

## American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP)

We welcome all ASTMH members with interest in basic parasitology to join our subgroup and contribute to our programs.



### Welcome Message from our President, Dr. Mahalia Desruisseaux

#### Hello friends in Parasitology!



I hope everyone is having a decent spring. In addition to the 2021 Annual Meeting announcements, this newsletter will be highlighting some of the initiatives that our ACMCIP trainees have been involved in since the Fall meeting. In this edition of the newsletter, we are showcasing the career of an exceptional parasitologist, our 2020 Trager Awardee, Dr. David Fidock.

Speaking of exceptional scientists, if you are a principal investigator who enjoys sharing your work with the next generation of parasitologists, please consider participating in the “Parasites at the Fireside” series run by and for our ACMCIP trainees. Follow this [link](#) to be included in the database of speakers. We especially encourage early-career investigators to take advantage of this

unique platform to connect with our talented trainees.

To support our trainee initiatives, we recently launched an ACMCIP Bonfire fundraising campaign where you can order ACMCIP swag items like coffee mugs, tote bags, T shirts and sweatshirts. All proceeds will go toward ACMCIP Trainee activities, including sponsorship of the 3-minute thesis presentations at our annual meeting.

I want to close this President’s message by giving a heartfelt thanks to all the SARS-CoV-2 investigators and study teams, at the bench and at the bedside, and all the study participants who have worked so tirelessly and given so selflessly so that we can finally say that there is some light at the end of the tunnel. I am looking forward to seeing everyone in Washington, DC this November.

**Mahalia S. Desruisseaux, MD**

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## 2021 ACMCIP Award Announcements!

### Travel Award for Low/Low-Middle Income Country Trainees ([Download Guidelines](#))

The ACMCIP student travel award will recognize a student or trainee who is primarily based in a Low/Low-Middle Income Country (LMIC) and who submits an abstract to the ASTMH Annual Meeting representing novel and exciting research in the field of molecular, cellular or immunoparasitology. The trainee must be, or become, an ASTMH and ACMCIP member.

**Application Deadline:** April 21, 2021 ([Submit your application HERE](#))

### Exchange Fellowship Award ([Download Guidelines](#))

Generous funding from our ASTMH parent body, along with your membership contributions, has allowed us to continue this award for 2021. It is aimed at all levels of trainees, including junior independent researchers, seeking to gain new or additional research skills by visiting laboratories that employ cutting-edge methods. This award, up to \$500 for domestic travel and \$2,000 for international travel, will aid trainees in augmenting their molecular or immunoparasitology studies by supporting travel from or to an ACMCIP member's laboratory. The trainee must be, or become, an ASTMH and ACMCIP member.

**Application Deadline:** May 12, 2021 ([Submit your application HERE](#))

### The William Trager Award for Fundamental Breakthrough in Parasitology Research



The William Trager Award, established by the ACMCIP in 2015, recognizes a fundamental breakthrough in molecular, cellular or immunoparasitology. This annual award is named in honor of Prof. William Trager, PhD, a past President of ASTMH who established *in vitro* culture conditions for *Plasmodium* parasites and thereby directly enabled almost all the current fields of basic and applied malaria research. This is not a career recognition award but is to recognize a recent breakthrough in basic parasitology that has been published (usually with the nominee as corresponding author) between two and 15 years ago. The awardee will be announced during the ASTMH

Annual Meeting Awards Ceremony, and the award will be made at ACMCIP's Business Meeting.

([Guidelines for nomination](#)).

**Nomination Deadline:** June 7, 2021

## SAVE THE DATE for #TropMed21 (in person!)

The ASTMH 70th Annual Meeting will be held on November 17-21, 2021 (Wednesday through Sunday) at the Gaylord National Resort and Convention Center in Maryland, USA (adjacent to Washington, DC)! Submit your abstracts for the meeting by April 21, 2021. ([Abstract Submission Guidelines](#))

## Trainee Corner

Hi there! As we begin to envision an end to the pandemic ([are you vaccinated?](#)), our team is more excited than ever about promoting trainee engagement and development through dynamic and creative programming and content. Please welcome new members to your trainee team: **Ben Liffner** (Iowa State University) and **Selasi Dankwa** (Seattle Children's Research Institute), who are helping to expand the range and reach of our activities.

We recently opened the ACMCIP Bonfire store ([ACMCIP | Official Merchandise | Bonfire](#)), organized by **Adesola Olatunde** (University of Utah). You can show your parasitology pride with ACMCIP swag like coffee mugs, tote bags, T shirts and sweatshirts. The proceeds from this campaign will go toward supporting ACMCIP Trainee activities. You are also able to support our trainees with a donation at this site.



Launched in 2020, GOTropMed is the Global Online Tropical Medical Education website overseen by the ASTMH Digital Education Committee for which **Kate Vendrely** (University of Notre Dame) is the ACMCIP trainee representative. This site is a rich repository of talks, presentations, and interviews, as well as professional development resources that are relevant for researchers at all career stages, including a webinar on submitting successful abstracts for the ASTMH Annual Meeting! The Digital Education Committee is always adding content to this growing library at [gotropmed.astmh.org](http://gotropmed.astmh.org), so check it out and check back often. The site is free with ASTMH membership; just log in with your ASTMH username and password.

Our next “Parasites at the Fireside” seminar will take place on April 22, 2021 at 11am EST. Our guest, **Dr. Dan Colley** (University of Georgia), will share his research in schistosomiasis and the public health measures related to this work. As always, there will be an open discussion following the presentation, and we encourage all trainees to engage with this platform ([sign up here](#)).

If you would like to help facilitate these events or suggest others, please send an email to [acmcip.astmh@gmail.com](mailto:acmcip.astmh@gmail.com). The [@ACMCIP](#) Twitter account has also become a significant avenue of engagement with our global membership. We encourage all trainees to join Twitter and follow the **#ACMCIPtrainees** hashtag to keep up with our activities and connect with the broader parasitology community.

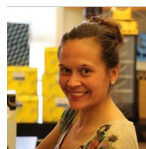
### Meet your trainee team & connect with us on Twitter!



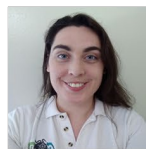
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[@DesolaOlatunde](#)



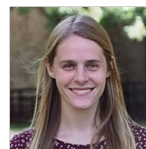
**Ben**  
[@LiffnerBen](#)



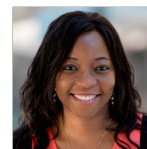
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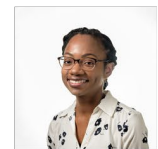
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[@hanniepower](#)



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[@venderkat](#)



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[@naijalola](#)



**Selasi**  
[@DankwaSelasi](#)

## Meet the 2020 ACMCIP William Trager Awardee: David Fidock



*David Fidock, PhD, FASTMH (Columbia University), discusses his career path, mentoring philosophy, future plans and advice for trainees and junior PIs.*

Dr. David Fidock was not always set on becoming a parasitologist. After his undergraduate studies in Australia, his plan was to study plant genetics and engineer crops to withstand adverse climate conditions. However, an opportunity arose at the Pasteur Institute that took him back to his native France, where he embarked on a PhD in malaria with Dr. Pierre Druilhe.

“That harmonized very much with my fundamental interest to use molecular biology and genetics to address issues of public health need that simply didn’t receive the attention that they deserved,” he said.

Life as a young malaria researcher was not easy for Dr. Fidock. Well into his first post-doc in the U.S. when the science was not going well, Dr. Fidock faced the difficult decision to either return to France where a position awaited him at the Pasteur Institute or remain in the U.S. for a second post-doc. He chose the latter, and the malaria field has been so much the better for it. For it was in the lab of Dr. Tom Wellems at the NIH that he started working on antimalarial drug resistance, drawn by the importance of this research, and undeterred by “the perception that it was very hard to obtain drug-resistant parasites in the lab.” Even after spending 18 months working on the wrong initial candidate gene for chloroquine resistance, he did not give up. **“That’s where you just have to be determined if you feel the goal is important. Perseverance really does matter,** and I think really paying attention to the details is what led me to discover [the *Plasmodium falciparum* chloroquine resistance transporter] PfCRT.”

Dr. Fidock has continued to work on antimalarial drug resistance, making several important discoveries over the course of his career. These include his lab being the first to prove that K13 was causal for artemisinin resistance *in vitro* and demonstrating using gene editing approaches that the driver of parasite resistance to piperazine is the emergence of novel mutations in PfCRT, a situation that has led to widespread treatment failure in southeast Asia. Among the factors that have sustained his interest in antimalarial drug resistance research are its importance to human health and its quantitative nature. Over the years, he has expanded his research to support the discovery and development of new therapeutics because, as he puts it, “It’s clear that it’s not enough to understand how drugs fail. You also need to figure out how you can leverage that information to optimize treatment.”

The success of any lab is in large part due to the members of that lab. When asked about his mentoring philosophy, Dr. Fidock said he strives to have each person in his lab leave with more opportunities than they arrived with. It is also important to him, he said, to try to ensure that everyone in his lab succeeds. “I think that’s really important for the lab spirit because you don’t want a situation where the success of a few comes at the expense of the others. That creates really difficult lab dynamics and is fundamentally unfair.” One way he tries to ensure everyone’s success is by encouraging them to take intellectual ownership of their project and emphasizing the need for everyone to publish. He tries to find the delicate balance between providing guidance and having people lead. But above all, he tries to be very supportive. He believes that, **“You don’t have to insist that people work hard. If you create the right research environment, people are happy to work hard because they appreciate the mission.”**

Dr. Fidock himself was profoundly influenced by a few mentors in his training, from his undergraduate Genetics professor at Adelaide University in South Australia whose passion for the subject caused Dr. Fidock to switch from mathematics and computer science to molecular biology and genetics, to Dr. Pierre Druilhe, his PhD advisor who “always challenged us to think outside the box and never hesitate to take on the big questions.” Of Dr. Tom Wellems, he says, “He was terrific at encouraging his team. He always made us feel like we were doing cutting-edge science.”

Dr. Fidock’s advice to trainees is to take on a couple of projects and get involved with others to help demonstrate leadership in one’s field, foster teamwork and build a publication record. Another word of counsel is to network from the beginning. He encourages trainees to introduce themselves to PIs at conferences and talk about their research. Also important is the need to learn the full range of skills necessary to become a well-rounded scientist, such as getting involved at all stages of the publishing process, creating collaborations and writing grants. “I think writing grants is incredibly valuable, even if you get rejected, because you get rejected maybe the first few times, but once you start to get them, success builds on success.”

On dealing with rejection, he admitted that it is unavoidable as a junior PI, especially during the first six or seven years, “but you just have to accept it, keep working hard, being honest and doing good science and ultimately it will pay off.” As a junior PI, even though there is the temptation to take on safer “off-to-the-side” projects to avoid competition with bigger labs, he believes it is important to pursue the important questions. “... It’s okay to be scooped because this sort of approach will always increase the body of knowledge and understanding.”

Dr. Fidock remains committed to conducting research that reduces the burden of malaria, but he is also learning that economics play an undeniable role in disease mitigation efforts. “I’d like to become more involved in building up centers of excellence, and I’d like to inject some more policy to it as well.” He also aspires to run for ASTMH president in the future, as that will afford him the opportunity to be more involved in advocacy and policy. He further envisions contributing to advisory panels for foundations and other entities, including policy makers that work to streamline and accelerate the antimalarial drug discovery and development pipeline, as well as increasing his workings with organizations like the WHO. As much as he desires to expand into intervention measures, he recognizes that this will be challenging because he runs a basic science lab, where “[science] will always be the driver” of what he does. But whatever path Dr. Fidock chooses in the future, this esteemed scientist, mentor and father of four has already left a legacy that will long outlive him.

Dr. Selasi Dankwa (Seattle Children’s Research Institute) had the pleasure of interviewing Dr. David Fidock.

## ParasiteSlack: an online resource for parasitology

Sign up to access the **ParasiteSlack** ([ParasiteSlack.slack.com](http://ParasiteSlack.slack.com)) where you can share job opportunities, fellowships, meeting information or ask questions of the community. They are requesting that the community upload protocols as a resource also. If you have any ideas for how to make it more useful to you or suggest new channels for your parasite, let them know. I asked for a #ParasiteImmunology channel, *et viola*, we have a new community! So get Slacking!

## Your ACMCIP Council

<b>Position</b>	<b>Member</b>
<b>President</b>	Mahalia Desruisseaux, <i>Yale School of Medicine</i>
<b>Immediate Past President</b>	Michael Ferdig, <i>University of Notre Dame</i>
<b>Councilor for Awards &amp; Pre-Meeting Course</b>	Jeff Dvorin, <i>Boston Children's Hospital/Harvard T.H. Chan School of Public Health</i>
<b>Councilor for Communications</b>	Amy Kristine Bei, <i>Yale School of Public Health</i>
<b>Councilor for Symposia</b>	Keke Fairfax, <i>University of Utah</i>
<b>International Councilor</b>	Carolyn Kifude, <i>Kenya Medical Research Institute</i>
<b>Secretary/Treasurer</b>	Amanda Lukens, <i>Broad Institute/Harvard Chan School of Public Health</i>
<b>Trainee Councilor</b>	Lola Fagbami, <i>University of Georgia</i>

If you have any questions regarding ACMCIP, please do not hesitate to contact us.