

Prof. Faith Hope Among'in Osier

Executive Director, IAVI Human Immunology Laboratory, Imperial College London

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<https://www.iavi.org/our-work/discovery/human-immunology-laboratory>

<https://www.imperial.ac.uk/infectious-disease/research/immunology-infection/human-immunology/>

<https://www.faihosier.net/>

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Biography

Our mission at IAVI is to translate scientific discoveries into affordable, globally accessible public health solutions. My team at the Human Immunology Laboratory includes scientists, managers and operational staff, PhD and Masters Students. Our portfolio of projects includes HIV, TB, Emerging Infectious Diseases – Marburg, Lassa, Ebola – and Malaria. We specialize in the analysis of immune responses as part of vaccine development partnerships. Our work spans discovery research and development, preclinical and clinical vaccine development, through to GCLP accredited human clinical trials. We are a central repository for clinical samples collected from clinical research centers worldwide, in support of IAVI's clinical and epidemiology studies.

My expertise is in malaria where I believe we can “Make Malaria History” through vaccination. I previously led two core teams of over 25 scientists across KEMRI–Wellcome, Kenya and Heidelberg University Hospital, Germany. Our projects focused on creating highly effective malaria vaccines through vaccine candidate discovery, identifying immune correlates of protection and unravelling important mechanisms underlying antibody-dependent protection. We designed an innovative custom protein microarray KILchip©, a first of its kind in Africa. We built a SMART network of partners that enabled us to assemble 10,000 samples from across Africa to probe our chip, the largest study of this nature.

I am President of the International Union of Immunological Societies (> 60,000 members globally) – the first African and only second woman in this role. I have won multiple prestigious prizes including the Royal Society Pfizer, the Sofja Kovalevskaja and the UKRI-MRC/DFID African Research Leader Awards. I am a 2018 TED Fellow and a Fellow of the African Academy of Sciences. I serve on Boards and Expert Committees at the WHO, Wellcome, UKRI, MVI-PATH & BactiVac, and have a global footprint as a keynote & motivational speaker. I am an Official #TOGETHERBAND Ambassador for the UN Sustainable Development Goal 3: Good Health & Well-being. I am passionate about emerging African scientists as key agents of change, delivering the health interventions our continent urgently needs.

Current Positions

Executive Director

IAVI Human Immunology Laboratory
Principal Research Fellow, Faculty of Medicine, Imperial College London, UK
January 2021 – Date

Visiting Professor of Malaria Immunology

Oxford University, UK
January 2014 – Date

President

International Union of Immunological Societies
October 2019 – Date

Executive Skills

Visionary Leadership

Ambitious | Bold | Driven

Strong Analytical Skills

Critical | Logical | Consultative

Exceptional People Management

Listen | Negotiate | Motivate

Expert Communication Skills

Eloquent | Engaging | Inspire

Versatile: across cultures and disciplines

Global Citizen | Multi-tasker | Connector

Extensive Networks in Global Public Health

Grass-roots | Research Institutions | Boards & Expert Committees

Current Activities

Leadership

People Management | Projects | Publications | the “Purse”

International Boards

Advisory | Funding | Expert & High-level Committees

Networks and Collaborations

International | African | Institutional

International Speaking Engagements

Careers in Science | Women in Science | Public Engagement

IAVI has four core vaccine discovery and development laboratories worldwide. IAVI laboratories work to identify ways to generate protective immune responses against HIV and other infectious diseases. We characterize and optimize antibodies, analyze T-cell and other cellular effectors, and utilize systems immunology approaches to identify correlates of protection that can be translated into treatments and products for unmet global health needs. The Vaccine Design and Development Laboratory (DDL) in Brooklyn focuses on the design and development of viral vectors for vaccines. The Neutralizing Antibody Centre (NAC) at Scripps Research, USA utilizes advances in antibody science to prevent and treat disease. The HIV Vaccine Translational Research Laboratory at the Translational Health Science and Technology Institute (THSTI) NCR Biotech Science Cluster in Faridabad, Haryana, India, designs and evaluates preventive HIV vaccines. The Human Immunology Laboratory (HIL) at Imperial College London is the clinical immunology reference laboratory for IAVI and its research partners worldwide.

Top Achievements

Scientific impact:

Leadership and Influence: In October 2019, I took over as President of the International Union of Immunological Societies having been Vice-President (VP) for three years. We have over 60,000 members worldwide and are the umbrella body for immunological societies globally. As VP, I worked with colleagues to launch the FAIS Legacy Project (1000 African PhDs), driven by my passion to tap into the enormous potential of scientists in resource-constrained settings, to find scientific solutions to health challenges.

I established SMART, a network comprising over 20 international malaria research leaders with whom we share samples, meta-data and skills to accelerate malaria vaccine development. This allowed me to assemble the largest African multi-center cohort study of this nature with >10,000 samples: an incredible resource to guide vaccine development.

Innovation: My team built KILchip ©, a custom *Plasmodium falciparum* protein microarray that's the first of its kind in Africa. The platform has now been extended to *Plasmodium vivax*, and other diseases such as RSV, MERS, RVF. Some of its key advantages are high-throughput, low cost, minimal sample use, and adaptability into multiple formats depending on the scientific question. We provide much-needed standardized protein reagents in Africa. We have built new collaborations and partnerships, and contributed to grants in excess of \$ 70M.

SMART (South-South Malaria Research Partnership) was innovative of itself as we used archived samples & metadata from 15 cohort studies across Africa savings worth ~ \$10M that would have been necessary for new prospective studies. I trained PhD students from all SMART African partner countries and thereby built trust in their home institutions and health ministries.

The combination of KILchip© & SMART will be transformative for malaria vaccine development because it builds the strongest evidence-base to date to guide antigen selection. It brings together power, a standardized approach, high quality correctly folded antigens, and covers both the heterogeneity of malaria transmission seen on the African continent, as well as the heterogeneity of clinical malaria with regards to age.

Investment into future scientific leaders: I have directly supervised 20 PhD students from Kenya, Uganda, Tanzania, Senegal, Burkina Faso, Ghana, Mali, Germany and Sweden. I am a role model and career inspiration for several hundred.

Accomplished International Speaker / Global Goals Ambassador: I enjoy science communication and have been speaking at TED, the Hay Festival, Grand Challenges Conferences, and the famous Falling Walls in Berlin. I am an Official #TOGETHERBAND Ambassador for UN Sustainable Development Goal 3.

Honors and Awards

- 2020 TWAS-Abdool Karim Award – The World Academy of Sciences
- 2020 Honorary Fellow of the British Science Association, UK
- 2020 100 Most Influential African Women by AvanceMedia
- 2019 #TOGETHERBAND Ambassador for UN Global Goal 3, Project Everyone
- 2018 TED Fellow – Technology, Entertainment and Design (TED), USA
- 2017 Fellow, African Academy of Sciences, AAS
- 2016 Sofja Kovalevskaja Award Winner – Alexander von Humboldt Foundation
- 2014 Royal Society Pfizer Award – Royal Society, UK
- 2014 5th Merle A. Sande Health Leadership Award – Accordia Foundation, USA
- 2014 1st EVIMalaR Promising African Scientist Award – European Malaria Institute
- 2013 MRC/DfID African Research Leader – Medical Research Council, UK and DfID
- 2011 Best oral presentation by a post-doc, “Malaria in Melbourne” - WEHI, Australia
- 2004 Best Student of the Year (2004), Dept of Immunology, University of Liverpool, UK

Education

Consultant Paediatrician
Kenya Medical & Dentists Practitioners Board
November 2009

Doctor of Philosophy, Life Sciences
Open University, UK
November 2008

Master of Science – Human Immunity, Distinction
University of Liverpool, UK
September 2004

Member of the Royal College of Paediatrics and Child Health
RCPCH, UK
March 2003

Bachelor of Medicine & Bachelor of Surgery
University of Nairobi, Kenya
November 1996

Group Leader, Malaria Vaccine Development, Heidelberg University Hospital, Germany and KEMRI – Wellcome, Kenya
January 2013 – December 2020

My multi-cultural core research teams in Kenya and Heidelberg focused on malaria vaccine development in three main areas: i) antigen discovery, ii) the identification of correlates of protection, and iii) the mechanisms that underpin antibody-dependent protection.

We have produced a large amount of data improving the understanding of natural acquired immunity to malaria. Our work will inform the rational development of a new generation of therapeutic and prophylactic interventions against malaria, in particular an effective malaria vaccine. We published more than 40 primary research articles and five major manuscripts are currently (June 2021) under review or shortly before submission.

Clinical Research Fellow, The Burnet Institute of Medical Research, Melbourne, Australia and KEMRI – Wellcome, Kenya
January 2010 – December 2012

A colleague and I established the merozoite opsonic phagocytosis assays and showed in a paper published in BMC Medicine that this was an important correlate of protection against clinical episodes of malaria in humans. I also took on my first PhD student.

Clinical Fellow in Immunology, Centre for Tropical Medicine, Oxford University, UK and KEMRI - Wellcome, Kenya
November 2008 – February 2010

I examined the role of allele-specific immune responses against merozoite surface protein 2 and apical membrane antigen 1 in protection against clinical malaria in humans. These studies suggested that antibodies to both allele-specific and conserved epitopes contributed to clinical protection.

PhD Training Fellow, London School of Hygiene & Tropical Medicine, UK and KEMRI – Wellcome, Kenya
April 2004 – August 2008

My most exciting output remains my most highly cited paper to date, where I showed that the breadth and magnitude of antibody responses to multiple *Plasmodium falciparum* antigens was strongly correlated with a reduced risk of malaria. I have since expanded this principle to cover a larger proportion of the parasite proteome analyzed in a multi-centre cohort study across Africa

Senior House Officer – Paediatrics, National Health Service, Mersey Deanery, UK
The Alder Hey Children's Hospital, Liverpool.
The Wirral NHS Trust, The Wirral
August 2001 – March 2004

I successfully completed by UK Paediatric Membership exams whilst working as a junior doctor.

Medical Officer (Paediatrics) /Research Assistant, KEMRI – Wellcome, Kenya and Kilifi District Hospital, Kenya
April 2004 – July 2001

My first real experience with research, from bedside observations to drug clinical trials and laboratory studies. This is where I got hooked into research, motivated by a wonderful team of British scientists.

Medical Officer – Internal Medicine (and Internship), The Coast General Hospital, Mombasa
Aug 1996 – March 1998

I was on duty in the Surgical dept when tribal clashes broke out in Kenya and worked with others round the clock to save lives

Major Research Grants: 2010 – 2021

Principal recipient, Mobility for Research and African Integration through Health Sciences (BRAINS) **€1.4 M**, Education, Audiovisual and Culture Executive Agency, European Commission, 2021 – 2026

Co-recipient, *Plasmodium vivax* volunteer infection studies in Thailand **£6.5 M**, Wellcome, 2018 – 2023

Co-recipient, Tackling infections to benefic Africa (TIBA) **£7 M**, NHS National Institutes for Health Research, UK, 2017 – 2021

Principal recipient, Towards a highly effective multi-component vaccine against *Plasmodium falciparum* malaria **€1.625 M**, Sofja Kovalevskaja Award, Alexander von Humboldt Foundation, 2016 – 2021

Principal recipient, Harnessing parasite diversity and naturally acquired protective immunity against *Plasmodium falciparum* malaria for the development of highly effective vaccines **€500,000**, European & Developing Countries Clinical Trials Partnership (EDCTP), 2016 – 2021

Co-recipient, Core support renewal for the Wellcome Major Overseas Programme **£40 M**, Wellcome, 2016 – 2021

Co-recipient, Accelerating the development of next generation malaria vaccines through development of innovative trial designs in malaria-endemic areas **£4.5 M**, Wellcome, 2015 – 2020

Co-recipient, West African Centre for Cell Biology of Infectious Diseases (University of Ghana) **£4.5 M**, DELTAS Africa Capacity Building, 2015 – 2020

Principal recipient, Defining the merozoite targets of protective immunity against *Plasmodium falciparum* malaria through multi-centre cohort studies **£746,000**, African Research Leader, DfID/Medical Research Council, UK, 2013 – 2017

Co-recipient, Core support renewal for the Wellcome Major Overseas Programme **£32 M**, Wellcome, 2011 – 2016

Principal recipient, Comprehensive analysis of the antibody targets of *Plasmodium falciparum* merozoites and identification of antigens important in the development of naturally acquired immunity to malaria **£783,233**, Wellcome, 2010 – 2015

Co-recipient, Integrated studies of the targets, regulation and consequences of human immunity to malaria **£1.5 M**, Immunology Programme Grant, Wellcome, 2010 – 2015

Advisory Boards, Expert and Management Committees

2020 – date	Chair, NIHR Global Health Research Centres for Research and Institutional Capacity Strengthening Funding Committee, UK
2020 – date	Chair, Wellcome Trust International Interview Committee, UK
2020 – 2023	Scientific Advisory Board Member, Instituto Serrapilheira, Brazil
2019 – 2022	President, International Union of Immunological Societies (IUIS)
2019 – 2022	Committee Member, African Academy of Sciences Intellectual Property Rights
2019 – 2022	EDCTP Expert Reviewer Panel Member, The Hague, Netherlands
2019 – 2022	Deputy Chair, Global Health Nutrition Panel, UKRI, UK
2019	Expert Panel Member, WHO Consultation on Malaria Vaccines / Biologicals Research & Development, Geneva
2019	Transregio Review Panel Member, German Research Foundation, Germany
2019	Expert Panel Member, Addressing Africa's HealthCare Challenges, Africa Strategic Consultative Meeting, Paris
2018 – 2022	Panel Member, MRC/DFID African Research Leader Interview Panel, UKRI, UK
2018 – 2022	Board Member, MARCAD, Malaria Research Capacity Development in West & Central Africa
2018 – 2021	Board Member, BactiVac, University of Birmingham, UK
2017 – 2020	Fellow, African Academy of Sciences
2017 – 2020	Consultant, Sumaya Biotech GmbH, Germany
2017 – 2022	SMART Leader, EDCTP-Funded Network
2016 – 2019	Vice President/President-elect, International Union of Immunological Societies
2016 – 2019	Council Member, MVI/PATH Vaccine Science Portfolio Advisory Council
2016 – 2019	Committee Member, Wellcome Trust International Interview Committee, UK
2016 – 2019	Committee Member, Infection and Immunity Board, UKRI

Active Networks/Memberships

Kenyan, German and American Societies of Immunology
EDCTP Fellows Network
Alexander von Humboldt Fellows Network
German African Research Projects Network
German Centre for Infection Research

UKRI MRC/DFID African Research Leader
Fellow, African Academy of Sciences
DELTA, Africa
Tackling Infections to Benefit Africa
Federation of African Immunological Societies

Honorary Appointments

Visiting Professor of Immunology
Nuffield Department of Medicine, University of Oxford, UK
2014 – 2022

Adjunct Associate Professor
Department of Biomedical Sciences, Pwani University, Kilifi, Kenya
2014 – 2018

Honorary Visiting Research Fellow in Tropical Medicine
Nuffield Department of Tropical Medicine, Oxford University, UK
2014 – 2017

Honorary Burnet Institute Fellow
MacFarlane Burnet Institute for Medical Research and Public Health, Melbourne, Australia
2014 – 2017

Main Supervisor Dissertations

Irene Nailain (2021) Characterization of the mechanism of action and target antigens of naturally acquired antibodies against *Plasmodium falciparum* malaria
Current Occupation: Postdoc, Heidelberg University Hospital, Germany

Karamoko Niare (2020) Overcoming *Plasmodium falciparum* diversity at loci encoding merozoite antigens for malaria vaccine development
Current Occupation: Postdoc, Brown University, USA

Fauzia Musasia (2020) Antibody mediated clearance of ring-infected erythrocytes as a mechanism of protective immunity against *Plasmodium falciparum* malaria
Current Occupation: Applying for postdoc positions

Patience Kiyuka (2019) The role of complement in antibody-dependent acquired immunity to *Plasmodium falciparum* malaria
Current Occupation: Career Development Fellow, KEMRI-Wellcome Trust Research Program

Gathoni Kamuyu (2017) Identifying the merozoite targets of protective immunity against *Plasmodium falciparum* malaria
Current Occupation: Research Fellow, UCL, Division of Medicine, UK

Linda Murungi (2014) Severe malaria: Identifying immune targets and mechanisms associated with protection in Kenyan children
Current Occupation: Associate Director for Immunology, IAVI, Africa

Josea Rono (2013) Naturally Acquired Immunity to *Plasmodium falciparum* Malaria: Antibody Responses and Immunological Memory
Current occupation: Co-founder/ Managing Partner at E&K Consulting Firm, Kenya

Ongoing Doctoral Supervision

Candidate	Locations	Anticipated finish date
Akua Botwe	Ghana/Kenya/Sweden	2021
Dennis Odera	Kenya/Germany/UK	2021
Kennedy Mwai	Kenya/Germany/South Africa	2021
Rodney Ogwang	Uganda/Kenya/UK	2022
Doreen Mutemi	Tanzania/Kenya/Sweden	2022
Micha Rosenkranz	Kenya/Germany	2023

Major Speaker Invitations & Consultations

(Last five years)

Keynote Speaker, MPRU 2020 Virtual Conference, London, 6th May 2021

Invited Speaker, Virtual Seminars at Emory University (U.S.), Harvard T.H. Chan School of Public Health (U.S.) and University of Washington (U.S.), April and May 2021

Invited Speaker, 1st Women in Malaria Virtual Conference (WiM), 24th March 2021

Invited Speaker, ASTMH Annual Meeting, Symposium on Parity and Equity in Global Health, 16th Nov 2020

Guest expert on BBC News Africa - Reinfections with COVID-19, 26th Oct 2020

Science Slam Winner, Alexander v. Humboldt Foundation Annual Meeting, 24th June 2020

Moderator / Organizer, IUIS COVID-19 Webinar Series, April – June 2020

Keynote Speaker, Botnar Research Centre for Child Health, Basel, 30th Jan 2020

Invited Speaker, Huxley Summit, the Royal Institution, London, UK, 27th Nov 2019

Keynote Speaker, The Falling Walls Conference, Berlin, 8 – 9th Nov 2019

Spotlight Plenary Talk, Bill & Melinda Gates Annual Grand Challenges Meeting, United Nations Conference Centre and African Union, Addis Ababa, Oct 27th to 30th, 2019

Moderator, Gordon Malaria Research Conference Power Hour, Challenges women face in science, issues of diversity and inclusion, Les Diablerets, Switzerland, July 2019

Invited Speaker, Hay Festival, Malaria eradication in Africa: Fact or fiction, Wales, UK, 30th May 2019

Invited Speaker, Godrej Leadership Conference, Mumbai, May 8 – 9th 2019

Keynote Lecture, AIMS Meeting, Lisbon, Portugal, 16th March 2019

Keynote Speaker, 3rd International Congress on Immunity, Science and Careers for women, Victoria Falls, Zimbabwe, 3-6th November 2018

Invited Speaker, ASTMH 67th Annual Meeting, New Orleans, USA, 28th October 2018

Keynote Speaker, Sub-Saharan Network for TB/HIV Research Excellence Conference, Secrets to Success in Science, Kigali, Rwanda, 26-27th September 2018

TED Speaker & Fellow, TED 2018 – The Age Of Amazement, Vancouver, Canada, 10th April 2018

Invited Speaker, International Womens Day Festival at Govanhill Baths, Glasgow, UK, 8th March 2018

Invited Speaker, 18th ICID/XVIII Congreso SADI, Buenos Aires, 1-4th March 2018

Invited Speaker, 11th Forum on the Internationalization of Sciences & Humanities, Science, Scientists and “Spin”, Berlin,, 10-11th Dec 2017

Invited Speaker, 10th Federation of African Immunological Societies Conference, Hammamet, 3 - 7th Dec 2017

Keynote Lecture, Sofja Kovalevskaja 2016 Award Ceremony, Berlin. 15th Nov 2016

Invited Speaker, Molecular Approaches to Malaria, Lorne, Australia. 21-25th Feb 2016

Media

1. [Interview with the British Society for Immunology](#)
2. [Interview with Advanced Science News 2021](#)
3. [Profile in The Lancet](#)
4. [Champion of the Malaria Must Die Campaign 2020](#)
5. [Expert on BBC News Africa 2020](#)
6. [#VaccinesWork: United Nations Global Goals 2020](#)
7. [Profile/Interview with SuperScientists](#)
8. [Podcast Interview University of Oxford 2019 - Part1, Part2](#)
9. [Articles in The Conversation, 2018, 2019](#)
10. [Articles in Nature](#)
11. [ONECampaign: International Day of Women in Science 2019](#)
12. [Faith Osier TED Talk 2018](#)
13. [Interview with Immunopaedia 2017](#)
14. [Royal Society Campaign: Parent, Career, Scientist 7th March 2016](#)
15. [Blog with ONE 2016](#)
16. [SciDevNet: Rolling out malaria vaccine research across Africa 2014](#)
17. [Health Kenya blog 2015](#)
18. [Medical Research Council, UK: Insight](#)
19. [Wellcome Trust: Researcher Spotlight](#)

Publications (h-index 33) & Book Chapters

1. Botwe, AK, Oppong, FB, Gyaase, S, Owusu-Agyei S, Asghar M, Asante KP, Färnert A and **Osier F**. Determinants of the varied profiles of Plasmodium falciparum infections among infants living in Kintampo, Ghana. *Malar J*. 2021 May 29; 20, 240. doi: 10.1186/s12936-021-03752-9
2. Lane R. **Faith Osier**: inspirational immunologist. *Lancet*. 2021 Apr 24;397(10284):1533. doi: 10.1016/S0140-6736(21)00839-4.
3. Mwai K, Kibinge N, Tuju J, Kamuyu G, Kimathi R, Mburu J, Chepsat E, Nyamako L, Chege T, Nkumama I, Kinyanjui S, Musenge E, and **Osier F**. protGear: A protein microarray data pre-processing suite. *Comput Struct Biotechnol J* 2021 Apr 24; 19:2518-2525. doi: 10.1016/j.csbj.2021.04.044
4. **Osier FHA**, Murungi LM. Smashing Stereotypes: Mutual Respect, Key to Embracing Diversity. *Trends Parasitol*. 2021 Jan 29;S1471-4922(21)00007-6. doi: 10.1016/j.pt.2021.01.004.
5. Niare K, Chege T, Mwai K, Tuju J, Nyamako L, Rosenkranz M, Tiono A, Waitumbi J, Ogutu B, Sirima S, Awandare G, Kouriba B, Rayner J, **Osier F**. Systemic Serological Diversity of a Putative Malaria Vaccine Candidate and Broad Protection. Preprint, Research Square, Dec 2020, doi: 10.21203/rs.3.rs-109750/v1
6. Botwe AK, Owusu-Agyei S, Asghar M, Hammar U, Oppong FB, Gyaase S, Dosoo D, Jakpa G, Boamah E, Twumasi MF, **Osier F**, Färnert A, Asante KP. Profiles of Plasmodium falciparum infections detected by microscopy through the first year of life in Kintampo a high transmission area of Ghana. *PLoS One*. 2020 Oct 19;15(10):e0240814. doi: 10.1371/journal.pone.0240814. eCollection 2020.
7. **Osier F**, Ting JPY, Fraser J, Lambrecht BN, Romano M, Gazzinelli RT, Bortoluci KR, Zamboni DS, Akbar AN, Evans J, Brown DE, Patel KD, Wu Y, Perez AB, Pérez O, Kamradt T, Falk C, Barda-Saad M, Ariel A, Santoni A, Annunziato F, Cassatella MA, Kiyono H, Chereshev V, Dieye A, Mbow M, Mbengue B, Niang MDS, Suchard M. The global response to the Covid-19 pandemic: how have immunology societies contributed *Nat Rev Immunol*. 2020 Oct;20(10):594-602.
8. Kapulu MC, Njuguna P, Hamaluba M, Kimani D, Ngoi JM, Musembi J, Ngoto O, Otieno E, Billingsley PF, CHMI-SIKA Study Team (incl. **Osier FHA**). Naturally acquired immunity among Kenyan adults suppresses the West African P. falciparum NF54 strain in controlled human malaria infection (CHMI). Preprint. medRxiv. 2020 Aug11.08.11.20172411. doi: 10.1101/2020.08.11.20172411.
9. **Osier F**, Uzonna JE. Editorial: Regulation of Immunity to Parasitic Infections Endemic to Africa *Front Immunol*. 2020 Jun 12;11:1159. doi: 10.3389/fimmu.2020.01159.
10. **Osier FHA**, Mwandumba HC, Gray CM. Turning Discoveries into Treatments: Immunology in Africa *Trends Immunol*. 2020 Dec;41(12):1051-1053.
11. Aniweh Y, Nyarko PB, Charles-Chess E, Ansah F, **Osier FHA**, Quansah E, Thiam LG, Kamuyu G, Marsh K, Conway DJ, Tetteh KKA, Awandare GA. Plasmodium falciparum Merozoite Associated Armadillo Protein (PfMAAP) Is Apically Localized in Free Merozoites and Antibodies Are Associated With Reduced Risk of Malaria. *Front Immunol*. 2020 Apr 7;11:505. doi: 10.3389/fimmu.2020.00505.
12. Niespodziana K, Borochova K, Pazderova P, Schleder T, Astafyeva N, Baranovskaya T, Barbouche MR, Beltyukov E, Berger A, Borzova E, Bousquet J, Bumbacea RS, Bychkovskaya S, Caraballo L, Chung KF, Custovic A, Docena G, Eiwegger T, Evsegneeva I, Emelyanov A,

- Errhalt P, Fassakhov R, Fayzullina R, Fedenko E, Fomina D, Gao Z, Giavina-Bianchi P, Gotua M, Greber-Platzer S, Hedlin G, Ilina N, Ispayeva Z, Idzko M, Johnston SL, Kalayci Ö, Karaulov A, Karsonova A, Khaitov M, Kovzel E, Kowalski ML, Kudlay D, Levin M, Makarova S, Matricardi PM, Nadeau KC, Namazova-Baranova L, Naumova O, Nazarenko O, O'Byrne PM, **Osier F**, Pampura AN, Panaitescu C, Papadopoulos NG, Park HS, Pawankar R, Pohl W, Renz H, Riabova K, Sampath V, Sekerel BE, Sibanda E, Siroux V, Sizyakina LP, Sun JL, Szepefalusi Z, Umanets T, Van Bever HPS, van Hage M, Vasileva M, von Mutius E, Wang JY, Wong GWK, Zaikov S, Zidarn M, Valenta R. Toward personalization of asthma treatment according to trigger factors. *J Allergy Clin Immunol*. 2020 Feb 18:S0091-6749(20)30193-7.
13. Njuguna P, Maitland K, Nyaguara A, Mwanga D, Mogeni P, Mturi N, Mohammed S, Mwambingu G, Ngetsa C, Awuondo K, Lowe B, Adetifa I, Scott JAG, Williams TN, Atkinson S, **Osier F**, Snow RW, Marsh K, Tsofa B, Peshu N, Hamaluba M, Berkley JA, Newton CRJ, Fondo J, Omar A, Bejon P. Observational study: 27 years of severe malaria surveillance in Kilifi, Kenya. *BMC Med*. 2019 Jul 8;17(1):124.
 14. Murungi LM, Kimathi RK, Tuju J, Kamuyu G, **Osier FHA**. Serological Profiling for Malaria Surveillance Using a Standard ELISA Protocol. *Methods Mol Biol*. 2019; 2013:83-90.
 15. Wamae K, Wambua J, Nyangweso G, Mwambingu G, **Osier F**, Ndung'u F, Bejon P, Ochola-Oyier LI. Transmission and Age Impact the Risk of Developing Febrile Malaria in Children with Asymptomatic *Plasmodium falciparum* Parasitemia. *J Infect Dis*. 2019 Feb 23;219(6):936-944. doi: 10.1093/infdis/jiy591.
 16. Yman V, White MT, Asghar M, Sundling C, Sondén K, Draper SJ, **Osier FHA**, Färnert A. Antibody responses to merozoite antigens after natural *Plasmodium falciparum* infection: kinetics and longevity in absence of re-exposure. *BMC Med*. 2019 Jan 30;17(1):22.
 17. Kamuyu G, Tuju J, Kimathi R, Mwai K, Mburu J, Kibinge N, Chong Kwan M, Hawkings S, Yaa R, Chepsat E, Njunge JM, Chege T, Guleid F, Rosenkranz M, Kariuki CK, Frank R, Kinyanjui SM, Murungi LM, Bejon P, Färnert A, Tetteh KKA, Beeson JG, Conway DJ, Marsh K, Rayner JC, **Osier FHA**. KILchip v1.0: A Novel *Plasmodium falciparum* Merozoite Protein Microarray to Facilitate Malaria Vaccine Candidate Prioritization. *Front Immunol*. 2018 Dec 11;9:2866.
 18. Feng G, Boyle MJ, Cross N, Chan JA, Reiling L, **Osier F**, Stanistic DI, Muellerl, Anders RF, McCarthy JS, Richards JS, Beeson JG. Human Immunization With a Polymorphic Malaria Vaccine Candidate Induced Antibodies to Conserved Epitopes That Promote Functional Antibodies to Multiple Parasite Strains. *J Infect Dis*. 2018 Jun 5;218(1):35-43.
 19. Payne RO, Silk SE, Elias SC, Miura K, Diouf A, Galaway F, de Graaf H, Brendish NJ, Poulton ID, Griffiths OJ, Edwards NJ, Jin J, Labbé GM, Alanine DG, Siani L, Di Marco S, Roberts R, Green N, Berrie E, Ishizuka AS, Nielsen CM, Bardelli M, Partey FD, Ofori MF, Barfod L, Wambua J, Murungi LM, **Osier FH**, Biswas S, McCarthy JS, Minassian AM, Ashfield R, Viebig NK, Nugent FL, Douglas AD, Vekemans J, Wright GJ, Faust SN, Hill AV, Long CA, Lawrie AM, Draper SJ. Human vaccination against RH5 induces neutralizing antimalarial antibodies that inhibit RH5 invasion complex interactions. *JCI Insight*. 2017 Nov 2;2(21).
 20. Mugenyi CK, Elliott SR, Yap XZ, Feng G, Boeuf P, Fegan G, **Osier FH**, Fowkes FJI, Avril M, Williams TN, Marsh K, Beeson JG. Declining Malaria Transmission Differentially Impacts the Maintenance of Humoral Immunity to *Plasmodium falciparum* in Children. *J Infect Dis*. 2017 Oct 17;216(7):887-898.
 21. Abdi AI, Hodgson SH, Muthui MK, Kivisi CA, Kamuyu G, Kimani D, Hoffman SL, Juma E, Ogutu B, Draper SJ, **Osier F**, Bejon P, Marsh K, Bull PC. *Plasmodium falciparum* malaria parasite var gene expression is modified by host antibodies: longitudinal evidence from controlled infections of Kenyan adults with varying natural exposure. *BMC Infect Dis*. 2017 Aug 23;17(1):585.

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Book chapters

1. JG Beeson, FJI Fowkes, L Reiling, FH Osier, DR Drew, GV Brown "Correlates of protection for *Plasmodium falciparum* malaria vaccine development: current knowledge and future research" In *Malaria Vaccine Development*, edited by Prof Giampetro Corradin and Dr Howard Engers