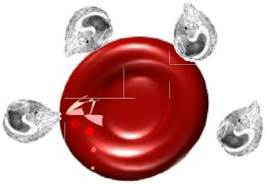
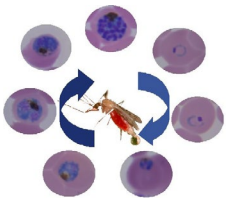


JOHN HOWARD ADAMS

Curriculum Vitae



Global Health Infectious Disease Research (GHIDR) Program
Department of Global Health, College of Public Health,
University of South Florida, Tampa, Florida USA

Mailing address:
3720 SPECTRUM BLVD STE 404
TAMPA FL 33612-9415
ResearcherID G-1800-2015

Tel. 813-974-9916
FAX 813-974-0992

ORCID **http://orcid.org/0000-0003-3707-7979**

Education:

- **Ph.D.**, Veterinary Medical Science, University of Illinois (1986)
- **M.Sc.**, Veterinary Medical Science, University of Illinois (1982)
- **B.A.**, Hendrix College, Conway, Arkansas (1978)

Research and Professional Experience:

Distinguished University Professor (2016 – present)**, Distinguished USF Health Professor** (2014 – present)**,** Professor (2007 to 2014), Department of Global Health, College of Public Health, University of South Florida, Tampa, Florida and (secondary appointments) Department of Molecular Medicine, USF College of Medicine and Division of Infectious Disease & International Medicine, Department of Internal Medicine, USF College of Medicine.

Professor (2005 to 2007), **Associate Professor** with tenure (1998-2005), **Assistant Professor** (1991-1998), Department of Biological Sciences, University of Notre Dame, Notre Dame Indiana.

Senior Staff Fellow (1989 - 1991), **Staff Fellow** (1987 - 1989), Malaria Section, Laboratory of Parasitic Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, Maryland

Post-doctoral Research Fellow (1986-1987), Department of Parasitology, University of Queensland, St. Lucia, Brisbane, Queensland, Australia

Graduate Assistant (1979-1986), Department of Veterinary Pathobiology, University of Illinois at Urbana-Champaign

Teaching Assistant (1976, 1978), Department of Biology, Hendrix College, Conway, Arkansas

Professional Societies:

- American Society for Microbiology
- American Society of Parasitologists
- American Society of Tropical Medicine and Hygiene
- The Society of Protozoologists

Awards and Activities

2009 – 2019	Editor, *Infection and Immunity* (http://iai.asm.org/site/misc/edboard.xhtml)
2011 – now	Mentor, PRIDE – Functional and Applied Genomics of Blood Disorders, NHLBI-Training Program for Junior Faculty at Georgia Health Sciences University
2009 – now	Scientific Advisory Team, PlasmoDB Plasmodium Genomics Resource
2015	Co-Chair, ASTMH Basic Science Pre-meeting Course: Recent Advances in *In vivo* and *In vitro* Models for Understanding Host-Parasite Interactions, October 25, 2015.
2015	Organizing Committee, International Conference on Research for *Plasmodium vivax*-5, May 19-22, 2015, Bali, Indonesia.

2014	Distinguished USF Health Professor
2006 – 2014	*Trends in Parasitology*, Advisory Editorial Board (http://www.cell.com/trends/parasitology).
2000 – 2014	ASMTH Scientific Program Committee
2013	*ad hoc* consultant, NIH Board of Scientific Counselors, site review of LMIV, LMVR & LPD
2015	Organizing Committee, Advances in *Plasmodium vivax* Malaria Research & Interdisciplinary Workshops, May 28-30, Barcelona, Spain.
2012 – 2013	Visiting Professor, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand
2008 – 2012	PATH Malaria Vaccine Initiative's Vaccine Science Portfolio Advisory Council.
2012	Site review of: Laboratory of Emerging Pathogens, FDA CBER.
2010 – 2011	Mentor, SIPID – Functional Genomics of Blood Disorders, NHLBI-Training Program for Junior Faculty at University of Texas at Dallas
2009 – 2011	Expert Advisory Group, CRIMALDDI project, Liverpool School of Tropical Medicine
2007 – 2010	Pathogenic Eukaryotes Study Section (NIH), Regular Member
2009	Member ad hoc, FDA Blood Products Advisory Committee Meeting, November 16, 2009.
2009	Chairman, Conference Organizing Committee, *Vivax malaria research III: 2009 and beyond*, Gamboa, Panama, May 24-28, 2009.
2008	21st Century World Class Scholar, State of Florida Board of Governors
2008	Hendrix College Odyssey Award for Research
2000 – 2009	*Infection and Immunity,* Editorial Board member
2000 – 2007	ASP R. Barclay McGhee Memorial Lecture Committee, Chair (http://asp.unl.edu/index.php)
2002 – 2006	Founding President, American Committee of Molecular, Cellular, & Immuno-Parasitology (ACMCIP) of ASTMH (http://www.astmh.org/subgroup/mp.asp)
2006	ASP Tellers Committee, Chair
1998 – 2004	Member / Chair, Scientific Advisory Committee, NIH Malaria Research and Reference Reagent Resource Center
2000 – 2004	ASMTH: Young Investigator Award Committee; Chair, ACMCIP
2000	Program Officer, Annual Midwestern Conference of Parasitologists, University of Notre Dame
1997	Co-Chair, Planning Meeting for NIAID Malaria Research and Reference Reagent Repository (MR4)
1997	Burroughs Wellcome Fund New Investigator Award in Molecular Parasitology
1997-1998	Panel Member, USDA National Research Initiative Competitive Grants Program
1986	University of Queensland Postdoctoral Research Fellowship
1981	University of Illinois List of Teachers Ranked as Excellent by Their Students
1978	Honorable Mention, National Science Foundation Graduate Fellowship

- Ad hoc reviews: (Journals) *American Journal of Tropical Medicine and Hygiene, Clinical & Vaccine Immunology, Eukaryotic Cell, European Journal of Cell Biology, Experimental Parasitology, Gene, Genomics, Infection and Immunity, International Journal for Parasitology, Journal of Biological Chemistry, Journal of Infectious Diseases, Journal of Parasitology, Journal of Cell Biology, Journal of Eukaryote Microbiology, Journal of Molecular Biology, Malaria Journal, Microbes & Infection, Molecular and Biochemical Parasitology, Molecular Microbiology, Nature, Nature Communications, Nature Methods, Nature Structural & Molecular Biology, Parasitology Research, PLoS ONE, PLoS Pathogens, PLoS Neglected Tropical Diseases, Proceedings of the National Academy of Sciences (USA), Scientific Reports, Vaccine*. (Grants) Canada Foundation for Innovation, Human Frontier Science Program; NHMRC (Australia); MRC (UK); NIH (USA) CRFS, IRID, DDR, PTHE, others; USDA National Research Initiative Competitive Grants Program; The Wellcome Trust; Natural Sciences and Engineering Research Council of Canada; Jeffress Memorial Trust.

Research Projects Ongoing or Completed During the Last 3 Years:

Active - research

R01AI064478 (Adams, PI) 08/01/2006 - 01/31/2018 12%
NIH/NIAID $3,321,964 total costs
Immunological Characterization of the P. vivax DBP
The specific aims of this proposal are to characterize residues on the *Plasmodium vivax* Duffy binding protein responsible for antigenic character and sensitivity to neutralizing antibody inhibition.

GRANT NO. OPP#1023643 (Adams, PI) 10/26/2010 – 10/31/2017_NCE 15%
Bill and Melinda Gates Foundation $8,580,640 total /5 years
LONG-TERM CONTINUOUS CULTURE OF *PLASMODIUM VIVAX* BLOOD STAGES
The purpose is to develop continuous culture system for blood-stage *P. vivax*.

R01AI094973 (Adams, PI) 04/01/2011 – 02/29/2017 5%
NIH/NIAID $1,745,388 total /5 years
A LARGE SCALE TRANSPOSON MUTAGENESIS SCREEN OF *PLASMODIUM FALCIPARUM*
The specific aims are to functionally characterize the *Plasmodium falciparum* genome.

BAA-NIAID-DAIT-NIHAI2013164 (Fremont, PI; multi-I) 09/01/2014 – 08/31/2019 8%
NIH/NIAID $1,099,987 total /5 years
B CELL EPITOPE MAPPING OF VIRAL AND PARASITIC ANTIGENS
A contract application that will provide functional characterization of B cell epitopes of *Plasmodium* & Flaviviruses.

R01AI117017 (Adams, PI) 04/01/2015 – 03/31/2020 8%
NIH/NIAID $3,668,428 total /5 YEARS
CHEMOGENOMIC PROFILING OF PLASMODIUM FALCIPARUM DRUG RESPONSES AND RESISTANCE
The objective is to identify and validate gene(s) associated with drug mechanisms of action.

Active – training/conference

Pending – research

1R01AI130171 (Adams, PI; Jiang, Otto, Rayner, Co-I) 02/01/2017 – 03/31/2020
NIH/NIAID 5 YEARS
DISCOVERING THE ESSENTIAL GENOME OF PLASMODIUM FALCIPARUM
The objective is to identify and validate essential genes of *Plasmodium falciparum*.

n/a (Tolia, PI; Adams, Curiel, Co-I) 02/01/2017 – 03/31/2020 _%
NIH/NIAID 5 YEARS
STRUCTURAL VACCINOLOGY AND DESIGN OF NOVEL IMMUNOGENS FOR MALARIA VACCINE DEVELOPMENT
The objective is to optimize of *Plasmodium falciparum* CelTOS vaccine.

PR160861 (Adams, PI; Dinglasan, Waters, Angov, Yadava, Co-I)
FY16 PEER REVIEWED MEDICAL RESEARCH PROGRAM 3 YEARS
ENHANCING DEVELOPMENT OF A MULTI-VALENT PLASMODIUM VIVAX VACCINE
The objective is to develop a multivalent, multistage *P. vivax* vaccine.

Active – training

1F32AI112271 (Oberstaller, J - Trainee) 04/01/2015 – 03/31/2020
NIH/NIAID $54,194/YEAR1
POST-TRANSCRIPTIONAL REGULATION IN THE MALARIA PARASITE BLOOD STAGE
The project will study post-transcriptional gene regulatory mechanisms.

Pending – training

Completed projects previous 5 years

R21AI098098 (Adams, PI) 03/20/2012 – 02/28/2016
NIH/NIAID
GENETIC SCREEN FOR *P. VIVAX CQR* $356,838 total /3 YEARS
The objective is to identify and validate gene(s) associated with CQR in *P. vivax*.

R21AI105328 (Marti, PI) 02/01/2013 – 01/31/2016
NIH/NIAID
A FORWARD GENETIC SCREEN TO IDENTIFY DETERMINANTS OF MALARIA STAGE CONVERSION $114,273 total
The objective is to identify genetic determinants of gametocytogenesis of *P. falciparum*. /3 years

GRANT NO. OPP#1023643 (Kyle, PI) 11/10/2010 – 10/31/2013
Bill and Melinda Gates Foundation $2,942,389 total /5 years
3D MICROFLUIDIC HUMAN LIVER MODELS FOR MALARIA DRUGS
The purpose is to develop an *in vitro* liver model predictive of *in vivo* outcomes.

PO001-0001020831 (Adams, PI) 08/22/11 – 08/21/12
The Charles Stark Draper Laboratory, Inc. $41,726 total
DEVELOPMENT OF A LIVER SINUSOID DEVICE FOR STUDYING *PLASMODIUM* EXOERYTHROCYTIC FORMS AND ANTIMALARIAL THERAPEUTICS
Doctoral fellowship – Steven Maher

PILOT STUDY PROPOSAL (Adams, PI) 01/28/2014 – 05/31/2014
PATH MVI $40,000 total /3 months
ASSAYS FOR EVALUATING PRE-ERYTHROCYTIC ANTIGENS USING A 3D LIVER MODEL
The purpose is to evaluate an *in vitro* liver model for evaluating anti-sporozoite antibody..

MMV 12/0076 (Adams, PI) 07/01/2012 – 06/30/2013
Medicines for Malaria Venture $50,000 total
CHEMICAL PROFILING OF P. FALCIPARUM GENETIC MUTANTS TO OPTIMIZE DRUG DEVELOPMENT I
The objective is to elucidate drug mechanisms of action and functionally annotate *P. falciparum* genome.

N66001-11-1-4174 (Deschenes, PI) 08/24/11 – 02/23/14
Defense Advanced Research Projects Agency $310,766 total
COUNTERMEASURES TO COMBAT PROTOZOAN PARASITES
The goal is to characterize a set of kinase and phosphatase targets specific for *T. gondii* and *Plasmodium;* yet are conserved across *Apicomplexa* parasites in general; toward the development of therapeutic agents against the *Apicomplexan* parasites.

RFP No. GBM-11-10-09 (Adams, PI) 01/28/2010 - 09/21/2013
Science Applications International Corp $ 693,916 total
EVALUATION OF PVDBPRII IMMUNOGENS FOR IMMUNOGENICITY AND PROTECTIVE EFFICACY TOWARD THE DEVELOPMENT OF AN ANTI-DBP VACCINE AGAINST *PLASMODIUM VIVAX*
A comparative evaluation of different PVRII vaccine designs.

CDDI Conference grant (Adams, PI) 02/01/12 – 01/31/13
USF System Internal Awards Program $9,996 total
NEW FRONTIERS OF DRUG DISCOVERY: ACADEMIC RESEARCH
Conference will provide doctoral students with the opportunity to present their infectious disease research as it relates to academic drug discovery.

R01 AI064478 supplement (Adams, PI) 08/01/2009 - 07/31/2012
NIH/NIAID $274,379 total
IN VITRO ASSAYS P. VIVAX DBP

The specific aims of this proposal are to characterize residues on the *Plasmodium vivax* Duffy binding protein responsible for antigenic character and sensitivity to neutralizing antibody inhibition.

F31 AI83053 (Adams, mentor) 08/01/2009-07/31/2011
NIH/NIAID $30,074 YR1 total
FUNCTIONAL CHARACTERIZATION OF A CONSERVED PHOSPHATASE OF PLASMODIUM FALCIPARUM

Organize on campus symposium and retreat for doctoral research program in Drug Discovery in Infectious Diseases.

Patents:

US Patent No.: 20,150,368,599 (December 24, 2015). "Design and hot embossing of macro and micro features with high resolution microscopy access". Inventors: S Maher, WM Sadi, AJ Taylor, HS Sun, D Kyle, J Adams. Invention relates to micro-feature devices and methods for fabricating micro-feature devices.

US Patent No.: 8,784,832 (July 22, 2014). "Synthetic antigen based on the ligand domain of the *Plasmodium vivax* Duffy binding protein". Inventors: JH Adams, FB Ntumngia, JL Schloegel, SJ Barnes, AM McHenry, P Chootong. Invention relates to a vaccine to prevent *Plasmodium vivax*.

US Patent Application No. 13/237,525 priority date March 29, 2009. "Method and composition using a dual specificity protein tyrosine phosphatase as an antimalarial drug target". Inventors: JH Adams, B Balu, SP Maher, C Campbell, R Manetsch. This invention relates to the treatment of malaria. Specifically, this invention relates to the discovery of a novel drug target for the treatment of malaria. Application abandoned by USF Division of Patents & Licensing, 2013.

US Patent 7932088 (April 26, 2011). High Efficiency Transformation of Plasmodium Falciparum by the Lepidopteran Transposon, *piggyBac*. Inventors: JH Adams, MJ Fraser, Jr., B Balu, DA Shoue. Invention relates to use of *piggyBac* as a tool for genetic manipulation of the *Plasmodium* genome.

US Patent No. 6,120,770 (September 19, 2000). Plasmodium Proteins Useful for Preparing Vaccine Compositions. Inventors: JH Adams, S Kappe and JP Dalton. Invention relates to *Plasmodium* MAEBL as it can be used as a vaccine for humans against malaria.

US Patent No. 5,541,292 (July 30, 1996). *Plasmodium vivax* and *Plasmodium knowlesi* Duffy receptor. Inventors: LH Miller, JH Adams, DC Kaslow, and X Fang. Invention relates to the Duffy binding protein of a *Plasmodium* parasite as it can be utilized as a vaccine for humans against malaria.

US Patent No. 5,198,347 (March 30, 1993; expired). DNA encoding *Plasmodium vivax* and *Plasmodium knowlesi* Duffy receptor. Inventors: LH Miller, JH Adams, DC Kaslow, and X Fang. Invention relates to the Duffy binding protein of a *Plasmodium* parasite as it can be utilized as a vaccine for humans against malaria.

Courses Taught (UND):

Undergraduate Level:

BIOS 201	General Biology
BIOS 40415	Medical & Veterinary Parasitology
BIOS 415L	Parasitology Lab
BIOS 418*	Molecular Genetics
BIOS 494	Directed Readings for Undergraduates
BIOS 499	Undergraduate Research

Graduate Level:

BIOS 510	Experimental Parasitology
BIOS 514	Field Parasitology Laboratory
BIOS 516	Physiological Chemistry of Animal Parasites
BIOS 60530	Immunobiology of Infectious Diseases/ Advanced Immunology
BIOS 580	Graduate Seminars

University committee service

Current University of South Florida.

Graduate Council & Policy subcommittee (2009-2011); USF Research Council (2011-current), 2013 Chair-elect.

Current College of Public Health.

Appointments for Promotion and Tenure, Chair of Faculty Search Committee for Computational Biologist, Tenure-track Assistant Professor.

Current Departmental committee memberships.

Appointments for Promotion and Tenure

Faculty Research Training Record

Postdoctorate level.

1. **M. Dennis Prickett**, NIH Postdoctoral fellows, 1991-1993. Undergraduate degree: Mississippi State University. Ph.D., University of Georgia. Research project: genetic analysis of polymorphisms of the *pkdbp* and *pvdbp*. Position after leaving: 3-year MRC Fellowship studying apical organelles of *Theileria* in the laboratory of Dr. Roger Hall, University of York, UK. Subsequent position: Research Scientist, Cancer Center, Milan, Italy.
2. **Naresh Singh**, M.Sc., Ph.D. Postdoctoral Research Assistant, 1/2001-6/2004 (R01 AI33656; UND 45742). Project: expression, purification and structural analysis of recombinant *Plasmodium falciparum* MAEBL ligand domains. Preceding appointment as Postdoctoral Fellow in the Malaria Research Group, International Centre for Genetic Engineering & Biotechnology, New Dehli, India. Current position, Research Associate, University California at San Francisco
3. **Jun Fu,** Ph.D. Postdoctoral Research Assistant (1/2002-3/2005)(R01 AI33656). Epitope mapping of *Plasmodium falciparum* MAEBL ligand domains. Preceding appointment as Research Fellow, Department of Medical Zoology, Nagoya City University Medical School, Japan
4. **Chitra Chauhan**, Postdoctoral Research Assistant, 2007, (R21 AI07088). Design and analysis of the effects of gene disruption in a genetic screen *Plasmodium falciparum*. PhD, 2005, Institute of Genomics and Integrative Biology, New Delhi, India, in Molecular Genetics. Deceased.
5. **Jesse Schloegel**, Postdoctoral Research Assistant, 2009 - 2010, (R01 AI064478). Identification and characterization of epitopes on the *Plasmodium vivax* Duffy binding protein using phage display. PhD, 2008, LaTrobe University, Bundoora, Australia.
6. **Bharath Balu**, Postdoctoral Research Assistant, 2006 - 2011, (R01 AI33656/ R21 AI07088). Design and apply a genetic screen to identify genes important in *Plasmodium falciparum* sporozoite development in the mosquito. PhD, 2006, University of Notre Dame.
7. **Saranya Siribal**, Postdoctoral Research Associate, 2010, (BMGF *in vitro* models project). Development of continuous *in vitro* blood-stage culture of *Plasmodium vivax*. Accepted position as Research Scientist, Mahidol Vivax Research Unit, Faculty of Tropical Medicine, Mahidol University. Accepted position at Western University, Thailand. PhD, 2010, Mahidol University, Bangkok Thailand.
8. **Wanlapa Roobsoong**, Postdoctoral Research Associate, 2010 - 2012, (BMGF *in vitro* models project). Development of continuous *in vitro* blood-stage culture of *Plasmodium vivax*. Accepted position as Research Scientist, Mahidol Vivax Research Unit, Faculty of Tropical Medicine, Mahidol University. PhD, 2010, Mahidol University, Bangkok Thailand.

9. **Rajeev Tyagi**, Postdoctoral Research Associate, 2011 - 2013, (R01 AI094973; BMGF *in vitro* models project). Development of humanized mouse models for experimental malaria research. PhD, 2011, Institut Pasteur, Paris, France.
10. **Anatoli Naumov**, Research Associate, 2009 - present, (BMGF *in vitro* models project). Optimizing expression of the *Plasmodium vivax* Duffy binding protein. PhD, 1985, Russian Academy of Sciences, Pushchino, Moscow Region, Russia.
11. **Francis Ntumngia**, Research Assistant Professor, 2013 – present (R21 AI107455-(PI); R01 AI064478); Postdoctoral Research Assistant/Associate, 2006 – 2013, (R01 AI064478; SAIC contract). Immunochemical characterization of conserved neutralizing epitopes on the *Plasmodium vivax* Duffy binding protein. PhD, 2006, Institut für Tropenmedizin der Universität Tübingen, Germany.
12. **Naresh Singh**, Research Associate, 2008 - 2015, (BMGF *in vitro* models project). Project: Analysis *Plasmodium falciparum* sporozoite development in wild type and genetic mutant parasite clones. Preceding appointment as Postdoctoral Research Associate, University California at San Francisco and University California, Davis. MSc, PhD.
13. **Shulin Xu**, Research Associate, 2012 - present, (R21AI098098; R21AI105328; R01AI094973). Genetic analysis of drug resistance and gene regulation in human malaria parasites. PhD, 1992, Graduate School of Chinese Academy of Agricultural Sciences, Beijing, China
14. **Jenna Oberstaller**, Postdoctoral scholar, 2012 - present, (F32AI112271 Fellowship; previously, R01AI094973 & BMGF *in vitro* models project). Comprehensive analysis of post-transcriptional regulatory mechanisms of *P. falciparum*; bioinformatics analysis of metabolic pathways of *P. vivax* to support development of long-term *in vitro* culture of blood-stage parasites. PhD, 2012, University of Georgia, Athens, Georgia.
15. **Richard Thomson-Luque**, Research Associate, 2014 – present (BMGF *in vitro* models project). Establishment of long-term continuous *in vitro* culture of blood-stage *P. vivax*. BMSc University of Málaga 200; MSc, University Autónoma of Barcelona, 2002.
16. **Sandhya Boyapalle**, Research Associate, 2015 – present. (R01AI094973 & BMGF *in vitro* models project). DVM, 1997, Acharya Ng Ranga Agricultural University, MSc, 1999, Tuskeegee University, PhD, 2005, Iowa State University. Analysis *Plasmodium falciparum* intraerythrocytic development in wild type and genetic mutant parasite clones; evaluation of *P. vivax* liver stages in humanized mouse model.

Predoctorate level.

1. **Stefan Kappe**, Doctoral student, 1992-1998. Undergraduate degree and Diploma at Universität Bonn. Dissertation title: "Molecular Cloning of *maebl* of *Plasmodium yoelii yoelii* and *Plasmodium berghei* ". Received BBMB Fellowship 93/94 academic year. Awards: LaRue Award for best student oral presentation AMCOP 1997; Outstanding Young Investigator Award, Molecular Parasitology Meeting 1997, Woods Hole; ASTMH Young Investigator Award, 1997 Annual Meeting. Initial position: Recipient of Bernard B. Levine Fellowship, NYU School of Medicine, Laboratory of Dr. Victor Nussenzweig; promoted to Assistant Professor, Department of Pathology, NYU School of Medicine;
   current position, Associate Member, Seattle Biomedical Research Institute, Seattle, Washington.
2. **Amy R. Noe**, Doctoral student, 1995 to 1999. Undergraduate degree San Diego State University. Dissertation topic: “Partial Characterization of the Protein MAEBL and its Use as a Molecular Marker for Organelle Biogenesis in the Malaria Parasite”. Predoctoral fellow on NIH Experimental Parasitology and Vector Biology Training Grant, 1/96-6/98. Initial position:

Senior Scientist/Project Manager, Allermed, San Diego, California;
Current position: Senior Biodefense Analyst, SAIC, San Diego, California.

3. **Pascal Michon**, Doctoral student, 1995 to 2001. Undergraduate degree at Université de Poitiers and graduate training at Université Montpellier. Dissertation topic: "Erythrocyte binding proteins of *Plasmodium vivax* and *Plasmodium knowlesi*: molecular and phyolgenetic approaches". Initial position: postdoctoral research fellow, The Welcome Trust Centre for the Epidemiology of Infectious Disease, Department of Zoology, University of Oxford, Laboratory of Prof. Karen P. Day. Current position: Senior Research Fellow, Papua New Guinea Institute for Medical Research, Madang PNG.
4. **Peter Linn Blair**, Doctoral student, 1996 to 2002. Undergraduate degree at Berea College. Dissertation topic: "Molecular cloning and characterization of the *Plasmodium falciparum maebl"*. Predoctoral fellow on NIH Experimental Parasitology and Vector Biology Training Grant, 8/96-6/99. Awards: Honorable Mention ASTMH Young Investigator Award, 1999 Annual Meeting; participant, Biology of Parasitism annual course at Marine Biology Laboratory, Woods Hole, MA. Initial position: National Research Council Associate, Naval Medical Research Medical Center, Forest Glen, MD; supervisor Dr. Daniel Carucci. Current position: Assistant Professor, Earlham College.
5. **Anita Vincent**, Doctoral student, 1999 – 2002, Undergraduate degree at St. Joseph's College (India), Graduate degree (M.Sc.) at Loyola University of Chicago. Dissertation topic: Expression and immunogenicity of *Plasmodium* erythrocyte binding proteins. Did not complete degree requirements.
6. **Eunita Ohas**, WHO Predoctoral Fellow and Visiting Doctoral student, 1999-2003 from Kenyatta University, Kenya. Dissertation topic: "Immunogenicity of the *Plasmodium falciparum* Erythrocyte Binding Antigen-175". PhD granted posthumously from Kenyatta University, 2003.
7. **Kelley VanBuskirk**, Doctoral student, 1997 to 2004. Undergraduate degree at University of North Carolina-Chapel Hill. Dissertation topic: "Partial immunological and functional characterization of the *Plasmodium vivax* Duffy binding protein". Awards: Recipient of a University of Notre Dame Luce Fellowship for Outstanding Woman Graduate Student; Honorable mention for best student poster presentation AMCOP 2000 & AMCOP2002. Current position: Post doc, Seattle Biomedical Research Institute
8. **Bharath Balu**, Doctoral student, 2000 – 2005, Undergraduate degree (India). Dissertation topic: "Genetic Analysis of *Plasmodium falciparum* using *piggyBac*-mediated insertional mutagenesis". Travel award to participate in 2002 Workshop on Transfection of Malaria Parasites, ICGEB, New Dehli, India. Current position: student in Physician Assistant Studies, Wake Forest School of Medicine.
9. **Fabián Ernesto Saenz**, Doctoral student, 2002 – 2008, Undergraduate degree (La Pontificia Universidad Católica del Ecuador), recipient of *Fulbright/Western Hemisphere Fellowship* and Coca Cola Award from University of Notre Dame Kellogg Institute. Dissertation topic: "Genetic analysis of the role of MAEBL for *Plasmodium falciparum* sporozoite invasion of the anopheline salivary gland". Travel award to participate in Workshop on Microarray applications with Malaria Parasites, Bangkok, Thailand. Current position: Assistant Professor, La Pontificia Universidad Católica del Ecuador.
10. **Sarita Mendonca**, Doctoral student, 2003 – 2008, Undergraduate degree (India), Dissertation topic: "Structural analysis of MAEBL ligand domains of *Plasmodium falciparum* sporozoites and partial characterization of its receptor on *Anopheles* salivary glands".

11. **Patchanee Chootong**, visiting 'sandwich' PhD student from Mahidol University (advisor: Prof. Rachanee Udomsangpetch), Department of Pathobiology. Identification and characterization of epitopes of *Plasmodium vivax* Duffy binding protein using immune sera. November, 2006 – August, 2008. (R01 AI064478)
12. **Amy McHenry**, Doctoral student, 2004 - 2009. Undergraduate degree at Union College, Lincoln, Nebraska. Dissertation topic: "Functional characterization of variant neutralizing epitopes on the *Plasmodium vivax* Duffy binding protein". Travel award to participate in Workshop on in vitro cultivation of *P. vivax*, Mae Sot, Thailand. Awards: Recipient of a University of Notre Dame Schmitt Fellowship; Best student presentation AMCOP 2005.
13. **Chris Campbell**, Doctoral student, 2007 – 2013. Undergraduate degree (B.Sc.) and Graduate degree (M.Sc.) at Andrews University. Berrien Springs, Michigan. Dissertation topic: functional characterization of conserved cell cycle protein tyrosine phosphatase in *P. falciparum*. Recipient of F31AI 83053. Current position: faculty position at Florida Hospital's Adventist University of Health Sciences in Orlando.
14. **Jennifer Sedillo**, Doctoral student, 2009 - 2014. Dissertation topic: understanding phopsphorylation cascades as a regulator of *Plasmodium falciparum* cell cycle. Recipient of USF Presidential Scholar award.
15. **Steven P. Maher**, Draper Lab Fellow Doctoral candidate, 2009 – 2014. Dissertation topic: development of *in vitro* liver stage models for human malaria parasites that predictive of *in vivo* outcomes. Recipient of Draper Laboratory Fellowship.
16. **Phaedra Thomas**, Doctoral student, 2008 – 2015. Undergraduate degree (B.S.) Albany State University and Graduate degree (M.S.) at University of South Florida. Dissertation topic: A forward genetic screen identifies factors associated with fever pathogenesis in *Plasmodium falciparum*.
17. **Miriam T. George**, Doctoral student, 2012 – 2015. Undergraduate degree (B.S.) Vellore Institute of Technology, Vellore, India and Graduate degree (MPH) at University of South Florida. Dissertation topic: Immunological characterization of Duffy binding protein of *Plasmodium vivax*.
18. **Alison Roth**, Doctoral student, 2015 – present. Undergraduate degree B.S.) Michigan State University and Graduate degree (MPH) at University of South Florida. Dissertation topic: Assessment of therapeutic targets of sporozoites of *Plasmodium vivax* and *P. falciparum.*

Visiting scientists:

G. Paul Curley, PhD, Visiting Postdoctoral researcher from Dublin City University, 1992. University College Dublin laboratory. Collaborative research project with John Dalton: Identification and cloning of the *ebl* homologues from rodent malaria parasites.

Takafumi Tsuboi, MD PhD, Visiting Scholar from Ehime University School of Medicine, Japan, 1992-1993. Ehime University School of Medicine. Collaborative research project: molecular epidemiology of *Plasmodioum vivax* and genetic analysis of polymorphisms in the *pvdbp* locus. Current position: Director & Professor, Ehime University Proteo-Science Center (PROS).

Bernadette Condon, PhD, Visiting Postdoctoral researcher from Dublin City University, 1995. University College Dublin. Collaborative research project: molecular cloning of the active metalloproteases from rodent malaria parasites.

Tonya Bonilla, visiting graduate student July 24-28, 2006 from University of Florida (advisor: Prof. John Dame), Dept. of Infectious Diseases and Pathology, Gainesville, Florida. Collaboration to develop *piggyBac* tools for malaria research (R21 AI07088).

Capt. Alyson Auliff, Visiting Fulbright Scholar, July 1, 2009 – June 30, 2010. Scientific Officer, Department of Drug Resistance and Diagnostics, Army Malaria Institute, Gallipoli Barracks, Enoggera (Brisbane) QLD. Analysis of *Plasmodium vivax* drug resistance genes by transgene expression in *Plasmodium falciparum.*

Hitoshi Otsuki, MD PhD, Visiting Scholar, April 1, 2011 – March 30, 2012. Scientific Officer, Tottori University, Faculty of Medicine, Department of Medical Zoology, Tottori, Japan. Analysis of *Plasmodium falciparum* gene regulation.

Capt. Alyson Auliff, PhD, Visiting Scientist, 2013. Scientific Officer, Department of Drug Resistance and Diagnostics, Army Malaria Institute, Gallipoli Barracks, Enoggera (Brisbane) QLD. Fulbright Scholar. Application of *piggyBac*-mediated transgenesis in *P. falciparum.*

Flora Kano, PhD, Visiting Scientist, 2013. Research Scientist from the Oswaldo Cruz Foundation, René Rachou Research Center, Malaria Laboratory in Belo Horizonte, Brazil. Collaboration studies with Luzia Carvalho on immunogenicity of PvDBP.

Maja Malmberg, PhD, 2014. Visiting Scientist from Swedish University of Agricultural Sciences. Molecular analysis of drug resistnace in malaria parasites. PhD, Karolinska Institutet, Stockholm Sweden. Forward genetic studies *piggyBac*-mutants in *P. falciparum.*

Letícia de Menezes Torres, 2014-2015. Visiting Doctoral student from Doutoranda em Ciências da Saúde, Centro de Pesquisas René Rachou/FIOCRUZ - Laboratório de Malária; Luzia Carvalho, major Professor. Collaboration studies with Luzia Carvalho on immunogenicity of *P. vivax* DBP and RBPs.

Kézia K. G. Scopel, PhD, Visiting Scientist 2014-2105. Professora Adjunta from the Instituto de Ciências Biológicas, Universidade Federal de Juiz de Fora. Advanced training in functional genomics of malaria parasites and *in vivo* humanized mouse models for malaria research.

Vishal Saxena, PhD, 2015, Visiting Scientist from Center for Biotechnology, Molecular Parasitology and System Biology Lab, Department of Biological Sciences, Birla Institute of Technology & Science, Pilani, 333031, Rajasthan, India. Molecular genetic and cell biological studies of *P. vivax.*

Plus 57 University of Notre Dame & University of South Florida undergraduate students, including three who graduated as an ND Outstanding Biology Major and two as Outstanding Honors Program Graduate in Science and four USF Honors students with thesis.

Refereed Publications:

MSc-related publications

1. Todd Jr KS, **Adams JH,** Hoogweg JH. (1978). The muskrat, *Ondatra zibethica*, as a host of *Taenia mustelae* in Illinois. *Journal of Parasitology*. **64**:523.
2. **Adams JH,** Levine ND, Todd Jr KS. (1981). *Eimeria* and *Sarcocystis* in raccoons in Illinois. *Journal of Protozoology*. **28**:221-222.
3. Blagburn BL, **Adams JH,** Todd Jr KS. (1982). First asexual generation of *Eimeria vermiformis* Ernst, Chobotar, and Hammond, 1971 in *Mus musculus*. *Journal of Parasitology*. **68**:1178-1180.

4. **Adams JH,** Todd Jr KS. (1983). Transmission electron microscopy of intracellular sporozoites of *Eimeria vermiformis* (Apicomplexa, Eucoccidiida) in the mouse. *Journal of Protozoology*. **30**:114-118.
5. Blagburn BL, **Adams JH,** Todd Jr KS, Warner KA. (1983). Prevalence of heartworm in dogs. A survey of southwestern Michigan and northern Indiana. *Modern Veterinary Practice*. **64**:811-814.
6. **Adams JH,** Todd Jr KS. (1984). Transmission electron microscopy of meront development of *Eimeria vermiformis* Ernst, Chobotar and Hammond, 1971, (Apicomplexa, Eucoccidiorida) in the mouse, *Mus musculus*. *Journal of Protozoology*. **31**:233-240.

PhD-related publications

7. Smith RD, Miranpuri GS, **Adams JH,** Ahrens E H (1985). *Borrelia theileri*: Isolation from ticks (*Boophilus microplus*) and tick-borne transmission between splenectomized calves. *American Journal of Veterinary Research*. **46**:1396-1398
8. Smith RD, Levy MG, Kuhlenschmidt MS, **Adams JH,** Rzechula DL, Hardt TA, Kocan KM. (1986). Isolate of *Anaplasma marginale* not transmitted by ticks. *American Journal of Veterinary Research*. **47**:127-129.
9. **Adams JH,** Smith RD, and Kuhlenschmidt, M.S. (1986). Identification of antigens of two isolates of *Anaplasma marginale*, using a western blot technique. *American Journal of Veterinary Research*. **47**:501-506.
10. Pang VF, **Adams JH,** Beasley VR, Buck WB, Haschek WM. (1986). Myocardial and pancreatic lesions induced by T-2 toxin, a Trichothecene mycotoxin, in swine. *Veterinary Pathology*. **23**:310-319.

Queensland Uni post doc publications

11. **Adams JH,** Monroy FG, East IJ, Dobson C. (1987). Surface and excretory/secretory antigens of *Nematospiroides dubius*. *Immunology and Cell Biology*. **65**:393-397.
12. **Adams JH,** East IJ, Monroy GF, Washington EA, Dobson C. (1987). Stage-specific antigens of *Nematospiroides dubius* Baylis, 1926 (Nematoda: Heligmosomoides). *Journal of Parasitology*. **73**:1164-1168.
13. **Adams JH,** Smith RD. (1988). Differential extraction of antigens of *Anaplasma marginale*. *American Journal of Veterinary Research*. **49**:257- 260.
14. **Adams JH,** Bushell G. (1988). The effect of protease inhibitors on *Eimeria vermiformis* invasion of cultured cells. *International Journal for Parasitology*. **18**:683-685.
15. **Adams JH,** East IJ, Monroy FG, Dobson C. (1988). Sex-specific antigens on the surface and in the secretions of *Nematospiroides dubius*. *International Journal for Parasitology*. **18:**999-1001.
16. **Adams JH,** Shiels IA, De Vos AJ (1989). Heterologous antibody responses of calves to *Anaplasma centrale* and *A. marginale*. *Veterinary Parasitology*. **31**:7-12.
17. Monroy FG, **Adams JH,** Dobson C, East IJ (1989). *Nematospiroides dubius*: influence of adjuvants on immunity in mice vaccinated with antigens isolated by affinity chromatography from adult worms. *Experimental Parasitology*. **68**:67-73.
18. Monroy FG, Dobson C, East IJ, **Adams JH.** (1989). Immunity in mice vaccinated with a molecular weight 60,000 glycoprotein secreted by adult *Nematospiroides dubius*. *International Journal for Parasitology*. **19**:71-76.
19. Monroy FG, **Adams JH,** Dobson C. (1989). Low molecular weight immunosuppressors secreted by adult *Nematospiroides dubius*. *International Journal for Parasitology*. **19**:125-127.

20. Monroy FG, Cayzer CJR, **Adams JH,** Dobson C. (1989). Proteolytic enzymes in excretory-secretory products from adult *Nematospiroides dubius*. *International Journal for Parasitology*. **19**:129- 131.
21. **Adams JH,** Bushell G. (1989). Changes in the cytoplasmic elements of cultured cells infected with *Eimeria vermiformis* sporozoites. *Journal of Protozoology*. **36**:131-136.
22. Monroy FG, **Adams JH,** East IJ, Dobson C. (1989). Excretory- secretory antigens from adult *Nematospiroides dubius*. *Immunology and Cell Biology*. **67**: 115-120.

NIH post doc publications

23. Good MF, Miller LH. Kumar S, Quakyi IA, Keister D, **Adams JH,** Moss B, Berzofsky JA, Carter R. (1988). A challenge for malaria vaccine development: limited immunological recognition of critical vaccine candidate antigens. *Science*. **242**:574-577.
24. Torii M, **Adams JH,** Miller LH, Aikawa M. (1989). Release of merozoite dense granules during erythrocyte invasion by *Plasmodium knowlesi*. *Infection and Immunity*. **57**:3230-3233.
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Independent faculty career publications by year

30. Prickett MD, Smarz T, **Adams JH.** (1994). Dimorphism and intergenic recombination within the microneme protein (MP-1) gene family of *Plasmodium knowlesi. Molecular and Biochemical Parasitology.* **63**: 37-48.
31. Tsuboi T, Kappe S, Al-Yaman F, Prickett MD, Alpers MP, **Adams JH.** (1994). Natural variation within the principal adhesion domain of the *Plasmodium vivax* Duffy binding protein. *Infection and Immunity*. **62:** 5581-5586. PMCID: PMC303305.

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32. Kolakovich KA, Ssengoba A, Wojcik K, Tsuboi T, Al-Yaman F, Alpers MP, **Adams JH.** (1996). *Plasmodium vivax*: favored gene frequencies of the merozoite surface protein-1 and the multiplicity of infection of in a malaria endemic region. *Experimental Parasitology*. **83**: 11-18.
33. Kappe SHI, **Adams JH.** (1996). Sequence analysis of the apical membrane antigen-1 (AMA-1) of *Plasmodium yoelii yoelii* and *Plasmodium berghei*. *Molecular and Biochemical Parasitology.* **78**: 279-283.

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49. Michon P, Stevens JR, Kaneko O, **Adams JH.** (2002). Evolutionary relationships of conserved cysteine-rich motifs in adhesive molecules of malaria parasites. *Molecular Biology and Evolution*, 19, 1128-42. PMID:12082132.

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56. Preiser P, Rénia L, Singh N, Balu B, Jarra W, Voza T, Kaneko O, Blair PL., Torii M, Landau I, **Adams JH.** (2004). MAEBL Antibodies against MAEBL ligand domains M1 and M2 inhibit sporozoite development in vitro. *Infection and Immunity*, 72, 3604-3608.
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components of the *Plasmodium falciparum* RhopH complex. *Molecular and Biochemical Parasitology*, 143:20-28. PMID:15953647.

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Update: April 11, 2023.