

### The students introduce themselves (Part 3, final)

#### Alasdair Hill



My name is Alasdair Hill and I'm from Moray in the North of Scotland, UK and my interests include the pathogenesis of malaria and the translation of research into improving disease treatment and management. I obtained my BSc (Hons) in Tropical Environmental Science at the University of Aberdeen where I took part in a research expedition to Ghana to study the fitness of *Anopheles spp.* Back in Aberdeen I investigated the role of resveratrol, a potent antioxidant, on the longevity and fecundity of *Anopheles gambiae*. I then undertook an MSc in Medical Parasitology at the London School of Hygiene and Tropical Medicine where I looked at the seasonal variation of the chloroquine resistance marker *pfcr1* in Gambian isolates at the MRC in Fajara, The Gambia under Dr David Conway, Dr Davis Nwakanma and Dr Colin Sutherland. Since my studies I have worked as a research technician on an antimalarial drug discovery programme at the Liverpool School of Tropical Medicine with Prof. Steve Ward funded by the Wellcome Trust.

My PhD project is based at the University of Oxford under Prof. David Roberts and in collaboration with Dr Olukemi Amodu at the Institute of Child Health, Ibadan, Nigeria. I am currently organising a case-control study in Ibadan, Nigeria to investigate the relationship between a number of host and parasite proteins with the degree of anaemia and other erythrocyte physiological parameters, in order to elucidate the causes of severe malarial anaemia. I will be involved in the collection of samples *in situ* and the analysis both in Nigeria and in the United Kingdom. This work will hopefully contribute to our understanding of the relative importance of a number of different red blood cell mechanisms involved in the development of this disease.

#### George Rugarabamu

I am George, or Joji in Swahili. I am originally from Dar es Salaam, Tanzania. I completed my undergraduate education in biochemistry and cell biology at Jacobs University in Bremen, Germany, and later moved to Zurich in Switzerland to seek for a Master of Science diploma in microbiology at the ETH Zurich. My thesis work at ETH Zurich was based on biochemical and proteomic analysis of *Trypanosoma brucei* oligosaccharyltransferases.

I am currently at the University of Geneva in Switzerland for my doctorate studies, where my research goal is to understand molecular mechanisms of ROM4/AMA1 mode of action during the lytic cycle progression in apicomplexan parasites.



### Editorial

Now that we are all back home from the BMP conference it is time to introduce the last students.

Perhaps you had the pleasure to meet some of them during the conference, if not this is the chance to get to know them.

There will be a two month break now until the next newsletter since I'm travelling around the world but the students will keep busy and we will be back with new interesting updates and information right after the summer.

Alessia Valdarno,  
Administrator

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### Harshal Patil



Hi, I am Harshal. I am from a small town situated in western India, called Jamner in Maharashtra province, which is very near to the world famous Ajanta caves. I completed my schooling from Jamner and went to Shivaji University for graduation in biotechnology. I obtained a masters degree in biomedical sciences from the University of Glasgow. During my masters' thesis on *trypanosomes*, I became interested in deadly infectious diseases, and malaria is an ideal example. Therefore, I applied to the EVIMalaR International PhD program.

My PhD project is based on the development of malaria parasite inside the mosquito. I specifically work on polarity development of the *P berghei* ookinete at Prof Waters lab, University of Glasgow, UK.

Apart from studies, I like travelling and painting. I also like visiting historical places like forts, castles, caves and etc.

### Jaishree Tripathi

Hi, I am Jaishree and I come from a city called Varanasi in India, which is often known as the 'cultural and religious capital' of the country. I did my undergrad in Life Sciences from St. Xavier's College, University of Mumbai. Then I went on to pursue a master's degree in biotechnology from University of Hyderabad. It was during my master's that I worked on my first malaria project trying to study the role of Sir proteins and Origin Recognition Complex (ORC) in telomere silencing in *Plasmodium falciparum*. This really got me interested and I was keen to dig deeper and learn more about other aspects of malaria which kills millions of people annually. Hence, I applied for the EVIMalaR PhD programme.



Currently, I am working with Dr. Oliver Billker at the Wellcome Trust Sanger Institute, Cambridge, and, Professor Maria M. Mota at Instituto de Medicina Molecular, Lisbon. My project focuses upon identification of host factors that can modulate liver stage development of *Plasmodium*. I would be using knockout mouse and human IPS cells resources to investigate in depth the role of various genes/factors which are essential for nutrient acquisition by the parasite in the hepatocytes.

Apart from research, in my leisure time, I like travelling, photography and cooking (specially trying new spicy Indian recipes!)

### Jenny Howard



My name is Jenny Howard, I was born in London in the UK but mostly grew up in a nearby town called Reading. I have a first class degree in Biochemistry from the University of York and between the second and last year of my degree I spent one year on Erasmus exchange at Aarhus University in Denmark. It was in Aarhus that I first learned a love of research doing a nine month project on the morphology of Septin 9 conditional knock-out mouse embryonic fibroblasts. It was also in Aarhus that I first became interested in malaria, and in particular the complex and fascinating interactions of the parasite with the host immune system.

My project here in Bordeaux, under the supervision of Charlotte Behr, is to dissect the role of human gamma-delta T cells in the instruction of adaptive immunity against *P.falciparum* infection.

Outside of the laboratory I love meeting new people and exploring new places. I also enjoy being in the 'great outdoors', disappearing into good books, and playing the flute. My knowledge of French is steadily growing (it was almost non-existent when I arrived) and I am enjoying testing this new-found ability on my ever-patient colleagues!

### Kartik Bane

It was altogether a different & nice transformation or twist of fate, as I would like to call it. Coming all the way from one of the biggest and warmest cities in the world, 'AmachMumbai' to one of the smallest and coldest cities in the world, Heidelberg, I truly enjoyed my 1<sup>st</sup> international venture. Unlike many malariologists, I was trained as biophysicist during my master's program at the University of Mumbai. Curiously, this now come very helpful with my PhD project in Freddy's lab in collaboration with Dominique Soldati from Geneva (bigger but even colder than Heidelberg, I hear). We study the amazing motility of malarial sporozoites, which move without the change in their cellular shape and also do not feature any extracellular appendages. I am currently trying to understand the role of the actin binding protein coronin in sporozoite motility. Also, since I arrived in Heidelberg I realized how much of a home of many basic sciences this tiny place is. Thus, in addition to mastering the molecular intricacies, I also have a golden opportunity to collaborate with scientists from the physics department to understand the mechanical cues in this unique form of motility.



### Liz Stevenson



I'm Liz Stevenson and I come from Bristol, England. In 2009 I completed my Bachelor's degree in Immunology at the University of Edinburgh, during which I worked in Dr. David Cavanagh's group looking at the mechanism of merozoite invasion in *P. falciparum*. It was through my undergraduate studies that I was first introduced to the complex interaction between parasites and host and I decided that malaria immunology was the area in which I wanted to work. Following graduation I moved to Kenya where I joined Dr. Britta Urban's group at the Kenya Medical Research Institute. Here I worked on T cell responses to a family of variant antigens expressed on the red cell surface-PFEMP1.

In October 2010 I was enrolled in the EVIMalaR PhD program under the supervision of Prof. Lars Hviid and Prof. Alister Craig at the Center for Medical Parasitology, University of Copenhagen. Currently my project aims to dissect the role of rosetting in *P. falciparum* utilizing human monoclonal antibodies directed against three full length PFEMP1's produced using the baculovirus system.

### Mariana De Niz Hidalgo

My name is Mariana De Niz. I'm from Mexico City, however I started living abroad since I was 16, mostly in Australia and the UK. During this time, I travelled to Uganda, Brazil, and southern Mexico to study malaria! I have been interested in infectious diseases ever since I can remember...

I travelled to the UK to study my BSc in Immunology at Glasgow University. During this time I grew more interested in the immunology of infectious diseases, and got my first contact with malaria research in Prof. Ricardo Gazzinelli's lab in Brazil in 2009, where I had the chance to study innate immune responses and cerebral malaria immunopathology in mice. After graduating from Glasgow University in 2010, I went to the London School of Hygiene and Tropical Medicine to do an MSc in Control of Infectious Diseases. It was a most exciting time, where I learnt of the many factors influencing this and other poverty-related diseases. Here, I also had the chance to work with a great team, led by Dr. Chris Drakeley, focusing on G6PD deficiency and malaria in Uganda, and got further attracted to the topic. Through EVIMalaR I have now joined the labs of Prof. Hernando del Portillo and Prof. Volker Heussler, to study the role of the spleen in malaria outcomes.



Outside my interest in science, I love writing (journalism), languages, travelling, and adventure sports! In the future, aside of research on malaria-host interactions, I'd like to get involved in its control within endemic countries, including mine!

### Nicole Andenmatten

I grew up in a little village in the Swiss Alps. I then moved to Zurich where I graduated from the Swiss federal institute of technology (ETH) with a master degree in biochemistry. My initial contact with malaria was during an internship in Prof. Andy Waters laboratory which also sparked my interest to stay in the field. Now I've joined the group of Dr. Markus Meissner at the University of Glasgow where enjoy working with the apicomplexan parasite *Toxoplasma gondii*. Besides research, I like travelling and different kinds of outdoor activities like snowboarding or diving.



### Samuel Abah



My name is Abah Samuel Enejo, I come from a small town called Ogugu situated at the middle belt region of Nigeria. I graduated with First Class honours in Microbiology from University of Maiduguri, Nigeria in 2007. Because of my interest in research, I joined Covenant University as a junior research fellow in 2008 from where I also obtained my MSc. Degree in Microbiology in 2010. I had desired to have a wide network of collaboration as a young scientist since research in sciences cannot be done in isolation, owing to this urge within me I decided to look for a platform which could satisfy my urge. I saw EVIMalaR second call PhD Programme and I felt it was a dream come true for me as it could provide such wide range of international platform and collaboration that I needed. It happened that I was one of the 12 successful candidates that survived the EVIMalaR rigorous PhD Interview.

I am currently working on the plasma proteome of children recovering from *Plasmodium falciparum* severe malarial anaemia in the laboratory of Dr. Delmiro Fernandez-Reyes at the National Institute of Medical Research, London and Prof. Mats Wahlgren at the Karolinska Institute, Sweden.

### Sanketha Kenthirapalan

I am Sanketha and I was born in a small city called Lemgo in Germany. My parents are originally from Sri Lanka and immigrated to Germany several decades ago.

I obtained my bachelor's and master's degree in Life Science from the University of Hannover. During my studies, I did several internships in various labs, e.g at the Israel Institute of Technology (Haifa, Israel) and at Stanford University (US). After completing my studies I was eager to do a PhD in the field of tropical diseases and decided to do it within the EVIMalaR PhD Programme.

Currently I am working in the Lab of Prof. Kai Matuschewski with Dr. Taco Kooij (Max Planck Institute for Infection Biology, Berlin) in collaboration with Prof. Andy Waters (University of Glasgow, UK).



Apart from science I love photography and I love to travel. Whenever I am free, I enjoy playing basketball.

### Sonia Moliner Cubel



I am Sonia Moliner from Barcelona, a sunny and cosmopolitan Mediterranean city in Spain. I graduated from Universitat Autònoma de Barcelona with a bachelor degree in Biotechnology in 2007 and during the last three years I worked for GlaxoSmithKline at the DDW (Diseases for the Developing World) research campus in Tres Cantos (Spain). I was involved in several research projects whilst primarily focusing my efforts in two of them: the capping apparatus as an antiplasmodial target and the mitochondrial respiratory chain inhibitors.

Now, I have joined Prof. Michael Lanzer's lab in Heidelberg (not so sunny, but a lovely German city next to the Neckar River) where my PhD research project focuses mainly on the functional characterization of a putative organic cation transporter in *P. falciparum*.

Besides enjoying to do research, I like travelling, reading and playing sports outdoor.

### Sujaan Das

My name is Sujaan Das and I am from Kolkata, India. I did my Bachelors in Chemistry from St. Stephen's College, Delhi. I got fascinated by biochemical pathways and wanted to understand the chemical reactions that result in life. I moved over to Biochemistry / Molecular Biology, and pursued a Masters at the Tata Institute for Fundamental Research, Mumbai. That is when I got introduced to the elusive workings of the malaria parasite. My Masters thesis focussed on the moonlighting functions of *Plasmodium* enolase, which is best known as a glycolytic enzyme.



After my Masters, I got selected for the EVIMalaR PhD programme, to work with Mike Blackman at the MRC National Institute for Medical Research in London. I currently work on understanding the functions of Merozoite Surface Protein 1 in *Plasmodium falciparum*.

I enjoy living in big cities and London is a lovely, cosmopolitan and chaotic city with loads to do on weekends. I love travelling and am bowled over by the beautiful towns and cities of Europe I've visited in the last year or so. Other than that, I enjoy theatre, painting, and I write poetry when I need to vent.

### Thubaraka Thavayogarah



My name is Thubaraka Thavayogarah and I was born and raised in the eastern part of the German state North-Rhine-Westphalia. My origins, however, are in Sri Lanka, a beautiful island in the Indian Ocean, which my parents left in 1985 due to the civil war.

I studied at the Westphalian Wilhelms University in Münster, where I received both my bachelor's and master's degree working in the area of biomedical research. Since I have always been interested in learning about different biological topics and the various methods I decided to do a few internships during my Master study. I therefore worked in a lab focusing on cardiovascular patterning at the Max-Planck-Institute of Molecular Biomedicine in Münster and I did another internship at the School of Biochemistry and Molecular Biology at the Australian National University in Canberra, Australia. My project involved electrophysiological recordings of transport-associated currents in *Xenopus laevis* oocytes. During my time in Australia I came across a lab working on the biology of the malaria parasite, which I ever since found very fascinating why I decided to do my PhD in malaria research.

I am currently working in the lab of Professor Lingelbach at the Philipps-University in Marburg, Germany in collaboration with Professor Holder from the National Institute for Medical Research in London, UK. My project focuses on possible alternative secretory pathways in the malaria parasite *P. falciparum* during the intraerythrocytic stage.

Apart from science I am also interested in music, sports, reading and I enjoy travelling and exploring other countries and cultures a lot.

### Wiebke Nahrendorf

Coming from a small village in the far eastern corner of Germany with a name that is unpronounceable for most people, I began my way into the world of malaria research by studying Biomedicine at the University of Wuerzburg. After focusing on *Drosophila* neurobiology in my B.Sc Thesis, I became increasingly more interested in infectious diseases during my Master studies, in particular those caused by parasites and their interaction with the immune system. The fascination for malaria was reinforced by an internship in Oliver Billker's lab at the Wellcome Trust Sanger Institute in Cambridge, where I investigated *Plasmodium berghei* ookinete motility. Determined to start a PhD in malaria immunology, I applied for the EviMalaR PhD programme and was fortunate enough to become Jean Langhorne's and Robert Sauerwein's student in October 2010.



In Robert Sauerwein's lab at the NCMLS, I have the unique possibility to analyse samples from human volunteers protected against *Plasmodium* infective mosquito bites after immunization with infective mosquito bites under chloroquine treatment (Roestenberg *et.al* , 2010). In my project, I am studying protective immune responses against malaria in this immunization setting, especially focusing on B cells. To perform in-debt mechanistic studies of these immune responses, I have set up a corresponding mouse model with *Plasmodium chabaudi* infection under chloroquine treatment in Jean Langhorne's lab at the NIMR, London.

The strength of this project is the integration of human and complementary mouse studies in order to better understand how protective immunity is generated and maintained against one of the world's major health problems.

My spare time is mainly spend on acting in amateur drama societies, trying to tighten my core with Pilates and wandering the streets of London on the look-out for some new curiosities. Of course I love travelling and I was lucky enough to combine work and pleasure at trips to Uganda, Kenya and Barcelona.