# **Museum of Vertebrate Zoology Newsletter**



Over a century of collections, research and education

April 2024



40 under:













Dear MVZ Community

With this newsletter, we are pleased to present the next eight awardees from MVZ's 40under40 list! This list highlights 40 alumni of the MVZ who are each under 40 years of age and have made substantial contributions in their chosen career. A call for nominations went out to the MVZ community last summer and nominees were chosen by a vote of the MVZ faculty and staff. Each of the winners will be featured in our upcoming newsletters. We hope the list will serve to acknowledge and promote the work and careers of MVZ's younger alumni! Congratulations to the winners!

Michael Nachman MVZ Director

#### Dr. Umilaela Arifin

Postdoc McGuire Lab, Currently Research Fellow, Leibniz Institute for the Analysis of Biodiversity Change, Germany

Twenty years ago, as an undergraduate student at the Bandung Institute of Technology (ITB), Indonesia, Umilaela joined Professor Jim McGuire on a three-month expedition in Sulawesi to study amphibians and reptiles. The trip helped shape her decision to become a herpetologist. Umilaela received her master's in biology from ITB in 2008 and a scholarship from the German Academic Exchange Service (DAAD) allowed her to pursue her doctorate at the University of Hamburg, Germany. In 2022 she came to the MVZ for a postdoc with Professor McGuire under the Marie Sklodowska Curie Fellowship program funded by the European Commission. During her time at the MVZ "the most fun thing was realizing the fact that herping in the USA requires methods that are completely different from the ones I used in Indonesia. I learnt for the first time



that it is more effective to "lasso" the lizard than trying hard to catch them with bare hands, which is what is typically done in Indonesia." Umilaela is currently a Research Fellow at the Leibniz Institute for the Analysis of Biodiversity Change, Germany. She is broadly interested in the amphibians and reptiles of Southeast Asia, with a special interest in those occurring in Indonesia. Umilaela founded and co-lead the Global Women in Herpetology Project, which aims to increase the visibility of women who work with amphibians and reptiles across disciplines, regions, and cultural backgrounds and to establish a scholarship program for students from underrepresented backgrounds.

#### **Jeremy Chase Crawford**

Graduate Student Lacey Lab, Currently Principal Bioinformatics Research Scientist and Director of Immunoinformatics, St. Jude Children's Research Hospital-Tennessee



Jeremy was in Professor Eileen Lacey's lab and received his PhD from UC Berkeley in 2016. He received his undergraduate degree at Duke where he worked with lemurs. At the MVZ he used genetics, endocrinology, analytical chemistry and behavioral ecology to study the evolution of sociality and animal communication. The communal lab model at the MVZ's Evolutionary Genetics Lab had a huge impact on the way that Jeremy thinks about science, the scientific community, and scientific collaboration, "I have tried to implement aspects of that model into the various laboratory setups that I've designed over the years. Credit goes to the MVZ's investment in the EGL as a resource and to Lydia Smith's amazing vision for communal training and collaboration." He did field work at Landels-Hills Big Creek Reserve on deer mice and California mice and in Australia on pebble mound mice before moving on to Tuco Tucos. The amazing community of

students at the MVZ is something Jeremy cherishes to this day, "I often think about the late evenings working side by side in the Evolutionary Genetics Lab, where we were all studying different things on entirely different organisms but chatting and laughing through the night (and into the early hours of the morning) from our respective lab benches. Students often disappeared for months at a time to do fieldwork or other work travel, but whenever we returned, there was always a sense of coming home to the MVZ." Today Jeremy is the Principal Bioinformatics Research Scientist and Director of Immunoinformatics at St. Jude Children's Research Hospital in Memphis, Tennessee.

## Rosa Alicia Jiménez

Graduate Student Bowie Lab, Currently Professor and the Curator of the Bird Collection at University of San Carlos of Guatemala

Rosa was a visiting researcher at the MVZ while working on her undergraduate and master's degrees. While an undergraduate student at the University of San Carlos of Guatemala (USAC), she also participated in collecting expeditions in Guatemala thanks to collaboration between the MVZ and USAC. She received her bachelor's degree in 2011 from USAC and her master's degree in 2013 from the Institute of Ecology in Veracruz, Mexico. In 2016 Rosa returned to the MVZ, this time as a graduate student, and got her Ph.D. (2021) studying Central American birds. "I enjoyed walking through the collections every day and constantly looking at specimens along with reading



papers on particular species or groups." After finishing her Ph.D. she went back home where she is currently a Professor and the Curator of the Bird Collection at USAC. "At the MVZ I learned more than I could have imagined, but what I am most proud of is being able to apply, to the Guatemalan bird collection, the legendary MVZ curatorial practices, which Dr. Rauri Bowie and Dr. Carla Cicero patiently taught me, and now I pass them on to my students." Rosa's research focuses on the biogeography and evolution of Central American birds and seeks to make contributions to their conservation and management.

## Jesyka Meléndez Rosa

Graduate Student Lacey Lab, Currently Project Director of Finca JEVANA, a regenerative farm in Puerto Rico



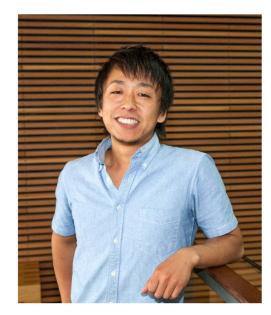
Jesyka joined Dr. Eileen Lacey's lab in 2012 and received her PhD from UC Berkeley in 2018. She completed an NSF postdoc at the University of Puerto Rico in 2020 and worked as the Humboldt State University Vertebrate Museum collections manager from 2020-2022. More recently she has transitioned into agroecology and permaculture. At the MVZ, Jesyka learned how to look for and see patterns, "the ability to observe and identify how things are different (or the same) primed me to become a great farmer. Good farming has natural history at its core and these skills influence everything from how I look at our soil microbiome to how I manage pests. Often, I find myself looking at small insects under a jeweler's loop and making

**taxonomy notes. Forever an MVZ student."** She is passionate about building community, growing healthy food and soil, and supporting Puerto Rico's food sovereignty movement. Jesyka is currently the project director of Finca JEVANA, a regenerative farm in Puerto Rico.

## Taichi Suzuki

Graduate Student Nachman Lab, Currently Assistant Professor, University of Arizona

Taichi was a PhD student in Professor Michael Nachman's lab and graduated in 2018. "My favorite thing about the MVZ was being surrounded by people who are obsessed with dead animals." Taichi was a postdoctoral research associate in microbiome science at the Max Planck Institute for Biology, Germany where he identified gut microbes that codiversified with humans. His research focuses on the ecology and evolution of host-microbial interactions and their implications for human health. In 2023 he joined the faculty at Arizona State University where he is an Assistant Professor at the College of Health Solutions and Biodesign Center for Health Through Microbiomes.



### **Dr. Pascal Title**

MVZ Undergraduate Curatorial Assistant, Currently Assistant Professor at Stony Brook University



As an undergraduate Pascal worked in the MVZ as a curatorial assistant, an informatics-GIS lab assistant and participated in Grinnell resurvey field work. "Working with museum specimens and data and thinking about the science was very exciting, but what made my time at the MVZ so special was that I was surrounded by wonderful, dedicated people who do amazing, critical work." He graduated from UC Berkeley in 2008 and received his masters at San Diego State University. He completed his PhD at the University of Michigan, followed by a postdoctoral research fellowship at the Environmental Resilience Institute at Indiana University. His research focuses on combining species occurrences and environmental spatial data with macroevolutionary and macroecological approaches. Pascal explores how biodiversity patterns are structured along geographic and environmental gradients, and how historical contingency has generated the patterns we observe today. During his

time at the MVZ Pascal learned about the inherent value of museums and their holdings, "I'm constantly amazed at the new ways scientists are using collections and strive to continue to keep museum collections central to my work." He is currently an Assistant Professor in the Department of Ecology and Evolution at Stony Brook University in New York.

### **Dr. Kwasi Wrensford**

Graduate Student Lacey Lab, Currently NSF Postdoctoral Fellow, University of British Columbia

In 2017, after completing his B.S. in Ecology and Evolution at the University of Connecticut, Kwasi joined Dr. Eileen Lacey's lab as a PhD student at the MVZ. Kwasi's doctoral research used data from free-living lodgepole and alpine chipmunks to explore the potential role of differences in response to novelty in shaping climate-driven shifts in the elevational ranges of these species. During his time at the MVZ Kwasi taught the MVZ's storied Vertebrate Natural History Course, "Being outside in nature, observing animals in their natural habitat, is what got me excited about doing science in the first place. Being able to pass that joy and wonder to a new generation of students was the highlight of my graduate career." He



completed his PhD in the fall of 2023 and is now an NSF Postdoctoral Fellow working with Dr. Kaitlyn Gaynor in the Department of Zoology and the Biodiversity Research Centre at the University of British Columbia, Vancouver, Canada. "My work is built on data collected over a century ago, and it was only through the meticulousness of those researchers who came before me, along with decades of careful curation by museum staff, that that data would be available to me to learn from and ask my own questions." Kwasi's research is aimed at understanding the role of behavior in mediating range shifts in bobcats at the northern (Canadian) edge of their distribution.

# Vicky (Mingna) Zhuang

MVZ Undergraduate Collection Assistant and AmphibiaWeb Coordinator. Currently Biodiversity Collections Manager, University of Texas at El Paso



As an undergraduate at UC Berkeley, Vicky worked as a collection's assistant in herpetology at the MVZ and as a coordinator for AmphibiaWeb. She received her PhD from UC Riverside with Dr. Tim Higham. Her dissertation focused on the functional morphology of the foot in relation to the evolution of the adhesive system in geckos. She worked with phylogenetic comparative methods, kinematics, and geometric morphometrics. During her time at the MVZ Vicky learned that, "People are really at the heart of natural history museums, making it possible for everyone to explore and learn with museum objects at their own pace. At my

current museum, I try to provide the same space and time for our students of all different backgrounds to build relationships with each other and with our specimens." Today, Vicky is the Biodiversity Collections Manager at the UTEP Biodiversity Collections, a natural history museum at the University of Texas at El Paso.