

IUPUI CURRICULUM VITAE FORMAT FOR PROMOTION AND TENURE DOSSIERS

NAME:	Arrizabalaga	Gustavo	
	Last	First	
 EDUCATION:			
	POSTDOCTORAL		
	Institution Stanford University	Degree	Date Awarded 2004
	GRADUATE		
	Institution Massachusetts Institute of Technology	Degree Ph.D., Biology	Date Awarded 7/1999
	UNDERGRADUATE		
	Institution Haverford College	Degree B.S., Biochemistry	Date Awarded 5/1992
 APPOINTMENTS:			
	ACADEMIC		
	Institution	Rank/Title	Inclusive Dates
	University of Idaho Moscow, ID	Assistant Professor Department of Microbiology, Molecular Biology and Biochemistry	2004-2009
	University of Idaho and Washington State University	Assistant Professor WWAMI Medical Education Program	2004-2009
	University of Idaho Moscow, ID	Associate Professor Department of Microbiology, Molecular Biology and Biochemistry	2009-2012
	University of Idaho and Washington State University	Associate Professor WWAMI Medical Education Program	2009-2012
	University of Idaho Moscow, ID	Director, Microbiology, Molecular Biology and Biochemistry Graduate Studies Program	2011-2012
	*Indiana University School of Medicine Indianapolis, IN	Associate Professor Department of Pharmacology and Toxicology	2012-present
	*Indiana University School of Medicine Indianapolis, IN	Associate Professor Department of Microbiology and Immunology Toxicology	2012-present

PROFESSIONAL ORGANIZATION MEMBERSHIPS:

Organization	Inclusive Dates
American Association for the Advancement of Science (AAAS)	2004-present
American Society for Microbiology (ASM)	2004-present
American Society for Biochemistry and Molecular Biology (ASBMB)	2012-present
American Society of Tropical Medicine and Hygiene (ASTMH)	2015-present
American Society of Cell Biology (ASCB)	2004-2015
Chair Elect, American Society for Microbiology (ASM) Division AA/Parasitic Protists	2012-2013
Member, American Society for Microbiology General Program Committee	2013
Member, American Society for Microbiology General Program Committee	2013
*Chair, American Society for Microbiology (ASM) Division AA/Parasitic Protists	2013-2014

PROFESSIONAL HONORS AND AWARDS:

TEACHING		
Award Name	Granted By	Date Awarded
R.M. Wade Teaching Excellence Award Nominee	College of Agriculture and Life Sciences University of Idaho	2008
R.M. Wade Teaching Excellence Award Nominee	College of Agriculture and Life Sciences University of Idaho	2009
R.M. Wade Teaching Excellence Award Nominee	College of Agriculture and Life Sciences University of Idaho	2010
Excellence in Teaching Award WWAMI medical program	University of Idaho	2011
Excellence in Teaching Award WWAMI medical program	University of Idaho	2012
RESEARCH		
Award Name	Granted By	Date Awarded
Howard Hughes Research Scholar	Haverford College Haverford, PA	1990-1992
Pre-doctoral Fellow	NIH-NIGMS	1994-1998
Training Grant Molecular Basis of Host Parasite Interactions	NIH	1999-2000
Post-doctoral Fellow	NIH NRSA	2000-2002
Research Supplements for Underrepresented Minorities	NIH	2002-2004
Carl Storm Fellowship	Gordon Research Conferences	2006

SERVICE

Award Name	Granted By	Date Awarded
Commitment to Diversity Faculty Award	WWAMI University of Idaho Moscow, ID	2011

OVERALL/OTHER

Award Name	Granted By	Date Awarded
Jose Padín Scholar	Haverford College Haverford, PA	1988-1992
Scholarship Improvement Prize	Haverford College Haverford, PA	1992
Honors, Chemistry Department	Haverford College Haverford, PA	1992
Spotlighted in October issue of The Minority Microbiology Mentor Newsletter of the American Microbiology Society	American Microbiology Society	2011

TEACHING:**UNDERGRADUATE**

Course #	Short Title	Format	Role	Term	Contact Hours
MMBB 487	Eukaryotic molecular genetics	Lecture	Lecturer	Fall 2004	3
MMBB 463	Molecular Parasitology	Lecture	Lecturer Course Developer	Spring 2006	45
MMBB 463	Molecular Parasitology	Lecture	Lecturer	Spring 2007	45
MMBB 463	Molecular Parasitology	Lecture	Lecturer	Spring 2008	45
MMBB 463	Molecular Parasitology	Lecture	Lecturer	Spring 2009	45
MMBB 463	Molecular Parasitology	Lecture	Lecturer	Spring 2010	45

GRADUATE

Course #	Short Title	Format	Role	Term	Contact Hours
MMBB 541	Biochemistry	Lecture	Lecturer	Fall 2004	2
MMBB 589	Adv. Top. Microbiology, Mol. Biology, Biochemistry	Lecture	Lecturer	Spring 2005	6
MMBB 589	Adv. Top. Microbiology, Mol. Biology, Biochemistry	Lecture	Lecturer	Spring 2006	6
MMBB 589	Adv. Top. Microbiology, Mol. Biology, Biochemistry	Lecture	Lecturer	Spring 2007	6
MMBB 589	Adv. Top. Microbiology, Mol. Biology, Biochemistry	Lecture	Lecturer	Spring 2008	6

MMBB 589	Adv. Top. Microbiology, Mol. Biology, Biochemistry	Lecture	Lecturer	Spring 2009	6
MMBB 589	Adv. Top. Microbiology, Mol. Biology, Biochemistry	Lecture	Lecturer	Spring 2010	6
MMBB 589	Adv. Top. Microbiology, Mol. Biology, Biochemistry	Lecture	Lecturer	Spring 2011	6
MMBB 589	Adv. Top. Microbiology, Mol. Biology, Biochemistry	Lecture	Lecturer	Spring 2012	6
* J829	Current Topics in Microorganisms	Lecture	Lecturer	Fall 2012	3
* G745	Intracellular Signal Transduction	Lecture	Lecturer	Spring 2014	5
* J829	Current Topics in Microorganisms	Lecture	Lecturer	Fall 2014	3
* G717	Cellular Basis of System Biology	Lecture	Lecturer	Fall 2014	1
* G745	Intracellular Signal Transduction	Lecture	Lecturer	Spring 2015	7
* G717	Cellular Basis of System Biology	Lecture	Lecturer	Fall 2015	1
* G745	Intracellular Signal Transduction	Lecture	Lecturer	Spring 2016	7

POSTGRADUATE

Course #	Short Title	Format	Role	Term	Contact Hours
Med 512	Medical Cell Physiology	Lecture	Lecturer	Fall 2004	20
Med 534	Medical Microbiology	Lecture	Lecturer	Spring 2005	2
Med 512	Medical Cell Physiology	Lecture	Lecturer	Fall 2005	20
Med 534	Medical Microbiology	Lecture	Lecturer	Spring 2006	2
Med 512	Medical Cell Physiology	Lecture	Lecturer	Fall 2007	20
Med 512	Medical Cell Physiology	Lecture	Lecturer	Fall 2008	20
WWAMI	Medical Cell Physiology University of Alaska	Lecture	Lecturer	Fall 2008	6
Med 512	Medical Cell Physiology	Lecture	Lecturer	Fall 2009	20
WWAMI	Medical Cell Physiology University of Alaska	Lecture	Lecturer	Fall 2009	9
Med 512	Medical Cell Physiology	Lecture	Course Director	Fall 2010	20
Med 534	Medical Microbiology	Lecture	Lecturer	Spring 2011	12
Med 512	Medical Cell Physiology	Lecture	Course Director	Fall 2011	20
Med 534	Medical Microbiology	Lecture	Lecturer	Spring 2012	12
* J602	Medical Microbiology	Lecture	Lecturer	Spring 2013	4

	Parasitology Block					
* J602	Medical Microbiology Parasitology Block	Lecture	Lecturer	Spring 2014	4	
* J602	Medical Microbiology Parasitology Block	Lecture	Lecturer	Spring 2015	4	
* K818	Principles in Medical Pharmacology Cardiac Block	Lecture	Lecturer	Fall 2015	4	
* F604	Medical Pharmacology Cardiac Block	Lecture	Lecturer	Spring 2016	6	

MENTORING: HIGH SCHOOL

Individual	Role	Inclusive Dates
Ester Garcia UDOC High School Mentoring Program	Laboratory Research Mentor	Summer 2005
*Sebastian Arrizabalaga	Laboratory Research Mentor	Summer 2013

MENTORING: UNDERGRADUATE

Individual	Role	Inclusive Dates
Ariela Karasov Stanford University Undergraduate	Laboratory Research Mentor	2003-2004
Ester Garcia UDOC High School Mentoring Program	Laboratory Research Mentor	Summer 2005
Kathy Morris University of Idaho Undergraduate	Laboratory Research Mentor	2005-2007
Erin Garrison University of Idaho Undergraduate	Laboratory Research Mentor	2005-2006
Patrick Matthews University of Idaho Undergraduate	Laboratory Research Mentor	2005-2006
Anna Pawlik Maria Curie-Sklodowska University Poland Undergraduate	Laboratory Research Mentor	Summer 2005
Anna Wasielec Maria Curie-Sklodowska University Poland Undergraduate	Laboratory Research Mentor	Summer 2006
Kathryn Margilieux University of Idaho Undergraduate	Laboratory Research Mentor	2007-present
Maria Francia University of Idaho Undergraduate	Laboratory Research Mentor	2007-2008
Sarah Wicher University of Idaho Undergraduate	Laboratory Research Mentor	2008-2012
Leslie Taylor University of Idaho Undergraduate	Laboratory Research Mentor	2009-2010
Danielle Greene University of Idaho Undergraduate	Laboratory Research Mentor	2009
Lauren Jacobson University of Idaho Undergraduate	Laboratory Research Mentor	2009

Christie Hammons University of Idaho Undergraduate	Laboratory Research Mentor	2009
Alexa Wicher University of Idaho Undergraduate	Laboratory Research Mentor	2010
Erin Harris South Idaho College INBRE Summer Fellowship	Laboratory Research Mentor	2010
Karolina Oszust Maria Curie-Sklodowska University Poland Undergraduate	Laboratory Research Mentor	Summer 2010
Monica Kerr University of Northern Colorado	Laboratory Research Mentor	Summer 2010
Emma Ehret University of Idaho Undergraduate	Laboratory Research Mentor	2011
Heidi Butz University of Idaho Undergraduate	Laboratory Research Mentor	2011-2012
Lygia Pereira University of Idaho Undergraduate	Laboratory Research Mentor	2012
*Hannah Alveal IUPUI Undergraduate	Laboratory Research Mentor	2014-present
*Brielle Warnock IUPUI Undergraduate LHSI program	Laboratory Research Mentor	2015-present

MENTORING: VISITING SCHOLARS

Individual	Role	Inclusive Dates
Veronica Coceres Visiting Graduate Student Instituto Tecnológico de Chascomús (IIB-INTECH) CONICET Argentina	Laboratory Research Mentor	Summer 2010

MENTORING: MEDICAL STUDENTS

Individual	Role	Inclusive Dates
Shannon Lee University of Washington School of Medicine	Laboratory Research Mentor	Summer 2011
*Vanessa Gallien Indiana University School of Medicine	Laboratory Research Mentor	Summer 2014
*Mohamad Saltagi SRPinAM program Indiana University School of Medicine	Laboratory Research Mentor	Summer 2015

MENTORING: SUPERVISED RESEARCH ROTATIONS

Individual	Role	Inclusive Dates
* Sherri Huang G803 MD/PhD	IBMG Research Rotation Mentor	Summer 2012

Program

* Nicole Shepherd G718	IBMG Research Rotation Mentor	Fall 2012
* Joseph Varberg G718	IBMG Research Rotation Mentor	Spring 2013
* Kaice LaFavers G718	IBMG Research Rotation Mentor	Spring 2013
* Stephanie Brandt G718	IBMG Research Rotation Mentor	Spring 2013
* Kimberly Burgess G718	IBMG Research Rotation Mentor	Spring 2013
* Darrelle Colinot G718	IBMG Research Rotation Mentor	Spring 2014
* Jamel Dobbs G718	IBMG Research Rotation Mentor	Fall 1015
* Omar El Jordi G718	IBMG Research Rotation Mentor	Spring 2016

MENTORING: PhD or MS Thesis Advisees

Individual	Role	Inclusive Dates
Ingrid Fruth, Ph.D.	Research Mentor	2004-2008
Maria Francia, M.S.	Research Mentor	2008-2010
Jayme Hass, PhD	Research Mentor	2008-2012
Erin Garrison, M.S.	Research Mentor	2009-2010
Omayra Rivera, M.S.	Research Mentor	2009-2012
Zahra Amiri, M.S.	Research Mentor	2010-2012
* Joseph Varberg, PhD Student Funded:	Research Mentor	2013-present
Pharma Foundation Fellowship		
* Kaice LaFavers, PhD Student Funded by:	Research Mentor	2013-present
Host and Microbe NIH Training Grant (2013-2015)		
American Heart Association Fellowship (2016-2018)		

MENTORING: Dissertation Committees

Individual	Role	Inclusive Dates
Wioleta Pyrzak, PhD		2006-2010
Justin Spinner, PhD		2006-2011
Kamilla Czornak, M.S.		2006-2007
Adili Abulaiti, M.S.		2007-2008
Joanna Piotrowska, PhD		2008-2011
Slawomir Dziedzic, PhD		2008-2011
Mandy Kuan, PhD		2009-2012
Thea Lu, PhD		2009-2012
Abbey Zuehlke, PhD		2009-2012
* Jiachen Wang, M.S.		2012-2013

* Sherri Huang, PhD Candidate	Committee chair	2014-present
* Leah Padgett, PhD Candidate		2014-present
* Ana Justis, PhD Candidate (Microbiology & Immunology)		2014-present

MENTORING: Evaluation of Pharmacology and Toxicology Student Seminars

*Rania Sulaiman, 2013

*Jessica Pellman, 2013

*Cindy Barbosa-Nuñez, 2013

*David McIlwain, 2014

*Kim Burgess, 2015

MENTORING: Graduate Student Qualifying Examination Committees

*Rania Sulaiman, 2013

*James Hamilton, 2014

*Sherri Huang, 2014

*Darrelle Colinot, 2015

MENTORING: Postdoctoral Fellows

Mark Lavine, PhD, 2005-2012

*Raj Gaji, PhD, DVM 2012-present

*Robert Charvat, PhD, 2013-present | Funded by American Heart Association Post-doctoral fellowship

*Chunlin Yang, PhD, 2015-present

GRANTS/FELLOWSHIPS IN TEACHING:

COMPLETED TEACHING GRANTS/FELLOWSHIPS

Title	Granting Agency	Role	Amount	Dates
*Visualization of Biomedical Topics	Idaho School Board of Education Idaho Technology Incentive Grant Program	Co-Investigator	\$80,000	7/1/2009–6/30/2010

RESEARCH/CREATIVE ACTIVITY:

GRANTS/FELLOWSHIPS IN RESEARCH:

ACTIVE RESEARCH GRANTS/FELLOWSHIPS

Title	Granting Agency	Role	% Effort	Amount	Dates
Dissecting the role of <i>Toxoplasma</i> CDPK3 in parasite propagation and virulence	NIH – R21	Principle Investigator	10	\$275,000	2/2/2015-1/31/2017
Calcium signaling in the <i>Toxoplasma</i> parasitophorous vacuole	NIH – R21	Principle Investigator	10	\$275,000	5/1/2015-4/30/2017

COMPLETED RESEARCH GRANTS/FELLOWSHIPS

Title	Granting Agency	Role	% Effort	Amount	Dates
<i>Toxoplasma gondii</i> egress	NIH K22 AI061293	Principle Investigator	30	\$250,000	9/1/2004-8/30/2007
Invasion and egress by the obligate intracellular parasite <i>Toxoplasma gondii</i>	USDA/CSREES HATCH	Principle Investigator	5	\$80,000	6/1/2004-5/30/2005
Monensin Resistance in the model coccidian <i>Toxoplasma gondii</i>	University of Idaho Research Office Seed grant	Principle Investigator	5	\$10,000	6/1/2004-5/30/2005
Developmental Biology in <i>Toxoplasma gondii</i>	NIH INBRE Pilot Project Grant	Project Investigator	10	\$90,000	6/1/2005-5/30/2007
Identification of genes involved in host cell exit in the opportunistic pathogen <i>Toxoplasma gondii</i>	University of Idaho COBRE Core Facility Grant	Principal Investigator	N/A	\$20,000 (for genome sequencing core use)	2011
Nanomaterials for basic and applied cell biology	University of Idaho Blue Ribbon Committee Research Awards	Co-Investigator	10	\$100,000	7/01/07-6/30/2011
Potassium sensing by the obligate intracellular parasite <i>Toxoplasma gondii</i>	NIH P20 RR15587	Project Leader	25	\$800,000	9/15/2005-5/31/2012
Characterization of calcium signaling proteins in <i>Toxoplasma gondii</i>	NIH RO1 AI 89808-01	Principle Investigator	25	\$900,000	7/1/2010-6/30/2014
*Dissecting the role of a unique kinase in the propagation and virulence of the cardiac pathogen <i>Toxoplasma gondii</i>	American Heart Association 3GRNT1604000	Principle Investigator	20	\$100,000	7/1/2013-6/30/2015
*Characterization of calcium signaling proteins in <i>Toxoplasma gondii</i>	NIH RO3 AI 101624	Principle Investigator	10	\$100,000	7/1/2012-6/30/2014

PENDING RESEARCH GRANTS AND FELLOWSHIPS

Title	Granting Agency	Role	Score	Amount	Dates
*Elucidating new and old roles for autophagy-like genes in <i>Toxoplasma gondii</i>	NIH R01	Co-Principle Investigator		\$250,000	7/1/2016-6/30/2018

*Dissecting the calcium dependent phosphorylation network of <i>Toxoplasma gondii</i>	NIH R01	Co-Principle Investigator	13 percentile	\$2,000,000	4/1/2016-3/30/2021
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SUBMITTED BUT NOT FUNDED RESEARCH GRANTS/FELLOWSHIPS

Title	Granting Agency	Role	Score	Amount	Dates
*Dissecting the role of <i>Toxoplasma gondii</i> CDPK3 during parasite propagation and virulence	CTSI - Pilot Funding for use of Core Facilities		Approved, Not Funded		2012
*Dissecting the role of <i>Toxoplasma gondii</i> CDPK3 during parasite propagation and virulence	NIH – R21	Principle Investigator	34 (Impact Score)	\$250,000	2012
*Identification of propagation genes in <i>Toxoplasma gondii</i> through forward genetics	NIH – R21	Principle Investigator		\$250,000	2013
*Hijacking the brain: toxoplasmosis, psychosis, and suicide	IU Collaborative Research Grant	Principle Investigator			2013
*Integrative Multiscale Modeling of <i>T. gondii</i> Infection and Transmission	NSF Collaborative Research Program	Collaborative Investigator		\$50,000	2013
* <i>Toxoplasma gondii</i> as a Surrogate for the Discovery of Drugs Targeting an Essential Calcium-Dependent Kinase from the Malaria Parasite <i>Plasmodium falciparum</i>	DOD – Congressionally Directed Medical Research Program	Principle Investigator	2.1	\$500,000	2013
*The ‘autophagy code’ in an early-branching pathogenic eukaryote	NIH – R21	Co-Investigator	42	\$250,000	2014
* <i>Toxoplasma gondii</i> as a Surrogate for Anti-apicomplexan Drugs Discovery	NIH – RO1	Principle Investigator	Not scored	\$750,000	2014
* <i>Toxoplasma gondii</i> as a Surrogate for the	DOD – Congressionally	Principle Investigator	1.9	\$500,000	2014

Discovery of Anti-malarial Drugs	Directed Medical Research Program				
*Discovery of novel anti-malarials with a cell-based surrogate system	CTSI-CTR Pilot Grant	Co-Principal investigator	Finalist, not funded	\$45,000	2015

INVITED PRESENTATIONS – RESEARCH

LOCAL

Title	Organization	Date
Staying alive: egress and drug resistance in the intracellular parasite <i>Toxoplasma gondii</i>	MMBB Seminar Series Moscow, Idaho	March 2007
Current advances in the study of the opportunistic pathogen <i>Toxoplasma gondii</i>	Idaho Medical Association Meeting Coeur d'Alene, Idaho	July 2007

REGIONAL

Title	Organization	Date
Ion homeostasis and <i>Toxoplasma</i> egress	Seattle Parasitology Conference	May 2005
<i>Toxoplasma gondii</i> egress: when to stay and when to go	Center for Reproductive Biology Annual retreat, Orofino, Idaho	June 23, 2005
<i>Toxoplasma gondii</i> egress: when to stay and when to go	Western Region INBRE Meeting, Moscow, Idaho	April, 2006
Motility is not required for <i>Toxoplasma gondii</i> egress	Seattle Parasitology Conference Seattle, WA	May 2007
Current advances in the study of the opportunistic pathogen <i>Toxoplasma gondii</i>	Idaho Medical Association Meeting Coeur d'Alene, Idaho	July 2007
Bursting out: how <i>Toxoplasma gondii</i> exits its host cell	Idaho INBRE Annual Research Conference, Moscow, ID	August 2007
Role of a MutS homolog in drug sensitivity in the opportunistic parasite <i>Toxoplasma gondii</i>	INBRE summer conference Moscow, ID	August 2010
*Calcium signaling and egress in <i>Toxoplasma gondii</i>	Midwest Neglected Infectious Diseases Meeting, Notre Dame U	2013
*Bursting out: role of a Calcium Dependent Protein Kinase in host cell egress by the opportunistic pathogen <i>Toxoplasma gondii</i>	Midwest Microbial Pathogenesis Conference	August 2015

NATIONAL

Title	Organization	Date
A mitochondrial DNA repair	Johns Hopkins University Medical	2008

enzyme plays a role in drug resistance in <i>Toxoplasma gondii</i>	Institutions Baltimore, MD	
"When to move and when to stop: regulation of motility in the parasite <i>Toxoplasma gondii</i> "	Albany Medical College Albany, NY	2008
When to move and when to stop: regulation of motility in the parasite <i>Toxoplasma gondii</i>	Temple University Philadelphia, PA	2008
When to move and when to stop: regulation of motility in the parasite <i>Toxoplasma gondii</i> "	University of Texas Medical Center Houston, TX	2008
Role of a MutS homolog in drug sensitivity in the opportunistic parasite <i>Toxoplasma gondii</i>	Montana State University Bozeman, MT	February 2010
The ins and outs of <i>Toxoplasma</i> invasion and egress	NIMBioS Investigative Workshop on Modeling <i>Toxoplasma gondii</i> , Knoxville, TN	March 2010
Role of a MutS homolog in drug sensitivity in the opportunistic parasite <i>Toxoplasma gondii</i>	Department of Microbiology and Immunology at the University of Oklahoma Health Sciences Center	January 2011
Role of a MutS homolog in drug sensitivity in the opportunistic parasite <i>Toxoplasma gondii</i>	Indiana University School of Medicine Pharmacology and Toxicology	2011
*Graceful exit: regulation of egress in <i>Toxoplasma gondii</i>	University of South Florida	October 2013
*A very useful kinase, the role of TgCDPK3 in the lytic cycle of <i>Toxoplasma</i>	University of California Irvine	December 2014
*Bursting out: how a human parasite uses an unique kinase to exit its host cell	Northern Illinois University Chicago, Illinois	February 2015
INTERNATIONAL		
Title	Organization	Date
<i>Toxoplasma gondii</i> egress can proceed without parasite Motility	International conference on Toxoplasmosis	June 2007
Role of a MutS homologue in drug sensitivity in <i>Toxoplasma gondii</i>	Argentine Society for Protozoology Annual Meeting Rosario, Argentina	2008
A MutS homolog is part of a drug-inducible death pathway in the parasite <i>Toxoplasma gondii</i>	International Congress on Toxoplasmosis Ottawa, Canada	June 2011
*Action of atovaquone and monensin against <i>Toxoplasma</i> depend on the mitochondrial MutS homolog, TgMSH1	International Congress on Toxoplasmosis, Oxford, UK	June 2013
*Monensin treatment of <i>Toxoplasma gondii</i> induces oxidative stress, which leads to	Molecular Parasitology Meeting Woods Hole, Massachusetts	September 2014

disruption of mitochondrial
membrane potential and parasite
death

*Defining the egress regulatory network of <i>Toxoplasma gondii</i> .	X Congress of the Argentinean Society of Protozoology Annual Meeting, Mar del Plata, Argentina	November 2014
*Defining the egress signaling network in the apicomplexan <i>Toxoplasma gondii</i>	64 th Annual meeting of the American Society of Tropical Medicine and Hygiene	October 2015

SERVICE:

UNIVERSITY SERVICE:

DEPARTMENT Activity	Role	Inclusive Dates
University of Idaho MMBB Department Undergraduate Research Symposium	Organizer	2005-2011
University of Idaho, MMBB Department, Curriculum Committee	Member	2005, 2007-2010
University of Idaho MMBB Department Promotion and Tenure Committee	Member	Fall 2005
University of Idaho Biology Department Third Year Review Committee	Member	2005
University of Idaho, MMBB Department MMBB student club	Faculty Advisor	2006-2012
University of Idaho MMBB Department Graduate Admission Committee	Member	2006-2008
University of Idaho MMBB Department Faculty Search Committee	Member	2007
University of Idaho Biology Department Promotion and Tenure Committee	Member	2008
University of Idaho MMBB Department Department Head Search Committee	Member	2008
University of Idaho MMBB Department Budget Specialist Search Committee	Member	2008
*IUSM Pharmacology and Toxicology Departmental Seminar Series	Director	2013-present
*IUSM Pharmacology and Toxicology Paradise Travel Award Selection	Member	2013-preent

Committee

*IUSM Pharmacology and Toxicology Faculty Search Committee	Committee Chair	2015-present
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SCHOOL

Activity	Role	Inclusive Dates
University of Idaho CALS Students Award Selection Committee	Member	2005
University of Idaho CALS Staff Award Selection Committee	Member	2005
University of Idaho WWAMI UDOC Internship Program Selection Committee	Member	2005
*Indiana University School of Medicine, LARC Advisory Committee	Member	2013-present
*IBMG Admissions Committee Toxicology Representative	Member	2014-present
*IUSM Diversity Council	Member	2015-present

UNIVERSITY

Activity	Role	Inclusive Dates
University of Idaho, McNair Program Advisory Committee	Member	2005-2012
University of Idaho Graduate Research Symposium	Judge	2006, 2008
University of Idaho McNair Program Coordinator Search Committee	Member	2008
University of Idaho Office of Multicultural Affairs Director Search Committee	Member	2008
University of Idaho Juntura Committee	Member	2007-2009
University of Idaho Juntura Committee	Chair	2009-2010
*SACNAS, IUPUI and IU School of Medicine	Faculty Advisor	2014-present

PROFESSIONAL SERVICE:

NATIONAL
Organization

Activity	Inclusive Dates
*American Heart Association Study Section Member Microbiology II review panel	2008-2015
NSF Ad hoc grant reviewer	

	Symbiosis Defense and Self-recognition Program	
NSF	Ad hoc grant reviewer Symbiosis Defense and Self-recognition Program	August 2009
Welcome Trust	Ad hoc grant reviewer Immunology and Infectious Disease Funding Meeting	October 2009
NSF	Ad hoc grant reviewer Symbiosis Defense and Self-recognition Program	October 2010
NIH	Ad hoc grant reviewer ZRG1 IDM-S study section	November 2011
NIH	Ad Hoc grant reviewer DDR Study Section	February 2012
NIH	Ad hoc grant reviewer DDR ZRG1 IDM-T (098)	March 2012
*NIH	Ad hoc grant reviewer PTHE Study Section	June 2012
*NIH	Ad hoc grant reviewer DDR Study Section	June 2013
*NIH	Ad hoc grant reviewer DDR Study Section	October 2013
*Research Corporation for Science Advancement	Ad hoc grant reviewer Cottrell College Science Award	September 2013

INTERNATIONAL Organization	Activity	Inclusive Dates
*French National Research Agency	Ad hoc grant reviewer	January 2013
*Foundation pour la Recherche Medicale	Ad hoc grant reviewer	March 2013
*Deutsche Forschungsgemeinschaft (German Research Foundation)	Ad hoc grant reviewer	June 2014
*Scientific Reports (Nature publishing)	Editorial Board Member	2015- present
*FONCyT (Argentinian Research Foundation)	Ad hoc grant reviewer	November 2015

Ad hoc manuscript reviewer:

Applied Environmental Microbiology
 *Antimicrobial Agents and Chemotherapy
 *Autophagy
 *BMC Research Notes
 *Cellular and Molecular Biology Letters
 *Cellular Microbiology
 *Cytoskeleton

Current Genetics

*Eukaryotic Cell

European J. of Cell Biology

Experimental Parasitology

Frontiers in Antimicrobials, Resistance and Chemotherapy

*Infection and Immunity

International Journal of Parasitology

Journal of Biological Chemistry

Journal of Clinical Microbiology

Journal of Immunology

*Journal of Visualized Experiments

*mBio

*Molecular Microbiology

*Nucleic Acid Research

*Parasitology

*PLoS one

*PLoS pathogens

*PLoS Genetics

*Protist

Trends in Parasitology

RESEARCH/CREATIVE ACTIVITY

Refereed

Journal Articles

1. **Arrizabalaga, G.** and Lehmann, R., 1999. A selective screen reveals discrete functional domains in *Drosophila* Nanos. *Genetics* 153; 1825-1838. PMID: 10581288
2. 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 Bio.* 20; 9399-9408.
3. Camps, M., **Arrizabalaga, G.** and Boothroyd J.C., 2002. An rRNA mutation identifies the apicoplast as the target for clindamycin in *Toxoplasma gondii*. *Molecular Microbiology* 43(5):1309-18. PMID: 11918815
4. **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. *Journal of Cell Biology*: 165(5):653-62,. PMID: 15173192
5. Karasov, A, Boothroyd J.C. and **Arrizabalaga, G.**, 2005. Identification and disruption of a rhoptry localized Sodium Hydrogen Exchanger in *Toxoplasma gondii*. *International Journal of Parasitology*, 35 (3); 285-291. PMID: 15722080
6. 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. *Infect Immun* 73(2); 695-702. PMID: 15664907
7. Lavine, M.D., Knoll, L.J., Rooney, P.J. and **Arrizabalaga, G.**, 2007. A *Toxoplasma gondii* mutant defective in responding to calcium fluxes shows reduced in vivo pathogenicity. *Molecular and Biochemical Parasitology*, 155(2): 113-122. PMID: 17643508
8. Fruth, I.A. and **Arrizabalaga G.**, 2007. *Toxoplasma gondii*: Induction of egress by the potassium ionophore nigericin. *International Journal of Parasitology*, *International Journal of Parasitology*, 37(14): 1559-67. PMID: 17643508

9. Lavine, M and **Arrizabalaga, G.**, 2008 Exit from host cells by the pathogenic parasite *Toxoplasma gondii* does not require motility. *Eukaryotic Cell*, 7(1): 131-140. PMID: 17993573
10. Saeij, J., **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. 2008 *Immunity and infection*, 76(6):2402-10. PMID: 18347037
11. Lavine, M.D. and **Arrizabalaga, G.**, 2009. Induction of mitotic S-phase of host and neighboring cells by *Toxoplasma gondii* enhances parasite invasion. *Molecular and Biochemical Parasitology*, 164(1):95-9. PMID: 19111577
12. Garrison, E. and **Arrizabalaga, G.**, 2009. Disruption of a mitochondrial homolog of a MutS DNA Repair Enzyme confers drug resistance in the pathogenic parasite *Toxoplasma gondii*. *Molecular Microbiology*, 72(2):425-41. PMID 19291232
13. Lavine, M.D. and **Arrizabalaga, G.**, 2011. The antibiotic monensin causes cell cycle disruption of *Toxoplasma gondii*, mediated through the DNA repair enzyme TgMSH-1. *Antimicrob Agents Chemother*, 55(2): 745-55. PMID: 21098240
14. Francia, M.E., Wicher S., Pace D.A., Sullivan, J., Moreno, S.N.J., and **Arrizabalaga, G.**, 2011. A *Toxoplasma* protein with homology to intracellular type Sodium Hydrogen Exchangers is required for osmotolerance and protein processing. *Experimental Cell Research*. 317(10):1384-96. PMID: 21501607
15. Kamau E., Meehan T., Lavine M.D., **Arrizabalaga, G.**, Mustata, G. and Boyle, J. 2011. A novel benzodioxole-containing inhibitors of *Toxoplasma gondii* growth alters the parasite cell cycle. *Antimicrob Agents Chemother*, 55(2): 745-55. PMID: 21947387
16. Hass, J., Garrison, E., Wicher, S., Knapp, B., Bridges N., McIlroy, D. and **Arrizabalaga, G.**, 2012. Synthetic osteogenic extracellular matrix formed by coated silicon dioxide nanosprings. *Journal of Bionanotechnology*, 10 (6). PMDI: 22284364
17. Lavine, M.D. and **Arrizabalaga, G.**, 2012, Analysis of Monensin Sensitivity in *Toxoplasma gondii* reveals autophagy as a mechanism for drug induced death. *Plos One*, 7(7):e42107. PMID: 22848721
- *18. Garrison, E., Treeck, M., Ehret, M., Garbuz, T., Oswald, B.P., Settles, M., Boothroyd, J., **Arrizabalaga, G.**, 2012. A forward genetic screen reveals calcium-dependent kinase 3 is critical for calcium-induced egress in *Toxoplasma*. *Plos Pathogen*, 8(11). PMDI: 23209419
- *19. Gaji, R., Checkley, L., Reese, M., Ferdig, M.T., and **Arrizabalaga, G.**, 2014. Expression of the essential kinase PfCDPK1 from *Plasmodium falciparum* in *Toxoplasma gondii* facilitates the discovery of novel antimalarial drugs. *Antimicrob Agents Chemother*, 58(5):2598-607. PMID: 24550330
- *20. Treeck, M., Sanders, J., Gaji, R., LaFavers, K., Child, M., **Arrizabalaga, G.**, Elias, J., Boothroyd, J., 2014. A novel role of Calcium-dependent Kinase 3 in regulating metabolism in *Toxoplasma gondii* in addition to ionophore induced egress. *PLoS Pathogen*, 10(6):e1004197. PMID: 24945436
- *21. Campodonico J., Kochhar K., **Arrizabalaga G.**, and Sevilla-Martir J., 2015. Assessing knowledge and perceptions related to preventive methods and treatment of malaria in the local endemic area of Trujillo, Honduras. *Hispanic HealthCare International Journal*, 13(2):97-108
- *22. Benmerzouga, I., Checkley, L., Ferdig, M., **Arrizabalaga, G.**, Wek, R., and Sullivan, W., 2015. Guanabenz repurposed as an anti-parasitic with activity against acute and latent toxoplasmosis, *Antimicrob Agents Chemother*, 59(11):6939-45. PMID: 26303803
- *23. Gaji, R. Johnson, D., Wang, M., Hudmon, A., and **Arrizabalaga, G.**, 2015. Phosphorylation of a Myosin motor by TgCDPK3 facilitates rapid initiation of motility during *Toxoplasma gondii* egress. *PLoS Pathog.* 11(11):e1005268. PMID: 26544049
- *24. Charvat, R. and Arrizabalaga, G. 2015. Oxidative stress generated during monensin treatment contributes to altered *Toxoplasma gondii* mitochondrial function. In revisions for *Sci Reports*
- *25. Varberg, J.M., Padgett, L.R., Arrizabalaga, G., Sullivan, W.J., 2015. TgATAT-mediated α -tubulin acetylation is required for division of the protozoan parasite *Toxoplasma gondii*. Submitted

Book Chapters, Reviews and Perspectives (all peer reviewed)

1. **Arrizabalaga, G.**, Boothroyd J.C., 2004. Role of calcium during invasion and egress in *Toxoplasma gondii*. International Journal of Parasitology 34; 361-368. PMID: 15003496
2. Lavine, M.D., and **Arrizabalaga, G.**, 2007. Invasion and egress by the obligate intracellular parasite *Toxoplasma gondii*: potential targets for the development of new antiparasitic drugs. Current Pharmaceutical Design. 13, 641-651. PMID: 17346179
3. **Arrizabalaga G.**, 2011. A fine balance between life and death: modulation of BCL-2 family members by *Toxoplasma gondii*. Frontier in Cellular and Infection Microbiology. 2:39
- *4. I. J. Blader, **G. Arrizabalaga**, and W. J. Sullivan. The Role of Host- And Parasite-Encoded Kinases in *Toxoplasma*-Host Interactions.” Invited Chapter Review for “Protein Phosphorylation in Eukaryotic Parasites: Potential for Chemotherapy”. Edited by Christian Doerig, Gerald Spaeth, Martin Wiese, and Paul Selzer. 2013.

Abstracts

American Society for Biochemistry and Molecular Biology (ASBMB)

*Varberg, J., Sullivan, B., Arrizabalaga, G., Investigation of lysine acetylation and autophagy in the protozoan parasite *Toxoplasma gondii*, Annual ASBMB meeting, San Diego, CA, 2014

American Society of Cell Biology (ASCB)

Arrizabalaga, G. Role of Host Cytoskeleton and Ionic Homeostasis in *Toxoplasma gondii* Egress, American Society of Cell Biology Meeting, San Diego, CA December 2006

Garrison, E., Lavine, M.D. and Arrizabalaga G., Disruption of a Mitochondrial MutS Homolog Confers Drug Resistance in *Toxoplasma gondii*, American Society of Cell Biology Annual meeting, San Diego, December 2009

*Gaji, R., Ehret, E., Checkley, L. M., Ferdig, M.T., and Arrizabalaga, G., Dissecting the function of Calcium Dependent Protein Kinases from apicomplexan parasites in *Toxoplasma gondii*, American Society of Cell Biology Annual meeting, San Diego, December 2013

American Society of Microbiology (ASM)

Garrison, E, Arrizabalaga, G., A MutS homolog is part of a drug-inducible death pathway in the parasite *Toxoplasma gondii*. ASM general Meeting, New Orleans, LA, May 2011

*Roiko, MJ, Leland D., Arrizabalaga, G., *Toxoplasma gondii*-Antibody-Positive Sera Recognize Intracellularly-Replicating Parasites with Diverse Patterns of Immuno-reactivity. ASM general Meeting, New Orleans, LA, May 2015

American Society of Tropical Medicine and Hygiene (ASTMH)

*Arrizabalaga, G., Defining the egress signaling network in the apicomplexan *Toxoplasma gondii*. ASTMH 64th Annual Meeting, Philadelphia, PA, October 2015, Oral presentation

*Garbuz, T., Arrizabalaga, G., Action of atovaquone and monensin against *Toxoplasma* depend on the mitochondrial MutS homolog, TgMSH1. ASTMH 64th Annual Meeting, Philadelphia, PA, October 2015

Argentinean Society of Protozoology Annual Meeting

Arrizabalaga, G. Role of a MutS homologue in drug sensitivity in *Toxoplasma gondii*. Argentine Society for Protozoology Annual Meeting, Rosario, Argentina, November 2008

*Arrizabalaga, G. Defining the egress regulatory network of *Toxoplasma gondii*. X Congress of the Argentinean Society of Protozoology Annual Meeting, Mar del Plata, November 2014

Gordon Conference: Biology of Host-parasite Interactions

Arrizabalaga, G., Ionic homeostasis and *Toxoplasma gondii* egress, Gordon Conference, Biology of Host-parasite interactions, RI, June 2006

Arrizabalaga, G., Disruption of a MutS DNA repair enzyme homologue confers drug resistance in *Toxoplasma gondii*, Gordon Conference, Biology of Host-parasite interactions, RI, June 2008

*Robert A. Charvat and Gustavo Arrizabalaga, Oxidative stress generated during monensin treatment contributes to altered *Toxoplasma gondii* mitochondrial function, Gordon Conference, Biology of Host-parasite interactions, RI, June 2014

International Conference on Toxoplasmosis

Fruth, I. and Arrizabalaga G., *Toxoplasma gondii*: regulation of motility" International conference on Toxoplasmosis, Chico Springs, MT, June 2007

Garrison, E. and Arrizabalaga G. 2007, Monensin resistance in the model coccidian *Toxoplasma gondii*, International conference on Toxoplasmosis, Chico Springs, MT, June 2007

Lavine M and Arrizabalaga G. 2007, *Toxoplasma gondii* egress can proceed without parasite Motility, International conference on Toxoplasmosis, Chico Springs, MT, June 2007

Garrison, E. and Arrizabalaga, G., Disruption of a MutS DNA repair enzyme homologue confers drug resistance in *Toxoplasma gondii*, International Congress on Toxoplasmosis, Kerkrade, Netherlands, June 2009

Garrison, E., Lavine, M. and Arrizabalaga, G., A MutS homolog is part of a drug-inducible death pathway in the parasite *Toxoplasma gondii*. 11th International Congress on Toxoplasmosis, Ottawa, Canada, June 2011

Coceres, V., Corvi, M., Garrison, E., Arrizabalaga, G. and Angel, S., Disruption of *Toxoplasma* hsp20 gene alters invasion, gliding motility and replication. 11th International Congress on Toxoplasmosis, Ottawa, Canada, June 2011

*Garbuz, T., Charvat, R. and Arrizabalaga, G., Action of atovaquone and monensin against *Toxoplasma* depend on the mitochondrial MutS homolog, TgMSH1, International Congress on Toxoplasmosis, Oxford, UK, June 2013

*Gaji, R., Ehret, E., Checkley, L. M., Ferdig, M.T., and Arrizabalaga, G., *Plasmodium falciparum* calcium dependent kinase (CDPK) 1 can complement function of TgCDPK3 in *Toxoplasma gondii* allowing screening for specific antimalarial drugs, International Congress on Toxoplasmosis, Oxford, UK, June 2013 (invited speaker: R. Gaji)

*Robert Charvat, Gustavo Arrizabalaga, Unique aspects of mitochondrial remodeling in the parasite *Toxoplasma gondii*, International Congress on Toxoplasmosis, Gettysburg, USA, June 2015

*Joseph M Varberg, Gustavo Arrizabalaga, William J Sullivan Jr, Mutation of lysine-23 on *Toxoplasma gondii* autophagy protein TgAtg8 impairs parasite replication, International Congress on Toxoplasmosis, Gettysburg, USA, June 2015

*Imaan Benmerzouga, Gustavo Arrizabalaga, Ronald C Wek, William J Sullivan Jr, Inhibitors of translational control have potent activity against acute and chronic stages of toxoplasmosis, International Congress on Toxoplasmosis, Gettysburg, USA, June 2015

*Marijo Roiko, Diana Leland, Gustavo Arrizabalaga, *Toxoplasma gondii*-positive sera recognize intracellular tachyzoites and bradyzoites with diverse patterns of immunoreactivity, International Congress on Toxoplasmosis, Gettysburg, USA, June 2015

*Raj Gaji, Derrick Johnson, Mu Wang, Andy Hudmon, Gustavo Arrizabalaga, Phosphorylation of a myosin motor by TgCDPK3 facilitates rapid initiation of motility during *Toxoplasma* egress, International Congress on Toxoplasmosis, Gettysburg, USA, June 2015 (invited speaker: R. Gaji)

*Kaice LaFavers, Gustavo Arrizabalaga, A novel dense granule protein plays a role in calcium-dependent signaling events in *Toxoplasma gondii*, International Congress on Toxoplasmosis, Gettysburg, USA, June 2015 (Poster award: K. LaFavers)

Keystone Symposia: Drug Discovery for Protozoan Parasites

Lavine, M., Garrison, E. and Arrizabalaga, G., Monensin sensitivity in *Toxoplasma gondii* requires a MutS homolog and involves cell cycle disruption and autophagy, Keystone Symposia Drug Discovery for Protozoan Parasites, Santa Fe, NM, 2012

Molecular Parasitology Meeting (MPM)

Arrizabalaga G., Fruth I. Rosenke R., Potassium sensing by *Toxoplasma gondii*. Molecular Parasitology Meeting XVI, Woods Hole, MA, 2005

Fruth I. and Arrizabalaga G., Time to move: activation of motility in *Toxoplasma gondii*. Molecular Parasitology Meeting XVII, Woods Hole, MA, 2006

Lavine M. and Arrizabalaga G., *Toxoplasma gondii* natural egress depends on host cell cytoskeleton. Molecular Parasitology Meeting XVII, Woods Hole, MA, 2006

Arrizabalaga, G., Motility during the *Toxoplasma gondii* lytic cycle, Molecular Parasitology Meeting, Woods Hole, MA, September 2007

Garrison, E. and Arrizabalaga G. "Disruption of a Mitochondrial MutS Homolog Confers Drug Resistance in *Toxoplasma gondii*" Molecular Parasitology Meeting, Woods Hole, MA, September 2008

Francia, M. and Arrizabalaga G. "Characterization of TgNHE3, a vacuolar type sodium hydrogen exchanger in the model apicomplexan *Toxoplasma gondii*" Molecular Parasitology Meeting, Woods Hole, MA, September 2008

Rivera, O., Garrison, E. and Arrizabalaga G., Isolation and characterization of slow propagating mutants strain of *Toxoplasma gondii*, Molecular Parasitology Meeting, Woods Hole, Massachusetts, September 2010

Garrison, E., Lavine, M.D. and Arrizabalaga G., The Mitochondrial MutS Homologue, TgMSH1, is required for Cell Cycle Redistribution and Parasite Death in Monensin-treated *Toxoplasma gondii*, Molecular Parasitology Meeting, Woods Hole, Massachusetts, September 2010

*Treeck, M., Sanders, J., Gaji, R., Elias, J., Arrizabalaga, G., Boothroyd, J., The calcium dependent Kinase3 is required for metabolic state and formation of encysted bradyzoites in *Toxoplasma gondii*. Molecular Parasitology Meeting, Woods Hole, Massachusetts, September 2013

*Charvat, R, Arrizabalaga, G., TgMSH-1 dependent disruption of mitochondrial function in monensin-treated *Toxoplasma*, Molecular Parasitology Meeting, Woods Hole, Massachusetts, September 2013

*LaFavers, K., Gaji, R., Arrizabalaga, G., Genetic dissection of calcium signalling in *Toxoplasma gondii*, Molecular Parasitology Meeting, Woods Hole, Massachusetts, September 2013

*Garbuz, T., Arrizabalaga, G., Action of atovaquone and monensin against *Toxoplasma* depend on the mitochondrial MusS homolog, TgMSH1, Molecular Parasitology Meeting, Woods Hole, Massachusetts, September 2013

*Charvat, R., Garbuz, T., Arrizabalaga, G., Monensin treatment of *Toxoplasma gondii* induces oxidative stress, which leads to disruption of mitochondrial membrane potential and parasite death. Molecular Parasitology Meeting, Woods Hole, Massachusetts, September 2014 (invited speaker: G. Arrizabalaga)

Seattle Parasitology Conference

Arrizabalaga, G., Ion homeostasis and *Toxoplasma* egress, Seattle Parasitology Conference, Seattle, WA, May 2005

Arrizabalaga, G., Potassium and the lytic cycle of *Toxoplasma gondii*, Seattle Parasitology Meeting, Seattle, WA, May 2006

Arrizabalaga G. Motility is not required for *Toxoplasma gondii* egress, Seattle Parasitology Conference, Seattle, WA, May 2007

Fruth, I. and Arrizabalaga G.; "Regulation of Motility in *Toxoplasma gondii*" Seattle Parasitology Conference, Seattle, WA, May 2007 (invited speaker: I. Fruth)

Francia, M. and Arrizabalaga G. Characterization of TgNHE3 and TgNHE4 in the model apicomplexa *Toxoplasma gondii*, Seattle Parasitology Conference, Seattle, WA, May 2008

Fruth, I. and Arrizabalaga G., Regulation of motility in *Toxoplasma gondii*, Seattle Parasitology Conference, Seattle, WA, May 2008

Arrizabalaga, G., A MutS homolog is part of a drug-inducible death pathway in the parasite *Toxoplasma gondii*. Seattle Parasitology Conference, May 2011

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