

# Jessica Carol Kissinger, Ph.D.

Email: [jkissing@uga.edu](mailto:jkissing@uga.edu)

URL's: <http://mango.ctegd.uga.edu/jkissingLab/index.html>

[http://www.genetics.uga.edu/people\\_bio\\_kissinger.html](http://www.genetics.uga.edu/people_bio_kissinger.html)

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## Current Position

Professor  
Department of Genetics  
Adjunct in Computer Science  
Center for Tropical and Emerging Global Diseases  
Director, Institute of Bioinformatics  
University of Georgia  
370B Paul D. Coverdell Center  
Athens, GA 30602  
Tel: 706-542-6562 FAX: 706-542-3582

## Education

1989-1995 Ph.D., Molecular, Cellular and Developmental Biology. Minor, Genetics.  
Indiana University, Bloomington, IN  
1985-1989 A.B. *cum laude*, University of Chicago, Chicago, IL  
1984-1985 George Washington University, Washington, DC

## Research/Professional Experience

2011 - Director, Institute of Bioinformatics, University of Georgia, Athens GA  
2012 - Professor, Department of Genetics, Adjunct in Computer Science, UGA  
2007-2012 Associate Professor, Department of Genetics, Adjunct in Computer Science, UGA  
2002-2007 Assistant Professor, Department of Genetics, Center for Tropical and Emerging Global Diseases, University of Georgia, Athens GA  
2000-2002 Lecturer, Computational Biology, University of Pennsylvania, Philadelphia, PA  
1998-2000 Post-doctoral Fellow, University of Pennsylvania, Philadelphia, PA  
1996-1998 Post-doctoral Fellow: Centro de Pesquisas René Rachou - FIOCRUZ, Belo Horizonte, Brazil  
1995-1996 Post-doctoral Fellow National Institutes of Health  
1989-1995 Doctoral thesis, Indiana University, Bloomington, IN  
1987-1989 Undergraduate honors thesis, University of Chicago, Chicago, IL

## Academic Awards and Fellowships

2009 Creative Research Medal, University of Georgia  
2008 National Associate, National Research Council, National Academies  
2003 Young Investigator Award, 7<sup>th</sup> International Congress on Toxoplasmosis  
1998-2000 NIH Computational Biology Post-doctoral Fellowship, University of Pennsylvania  
1997-1998 Recém Doutor Fellowship, CNPq, Brazil  
1995-1997 Sloan/NSF Postdoctoral Fellowship in Molecular Evolution  
1995-1995 Post-doctoral Fellowship, National Institutes of Health  
1993-1995 GAANN Fellowship, Indiana University  
1990-1993 National Institutes of Health Genetics Training Grant Appointment  
1990 Bayard Franklin Floyd Memorial Summer Fellowship, Indiana University  
1990 Sears Crowell Scholarship, Indiana University  
1989 A.B. *cum laude* University of Chicago (with special honors in biology)  
1988 Richter Grant, University of Chicago  
1988 Garber-Edmondson Summer Research Fellowship, University of Chicago  
1986-1989 Dean's List, University of Chicago

## Teaching Experience

### *Courses developed:*

GENE8940 Genome analysis – graduate seminar/Laboratory – University of Georgia

GENE4420L Bioinformatics and Modelling Laboratory – Undergraduate – University of Georgia

Métodos Modernos em sistemática (Modern Methods in Systematics) - graduate level intensive 2-month course in molecular systematics (taught in Brazil)

Biol536 A graduate level course in computational biology that serves as the core introduction to computational biology and genomics. Re-designed in 2000 to include more biology, computational laboratory exercises and final research projects – University of Pennsylvania

## Students Advised

### *Undergraduate Research Associates:*

Angel Smith, Jonathan Gardner, Fallon Hampton, Ariel Campbell, Issac Van Duys, Lela Lassiter, Deepa Raju, Mope Oluwadare, Zubin Mehta, Dianne Wellems, Jatan Patel, Jonathan Trebble-Greening, Shaneka Smalls, Parth Sehgal, Brynn Claypoole

### *Honor's Thesis Advisor:*

Ladson Gaddy

Erica Hall

Allyson Byrd

Katharine Korunes

*Member (past/present) of 27 external Ph.D. Thesis Committees in 6 UGA departments and institutes (Genetics, Cellular Biology, Plant Sciences, Microbiology, Infectious Diseases, Computer Science, Institute of Bioinformatics)*

*Member 7 Master's Thesis Committees at UGA (Entomology, Computer Science, Bioinformatics, Cellular Biology)*

### *Major Doctoral Advisor for:*

Nandita Mullanpudi – Graduated 2007

Chih-Horng Kuo (Co-advisor with Dr. Daniel Promislow) – Graduated 2008

Adhemar Zerlotini (Co-advisor with Dr. Guilherme Oliveira, Brazil) – Graduated 2009

Wenyuan Xiao 2008 – 2010

Jenna Oberstaller – Graduated 2012

Maryam Panahiazar 2008 – 2011

Raymond Nyasa 2010 – Visiting student from Cameroon

Sivaranjani Namasivayam 2010 – current

Ousman Mahmud 2011 - current

### *Post-doctoral Sponsor for:*

Dr. Jinling Huang (2002-2004) Present position – Assistant Professor Eastern Carolina

Dr. Adriana Andrade Oliveira (2005 – 2006) Present position – Programmer, Atlanta

Dr. Abhijeet Anil Bakre (2006 – 2008) Present position – Postdoctoral researcher, UGA

Dr. Sandeep Joseph (2008 – 2009) Present position – Postdoctoral researcher, Emory University

Dr. Gregorio Cordon (2008 – 2009) Present position – Postdoctoral researcher, Tufts University

Dr. Jeremy DeBarry (2008 – 2012)

Dr. Segun Fatumo (2010) Visiting researcher from Nigeria

Dr. Satomi Kato (2010 – 2011)

### *Sponsor for:*

Dr. Jeremy DeBarry, Assistant Research Scientist (2012 – current)

### *Courses or Workshops Taught:*

2012 Instructor, Biology of Parasitism Course, Juquehy, Brazil

2012 Instructor, Genomic Database Workshop, IV International *Giardia* and *Cryptosporidium* Conference, Wellington, New Zealand

2011 Instructor, Workshop on Mining and Utilizing Protist Genomics Data with the EuPathDB Family of Databases, 20<sup>th</sup> Latin American Congress on Parasitology and 25<sup>th</sup> Colombian Congress on Parasitology and Tropical Medicine, Bogotá, Colombia

2011 Instructor, Genomics in Infectious Diseases: A Public Tool Workshop, National University of Colombia, Bogotá, Colombia

2011 Instructor, EuPathDB Workshop, University of Quindio, Armenia, Colombia

2010 Instructor, PlasmoDB Workshop, XII Brazilian Meeting on Malaria Research, Ouro Preto, Brazil

2010 Instructor, EuPathDB Workshop, Shanghai Center for Bioinformatics, Shanghai, China

2010 Instructor, EuPathDB Workshop, International Coccidiosis Conference, Guangzhou, China

2010 Instructor, Caribbean Training Program on Bioinformatics, St. Augustine, Trinidad

2010 Co-Instructor, GENE8830, Advanced Topics in Molecular Genetics

2010 Co-Instructor, GENE8930, Advanced Molecular Genetics

2008 - 2010 Instructor, GENE4950 Senior Seminar

2007 Instructor, ApiDB Workshop, Belo Horizonte, Brazil

2007 Instructor, Institute of Bioinformatics Summer Workshop, UGA

2007 - 2009 Instructor, GENE3200, GENE3200H

2007 - 2009 Guest Lecturer, CBIO8500

2006 - 2012 Instructor, ApiDB/EuPathDB-Bioinformatics Resource Center Workshop, UGA

2006 - 2008 Guest Lecturer, BCMB8140

2006 - 2008 Guest Lecturer, BCMB8210

2005 Instructor, WHO/TDR Asian Course on Bioinformatics for Tropical Disease Research, ICGEB, New Delhi, India

2006 - 2010 Guest Lecturer, BINF 6001

2004 - 2010 Instructor, GENE4220L, Undergraduate Bioinformatics Laboratory, UGA

2003 - 2009 Instructor, GENE8940, Seminar in Genome Analysis, UGA

2004 Course director - (West African Biotechnology Workshop Series) WABWS 04 Workshop: Applied Malaria Bioinformatics, Ibadan, Nigeria

2003 - 2006 Instructor, GENE8950, Molecular Evolution

2003 Lecturer, "Bioinformatics – Writing Software for Genome Research", Cold Spring Harbor Laboratories, NY

2003 Co-Instructor, GENE 8950, Graduate course in Molecular Evolution, UGA

2002 - 2003 Facilitator, WHO/TDR Latin American Course on Bioinformatics for Tropical Disease Research, Sao Paulo, Brazil

2002 Instructor, "Applied Malaria Bioinformatics", Gulbenkian Training Programme in Bioinformatics, Oeiras, Portugal

2002 Instructor, WHO/TDR Asian Course on Bioinformatics for Tropical Disease Research, ICGEB, New Delhi, India

2000 - 2001 Course Assistant, "Bioinformatics - Writing Software for Genome Research", Cold Spring Harbor Laboratories, NY

2000 - 2001 Instructor, MR4-Malarial Bioinformatics Workshop, ATCC, Manassas, Virginia

2000 - 2009 Instructor, Biology of Parasitism - Bioinformatics Workshop, Woods Hole, MA

2000 Teaching Assistant, Workshop Database design and Development for Genomics Research, Madison, WI

2000 - 2002 Instructor, Biol536, graduate course in Computational Biology, U. of Pennsylvania

1999 Trainer, WHO Parasite Genomes Bioinformatics Workshop, Hinxton, England.

1999 Co-Instructor, Biol536, graduate course in Computational Biology, U. of Pennsylvania

1998 Instructor, "Modern Methods in Systematics" graduate course, FIOCRUZ, Brazil

1994 Guest Lecturer, graduate course "Development and Evolution", Indiana University

1990 Associate Instructor, undergraduate microbiology, Indiana University.

1989 Associate Instructor, undergraduate general biology, Indiana University

1989 Undergraduate Teaching Assistant, microbial genetics, University of Chicago

## Special Workshops/Training

- 2012 Management Development Program, Harvard University, Boston, MA  
1999 Genome Informatics Course, Cold Spring Harbor, NY.  
1996 International Workshop on Molecular Epidemiology,  
Centers for Disease Control, Atlanta, GA.  
1990 Molecular Evolution, Marine Biological Laboratory, Woods Hole, MA.

## Special Skills

Fluent speaker of Portuguese.

## Membership in Professional Societies

Sigma Xi • AAAS • Brazilian Society of Protozoology • International Society for Evolutionary Protistology • Society for Molecular Biology and Evolution • American Society for Microbiology • American Society for Tropical Medicine and Hygiene

## Meetings or Workshops Organized

Symposium (session) Organizer, Society for Molecular Biology and Evolution, July 7-11, 2013, Chicago, Illinois

Organizer, 7<sup>th</sup> Annual EuPathDB Workshop, funded by the National Institutes of Health. June 17-20, 2012, Athens, Georgia

Member, Scientific Committee, IV International *Giardia* and *Cryptosporidium* Conference, Wellington, New Zealand, February 2012

Organizer, 6<sup>th</sup> Annual EuPathDB Workshop, funded by the National Institutes of Health. June 12-15, 2011, Athens, Georgia

Organizer, 5<sup>th</sup> Annual EuPathDB Workshop, funded by the National Institutes of Health. June 6-9, 2010, Athens, Georgia

Organizer, (West African Biotechnology Workshop Series) Protozoan Pathogens Comparative Genomics Workshop, Ibadan, Nigeria, December 14-18, 2009

Organizer, "Getting the Most out of Bioinformatics Resources – Introduction to Resources that can Facilitate Your Research" Symposium, 58<sup>th</sup> Annual Meeting of the American Society of Tropical Medicine and Hygiene, Washington D.C., November 18-22, 2009

Member, Scientific Committee, and Organizer, "The Use of Genome Database Resources" session, III International *Giardia* and *Cryptosporidium* Conference, Terni, Italy, October 11-15, 2009

Organizer, 4<sup>th</sup> Annual EuPathDB Workshop, funded by the National Institutes of Health. June 7-10, 2009, Athens, Georgia

Organizer, 3rd Annual ApiDB Workshop, funded by the National Institutes of Health and Burroughs Wellcome Fund. June 8-11, 2008, Athens, Georgia.

Organizer, 1<sup>st</sup> French American Kavli Frontiers of Science Meeting, Roscoff, France, November 20-22, 2008

Organizer, 2nd Annual ApiDB Workshop, funded by the National Institutes of Health/University Pennsylvania, and Burroughs Wellcome Fund. June 3-6, 2007, Athens, Georgia.

Co-Organizer, American Society of Microbiology -2<sup>nd</sup> Pathogenomics Meeting. June 24-28, 2007 Halifax, Nova Scotia, Canada (Cancelled by ASM last minute)

Organizer, 1st Annual ApiDB Workshop, funded by the National Institutes of Health/University of Pennsylvania, and Burroughs Wellcome Fund. June 26-29, 2006, Athens, Georgia.

U.S. Co-chair, Organizing committee, 12th annual German-American Frontiers of Science (GAFoS) symposium, sponsored by the Alexander von Humboldt Foundation and the National Academy of Sciences, USA. June 2006, Germany

Member, Organizing committee, 11th annual German-American Frontiers of Science (GAFoS) symposium, sponsored by the Alexander von Humboldt Foundation and the National Academy of Sciences, USA. June 2-4, 2005, Irvine California.

Co-Organizer, American Society of Microbiology - Functional genomics and bioinformatics approaches to infectious disease research. October 6-9, 2004 Portland, Oregon

Member, Organizing committee, special NSF funded workshop on "Frontiers in Genomics: Insights into protist evolutionary biology". University of Iowa, May 19-21, 2004.

### **Professional Duties (National and International)**

#### ***Reviewer for the following Peer Reviewed Journals:***

Acta Tropica • Agricultural Research Service • American Journal of Tropical Medicine and Hygiene • Applied Bioinformatics • BioScience • BMC Bioinformatics • BMC Evolutionary Biology • BMC Genomics • Cellular Microbiology • Cellular and Molecular Life Science • Chemistry and Biology • Computational and Functional Genomics • Eukaryotic Cell • Evolution and Development • FEBS Letters • Folia Parasitologica • Genome Biology • Genome Research • Heredity • Infection and Immunity • International Journal of Parasitology • Journal of the College of Physicians and Surgeons Pakistan • Journal of Molecular Evolution • Journal of Parasitology • The Lancet • The Lancet Infectious Diseases • Molecular and Biochemical Parasitology • Molecular Biology and Evolution • Molecular Phylogenetics and Evolution • Molecular Microbiology • Nature • Nature Communications • Nucleic Acids Research • Parasitology • Parasite Immunology • Parasitology Research • Physiological Genomics • PLoS Computational Biology • PLoS Neglected Tropical Diseases • PLoS ONE • PLoS Pathogens • Proceedings of the National Academy of Sciences • Proceedings Pacific Symposium on Biocomputing • Proteomics • Science • Science Asia • Transactions of the Royal Society of Tropical Medicine and Hygiene • Trends in Parasitology

#### **Editorial Duties:**

Associate Editor for BMC Genomics (2009 – 2012)  
Deputy Section Editor, BMC Genomics Eukaryotic Microbes and Viruses Section (2012 – 2013)  
Member, Editorial Board of Academic Editors for PeerJ (2012 – present)

#### ***Reviewer/study section member for the following Granting Agencies:***

Ad Hoc Member NIH study section AARR-4 – Aids Related Research • Academy of Sciences of the Czech Republic • BPST- Conicyt- Government of Chile (3) • CDRF – U.S. Civilian Research and Development Foundation • Dana Lush Scholarship - Australian National Health and Medical Research Council • NIGMS03/NSF – Mathematical Biology • NIH- 2007/01 ZAI1 GSM-M (J1) (1) – Tropical Medicine Research Centers • NIH – 2007/ International Research in Infectious Diseases (3) • Wellcome Trust – United Kingdom (5) • World Health Organization • NSF Advances in Biological Informatics • NSF International Research Fellowship Program • NIH – 2008/Special Emphasis Panel • NIH – 2009/Special Emphasis Panels (2) and one Challenge grant • NIH – 2011/Special Emphasis Panel • NIH – 2012/PTHE section • National Research Foundation (South Africa)

#### **Study Section Chair**

Panel Chair – USDA NP 108 Panel 13 – Parasitology (2011) of the USDA, ARS, NP 108 Food Safety (Animal and Plant Products)

**Reviewer for Promotion and Tenure at the following institutions:**

Academica Sinica Taiwan • American Museum of Natural History • Purdue University • University of Massachusetts at Amherst

**Advisory Board Member:**

External Advisory Committee, Louisiana Biomedical Research Network, INBRE (2011 – Current)  
H3ABioNet Scientific Advisory Board (2012 – Current)  
EuPathDB Scientific Working Group (2010 – Current)  
*Plasmodium* Genome Database Advisory Committee (2004 – 2009)  
ApiDB Database Advisory Committee (2004 – 2009)  
NIH – Bioinformatics Resource Center Interoperability Working Group (2004 - 2009)  
Genomes for Eukaryotic Microbes Steering Committee (2004 – 2009)

**Working Group Member:**

NIH NIAID Scientific Working Group for Genomic Sequencing Centers for Infectious Diseases (GSCID) (2009 – Current)  
NIH NIAID - GSC-BRC Clinical MetaData Working Group (2012 – Current)  
NIH NIAID Data Sharing – DDWG (2012 – Current)

**Professional Duties (University and Departmental)**

Spr 2012 – Fall 2012	Member, Champions of 2020 Strategic Plan Committee
Fall 2011 – Current	Member, OVPR Research Communications Group
Fall 2011 – Current	Member, Faculty of Infectious Diseases Executive Council
Fall 2011 – Current	Member, IOB Executive Committee
Fall 2011 – 2012	Member, Search Committee for Georgia Advanced Computing Resource Center Director
Spr 2011	Member, CIO Search Committee
Fall 2011 – Current	Ex-Officio Member, Georgia Advanced Computing Resource Center Advisory Committee GACRC-AC
Spr 2010 – Current	Member, Center for Drug Discovery
Spr 2010	Member, Search Committee for Genetics Department Head
Fall 2009 – Spring 2012	Member, Curriculum Development Committee, Genetics Department
Fall 2008 – Spring 2011	Chair, Research Computing Advisory Committee
Fall 2008 – Spring 2011	Member, CIO Advisory Cabinet
Fall 2007 – Sept 2009	Chair, Undergraduate Affairs Committee, Genetics Department
Fall 2006 – Dec 2008	Chair, IOB Computing Committee
Fall 2007 – Fall 2008	Member, James L. Carmon Scholarship Selection Committee
Fall 2007 – Sept 2009	Member Executive Committee, Genetics Department
Fall 2007 – Current	Faculty sponsor, BIGSA, IOB Graduate Student Organization
Fall 2007 – 2008	Editor Department of Genetics Newsletter
Fall 2007	RCC – OVPR Committee to Establish Sustainable Research Computing
Spr 2007 – 2008	Program Committee for Computational and Systems Biology Symposium
Fall 2002 – 2007	Undergraduate Affairs Committee
Fall 2004 – 2005	RCC – High Performance Computer Selection Committee
Fall 2006 – 2008	Member, Research Computing Advisory Committee
Fall 2004 – May 2008	Institute of Bioinformatics Curriculum Development Committee
Spr 2005 – 2007	Genetics Web Site Development Committee
Fall 2005	Molecular Evolutionist Search committee
Jun 2003 – Mar 2004	Cellular Biology/CTEGD, Orkin Eminent Scholar search committee
Aug 2003 – Mar 2004	Department of Genetics – Evolutionary Geneticist search committee
Sept 2002 – Aug 2003	Institute of Bioinformatics Membership Committee
Sept 2003 – Aug 2003	Institute of Bioinformatics Fundraising Committee

## **CURRENT financial support**

NIH HHSN272201200031C, "An Integrated Approach to Understanding Host-Pathogen Interactions - The Malaria Host-Pathogen Interaction Center"

11/01/2012 – 9/29/2017, Role: Co-PI

Total Direct Costs for UGA = \$2,526,499

NIH HHSN272200900038C, "The Eukaryotic Pathogen Bioinformatics Resource Center"

10/01/2009 – 09/30/2014, Role: Co-PI

Total direct costs for UGA = \$3,051,700

NIH 2D43 TW007012, "Infectious Disease Genomics and Bioinformatics Training in Brazil"

09/26/2009 – 06/30/2014, Role: PI

Total direct costs = \$616,234

NIH 1 R01 GM093132, "Integrative Tools for Protozoan Parasite Research"

04/01/2010 – 03/31/2013, Role: Co-PI

Total Direct Costs for UGA = \$290,924

USDA/CSREES 2009-01550, "*Sarcocystis neurona* Genome Project"

09/01/2009 – 08/31/2013, Role: Co-PI

Total direct costs for UGA = \$104,369

Bill and Melinda Gates Foundation "TrypDB: A Bioinformatics Tool for Target Discovery Research on Trypanosomatid Parasites"

11/01/2008 – 10/31/2013, Role: Co-PI

Total direct costs for UGA = \$360,259

Burroughs Wellcome Fund – "Travel Assistance for Bioinformatics Training at UGA"

08/15/2011 - 08/1/2013, Role: PI

Total direct costs = \$10,000

## **(PAST support)**

NIH R01 AI068908, "Genome Evolution, Innovation and Host Adaptation in the Apicomplexa"

02/01/2007- 01/31/2013, Role: PI

Total direct costs = \$1,054,077

CDC/UGA Collaborative Seed Grant – "Development of Simple, Field-Usable Molecular Tools for the Diagnosis of Malaria"

01/01/2009 – 12/31/2010, Role: Co-PI

Total direct costs for UGA = \$50,000

USDA 0624492, "Genome Sequencing and Comparative Analysis of Coronaviruses"

09/01/2006-11/14/2010, Role: Co-PI

Total direct costs for UGA = \$12,000

NIH 5D43 TW007012, "Informatics Training for Brazilian Vector and Parasitic Diseases"

06/01/2004-06/30/2010, Role: PI

Total direct costs (5 years) = \$1,145,044

NIH R01 AI065246, "Informatics Analysis of *Cryptosporidium* Gene Expression"

05/01/2006 – 12/31/2009 PI: M. Rutherford, Role: Co-PI

Total direct costs = \$165,694

NIH Contract N01-AI-40037, "Integrated Databases for Apicomplexan Pathogens"

7/19/2004 – 9/30/2009, Role: Co-PI  
Total direct costs for UGA = \$2,341,650

NIH R01 AI058515, “PlasmoDB”  
03/01/2004 – 7/31/2009, Role: Co-PI  
Total direct costs for UGA = \$330,459

NIH Contract # HHSN26620040001C “*Cryptosporidium* ESTs”  
08/01/2007 – 10/31/2008  
Total direct costs for UGA = \$121,636

American Heart Association Career Development Award 0330338N, “Building a *Trypanosoma cruzi* Genome Resource: Integrating Diverse Genomic Datasets to Facilitate Basic Research”  
01/01/03 – 12/31/06, Role: PI  
Total direct costs = \$236,364 20% effort

Maryland Sea Grant/NOAA SA7528068-I, “Identification of Candidate Genes for Chemotherapeutic and/or Genetic Intervention against Dermo Disease Using Expression Sequence Tags (EST)”  
06/01/2004 – 5/31/2005, Role: Co-PI  
Total direct costs = \$6,794

PhRMA Foundation 0261168-01, “Pattern Finding and Phylogenetic Restriction in *Trypanosoma cruzi*”  
01/01/03 – 12/31/03, Role: PI  
Total direct costs = \$30,000

University of Georgia Research Foundation, “Did *Cryptosporidium parvum* contain a Plastid?”  
01/01/03 – 12/31/03, Role: PI  
Total direct costs = \$6,335

Sloan Foundation/National Science Foundation (BIR-9510803), “Evolution of *Plasmodium*”  
1995-1997  
\$80,000

FAPEMIG (Fundação de Amparo À Pesquisa do Estado de Minas Gerais) (CBS-944/97), “Estudo das Relações Evolutivas entre os Haemosporidia (Phylum: Apicomplexa) com ênfase no *Plasmodium* (Study of Evolutionary Relationships among Haemosporidia (Phylum: Apicomplexa) with emphasis on *Plasmodium*.”  
Awarded: 1997 \$22,722.66 Funds never received due to financial crisis in Brazil.

Sun Microsystems AEG hardware grant to equip bioinformatics training classroom.  
Grant Number EDUD-7824-020142-US 2001 \$53,222

## Patents

Rapid Malaria Diagnostic  
(Provisional patent filed, 9 November 2009) – not converted

Heterologous Protein Production Using the Twin Arginine Translocation Pathway  
US Patent Number: 7,447,595 B1, issued November 4, 2008

*Cryptosporidium parvum* bacterial thymidine kinase gene and uses thereof.  
(Provisional patent filed, 15 September 2003) – not converted

TATFIND V1.0 (2001) - Program to detect proteins that are secreted through the twin arginine pathway.  
(Provisional patent filed, US 60/364,877 15 March 2002)



## Publications (Software projects/URL sites)

AmoebaDB.org; MicrosporidiaDB.org; PlasmoDB.org; ToxoDB.org; TriTrypDB.org; CryptoDB.org; GiardiaDB.org; TrichDB.org; EuPathDB.org; OrthoMCLDB.org; SchistoDB.net \*\* In aggregate, EuPathDB web sites receive ~6.5M non-robot hits per month (a particularly useless statistic), from >10,000 unique users, in >100 countries (difficult to compile, as many users gain access via remote servers). The average user returns ~3.4 times per month. Annual bandwidth >Tb. Cumulative Google Scholar citations will exceed 5000 in early 2013.

## Peer Reviewed Publications (articles)

1. Jenna Oberstaller, Sandeep J. Joseph and Jessica C. Kissinger. Broad Trends of *Cryptosporidium parvum* Transcriptional Regulation Revealed by Upstream Sequence Analysis of 281 Genes Clustered by Expression Profile. (Submitted)
2. Naomi W. Lucchi, Jenna Oberstaller, Jessica C. Kissinger, Venkatachalam Udhayakumar. Using genomics to improve malaria diagnosis (in Press, Public Health Genomics)
3. J.C. Patel, Jenna Oberstaller, M. Xayavong, J. Narayanan, Jeremy D. DeBarry, Ganesh Srinivasamoorthy, L. Villegas, A.A. Escalante, A. DaSilva, David S. Peterson, John S. Barnwell, Jessica C. Kissinger, Venkatachalam Udhayakumar and Naomi W. Lucchi. (2013) Real-Time Loop-Mediated Isothermal Amplification (RealAmp) for the Species-Specific Identification of *Plasmodium vivax*. PLoS ONE 8(1): e54986. Doi:10.1371/journal.pone.0054986
4. Adhemar Zerlotini, Eric Aguiar, Fudong Yu, Huayong Xu, Yixue Li, Neil Young, Robin Gasser, Anna Protasio, Matt Berriman, David Roos, Jessica Kissinger, Guilherme Oliveira. (2012) SchistoDB: An Updated Resource for the Three Key Schistosomes of Humans. Nucleic Acids Research, 1-4 doi:10.1093/nar/gks1087
5. Cristina Aurrecochea, Ana Barreto, John Brestelli, Brian P. Brunk, Shon Cade, Ryan Doherty, Steve Fischer, Bindu Gajria, Xin Gao, Alan Gingle, Omar S. Harb, Mark Heiges, Sufen Hu, John Iodice, Jessica C. Kissinger, Eileen T. Kraemer, Wei Li, Deborah F. Pinney, Brian Pitts, David S. Roos, Ganesh Srinivasamoorthy, Christian J. Stoeckert Jr., Haiming Wang, Susanne Warrenfeltz. (2013) EuPathDB: The Eukaryotic Pathogen Database Nucleic Acids Research. 41 (D1): D684-D691. doi: 10.1093/nar/gks1113
6. Alok Dhamanaskar, Michael E. Cotterell, Chaitanya Guttula, John A. Miller, Jessica C. Kissinger, Jie Zheng, and Christian J. Stoeckert, Jr. (2012) Suggestions for Galaxy Workflow Design Using Ontologically Annotated Web Services. Formal Ontology in Information Systems – Proceedings of the Seventh International Conference, Volume 239, pp. 29-42.
7. Zhu-Hong Li, Javier G. De Gaudenzi, Vanina E. Alvarez, Haiming Wang, Jessica Kissinger, Alberto C. Frasch, Roberto Docampo. (2012) An 43-nt AU-rich Element in the 3'UTR Region of a Large Number of *Trypanosoma cruzi* mRNAs is Important for mRNA Stability in Intracellular Amastigotes. Journal of Biological Chemistry. doi:10.1074/jbc.M111.338699
8. Lucchi, N.W., Poorak, M., Oberstaller, J., DeBarry, J., Srinivasamoorthy, G., Goldman, I., Xayavong, M., DaSilva, A., Peterson, D.S., Barnwell, J., Kissinger, J.C., Udhayakumar, V. (2012) A new single-step PCR assay for the detection of the zoonotic malaria parasite *Plasmodium knowlesi*. PLoS ONE. 7(2): e31848. doi:10.1371/journal.pone.0031848
9. Y. Wang, H. Tang, J. D. DeBarry, X. Tan, J. Li, X. Wang, T. Lee, H. Jin, B. Marler, H. Guo, J.C. Kissinger and A. H. Paterson. (2012) MCScanX: a toolkit for detection and evolutionary analysis of gene synteny and collinearity. Nucleic Acids Research, 1-14. doi: 10.1093/nar/gkr1293

10. Jason E. Stajich; Todd Harris; Brian P. Brunk; John Brestelli; Steve Fischer; Omar S. Harb; Jessica C. Kissinger; Wei Li; Vishal Nayak; Deborah F. Pinney; Chris J. Stoeckert Jr; David S. Roos. (2011) FungiDB: an integrated functional genomics database for fungi. *Nucleic Acids Research*. doi: 10.1093/nar/gkr918
11. J. E. Phillips, M. W. Jackwood, E. T. McKinley, S. W. Thor, D. A. Hilt, N. D. Acevedo, S. M. Williams, J. C. Kissinger, A. H. Paterson, J. S. Robertson, C. Lemke. (2011) Changes in Nonstructural Protein 3 are Associated with Attenuation in Avian Coronavirus. *Virus Genes*,
12. Thor, S.W.; Hilt, D.A.; Kissinger, J.C.; Paterson, A.H.; Jackwood, M.W. (2011) Recombination in Avian Gamma-Coronavirus Infectious Bronchitis Virus. *Viruses*, 3, 1777-1799.
13. Guttula, Chaitanya, Alok Dhamanaskar, Rui Wang, John A. Miller, Jessica C. Kissinger, Jie Zheng and Christian J. Stoeckert, Jr., Enriching the Ontology for Biomedical Investigations (OBI) to Improve its Suitability for Web Service Annotations. In *Proceedings of the International Conference on Biomedical Ontology (ICBO) Buffalo, New York (July 2011)* pp. 246-248.
14. Wang, Rui, Chaitanya Guttula, Maryam Panahiazar, Haseeb Yousaf, John A. Miller, Eileen T. Kraemer and Jessica C. Kissinger, Web Service Composition using Service Suggestions In: *Proceedings of the 2011 IEEE International Workshop on Formal Methods in Services and Cloud Computing (FM-S&C ) in conjunction with the 2011 IEEE International Conference on Web Services (ICWS), Washington, DC (July 2011)* pp. 482-489.
15. Jessica C Kissinger and Jeremy DeBarry. (2011) Genome cartography: charting the apicomplexan genome. doi:10.1016/j.pt.2011.03.006 *Trends in Parasitology*, August 2011, Vol. 27, No. 8
16. Steve Fischer, Cristina Aurrecochea, Brian P. Brunk, Xin Gao, Omar S. Harb, Eileen T. Kraemer, Cary Pennington, Charles Treatman, Jessica C. Kissinger, David S. Roos and Christian J. Stoeckert. (2011) The Strategies WDK: a graphical search interface and web development kit for functional genomics databases. *DATABASE - The Journal of Biological Databases and Curation* doi: 10.1093/database/bar027
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## Publications (book chapters)

- Jeremy DeBarry, Segun Fatumo and Jessica C. Kissinger. (2013) The Apicomplexan Genomic Landscape - The Evolutionary Context of *Plasmodium*. In "Malaria Parasites: Comparative Genomics, Evolution and Molecular Biology," Editors, Jane M. Carlton, Susan L. Perkins and Kirk W. Deitsch ISBN: 978-1-908230-07-2 Publisher: Caister Academic Press
- Satomi Kato and JC Kissinger. (2012) *Cryptosporidium*: Comparative Genomics and Pathogenesis. in "Evolution of Virulence in Eukaryotic Microbes" Editors, David Sibley, Barbara J. Howlett, and Joseph Heitman, Wiley-Blackwell
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### **Published Abstracts, Commentary**

Balu, B., S. Maher, C. Chauhan, D. Shoue, J. Kissinger, M.J. Fraser and J.H. Adams. (2008) A whole-genome mutagenesis screen to identify genes important for *Plasmodium falciparum* bloodstage growth. *International Journal for Parasitology*. Vol 38 Suppl.: 51

Wang, Z., Gao, X., He, C., Miller, J.A., Kissinger, J.C., Heiges, M., Aurrecochea, C., Kraemer, E.T., Fischer, S., Stoeckert, C.J. (2006) Creating a Federation of Bioinformatics Databases in Oracle. From the Virginia Bioinformatics Institute at Virginia Tech (VBI) and The Jackson Laboratory's 9th Annual Computational Genomics Conference, Baltimore, Maryland.

Kissinger, J.C., W.E. Collins and T.F. McCutchan. (1997) *Plasmodium* parasites with quartan periodicities are not closely related to each other evolutionarily. *Mem. Inst. Oswaldo Cruz*. Vol 92 Suppl.:186

Butler, M and J.C. Kissinger. (1997) A Report from the Women in Evolution Conference. Posted February 4. <http://nextwave.sciencemag.org/cgi/content/full/1998/03/29/59?>

Kissinger, J.C. (1996) Evolutionary Origins of Human *Plasmodium* Species. *Mem. Inst. Oswaldo Cruz*. Vol 91 Suppl.:19

### **Invited Presentations**

- 2013 Keynote – The Malaria Host-Pathogen Interaction Center (MaHPIC): Computational Challenges Associated with Host-Pathogen Interaction Studies, International Society for Computational Biology/African Society for Bioinformatics and Computational Biology 2013 Africa Conference, Casablanca, Morocco
- 2012 Using Genomics to Design a Better Diagnostic Test for Malaria, Mississippi University for Women, Columbus, Mississippi
- 2012 Eukaryotic Pathogen Database, Jackson State University, Jackson, Mississippi
- 2012 Evolution of the Apicomplexan Genome, Program MBL-ICB-FAPESP Biology of Parasitism, Juquehy, Brazil
- 2012 Introduction to the EuPath DB Data Mining Resource, Program MBL-ICB-FAPESP Biology of Parasitism, Juquehy, Brazil
- 2012 Challenges and Opportunities Associated with Linking Immunoinformatics to Host-Pathogen Interactions, 3<sup>rd</sup> Immunoinformatics and Computational Immunology Workshop, Orlando, Florida
- 2012 Defining the *Cryptosporidium parvum* Transcriptional Regulatory Network, 5<sup>th</sup> International Conference on Anaerobic Protists, Los Angeles, California
- 2012 Confessions of a Data Junkie: What is a Biologist to Do? (Keynote address), 5<sup>th</sup> Louisiana Biomedical Research Network Computational Biology Workshop, Shreveport, Louisiana
- 2012 EuPathDB.org – An Integrated Omics and Isolate Platform for Eukaryotic Pathogens (presentation part of a bioinformatics-themed panel), International Conference on Emerging Infectious Diseases, Atlanta, Georgia
- 2012 Analysis of Gene Expression in *Cryptosporidium parvum*, International *Giardia* & *Cryptosporidium* Conference, Wellington, New Zealand
- 2011 Mining Integrated “Omics” and Ortholog Data to Develop Candidate Target Lists, International Conference on Global Challenges for New Drug Discovery against Tropical Parasitic Diseases, Riviera Maya, Mexico
- 2011 ToxoDB: An Integrated Genomic Database for the Study of *Toxoplasma* and *Neospora*, 20<sup>th</sup> Latin American Congress on Parasitology, 25<sup>th</sup> Colombian Congress on Parasitology and Tropical Medicine, Bogotá, Colombia
- 2011 Evolution of the Apicomplexan Genome, II Meeting on Parasitology Research, Federal University of Minas Gerais, Belo Horizonte, Brazil

- 2011 Keynote – Evolution of the Apicomplexan Genome, International Meeting on Malaria and Related Haemosporidian Parasites of Wildlife, Shepherdstown, WV
- 2011 "Omic" data integration and the role of databases in facilitating research, European Bioinformatics Institute, Hinxton, England
- 2011 "Omic" data integration and the role of databases in facilitating research, Bogotá, Colombia
- 2010 Making Sense of the Apicomplexan Genome: Synteny, Diagnostic Targets and Databases, LSU, Baton Rouge, LA
- 2010 59<sup>th</sup> Annual Meeting of the American Society for Tropical Medicine and Hygiene, PlasmoDB Update, Atlanta, GA
- 2010 International Coccidiosis Conference, Update on *Cryptosporidium* and *Sarcocystis* –Omics Datasets, Guangzhou, China
- 2010 International Coccidiosis Conference, EuPathDB, China
- 2010 12<sup>th</sup> Brazilian Meeting on Malaria Research, Development of Simple, Field-usable Molecular Tools for the Diagnosis of Malaria: The Applied Side of Genomics, Ouro Preto, Brazil
- 2010 Bioinformatics Resource Center Meeting, EuPathDB Postgenomic Data Update, Philadelphia, PA
- 2010 National Evolutionary Synthesis Center, Evolution of the Apicomplexan Genome: Where has all the Synteny Gone?, Durham, NC
- 2010 Global Health Network Meeting, Infectious Disease Genomics and Bioinformatics Training in Brazil, Bethesda, MD
- 2010 85<sup>th</sup> Annual Meeting of the American Society of Parasitologists, EuPathDB: A Eukaryotic Pathogen Database of Protist "Omics" Data, Colorado Springs, CO
- 2010 University of Georgia – Centers for Disease Control Research Forum, Development of Simple, Field-Usable Molecular Tools for the Diagnosis of Malaria, Atlanta, GA
- 2009 Jackson State University, The applied side of parasite genomics: Potential therapeutics and diagnostics, Jackson, MS
- 2009 Biology of Parasitism Course, How do I use all that data? Applications of Bioinformatics to Parasite research, MBL, Woods Hole, MA
- 2009 University of Texas at Arlington, Evolution of the apicomplexan genome, something borrowed, again and again, Arlington, TX
- 2009 Kinetoplastid Bioinformatics Strategic Planning Meeting, Introduction to TriTrypDB, Philadelphia, PA
- 2008 BRC6, Advances in User Interface Design, Deerfield Beach, FL
- 2008 A sneak peek at EuPathDB new developments, CTEGD Symposium 2008, Athens, GA
- 2008 X-Meeting, Data Integration: The Challenge (and Beauty) of Working in an "Omics World," Salvador, Bahia, Brazil
- 2008 ISEP Protist 2008, Evolution of the Apicomplexan Genome, Halifax, Nova Scotia, Canada
- 2008 Keynote -Translational & Transformative Bioinformatics Research, UNICEF/UNDP/World Bank/WHO-TDR Bioinformatics Workshop 2008, Abuja, Nigeria
- 2008 ICAP Taiwan - EuPathDB bioinformatics resources for anaerobic protists – a data mining and evolutionary approach to research, Taipei, Taiwan
- 2007 Introduction to NIH's Bioinformatics Resource Centers and the challenges of meaningful data integration in an "OMICS" world, IOB Brown Bag Bioinformatics Series, Athens, GA
- 2007 BRC5, Apicomplexan Isolates, Bethesda, MD
- 2007 Identification and functional characterization of *cis*-regulatory elements in Apicomplexan parasites, Department of Medical Parasitology, NYU, NY
- 2007 Interoperability and the Integration of Diverse Data Types: Strategies for the Future, Structural Genomics Consortium meeting, Toronto, Canada
- 2007 Omics, Omics everywhere, What is a parasitologist to do? Biology of Parasitism, MBL, Woods Hole, MA
- 2007 CryptoDB, International Giardia and Cryptosporidiosis Congress, Morelia, Mexico
- 2006 Evolution of Apicomplexan Parasite Genomes and Their Respective Databases. Indiana University, Bloomington, IN.
- 2006 Gene Transfer and Evolution of the Apicomplexan Genome. University of Chicago, Chicago, IL.
- 2006 Apicomplexan parasites: Perspectives on the evolution of their genomes and their genome databases. University of Toronto, Toronto, Ontario, Canada

- 2005 Infectious Disease and Data Integration: Defining the challenges, Exploring the Possibilities. First annual symposium on computational and systems biology, University of Georgia, Athens, GA
- 2005 Bioinformatics, Genomics, and Functional Genomics in Veterinary Science: Viewing the Terrain. Kansas State University, Manhattan, KS
- 2005 Intracellular and Horizontal Gene transfer in the Apicomplexa: The scope and functional Consequences. Duke University, Durham, NC
- 2005 Ok, we have the genome sequence, so now what? Roanoke College, Roanoke, VA.
- 2005 Data integration: Defining the Challenges, Exploring the Possibilities. Keynote Speech British Society of Parasitology, University of Nottingham, England
- 2005 Intracellular and Horizontal Gene transfer in the Apicomplexa: The scope and functional Consequences, Medical College of Georgia
- 2004 Using genomics to assess gene transfer in the Apicomplexa: The functional consequences. XX Annual meeting of the Brazilian Society of Protozoology, Caxambu, Brazil
- 2004 Using genomics to assess gene transfer in the Apicomplexa: The functional consequences. Centro de Pesquisas René Rachou/FIOCRUZ, Belo Horizonte, Brazil
- 2004 Data Integration, defining the challenges, exploring the possibilities. American Society of Microbiology - Functional genomics and bioinformatics approaches to infectious disease research. Portland, Oregon
- 2004 TcruziDB: A project update. Tri-Trypanosome International meeting, Seattle, Washington
- 2004 Horizontal and Intracellular gene transfer in the Apicomplexa : The scope and functional consequences – Genome evolution in microbial eukaryotes symposium, Society of protozoologists, Bryant College, Smithfield, RI
- 2004 Horizontal and Intracellular gene transfer in the Apicomplexa : The scope and functional consequences. Bernhard Nacht Institute of Tropical Medicine, Hamburg, Germany
- 2004 Genomes and databases: Computational approaches to determining the function of Apicomplexan organelles , Obafemi Awolowo University, Ile-Ife , Nigeria
- 2004 Genomes and databases: Computational approaches to determining the function of Apicomplexan organelles, College of Medicine, University of Ibadan, Ibadan, Nigeria
- 2004 Horizontal and Intracellular gene transfer in Apicomplexa – A phylogenomic perspective. IGERT Evolutionary Genomics conference, Tucson, AZ
- 2003 Phylogenomic Approaches to Drug Target Discovery in the Apicomplexa: Something Borrowed, Something Green, University of Memphis, Memphis, TN
- 2003 Genomes & Databases – PlasmoDB, the Plastid connection, NC State, Raleigh, NC
- 2003 Genomes & Databases: Computational Approaches to Determining the Function of the Apicomplexan Plastid. Center of Marine Biotechnology, University of Maryland, Baltimore, MD
- 2003 TcruziDB: An Integrated Genome Resource. Tri-Trypanosome Meeting, Hinxton, England
- 2003 Parasites and Their Hosts: Genomes and Databases. CTEGD Symposium Athens, GA
- 2002 Genomes & Databases: Computational Approaches to Determining the Function of the Apicomplexan Plastid. University of Maryland, College Park, MD.
- 2002 Apicomplexan genome databases: PlasmoDB and ToxoDB, Molecular Parasitology Meeting, Marine Biological Laboratories, Woods Hole, MA.
- 2002 A Computational Approach to Organellar Function – Mining Parasite Genomes for Nuclear-encoded Apicoplast Genes, Instituto Gulbenkian de Ciencia, Oerias, Portugal
- 2002 Completion of the *Plasmodium falciparum* Genome, The challenges that lay ahead. Gordon Conference, Biology of Host-Parasite Interactions, Newport, RI.
- 2002 Genomics in the post-genomics era - the challenge of data integration, UGA/SECSG/IBM Symposium on Structural Genomics and Bioinformatics, University of Georgia, Athens, GA
- 2001 A Computational Approach to Organellar Function - Mining Parasite Genomes for Nuclear-Encoded Apicoplast Genes, Washington University, St. Louis, MO.
- 2000 Mining Parasite Genomes for Nuclear Encoded Apicoplast Genes - A Computational Approach to Organellar Function, Emory University, Atlanta, GA
- 2000 Mining Parasite Genomes for Nuclear Encoded Apicoplast Genes - A Computational Approach to Organellar Function, University of Georgia, Athens, GA
- 2000 In search of nuclear-encoded apicoplast genes, mining the *Toxoplasma* and *Plasmodium* genomes. ATCC, Manassas VA.

- 1996 Evolutionary Origins of Human *Plasmodium* Species. XII Annual Reunion of the Brazilian Society of Protozoology. Caxambu, Brazil.
- 1996 From Microscopes to Molecules: The Evolution of Malaria. Women in Evolution Conference. University of Arkansas, Fayetteville AR.

### Select Presentations

- 2012 Sivaranjani Namasivayam, Sriveny Dangoudoubiyam, Jolanta Jaromczyk, Joshua Bridgers, Michelle Yeargan, Ablesh Gautam, Juber Patel, Tommy Bullock, Christopher L. Schardl, Jessica D. Kissinger, Daniel K. Howe, The *Sarcocystis neurona* Genome Project, Poster Presentation at the 23<sup>rd</sup> Annual Molecular Parasitology Meeting, Woods Hole, Massachusetts
- 2012 Jessica C. Kissinger and the EuPathDB Team, EuPathDB: Eukaryotic Pathogen Database Resources, Poster Presentation at the 5<sup>th</sup> International Conference on Anaerobic Protists
- 2012 Jeremy DeBarry and Jessica C. Kissinger, Location, Location, Location: Duplication, Evolutionary Innovation, and Cartography in Apicomplexan Genomes, Poster Presentation at 2012 meeting of the Society for Molecular Biology and Evolution, Dublin, Ireland
- 2012 Alok Dhamanaskar, John Miller, Michael E. Cotterell, Chaitanya Guttula, Yung Long Li, Jessica C. Kissinger, Jie Zheng, and Christian J. Stoeckert, Jr., Ontology Development and Usage for Protozoan Parasite Research, National Center for Biomedical Ontology Project Meeting, Palo Alto, California
- 2012 Allyson Byrd, Jeremy DeBarry, and Jessica C. Kissinger, Comparative Genomics of Ribosomal RNAs in Malaria Parasites: A Work in Progress, Oral and Poster Presentation at the Center for Undergraduate Research Opportunities Symposium, Athens, GA
- 2011 Cristina Aurrecochea, Brian P. Brunk, Steve Fischer, Xin Gao, Omar S. Harb, Mark Heiges, Jessica C. Kissinger, Eileen T. Kraemer, Cary Pennington, David S. Roos, Christian J. Stoeckert, Charles Treatman, and Susanne Warrenfeltz, Genomic Colocation: A New Option in the Strategies WDK to Combine Result Sets Using Relative Genomic Locations, Poster Presentation at the Genome Informatics Meeting, Cold Spring Harbor, NY
- 2011 Jeremy DeBarry, and Jessica C. Kissinger, Adapting Tools for the Comparative Genomics of Gene Repertoires, Distributions, and Functions in a Non-Model Phylum that Lacks Synteny, Poster Presentation at the Genome Informatics Meeting, Cold Spring Harbor, NY
- 2011 Juber Patel, Shaying Zhao, and Jessica C. Kissinger, DawgPack: Next-Generation Sequence Alignment and Analysis in the Cloud, Poster Presentation at the Genome Informatics Meeting, Cold Spring Harbor, New York
- 2011 Jenna Oberstaller, Yoanna Pumplova, Sandeep Joseph, Manuel Llinás, Jessica C. Kissinger. Defining the *Cryptosporidium parvum* ApiAP2 transcription factor network: Insight into ApiAP2 regulatory network evolution across the phylum Apicomplexa. 22<sup>nd</sup> Annual Molecular Parasitology Meeting, Woods Hole, MA
- 2011 Chaitanya Guttula, Alok Dhamanaskar, Rui Wang, John A. Miller, Jessica C. Kissinger, Jie Zheng, and Christian J. Stoeckert, Jr. Enriching the Ontology for Biomedical Investigations (OBI) to Improve its Suitability for Web Service Annotations. Poster Presentation at the International Conference on Biomedical Ontology, Buffalo, NY
- 2011 Jenna Oberstaller, Allison Demas, Jeremy DeBarry, Naomi W. Lucchi, Ganesh Srinivasamoorthy, Deborah Sumari, Abdunoor M. Kabanywany, Leopoldo Villegas, Ananias A. Escalante, S. Patrick Kachur, John W. Barnwell, David S. Peterson, Venkatachalam Udhayakumar, and Jessica C. Kissinger. Applied genomics: Data mining reveals species-specific malaria diagnostic targets more sensitive than the molecular gold standard. 21<sup>st</sup> Annual Molecular Parasitology/Vector Biology Symposium, Athens, GA
- 2010 Oberstaller, J., J. DeBarry, G. Srinivasamoorthy, A. Demas, N. Lucchi, V. Udhayakumar, J.C. Kissinger, Applied genomics to improve molecular malaria detection: *Plasmodium* subtelomeric regions harbor promising diagnostic targets, Poster Presentation at the 21<sup>st</sup> Annual Molecular Parasitology Meeting in Woods Hole, MA
- 2010 DeBarry J., J.C. Kissinger, Where Has The Apicomplexan Synteny Gone? Poster Presentation at the 21<sup>st</sup> Annual Molecular Parasitology Meeting in Woods Hole, MA
- 2010 Smalls, S. J.C. Kissinger, Detection of *Cryptosporidium* in *Bos indicus*, Poster Presentation at Research Experience for Undergraduates Poster Session, Athens, GA
- 2010 Oberstaller, J., N. Lucchi, A. Demas, J.C. Kissinger, V. Udhayakumar, Field-testing malaria diagnostics in Tanzania: Molecular detection using Loop-mediated Isothermal Amplification of

- DNA, Poster Presentation at the University of Georgia—Centers for Disease Control Research Forum, Atlanta, GA
- 2010 Fischer, S. B.P. Brunk, M. Heiges, J. Kissinger, W. Li, D. Pinney, D.S. Roos, C.J. Stoeckert, ReFlow: A reversible workflow for building and maintaining large functional genomics databases, Genome Informatics Meeting, Hinxton, UK
- 2010 DeBarry, J. and J.C. Kissinger, Genomes On The Move: Rearrangements In The Non-Model Apicomplexa, Presentation at the 20<sup>th</sup> Annual Molecular Parasitology/Vector Biology Symposium, Athens, GA
- 2009 Oberstaller, J. and J.C. Kissinger, Phylogenetic analysis and distribution of the plant-like ApiAP2 family of transcription factors in Alveolates. Poster Presentation at 20<sup>th</sup> Annual Molecular Parasitology Meeting, Woods Hole, MA
- 2009 Xiao, W., E. M. Hall and J. C. Kissinger, The Elusive Mitochondrial Genome of *Toxoplasma gondii*. Poster Presentation at 20<sup>th</sup> Annual Molecular Parasitology Meeting, Woods Hole, MA
- 2008 Karen E. Hermetz, Keith M. Woods, Jessica D. Kissinger and Steve J. Upton. A method to purify *in vitro* *Cryptosporidium parvum*. Poster presentation at 19<sup>th</sup> annual Molecular Parasitology Meeting, Woods Hole, MA.
- 2008 Zerlotini A., G.C. Oliveira and J.C. Kissinger. From genes to drug targets: Applications for parasitic organisms. Poster presentation at ISMB 2008, Toronto, Canada
- 2008 Zerlotini et al. Integration and use of *Schistosoma mansoni* genomic data for the discovery of candidate therapeutic targets. Poster presentation at ISMB 2008, Toronto, Canada
- 2007 Kuo, C-H. and J. Kissinger, Identification of Phylogenetically Informative Genes and the Biological Implications. Poster presentation at 17<sup>th</sup> Annual Molecular Parasitology and Vector Biology Symposium, Athens, GA
- 2007 Bakre et al., Identification of Small Nucleolar RNAs in the *Toxoplasma gondii* Genome. Poster presentation at 17<sup>th</sup> Annual Molecular Parasitology and Vector Biology Symposium, Athens, GA
- 2006 Mullapudi et al., Identification of Putative Regulatory Elements in *Cryptosporidium parvum* by de novo Pattern Finding. Poster presentation at 16th Annual Molecular Parasitology and Vector Biology Symposium, Athens, GA
- 2005 Kuo et al., Comparative Analysis of Gene Content in the Apicomplexa. Poster presentation at 15th Annual Molecular Parasitology and Vector Biology Symposium, Athens, GA
- 2005 Heiges et al., An Integrated Apicomplexan Parasite Genomics Database (APIDB). Poster presentation at 15th Annual Molecular Parasitology and Vector Biology Symposium, Athens, GA
- 2005 Mullapudi et al., *Toxoplasma* goes GAGA. Poster presentation at 15th Annual Molecular Parasitology and Vector Biology Symposium, Athens, GA
- 2005 Kuo, C.-H., A. Oliveira, and J. Kissinger. Phylogenomics done backwards, Let the genomes speak! Poster presentation at the University of Georgia Computational and Systems Biology Symposium, Athens, GA. Georgia Tech/ORNL International Conference on Bioinformatics, Atlanta, GA.
- 2004 Huang et al., 14<sup>th</sup> Annual Molecular Parasitology and Vector Biology Symposium, Athens, GA
- 2004 Luchtan et al., 14<sup>th</sup> Annual Molecular Parasitology and Vector Biology Symposium, Athens, GA
- 2003 Multiple gene transfers shape the nucleotide biosynthesis of *Cryptosporidium parvum*. Boris Striepen, Andrea A. Pruijssers, Li Catherine, Jinling Huang, Marc-Jan Gubbels, Nwakaso N. Umejiego, Lizbeth Hedstrom, Jessica C. Kissinger. Molecular Parasitology Meeting, Woods Hole, MA Sept. 2003 (Poster)
- 2003 Horizontal and Intracellular Gene Transfer in the Apicomplexa. Huang, J., Mullapudi, N., Kissinger, J. Molecular Parasitology Meeting, Woods Hole, MA Sept 2003 (Poster)
- 2003 Integrated genome databases for *Cryptosporidium parvum* and *Trypanosoma cruzi*. Puiu, D., Warade, C., Luchtan, M., Buck, G., Kissinger, J. Molecular Parasitology Meeting, Woods Hole, MA Sept. 2003 (Talk)
- 2003 Did *Cryptosporidium parvum* have an algal endosymbiont? Huang, J., Mullapudi, N., Gubbels, M., Buck, G., Abrahamsen, M., Striepen, B., Kissinger, J. Molecular Parasitology Meeting, Woods Hole, MA Sept. 2003 (Poster)
- 2003 The Apicomplexan Genome – Evolutionary Insights. Huang, J. and J.C. Kissinger. 7th International Congress on Toxoplasmosis. Tarrytown, NY May 2003
- 2003 Did *Cryptosporidium parvum* contain an apicoplast? CTEGD Symposium, Athens, GA (Poster)

- 2002 Mining genomic data: A look at *Plasmodium* and other Apicomplexan Parasites through the eyes of an Evolutionary Biologist, University of Pennsylvania, Philadelphia, PA
- 2000 Mining parasite genomes for nuclear-encoded apicoplast genes: What does the apicomplexan plastid do? ISEP XIII, České Budejovice, Czech Republic.
- 1999 Application of computational methods to identify nuclear-encoded apicoplast genes in *Toxoplasma gondii* and *Plasmodium falciparum*. Molecular Parasitology Meeting, Marine Biological Laboratories, Woods Hole, MA.
- 1997 *Plasmodium* parasites with quartan periodicities are not closely related to each other evolutionarily. XIII Annual Reunion of the Brazilian Society of Protozoology. Caxambu, Brazil.
- 1997 Species of *Plasmodium* with a quartan periodicity are not closely related evolutionarily. IV annual meeting of "post-graduate" students. Centro de Pesquisas René Rachou.
- 1997 15 years of "Lytic antibodies" a review culminating in the cloning of a possible target antigen. Centro de Pesquisas René Rachou.
- 1996 Evolution of Haemosporidia as inferred from analyses of SSU rRNA and CS protein. ISEP 11 (International Society for the Evolution of Protists) Cologne, Germany.
- 1996 Molecular Approaches to Understanding the Evolution of *Plasmodium* and other Haemosporida, René Rachou Research Institute, Belo Horizonte, Brazil.
- 1996 Evolution of *Plasmodium* (the causative agent of Malaria) and other Haemosporidia, Systematic Biology and Evolution Annual Meeting, St. Louis, MO.
- 1996 Molecular evolution applied to parasites: What can we learn:, Laboratory of Parasitic Diseases, National Institutes of Health, Bethesda, MD.
- 1995 Molecular Approaches to the Phylogeny of Malaria, University of Queensland, Brisbane Australia