





Curriculum Vitae

Dipak K. Raj, PhD

Associate Professor

Division of Infectious Disease & International Medicine University of South Florida | USF Health Morsani College of Medicine

3720 Spectrum Blvd Tampa, FL 33606 Phone: 401 663 4648 (M) Fax: (813) 905-9991 Email:dipakraj@usf.edu

EDUCATION

Master of Science

Graduate School

Punjab University Chandigarh, MS in Biotechnology, 1999

Utkal University, Ph.D. in Life Sciences, 2005

POSTGRADUATE TRAINING

Postdoctoral Fellowship

LMVR/NIAID, National Institute of Health, Bethesda, MD 20892-4874. Field of study: Identification of drugresistant gene and vaccine candidate for falciparum malaria 2005-2010

ACADEMIC APPOINTMENTS

- 2004-2005 Consultant to Department of Vector Research, Institute of Life Sciences, India
- 2005-2010 Postdoctoral Fellow, LMVR/NIAID, National Institute of Health, MD, USA
- 2010-2014 Research Scientist, CIHR/ Rhode Island Hospital, USA
- 2014 2021 Assistant Professor of Pathology and Laboratory Medicine, Brown University, RI USA
- 2021- Assistant Professor (Adjunct) of Pathology and Laboratory Medicine, Brown University, RI, USA
- 2021- Associate Professor, Division of Infectious Disease & International Medicine

University of South Florida | USF Health Morsani College of Medicine, FL, USA

PROFESSIONAL MEMBERSHIPS

2005-2015	Student member of the American Society of Tropical Medicine and Hygiene
2016-	Member of the American Society of Tropical Medicine and Hygiene
2023-	Lifetime member of the National Academy of Vector-Borne Diseases

HONORS

2011	New Investigator Award, Lifespan, Providence, RI
2012	Finalist New Investigator award, Lifespan, Providence USA
2016	Young Investigator Travel Award, National IDeA Symposium (NISBRE)
2018	Travel Award for PI, NIH Sponsored Workshop on Quantitative Proteomics
2023	Vestergaard Frandsen Award from the National Academy of Vector Borne
	Diseases (NAVBD) for his contributions to the field of malaria control.

SCIENTIFIC REVIEW APPOINTMENTS

- NIH/NIAID, The Small Business Innovation Research (SBIR) Study section, November
 2018
- > NIH/NIAID, The Small Business Innovation Research (SBIR) Study section, March 2019
- > NIH/NIAID, The Small Business Innovation Research (SBIR) Study section, June 2019
- > NIH/NIAID, Vaccines against Microbial Diseases (VMD) Study section, May 2020
- NIH/DNDA, clinical Neuroimmunology and brain tumors (CNBT), Study section, October
 2020
- > NIH/NIAID, The Small Business Innovation Research (SBIR) Study section, March 2021
- NIH/NIAID, Infectious Diseases Vaccines, Therapeutics, and Vector Biology"(AIDC-V) Study section, July 2021
- NIH/DNDA, clinical Neuroimmunology and brain tumors (CNBT), Study section, October
 2021
- > NIH/NIAID, Vaccines against Microbial Diseases (VMD) Study section, May 2022

- > DOD Peer Reviewed Medical Research Program (PRMRP) CT-ID FY22
- Small Business Innovation Research (SBIR) Phase II Program "Development of Monoclonal Antibody-mediated Interventions to Combat Malaria" Feb, 2023
- > DOD Peer Reviewed Medical Research Program (PRMRP) CT-ID FY2023
- Chair the Review panel NIAID/NIH "Vaccines Against Infectious Diseases and Vector-Borne and Zoonotic Diseases" on November 6, 2023
- NIH/DNDA, clinical Neuroimmunology and brain tumors (CNBT), Study Section, June 2024

JOURNAL REVIEW APPOINTMENTS

Ad hoc reviewer for:

- Antimicrobial Agents and Chemotherapy 2021
- Scientific Reports 2021
- > American Journal of Tropical Medicine and Hydergine 2024
- > Journal of Molecular Biology Research, 2015

Editorial Board

> Journal of Science, Technology and Environment Informatics 2015-

Guest editor

- > "MDPI Vaccine" Recent Advances in Malaria Vaccine Development, 2023-
- > Antimicrobials, Resistance and Chemotherapy Frontiers in Microbiology, 2023-

PUBLICATIONS

Original peer-reviewed publication

- 1. **Raj DK**, Das BR, Dash AP and Supakar PC. Identification of telomerase activity in gametocytes of *Plasmodium falciparum*. <u>Biochemical and Biophysical Research</u> <u>Communication</u>. 2003; 309 (3): 685-8.
- Raj DK, Das BR, Dash AP and Supakar PC. Genetic diversity in MSA-1 gene of *Plasmodium falciparum* in different malaria-endemic localities. <u>American Journal of Tropical Medicine and Hygiene</u> 2004;71 (3):285-9.

- 3. **Raj DK**, Das BR, Dash AP and Supakar PC. Detection of a rare point mutation in the Cterminus conserve region of MSA-1 gene in *Plasmodium falciparum*. <u>Experimental</u> <u>Parasitology</u> 2004;106 (1-2): 45-49.
- 4. Mishra K, **Raj DK**, Dash AP and Hazra RK. Combined detection of *Brugia malayi* and *Wuchereria bancrofti* using single PCR. <u>Acta Trop</u>. 2005; 93(3): 233-7.
- Mishra K, Raj DK, Dash AP and Hazra RK. A simple Para film-based membrane-feeding method for in vivo radioisotope labeling of the polypeptide in mosquitoes. <u>Annals of Tropical</u> <u>Medicine and Parasitology</u> 2005; 99(8) 803-806.
- 6. **Raj DK**, Mishra S, Das BR, and Dash AP. *Plasmodium falciparum* Pfs25 gene promoter has no polymorphism in natural isolates of Eastern India <u>Acta Protozologica</u> 2005; 44, 289-292.
- Mishra S, Raj DK, Dash AP, and Supakar PC. An efficient detection of chloroquine resistance marker in pfCRT gene of *Plasmodium falciparum* by PCR-SSCP analysis in eastern Indian isolates. <u>Transaction of Royal Society of Tropical Medicine and Hygiene</u> 2006; 100(3): 243-7.
- Mishra K, Raj DK, Hazra RK, Dash AP and Supakar PC. The development and evaluation of a single-step multiplex PCR method for simultaneous detection of *Brugia malayi* and *Wuchereria bancrofti*. <u>Mol Cell Probes</u>. 2007; 21: 355-62.
- 9. **Raj DK**, Mu J, Jiang H, Kabat J, Singh S, Sullivan M, Fay MP, McCutchan TF, Su XZ. Disruption of a *Plasmodium falciparum* multidrug resistance-associated protein (PFMRP) alters its fitness and transport of antimalarial drugs and glutathione. *Journal of Biological Chemistry* 2010; March 20; 284(12):7687-96.
- Eastman RT, Pattaradilokrat S, Raj DK, Dixit S, Deng B, Miura K, Yuan J, Tanaka TQ, Johnson RL, Jiang H, Huang R, Williamson K, Lambert LE, Long C, Austin CP, Wu Y, and Su XZ. A Class of Tricyclic Compounds Blocking Malaria Oocyst Development and Transmission. <u>Antimicrobial Agents and Chemotherapy</u> 2012; Jan; 57(1): 425-35.
- 11. Raj DK, Nixon CP, Nixon CE, Dvorin JD, DiPetrillo CG, Pond-Tor S, Wu HW, Jolly G, Pischel L, Lu A, Michelow IC, Cheng L, Conteh S, McDonald EA, Absalon S, Holte SE, Friedman JF, Fried M, Duffy PE, and Kurtis JD. Antibodies to PfSEA-1 block parasite egress from RBCs and protect against malaria infection. <u>Science</u> 2014; 344:871-7. (IF: 41.845)
- Nixon CE, Park S, Pond-Tor S, **Raj DK**, Lambert L, Orr-Gonzales S, Barnafo E, Friedman JF, Fried M, Duffy PE, and Kurtis JD. Identification of protective B-cell epitopes within the novel malaria vaccine candidate P. falciparum Schizont Egress Antigen-1. <u>*Clinical and Vaccine Immunology*</u> 2017; July 5; 24(7). PMID: 28468980 (IF: 3.5)
- Nixon CP, Silva-Viera RA, Nixon CE, Obeidallah SA, Jha A, Dockery D, Raj DK, Park S, Patrick E. DuffyPE, and Kurtis JD. Antibodies to Pfs355, A Novel Early Gametocyte Protein, Predict Decreased Plasmodium falciparum Gametocyte Density In Humans. <u>Journal of Infectious Diseases</u>, 2018 October 20; 218(11): 1792-1801. PMID: 29982707 (IF: 5.02)

14. Raj DK*, Kurtis JD*, Park S, Nixon CE, McDonald EA, Nixon CP, Pond-Tor S, Jha A, Taliano RJ, Kabyemela ER, Friedman JF, Duffy PE and Fried M. 2018. Maternally derived antibodies to Schizont Egress Antigen-1 protect offspring from severe malaria. <u>*Clinical Infectious Diseases.*</u> 2019 May 2; 68 (10):1718-1724. PMID: 30165569 (IF: 9.08)

* Equal contribution as 1st and communicating Author

- Clements RL, Streva V, Dumoulin P, Huang W, Raj DK, Barbara Burleigh B, Llinás M, Winzeler E, Zhang Q, and Dvorin JF, 2019. A novel antiparasitic compound kills ring-stage Plasmodium falciparum and retains activity against artemisinin-resistant parasites. <u>Journal of Infectious Diseases</u> 2019 October 16. PMID: 31616928 (IF: 5.02)
- 16. Raj DK, Das Mohapatra A, Jnawali A, Zuromski J, Jha A, Cham-Kpu G, Sherman B, Rudlaff RM, Nixon CE, Hilton N, Oleinikov AV, Chesnokov O, Merritt J, Pond-Tor S, Burns L, Jolly G, Ben Mamoun C, Kabyemela E, Muehlenbachs A, Lambert L, Orr-Gonzalez S, Gnädig NF, Fidock DA, Park S, Dvorin JD, Pardi N, Weissman D, Mui BL, Tam YK, Friedman JF, Fried M, Duffy PE, Kurtis JD. Anti-PfGARP activates programmed cell death of parasites and reduces severe malaria. <u>Nature.</u> 2020 Jun; 582(7810): 104-108. PMID: 32427965 (IF: 42.778)
- Michelow IC, Park S, Tsai SW, Rayta B, Pasaje CFA, Nelson S, Early AM, Frosch AP, Ayodo G, **Raj DK**, Nixon CE, Nixon CP, Pond-Tor S, Friedman JF, Fried M, Duffy PE, Roch KGL, Niles JC, Kurtis JD. A Newly Characterized Malaria Antigen on Erythrocyte and Merozoite Surfaces Induces Parasite Inhibitory Antibodies. <u>Journal of Experimental</u> <u>Medicine</u>. 2021 September 6;218(9), Epub 2021 August 3. PMID: 34342640 (IF: 14.31)
- Johnson Y, Shakri AR, Pond-Tor S, Jnawali A, Najrana T, Wei Wu H, Alameh MG, Weissman D, KABYEMELA E, Duffy PE, Fried M, Kurtis JD, **Raj DK**. Immunization with PfGBP130 generates antibodies that inhibit RBC invasion by P. falciparum parasites. <u>Frontier in Immunology</u> 30th April 2024, (*Accepted*)

PATENTS

- 1. Su XZ, Yuan J, **Raj DK**, Pattaradilokart S, Jonshon R, and Huang R. "COMPOUND THAT TREATS MALARIA AND prevents MALARIA TRANSMISSION." *June 28, 2016.* **US Patent No. 9375424B2**
- 2. **Raj DK**, Pattaradilokart S, Jonshon R, Huang R, Su XZ "COMPOUND THAT treats MALARIA AND prevents MALARIA TRANSMISSION". *August, 02,2012.* **US Patent No. 13 392668**
- 3. Kurtis J, Christian N, **Raj DK**, Friedman J, Fried M, Duffy P. "VACCINE FOR FALCIPARUM MALARIA."March 30, 2021, *US Patent No. 960,065 B2.*
- 4. Kurtis JK, Oleinikov A, Raj DK, COMPOSITIONS AND METHODS FOR THE TREATMENT OF PLASMODIUM FALCIPARUM MALARIA. February 26, 2021. US *Provisional Patent No.* 63/154,105.
- 5. Kurtis JD, **Raj DK**, Das Mohapatra A & Zuromski J. ANTIBODIES TO PFGARP KILL PLASMODIUM FALCIPARUM MALARIA PARASITE AND PROTECT AGAINST INFECTION AND SEVERE DISEASE: US *July 16, 2024, U.S. Patent No. 12,037,386*
- 6. **Raj DK** & Kurtis JD. A NOVEL METHOD TO TARGET PFGBP130 AS A VACCINE FOR P. FALCIPARUM MALARIA. *U.S. Provisional Patent No. 63/642,438* (filed on May 3, 2024).

OTHER PUBLICATIONS

- 1. Jenna Zuromski, Jonathan Kurtis & **Dipak Kumar Raj.** Protocol for differential biopanning of *P. falciparum* phage display cDNA library to identify parasite targets of protective antibodies. <u>Methods in Molecular Biology</u> 2021, Springer Science.
- 2. Alok Das Mohapatra, Jenna Zuromski, **Dipak Kumar Raj** & Jonathan Kurtis. Assessing PfGARP mediated apoptosis of intra-erythrocytic *Plasmodium falciparum* parasites. <u>Methods in</u> <u>(Molecular Biology 2021</u>, Springer Science

Indo-US joint venture for the development of Science (Student Speaker)	Bengaluru, India, 2003. Title- Detection of telomerase activity in the gametocyte of <i>Plasmodium falciparum</i>
Utkal University, Research Seminar Series	Utkal University, India. 2005 "Title-Polymorphism in <i>P. falciparum</i> malaria vaccine candidate genes"
John Hopkins University, Malaria Seminar Series	John Hopkins University, MD, 2007. Title: PfMRP gene and drug resistance in malaria.
Woman and Infant Hospital Pediatric research colloquium	Woman and Infant Hospital, RI, 2013.Title- PfSEA-1, a novel vaccine candidate for pediatric falciparum malaria."
Woman and Infant Hospital Pediatric research colloquium	Woman and Infant Hospital, RI, 2014. Title- Antibodies to Plasmodium falciparum glutamic acid-rich protein (PfGARP) inhibit parasite growth by arresting trophozoite development
Kalinga Institute of Industrial Technology (Invited Speaker).	Kalinga Institute of Industrial Technology, Odisha, India, Title- characterization of PfGARP as a vaccine candidate against pediatric falciparum malaria, April 2015
Institute of Life Sciences (Invited Speaker)	Institute of Life Sciences, India, Title characterization of PfSEA-1 as a vaccine against pediatric falciparum malaria, April 2015
University of Rhode Island, COBRE Investigators Seminar,	University of Rhode Island, April 2017. Title- "Immune- Based Interventions Against Infectious Diseases"
Brown University, Department of Pathology and Laboratory Medicine Work In Progress Seminar Series	Brown University, Department of Pathology and Laboratory Medicine. Jan 2019. Title- " Characterizations of PfSEA-1 as a Candidate for a pediatric malaria vaccine."
Brown University, Department of Pathology and Laboratory Medicine, Work In Progress Seminar Series	Brown University, Department of Pathology and Laboratory Medicine. Jan 2019. Title- "PfGARP as a pediatric malaria vaccine."
Invited Speaker for Research Collaboration (NCI, NIH)	National Cancer Institute, Laboratory of Molecular Biology June 12, 2019, Title-PfGARP as malaria vaccine and the possibility of phage-based therapy.
National Institute of Health, Invited Speaker	National Cancer Institute, Laboratory of Molecular Biology, December 2020 "Development of Lambda particle vaccine against malaria."

INVITED PRESENTATIONS

The University of South Florida, Invited Speaker	The Department of Internal Medicine, Division of Infectious Disease & International Medicine, 2021
	Research on Malaria-Resistant Children in Tanzania Leads to Promising New Vaccine Targets
Institute of Life Sciences,	KIIT, India, anti-PfGARP Drug development against
Invited Speaker	malaria. 2023
School Of Biotechnology,	Institute of Life Sciences, India, Vaccine development
Invited Speaker.	against falciparum malaria 2023
Brown University,	Development of Vaccines against Infectious Diseases.
Invited Speaker	2023
Punjab University Chandigarh Invited Speaker	Vaccine development against falciparum malaria, 2023

OTHER PRESENTATIONS

6th International Symposium on Vectors & Vector-Borne DiseasesRegional Medical Research Centre, India. 2002 Title Plasmodium falciparum Pfs25 gene polymorphism natural isolates. Bhubaneswar, India6th International Symposium on Vectors & Vector-Borne DiseasesRegional Medical Research Centre, India. 2002. Title Genetic polymorphisms in MSA-1 gene of Plasmodium falciparum in different malaria-ender localities. Bhubaneswar, India6th International Symposium on MalariaRegional Medical Research Centre, India. 2002. Title Genetic polymorphisms in MSA-1 gene of Plasmodium falciparum in different malaria-ender localities. Bhubaneswar, IndiaInternational Symposium on MalariaMalaria Research Centre, 2004. Title- Detection of ra point mutations in the C-terminus region of MSA- gene in Plasmodium falciparum. New Delhi, Indi schizont egress from falciparum-infected RBCs 2013, USAAm J Trop Med Hyg, ConferencePfCDPK5 as a novel vaccine antigen against pediatr malariaGordon Malaria Conference(Switzerland), PfGARP is the target for antimalaria vaccine development. 2019, USA
6th International Symposium on Vectors & Vector-Borne DiseasesRegional Medical Research Centre, India. 2002. Title Genetic polymorphisms in MSA-1 gene of Plasmodium falciparum in different malaria-ender localities. Bhubaneswar, IndiaInternational Symposium on MalariaMalaria Research Centre, 2004. Title- Detection of ra point mutations in the C-terminus region of MSA- gene in Plasmodium falciparum. New Delhi, IndiAm J Trop Med Hyg, ConferenceAntibodies to Schizont Egress Antigen-1 (PfSEA-1) bl schizont egress from falciparum-infected RBCs 2013, USAAm J Trop Med Hyg, ConferencePfCDPK5 as a novel vaccine antigen against pediatr malariaGordon Malaria Conference(Switzerland), PfGARP is the target for antimalaria vaccine development. 2019, USA
International Symposium on MalariaMalaria Research Centre, 2004. Title- Detection of ra point mutations in the C-terminus region of MSA- gene in <i>Plasmodium falciparum</i> . New Delhi, IndiAm J Trop Med Hyg, ConferenceAntibodies to Schizont Egress Antigen-1 (PfSEA-1) ble schizont egress from falciparum-infected RBCs 2013, USAAm J Trop Med Hyg, ConferencePfCDPK5 as a novel vaccine antigen against pediatr malariaGordon Malaria Conference(Switzerland), PfGARP is the target for antimalaria vaccine development. 2019, USA
Am J Trop Med Hyg, Conference Antibodies to Schizont Egress Antigen-1 (PfSEA-1) blaschizont egress from falciparum-infected RBCs 2013, USA Am J Trop Med Hyg, Conference PfCDPK5 as a novel vaccine antigen against pediatr malaria Gordon Malaria Conference (Switzerland), PfGARP is the target for antimalaria vaccine development. 2019, USA
Am J Trop Med Hyg, ConferencePfCDPK5 as a novel vaccine antigen against pediatr malariaGordon Malaria Conference(Switzerland), PfGARP is the target for antimalaria vaccine development. 2019, USA
Gordon Malaria Conference (Switzerland), PfGARP is the target for antimalaria vaccine development. 2019, USA
Malaria Madness Meeting Evaluation of PfCDPK-5 as a novel antimalarial vacci candidate. Saint Petersburg 2022, USA
Am J Trop Med Hyg, ConferenceApoptosis-Inducing Anti-Malaria Drugs TargetingPfGARP, Seattle, 2022 USA
Am J Trop Med Hyg, ConferencePfCDPK5 as potential malaria vaccine, Chicago, 20223USA
National Academy of Vector BorneAnti-PfGARP drug development against Malaria, GoDiseases, ConferenceIndia 2023
National Academy of Vector BornePfCDPK5 as a vaccine candidate against Malaria, GoDiseases, ConferenceIndia 2023

GRANTS

Completed

- University Grant Commission, India Research fellowship "Identification of polymorphism in malaria antigens" 01/01/1999-12/30/2003. Total Costs: \$13,125. Dr. Raj is the Principal Investigator.
- 2. **Department of Biotechnology**, Govt. India, Grant for research on vector-borne diseases. Detection of malaria and filariasis in patients using the molecular diagnostic tool" 2004-2005. Total Costs: **\$3,000**. **Dr. Raj** is the Principal Investigator.
- COBRE P20GM1043-12 "Evaluation of PfCDPK-5 as pediatric malaria vaccine" 06/01/2015- 05/31/2016 Total Direct Costs: \$80,000. Dr. Raj is The Principal Investigator at 50% effort.
- Rhode Island Foundation "Evaluation of vaccine potential for five malaria antigens identified in disease-resistant children." 05/012017-11/30/2018. Total Direct Costs: \$25,000. Dr. Raj is The Principal Investigator at 20% effort.
- 5. **Oh-Zopfi**, **Women & Infants Hospital Project Grant** "Preliminary evaluation of newly identified malaria antigens" 01/01/2018-11/30/2019. Total Direct Costs: **\$22,500**. **Dr. Raj** is The **Principal Investigator** at 10% effort.
- NIH/NIAID R01 5R01AI076353 "PfSEA-1 based vaccines for *falciparum* malaria" 09/01/2014-08/31/2020. Total Costs: \$2,567,622. Dr. Raj is a Co-investigator (RA) at 40% effort.
- 7. NIH/NIAID R21 Al131047-01A1 "PfCDPK5 based vaccines for pediatric malaria" 02/2018-01/2021. Total Costs: \$445,000. Dr. Raj, Principal Investigator, at 50% effort.
- 8. **The Warren Alpert Foundation** "mRNA vaccines for falciparum malaria" 2021-2026. Total Costs **\$4,599,053**. **Dr. Raj** is a Co-Investigator at 50% effort

Current

 R01 Al144014-01A1 "multi-target blood-stage vaccine against Plasmodium." 12/13/2019-11/30/2024. Total Costs \$2025,000. Dr. Raj is the Principal Investigator at 50% effort

<u>Pending</u>

- NIH/NIAID R21 "Immunodominant fragment of PfGARP" 2024-2026. Total Costs \$445,000. Dr. Raj is the Principal Investigator. Impact Score 28 (2024 Payline NIAID 28).
- NIH/NIAID R01 "Apoptosis-inducing anti-malaria drugs targeting PfGARP" 2021-2026. Total Cost: \$3,867,909. Dr. Raj is an MPI 30% effort. Impact Score 50 (2024 Payline NIAID 10)

MENTORING EXPERIENCE:

Dr. Raj has supervised the independent senior thesis work of undergraduate and Master students.

Student and Institution	Class	Year	Title of The Project
Josephine Dunn	NIH Postbaccalaureate	2006-2008	Analysis of drug resistance genes in the malaria parasite <i>Plasmodium falciparum</i>
Veronica S Wright National Institute of Health, USA)	NIH Postbaccalaureate	2008-2010	Gene knockout and analysis of drug resistance genes in the malaria parasite <i>Plasmodium falciparum</i>
Camia Crawford (Brown Medical School, USA)	Brown Undergrad	2010-2011	Detection and analysis of malaria-specific antibodies in kids serum collected from Moherza Tanzania
Lauren Pischel (Brown University, USA)	Brown Undergrad (UTRA)	2010-2011	Heterogeneity in PfSEA-1 sequences from field isolates- implication for vaccine development
Marie Siwicki (Brown University, USA)	Brown Undergrad	2010-2011	Growth inhibition antibodies are targeting PfSEP- 1 (Brown University).
Alini Lu (College of Human Ecology NY, USA)	Undergrad	2011-2012	Use of T7 phase display techniques for identification of potential vaccine candidates for pediatric malaria.
Nick Rich New York University, USA)	Undergrad	2013	Cloning and recombinant protein expression of a potential vaccine candidate, Pf-GARP for pediatric malaria
Hadly Witt (Brown University, USA)	Master Student	2014-2016	Optimization and adjuvant formulations of PfSEA-1-based vaccines and identification of RBC invasion ligands in murine challenge models
Brett Sherman (Brown University, USA)	Undergrad	2015-2017	Phenotyping of genetically altered potential malaria vaccine candidate gene, Pf-GARP
Shreya Ramyya (Brown University, USA)	Undergrad	2016-2018	Evaluation of PfCDPK-5 as a pediatric malaria vaccine

Ambrish Jha (Medical Graduate, Nepal)	International medical student	2016-2017	"Optimization of Schizont Egress Antigen-1 (PfSEA-1) and adjuvant combination against P. Berghei ANKA challenge in mice."
Andrea Rodriguez (Brown University	Visiting Undergrad	2017-2018	"Identification of Novel Vaccine Candidates against pediatric malaria."
Anup Janiwali (Medical Graduate, Nepal)	International medical student	2017-2019	PfGARP as pediatric malaria vaccine
Karan Modi (Brown University)	Undergrad	2018-2019	Evaluation of PfCDPK-5 as pediatric malaria vaccine
Savannah Lewis (Brown University	Undergrad (UTRA)	2020-2021	Anti-PfGARP Monoclonal antibodies against Plasmodium falciparum
Monika Karera (Medical Graduate)	International Medical Graduate	2019-2021	Preliminary evaluation of newly identified malaria antigens
Elgodamy Yousef (Brown University)	Undergrad	2019-2021	Identification of the smallest recombinant fragment from the PfGARP gene to be used as a malaria vaccine
Robidoux, Annalise (Brown University)	Master student	2020-2022	Identification of vaccine candidate for malaria parasite.
Huijun Edelyn Park (Brown/USF)	Master student	2020-2022	ABC transporter as the drug-resistant gene in Plasmodium falciparum
Joonhwa Jung (Brown/USF)	Master Student	2020-2022	Evaluation of immunodominant fragment of PfGARP for vaccine development
Maansi Gupta (Brown University)	Undergrad (SPRINT UTRA)	2020-2022	"Identification of vaccine candidate for malaria parasite.
Tanbir Najrana	Postdoctoral Fellow	2020-2021	Characterization of a vaccine candidate against falciparum malaria
Shreya Kamojjala (Brown/USF)	Undergrad, Brown University	2020-2023	In-silico analysis of plasmodium falciparum genes for malaria vaccine
Amr Soliman Brown/USF	International Medical Graduate	2021-2023	Vaccine development against falciparum malaria
Nichol John-Lewis USF	USF PhD Student	2023-2023	Vaccine against falciparum malaria (Lab rotation)
Rushdi Shakri, USF	Postdoctoral Fellow	2022-	High Throughput Screening of P. falciparum Phage Based c-DNA Libraries for malaria vaccine discovery

Jhasaketan Badhai, USF	Postdoctoral Fellow	2023-	PfCDPK5-MSP4 based vaccine against malaria.
Aditya Anand, USF	Postdoctoral Fellow	2023-	ABC Transporters as Therapeutic Target Against Falciparum Malaria
Mohammed Marouf USF	International Medical Graduate	2023-	P. falciparum Genes With Tandem Repeat as Target for malaria vaccine discovery.
Amrita Ramkallawan USF	Undergrad	2023-	Characterization of Malaria Antigens for Vaccine Development
Jayanth Tallapalli USF	International Medical Graduate	2024-	Characterization of Malaria Antigens for Vaccine Development
Alvin Varghese USF	USF Undergrad,	2024-	Targeting genes with tandem repeat for antimalarial vaccine development.
Divyani Tangudu USF	USF Undergrad	2024-	Identification of vaccine candidate against falciparum malaria