

Summer 2022



THE UNIVERSITY OF
CHICAGO

PREP Newsletter

Greetings from the UChicago PREP!

Congratulations to the 2021-22 University of Chicago PREP Scholars, who have just completed the program. We are proud of all they have accomplished this year and wish them the best of luck in their future endeavors.

We hope you are all doing well both personally and professionally. As always, we'd love to hear from you with any [news or career updates](#). Have a great summer!

The UChicago PREP staff

UChicago PREP Symposium



The 18th Annual PREP Symposium was held on June 3, 2022 and we were excited to return to an in-person format, though some presented virtually. The PREP Scholars presented their research projects and results and answered questions from the audience at the Symposium. Congratulations to all on your presentations and accomplishments this year. The 2021-22 PREP cohort is now moving on to graduate school or continuing their research careers at: UC Berkeley, Yale, UChicago, USC and Northwestern. We look forward to hearing about their future successes in their research and educational endeavors. Thank you to all of the PREP Mentors this year including our new mentors to the program: Drs. Sarah Keedy, Shannon Elf, Cara Brook, Sliman Bensmaia, Robert Carrillo, Marc Berman, Raghu Mirmira and Isabel Casimiro. Finally, a big thank you to Dr. Miriam Domowicz for her mentoring of all the Scholars this year through PREP Journal Club and their preparations for the Symposium.

Welcome to the 2022-23 UChicago PREP Scholars!

The newest cohort of UChicago PREP Scholars will be joining the Program this Summer and represent the following institutions: Brooklyn College, Macalester College, the University of North Carolina at Pembroke, the University of Washington, the University of Illinois at Chicago, the University of Virginia, Northeastern Illinois University and Columbia University. Join us in welcoming the PREP Cohort of 2022-23!

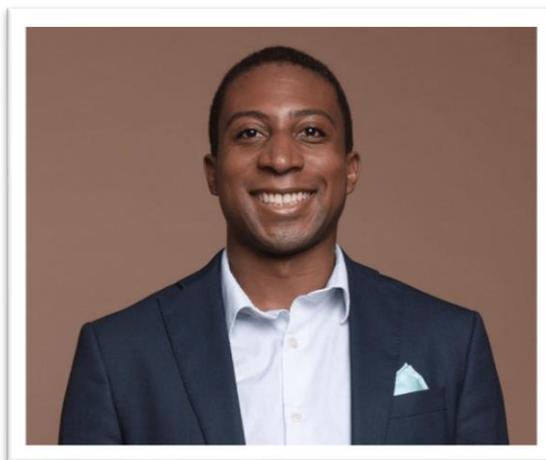


PREP Alum Updates

We are proud to announce that several PREP alumnae have exciting academic and professional updates! Please join us as we congratulate them and share their good news. We are thrilled to announce that **Dr. Tristan Jordan** has completed a Postdoctoral training program and has accepted a faculty position at the University of Washington, Department of Microbiology. Additionally, we are excited to share that **Dr. Shanan Emmanuel, Dr. Diandra Vaval Taylor, and Dr. Arnold Olali** have recently received their PhD degrees and accepted opportunities to pursue Postdoctoral Fellowships. We invite you to join us as we celebrate their many accomplishments! To learn more about their achievements and academic pursuits, please read their profiles below!

PREP Alum Spotlights

Dr. Tristan X. Jordan (PREP Alum 2009, Randall Lab) has newly accepted a faculty position with the Department of Microbiology at the University of Washington School of Medicine. As a PREP Scholar, he studied the role of phosphatidylinositol-4 III kinase alpha in Hepatitis C virus replication under the guidance of Dr. Glenn Randall. Tristan completed his graduate studies at the University of Chicago where he continued his work in Dr. Randall's lab focusing on the signaling pathways triggered by dengue virus to induce the specific depletion of lipid droplets by autophagy, and was awarded a PhD in Microbiology in 2016. He then went on to join the lab of Dr. Benjamin tenOever for his postdoctoral fellowship where he worked on understanding the innate immune response against viral pathogens until the pandemic shifted his focus to understanding the biology of SARS-CoV-2 infection. Tristan was recently featured on the 'Let's Meet the Virologists' Podcast where he discussed his work identifying new potentially-druggable targets to prevent and treat COVID-19 using a CRISPR screen. His research interests include the cell biology of virus-host interactions, the evolution and regulation of antiviral systems, and engineering viruses for potential therapeutic applications. To date, his research pursuits have resulted in 14 total publications.



Dr. Shanan Emmanuel (PREP Alum 2017, Manicassamy Lab) has newly accepted an opportunity to join the University of North Carolina at Chapel Hill as a Postdoctoral Fellow. She recently graduated from the University of Florida (UF) with a PhD in Biomedical Sciences (Spring 2022). While at UF she studied developing variant Adeno-Associated Virus (AAV) capsids that evade neutralizing antibodies and defensins. To date, Shanan's graduate research in the Agbandje-Mckenna lab has led to three publications. In her time at the University of Florida, Shanan won several awards including the Boyce Award, Medical Guild Bronze Award and Ruska Award. Just recently, Shanan was also awarded the esteemed Association for Academic Women's (AAW) National Science Foundation (NSF) Emerging STEM Scholar Award. In addition to her graduate studies, Shanan completed an internship with LogicBio Therapeutics in Lexington, MA. Shanan is an active member of the American Society for Gene And Cell Therapy and was recognized as a Board of Education Scholar in 2017. As a PREP Scholar, Shanan investigated the role of the Rab11a

cellular protein in the life cycle of influenza virus under the guidance of Dr. Manicassamy and her work was recently published in PLOS Pathogens.



Dr. Diandra Vaval Taylor (PREP Alum 2015, Schwartz lab) recently graduated from the University of Illinois at Chicago with a PhD in Microbiology (Spring 2022). As a PREP Scholar at UChicago, she studied the ways in which the extracellular matrix influences chondrocyte differentiation under the control of the transcription factor Sox9, under the guidance of Drs. Nancy Schwartz and Miriam Domowicz. Upon completing her PREP year, Diandra enrolled at the University of Illinois at Chicago and was awarded the prestigious National Science Foundation (NSF) Bridge to Doctorate Fellowship in 2015. At UIC, under the mentorship of Dr. Nancy Freitag, Diandra's graduate research focused on the mechanism by which *Listeria monocytogenes* (*Lm*) escapes from host cell vacuoles by deciphering the role of bacterial peptide pheromones, utilizing genetic tools to elucidate key genes in this process. Diandra is an active member of the American Society for Microbiology (ASM) and has served as the ASM Ambassador to Illinois since 2020. She has successfully mentored

a PREP scholar and volunteers as a professional affiliate with the I CAN PERSIST (ICP) STEM Initiative for girls and women of color. Additionally, she has taught a Biomedical Seminar Series at a medical preparatory high school in Chicago, and she has served as a guest lecturer at both the University of Illinois at Chicago and Chicago State University. Diandra recently accepted a Postdoctoral Research position at the UIC and plans to pursue science policy efforts in the future.

Dr. Arnold Olali (PREP Alum 2017, Randall Lab) has recently accepted an offer to join the Children's Hospital of Philadelphia as a Postdoctoral Fellow. He received a PhD in Integrated Biomedical Science from Rush University Medical Center in the spring of 2022. Under the Guidance of Dr. Ryan Ross and Dr. Lena Al-Harthi at Rush, Arnold's studies focused on characterizing the individual contributions of HIV and combined antiretroviral therapy (cART) on bone related pathology in people living with HIV. Arnold's dissertation research led to 3 publications thus far. In addition to his graduate studies, Arnold was a Research Intern with the Union of Concerned Scientists: Center for Science and Democracy. During his internship, Arnold conducted research on the Environmental Protection Agency (EPA) scientific advisory committee activities and practices. Arnold received an IMSD (Initiative for Maximizing Student Development) Fellowship in 2017 and has been awarded the prestigious American Society for Bone and Mineral Research (ASBMR) Young Investigator Award. He is also a SACNAS Registration scholarship recipient.





PREP Alum Photos



Dr. Shanan Emmanuel (PREP '17) with the University of Florida President Dr. Kent Fuchs at the NSF Award Reception.



PREP Alums Xiomarie Alejandro-Navarreto (PREP '16) and Dr. Dianda Vaval Taylor (PREP '15) at Diandra's final defense. Xiomarie and Diandra became labmates at UIC after completing the PREP!

PREP Evaluation Project

Our long-term PREP Evaluation project with the University of Chicago Survey Lab is on-going at this time. Thank you to all who have participated already in the interview phone call or online survey completion. If you receive an email or call from Dr. Martha Van Haitisma or the Survey Lab, please participate in the survey! Your responses are much appreciated and will be used to inform and improve programming for future PREP Scholars.

If you have any recent awards or career news to share, please fill out our [2022 PREP Alum Survey](#) or e-mail us at irisner1@peds.bsd.uchicago.edu. We'd love to hear from you!