences University, Dept. Immunol. & Microbiol., Portland, OR
University of California, Infectious Diseases and Immunity, Berkeley, CA
12th International Congress on Toxoplasmosis, Oxford, UK
Yale University, Microbial Pathogenesis, New Haven, CT
University of Denver, Dept. Biochemistry and Molecular Genetics, Denver, CO

2014:

George Washington University, Institute for Biomedical Sciences, Washington, DC
Johns Hopkins University, School of Public Health, Baltimore, MD
University of California, Molecular and Cellular Biology, Berkeley, CA
International Congress of Parasitology, Mexico City, Mexico
Awaji International Forum on Infection and Immunity, Nara, Japan
Dartmouth University, Life Sciences Symposium, Hanover, NH
Notre Dame University, Clinical Translational Seminars, Notre Dame, IN
Ricketts Symposium Lecturer, Committee on Microbiology, University of Chicago, IL

2015:

Larsen Lecture, College of Veterinary Medicine, Washington State University, Pullman, WA
Centenary Symposium Speaker, Walter and Eliza Hall Institute of Med. Research, Melbourne, Australia

2016:

Keynote Speaker, Annual Molecular Parasitology/Vector Biology Symposium, Univ. Georgia, GA
Miller Symposium, Marin, CA
Session Chair and Speaker, Gordon Conference on Parasitism, Newport, RI
Scripps Research Institute, La Jolla, CA
University of Utah, Salt Lake City, UT

2017:

Plenary Lecture, Molecular Microbiology Symposium, UT Southwestern, Dallas, TX
Collège de France, International Symposium, Paris, France
Crick Institute, Department of Infectious Disease, London, UK
ThermoFisher Distinguished Speaker, SUNY, Buffalo, NY
University of Wisconsin, Department of Medical Microbiology and Immunology, Madison, WI

2018:

University of Arizona, Bio5 Institute, Tucson, AZ
California State University, Department of Biology, Northridge, CA

Past, Current and Pending Research Support:

Current:

[dates are entire period funded since inception; amounts are Direct Costs for most recently funded year]

RO1 AI21423-32 (P.I.: John C. Boothroyd) 07/01/85-06/30/19 25% effort
NIH/NIAID ~\$339,000

“Toxoplasma rhoptry proteins.”

The major goals of this project are to study the biological function of rhoptry proteins used by Toxoplasma to invade into a host cell and co-opt its function once inside.

RO1 AI73756-10 (P.I.: John C. Boothroyd) 08/01/07-07/31/18 (NCE) 25% effort
NIH/NIAID ~\$290,000

“Strain-specific host-pathogen interactions in toxoplasmosis.”

The major goals of this project are to use genetic crosses between strains that differ in their virulence to identify and then characterize proteins that play a crucial role in mediating the host-pathogen interaction.

K12 GM088033 (P.I.: John C. Boothroyd) 09/01/10-08/31/17 (NCE) 10% effort
NIH/NIGMS ~\$1,179,000

“A Stanford - SJSU Postdoctoral Training Program to Enhance URM Teaching.”

The major goals of this project are to train postdoctoral fellows for a research and teaching career, especially at institutions that excel at serving under-represented minorities. This grant is currently in a no-cost extension of one year. Dr. Joseph Puglisi served as PI from its start through 7/1/15, at which time Dr. Boothroyd became PI.

Pending:

RO1 AI129529-01 (P.I.: John C. Boothroyd) 04/01/18-03/31/23 25% effort
NIH/NIAID ~\$322,658

“Identifying the Toxoplasma effector that up-regulates host c-Myc and the machinery that translocates such effectors into the host cell.”

The major goals of this project are to determine the effector used by Toxoplasma to up-regulate host c-Myc and the machinery used to translocate this and other effectors across the parasitophorous vacuole membrane into the host cell.

Previous Major Grants:

[dates are entire period funded; order is based on when expired]

National Institutes of Health 5 RO1 AI-25732-03
P.I. John C. Boothroyd (10% effort)
"Rapid Diagnostic Procedures for Opportunistic Parasites"
Final Year Annual Direct Costs: ~\$85,000
Period: 9/15/87-8/31/90

Burroughs Wellcome Fund
P.I. John C. Boothroyd
“Scholar Award in Molecular Parasitology”
Final Year Annual Direct Costs: \$60,000
Period: 9/1/86-8/31/91

MacArthur Foundation

Program Director: John C. Boothroyd
"Program in Molecular Parasitology"
Project Title: "Genetic Analysis of Toxoplasma".
P.I. John C. Boothroyd
Average Annual Direct Costs: ~\$50,000
Period: 1/1/85-12/31/95

National Institutes of Health 2 RO1 AI-21025
P.I. John C. Boothroyd (35% effort)
"Molecular Basis of Pathogenicity of African Trypanosomes"
Final Year Annual Direct Costs: ~\$155,000
Period: 3/1/84-2/28/97

National Institutes of Health UO1 AI-30230-04 (NCDDG)
P.I. Jack S. Remington
Project Leader: John C. Boothroyd (5% effort)
Project Title: "Identification of Drug Targets through Genetics"
Final Year Annual Direct Costs \$63,875
Period: 6/1/90-11/30/98

University of California R96-ST-105 (Universitywide AIDS Research Program)
P.I. John C. Boothroyd (10% effort)
"Identification of genes involved in invasion by Toxoplasma."
Final Year Annual Direct Costs: \$60,000
Period: 7/1/96-6/30/98

Alameda County District Attorney's Office.
P.I. John C. Boothroyd (5% effort)
"Strain-specific serological typing of Toxoplasma infection."
Final Year Annual Direct Costs: \$68,309
Period: 7/1/99-12/31/02.

National Institutes of Health RO1 AI45057 (John C. Boothroyd)
P.I. John C. Boothroyd (25% effort)
"Genetics of Invasion and Egress in Toxoplasma."
Final Year Annual Direct Costs: \$189,120
Period: 3/1/99-2/28/06.

Senior Scholar Award in Global Infectious Diseases.
Ellison Medical Foundation
P.I. John C. Boothroyd
"Evolution of Virulence in Eukaryotic Pathogens."
Final Year Annual Direct Costs: \$150,000
Period: 11/1/02-10/31/06

National Institutes of Health U19 AI057229 (P.I.: Mark M. Davis)
NIH/NIAID
Sub-project P.I.: John C. Boothroyd (3% effort)
"Predicting Disease Outcome in Human Toxoplasmosis Based on Immune Profiling"
Final Year Annual Direct Costs: \$75,000
Period: 12/1/09-11/30/11

EuPathDB (P.I. David S. Roos)

NIH/NIAID

Sub-contract P.I. John C. Boothroyd (5% effort)

“High Throughput analysis of oocyst development in *Toxoplasma*”

Annual Direct Costs: ~\$103,000

Period: 8/31/10-7/31/11

RO1 AI41014 (P.I. John C. Boothroyd)

NIH/NIAID

“Developmental Biology of *Toxoplasma*”

Annual Direct Costs: ~\$225,000

Period: 12/1/97-11/30/12

R21 AI112962-01 (P.I.: John C. Boothroyd)

NIH/NIAID

“Role of c-Myc up-regulation in *Toxoplasma* infection.”

Final Year Annual Direct Costs: ~\$125,000

Period: 12/01/14-11/30/16

R21 AI120476-01 (P.I.: John C. Boothroyd)

07/01/15-06/30/17

10% effort

NIH/NIAID

~\$150,000

“Role of pseudouridylation in *Toxoplasma* differentiation.”

The major goals of this project are to determine how a pseudouridine synthase operates to enable differentiation of *Toxoplasma* tachyzoites into bradyzoites.

Patents Issued:

1. Boothroyd, J.C., Cross, G.A.M., Highfield, P., Winther, M. Rowlands, Brown, F. and Harris, T.J. Recombinant DNA expression vector encoding for foot and mouth disease virus proteins U.S. No. 4743554.
2. Burg, J.L., Pouletty, P.J. and Boothroyd, J.C. Selective Amplification of Target Polynucleotide Sequences. U.S. No. 5437990, 6090951 and 6410276; EPO 0682120 [note: as of 2012, this patent ranked in the top 10 on the list of “inventions” ever to come out of Stanford University, in terms of cumulative royalties paid on licenses]
3. Sibley, L.D., Buelow, R. and Boothroyd, J.C. Composition and method for distinguishing virulent and non-virulent *Toxoplasma* infections. U.S. No. 5429922
4. Burg, J.L., Kasper, L.H. and Boothroyd, J.C. Diagnostic Genes for Toxoplasmosis. U.S. No. 5629414; EPO 89903608.1
5. Burg, J.L., Kasper, L.H. and Boothroyd, J.C. P30 peptides of *Toxoplasma gondii*. U.S. No. 5859196
6. Kim, K., Soldati, D. and Boothroyd, J.C. Transfection and genetic manipulations in obligate intracellular parasites. U.S. No. 5643718, 5976553
7. Cleary, M.D. and Boothroyd, J.C. Biosynthetic labeling and separation of RNA. EPO 04760942.5

Publications:

I. Books:

Boothroyd, J.C. and Komuniecki, R. (editors). 1995. Molecular Approaches to Parasitology. Wiley-Liss, New York.

II. Book Chapters:

1. Holder, A.A., Boothroyd, J.C. and Cross, G.A.M. 1980. Trypanosome Variant Surface Glycoprotein: The C-Terminus of the Protein is the Location of Antigenically Cross Reacting Carbohydrate Groups of a Putative Membrane Attachment Sequence and the Site of Proteolytic Processing. In, The Host Invader Interplay, H. Van den Bosche (ed.), Elsevier/North Holland Biomedical Press, Amsterdam, pp. 249-252.
2. Boothroyd, J.C., Campbell, D.A. and Sutton, R.E. 1985. Expression of Surface Antigen Genes in *Trypanosoma brucei* Involves a Novel System of Discontinuous Transcription. In: Vaccines 85, R. Channock, R. Lerner and F. Brown (eds.). Cold Spring Harbor Laboratory, Cold Spring Harbor, New York, pp. 61-66.
3. Boothroyd, J.C., Burg, J.L., Nagel, S.D., Ossorio, P.N., Perelman, D., Kasper, L.H., Ware, P.L., Prince, J., Sharma, S. and Remington, J. 1987. Antigen and Tubulin Genes of *Toxoplasma gondii*. In: Molecular Strategies of Parasitic Invasion, Agabian, N., Goodman, H. and Noguiera, N. (eds.) UCLA Symposium on Molecular and Cellular Biology, New Series, Vol. 42, Alan R. Liss, Inc., New York, pp. 237-250 .
4. Boothroyd, J.C., Nagel, S.D., Burg, J.L. and Perelman, D. 1987. Molecular Approaches to the Study of *Toxoplasma gondii*. In, Contemporary Issues in Infectious Diseases, Sande, M.A., Leech, J.H. and Root, R.K. (eds.), Vol. 7. Churchill-Livingston.
5. Boothroyd, J.C. and Beals, T.P. 1987. Evolution of Antigenic Variation in African Trypanosomes. In, Host-Parasite Cellular and Molecular Interactions in Protozoal Infections. Chang, K.-P. and Snary, D. (eds.), NATO ASI Series, Springer-Verlag, Heidelberg, pp. 9-18.
6. Boothroyd, J.C. 1990. Molecular Biology of Trypanosomes. In: Wyler, D.J., Pereira, M.E.A. and Wirth, D. (eds.) Cell Biology, Molecular Biology and Immunology of Parasites. Freeman Press, New York
7. Sibley, L.D., Pouletty, C. and Boothroyd, J.C. 1993. Formation and modification of the parasitophorous vacuole occupied by *Toxoplasma gondii*. In, Toxoplasmosis, NATO/ASI series, J. Smith (ed.), Springer Verlag pp. 63-72.
8. Kasper, L.H. and Boothroyd, J.C. 1993. *Toxoplasma gondii* and Toxoplasmosis. In, Immunology and Molecular Biology of Parasitic Infections. K. Warren (ed.), Blackwell Scientific Publications, Boston. pp. 269-301.

9. Boothroyd, J.C., LeBlanc, A.J. and Sibley, L.D. 1993. Allelic Polymorphism in *Toxoplasma gondii*. Implications for Interstrain Mating. in Toxoplasmosis, NATO/ASI series, J. Smith (ed.), Springer Verlag pp. 3-8.
10. Boothroyd, J.C., Black, M., Kim, K., Pfefferkorn, E.R., Seeber, F., Sibley, L.D. and Soldati, D. 1995. Forward and Reverse Genetics as a tool for the study of the protozoan parasite, *Toxoplasma gondii*. In, Methods in Molecular Genetics, Vol. 6. Microbial Gene Techniques. K. Adolph (ed.), Academic Press, New York. pp. 3-29
11. Boothroyd, J.C., Kim, K., Ortega, E., Sibley, L.D. and Soldati, D. 1995. Toxoplasma as a paradigm for the use of genetics in the study of parasitic protozoa. In. Molecular Approaches to Parasitology. J.C. Boothroyd and R. Komuniecki (eds.), Wiley-Liss, New York. pp. 211-225.
12. Boothroyd, J.C. 2000. Toxoplasmosis. In: Encyclopedia of Microbiology. Section 4. J. Lederberg (ed.). Academic Press, New York. pp. 598-609.
13. Fouts, A. and Boothroyd, J.C. 2007. Cellular response to infection. In: Toxoplasma: Molecular and Cellular Biology. D. Soldati and J. Ajioka (eds.), Horizon Bioscience, Norfolk. pp.171-190.
14. Dunn, J.D., Butcher, B., Boothroyd, J.C. and Denkers, E.Y. 2007. Alterations in host-cell biology due to *Toxoplasma gondii*. In: Toxoplasma gondii. K. Kim and L. Weiss (eds.), Academic Press, London. pp. 317-340.
15. Montoya, J.G., Boothroyd, J.C. and Kovacs, J.A. 2009. *Toxoplasma gondii*. In: Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases. 7th Edition. Mandell, G.L., Douglas, J.E. and Dolin, R. (eds.), Churchill Livingstone, Philadelphia.
16. Boothroyd, J.C. 2009. Toxoplasmosis. In: Encyclopedia of Microbiology. Lederberg, J. et al. (eds.). Academic Press, New York.
17. Sibley, L.D. and Boothroyd, J.C. 2011. Genetic mapping of acute virulence in *Toxoplasma*. In: Evolution of Virulence in Eukaryotic Pathogens. Sibley, L.D., Howlett, B. and Heitman, J. (eds.). Wiley Blackwell Press, Hoboken.
18. Butcher, B.A., Reese, M.L., Boothroyd, J.C. and Denkers, E.Y. 2013. Interactions Between Toxoplasma Effectors and Host Immune Responses. In: Toxoplasma gondii. 2nd Edition. K. Kim and L. Weiss (eds.), Academic Press, London. (in press)
19. Montoya, J.G., Boothroyd, J.C. and Kovacs, J.A. 2014. *Toxoplasma gondii*. In: Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases. 8th Edition. Mandell, G.L., Douglas, J.E. and Dolin, R. (eds.), Churchill Livingstone, Philadelphia. (in press)

III. Invited Reviews:

1. Cross, G.A.M., Holder, A.A., Allen, G. and Boothroyd, J.C. 1980. An Introduction to Antigenic Variation in Trypanosomes. **Am. J. Trop. Med. Hyg.** 29(5) suppl.:1027-1032.

2. Boothroyd, J.C. 1985. Antigenic Variation in African Trypanosomes. **Ann. Rev. Microbiol.** 39:475-502.
3. Boothroyd, J.C. 1989. Trans-splicing. **Nucl. Acids and Mol. Biol.** 3: 216-230.
4. Boothroyd, J.C. 1993. Population biology of *Toxoplasma*: clonality, virulence and speciation (or not). **Inf. Agents and Dis.** 2:100-102.
5. Sibley, L.D., Pfefferkorn, E.R. and Boothroyd, J.C. 1993. Development of genetic systems for *Toxoplasma gondii*. **Parasitol. Today** 9:392-392.
6. Boothroyd, J.C. and Sibley, L.D. 1993. Population biology of *Toxoplasma gondii*. **Research in Immunology** 144 (1) 93-96.
7. Carrington, M. and Boothroyd, J.C. 1996. Implications of conserved structural motifs in disparate trypanosome surface proteins. **Mol. Biochem. Parasitol.** 81:119-126.
8. Hehl, A., Manger, I. and Boothroyd, J.C. 1997. Genetic analysis in *Toxoplasma*: gene discovery with EST's and rapid mapping of natural polymorphisms. **Methods** 13:89-102.
9. Boothroyd, J.C., Black, M., Bonnefoy, S., Hehl, I., Knoll, L., Manger, I., Ortega-Barria, E. and Tomavo, S. 1997. Genetic and Biochemical Analysis of Development in *Toxoplasma gondii*. **Philosophical Transactions: Biological Sciences.** Royal Society. 352:1347-1354.
10. Boothroyd, J.C., Hehl, A., Knoll, L.J. and Manger, I.D. 1998. The surface of *Toxoplasma gondii*: more and less. **Intl J. Parasitol.** 28:3-9.
11. Knoll, L.J. and Boothroyd, J.C. 1998. Molecular biology lessons about *Toxoplasma* development: stage-specific homologs. **Parasitology Today** 14:490-493.
12. Black, M.W. and Boothroyd, J.C. 2000. The lytic cycle of *Toxoplasma gondii*. **Microbiology and Molecular Biology Reviews** 64:607-623.
13. McFadden, D.W., Camps, M. and Boothroyd, J.C. 2001. Resistance as a tool in the study of old and new drug targets in *Toxoplasma*. **Drug Resistance Updates** 4:79-84.
14. Boothroyd, J.C. and Grigg, M.E. 2002. Population biology of *Toxoplasma gondii* and its relevance to human disease: do different strains cause different disease? **Current Opinion in Microbiology** 5:429-430.
15. Boothroyd, J.C. and Grigg, M.E. 2002. Population biology of *Toxoplasma gondii* and its relevance to human disease: do different strains cause different disease? **Current Opinion in Microbiology** 5:438-442.
16. Boothroyd, J.C., Blader, I., Cleary, M. and Singh, U. 2003. DNA Microarrays in parasitology. **Parasitology Today.** 19:470-476.

17. Arrizabalaga, G. and Boothroyd, J.C. 2004. Role of Calcium in Toxoplasma Invasion and Egress. **International Journal of Parasitology**. 24:361-368.
18. Saeij, J.P.J., Boyle, J.P. and Boothroyd, J.C. 2005. Differences among the three major strains of *Toxoplasma gondii* and their specific interactions with the infected host. *Microbes and Infection*. **Trends in Parasitology** 21:476-481.
19. Boyle, J.P., Saeij, J.P.J., Cleary, M.D. and Boothroyd, J.C. 2006. Analysis of gene expression during development: lessons from the apicomplexa. **Microbes and Infection** 8:1623-1630.
20. Carruthers, V. and Boothroyd, J.C. 2007. Pulling together: An integrated model of *Toxoplasma* cell invasion. **Current Opinion in Microbiology** 1:82-89.
21. Boothroyd, J.C. and Dubremetz, J.-F. 2008. Kiss and spit: the dual roles of Toxoplasma rhoptries. **Nature Reviews in Microbiology** 6:79-88.
22. Ravindran, S. and Boothroyd, J.C. 2008. Secretion of proteins into host cells by Apicomplexan parasites, **Traffic** 9:647-656.
23. Zeiner G.M., Cleary M.D., Fouts A.E., Meiring C.D., Mocarski E.S. and Boothroyd J.C. 2008. RNA analysis by biosynthetic tagging using 4-thiouracil and uracil phosphoribosyltransferase. **Methods Mol. Biol.** 419:135-46
24. Boothroyd, J.C. 2009. Hypothesis: Expansion of host range is a driving force in the evolution of Toxoplasma. **Memorias do Instituto Oswaldo Cruz**. 104:179-184.
25. Boothroyd, J.C. 2009. *Toxoplasma gondii*: twenty-five years and twenty-five major advances for the field. **International Journal of Parasitology** 39:935-946. PMC2895946
26. Tyler, J.S., Treeck, M. and Boothroyd, J.C. 2011. Focus on the ringleader: the role of AMA1 in apicomplexan invasion and replication. **Trends in Parasitology** 27: 410-420. PMC3159806
27. Boothroyd, J.C. 2013. Have it your way: how polymorphic, injected protein kinases and pseudokinases enable Toxoplasma to subvert host defenses. **PLoS Pathogens** 9(4):e1003296. PMC3635977

IV. Miscellaneous Publications (Book Reviews, Meeting Reports, Commentary, etc.)

1. Sibley, L.D. Pfefferkorn, E.R. and Boothroyd, J.C. 1991. Proposed genetic nomenclature for *Toxoplasma gondii*. **Parasitol. Today** 7: 327-328.
2. Schwartzman, J.D., Boothroyd, J.C. and Kasper, L.H. 1994. Toxoplasma Workshop Overview. **J. Euk. Microbiol.** 41:S19-S21.
3. Smith, J.E., Boothroyd, J.C., Hunter, C. and Petersen, E. 1997. Progress in Toxoplasmosis research. **Parasitol. Today** 13:245-247.

V. Refereed Original Publications:

1. Cattolico, R.A., Boothroyd, J.C. and Gibbs, S.P. 1976. Synchronous Growth and Plastid Replication in the Naturally Wall-less Alga *Olisthodiscus luteus*. **Plant Physiol.** 57:497-503.
2. Boothroyd, J.C. and Hayward, R.S. 1979. New Genes and Promoters Suggested by the DNA Sequence Near the End of the Coliphage T7 Early Operon. **Nucl. Acids Res.** 7:1931-1943.
3. Boothroyd, J.C., Cross, G.A.M., Hoeijmakers, J.H.J. and Borst, P. 1980. A Variant Surface Glycoprotein of *Trypanosoma brucei* Synthesized with a C-Terminal Hydrophobic "Tail" Absent from Purified Glycoprotein. **Nature** 288:624-626.
4. Boothroyd, J.C., Highfield, P.E., Cross, G.A.M., Rowlands, D.J., Lowe, P.A., Brown, F. and Harris, T.J.R. 1981. Molecular Cloning of the Foot and Mouth Disease Virus Genome and Nucleotide Sequences in the Structural Protein Genes. **Nature** 290:800-802.
5. Boothroyd, J.C., Paynter, C.A., Cross, G.A.M., Bernards, A. and Borst, P. 1981. Variant Surface Glycoproteins of *Trypanosoma brucei* are Synthesized with Cleavable Hydrophobic Sequences at the Carboxy and Amino Termini. **Nucl. Acids Res.** 9:4735-4743.
6. Majumder, H.K., Boothroyd, J.C. and Weber, H. 1981. Homologous 3'-Terminal Regions of mRNAs for Surface Antigens of Different Antigenic Variants of *Trypanosoma brucei*. **Nucl. Acids Res.** 9:4745-4753.
7. Bernards, A., Van der Ploeg, L.H.T., Frasch, A.C., Borst, P., Boothroyd, J.C., Coleman, S.L. and Cross, G.A.M. 1981. Activation of Trypanosome Surface Glycoprotein Genes Involves a Duplication-Transposition Leading to an Altered 3'-end. **Cell** 27:497-505.
8. Boothroyd, J.C., Lowe, P.A., Rowlands, D.J. and Harris, T.J.R. 1982. The Nucleotide Sequence of cDNA Coding for the Structural Proteins of Foot and Mouth Disease Virus. **Gene** 17:153-161.
9. Boothroyd, J.C., Paynter, C.A., Coleman, S.L. and Cross, G.A.M. 1982. Complete Nucleotide Sequence of Complementary DNA Coding for a Variant Surface Glycoprotein from *Trypanosoma brucei*. **J. Mol. Biol.** 157:547-556.
10. Boothroyd, J.C. and Cross, G.A.M. 1982. Transcripts Coding for Different Variant Surface Glycoproteins of *Trypanosoma brucei* Have a Short, Identical Exon at Their 5'-end. **Gene** 20:281-289.
11. Makoff, A.J., Paynter, C.A., Rowlands, D.J. and Boothroyd, J.C. 1982. Antigenic Variation in Foot and Mouth Disease. Comparison of the Nucleotide and Predicted Amino Acid Sequence of the Major Immunogen from Three Serotypes. **Nucl. Acids Res.** 10:8285-8295.
12. Campbell, D.A., van Bree, M. and Boothroyd, J.C. 1984. The 5'-limit of Transposition and Upstream Barren Region of a Trypanosome VSG Gene: Tandem 76 Base-Pair Repeats Flanking (TAA)₉₀. **Nucl. Acids Res.** 12:2759-2774.

13. Campbell, D.A., Thornton, D.A. and Boothroyd, J.C. 1984. Apparent Discontinuous Transcription of *Trypanosoma brucei* Variant Surface Antigen Genes. **Nature** 311:350-355.
14. Sutton, R.E. and Boothroyd, J.C. 1986. Evidence for Trans-splicing in Trypanosomes. **Cell** 47:527-535.
15. Campbell, D.A., Kubo, K., Clark, G. and Boothroyd, J.C. 1987. Precise Identification of Cleavage Sites Involved in the Unusual Processing of Trypanosome Ribosomal RNA. **J. Mol. Biol.** 196:113-124.
16. Boothroyd, J.C., Wang, A., Campbell, D.A. and Wang, C.C. 1987. An Unusually Compact Ribosomal DNA Repeat in the Protozoan *Giardia lamblia*. **Nucl. Acids Res.** 15:4065-4084.
17. Sutton, R.E. and Boothroyd, J.C. 1988. The cap of both medRNA and mRNA of Trypanosomes is 7-methylguanosine. **Mol. Cell. Biol.** 8:494-496.
18. Nagel, S.D. and Boothroyd, J.C. 1988. The Alpha- and Beta-Tubulins of *Toxoplasma gondii* Are Encoded by Single Copy Genes Containing Multiple Introns. **Mol. Bioch. Parasitol.** 29:261-273.
19. Sutton, R.E. and Boothroyd, J.C. 1988. Trypanosome Trans-Splicing Utilizes 2'-5' Branches and a Corresponding Debranching Activity. **EMBO J.** 7:1431-1437.
20. Muhich, M. and Boothroyd, J.C. 1988. Polycistronic Transcripts in Trypanosomes and their Accumulation during Heat Shock: Evidence for a Precursor Role in mRNA Synthesis. **Mol. Cell. Biol.** 8:3837-3846.
21. Burg, J.L., Perelman, D., Kasper, L.H., Ware, P.L. and Boothroyd, J.C. 1988. Molecular analysis of the gene encoding the major surface antigen of *Toxoplasma gondii*. **J. Immun.** 141:3584-3591.
22. Nagel, S.D. and Boothroyd, J.C. 1989. The Major Surface Antigen, p30, of *Toxoplasma gondii* is Anchored by a Glycolipid. **J. Biol. Chem.** 264:5569-5574.
23. Prince, J.B., Araujo, F.G., Remington, J.S., Burg, J.L., Boothroyd, J.C. and Sharma, S.D. 1989. Cloning of cDNAs Encoding a 28 kilodalton antigen of *Toxoplasma gondii*. **Mol. Bioch. Parasit.** 34:3-14.
24. Muhich, M.L. and Boothroyd, J.C. 1989. Synthesis of Trypanosome hsp70 mRNA is Resistant to Disruption of Trans-splicing by Heat Shock. **J. Biol. Chem.** 264:7107-7110.
25. Muhich, M.L., Hsu, M.P. and Boothroyd, J.C. 1989. Heat Shock Disruption of Trans-splicing in Trypanosomes: Effect on hsp70, hsp85 and Tubulin mRNA Synthesis. **Gene** 82:169-175.
26. Burg, J.L., C. Grover, Pouletty, P. and Boothroyd, J.C. 1989. Direct and Sensitive Detection of a Pathogenic Protozoan, *Toxoplasma gondii* by Polymerase Chain Reaction. **J. Clin. Micro.** 27:1787-1792.

27. Hsu, M.P., Muhich, M.L. and Boothroyd, J.C. 1989. A Developmentally Regulated Gene of Trypanosomes Encodes a Homologue of Rat Protein-Disulphide Isomerase and Phosphoinositol-Phospholipase C. **Biochemistry** 28:6440-6446.
28. Perelman, D.A. and Boothroyd, J.C. 1990. The Trypanosome Homologue of the Yeast Ribosomal Protein Gene, rp51, is Trans- but not Cis-spliced. **Mol. Cell Biol.** 10:3284-3288.
29. Grover, C.M., Thulliez, P., Remington, J.S. and Boothroyd, J.C. 1990. Rapid Prenatal Diagnosis of Congenital Toxoplasma Infection from Amniotic Fluid by Polymerase Chain Reaction. **J. Clin. Micro.** 28:2297-2301.
30. Hobbs, M.H. and Boothroyd, J.C. 1990. Characterization of an expression-site-associated gene family in trypanosomes: expression in vivo and homology to VSG genes. **Mol. Biochem. Parasitol.** 43:1-16.
31. Dorn, P.L., Aman, R.A. and Boothroyd, J.C. 1991. Inhibition of Protein Synthesis Results in Super-Induction of Procyclin/PARP RNA Levels. **Mol. Biochem. Parasitol.** 44: 133-140
32. Ossorio, P.N., Sibley, L.D. and Boothroyd, J.C. 1991. Mitochondrial-like sequences flanked by repeated sequences in the nuclear genome of *Toxoplasma gondii*: **J. Mol. Biol.** 222: 525-536
33. Bülow, R. and Boothroyd, J.C. 1991. Protection of mice from Toxoplasma infection with p30 antigen in liposomes. **J. Immunol.** 147: 3496-3500.
34. Ossorio, P.N., Schwartzman, J.D. and Boothroyd, J.C. 1992. A Toxoplasma gondii rhoptry protein associated with host cell penetration has unusual charge asymmetry. **Mol. Biochem. Parasitol.** 50:1-16.
35. Beals, T.P. and Boothroyd, J.C. 1992. The genomic organization and context of a trypanosome variant surface glycoprotein gene family. **J. Mol. Biol.** 225:961-971.
36. Beals, T.P. and Boothroyd, J.C. 1992. Sequence divergence among members of a trypanosome variant surface glycoprotein gene family. **J. Mol. Biol.** 225:973-983.
37. Sibley, L.D. and Boothroyd, J.C. 1992. Construction of a molecular karyotype for *Toxoplasma gondii*. **Mol. Biochem. Parasitol.** 51:291-300.
38. Kasper, L.H., Khan, I.A., Ely, K.H., Bülow, R. and Boothroyd, J.C. 1992. Antigen specific (P30) mouse CD8+ T cells are cytotoxic against *Toxoplasma gondii* infected peritoneal macrophages. **J. Imm.** 148:1493-1498.
39. Bangs, J.D., Crain P.F., Hashizume, T., McCloskey J.A. and Boothroyd, J.C. 1992. Mass Spectrometry of mRNA Cap 4 from trypanosomatids reveals two novel nucleosides. **J. Biol. Chem.** 267: 9805-9815.
40. Sibley, L.D. and Boothroyd, J.C. 1992. Virulent strains of *Toxoplasma gondii* are clonal. **Nature** 359:82-85.

41. Sibley, L.D., LeBlanc, A., Pfefferkorn, E.R. and Boothroyd, J.C. 1992. Generation of a restriction fragment length polymorphism linkage map for *Toxoplasma gondii*. **Genetics** 132:1003-1015.
42. Hardwick, K., Boothroyd, J.C., Rudner, A. and Pelham, H.R. 1992. Genes that allow yeast cells to grow in the absence of the HDEL receptor. **EMBO J.** 11:4187-4195.
43. Soldati, D. and Boothroyd, J.C. 1993. Transient transfection of the obligate intracellular parasite, *Toxoplasma gondii*. **Science** 260: 349-352.
44. Bangs, J.D., Uyetake, L., Brickman, M.J., Balber, A.E. and Boothroyd, J.C. 1993. Molecular cloning and cellular localization of a BiP homologue in *Trypanosoma brucei*: Divergent ER retention signals in a lower eukaryote. **J. Cell Sci.** 105:1101-1113.
45. Xiong, C., Grieve, R.B., Kim, K. and Boothroyd, J.C. 1993. Expression of *Toxoplasma gondii* P30 as fusions with glutathione S-transferase in animal cells by sindbis recombinant virus. **Mol. Biochem. Parasitol.** 61:143-148.
46. Kim, K., Soldati, D. and Boothroyd, J.C. 1993. Gene replacement in *Toxoplasma gondii* with chloramphenicol acetyl transferase as selectable marker. **Science** 262:911-914.
47. Kim, K., Buelow, R., Kampmeier, J. and Boothroyd, J.C. 1994. Conformationally appropriate expression of the *Toxoplasma* antigen SAG1 (p30) in CHO cells. **Infection and Immunity** 62:203-209.
48. Kim, K. and Boothroyd, J.C. *Toxoplasma gondii*: 1995. Stable complementation of *sag1* mutants using *SAG1* transfection and fluorescence activated cell sorting. **Expt. Parasitol.** 80:46-53.
49. Soldati, D. and Boothroyd, J.C. 1995. A selector of transcription initiation in the protozoan parasite, *Toxoplasma gondii*. **Mol. Cell Biol.** 15:87-93.
50. Field, M.C., Field, H. and Boothroyd, J.C. 1995. A homologue of the nuclear GTPase Ran/TC4 from *Trypanosoma brucei*. **Mol. Biochem. Parasitol.** 69:131-134.
51. Black, M., Kim, K., Soldati, D., Seeber, F. and Boothroyd, J.C. 1995. Restriction-enzyme-mediated-integration increases the frequency of transfection and co-transfection. **Mol. Biochem. Parasitol.** 74:55-63.
52. Tomavo, S. and Boothroyd, J.C. 1995. Interconnection between organellar functions, development and drug resistance in the protozoan parasite, *Toxoplasma gondii*.. **Int. J. Parasitol.** 25:1293-1298.
53. Field, M.C. and Boothroyd, J.C. 1995. A family of small GTP-binding proteins in *Trypanosoma brucei*.. **Experimental Parasitol.** 81:313-320.
54. Soldati, D., Kim, K., Kampmeier, J., Dubremetz, J.F. and Boothroyd, J.C. 1995. Complementation of a *Toxoplasma gondii* ROP1 knock-out mutant using phleomycin selection. **Mol. Biochem. Parasitol.** 74:87-97.

55. Hsia, R-C., Beals, T.P. and Boothroyd, J.C. 1996. Use of chimeric recombinant polypeptides to analyze conformational, surface epitopes on trypanosome variant surface glycoproteins. **Mol. Microbiol.** 19:53-63.
56. Seeber, F. and Boothroyd, J.C. 1996. *E. coli* β -galactosidase as an *in vitro* reporter enzyme and stable transfection marker in the intracellular protozoan parasite *Toxoplasma gondii*. **Gene** 169:39-45.
57. Field, M.C. and Boothroyd, J.C. 1996. Sequence divergence in a trypanosome variant surface glycoprotein gene family: coding region hypervariability and downstream recombinogenic repeats. **J. Molec. Evol.** 42:500-511
58. McFadden, D., Seeber, F. and Boothroyd, J.C. 1997. Use of *Toxoplasma gondii* expressing β -galactosidase for colorimetric assessment of drug activity *in vitro*. **Antimicrobial Agents and Chemotherapy** 41:1849-1853.
59. Hehl, A., Krieger, T. and Boothroyd, J.C. 1997. Identification and characterization of SRS1, a *Toxoplasma gondii* surface antigen upstream of and related to SAG1. **Mol. Biochem. Parasitol.** 89:271-282.
60. Knoll, L.J. and Boothroyd, J.C. 1998. Isolation of developmentally regulated genes from *Toxoplasma gondii* using a gene trap with the positive and negative selectable marker hypoxanthine-xanthine-guanine phosphoribosyltransferase. **Mol. Cell Biol.** 18:807-814.
61. Seeber, F. and Boothroyd, J.C. 1998. Analysis of *Toxoplasma gondii* stably transfected with a transmembrane variant of its major surface protein, SAG1. **J. Cell Sci.** 111:23-29.
62. Black, M. and Boothroyd, J.C. 1998. Development of a stable episomal shuttle vector for *Toxoplasma gondii*. **J. Biol. Chem.** 273:3972-3979.
63. Ajioka, J., Boothroyd, J.C., Hehl, A., Hillier, L., Lingnau, M., Manger, I.D., Marra, M., Roos, D., Wan, K.L., Waterston, R. and Sibley, L.D. 1998. Sequencing of ESTs from the protozoan parasite *Toxoplasma gondii*: Efficient identification of genes and discovery of phylogenetically conserved sequences of the Apicomplexa. **Genome Research** 8:18-28. (note: author order is alphabetical apart from first and last).
64. Manger, I.D., Hehl, A., Parmley, S., Sibley, L.D., Marra, M., Hillier, L., Waterston, R. and Boothroyd, J.C. 1998. Expressed Sequence Tag Analysis of the Bradyzoite Stage of *Toxoplasma gondii*: Identification of Developmentally Regulated Genes. **Infection and Immunity** 66:1632-1637. [note first two authors are joint "first" authors].
65. Manger, I.D., Hehl, A.B and Boothroyd, J.C. 1998. The surface of *Toxoplasma* tachyzoites is dominated by a family of GPI-anchored antigens related to SAG1. **Infection and Immunity** 66:2237-2244.
66. Soldati, D., Lassen, A., Dubremetz, J.-F., and Boothroyd, J.C. 1998. Processing of *Toxoplasma* ROP1 protein late in secretion. **Mol. Biochem. Parasitol.** 96:37-48.

67. Manger, I.D. and Boothroyd, J.C. 1998. Identification of a nuclear protein in *Trypanosoma brucei* with homology to RNA-binding proteins from *cis*-splicing systems. **Mol. Biochem. Parasitol.** 97:1-11.
68. Ortega-Barria, E.O. and Boothroyd, J.C. 1999. A *Toxoplasma* lectin-like activity specific for sulfated polysaccharides is involved in host cell infection. **J. Biol. Chem.** 274:1267-1276.
69. Wilson, K. and Boothroyd, J.C. 1999. *Trypanosoma brucei*: Cis-acting sequences involved in the developmental regulation of PARP expression. **Experimental Parasitol.** 91:222-230.
70. Bradley, P.J. and Boothroyd, J.C. 1999. Identification of the pro-mature processing site of *Toxoplasma* ROP1 by mass spectrometry. **Mol. Biochem. Parasitol.** 100:101-103.
71. McFadden, D.C. and Boothroyd, J.C. 1999. Cytochrome b mutation identified in a decoquinate-resistant mutant of *Toxoplasma gondii*. **J. Euk. Microbiol.** 46:81S-82S.
72. McFadden, D.C., Tomavo, S., Berry, E.A. and Boothroyd, J.C. 2000. Atovaquone-resistant mutants of *Toxoplasma gondii* contain mutations in the Q_o domain of cytochrome b gene. **Mol. Biochem. Parasitol.** 108:1-12.
73. Hehl, A.B., Lekutis, C., Grigg, M., Dubremetz, J.-F., Ortega-Barria, E., Bradley, P. and Boothroyd, J.C. 2000. A *Toxoplasma gondii* homologue of the *Plasmodium* Apical Membrane Antigen 1 is involved in invasion of host cells. **Infection and Immunity** 68:7078-7086. [note first two authors are joint "first" authors].
74. Lekutis, C., Ferguson, D.J.P. and Boothroyd, J.C. 2000. *Toxoplasma gondii*: Identification of a developmentally regulated family of genes related to SAG2. **Expt. Parasitol.** 96:89-96
75. Wilson, K., Uyetake, L. and Boothroyd, J.C. 2000. The trans-spliced L30 ribosomal protein mRNA of *Trypanosoma brucei* is not subject to autogenous feedback control at the messenger RNA level. **Mol. Biochem. Parasitol.** 111:199-205
76. Black, M.W., Arrizabalaga, G. and Boothroyd, J.C. 2000. Ionophore-resistant mutants of *Toxoplasma gondii* reveal host-cell permeabilization as an early event in egress. **Mol. Cell Biol.** 20:9399-9408.
77. Grigg, M.E. and Boothroyd, J.C. 2001. Rapid identification of virulent type I strains of the protozoan pathogen *Toxoplasma gondii* by PCR-RFLP analysis at B1. **J. Clin. Micro.** 39:398-400.
78. Uyetake, L., Ortega-Barria, E. and Boothroyd, J.C. 2001. Isolation and Characterization of a Cold-Sensitive Attachment/Invasion Mutant of *Toxoplasma gondii*. **Expt. Parasitol.** 97:55-59.
79. Blader, I.J., Manger, I.D. and Boothroyd, J.C. 2001. Microarray analysis reveals previously unknown changes in *Toxoplasma gondii* infected human cells. **J. Biol. Chem.** 276:24223-24231.

80. Knoll, L.J., Furie, G.L. and Boothroyd, J.C. 2001. Adaptation of signature-tagged mutagenesis for *Toxoplasma gondii*: a negative screening strategy to isolate genes that are essential in restrictive growth conditions. **Mol. Biochem. Parasitol.** 116:11-16.
81. Bradley, P.J. and Boothroyd, J. C. 2001. The pro region of *Toxoplasma* ROP1 is a rhoptry-targeting signal. **Intl. J. Parasitol.** 31:1177-1186.
82. Camps, M. and Boothroyd, J.C. 2001. *Toxoplasma gondii*: Selective killing of extracellular parasites by oxidation using pyrrolidine dithiocarbamate. **Expt. Parasitol.** 4:206-214.
83. Lekutis, C., Ferguson, D.J.P., Grigg, M.E., Camps, M. and Boothroyd, J.C. 2001. Surface Antigens of *Toxoplasma gondii*: Variations on a Theme. **Intl. J. Parasitol.** 31:1285-1292.
84. Grigg, M.E., Ganatra, J., Boothroyd, J.C. and Margolis, T. 2001. Unusual abundance of atypical strains associated with ocular toxoplasmosis in humans. **J. Inf. Dis.** 184:633-639.
85. Manger, I.D. and Boothroyd, J.C. 2001. Targeted disruption of an essential RNA-binding protein perturbs cell division in *Trypanosoma brucei*. **Mol. Biochem. Parasitol.** 2:239-245.
86. Grigg, M.E., Suzuki, Y. and Boothroyd, J.C. 2001. Success and virulence in the AIDS pathogen *Toxoplasma* as the result of sexual recombination between two distinct ancestries. **Science** 294:161-165.
87. De Avalos, S.V., Blader, I.J., Fisher, M., Boothroyd, J.C. and Burleigh, B.A. 2002. Immediate/early response to *Trypanosoma cruzi* infection involves minimal modulation of host cell transcription. **J. Biol. Chem.** 277:639-644.
88. Camps, M., Arrizabalaga, G. and Boothroyd, J.C. 2002. An rRNA mutation identifies the apicoplast as the target for clindamycin in *Toxoplasma gondii*. **Mol. Microbiol.** 43:1309-1318.
89. Singh, U., Brewer, J.L. and Boothroyd, J.C. 2002. Genetic analysis of tachyzoite to bradyzoite differentiation mutants in *Toxoplasma gondii* reveals a hierarchy of gene induction. **Mol. Microbiol.** 44:721-733.
90. Cleary, M., Blader, I.J., Singh, U., Brewer, J. and Boothroyd J.C. 2002. Gene expression during *Toxoplasma* development: Identification of distinct classes of regulated genes. **Eukaryotic Cell** 1:329-340.
91. He, X.-L., Grigg, M.E., Boothroyd, J.C. and Garcia, K.C. 2002. A structural framework for host cell attachment revealed by the crystal structure of SAG1, the immunodominant surface antigen of *Toxoplasma gondii*. **Nature Structural Biology** 9:606-611.
92. Bradley, P.J., Hsieh, C. and Boothroyd, J. C. 2002. Processing of *Toxoplasma* proROP1 is not necessary for targeting and release upon invasion. **Mol. Biochem. Parasitol.** 125: 155-158.
93. Kong, J.-T., Grigg, M.E., Uyetake, L., Parmley, S. and Boothroyd, J.C. 2003. Serological Strain-Typing of Human Toxoplasmosis Using Synthetic Peptides. **J. Inf. Dis.** 187:1484-1496.

94. Miller, M. A., Grigg, M. E., Kreuder, C, Melli, A.C., Crosbie, P.R., Jessup, D.A., Boothroyd, J.C., Brownstein, D. and Conrad, P.A. 2004. An unusual genotype of *Toxoplasma gondii* is common in Californian sea otters (*Enhydra lutris nereis*) and is a cause of high mortality. **Int. J. Parasitol.** 34:275-284.
95. Arrizabalaga, G., Ruiz, F., Moreno, S. and Boothroyd J.C. 2004. Ionophore-resistant mutant of *Toxoplasma gondii* reveals involvement of a sodium/hydrogen exchanger in calcium regulation. **J. Cell Biol.** 165:653-662. PMC2172388
96. Bradley, P.J., Li, N., and Boothroyd, J.C. 2004. A GFP-based motif-trap reveals a novel rhoptry targeting sequence in the *Toxoplasma* ROP4 protein. **Mol. Biochem. Parasitol.** 137:111-120.
97. Rachinel, N., Dutta, C., Buzoni-Gatel, D., Mennechet, F.J.D., Grigg, M.E., Boothroyd, J.C. and Kasper, L.H. 2004. The induction of acute ileitis by a single microbial antigen of *Toxoplasma gondii*. **J. Immunol.** 173:2725-2735.
98. Saeij, J.P.J., Boyle, J.P., Grigg, M.E., Arrizabalaga, G. and Boothroyd, J.C. 2005. Bioluminescence imaging of *Toxoplasma* infection in living mice reveals dramatic differences between strains. **Infection and Immunity** 73:695-702. PMC547072
99. Cleary, M., Meiering, C. Jan, E., Guymon, R. and Boothroyd, J.C. 2005. Biosynthetic Labeling of RNA via Uracilphosphoribosyltransferase Allows Cell-specific Microarray Analysis of mRNA Synthesis and Decay. **Nature Biotechnology** 23:232-237. PMC118016
100. Karasov, A.O., Boothroyd, J.C. and Arrizabalaga, G. 2005. Identification and disruption of a rhoptry localized sodium hydrogen exchanger in *Toxoplasma gondii*. **Int. J. Parasitol.** 35:285-291.
101. Kim, S.-K. and Boothroyd, J.C. 2005. Stage-specific expression of surface antigens by *Toxoplasma gondii* as a mechanism that facilitates parasite persistence. **J. Immunol.** 174:8038-8048.
102. Khan, A., Taylor, S., Su, C., Mackey, A.J., Boyle, J., Cole, R., Glover, D., Tang, K., Paulsen, I., Berriman, M., Boothroyd, J.C., Pfefferkorn, E.R., Dubey, J.P., Roos, D.S., Ajioka, J.W., Wootton, J.C. and Sibley, L.D. 2005. A genome map for *Toxoplasma gondii*. **Nucl. Acids Res.** 33:2980-2992.
103. Schwarz, J., Fouts, A.E., Ferguson, D and Boothroyd, J.C. 2005. A novel bradyzoite-specific rhoptry protein in *Toxoplasma gondii*. **Mol. Biochem. Parasitol.** 144:159-166.
104. Bradley, P.J., Ward, C., Cheng, S.J., Alexander, D.L., Collier, S., Coombs, G.H., Dunn, J.D., Ferguson, D.J., Sanderson, S.J., Wastling, J.M. and Boothroyd, J.C. 2005. Proteomic analysis of *Toxoplasma* rhoptries reveals many novel constituents for host-parasite interaction. **J. Biol. Chem.** 280: 34245-34258.
105. Vanchinathan, P., Brewer, J.L., Harb, O.S., Boothroyd, J.C. and Singh, U. 2005. Disruption of a locus encoding a nucleolar zinc finger protein inhibits tachyzoite to bradyzoite differentiation in *Toxoplasma gondii*. **Infection and Immunity** 73:6680-6688.

106. Alexander, D.L., Mital, J., Ward, G.E., Bradley, P.J. and Boothroyd, J.C. 2005. Identification of the moving junction complex of an Apicomlexan parasite, *Toxoplasma gondii*: collaboration between two distinct secretory organelles. **PLOS Pathogens** 1:137-149. PMC1262624
107. Coppens, I., Dunn, J.D., Romano, J.D., Pypaert, M., Zhang, H., Boothroyd, J.C. and Joiner, K.A. 2006. *Toxoplasma gondii* sequesters lysosomes from mammalian hosts in the vacuolar space. **Cell** 125:261-274. PMID16630815
108. Boyle, J.P., Rajasekar, B., Saeij, J.P.J., Ajioka, J., Berriman, M., Paulsen, I., Roos, D.S., Sibley, L.D., White, M. and Boothroyd, J.C. 2006. Just one cross appears capable of dramatically altering the population biology of a eukaryotic pathogen like *Toxoplasma gondii*. **Proc. Natl. Acad. Sci. USA** 103:10514-10519. PMC1502489
109. Alexander, D.L., Arastu-Kapur, S., Dubremetz, J.-F., and Boothroyd, J.C. 2006. *Plasmodium falciparum* AMA1 (PfAMA1) binds a rhoptry neck protein homologous to TgRON4, a component of the moving junction in *Toxoplasma*. **Eukaryotic Cell** 5:1169-1173. PMC1489286
110. Saeij*, J.P.J., Boyle*, J.P., Collier, S.C., Taylor, S., Sibley, L.D., Brooke-Powell, E.T., Ajioka, J.W. and Boothroyd, J.C. 2006. Polymorphic secreted kinases are key virulence factors in toxoplasmosis. **Science** 314:1780-1783. [* equal contributors]. PMC2646183
111. Gilbert, L.A., Ravindran, S., Turetzky, J.M., Boothroyd, J.C. and Bradley, P.J. 2007. *Toxoplasma gondii* targets a protein phosphatase to the nucleus of infected host cells. **Eukaryotic Cell** 6:73-83. PMC1800361
112. Saeij*, J.P.J., Collier*, S., Boyle, J.P., Jerome, M. White, M. and Boothroyd, J.C. 2007. *Toxoplasma* co-opts host gene expression by injection of a polymorphic kinase homologue. **Nature** 445:324-327. [* equal contributors]. PMC2637441
113. Fouts, A.E. and Boothroyd, J.C. 2007. Infection with *Toxoplasma* bradyzoites has a diminished impact on host transcript levels relative to tachyzoite-infection. **Infection and Immunity** 75:634-642. PMC1828502
114. Boyle, J.P., Saeij, J.P.J. and Boothroyd, J.C. 2007. *Toxoplasma gondii*: Inconsistent dissemination patterns following oral infection in mice. **Experimental Parasitology** 116:302-305. PMID17335814
115. Kim, S.-K., Fouts, A. and Boothroyd, J.C. 2007. *Toxoplasma gondii* dysregulates IFN- γ -inducible gene expression in human fibroblasts: insights from a genome-wide transcriptional profiling. **J. Immunol.** 178:5154-5165. PMID17404298
116. Vyas, A., Kim, S.-K., Giacomini, N., Boothroyd, J.C. and Sapolsky, R.M. 2007. Behavioral changes induced by *Toxoplasma* infection of rodents are highly specific to cat odors. **Proc. Natl. Acad. Sci. USA** 104:6442-6447. PMC1851063

117. Kim, S.-K., Karasov, A.O. and Boothroyd, J.C. 2007. Bradyzoite-specific surface antigen SRS9 plays a role in maintaining *Toxoplasma gondii* persistence in the brain and shaping a protective host response in the intestine. **Infection and Immunity** 75:1626-1634. PMC1865672
118. Van, T.T., Kim, S.-K., Camps, M., Boothroyd, J.C. and Knoll, L.J. 2007. The BSR4 protein is up-regulated in *Toxoplasma gondii* bradyzoites, however the dominant surface antigen recognised by the P36 monoclonal antibody is SRS9. **Intl. J. Parasitol.** 37:877-885. PMID17368655
119. Saeij, J.P., Arrizabalaga, G. and Boothroyd, J.C. 2008. A cluster of four surface antigen genes specifically expressed in bradyzoites, SAG2CDXY, plays an important role in *Toxoplasma gondii* persistence. **Infection and Immunity** 76:2402-2410. PMC2423105
120. Boyle, J.P., Saeij, J.P.J., Harada, S.Y., Ajioka, J.W. and Boothroyd, J.C. 2008. Expression QTL mapping of *Toxoplasma* genes reveals multiple mechanisms for strain-specific differences in gene expression. **Eukaryotic Cell** 7:1403-1414. PMC2519772
121. Dunn, J.D., Ravindran, S., Kim-S.-Y. and Boothroyd, J.C. 2008. The *Toxoplasma gondii* dense granule protein GRA7 is phosphorylated upon invasion and forms an unexpected association with the rhoptry proteins ROP2 and ROP4. **Infection and Immunity** 76:5853-5861. PMC2637441
122. Kafsack, B.F.C., Pena, J.D.O., Coppens, I., Ravindran, S., Boothroyd, J.C. and Carruthers, V.B. 2008. Rapid membrane disruption by a perforin-like protein facilitates parasite egress from host cells. **Science** 323:530-533. PMC2662845
123. Anderson, M.Z., Brewer, J., Singh, U. and Boothroyd, J.C. 2009. A pseudouridine synthase homologue is critical to cellular differentiation in *Toxoplasma gondii*. **Eukaryotic Cell** 8: 262-270. PMC2653242
124. Reese, M.L. and Boothroyd, J.C. 2009. A helical membrane-binding domain targets the *Toxoplasma* ROP2-family to the parasitophorous vacuole. **Traffic** 10:1458-1470. PMC1746882
125. Ravindran, S., Lodoen, M.B., Verhelst, S., Bogyo, M. and Boothroyd J.C. 2009. 4-bromophenacyl bromide specifically blocks rhoptry secretion during *Toxoplasma* invasion. **PLoS ONE** 4 (e8143):1-12. PMC2780294
126. Lodoen, M.B., Gerke, C. and Boothroyd, J.C. 2010. Detecting secretion of the actin-binding protein toxofilin during *Toxoplasma gondii* infection using a highly-sensitive FRET-based approach. **Cellular Microbiology** 12:55-66. PMC3411547
127. Koshy, A.A., Fouts, A.E., Lodoen, M.B., Alkan, O., Blau, H.M. and Boothroyd J.C. 2010. *Toxoplasma gondii* secreting Cre recombinase: a new tool to study host-parasite interactions. **Nature Methods** 7:307-309. PMC2850821
128. Khaminets, A., Hunn, J.P., Könen-Waisman, S., Zhao, Y.O., Preukschat, D., Coers, J., Boyle, J.P., Ong, Y.-C., Boothroyd, J.C., Reichmann, G., Howard, J.C. 2010. Coordinated loading of IRG resistance GTPases on to the *Toxoplasma gondii* parasitophorous vacuole correlates with parasite virulence. **Cellular Microbiology** 12:939-961. PMC2901525

129. Zeiner, G.M., Norman, K., Thomson, J.M., Hammond, S.M. and Boothroyd, J.C. 2010. *Toxoplasma* infection specifically increases the levels of key host microRNAs. **PLoS ONE** 5 (e8742):1-8. PMC2806928
130. Zeiner, G.M., and Boothroyd, J.C. 2010. Use of two novel approaches to discriminate between closely related host microRNAs that are manipulated by *Toxoplasma gondii* during infection. **RNA** 16:1268-1274. PMC2874178
131. Pernas, L. and Boothroyd, J.C. 2010. Association of host mitochondria with the parasitophorous vacuole during *Toxoplasma* infection is not dependent on rhoptry proteins ROP2/8. **Intl. J. Parasitol.** 40:1367-1371. PMC2939271
132. Ong, Y.-C., Reese, M.L. and Boothroyd, J.C. 2010. *Toxoplasma* ROP16 subverts host function by direct phosphorylation of STAT6. **J. Biol. Chem.** 285:28731-28740. PMC2937901
133. Tyler, J.S. and Boothroyd, J.C. 2011. The C-terminus of *Toxoplasma* RON2 provides the crucial link between AMA1 and the host-associated invasion complex. **PLoS Pathogens** 7:e1001282. PMC3037364
134. Reese, M.L., Zeiner, G., Saeij, G., Boothroyd, J.C. and Boyle, J.P. 2011. A polymorphic family of injected pseudokinases is paramount in *Toxoplasma* virulence. **Proc. Natl. Acad. Sci. USA** 108:9625-9630. PMC3111280
135. Lee, Y. Choi, J.-Y., Fu, H., Harvey, C., Ravindran, S. Roush, W.R., Boothroyd, J.C. and Khosla, C. 2011. Chemistry and biology of macrolide antiparasitic agents. **J. Med. Chem.** 54:2792-2804. PMC3085955
136. Jensen, K.D.C., Wang, Y., Tait, E., Shastri, A.J., Hu, K., Cornel, L., Boedec, Ong, Y.-C., E., Chien, Y.-H., Hunter, C.A., Boothroyd, J.C., and Saeij, J.P. 2011. Alternative versus classical activation of macrophages during *Toxoplasma* infection is mediated by the action of two polymorphic effectors. **Cell Host and Microbe** 9:472-483. PMC3131154
137. Hall, C.I., Reese, M.L., Weerapana, E., Bowyer, P.W., Albrow, V.E., Haraldsen, J.G., Phillips, M.R., Deu Sandoval, E., Ward, G.E., Cravatt, B.F., Boothroyd, J.C. and Bogoy, M. 2011. A small molecule screen in *Toxoplasma gondii* identifies a regulator of host cell attachment and invasion. **Proc. Natl. Acad. Sci. USA** 108:10568-10573. PMC3127939
138. Caffaro, C.E. and Boothroyd, J.C. 2011. Evidence for host as the major contributor to lipid in the tubovesicular network of *Toxoplasma*-infected cells. **Eukaryotic Cell** 10:1095-1099. PMC3165450
139. Reese, M.L. and Boothroyd, J.C. 2011. A conserved noncanonical motif in the ROP5 pseudoactive site mediates its effect on *Toxoplasma* virulence. **J. Biol. Chem.** 286:29366-29375. PMC3190742
140. Srinivasan, P., Beatty, W.L., Diouf, A., Herrera, R., Ambroggio, X., Moch, J.K., Tyler, J.S., Narum, D.L., Pierce, S.K., Boothroyd, J.C., Haynes, J.D. and Miller, L.H. 2011. Binding of

Plasmodium merozoite surface protein AMA1 to RON2 triggers junction formation and invasion. **Proc. Natl. Acad. Sci. USA** 108:13275-13280. PMC3156155

141. Treeck, M., Sanders, J., Elias, J.E. and Boothroyd, J.C. 2011. The phosphoproteomes of *Plasmodium falciparum* and *Toxoplasma gondii* reveal unusual adaptations within and beyond the parasites' boundaries. **Cell Host and Microbe** 10:410-419. PMC3254672.
142. Morgado, P., Ong, Y.-C., Boothroyd, J.C. and Lodoen, M.B. 2011. *Toxoplasma gondii* induces B7-2 expression through activation of JNK signal transduction. **Infection and Immunity** 79:4401-4412. PMC3257910
143. Ong, Y.-C., Boyle, J.P. and Boothroyd, J.C. 2011. Strain-dependent host transcriptional responses to *Toxoplasma* infection are largely conserved in mammalian and avian hosts. **PLoS ONE** 6(10): e26369. PMC3192797
144. Buchholz, K.R., Fritz, H.M., Chen, X., Durbin-Johnson, B., Rocke, D.M., Conrad, P. and Boothroyd, J.C. 2011. Identification of tissue cyst wall components by transcriptome analysis of *in vivo* and *in vitro* *Toxoplasma* bradyzoites. **Eukaryotic Cell** 10:1637-1647. PMC3232729
145. Robbins, J.R., Zeldovich, V.B., Poukchanski, A., Boothroyd, J.C. and Bakardjiev, A.I. 2012. Tissue barriers of the human placenta to infection with *Toxoplasma gondii*. **Infection and Immunity** 80:418-428. PMC3255695
146. Fritz*, H.M., Bowyer*, P. W., Bogyo, M., Conrad, P.A. and Boothroyd, J.C. 2012. Proteomic analysis of fractionated *Toxoplasma* oocysts reveals clues to their environmental resistance. **PLoS ONE** 7(1): e29955. [* equal contributors] PMC3261165
147. Fritz, H.M., Buchholz, K.R., Chen, X., Durbin-Johnson, B., Rocke, D.M., Conrad, P. and Boothroyd, J.C. 2012. Transcriptomic analysis of *Toxoplasma* development reveals many novel functions and structures specific to oocysts. **PLoS ONE** 7(2): e29998. PMC3232729
148. Collantes-Fernandez, E., Arrighi, R.B.G., Alvarez-Garcia, G., Weidner, J.M., Regidor-Cerrillo, J., Boothroyd, J.C., Ortega-Mora, L.M. and Barragan, A. 2012. Infected dendritic cells facilitate systemic dissemination and transplacental passage of the obligate intracellular parasite *Neospora caninum* in mice. **PLoS ONE** 7(3): e32123. PMC3293873
149. Fleckenstein*, M.A., Reese*, M.L., Konen-Waisman, S., Boothroyd, J.C., Howard, J.C and Steinfeldt, T. 2012. A *Toxoplasma gondii* pseudokinase inhibits host IRG resistance GTPases. **PLoS Biology** 10(7): e1001358. [* equal contributors] PMC3393671
150. Koshy, A., Dietrich, H. Melehani, J.H., Shastri, A.J. and Boothroyd, J.C. 2012. *Toxoplasma* co-opts host cells it does not invade. **PLoS Pathogens** 8(7): e1002825. PMC3406079
151. Garrison*, E., Treeck*, M., Ehret, E., Oswald, B.P., Settles, M., Boothroyd, J.C. and Arrizabalaga, G. 2012. A forward genetic screen reveals calcium-dependent protein kinase 3 regulates egress in *Toxoplasma*. **PLoS Pathogens** 8(11): e1003049. PMC3510250. [* equal contributors]

152. Buchholz, K., Bowyer, P. and Boothroyd, J.C. 2013. Bradyzoite pseudokinase 1 is crucial for efficient oral infectivity of the *Toxoplasma* tissue cyst. **Eukaryotic Cell** 12(3):399-410. PMC3629768.
153. Caffaro, C.E., Koshy, A., Liu, L., Zeiner, G., Hirschberg, C.B. and Boothroyd, J.C. 2013. A nucleotide sugar transporter (NST1) involved in glycosylation of the *Toxoplasma* tissue cyst wall is required for efficient persistence of bradyzoites. **PLoS Pathogens** 9(5): e1003331. PMC 3642066.
154. Poukchanski, A., Fritz*, H.M., Tonkin*, M.L., Treeck, M., Boulanger, M.J., and Boothroyd, J.C. 2013. *Toxoplasma gondii* sporozoites invade host cells using two novel paralogues of RON2 and AMA1. **PLoS ONE** 8(8): e70637. PMC3734201. [* equal contributors]
155. Child, M.A., Hall, C.I., Abrow, V.E., Beck, J.R., Bowyer, P.W., Bradley, P.J., Boothroyd, J.C., Powers, J.C., Weerapana, E., and Bogyo, M. 2013. Small-molecule inhibition of a depalmitoylase enhances *Toxoplasma* host-cell invasion. **Nature Chemical Biology** 9:651-656. PMC3832678.
156. Ewald, S.E., Chavarria-Smith, J. and Boothroyd, J.C. 2014. NLRP1 is an inflammasome sensor for *Toxoplasma gondii*. **Infection and Immunity** 82:460-468. PMC3911858.
157. Pernas, L., Adomako-Ankomah, Y., Shastri, A., Ewald, S.E., Treeck, M., Boyle, J.P. and Boothroyd, J.C. 2014. *Toxoplasma* effector MAF1 mediates recruitment of host mitochondria and impacts the host response. **PLoS Biology** 12(4): e1001845. PMC4004538.
158. Franco, M., Shastri, A.S., and Boothroyd, J.C. 2014. Specific induction of host c-Myc by *Toxoplasma gondii* contributes to the dramatic host transcriptional changes seen upon infection. **Eukaryotic Cell** 13(4):483-93. PMC4000098.
159. Grover, H.S., Chu, H.H., Kelly, F., Yang, S.J., Reese, M.L., Blanchard, N., Gonzalez, F., Chan, S.-W., Boothroyd, J.C., Shastri, N. and Robey, E.A. 2014. Impact of regulated secretion on anti-parasitic CD8 T cell responses. **Cell Reports** 7(5):1716-28. PMC 4057976.
160. Pernas, L.F., Ramirez, R., Holmes, T., Montoya, J.G. and Boothroyd, J.C. 2014. Immune-profiling of pregnant *Toxoplasma*-infected US and Colombia patients reveals surprising impacts of infection on peripheral blood cytokines. **J. Inf. Dis.** 210:923-31. PMC 4004358.
161. Shastri, A., Marino*, N.D., Franco*, M. Lodoen, M.B. and Boothroyd, J.C. 2014. GRA25 is a novel virulence factor of *Toxoplasma gondii* and influences the host immune response. **Infection and Immunity** 82(6):2595-605. [* equal contributors] PMC 4019154.
162. Treeck, M., Sanders, J.L., Arrizabalaga, G., Elias, J.E., and Boothroyd, J.C. 2014. Phosphoproteomic analysis of *Toxoplasma gondii* mutants reveals a pleiotropic role for calcium-dependent protein kinase 3. **PLoS Pathogens** 10(6):e1004197. PMC 4063958
163. Christian, D., Koshy, A., Morgan, R., Betts, M., Boothroyd, J.C., and Hunter, C. 2014. The use of transgenic parasites and host reporters to dissect the events that promote IL-12 production during toxoplasmosis. **Infection and Immunity** 82(10): 4056-67. PMC 4187868

164. Reese, M.L., Shah, N. and Boothroyd, J.C. 2014. The *Toxoplasma* pseudokinase ROP5 is an allosteric inhibitor of the immunity-related GTPases. **J. Biol. Chem.** 289(40):27849-58. PMC 4183819.
165. Han, S.-J., Melichar, H.J., Coombes, J.L., Chan, S.W., Koshy, A.A., Boothroyd, J.C. Barton, G.M. and Robey, E.A. 2014. Internalization and TLR-dependent type I interferon production by monocytes in response to *Toxoplasma gondii*. **Immunol. Cell Biol.** 92(10):872-881. PMC 4245188.
166. Coffey, M.J., Sleebs, B.E., Uboldi, A.D., Garnham, A., Franco, M., Marino, N.D., Panas, M.W., Ferguson, D.J., Enciso, M., O'Neill, M.T., Lopaticki, S., Stewart, R.J., Dewson, G., Smyth, G.K., Smith, B.J., Boothroyd, J.C., Masters, S.L., Boddey, J.A., and Tonkin, C.J. 2015. An aspartyl protease defines a novel pathway for export of *Toxoplasma* effectors. **eLife** 4:e10809 PMC4754566
167. Lorenzi, H., Khan, A., Behnke, M.S., Liu, L., Namasivayam, S., Swapna, L.S., Hadjithomas S. Karamycheva, S., Pinney, D., Brunk, B., Ajioka, J.W., Azjenberg, D., Boothroyd, J.C., Boyle, J.P., Darde, M.L., Dubey, J.P., Fritz, H.M., Gennan, S.M., Gregory, B.D., Kim, K., Rosenthal, B.M., J. Saeij, J., Su, C.L., White, M.W., Zhu, X.Q., Howe, D.K., Grigg, M.E., Parkinson, J., Liu, L., Kissinger, J.C., Roos, D.S., Sibley, L.D. 2016. Comparative sequence analysis of *Toxoplasma gondii* reveals local genomic admixture drives concerted expansion and diversification of secreted pathogenesis determinants. **Nature Communications** 7:10147. PMC4729833
168. Franco*, M., Panas*, M.W., Marino*, N.D., Lee, W.M.-C., Buchholz, K.R., Kelly, F.D., Bednarski, J.J., Sleckman, B.P., Pourmand, N., and Boothroyd, J.C. 2016. A novel secreted protein, MYR1, is central to *Toxoplasma*'s manipulation of host cells. **mBio** 7:e02231-15. [* equal contributors] PMC4742717
169. Krishnamurthy, S., Deng, B., del Rio, R., Buchholz, R. Treeck, M., Urban, S., Boothroyd, J.C., Lam, Y.W. and Ward, G. 2016. Not a simple tether: Binding of *Toxoplasma gondii* AMA1 to RON2 during invasion protects AMA1 from rhomboid-mediated cleavage and leads to dephosphorylation of its cytosolic tail. **mBio** 7:e00754-16. PMC5021801
170. Child, M.A., Garland, M., Madzelan, P., Treeck, M., van der Linden, W., Oresic, K., Weerapana, E., Wilson, M.A., Boothroyd, J.C., Reese, M.L., and Bogyo, M. 2017. *Toxoplasma* DJ-1 regulates microneme exocytosis through an association with the plant-like kinase, CDPK1. **mBio** 8:e02189-16. PMC5347346
171. Marino, N.D. and Boothroyd, J.C. 2017. Tyrosine is essential for *Toxoplasma* growth *in vitro*. **Expt. Parasitol.** 176:52-58 PMID28257757 PMC (in process)
172. Guiton, P.S., Sagawa, J., Fritz, H.M. and Boothroyd, J.C. 2017. An *in vitro* model of intestinal infection reveals a developmentally regulated transcriptome of *Toxoplasma* sporozoites and a NF- κ B-like signature in infected host cells. **PLoS ONE** 12(3): e173018 PMC5376300

173. Kelly, F., Wei, B., Tonkin, M., Boulanger, M., and Boothroyd, J.C. 2017. *Toxoplasma gondii* MAF1b binds the host cell MIB complex to mediate mitochondrial association. **mSphere** 2(3) e000183-17. PMC 5444011
174. Nakamoto, M.A., Lovejoy, A.F., Cygan, A.M. and Boothroyd, J.C. 2017. mRNA pseudouridylation affects RNA metabolism in the parasite *Toxoplasma gondii*. **RNA** 062794.117 PMC 5689004
175. Marino, N.D., Panas, M.W., Franco, M., Theisen, T.C., Buchholz, K.R., Lorenzi, H.A. and Boothroyd, J.C. 2018. Identification of a novel protein complex essential for effector translocation across the parasitophorous vacuole membrane of *Toxoplasma gondii*. **PLoS Pathogens** (in press).
176. Diaz-Mirandal, M.A., Bernal, A., Beiting, D.P., Dragomir, I., Gregory, B.D., Xia, D., Wastling, J., Hehl, A.B., Fritz, H.M., Boothroyd, J.C., Brestelli, J., Brunk, B.P. and Roos, D.S. Mining the *T. gondii* transcriptome: Generalizable strategies for recognizing alternative splicing, stage-specific mRNA and lncRNA expression, and improving genome annotation. (in revision for **BMC Genomics**).
177. Pernas, L., Boothroyd, J.C. and Scorrano, L. Mitochondria limit *Toxoplasma* growth by competing for fatty acids. (in revision for **Cell Metabolism**)
178. Hatter J., Kouche M., Melchor S., Ng K., Bouley D., Boothroyd J.C., Ewald S.E. *Toxoplasma gondii* infection triggers chronic cachexia and sustained commensal dysbiosis in mice. (submitted)
179. Blank*, M.L., Parker*, M.L., Ramaswamy, R., Powell, C.J., English, E.D., Adomako-Ankomanh-Y., Pernas, L.F., Workman, S.D., Boothroyd, J.C., Boulanger, M.J. and Boyle, J.P. Structural and functional characterization of *Toxoplasma gondii* Mitochondrial 3 Association Factor 1 (MAF1) reveals a central role for C-terminal residues in 4 mediating host mitochondrial association and in vivo growth advantage. (submitted)[* equal contributors]
180. Naor*, A., Panas*, M.W., Marino, N.D., Coffey, M.J., Tonkin, C.J. and Boothroyd, J.C. MYR1-dependent effectors are the major drivers of a host cell's early response to *Toxoplasma* tachyzoites and counteract other impacts. (in preparation) [* equal contributors]