

# CURRICULUM VITAE

## PHOTINI SINNI

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### Education

1981	B.A.	Biology	Swarthmore College, Swarthmore PA
1988	M.D.	Medicine	Dartmouth Medical School, Hanover NH

### Postdoctoral Training

1991 – 1997 Parasitology Dr. Victor Nussenzweig N.Y.U. School of Medicine

### Internships and Residencies

1988 – 1989 Internship in Internal Medicine, Columbia-Presbyterian Hospital, New York  
1989 – 1990 Residency in Internal Medicine, Columbia-Presbyterian Hospital, New York

### Licensure and Certification

1989 York State Medical License  
1992 American Board of Internal Medicine Certificate

### Academic Appointments

1993 – 1998 Instructor, Dept. Medical Parasitology, NYU School of Medicine  
1998 – 2008 Assistant Professor, Dept. Medical Parasitology, NYU School of Medicine  
1998 – 2008 Assistant Attending Physician, Dept. Medicine, NYU Medical Center  
2008 – 2011 Associate Professor, Dept. Medical Parasitology, NYU School of Medicine  
2008 – 2011 Associate Professor, Dept. Medicine, Division of Infectious Diseases, NYU Medical Center  
2011 – 2013 Associate Professor, Dept. Molecular Microbiology & Immunology, Johns Hopkins Bloomberg School of Public Health  
2012 – 2013 Associate Professor, Dept. Medicine, Division of Infectious Diseases, Johns Hopkins School of Medicine  
2014 – present Professor, Dept. Molecular Microbiology & Immunology, Johns Hopkins Bloomberg School of Public Health

### Hospital Appointments

1991 – 1992 Assistant Attending Physician, Department of Emergency Medicine, Bellevue Hospital, New York  
1993 – 1995 Attending Physician, Chelsea Tuberculosis Clinic, Department of Health, New York

### Other Professional Positions

1986 – 1987 Howard Hughes Medical Institute Research Scholar, Laboratory of Parasitic Diseases, National Institutes of Health, Bethesda, MD

## **Awards and Honors**

1981	B.A. with Distinction, Swarthmore College
1981	Associate Member of Sigma Xi, Swarthmore College
1981	Student Fellowship, Woods Hole Oceanographic Institute
1988	M.D. with Honors, Dartmouth Medical School
1988	Alpha Omega Alpha, Dartmouth Medical School
1993	NIH Physician-Scientist Award
1996	Irma T. Hirschl Career Scientist Award
2000	Mallinckrodt Scholar Award

## **Institutional Committees and Service**

### New York University School of Medicine

2000 – 2011	Director of Anopheles Insectary
2002 – 2003	M.D.- Ph.D. Admissions Committee
2005 – 2008	Departmental Representative to Faculty Council
2006 – 2011	M.D.- Ph.D. Admissions Committee
2008 – 2011	Executive Committee, Masters in Clinical Investigation
2008 – 2011	Departmental Appointment and Promotions Committee
2009 – 2011	Departmental Graduate Student Advisor

### Johns Hopkins University

2012 – present	Graduate Student Admissions Committee
2014 – present	Deputy Director (one of four), Johns Hopkins Malaria Research Institute
2014 - 2015	Chair, Faculty Search Committee, Johns Hopkins Malaria Research Institute
2015 – present	Departmental Representative to Faculty Senate
2015 – 2016	Member, Faculty Search Committee, Dept of Molecular Microbiology & Immunology
2016	Ad-Hoc Member, Johns Hopkins School of Public Health Appointments & Promotions Committee

## **Non-University Committees and Service**

### Grant Review

2006	Ad Hoc Member, Minority Biomedical Research Support (MBRS) Review Panel, National Institute of General Medical Sciences, NIH
2006	External Reviewer of Malaria Biology and Genetics Provisional Unit, Institute Pasteur, Paris, France
2007	Member, Special Emphasis Panel to review Research Career Development (K) Awards, NIAID, NIH
2007	Grant Reviewer, Transverse Research Program, Institute Pasteur, Paris, France
2007	Ad-Hoc Reviewer, U.S. Army Research Grants, Research Triangle Park, NC
2009	Reviewer, Challenge Grants in Health and Science Research, NIH
2009	Ad-Hoc Reviewer, Minority Biomedical Research Support (MBRS) Grants, National Institute of General Medical Sciences, NIH
2009	External Reviewer for Faculty Recruitment in Molecular Parasitology, Swedish Research Council, Stockholm, Sweden
2010 – present	Reviewer, Microbiology Immunology and Infection Panel, French National Research Agency, France
2012	External Reviewer, Life & Health Sciences, Fundação para a Ciência e a Tecnologia, Portugal
2012	Ad-Hoc Reviewer, Peer Reviewed Medical Research Program, Dept of Defense
2010 – 2014	Ad-Hoc Reviewer (serve once/yr), Eukaryotic Pathogens Study Section, NIH
2012	Ad-Hoc Reviewer, Drug Discovery and Mechanisms of Antimicrobial Resistance Study Section, NIH
2013	Admissions Committee, Biology of Parasitism Course, Marine Biological Laboratory

2013 Ad-Hoc Reviewer, German-Israeli Foundation for Scientific Research and Development  
2014 Ad-Hoc Reviewer, Medical Research Council, UK  
2016 – 2021 Permanent Member, Eukaryotic Pathogens Study Section, NIH

#### Conference Organizer

2002 Co-Organizer, New York Area Apicomplexan Biology Meeting, National Academy of Medicine  
2002 – 2003 Co-Organizer New York Area Apicomplexan Group Bimonthly Meetings  
2008 Co-Organizer of Symposium in Honor of Victor and Ruth Nussenzweig: Frontiers in the Molecular Mechanisms of the Complement System, Parasite Immunology and Vaccine Development.  
2015 Organizer, Malaria in Pregnancy Symposium, Johns Hopkins Malaria Research Institute

#### Editorial Board Membership

2007 - 2009 Associate Editor, PLoS Neglected Tropical Diseases  
2010 - 2014 Member of the Editorial Board, Parasitology International  
2009 – present Associate Editor, PLoS ONE  
2009 - present Deputy Editor, PLoS Neglected Tropical Diseases  
2015 – present Guest Editor, PLoS Pathogens  
2016 Guest Editor, eLife  
2016 – present Editor, mSphere

#### External Committees

Malaria Eradication Scientific Alliance

### **Teaching**

#### Johns Hopkins University

2012 – present Parasitology Lecturer (5 lectures), Genes to Society, 2<sup>nd</sup> year medical students  
2012 Conference Leader, Genes to Society, 2<sup>nd</sup> yr medical students  
2012 – present Conference Leader, Infectious Diseases Intersession, 3<sup>rd</sup> & 4<sup>th</sup> yr medical students  
2012 - present Lecturer, Lab and Journal Club Leader, Biology of Parasitism, graduate students  
2012 Lecturer, Current Issues in Public Health, MPH students  
2013 – present Facilitator, Cellular & Molecular Medicine Core Discussion Group, graduate students  
2014 – 2015 Facilitator, Core Discussion of Scientific Literature, graduate students  
2014 – present Lecturer, Current Topics in Biochemistry & Molecular Biology, graduate students  
2014 Lecturer, Tropical Medicine and Parasitology, MPH students

#### New York University School of Medicine

1998 – 2011 Conference leader and lecturer, Medical Parasitology 2<sup>nd</sup> yr medical students  
2002 – 2011 Director, lecturer & laboratory leader, Introduction to Parasitology, graduate students  
1999 – 2011 Lecturer, Molecular Parasitology, graduate students  
2000 – 2011 Lecturer, Microbial Pathogenesis, graduate students  
2005 – 2011 Lecturer, Orientation Lectures for 1<sup>st</sup> Year Infectious Disease Fellows  
2005 – 2011 Facilitator and Contributor, Bellevue Residents Conferences and CPCs  
2007 – 2011 Lecturer, The Science Behind Infectious Diseases, 4<sup>th</sup> yr medical students  
2008 - 2011 Weekly Conference Leader, Integrative Seminar, Masters in Clinical Investigation  
2004 – 2008 Lecturer, Microbiology for 2<sup>nd</sup> year dental students

### Teaching at External Institutions

2002	Lecturer, Biology of Parasitism, Marine Biological Laboratory, Woods Hole, MA
2000 – 2002	Lecturer, Ecology, Epidemiology and Control of Important Parasitic Diseases of Developing Countries, Harvard School of Public Health, Boston, MA
2002 – 2012	Lecturer, Malaria From Clinical Presentation to Public Policy, Columbia School of Public Health, New York, NY
2010	Lecturer, Cellular and Molecular Biology of Parasites, Harvard School of Public Health, Boston, MA
2012 - present	Lecturer, Cellular & Molecular Immunology, Uniformed Services University of the Health Sciences, Bethesda, MD
2010 – present	Lecturer, Biology of Parasitism, Marine Biological Laboratory, Woods Hole
2012 – 2014	Module Director, Biology of Parasitism, Marine Biological Laboratory, Woods Hole
2014	Guest Lecturer, Wellcome Trust Advanced Course in Malaria Experimental Genetics, The Sanger Institute, Hinxton, UK
2016 – present	Co-Director, Biology of Parasitism, Marine Biological Laboratory, Woods Hole, MA

### **Teaching Award**

2005	Commendation from the University of Georgia Honors Program for support of undergraduate research.
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### **Publications**

1. **Sinnis P** and Wellem T. Long-range restriction maps of *Plasmodium falciparum* chromosomes: Crossingover and size variation among geographically distinct isolates. *Genomics* 3:287-295, 1988.
2. Cerami C, Frevert U, **Sinnis P**, Takacs B, Clavijo P, Santos M and Nussenzweig V. The basolateral domain of the hepatocyte plasma membrane bears receptors for the circumsporozoite protein of *Plasmodium falciparum* sporozoites. *Cell* 70:1021-1035, 1992.
3. Frevert U, **Sinnis P**, Cerami C, Shreffler W, Takacs B and Nussenzweig V. Malaria circumsporozoite protein binds to the sulfated proteoglycans associated with the surface membrane of hepatocytes. *J Exp Med* 177:1287-1298, 1993.
4. Cerami C, Frevert U, **Sinnis P**, Takacs B and Nussenzweig V. Rapid clearance of malaria circumsporozoite protein by hepatocytes. *J Exp Med* 179:695-701, 1994.
5. **Sinnis P**, Clavijo P, Chait B, Fenyo D, Cerami C, Takacs B and Nussenzweig V. Structural studies of the circumsporozoite protein hepatocyte-binding ligand. *J Exp Med* 180:297-306, 1994.
6. Frevert U, **Sinnis P**, Esko JD and Nussenzweig V. Cell surface glycosaminoglycans are not obligatory for *Plasmodium berghei* sporozoite invasion *in vitro*. *Mol Biochem Parasitol* 76: 257-266, 1996.
7. **Sinnis P**, Willnow TE, Briones MRS, Herz J and Nussenzweig V. Remnant lipoproteins inhibit malaria sporozoite invasion of hepatocytes. *J Exp Med* 184:945-954, 1996.
8. **Sinnis P**. The malaria sporozoite's journey into the liver. *Infectious Agents and Disease* 5:182-189, 1996.
9. Gantt SM, Clavijo P, Bai X, Esko JD and **Sinnis P**. Cell Adhesion to a motif shared by the malaria circumsporozoite protein and thrombospondin is mediated exclusively by its glycosaminoglycan-binding region and not by CSVTGG. *J Biol Chem* 272:19205-19213, 1997.

10. Sidjanski SP, Vanderberg JP and **Sinnis P**. *Anopheles stephensi* salivary glands bear receptors for region I of the circumsporozoite protein of *Plasmodium falciparum*. Mol Biochem Parasitol 90:33-41, 1997.
11. **Sinnis P** and Sim BKL. Cell invasion by the vertebrate stages of *Plasmodium*. Trends Microbiol 5: 52-58, 1997.
12. Gantt SM, Myung JM, Briones MRS, Li WD, Corey EJ, Omura S, Nussenzweig V and **Sinnis, P**. Proteasome inhibitors block development of *Plasmodium*. Antimicrob Agents Chemother 42:2731-2738, 1998.
13. **Sinnis P**. An immunoradiometric assay for quantification of *Plasmodium* sporozoite invasion in HepG2 cells. J Immunol Meth 221:17-23, 1998.
14. Marshall P, Rohlmann A, Nussenzweig V, Herz J and **Sinnis P**. *Plasmodium* sporozoites invade cells with targeted deletions in the LDL Receptor Related Protein (LRP). Mol Biochem Parasitol 106:293-298, 2000.
15. Pinzon-Ortiz C, Friedman J, Esko J and **Sinnis P**. The binding of the circumsporozoite protein to cell surface heparan sulfate proteoglycans is required for *Plasmodium* sporozoite attachment to target cells. J Biol Chem 276:26784-26791, 2001.
16. **Sinnis P** and Febbraio M. *Plasmodium yoelii* Sporozoites Infect CD36 Deficient Mice. Exp Parasitol 100:12-16, 2002.
17. Mo Myung J, Marshall P and **Sinnis P**. The *Plasmodium* circumsporozoite protein is involved in mosquito salivary gland invasion by sporozoites, Mol Biochem Parasitol 133:53-59, 2004.
18. Coppi A, Pinzon-Ortiz C, Hutter C and **Sinnis P**. The *Plasmodium* circumsporozoite protein is proteolytically processed during cell invasion. J Exp Med 201:27-33, 2005. Comment by S.M. Hurtley in "Editors Choice", Science 307:319.
19. Medica D and **Sinnis P**. Quantitative dynamics of *Plasmodium yoelii* sporozoite transmission by infected Anopheline mosquitoes feeding on vertebrate hosts. Infect Immun 73:4363-4369, 2005.
20. Engelmann S, **Sinnis P** and Matuschewski K. Transgenic *Plasmodium berghei* sporozoites expressing beta-galactosidase for quantification of sporozoite transmission. Mol Biochem Parasitol 146:30-37, 2006.
21. Coppi A, Cabinian M, Mirelman D and **Sinnis P**. Antimalarial Activity of Allicin, a Biologically Active Compound From Garlic Cloves. Antimicrob Agents Chemother 50:1731-1737, 2006.
22. Yamauchi LM, Coppi A, Snounou G and **Sinnis P**. *Plasmodium* Sporozoites Trickle Out of the Injection Site. Cell. Microbiol. 9:1215-1222, 2007.
23. Bhandari R, Janos DP and **Sinnis P**. Furuncular myiasis in a returning traveler caused by *Dermatobia hominis*. Am J Trop Med Hyg 76:598-599, 2007.
24. **Sinnis P**, Coppi A, Toida T, Toyoda H, Kinoshita-Toyoda A, Xie J, Kemp MM and Linhardt RJ. Mosquito heparan sulfate and its potential role in malaria infection and transmission. J Biol Chem 282:25376-84, 2007.

25. Kelly BA, Neil SJ, McKnight A, Santos JM, **Sinnis P**, Jack ER, Middleton DA and Dobson CB Apolipoprotein E-derived anti-microbial peptide analogues with altered membrane affinity and increased potency and breadth of activity. *FEBS J* 274:4511-25, 2007.
26. Coppi A, Tewari R, Bishop JR, Bennett BL, Lawrence R, Esko J, Billker O and **Sinnis P**. Heparan sulfate proteoglycans provide a signal to *Plasmodium* sporozoites to stop migrating and productively invade cells. *Cell Host Microbe* 2:316-327, 2007.  
Selected for cover image and commentary by M. Mota, *Cell Host Microbe* 2:286-288.
27. Grüner AC, Mauduit M, Tewari R, Romero JF, Depinay N, Kayibanda M, Lallemand E, Chavatte JM, Crisanti A, **Sinnis P**, Mazier D, Corradin G, Snounou G and Rénia L. Sterile protection against malaria is independent of immune responses to the circumsporozoite protein. *PLoS One* 2:e1371, 2007
28. **Sinnis P** and Coppi A. A Long and Winding Road: The *Plasmodium* Sporozoite's Journey in the Mammalian Host. *Parasitol Int* 56:171-178, 2007.
29. Moreira CK, Templeton TJ, Lavazec C, Hayward RE, Hobbs CV, Kroeze H, Janse CJ, Waters AP, **Sinnis P** and Coppi A. The *Plasmodium* TRAP/MIC2 family member, TRAP-Like Protein (TLP), is involved in tissue traversal by sporozoites. *Cell Microbiol* 10:1505-16, 2008.
30. Gissot M, Ting LM, Daly TM, Bergman LW, **Sinnis P** and Kim K. High mobility group protein HMGB2 is a critical regulator of *Plasmodium* oocyst development. *J Biol Chem* 283:17030-38, 2008.
31. Belnoue E, Voza T, Costa FT, Grüner AC, Mauduit M, Rosa DS, Depinay N, Kayibanda M, Vigário AM, Mazier D, Snounou G, **Sinnis P** and Rénia L. Vaccination with live *Plasmodium yoelii* blood stage parasites under chloroquine cover induces cross-stage immunity against malaria liver stage. *J Immunol* 181: 8552-558, 2008.
32. Li-Min T, Gissot M, Coppi A, **Sinnis P** and Kim K. Attenuated *Plasmodium yoelii* lacking purine nucleoside phosphorylase confer protective immunity. *Nature Med.* 14: 954-58, 2008.  
Selected for commentary by C. Engwerda and M. Good, *Nature Med.* 14:912-913.
33. Yu M, Kumar TR, Nkrumah LJ, Coppi A, Retzlaff S, Li CD, Kelly BJ, Moura PA, Lakshmanan V, Freundlich JS, Valderramos JC, Vilcheze C, Siedner M, Tsai JH, Falkard B, Sidhu AB, Purcell LA, Graud P, Kremer L, Waters AP, Schieghser G, Jacobus DP, Janse CJ, Ager A, Jacobs WR, Sacchetti JC, Heussler V, **Sinnis P** and Fidock D.A. The fatty acid biosynthesis enzyme FabI plays a key role in the development of liver-stage malarial parasites. *Cell Host Microbe*, 4: 567-78, 2008.  
Selected for cover image and commentary by M. Spalding and S. Prigge, *Cell Host Microbe* 4:509-511.
34. **Sinnis P** and Zavala F. The skin stage of malaria infection: biology and relevance to the malaria vaccine effort. *Future Microbiol* 3:275-278, 2008.
35. **Sinnis P** and Ernst J. CO-opting the host HO-1 pathway in tuberculosis and malaria. *Cell Host Microbe* 3:277-279, 2008.
36. Hobbs CV, Voza T, Coppi A, Marsh K, Borkowsky W and **Sinnis P**. HIV protease inhibitors affect development of pre-erythrocytic stage *Plasmodium*. *J Infect Dis* 199: 134-141, 2009.  
Selected for cover image.

37. Mwakingwe A, Ting LM, Hochman S, Chen J, **Sinnis P** and Kim K. Noninvasive real-time monitoring of liver-stage development of bioluminescent *Plasmodium* parasites. *J Infect Dis* 200: 1470-78, 2009.
38. Ejigiri, I and **Sinnis, P.** *Plasmodium* sporozoite-host interactions from the dermis to the hepatocyte. *Current Op Microbiol* 12:401-407, 2009.
39. Kortagere S, Welsh WJ, Morrisey JM, Daly T, Ejigiri I, **Sinnis P**, Vaidya AB, Bergman LW Structure-based design of novel small-molecule inhibitors of *Plasmodium falciparum*. *J Chem Inf Model* 50: 840-49, 2010.
40. Bennett BL and **Sinnis P.** What can we learn from an unnatural immune response? *Trends Parasitol* 26:319-321, 2010.
41. Ecker A, Lakshmanan V, **Sinnis P**, Coppens I and Fidock DA Evidence that mutant PfCRT facilitates the transmission to mosquitoes of chloroquine-treated *Plasmodium* gametocytes. *J Infect Dis* 203:228-36, 2011.
42. Coppi A, Natarajan R, Pradel G, Bennett BL, James ER, Roggero MA, Corradin G, Persson C, Tewari R and **Sinnis P.** The malaria circumsporozoite protein has two functional domains each with distinct roles as sporozoites journey from mosquito to mammalian host. *J Exp Med* 208:341-36, 2011.
43. Cockburn IA, Tse S, Radtke AJ, Srinivasan P, Chen Y, **Sinnis P** and Zavala F. Dendritic cells and hepatocytes use distinct pathways to process protective antigen from *Plasmodium in vivo*. *PLoS Pathogens*, 7: e1001218, 2011.
44. Vera IM, Beatty WL **Sinnis P** and Kim K. Plasmodium protease ROM1 is important for proper formation of the parasitophorous vacuole. *PLoS Pathogens*, 7:e1002197, 2011.
45. Das A, Anvikar AR, Cator LJ, Dhiman RC, Eapen A, Mishra N, Nagpal BN, Nanda N, Raghavendra K, Read AF, Sharma SK, Singh OP, Singh V, **Sinnis P.**, Srivastava H.C., Sullivan S.A., Sutton P.L., Thomas M.B., Carlton J.M., Valecha N. Malaria in India: The Center for the Study of Complex Malaria in India. *Acta Trop* 121:267-73, 2012.
46. Voza T, Miller JL, Kappe SH and **Sinnis P.** Extrahepatic exoerythrocytic forms of rodent malaria parasites at the site of inoculation: Clearance after immunization, susceptibility to primaquine and contribution to blood stage infection. *Infect Immun* 80:2158-64, 2012.
47. Ejigiri I, Ragheb DRT, Pino P, Coppi A, Bennett BL, Soldati-Favre D and **Sinnis P.** Shedding of TRAP by a rhomboid protease from the malaria sporozoite surface is essential for gliding motility and sporozoite infectivity. *PLoS Pathogens* 8:e1002725, 2012.
48. **Sinnis P** and Zavala F. The skin: where malaria infection and the host immune response begin. *Semin Immunopathol* 34:787-92, 2012.
49. Hobbs CV, Voza T, de la Vega P, Van Vliet J, Conteh S, Penzak SR, Fay MP, Anders N, Ilmet T, Li Y, Borkowsky W, Krych U, Duffy PE, **Sinnis P.** HIV Non-nucleoside Reverse Transcriptase Inhibitors and Trimethoprim-Sulfamethoxazole Inhibit *Plasmodium* Liver Stages. *J Inf Dis* 206:1706-14, 2012.

50. Love MS, Millholland MG, Mishra S, Kulkarni S, Freeman KB, Pan W, Kavash RW, Costanzo MJ, Jo H, Daly TM, Williams DR, Kowalska MA, Bergman LW, Poncz M, DeGrado WF, **Sinnis P**, Scott RW, Greenbaum DC. Platelet factor 4 activity against *P. falciparum* and its translation to nonpeptidic mimics as antimalarials. *Cell Host Microbe* 12:815-23, 2012.
51. Millholland MG, Mishra S, Dupont CD, Love MS, Patel B, Shilling D, Kazanietz MG, Foskett JK, Hunter CA, **Sinnis P**, Greenbaum DC. A host GPCR signaling network required for the cytolysis of infected cells facilitates release of apicomplexan parasites. *Cell Host Microbe* 13:15-28, 2013.
52. Lindner SE, Swearingen KE, Harupa A, Vaughan AM, **Sinnis P**, Moritz RL, Kappe SH. Total and putative surface proteomics of malaria parasite salivary gland sporozoites. *Mol Cell Proteomics* 12:1127-43, 2013.
53. Falkard B, Kumar TR, Hecht LS, Matthews KA, Henrich PP, Gulati S, Lewis RE, Manary MJ, Winzeler EA, **Sinnis P**, Prigge ST, Heussler V, Deschermeier C, Fidock D. A key role for lipoic acid synthesis during *Plasmodium* liver stage development. *Cell Microbiol* 15:1585-1604, 2013.
54. Hobbs CV, De La Vega P, Penzak SR, Van Vliet J, Krzych U, Sinnis P, Borkowsky W, Duffy PE. The effect of antiretrovirals on *Plasmodium falciparum* liver stages. *AIDS* 27:1674-77, 2013.
55. Sack BK, Miller JL, Vaughan AM, Douglass A, Kaushansky A, Mikolajczak S, Coppi A, Zavala F, Sinnis P, Kappe SH. A model for in vivo assessment of humoral protection against malaria sporozoite challenge by passive transfer of monoclonal antibodies and immune serum. *Infect Immun* 82:808-17, 2014.
56. Lehmann C, Heitmann A, Mishra S, Burda PC, Singer M, Prado M, Niklaus L, Lacroix C, Ménard R, Frischknecht F, Stanway R, Sinnis P, Heussler V. A cysteine protease inhibitor of plasmodium berghei is essential for exo-erythrocytic development. *PLoS Pathog* 10:e1004336, 2014.
57. Ferguson DJP, Balaban AE, Patzewitz EM, Wall RJ, Hopp CS, Poulin B, Mohammed A, Malhotra P, Coppi A, Sinnis P\*, Tewari R\*. The repeat region of the circumsporozoite protein is critical for sporozoite formation and maturation in *Plasmodium*. *PLoS ONE*, 9:e113923, 2014.  
\*co-corresponding authors
58. Radtke AJ, Kastenmüller W, Espinosa DA, Gerner MY, Tse SW, Sinnis P, Germain RN, Zavala FP, Cockburn IA. Lymph-node resident CD8 $\alpha$ <sup>+</sup> dendritic cells capture antigens from migratory malaria sporozoites and induce CD8<sup>+</sup> T cell responses. *PLoS Pathog* 11:e1004637, 2015.
59. Hopp CS, Sinnis P. The innate and adaptive response to mosquito saliva and *Plasmodium* sporozoites in the skin. *Ann N Y Acad Sci* 1342:37-43, 2015.
60. Espinosa DA, Gutierrez GM, Rojas-López M, Noe AR, Shi L, Tse SW, Sinnis P, Zavala F. Proteolytic cleavage of the *Plasmodium falciparum* circumsporozoite protein is a target of protective antibodies. *J Infect Dis*, 212:1111-9, 2015.
61. Douglas RG, Amino R, Sinnis P, Frischknecht F. Active migration and passive transport of malaria parasites. *Trends Parasitol* 32:357-62, 2015.
62. Herrera R, Anderson C, Kumar K, Molina-Cruz A, Nguyen V, Burkhardt M, Reiter K, Shimp R Jr, Howard RF, Srinivasan P, Nold MJ, Ragheb D, Shi L, DeCotiis M, Aebig J, Lambert L, Rausch KM, Muratova O, Jin A, Reed SG, Sinnis P, Barillas-Mury C, Duffy PE, MacDonald NJ, Narum DL. Reversible Conformational Change in the *Plasmodium falciparum* Circumsporozoite Protein Masks Its Adhesion Domains. *Infect Immun* 83:3771-80, 2015.



63. Nemetski SM, Cardozo TJ, Bosch G, Weltzer R, O'Malley K, Ejigiri I, Kumar KA, Buscaglia CA, Nussenzweig V, Sinnis P, Levitskaya J, Bosch J. Inhibition by stabilization: targeting the *Plasmodium falciparum* aldolase-TRAP complex. *Malar J* 14:324, 2015.
64. Hopp CS, Chiou K, Ragheb DR, Salman A, Khan SM, Liu AJ, Sinnis P. Longitudinal analysis of *Plasmodium* sporozoite motility in the dermis reveals component of blood vessel recognition. *Elife* 4:doi:10.7554/eLife.07789, 2015.  
Selected for commentary "Looking for Blood" by P. Formaglio and R. Amino, *Elife* 4: doi: 10.7554/eLife.11284, 2015.
65. Moreira CK, Naissant B, Coppi A, Bennett BL, Aime E, Franke-Fayard B, Janse CJ, Coppens I, Sinnis P, Templeton TJ. The *Plasmodium* PHIST and RESA-Like Protein Families of Human and Rodent Malaria Parasites. *PLoS One* 11:e0152510, 2016.
66. Hopp CS, Balaban AE, Bushell E, Billker O, Rayner JC, Sinnis P. Palmitoyl Transferases have Critical Roles in the Development of Mosquito and Liver Stages of *Plasmodium*. *Cell Microbiol* doi:10.1111/cmi.12601, 2016.  
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67. Voss C, Ehrenman K, Mlambo G, Mishra S, Kumar KA, Sacci JB Jr, Sinnis P, Coppens I. Overexpression of *Plasmodium berghei* ATG8 by Liver Forms Leads to Cumulative Defects in Organelle Dynamics and to Generation of Noninfectious Merozoites. *MBio*. 7: e00682-16, 2016.
68. Swearingen KE, Lindner SE, Shi L, Shears MJ, Harupa A, Hopp CS, Vaughan AM, Springer TA, Moritz RL, Kappe SH, Sinnis P. Interrogating the *Plasmodium* Sporozoite Surface: Identification of Surface-Exposed Proteins and Demonstration of Glycosylation on CSP and TRAP by Mass Spectrometry-Based Proteomics. *PLoS Pathog* 12:e1005606, 2016.

## Book Chapters

1. **Sinnis P.** and Nussenzweig V. Preventing sporozoite invasion of hepatocytes. In: *Malaria Vaccine Development: A Multi-Immune Response Approach*. Edited by Stephen Hoffman, ASM Press, pp 15-33, 1996.
2. Chitnis C., **Sinnis P.** and Miller L.M., The sporozoite, the merozoite and the infected red cell: Receptors and host cells. In: *Malaria: Molecular and Clinical Aspects*. Edited by Mats Wahlgren and Peter Perlmann, Harwood Academic Publishers, pp 249-285, 1999.
3. **Sinnis P.** and Nardin B. Sporozoite Antigens: Biology and Immunology of the Circumsporozoite Protein and Thrombospondin Related Anonymous Protein. In: *Malaria Immunology*. Edited by P. Perlmann and M. Troye-Blomberg, S. Karger Press, pp 70-96, 2002.
4. **Sinnis P.** Giardia. In: *Parasitology*. Edited by A. Satoskar, G. Simon, P. Hotez and M. Tsuji, Landes Bioscience, pp 195-205, 2009.
5. **Sinnis P.**, De La Vega P., Coppi A., Krzych U. and Mota M.M. Quantification of Sporozoite Invasion, Migration and Development by Microscopy and Flow Cytometry. In: *Malaria: Methods and Protocols*. Edited by R. Menard, Humana Press, Springer, pp 385-40, 2013.