Stanford

John Boothroyd

Burt and Marion Avery Professor of Immunology, Emeritus

Microbiology and Immunology

Curriculum Vitae available Online

CONTACT INFORMATION

- **Alternate Contact**

  Yen Chau - Administrative Associate

  Email yenc@stanford.edu

  Tel 650-498-7074

Bio

BIO

John Boothroyd, Ph.D., is the Burt and Marion Avery Professor of Immunology (Emeritus) in the Department of Microbiology and Immunology at Stanford University School of Medicine. For over 40 years, his group focused on dissecting the pathogenesis of parasitic infections, most notably Toxoplasma gondii. In addition to his research, he has also been heavily committed to undergraduate, graduate and post-doctoral training, including trainee professional development.

Dr. Boothroyd received his undergraduate degree in Cell, Molecular, and Developmental Biology from McGill University in Montreal, Canada, and his PhD in Molecular Biology from Edinburgh University in Scotland. He worked as a scientist in the Immunochemistry and Molecular Biology Department at Wellcome Research Laboratories, UK, before joining the Stanford faculty in 1982 as a member of the Department of Microbiology and Immunology. He was Department Chair from 1999-2002 and served as Senior Associate Dean for Research and Training in the School of Medicine from 2002-2005 and Associate Vice Provost for Graduate Education and Postdoctoral Affairs for the University from 2018-2024. Dr. Boothroyd has received various awards including being named a Burroughs Wellcome Scholar in Molecular Parasitology in 1986 and an Ellison Medical Foundation Scholar in Global Infectious Diseases in 2002. In 2008 he received the Leuckart Medal from the German Society for Parasitology and in 2016 he was elected to membership in the U.S. National Academy of Sciences. All of these awards reflect the creativity and hard work of the many staff, students and post-docs who have worked with him, over 30 of whom are now in independent faculty positions.

Dr. Boothroyd’s research interests have spanned from viruses such as bacteriophage T7 and Foot and Mouth Disease Virus through to protozoan parasites such as Trypanosoma brucei, the cause of African sleeping sickness, and Toxoplasma gondii, a serious pathogen in newborns and individuals who are immunocompromised. In 2025, Dr. Boothroyd closed his lab and transitioned to an Emeritus role at Stanford in order to take up a new position with Schmidt Science Fellows (SSF), an international postdoc training program operated as a partnership between Schmidt Sciences and the Rhodes Trust. In addition to chairing SSF's Academic Council and serving as Faculty Director, Dr. Boothroyd is heavily involved in the training and on-going mentoring of the >230 exceptional Fellows supported by SSF.

ACADEMIC APPOINTMENTS

- Emeritus Faculty, Acad Council, Microbiology and Immunology
- Member, Bio-X
- Member, Maternal & Child Health Research Institute (MCHRI)

ADMINISTRATIVE APPOINTMENTS

- Associate Vice Provost for Graduate Education and Postdoctoral Affairs, Stanford University, (2018-2024)
- Associate Vice Provost for Graduate Education, Stanford University, (2008-2018)
- Senior Associate Dean for Research and Training, Stanford University School of Medicine, (2003-2005)
- Senior Associate Dean for Research, Stanford University School of Medicine, (2002-2003)
- Chair, Dept. Microbiology and Immunology, Stanford University School of Medicine, (1999-2002)

HONORS AND AWARDS

- Councilor, National Academy of Sciences USA (2021-2024)
- C.C. and Alice Wang Award in Molecular Parasitology, American Society for Biochemistry and Molecular Biology (2021)
- Member, National Academy of Sciences USA (2016)
- Burt and Marion Avery Professor of Immunology, Stanford University (2015)
- Leuckart Medal, German Society for Parasitology (2008)
- Fellow, American Academy of Microbiology (2007)
- Senior Scholar in Global Infectious Diseases, Ellison Medical Foundation (2002-2006)
- Bass University Fellow in Undergraduate Education, Stanford University (2002)
- Merit Award, NIH (1994-2004)
- Scholar Award in Molecular Parasitology, Burroughs Wellcome Fund (1986-1991)
- Overseas Research Scholarship, Royal Commission for the Exhibition of 1851 (1976-1979)
- Sir Arthur Sims Memorial Scholarship, Royal Society of Canada (1976-1978)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Chair, Academic Council, Schmidt Science Fellows (2023 - present)
- Chair, C.C. and Alice Wang Award Selection Committee, American Society for Biochemistry and Molecular Biology (2022 - 2025)
- Deputy Chair, Academic Council, Schmidt Science Fellows (2022 - 2023)
- Member, Governing Council, National Academy of Sciences (2021 - 2024)
- Member, Board of Directors, San José State University Research Foundation (2020 - 2024)
- Member, Academic Council, Schmidt Science Fellows (2019 - 2022)
- Member, Committee on Addressing the Underrepresentation of Women in STEMM, National Academies of Sciences, Engineering and Medicine (2018 - 2019)
- Member, Committee on Next Generation Researchers Initiative, National Academies of Sciences, Engineering and Medicine (2016 - 2018)
- Chair, Advisory Panel on Pathogenesis of Infectious Diseases, Burroughs Wellcome Fund (2013 - 2016)
- Chair, Advisory Panel on Molecular Parasitology, Burroughs Wellcome Fund (1999 - 2001)
- Chair, Gordon Conference on Parasitism, Gordon Research Conferences (1999 - 1999)
- Director, Summer Course on Biology of Parasitism, Marine Biological Laboratory (1991 - 1993)

PROFESSIONAL EDUCATION

- Ph.D., Edinburgh University , Molecular Biology (1979)
- B.Sc. (Hons), McGill University , Cell, Mol. and Devel. Biology (1975)

LINKS

- My group's web site: http://boothroydlab.stanford.edu/

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Studies on the cell and molecular biology of parasitic protozoa are critically important for two reasons; first, these organisms are major pathogens of humans and animals and, second, they have proven to be a source of some remarkable phenomena that have challenged much of the dogma thought to be universal in eukaryotic biology. From 1982-2025, our lab focused on the host-parasite interaction of two protozoan parasites, Trypanosoma brucei and Toxoplasma gondii. Each has its own features that made them interesting to the scientist and both are major pathogens, trypanosomes being the cause of sleeping sickness in Africa and Toxoplasma being a major opportunistic pathogen of AIDS patients. As of, 1998, however, we focused our entire effort on Toxoplasma because of its growing importance and our results developing this system for modern genetic analysis (we now have a full genetic "toolbox" for this intracellular parasite including a genetic map, efficient genetic transformation and gene knock-out).

The major areas where the lab was focused on prior to shutting down were:

(i) Intracellular parasitism: how does this parasite attach, invade and reproduce within virtually any nucleated cell.
(ii) Protein trafficking; how are proteins destined for novel secretory organelles specifically targeted and, ultimately, injected into the host cell during invasion?
(iii) Developmental biology; what genes are crucial for asexual development from the actively dividing to the latent form of the parasite and what are the cis- and trans-elements that control that expression.
(iv) Host-pathogen interaction: what changes occur in the host cell in response to infection?
(v) Pathogenesis: what properties make certain strains more virulent than others?

Teaching

COURSES

2024-25

- Preparing for Faculty Careers: EDUC 343C (Spr)

2023-24

- Understanding the Factors that Lead to Pandemics and Their Impact on Spanish and World History: OSPMADRD 26 (Spr)

2022-23

- Preparing for Faculty Careers: EDUC 343C, MI 343C (Spr)

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Microbiology and Immunology (Phd Program)

Publications

PUBLICATIONS

- **In vitro growth of Toxoplasma gondii tachyzoites on different host cell lines selects for changes in efficiency of invasion and parasite surface antigen gene expression** *FEMS MICROBES*
  Naor, A., Boothroyd, J.
  2026; 7: xtag006

- **Emergent actin flows explain distinct modes of gliding motility** *NATURE PHYSICS*
  Hueschen, C. L., Segev-Zarko, L., Chen, J., Legros, M. A., Larabell, C. A., Boothroyd, J. C., Phillips, R., Dunn, A. R.
  2024

- **Cryogenic electron tomography reveals novel structures in the apical complex of Plasmodium falciparum.** *mBio*
  Sun, S. Y., Segev-Zarko, L., Pintilie, G. D., Kim, C. Y., Staggers, S. R., Schmid, M. F., Egan, E. S., Chiu, W., Boothroyd, J. C.
  2024: e0286423

- **Cryo-electron tomography with mixed-scale dense neural networks reveals key steps in deployment of Toxoplasma invasion machinery.** *PNAS nexus*
  Segev-Zarko, L. A., Dahlberg, P. D., Sun, S. Y., Pelt, D. M., Kim, C. Y., Egan, E. S., Sethian, J. A., Chiu, W., Boothroyd, J. C.
  2022; 1 (4): pgac183

- **Cryo-ET of Toxoplasma parasites gives subnanometer insight into tubulin-based structures.** *Proceedings of the National Academy of Sciences of the United States of America*
  Sun, S. Y., Segev-Zarko, L., Chen, M., Pintilie, G. D., Schmid, M. F., Ludtke, S. J., Boothroyd, J. C., Chiu, W.
  2022; 119 (6)

- **Proximity-Labeling Reveals Novel Host and Parasite Proteins at the Toxoplasma Parasitophorous Vacuole Membrane.** *mBio*
  Cygan, A. M., Jean Beltran, P. M., Mendoza, A. G., Branon, T. C., Ting, A. Y., Carr, S. A., Boothroyd, J. C.
  2021: e0026021

- **Coimmunoprecipitation with MYR1 Identifies Three Additional Proteins within the Toxoplasma gondii Parasitophorous Vacuole Required for Translocation of Dense Granule Effectors into Host Cells.** *mSphere*
  Cygan, A. M., Theisen, T. C., Mendoza, A. G., Marino, N. D., Panas, M. W., Boothroyd, J. C.
  2020; 5 (1)

- **A single-parasite transcriptional atlas of Toxoplasma gondii reveals novel control of antigen expression.** *eLife*
  Xue, Y., Theisen, T. C., Rastogi, S., Ferrel, A., Quake, S. R., Boothroyd, J. C.
  2020; 9

- **Identification of a novel protein complex essential for effector translocation across the parasitophorous vacuole membrane of Toxoplasma gondii** *PLOS PATHOGENS*
  Marino, N. D., Panas, M. W., Franco, M., Theisen, T. C., Naor, A., Rastogi, S., Buchholz, K. R., Lorenzi, H. A., Boothroyd, J. C.
  2018; 14 (1): e1006828

- **A Suite of Eight Toxoplasma gondii Effectors Cooperates to Activate the Non-canonical NF-κB Pathway.** *bioRxiv : the preprint server for biology*
  Berg, K., Panas, M., Kurup, S. P., Boothroyd, J. C., Rosenberg, A.
  2026

- **Emergent actin flows explain distinct modes of gliding motility.** *Nature physics*
  Hueschen, C. L., Segev-Zarko, L. A., Chen, J. H., LeGros, M. A., Larabell, C. A., Boothroyd, J. C., Phillips, R., Dunn, A. R.
  2024; 20 (12): 1989-1996

- **Toxoplasma protein export and effector function.** *Nature microbiology*
  Seizova, S., Ferrel, A., Boothroyd, J., Tonkin, C. J.
  2024

- **Host MOSPD2 enrichment at the parasitophorous vacuole membrane varies between Toxoplasma strains and involves complex interactions.** *mSphere*

Ferrel, A., Romano, J., Panas, M. W., Coppens, I., Boothroyd, J. C.
2023: e0067022

- **Actin self-organization in gliding parasitic cells**
Hueschen, C. L., Zarko, L., Chen, J., LeGros, M., Larabell, C. A., Boothroyd, J. C., Phillips, R., Dunn, A. R.
CELL PRESS.2023: 5A

- **Emergent actin flows explain distinct modes of gliding motility**
Hueschen, C. L., Zarko, L., Chen, J., LeGros, M. A., Larabell, C. A., Boothroyd, J. C., Phillips, R., Dunn, A. R.
AMER SOC CELL BIOLOGY.2023: 1160

- **Transcriptional signatures of clonally derived Toxoplasma tachyzoites reveal novel insights into the expression of a family of surface proteins.** *PloS one*
Theisen, T. C., Boothroyd, J. C.
2022; 17 (2): e0262374

- **Seizing control: how dense granule effector proteins enable Toxoplasma to take charge.** *Molecular microbiology*
Panas, M. W., Boothroyd, J. C.
2021

- **Toxoplasma Uses GRA16 To Upregulate Host c-Myc.** *mSphere*
Panas, M. W., Boothroyd, J. C.
2020; 5 (3)

- **Differential Impacts on Host Transcription by ROP and GRA Effectors from the Intracellular Parasite Toxoplasma gondii.** *mBio*
Rastogi, S., Xue, Y., Quake, S. R., Boothroyd, J. C.
2020; 11 (3)

- **What a Difference 30Years Makes! A Perspective on Changes in Research Methodologies Used to Study Toxoplasma gondii.** *Methods in molecular biology (Clifton, N.J.)*
Boothroyd, J. C.
2020; 2071: 1–25

- **Effectors produced by rhoptries and dense granules: an intense conversation between parasite and host in many languages** *TOXOPLASMA GONDII: THE MODEL APICOMPLEXAN-PERSPECTIVES AND METHODS, 3RD EDITION*
Boothroyd, J. C., Hakimi, M.
edited by Weiss, L. M., Kim, K.
2020: 789–806

- **Translocation of effector proteins into host cells by Toxoplasma gondii.** *Current opinion in microbiology*
Rastogi, S., Cygan, A. M., Boothroyd, J. C.
2019; 52: 130–38

- **Translocation of Dense Granule Effectors across the Parasitophorous Vacuole Membrane in Toxoplasma-Infected Cells Requires the Activity of ROP17, a Rhoptry Protein Kinase.** *mSphere*
Panas, M. W., Ferrel, A., Naor, A., Tenborg, E., Lorenzi, H. A., Boothroyd, J. C.
2019; 4 (4)

- **Toxoplasma Controls Host Cyclin E Expression through the Use of a Novel MYR1-Dependent Effector Protein, HCE1.** *mBio*
Panas, M. W., Naor, A., Cygan, A. M., Boothroyd, J. C.
2019; 10 (2)

- **Erratum for Franco et al., "A Novel Secreted Protein, MYR1, Is Central to Toxoplasma's Manipulation of Host Cells".** *mBio*
Franco, M., Panas, M. W., Marino, N. D., Lee, M. W., Buchholz, K. R., Kelly, F. D., Bednarski, J. J., Sleckman, B. P., Pourmand, N., Boothroyd, J. C.
2018; 9 (5)

- **A Toxoplasma gondii locus required for the direct manipulation of host mitochondria has maintained multiple ancestral functions** *MOLECULAR MICROBIOLOGY*
Blank, M. L., Parker, M. L., Ramaswamy, R., Powell, C. J., English, E. D., Adomako-Ankomah, Y., Pernas, L. F., Workman, S. D., Boothroyd, J. C., Boulanger, M. J., Boyle, J. P.
2018; 108 (5): 519–35

- **Mitochondria Restrict Growth of the Intracellular Parasite Toxoplasma gondii by Limiting Its Uptake of Fatty Acids** *CELL METABOLISM*
  Pernas, L., Bean, C., Boothroyd, J. C., Scorrano, L.
  2018; 27 (4): 886-+
- **MYR1-Dependent Effectors Are the Major Drivers of a Host Cell's Early Response to Toxoplasma, Including Counteracting MYR1-Independent Effects** *MBIO*
  Naor, A., Panas, M. W., Marino, N., Coffey, M. J., Tonkin, C. J., Boothroyd, J. C.
  2018; 9 (2)
- **Toxoplasma gondii infection triggers chronic cachexia and sustained commensal dysbiosis in mice.** *PloS one*
  Hatter, J. A., Kouche, Y. M., Melchor, S. J., Ng, K., Bouley, D. M., Boothroyd, J. C., Ewald, S. E.
  2018; 13 (10): e0204895
- **mRNA pseudouridylation affects RNA metabolism in the parasite Toxoplasma gondii** *RNA*
  Nakamoto, M. A., Lovejoy, A. F., Cygan, A. M., Boothroyd, J. C.
  2017; 23 (12): 1834–49
- **MAF1b Binds the Host Cell MIB Complex To Mediate Mitochondrial Association.** *mSphere*
  Kelly, F. D., Wei, B. M., Cygan, A. M., Parker, M. L., Boulanger, M. J., Boothroyd, J. C.
  2017; 2 (3)
- **An in vitro model of intestinal infection reveals a developmentally regulated transcriptome of Toxoplasma sporozoites and a NF-kappa B-like signature in infected host cells** *PLOS ONE*
  Guiton, P. S., Sagawa, J. M., Fritz, H. M., Boothroyd, J. C.
  2017; 12 (3)
- **Toxoplasma DJ-1 Regulates Organelle Secretion by a Direct Interaction with Calcium-Dependent Protein Kinase 1.** *mBio*
  Child, M. A., Garland, M., Foe, I., Madzelan, P., Treeck, M., van der Linden, W. A., Oresic Bender, K., Weerapana, E., Wilson, M. A., Boothroyd, J. C., Reese, M. L., Bogyo, M.
  2017; 8 (1)
- **Toxoplasma growth in vitro is dependent on exogenous tyrosine and is independent of AAH2 even in tyrosine-limiting conditions.** *Experimental parasitology*
  Marino, N. D., Boothroyd, J. C.
  2017
- **Toxoplasma DJ-1 Regulates Organelle Secretion by a Direct Interaction with Calcium-Dependent Protein Kinase 1** *MBIO*
  Child, M. A., Garland, M., Foe, I., Madzelan, P., Treeck, M., van der Linden, W. A., Bender, K. O., Weerapana, E., Wilson, M. A., Boothroyd, J. C., Reese, M. L., Bogyo, M.
  2017; 8 (1)
- **A Novel Secreted Protein, MYR1, Is Central to Toxoplasma's Manipulation of Host Cells.** *mBio*
  Franco, M., Panas, M. W., Marino, N. D., Lee, M. W., Buchholz, K. R., Kelly, F. D., Bednarski, J. J., Sleckman, B. P., Pourmand, N., Boothroyd, J. C.
  2016; 7 (1)
- **Not a Simple Tether: Binding of Toxoplasma gondii AMA1 to RON2 during Invasion Protects AMA1 from Rhomboid-Mediated Cleavage and Leads to Dephosphorylation of Its Cytosolic Tail.** *mBio*
  Krishnamurthy, S., Deng, B., del Rio, R., Buchholz, K. R., Treeck, M., Urban, S., Boothroyd, J., Lam, Y., Ward, G. E.
  2016; 7 (5)
- **Local admixture of amplified and diversified secreted pathogenesis determinants shapes mosaic Toxoplasma gondii genomes.** *Nature communications*
  Lorenzi, H., Khan, A., Behnke, M. S., Namasivayam, S., Swapna, L. S., Hadjithomas, M., Karamycheva, S., Pinney, D., Brunk, B. P., Ajioka, J. W., Ajzenberg, D., Boothroyd, J. C., Boyle, et al
  2016; 7: 10147-?
- **An aspartyl protease defines a novel pathway for export of Toxoplasma proteins into the host cell** *ELIFE*
  Coffey, M. J., Sleebs, B. E., Uboldi, A. D., Garnham, A., Franco, M., Marino, N. D., Panas, M. W., Ferguson, D. J., Enciso, M., O'Neill, M. T., Lopaticki, S., Stewart, R. J., Dewson, et al
  2015; 4

- **Internalization and TLR-dependent type I interferon production by monocytes in response to Toxoplasma gondii** *IMMUNOLOGY AND CELL BIOLOGY*
  Han, S., Melichar, H. J., Coombes, J. L., Chan, S. W., Koshy, A. A., Boothroyd, J. C., Barton, G. M., Robey, E. A.
  2014; 92 (10): 872-881
- **The Toxoplasma Pseudokinase ROP5 Is an Allosteric Inhibitor of the Immunity-related GTPases** *JOURNAL OF BIOLOGICAL CHEMISTRY*
  Reese, M. L., Shah, N., Boothroyd, J. C.
  2014; 289 (40): 27849-27858
- **Use of Transgenic Parasites and Host Reporters To Dissect Events That Promote Interleukin-12 Production during Toxoplasmosis** *INFECTION AND IMMUNITY*
  Christian, D. A., Koshy, A. A., Reuter, M. A., Betts, M. R., Boothroyd, J. C., Hunter, C. A.
  2014; 82 (10): 4056-4067
- **Immune Profiling of Pregnant Toxoplasma-Infected US and Colombia Patients Reveals Surprising Impacts of Infection on Peripheral Blood Cytokines.** *journal of infectious diseases*
  Pernas, L., Ramirez, R., Holmes, T. H., Montoya, J. G., Boothroyd, J. C.
  2014; 210 (6): 923-931
- **Impact of Regulated Secretion on Antiparasitic CD8 T Cell Responses** *CELL REPORTS*
  Grover, H. S., Chu, H. H., Kelly, F. D., Yang, S. J., Reese, M. L., Blanchard, N., Gonzalez, F., Chan, S. W., Boothroyd, J. C., Shastri, N., Robey, E. A.
  2014; 7 (5): 1716-1728
- **Impact of Regulated Secretion on Antiparasitic CD8 T Cell Responses.** *Cell reports*
  Grover, H. S., Chu, H. H., Kelly, F. D., Yang, S. J., Reese, M. L., Blanchard, N., Gonzalez, F., Chan, S. W., Boothroyd, J. C., Shastri, N., Robey, E. A.
  2014; 7 (5): 1716-28
- **GRA25 Is a Novel Virulence Factor of Toxoplasma gondii and Influences the Host Immune Response.** *Infection and immunity*
  Shastri, A. J., Marino, N. D., Franco, M., Lodoen, M. B., Boothroyd, J. C.
  2014; 82 (6): 2595-2605
- **The calcium-dependent protein kinase 3 of toxoplasma influences basal calcium levels and functions beyond egress as revealed by quantitative phosphoproteome analysis.** *PLoS pathogens*
  Treeck, M., Sanders, J. L., Gaji, R. Y., LaFavers, K. A., Child, M. A., Arrizabalaga, G., Elias, J. E., Boothroyd, J. C.
  2014; 10 (6)
- **The Calcium-Dependent Protein Kinase 3 of Toxoplasma Influences Basal Calcium Levels and Functions beyond Egress as Revealed by Quantitative Phosphoproteome Analysis** *PLOS PATHOGENS*
  Treeck, M., Sanders, J. L., Gaji, R. Y., LaFavers, K. A., Child, M. A., Arrizabalaga, G., Elias, J. E., Boothroyd, J. C.
  2014; 10 (6)
- **Infection by Toxoplasma gondii specifically induces host c-Myc and the genes this pivotal transcription factor regulates.** *Eukaryotic cell*
  Franco, M., Shastri, A. J., Boothroyd, J. C.
  2014; 13 (4): 483-493
- **Toxoplasma effector MAF1 mediates recruitment of host mitochondria and impacts the host response.** *PLoS biology*
  Pernas, L., Adomako-Ankomah, Y., Shastri, A. J., Ewald, S. E., Treeck, M., Boyle, J. P., Boothroyd, J. C.
  2014; 12 (4)
- **NLRP1 Is an Inflammasome Sensor for Toxoplasma gondii** *INFECTION AND IMMUNITY*
  Ewald, S. E., Chavarria-Smith, J., Boothroyd, J. C.
  2014; 82 (1): 460-468
- **Small-molecule inhibition of a depalmitoylase enhances Toxoplasma host-cell invasion.** *Nature chemical biology*
  Child, M. A., Hall, C. I., Beck, J. R., Ofori, L. O., Albrow, V. E., Garland, M., Bowyer, P. W., Bradley, P. J., Powers, J. C., Boothroyd, J. C., Weerapana, E., Bogyo, M.
  2013; 9 (10): 651-656
- **A nucleotide sugar transporter involved in glycosylation of the toxoplasma tissue cyst wall is required for efficient persistence of bradyzoites.** *PLoS pathogens*
  Caffaro, C. E., Koshy, A. A., Liu, L., Zeiner, G. M., Hirschberg, C. B., Boothroyd, J. C.

2013; 9 (5)

- **Have it your way: how polymorphic, injected kinases and pseudokinases enable toxoplasma to subvert host defenses.** *PLoS pathogens*
  Boothroyd, J. C.
  2013; 9 (4)
- **Bradyzoite Pseudokinase 1 Is Crucial for Efficient Oral Infectivity of the Toxoplasma gondii Tissue Cyst** *EUKARYOTIC CELL*
  Buchholz, K. R., Bowyer, P. W., Boothroyd, J. C.
  2013; 12 (3): 399-410
- **A nucleotide sugar transporter involved in glycosylation of the Toxoplasma tissue cyst wall is required for efficient persistence of bradyzoites.** *PLoS pathogens*
  Caffaro, C. E., Koshy, A. A., Liu, L., Zeiner, G. M., Hirschberg, C. B., Boothroyd, J. C.
  2013; 9 (5)
- **Toxoplasma gondii Sporozoites Invade Host Cells Using Two Novel Paralogues of RON2 and AMA1.** *PloS one*
  Poukchanski, A., Fritz, H. M., Tonkin, M. L., Treeck, M., Boulanger, M. J., Boothroyd, J. C.
  2013; 8 (8)
- **A Forward Genetic Screen Reveals that Calcium-dependent Protein Kinase 3 Regulates Egress in Toxoplasma** *PLOS PATHOGENS*
  Garrison, E., Treeck, M., Ehret, E., Butz, H., Garbuz, T., Oswald, B. P., Settles, M., Boothroyd, J., Arrizabalaga, G.
  2012; 8 (11)
- **Toxoplasma Co-opts Host Cells It Does Not Invade** *PLOS PATHOGENS*
  Koshy, A. A., Dietrich, H. K., Christian, D. A., Melehani, J. H., Shastri, A. J., Hunter, C. A., Boothroyd, J. C.
  2012; 8 (7)
- **A Toxoplasma gondii Pseudokinase Inhibits Host IRG Resistance Proteins** *PLOS BIOLOGY*
  Fleckenstein, M. C., Reese, M. L., Koenen-Waisman, S., Boothroyd, J. C., Howard, J. C., Steinfeldt, T.
  2012; 10 (7)
- **Infected Dendritic Cells Facilitate Systemic Dissemination and Transplacental Passage of the Obligate Intracellular Parasite Neospora caninum in Mice** *PLOS ONE*
  Collantes-Fernandez, E., Arrighi, R. B., Alvarez-Garcia, G., Weidner, J. M., Regidor-Cerrillo, J., Boothroyd, J. C., Ortega-Mora, L. M., Barragan, A.
  2012; 7 (3)
- **Transcriptomic Analysis of Toxoplasma Development Reveals Many Novel Functions and Structures Specific to Sporozoites and Oocysts** *PLOS ONE*
  Fritz, H. M., Buchholz, K. R., Chen, X., Durbin-Johnson, B., Rocke, D. M., Conrad, P. A., Boothroyd, J. C.
  2012; 7 (2)
- **Proteomic Analysis of Fractionated Toxoplasma Oocysts Reveals Clues to Their Environmental Resistance** *PLOS ONE*
  Fritz, H. M., Bowyer, P. W., Bogyo, M., Conrad, P. A., Boothroyd, J. C.
  2012; 7 (1)
- **Tissue Barriers of the Human Placenta to Infection with Toxoplasma gondii** *INFECTION AND IMMUNITY*
  Robbins, J. R., Zeldovich, V. B., Poukchanski, A., Boothroyd, J. C., Bakardjiev, A. I.
  2012; 80 (1): 418-428
- **Identification of Tissue Cyst Wall Components by Transcriptome Analysis of In Vivo and In Vitro Toxoplasma gondii Bradyzoites** *EUKARYOTIC CELL*
  Buchholz, K. R., Fritz, H. M., Chen, X., Durbin-Johnson, B., Rocke, D. M., Ferguson, D. J., Conrad, P. A., Boothroyd, J. C.
  2011; 10 (12): 1637-1647
- **Toxoplasma gondii Induces B7-2 Expression through Activation of JNK Signal Transduction** *INFECTION AND IMMUNITY*
  Morgado, P., Ong, Y., Boothroyd, J. C., Lodoen, M. B.
  2011; 79 (11): 4401-4412
- **The Phosphoproteomes of Plasmodium falciparum and Toxoplasma gondii Reveal Unusual Adaptations Within and Beyond the Parasites' Boundaries** *CELL HOST & MICROBE*
  Treeck, M., Sanders, J. L., Elias, J. E., Boothroyd, J. C.

2011; 10 (4): 410-419

- **Strain-Dependent Host Transcriptional Responses to Toxoplasma Infection Are Largely Conserved in Mammalian and Avian Hosts** *PLOS ONE*
  Ong, Y., Boyle, J. P., Boothroyd, J. C.
  2011; 6 (10)
- **Focus on the ringleader: the role of AMA1 in apicomplexan invasion and replication** *TRENDS IN PARASITOLOGY*
  Tyler, J. S., Treeck, M., Boothroyd, J. C.
  2011; 27 (9): 410-420
- **A Conserved Non-canonical Motif in the Pseudoactive Site of the ROP5 Pseudokinase Domain Mediates Its Effect on Toxoplasma Virulence** *JOURNAL OF BIOLOGICAL CHEMISTRY*
  Reese, M. L., Boothroyd, J. C.
  2011; 286 (33): 29366-29375
- **Binding of Plasmodium merozoite proteins RON2 and AMA1 triggers commitment to invasion** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Srinivasan, P., Beatty, W. L., Diouf, A., Herrera, R., Ambroggio, X., Moch, J. K., Tyler, J. S., Narum, D. L., Pierce, S. K., Boothroyd, J. C., Haynes, J. D., Miller, L. H.
  2011; 108 (32): 13275-13280
- **Evidence for Host Cells as the Major Contributor of Lipids in the Intravacuolar Network of Toxoplasma-Infected Cells** *EUKARYOTIC CELL*
  Caffaro, C. E., Boothroyd, J. C.
  2011; 10 (8): 1095-1099
- **Chemical genetic screen identifies Toxoplasma DJ-1 as a regulator of parasite secretion, attachment, and invasion** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Hall, C. I., Reese, M. L., Weerapana, E., Child, M. A., Bowyer, P. W., Albrow, V. E., Haraldsen, J. D., Phillips, M. R., Sandoval, E. D., Ward, G. E., Cravatt, B. F., Boothroyd, J. C., Bogyo, et al
  2011; 108 (26): 10568-10573
- **Toxoplasma Polymorphic Effectors Determine Macrophage Polarization and Intestinal Inflammation** *CELL HOST & MICROBE*
  Jensen, K. D., Wang, Y., Wojno, E. D., Shastri, A. J., Hu, K., Cornel, L., Boedec, E., Ong, Y., Chien, Y., Hunter, C. A., Boothroyd, J. C., Saeij, J. P.
  2011; 9 (6): 472-483
- **Polymorphic family of injected pseudokinases is paramount in Toxoplasma virulence** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Reese, M. L., Zeiner, G. M., Saeij, J. P., Boothroyd, J. C., Boyle, J. P.
  2011; 108 (23): 9625-9630
- **Chemistry and Biology of Macrolide Antiparasitic Agents** *JOURNAL OF MEDICINAL CHEMISTRY*
  Lee, Y., Choi, J. Y., Fu, H., Harvey, C., Ravindran, S., Roush, W. R., Boothroyd, J. C., Khosla, C.
  2011; 54 (8): 2792-2804
- **The C-Terminus of Toxoplasma RON2 Provides the Crucial Link between AMA1 and the Host-Associated Invasion Complex** *PLOS PATHOGENS*
  Tyler, J. S., Boothroyd, J. C.
  2011; 7 (2)
- **Association of host mitochondria with the parasitophorous vacuole during Toxoplasma infection is not dependent on rhoptry proteins ROP2/8** *INTERNATIONAL JOURNAL FOR PARASITOLOGY*
  Pernas, L., Boothroyd, J. C.
  2010; 40 (12): 1367-1371
- **Toxoplasma Rhoptry Protein 16 (ROP16) Subverts Host Function by Direct Tyrosine Phosphorylation of STAT6** *JOURNAL OF BIOLOGICAL CHEMISTRY*
  Ong, Y., Reese, M. L., Boothroyd, J. C.
  2010; 285 (37): 28731-28740
- **Coordinated loading of IRG resistance GTPases on to the Toxoplasma gondii parasitophorous vacuole** *CELLULAR MICROBIOLOGY*

Khaminets, A., Hunn, J. P., Koenen-Waisman, S., Zhao, Y. O., Preukschat, D., Coers, J., Boyle, J. P., Ong, Y., Boothroyd, J. C., Reichmann, G., Howard, J. C.
2010; 12 (7): 939-961

- **Use of two novel approaches to discriminate between closely related host microRNAs that are manipulated by Toxoplasma gondii during infection** *RNA-A PUBLICATION OF THE RNA SOCIETY*
  Zeiner, G. M., Boothroyd, J. C.
  2010; 16 (6): 1268-1274
- **Toxoplasma secreting Cre recombinase for analysis of host-parasite interactions** *NATURE METHODS*
  Koshy, A. A., Fouts, A. E., Lodoen, M. B., Alkan, O., Blau, H. M., Boothroyd, J. C.
  2010; 7 (4): 307-309
- **Toxoplasma gondii Infection Specifically Increases the Levels of Key Host MicroRNAs** *PLOS ONE*
  Zeiner, G. M., Norman, K. L., Thomson, J. M., Hammond, S. M., Boothroyd, J. C.
  2010; 5 (1)
- **A highly sensitive FRET-based approach reveals secretion of the actin-binding protein toxofilin during Toxoplasma gondii infection** *CELLULAR MICROBIOLOGY*
  Lodoen, M. B., Gerke, C., Boothroyd, J. C.
  2010; 12 (1): 55-66
- **4-Bromophenacyl Bromide Specifically Inhibits Rhoptry Secretion during Toxoplasma Invasion** *PLOS ONE*
  Ravindran, S., Lodoen, M. B., Verhelst, S. H., Bogyo, M., Boothroyd, J. C.
  2009; 4 (12)
- **A Helical Membrane-Binding Domain Targets the Toxoplasma ROP2 Family to the Parasitophorous Vacuole** *TRAFFIC*
  Reese, M. L., Boothroyd, J. C.
  2009; 10 (10): 1458-1470
- **Toxoplasma gondii: 25 years and 25 major advances for the field** *INTERNATIONAL JOURNAL FOR PARASITOLOGY*
  Boothroyd, J. C.
  2009; 39 (8): 935-946
- **A Pseudouridine Synthase Homologue Is Critical to Cellular Differentiation in Toxoplasma gondii** *EUKARYOTIC CELL*
  Anderson, M. Z., Brewer, J., Singh, U., Boothroyd, J. C.
  2009; 8 (3): 398-409
- **Expansion of host range as a driving force in the evolution of Toxoplasma** *Meeting on Toxoplasma Centennial Congress from Discovery to Public Health Management*
  Boothroyd, J. C.
  FUNDACO OSWALDO CRUZ.2009: 179–84
- **Rapid Membrane Disruption by a Perforin-Like Protein Facilitates Parasite Exit from Host Cells** *SCIENCE*
  Kafsack, B. F., Pena, J. D., Coppens, I., Ravindran, S., Boothroyd, J. C., Carruthers, V. B.
  2009; 323 (5913): 530-533
- **The Toxoplasma gondii Dense Granule Protein GRA7 Is Phosphorylated upon Invasion and Forms an Unexpected Association with the Rhoptry Proteins ROP2 and ROP4** *INFECTION AND IMMUNITY*
  Dunn, J. D., Ravindran, S., Kim, S., Boothroyd, J. C.
  2008; 76 (12): 5853-5861
- **Expression quantitative trait locus mapping of Toxoplasma genes reveals multiple mechanisms for strain-specific differences in gene expression** *EUKARYOTIC CELL*
  Boyle, J. P., Saeij, J. P., Harada, S. Y., Ajioka, J. W., Boothroyd, J. C.
  2008; 7 (8): 1403-1414
- **A cluster of four surface antigen genes specifically expressed in bradyzoites, SAG2CDXY, plays an important role in Toxoplasma gondii persistence** *INFECTION AND IMMUNITY*
  Saeij, J. P., Arrizabalaga, G., Boothroyd, J. C.
  2008; 76 (6): 2402-2410

- **Secretion of proteins into host cells by Apicomplexan parasites** *TRAFFIC*
  Ravindran, S., Boothroyd, J. C.
  2008; 9 (5): 647-656

- **Kiss and spit: the dual roles of Toxoplasma rhoptries** *NATURE REVIEWS MICROBIOLOGY*
  Boothroyd, J. C., Dubremetz, J.
  2008; 6 (1): 79-88

- **RNA analysis by biosynthetic tagging using 4-thiouracil and uracil phosphoribosyltransferase.** *Methods in molecular biology (Clifton, N.J.)*
  Zeiner, G. M., Cleary, M. D., Fouts, A. E., Meiring, C. D., Mocarski, E. S., Boothroyd, J. C.
  2008; 419: 135-146

- **Toxoplasma gondii: Inconsistent dissemination patterns following oral infection in mice** *EXPERIMENTAL PARASITOLOGY*
  Boyle, J. P., Saeij, J. P., Boothroyd, J. C.
  2007; 116 (3): 302-305

- **The BSR4 protein is up-regulated in Toxoplasma gondii bradyzoites, however the dominant surface antigen recognised by the P36 monoclonal antibody is SRS9** *INTERNATIONAL JOURNAL FOR PARASITOLOGY*
  Van, T. T., Kim, S., Camps, M., Boothroyd, J. C., Knoll, L. J.
  2007; 37 (8-9): 877-885

- **Toxoplasma gondii dysregulates IFN-gamma-inducible gene expression in human fibroblasts: Insights from a genome-wide transcriptional profiling** *JOURNAL OF IMMUNOLOGY*
  Kim, S., Fouts, A. E., Boothroyd, J. C.
  2007; 178 (8): 5154-5165

- **Behavioral changes induced by Toxoplasma infection of rodents are highly specific to aversion of cat odors** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Vyas, A., Kim, S., Giacomini, N., Boothroyd, J. C., Sapolsky, R. M.
  2007; 104 (15): 6442-6447

- **Bradyzoite-specific surface antigen SRS9 plays a role in maintaining Toxoplasma gondii persistence in the brain and in host control of parasite replication in the intestine** *INFECTION AND IMMUNITY*
  Kim, S., Karasov, A., Boothroyd, J. C.
  2007; 75 (4): 1626-1634

- **Pulling together: an integrated model of Toxoplasma cell invasion.** *Current opinion in microbiology*
  Carruthers, V., Boothroyd, J. C.
  2007; 10 (1): 83-89

- **Pulling together: an integrated model of Toxoplasma cell invasion** *CURRENT OPINION IN MICROBIOLOGY*
  Carruthers, V. B., Boothroyd, J. C.
  2007; 10 (1): 82-89

- **Infection with Toxoplasma gondii bradyzoites has a diminished impact on host transcript levels relative to tachyzoite infection** *INFECTION AND IMMUNITY*
  Fouts, A. E., Boothroyd, J. C.
  2007; 75 (2): 634-642

- **Toxoplasma co-opts host gene expression by injection of a polymorphic kinase homologue** *NATURE*
  Saeij, J. P., Coller, S., Boyle, J. P., Jerome, M. E., White, M. W., Boothroyd, J. C.
  2007; 445 (7125): 324-327

- **Toxoplasma gondii targets a protein phosphatase 2C to the nuclei of a infected host cells** *EUKARYOTIC CELL*
  Gilbert, L. A., Ravindran, S., Turetzky, J. M., Boothroyd, J. C., Bradley, P. J.
  2007; 6 (1): 73-83

- **Polymorphic secreted kinases are key virulence factors in toxoplasmosis** *SCIENCE*
  Saeij, J. P., Boyle, J. P., Coller, S., Taylor, S., Sibley, L. D., Brooke-Powell, E. T., Ajioka, J. W., Boothroyd, J. C.
  2006; 314 (5806): 1780-1783

- **Just one cross appears capable of dramatically altering the population biology of a eukaryotic pathogen like Toxoplasma gondii** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Boyle, J. P., Rajasekar, B., Saeij, J. P., Ajiokat, J. W., Berriman, M., Paulsen, I., Roos, D. S., Sibley, L. D., White, M. W., Boothroyd, J. C.
  2006; 103 (27): 10514-10519
- **Plasmodium falciparum AMA1 binds a rhoptry neck protein homologous to TgRON4, a component of the moving junction in Toxoplasma gondii** *EUKARYOTIC CELL*
  Alexander, D. L., Arastu-Kapur, S., Dubremetz, J., Boothroyd, J. C.
  2006; 5 (7): 1169-1173
- **Analysis of gene expression during development: Lessons from the Apicomplexa** *MICROBES AND INFECTION*
  Boyle, J. P., Saeij, J. P., Cleary, M. D., Boothroyd, J. C.
  2006; 8 (6): 1623-1630
- **Toxoplasma gondii sequesters lysosomes from mammalian hosts in the vacuolar space** *CELL*
  Coppens, I., Dunn, J. D., Romano, J. D., Pypaert, M., Zhang, H., Boothroyd, J. C., Joiner, K. A.
  2006; 125 (2): 261-274
- **A novel rhoptry protein in Toxoplasma gondii bradyzoites and merozoites** *MOLECULAR AND BIOCHEMICAL PARASITOLOGY*
  Schwarz, J. A., Fouts, A. E., Cummings, C. A., Ferguson, D. J., Boothroyd, J. C.
  2005; 144 (2): 159-166
- **Proteomic analysis of rhoptry organelles reveals many novel constituents for host-parasite interactions in Toxoplasma gondii** *JOURNAL OF BIOLOGICAL CHEMISTRY*
  Bradley, P. J., Ward, C., Cheng, S. J., Alexander, D. L., Coller, S., Coombs, G. H., Dunn, J. D., Ferguson, D. J., Sanderson, S. J., Wastling, J. M., Boothroyd, J. C.
  2005; 280 (40): 34245-34258
- **Identification of the moving junction complex of Toxoplasma gondii: A collaboration between distinct secretory organelles** *PLOS PATHOGENS*
  Alexander, D. L., Mital, J., Ward, G. E., Bradley, P., Boothroyd, J. C.
  2005; 1 (2): 137-149
- **Differences among the three major strains of Toxoplasma gondii and their specific interactions with the infected host** *TRENDS IN PARASITOLOGY*
  Saeij, J. P., Boyle, J. P., Boothroyd, J. C.
  2005; 21 (10): 476-481
- **Disruption of a locus encoding a nucleolar zinc finger protein decreases tachyzoite-to-bradyzoite differentiation in Toxoplasma gondii** *INFECTION AND IMMUNITY*
  Vanchinathan, P., Brewer, J. L., Harb, O. S., Boothroyd, J. C., Singh, U.
  2005; 73 (10): 6680-6688
- **Stage-specific expression of surface antigens by Toxoplasma gondii as a mechanism to facilitate parasite persistence** *JOURNAL OF IMMUNOLOGY*
  Kim, S. K., Boothroyd, J. C.
  2005; 174 (12): 8038-8048
- **Identification and disruption of a rhoptry-localized homologue of sodium hydrogen exchangers in Toxoplasma gondii** *INTERNATIONAL JOURNAL FOR PARASITOLOGY*
  Karasov, A. O., Boothroyd, J. C., Arrizabalaga, G.
  2005; 35 (3): 285-291
- **Biosynthetic labeling of RNA with uracil phosphoribosyltransferase allows cell-specific microarray analysis of mRNA synthesis and decay** *NATURE BIOTECHNOLOGY*
  Cleary, M. D., Meiering, C. D., Jan, E., Guymon, R., Boothroyd, J. C.
  2005; 23 (2): 232-237
- **Bioluminescence imaging of Toxoplasma gondii infection in living mice reveals dramatic differences between strains** *INFECTION AND IMMUNITY*
  Saeij, J. P., Boyle, J. P., Grigg, M. E., Arrizabalaga, G., Boothroyd, J. C.

2005; 73 (2): 695-702

- **Composite genome map and recombination parameters derived from three archetypal lineages of Toxoplasma gondii** *NUCLEIC ACIDS RESEARCH*
  Khan, A., Taylor, S., Su, C., Mackey, A. J., BOYLE, J., Cole, R., Glover, D., Tang, K., Paulsen, I. T., Berriman, M., Boothroyd, J. C., Pfefferkorn, E. R., Dubey, et al
  2005; 33 (9): 2980-2992

- **A GFP-based motif-trap reveals a novel mechanism of targeting for the Toxoplasma ROP4 protein** *MOLECULAR AND BIOCHEMICAL PARASITOLOGY*
  Bradley, P. J., Li, N., Boothroyd, J. C.
  2004; 137 (1): 111-120

- **The induction of acute ileitis by a single microbial antigen of Toxoplasma gondii** *JOURNAL OF IMMUNOLOGY*
  Rachinel, N., Buzoni-Gatel, D., Dutta, C., Mennechet, F. J., Luangsay, S., Minns, L. A., Grigg, M. E., Tomavo, S., Boothroyd, J. C., Kasper, L. H.
  2004; 173 (4): 2725-2735

- **Ionophore-resistant mutant of Toxoplasma gondii reveals involvement of a sodium/hydrogen exchanger in calcium regulation** *JOURNAL OF CELL BIOLOGY*
  Arrizabalaga, G., RUIZ, F., Moreno, S., Boothroyd, J. C.
  2004; 165 (5): 653-662

- **An unusual genotype of Toxoplasma gondii is common in California sea otters (Enhydra lutris nereis) and is a cause of mortality** *7th International Congress on Toxoplasmosis*
  Miller, M. A., Grigg, M. E., Kreuder, C., James, E. R., Melli, A. C., Crosbie, P. R., Jessup, D. A., Boothroyd, J. C., Brownstein, D., Conrad, P. A.
  ELSEVIER SCI LTD.2004: 275–84

- **Role of calcium during Toxoplasma gondii invasion and egress** *7th International Congress on Toxoplasmosis*
  Arrizabalaga, G., Boothroyd, J. C.
  ELSEVIER SCI LTD.2004: 361–68

- **DNA microarrays in parasitology: strengths and limitations** *TRENDS IN PARASITOLOGY*
  Boothroyd, J. C., Blader, I., Cleary, M., Singh, U.
  2003; 19 (10): 470-476

- **Serotyping of Toxoplasma gondii infections in humans using synthetic peptides** *JOURNAL OF INFECTIOUS DISEASES*
  Kong, J. T., Grigg, M. E., Uyetake, L., Parmley, S., Boothroyd, J. C.
  2003; 187 (9): 1484-1495

- **Unprocessed Toxoplasma ROP1 is effectively targeted and secreted into the nascent parasitophorous vacuole** *MOLECULAR AND BIOCHEMICAL PARASITOLOGY*
  Bradley, P. J., Hsieh, C. L., Boothroyd, J. C.
  2002; 125 (1-2): 189-193

- **Structure of the immunodominant surface antigen from the Toxoplasma gondii SRS superfamily** *NATURE STRUCTURAL BIOLOGY*
  He, X. L., Grigg, M. E., Boothroyd, J. C., Garcia, K. C.
  2002; 9 (8): 606-611

- **Population biology of Toxoplasma gondii and its relevance to human infection: do different strains cause different disease?** *CURRENT OPINION IN MICROBIOLOGY*
  Boothroyd, J. C., Grigg, M. E.
  2002; 5 (4): 438-442

- **Toxoplasma gondii asexual development: Identification of developmentally regulated genes and distinct patterns of gene expression** *EUKARYOTIC CELL*
  Cleary, M. D., Singh, U., Blader, I. J., Brewer, J. L., Boothroyd, J. C.
  2002; 1 (3): 329-340

- **Genetic analysis of tachyzoite to bradyzoite differentiation mutants in Toxoplasma gondii reveals a hierarchy of gene induction** *MOLECULAR MICROBIOLOGY*
  Singh, U., Brewer, J. L., Boothroyd, J. C.

2002; 44 (3): 721-733

- **An rRNA mutation identifies the apicoplast as the target for clindamycin in Toxoplasma gondii** *MOLECULAR MICROBIOLOGY*
  Camps, M., Arrizabalaga, G., Boothroyd, J.
  2002; 43 (5): 1309-1318
- **Immediate/early response to Trypanosoma cruzi infection involves minimal modulation of host cell transcription** *JOURNAL OF BIOLOGICAL CHEMISTRY*
  de Avalos, S. V., Blader, I. J., Fisher, M., Boothroyd, J. C., Burleigh, B. A.
  2002; 277 (1): 639-644
- **Success and virulence in toxoplasma as the result of sexual recombination between two distinct ancestries** *SCIENCE*
  Grigg, M. E., Bonnefoy, S., Hehl, A. B., Suzuki, Y., Boothroyd, J. C.
  2001; 294 (5540): 161-165
- **Surface antigens of Toxoplasma gondii: variations on a theme** *INTERNATIONAL JOURNAL FOR PARASITOLOGY*
  Lekutis, C., Ferguson, D. J., Grigg, M. E., Camps, M., Boothroyd, J. C.
  2001; 31 (12): 1285-1292
- **Targeted disruption of an essential RNA-binding protein perturbs cell division in Trypanosoma brucei** *MOLECULAR AND BIOCHEMICAL PARASITOLOGY*
  Manger, I. D., Boothroyd, J. C.
  2001; 116 (2): 239-245
- **Unusual abundance of atypical strains associated with human ocular toxoplasmosis** *JOURNAL OF INFECTIOUS DISEASES*
  Grigg, M. E., Ganatra, J., Boothroyd, J. C., Margolis, T. P.
  2001; 184 (5): 633-639
- **The pro region of Toxoplasma ROP1 is a rhoptry-targeting signal** *INTERNATIONAL JOURNAL FOR PARASITOLOGY*
  Bradley, P. J., Boothroyd, J. C.
  2001; 31 (11): 1177-1186
- **Adaptation of signature-tagged mutagenesis for Toxoplasma gondii: a negative screening strategy to isolate genes that are essential in restrictive growth conditions** *MOLECULAR AND BIOCHEMICAL PARASITOLOGY*
  Knoll, L. J., Furie, G. L., Boothroyd, J. C.
  2001; 116 (1): 11-16
- **Toxoplasma gondii: Selective killing of extracellular parasites by oxidation using pyrrolidine dithiocarbamate** *EXPERIMENTAL PARASITOLOGY*
  Camps, M., Boothroyd, J. C.
  2001; 98 (4): 206-214
- **Microarray analysis reveals previously unknown changes in Toxoplasma gondii-infected human cells** *JOURNAL OF BIOLOGICAL CHEMISTRY*
  Blader, I. J., Manger, I. D., Boothroyd, J. C.
  2001; 276 (26): 24223-24231
- **Resistance as a tool in the study of old and new drug targets in Toxoplasma** *DRUG RESISTANCE UPDATES*
  McFadden, D. C., Camps, M., Boothroyd, J. C.
  2001; 4 (2): 79-84
- **Rapid identification of virulent type I strains of the protozoan pathogen Toxoplasma gondii by PCR-restriction fragment length polymorphism analysis at the B1 gene** *JOURNAL OF CLINICAL MICROBIOLOGY*
  Grigg, M. E., Boothroyd, J. C.
  2001; 39 (1): 398-400
- **Isolation and characterization of a cold-sensitive attachment/invasion mutant of Toxoplasma gondii** *EXPERIMENTAL PARASITOLOGY*
  Uyetake, L., Ortega-Barria, E., Boothroyd, J. C.
  2001; 97 (1): 55-59
- **Success and virulence in the AIDS pathogen Toxoplasma as the result of sexual recombination between two distinct ancestries** *Science*

Grigg ME, Suzuki Y, Boothroyd JC
2001; 294: 161-16

- **Toxoplasma gondii homologue of plasmodium apical membrane antigen 1 is involved in invasion of host cells** *INFECTION AND IMMUNITY*
  Hehl, A. B., Lekutis, C., Grigg, M. E., Bradley, P. J., Dubremetz, J. F., Ortega-Barria, E., Boothroyd, J. C.
  2000; 68 (12): 7078-7086
- **Ionophore-resistant mutants of Toxoplasma gondii reveal host cell permeabilization as an early event in egress** *MOLECULAR AND CELLULAR BIOLOGY*
  Black, M. W., Arrizabalaga, G., Boothroyd, J. C.
  2000; 20 (24): 9399-9408
- **Trans-spliced L30 ribosomal protein mRNA of Trypanosoma brucei is not subject to autogenous feedback control at the messenger RNA level** *MOLECULAR AND BIOCHEMICAL PARASITOLOGY*
  Wilson, K., Uyetake, L., Boothroyd, J. C.
  2000; 111 (1): 199-205
- **Toxoplasma gondii: Identification of a developmentally regulated family of genes related to SAG2** *EXPERIMENTAL PARASITOLOGY*
  Lekutis, C., Ferguson, D. J., Boothroyd, J. C.
  2000; 96 (2): 89-96
- **Lytic cycle of Toxoplasma gondii** *MICROBIOLOGY AND MOLECULAR BIOLOGY REVIEWS*
  Black, M. W., Boothroyd, J. C.
  2000; 64 (3): 607-?
- **Characterization of cytochrome b from Toxoplasma gondii and Q(o) domain mutations as a mechanism of atovaquone-resistance** *MOLECULAR AND BIOCHEMICAL PARASITOLOGY*
  McFadden, D. C., Tomavo, S., Berry, E. A., Boothroyd, J. C.
  2000; 108 (1): 1-12
- **Cytochrome b mutation identified in a decoquinate-resistant mutant of Toxoplasma gondii** *5th International Workshop on Opportunistic Protists*
  McFadden, D. C., Boothroyd, J. C.
  WILEY-BLACKWELL PUBLISHING, INC.1999: 81S–82S
- **Identification of the pro-mature processing site of Toxoplasma ROP1 by mass spectrometry** *MOLECULAR AND BIOCHEMICAL PARASITOLOGY*
  Bradley, P. J., Boothroyd, J. C.
  1999; 100 (1): 103-109
- **Trypanosoma brucei: Cis-acting sequences involved in the developmental regulation of PARP expression** *EXPERIMENTAL PARASITOLOGY*
  Wilson, K., Uyetake, L., Boothroyd, J.
  1999; 91 (3): 222-230
- **A Toxoplasma lectin-like activity specific for sulfated polysaccharides is involved in host cell infection** *JOURNAL OF BIOLOGICAL CHEMISTRY*
  Ortega-Barria, E., Boothroyd, J. C.
  1999; 274 (3): 1267-1276
- **Molecular biology's lessons about Toxoplasma development: Stage-specific homologs** *PARASITOLOGY TODAY*
  Knoll, L. J., Boothroyd, J. C.
  1998; 14 (12): 490-493
- **Identification of a nuclear protein in Trypanosoma brucei with homology to RNA-binding proteins from cis-splicing systems** *MOLECULAR AND BIOCHEMICAL PARASITOLOGY*
  Manger, I. D., Boothroyd, J. C.
  1998; 97 (1-2): 1-11
- **Processing of Toxoplasma ROP1 protein in nascent rhoptries** *MOLECULAR AND BIOCHEMICAL PARASITOLOGY*
  Soldati, D., Lassen, A., Dubremetz, J. F., Boothroyd, J. C.

1998; 96 (1-2): 37-48

- **The surface of Toxoplasma tachyzoites is dominated by a family of glycosylphosphatidylinositol-anchored antigens related to SAG1** *INFECTION AND IMMUNITY*
  Manger, I. D., Hehl, A. B., Boothroyd, J. C.
  1998; 66 (5): 2237-2244
- **Expressed sequence tag analysis of the bradyzoite stage of Toxoplasma gondii: Identification of developmentally regulated genes** *INFECTION AND IMMUNITY*
  Manger, I. D., Hehl, A., Parmley, S., Sibley, L. D., Marra, M., Hillier, L., Waterston, R., Boothroyd, J. C.
  1998; 66 (4): 1632-1637
- **Development of a stable episomal shuttle vector for Toxoplasma gondii** *JOURNAL OF BIOLOGICAL CHEMISTRY*
  Black, M. W., Boothroyd, J. C.
  1998; 273 (7): 3972-3979
- **Isolation of developmentally regulated genes from Toxoplasma gondii by a gene trap with the positive and negative selectable marker hypoxanthine-xanthine-guanine phosphoribosyltransferase** *MOLECULAR AND CELLULAR BIOLOGY*
  Knoll, L. J., Boothroyd, J. C.
  1998; 18 (2): 807-814
- **The surface of Toxoplasma: More and less** *10th International Congress of Protozoology*
  Boothroyd, J. C., Hehl, A., Knoll, L. J., Manger, I. D.
  ELSEVIER SCI LTD.1998: 3–9
- **Analysis of Toxoplasma gondii stably transfected with a transmembrane variant of its major surface protein, SAG1** *JOURNAL OF CELL SCIENCE*
  Seeber, F., Dubremetz, J. F., Boothroyd, J. C.
  1998; 111: 23-29
- **Gene discovery by EST sequencing in Toxoplasma gondii reveals sequences restricted to the apicomplexa** *GENOME RESEARCH*
  Ajioka, J. W., Boothroyd, J. C., Brunk, B. P., Hehl, A., Hillier, L., Manger, I. D., Marra, M., Overton, G. C., Roos, D. S., Wan, K. L., Waterston, R., Sibley, L. D.
  1998; 8 (1): 18-28
- **Identification and characterization of SRS1, a Toxoplasma gondii surface antigen upstream of and related to SAG1** *MOLECULAR AND BIOCHEMICAL PARASITOLOGY*
  Hehl, A., Krieger, T., Boothroyd, J. C.
  1997; 89 (2): 271-282
- **Genetic analysis in toxoplasma: Gene discovery with expressed sequence tags and rapid mapping of natural polymorphisms** *METHODS*
  Hehl, A., Manger, I. D., Boothroyd, J. C.
  1997; 13 (2): 89-102
- **Genetic and biochemical analysis of development in Toxoplasma gondii** *Discussion Meeting of the Royal-Society-of-London on Immune Effector Mechanisms in Parasitic Infections*
  Boothroyd, J. C., Black, M., Bonnefoy, S., Hehl, A., Knoll, L. J., Manger, I. D., ORTEGABARRIA, E., Tomavo, S.
  ROYAL SOC.1997: 1347–54
- **Use of Toxoplasma gondii expressing beta-galactosidase for colorimetric assessment of drug activity in vitro** *ANTIMICROBIAL AGENTS AND CHEMOTHERAPY*
  McFadden, D. C., Seeber, F., Boothroyd, J. C.
  1997; 41 (9): 1849-1853
- **Implications of conserved structural motifs in disparate trypanosome surface proteins.** *MOLECULAR AND BIOCHEMICAL PARASITOLOGY*
  Carrington, M., Boothroyd, J.
  1996; 81 (2): 119-126
- **Sequence divergence in a family of variant surface glycoprotein genes from trypanosomes: Coding region hypervariability and downstream recombinogenic repeats** *JOURNAL OF MOLECULAR EVOLUTION*
  Field, M. C., Boothroyd, J. C.

1996; 42 (5): 500-511

- **Escherichia coli beta-galactosidase as an in vitro and in vivo reporter enzyme and stable transfection marker in the intracellular protozoan parasite Toxoplasma gondii** *GENE*
  Seeber, F., Boothroyd, J. C.
  1996; 169 (1): 39-45

- **Use of chimeric recombinant polypeptides to analyse conformational, surface epitopes on trypanosome variant surface glycoproteins** *MOLECULAR MICROBIOLOGY*
  Hsia, R. C., Beals, T., Boothroyd, J. C.
  1996; 19 (1): 53-63

- **INTERCONNECTION BETWEEN ORGANELLAR FUNCTIONS, DEVELOPMENT AND DRUG-RESISTANCE IN THE PROTOZOAN PARASITE, TOXOPLASMA-GONDII** *1994 Annual Meeting of the Australian-Society-for-Parasitology*
  Tomavo, S., Boothroyd, J. C.
  PERGAMON-ELSEVIER SCIENCE LTD.1995: 1293–99

- **Trypanosoma brucei: Molecular cloning of homologues of small GTP-binding proteins involved in vesicle trafficking** *EXPERIMENTAL PARASITOLOGY*
  Field, M. C., Boothroyd, J. C.
  1995; 81 (3): 313-320

- **Restriction enzyme-mediated integration elevates transformation frequency and enables co-transfection of Taxoplasma gondii** *MOLECULAR AND BIOCHEMICAL PARASITOLOGY*
  Black, M., Seeber, F., Soldati, D., Kim, K., Boothroyd, J. C.
  1995; 74 (1): 55-63

- **Complementation of a Toxoplasma gondii ROP1 knock-out mutant using phleomycin selection** *MOLECULAR AND BIOCHEMICAL PARASITOLOGY*
  Soldati, D., Kim, K., Kampmeier, J., Dubremetz, J. F., Boothroyd, J. C.
  1995; 74 (1): 87-97

- **TOXOPLASMA-GONDII - STABLE COMPLEMENTATION OF SAG1 (P-30) MUTANTS USING SAG1 TRANSFECTION AND FLUORESCENCE-ACTIVATED CELL SORTING** *EXPERIMENTAL PARASITOLOGY*
  Kim, K., Boothroyd, J. C.
  1995; 80 (1): 46-53

- **A HOMOLOG OF THE NUCLEAR GTPASE RAN/TC4 FROM TRYPANOSOMA-BRUCEI** *MOLECULAR AND BIOCHEMICAL PARASITOLOGY*
  Field, M. C., Field, H., Boothroyd, J. C.
  1995; 69 (1): 131-134

- **A SELECTOR OF TRANSCRIPTION INITIATION IN THE PROTOZOAN PARASITE TOXOPLASMA-GONDII** *MOLECULAR AND CELLULAR BIOLOGY*
  Soldati, D., Boothroyd, J. C.
  1995; 15 (1): 87-93

- **Toxoplasma workshop overview.** *journal of eukaryotic microbiology*
  Schwartzman, J. D., Boothroyd, J. C., Kasper, L. H.
  1994; 41 (5): 19S-21S

- **CONFORMATIONALLY APPROPRIATE EXPRESSION OF THE TOXOPLASMA ANTIGEN SAG1 (P-30) IN CHO CELLS** *INFECTION AND IMMUNITY*
  Kim, K., Bulow, R., Kampmeier, J., Boothroyd, J. C.
  1994; 62 (1): 203-209

- **GENE REPLACEMENT IN TOXOPLASMA-GONDII WITH CHLORAMPHENICOL ACETYLTRANSFERASE AS SELECTABLE MARKER** *SCIENCE*
  Kim, K., Soldati, D., Boothroyd, J. C.
  1993; 262 (5135): 911-914

- **DEVELOPMENT OF GENETIC SYSTEMS FOR TOXOPLASMA-GONDII** *PARASITOLOGY TODAY*
  Sibley, L. D., Pfefferkorn, E. R., Boothroyd, J. C.

1993; 9 (10): 392-395

- **EXPRESSION OF TOXOPLASMA-GONDII P-30 AS FUSIONS WITH GLUTATHIONE-S-TRANSFERASE IN ANIMAL-CELLS BY SINDBIS RECOMBINANT VIRUS** *MOLECULAR AND BIOCHEMICAL PARASITOLOGY*
  Xiong, C., Grieve, R. B., Kim, K., Boothroyd, J. C.
  1993; 61 (1): 143-148
- **MOLECULAR-CLONING AND CELLULAR-LOCALIZATION OF A BIP HOMOLOG IN TRYPANOSOMA-BRUCEI - DIVERGENT ER RETENTION SIGNALS IN A LOWER EUKARYOTE** *JOURNAL OF CELL SCIENCE*
  Bangs, J. D., Uyetake, L., BRICKMAN, M. J., Balber, A. E., Boothroyd, J. C.
  1993; 105: 1101-1113
- **TRANSIENT TRANSFECTION AND EXPRESSION IN THE OBLIGATE INTRACELLULAR PARASITE TOXOPLASMA-GONDII** *SCIENCE*
  Soldati, D., Boothroyd, J. C.
  1993; 260 (5106): 349-352
- **POPULATION BIOLOGY OF TOXOPLASMA - CLONALITY, VIRULENCE, AND SPECIATION (OR NOT)** *INFECTIOUS AGENTS AND DISEASE-REVIEWS ISSUES AND COMMENTARY*
  Boothroyd, J. C.
  1993; 2 (2): 100-102
- **STABLE TRANSFORMATION OF THE OPPORTUNISTIC PATHOGEN TOXOPLASMA USING CHLORAMPHENICOL SELECTION**
  Kim, K., Boothroyd, J. C.
  SLACK INC.1993: A209–A209
- **POPULATION BIOLOGY OF TOXOPLASMA-GONDII** *RESEARCH IN IMMUNOLOGY*
  Boothroyd, J. C., Sibley, L. D.
  1993; 144 (1): 14-16
- **GENERATION OF A RESTRICTION-FRAGMENT-LENGTH-POLYMORPHISM LINKAGE MAP FOR TOXOPLASMA-GONDII** *GENETICS*
  Sibley, L. D., LeBlanc, A. J., Pfefferkorn, E. R., Boothroyd, J. C.
  1992; 132 (4): 1003-1015
- **GENES THAT ALLOW YEAST-CELLS TO GROW IN THE ABSENCE OF THE HDEL RECEPTOR** *EMBO JOURNAL*
  Hardwick, K. G., Boothroyd, J. C., Rudner, A. D., Pelham, H. R.
  1992; 11 (11): 4187-4195
- **VIRULENT-STRAINS OF TOXOPLASMA-GONDII COMPRISE A SINGLE CLONAL LINEAGE** *NATURE*
  Sibley, L. D., Boothroyd, J. C.
  1992; 359 (6390): 82-85
- **GENOMIC ORGANIZATION AND CONTEXT OF A TRYPANOSOME VARIANT SURFACE GLYCOPROTEIN GENE FAMILY** *JOURNAL OF MOLECULAR BIOLOGY*
  Beals, T. P., Boothroyd, J. C.
  1992; 225 (4): 961-971
- **SEQUENCE DIVERGENCE AMONG MEMBERS OF A TRYPANOSOME VARIANT SURFACE GLYCOPROTEIN GENE FAMILY** *JOURNAL OF MOLECULAR BIOLOGY*
  Beals, T. P., Boothroyd, J. C.
  1992; 225 (4): 973-983
- **MASS-SPECTROMETRY OF MESSENGER-RNA CAP-4 FROM TRYPANOSOMATIDS REVEALS 2 NOVEL NUCLEOSIDES** *JOURNAL OF BIOLOGICAL CHEMISTRY*
  Bangs, J. D., Crain, P. F., Hashizume, T., MCCLOSKEY, J. A., Boothroyd, J. C.
  1992; 267 (14): 9805-9815
- **CONSTRUCTION OF A MOLECULAR KARYOTYPE FOR TOXOPLASMA-GONDII** *MOLECULAR AND BIOCHEMICAL PARASITOLOGY*
  Sibley, L. D., Boothroyd, J. C.
  1992; 51 (2): 291-300
- **ANTIGEN-SPECIFIC (P-30) MOUSE CD8+ T-CELLS ARE CYTOTOXIC AGAINST TOXOPLASMA-GONDII-INFECTED PERITONEAL-MACROPHAGES** *JOURNAL OF IMMUNOLOGY*

Kasper, L. H., Khan, I. A., Ely, K. H., Buelow, R., Boothroyd, J. C.
1992; 148 (5): 1493-1498

- **A TOXOPLASMA-GONDII RHOPTRY PROTEIN ASSOCIATED WITH HOST-CELL PENETRATION HAS UNUSUAL CHARGE ASYMMETRY** *MOLECULAR AND BIOCHEMICAL PARASITOLOGY*
  Ossorio, P. N., Schwartzman, J. D., Boothroyd, J. C.
  1992; 50 (1): 1-16

- **MITOCHONDRIAL-LIKE DNA-SEQUENCES FLANKED BY DIRECT AND INVERTED REPEATS IN THE NUCLEAR GENOME OF TOXOPLASMA-GONDII** *JOURNAL OF MOLECULAR BIOLOGY*
  Ossorio, P. N., Sibley, L. D., Boothroyd, J. C.
  1991; 222 (3): 525-536

- **PROPOSAL FOR A UNIFORM GENETIC NOMENCLATURE IN TOXOPLASMA-GONDII** *PARASITOLOGY TODAY*
  Sibley, L. D., Pfefferkorn, E. R., Boothroyd, J. C.
  1991; 7 (12): 327-328

- **PROTECTION OF MICE FROM FATAL TOXOPLASMA-GONDII INFECTION BY IMMUNIZATION WITH P-30 ANTIGEN IN LIPOSOMES** *JOURNAL OF IMMUNOLOGY*
  Bulow, R., Boothroyd, J. C.
  1991; 147 (10): 3496-3500

- **INHIBITION OF PROTEIN-SYNTHESIS RESULTS IN SUPER-INDUCTION OF PROCYCLIN (PARP) RNA LEVELS** *MOLECULAR AND BIOCHEMICAL PARASITOLOGY*
  Dorn, P. L., Aman, R. A., Boothroyd, J. C.
  1991; 44 (1): 133-139

- **AN EXPRESSION-SITE-ASSOCIATED GENE FAMILY OF TRYPANOSOMES IS EXPRESSED INVIVO AND SHOWS HOMOLOGY TO A VARIANT SURFACE GLYCOPROTEIN GENE** *MOLECULAR AND BIOCHEMICAL PARASITOLOGY*
  Hobbs, M. R., Boothroyd, J. C.
  1990; 43 (1): 1-16

- **RAPID PRENATAL-DIAGNOSIS OF CONGENITAL TOXOPLASMA INFECTION BY USING POLYMERASE CHAIN-REACTION AND AMNIOTIC-FLUID** *JOURNAL OF CLINICAL MICROBIOLOGY*
  GROVER, C. M., Thulliez, P., Remington, J. S., Boothroyd, J. C.
  1990; 28 (10): 2297-2301

- **LACK OF INTRONS IN THE RIBOSOMAL-PROTEIN GENE S14 OF TRYPANOSOMES** *MOLECULAR AND CELLULAR BIOLOGY*
  Perelman, D., Boothroyd, J. C.
  1990; 10 (6): 3284-3288

- **HEAT-SHOCK DISRUPTION OF TRANS-SPLICING IN TRYPANOSOMES - EFFECT ON HSP70, HSP85 AND TUBULIN MESSENGER-RNA SYNTHESIS** *GENE*
  MUHICH, M. L., Hsu, M. P., Boothroyd, J. C.
  1989; 82 (1): 169-175

- **DIRECT AND SENSITIVE DETECTION OF A PATHOGENIC PROTOZOAN, TOXOPLASMA-GONDII, BY POLYMERASE CHAIN-REACTION** *JOURNAL OF CLINICAL MICROBIOLOGY*
  Burg, J. L., GROVER, C. M., Pouletty, P., Boothroyd, J. C.
  1989; 27 (8): 1787-1792

- **A DEVELOPMENTALLY REGULATED GENE OF TRYPANOSOMES ENCODES A HOMOLOG OF RAT PROTEIN-DISULFIDE ISOMERASE AND PHOSPHOINOSITOL PHOSPHOLIPASE-C** *BIOCHEMISTRY*
  Hsu, M. P., MUHICH, M. L., Boothroyd, J. C.
  1989; 28 (15): 6440-6446

- **SYNTHESIS OF TRYPANOSOME HSP70 MESSENGER-RNA IS RESISTANT TO DISRUPTION OF TRANS-SPLICING BY HEAT-SHOCK** *JOURNAL OF BIOLOGICAL CHEMISTRY*
  MUHICH, M. L., Boothroyd, J. C.
  1989; 264 (13): 7107-7110

- **THE MAJOR SURFACE-ANTIGEN, P-30, OF TOXOPLASMA-GONDII IS ANCHORED BY A GLYCOLIPID** *JOURNAL OF BIOLOGICAL CHEMISTRY*
  NAGEL, S. D., Boothroyd, J. C.
  1989; 264 (10): 5569-5574
- **CLONING OF CDNAS ENCODING A 28 KILODALTON ANTIGEN OF TOXOPLASMA-GONDII** *MOLECULAR AND BIOCHEMICAL PARASITOLOGY*
  Prince, J. B., Araujo, F. G., Remington, J. S., Burg, J. L., Boothroyd, J. C., Sharma, S. D.
  1989; 34 (1): 3-13
- **MOLECULAR ANALYSIS OF THE GENE ENCODING THE MAJOR SURFACE-ANTIGEN OF TOXOPLASMA-GONDII** *JOURNAL OF IMMUNOLOGY*
  Burg, J. L., Perelman, D., Kasper, L. H., Ware, P. L., Boothroyd, J. C.
  1988; 141 (10): 3584-3591
- **POLYCISTRONIC TRANSCRIPTS IN TRYPANOSOMES AND THEIR ACCUMULATION DURING HEAT-SHOCK - EVIDENCE FOR A PRECURSOR ROLE IN MESSENGER-RNA SYNTHESIS** *MOLECULAR AND CELLULAR BIOLOGY*
  MUHICH, M. L., Boothroyd, J. C.
  1988; 8 (9): 3837-3846
- **THE ALPHA-TUBULINS AND BETA-TUBULINS OF TOXOPLASMA-GONDII ARE ENCODED BY SINGLE COPY GENES CONTAINING MULTIPLE INTRONS** *MOLECULAR AND BIOCHEMICAL PARASITOLOGY*
  NAGEL, S. D., Boothroyd, J. C.
  1988; 29 (2-3): 261-273
- **TRYPANOSOME TRANS-SPLICING UTILIZES 2'-5' BRANCHES AND A CORRESPONDING DEBRANCHING ACTIVITY** *EMBO JOURNAL*
  Sutton, R. E., Boothroyd, J. C.
  1988; 7 (5): 1431-1437
- **THE CAP OF BOTH MINIEXON-DERIVED RNA AND MESSENGER-RNA OF TRYPANOSOMES IS 7-METHYLGUANOSINE** *MOLECULAR AND CELLULAR BIOLOGY*
  Sutton, R. E., Boothroyd, J. C.
  1988; 8 (1): 494-496
- **PRECISE IDENTIFICATION OF CLEAVAGE SITES INVOLVED IN THE UNUSUAL PROCESSING OF TRYPANOSOME RIBOSOMAL-RNA** *JOURNAL OF MOLECULAR BIOLOGY*
  Campbell, D. A., Kubo, K., Clark, C. G., Boothroyd, J. C.
  1987; 196 (1): 113-124
- **AN UNUSUALLY COMPACT RIBOSOMAL DNA REPEAT IN THE PROTOZOAN GIARDIA-LAMBLIA** *NUCLEIC ACIDS RESEARCH*
  Boothroyd, J. C., Wang, A., Campbell, D. A., Wang, C. C.
  1987; 15 (10): 4065-4084
- **EVIDENCE FOR TRANS SPLICING IN TRYPANOSOMES** *CELL*
  Sutton, R. E., Boothroyd, J. C.
  1986; 47 (4): 527-535
- **ANTIGENIC VARIATION IN AFRICAN TRYPANOSOMES** *ANNUAL REVIEW OF MICROBIOLOGY*
  Boothroyd, J. C.
  1985; 39: 475-502
- **APPARENT DISCONTINUOUS TRANSCRIPTION OF TRYPANOSOMA-BRUCEI VARIANT SURFACE-ANTIGEN GENES** *NATURE*
  Campbell, D. A., THORNTON, D. A., Boothroyd, J. C.
  1984; 311 (5984): 350-355
- **THE 5'-LIMIT OF TRANSPOSITION AND UPSTREAM BARREN REGION OF A TRYPANOSOME VSG GENE - TANDEM-76 BASE-PAIR REPEATS FLANKING (TAA)90** *NUCLEIC ACIDS RESEARCH*
  Campbell, D. A., VANBREE, M. P., Boothroyd, J. C.
  1984; 12 (6): 2759-2774

- **COMPARISON OF THE AMINO-ACID-SEQUENCE OF THE MAJOR IMMUNOGEN FROM 3 SEROTYPES OF FOOT AND MOUTH-DISEASE VIRUS** *NUCLEIC ACIDS RESEARCH*
  Makoff, A. J., PAYNTER, C. A., Rowlands, D. J., Boothroyd, J. C.
  1982; 10 (24): 8285-8292
- **THE NUCLEOTIDE-SEQUENCE OF CDNA CODING FOR THE STRUCTURAL PROTEINS OF FOOT-AND-MOUTH-DISEASE VIRUS** *GENE*
  Boothroyd, J. C., Harris, T. J., Rowlands, D. J., Lowe, P. A.
  1982; 17 (2): 153-161
- **COMPLETE NUCLEOTIDE-SEQUENCE OF COMPLEMENTARY-DNA CODING FOR A VARIANT SURFACE GLYCOPROTEIN FROM TRYPANOSOMA-BRUCEI** *JOURNAL OF MOLECULAR BIOLOGY*
  Boothroyd, J. C., PAYNTER, C. A., Coleman, S. L., Cross, G. A.
  1982; 157 (3): 547-556
- **TRANSCRIPTS CODING FOR VARIANT SURFACE GLYCOPROTEINS OF TRYPANOSOMA-BRUCEI HAVE A SHORT, IDENTICAL EXON AT THEIR 5' END** *GENE*
  Boothroyd, J. C., Cross, G. A.
  1982; 20 (2): 281-289
- **MOLECULAR-CLONING OF FOOT AND MOUTH-DISEASE VIRUS GENOME AND NUCLEOTIDE-SEQUENCES IN THE STRUCTURAL PROTEIN GENES** *NATURE*
  Boothroyd, J. C., HIGHFIELD, P. E., Cross, G. A., Rowlands, D. J., Lowe, P. A., Brown, F., Harris, T. J.
  1981; 290 (5809): 800-802
- **VARIANT SURFACE GLYCOPROTEINS OF TRYPANOSOMA-BRUCEI ARE SYNTHESIZED WITH CLEAVABLE HYDROPHOBIC SEQUENCES AT THE CARBOXY AND AMINO TERMINI** *NUCLEIC ACIDS RESEARCH*
  Boothroyd, J. C., PAYNTER, C. A., Cross, G. A., Bernards, A., BORST, P.
  1981; 9 (18): 4735-4743
- **ACTIVATION OF TRYPANOSOME SURFACE GLYCOPROTEIN GENES INVOLVES A DUPLICATION-TRANSPOSITION LEADING TO AN ALTERED 3' END** *CELL*
  Bernards, A., VANDERPLOEG, L. H., FRASCH, A. C., BORST, P., Boothroyd, J. C., Coleman, S., Cross, G. A.
  1981; 27 (3): 497-505
- **HOMOLOGOUS 3'-TERMINAL REGIONS OF MESSENGER-RNAS FOR SURFACE-ANTIGENS OF DIFFERENT ANTIGENIC VARIANTS OF TRYPANOSOMA-BRUCEI** *NUCLEIC ACIDS RESEARCH*
  Majumder, H. K., Boothroyd, J. C., Weber, H.
  1981; 9 (18): 4745-4753
- **AN INTRODUCTION TO ANTIGENIC VARIATION IN TRYPANOSOMES** *AMERICAN JOURNAL OF TROPICAL MEDICINE AND HYGIENE*
  Cross, G. A., Holder, A. A., Allen, G., Boothroyd, J. C.
  1980; 29 (5): 1027-1032
- **A VARIANT SURFACE GLYCOPROTEIN OF TRYPANOSOMA-BRUCEI SYNTHESIZED WITH A C-TERMINAL HYDROPHOBIC TAIL ABSENT FROM PURIFIED GLYCOPROTEIN** *NATURE*
  Boothroyd, J. C., Cross, G. A., Hoeijmakers, J. H., BORST, P.
  1980; 288 (5791): 624-626
- **NEW GENES AND PROMOTERS SUGGESTED BY THE DNA-SEQUENCE NEAR THE END OF THE COLIPHAGE-T7 EARLY OPERON** *NUCLEIC ACIDS RESEARCH*
  Boothroyd, J. C., Hayward, R. S.
  1979; 7 (7): 1931-1943
- **SYNCHRONOUS GROWTH AND PLASTID REPLICATION IN NATURALLY WALL-LESS ALGA OLISTHODISCUS-LUTEUS** *PLANT PHYSIOLOGY*
  Cattolico, R. A., Boothroyd, J. C., Gibbs, S. P.
  1976; 57 (4): 497-503