

# Maya Juman

+1 646-370-9281 (cell)  
Twitter: @mayajuman

mmj38@cam.ac.uk  
[mayajuman.github.io](https://mayajuman.github.io)

## EDUCATION

---

**Ph.D. in Biological Sciences**, Gates Cambridge Scholar  
Department of Veterinary Medicine, University of Cambridge

Fall 2022 – Present

**B.S. in Ecology & Evolutionary Biology**, *magna cum laude*, with distinction (3.91/4.00)  
Yale University

May 2020

## PEER-REVIEWED PUBLICATIONS

---

7. Olson, L.E.\*, **Juman, M.M.\*** (*accepted*) Host taxonomy is critical in zoonotic disease surveillance and reporting. *Journal of Wildlife Diseases*. (\*both authors contributed equally to this work)
6. **Juman, M.M.**, Olson, L.E., Sargis, E.J. (2024) Craniometric variation and taxonomic boundaries in the Madras Treeshrew (Scandentia, Tupaiidae: *Anathana ellioti* [Waterhouse, 1850]) from India. *Journal of Mammalian Evolution*: 31:4.
5. **Juman, M.M.**, Woodman, N., Miller-Murthy, A., Olson, L.E., Sargis, E.J. (2022) Taxonomic boundaries in Lesser Treeshrews (Scandentia, Tupaiidae: *Tupaia minor* Günther, 1876). *Journal of Mammalogy* 103(6): 1431-1440.
4. **Juman, M.M.**, Millien, V., Olson, L.E., Sargis, E.J. (2022) Recent and rapid ecogeographical rule reversals in Northern Treeshrews. *Scientific Reports* 12: 19689.
3. **Juman, M.M.**, Olson, L.E., Sargis, E.J. (2021) Skeletal variation and taxonomic boundaries in the Pen-tailed Treeshrew (Scandentia, Ptilocercidae: *Ptilocercus lowii* Gray, 1848). *Journal of Mammalian Evolution* 28(4): 1193-1203.
2. **Juman, M.M.**, Woodman, N., Olson, L.E., Sargis, E.J. (2021) Ecogeographic variation and taxonomic boundaries in Large Treeshrews (Scandentia, Tupaiidae: *Tupaia tana* Raffles, 1821) from Southeast Asia. *Journal of Mammalogy* 102(4): 1054-1066.
1. Ruane, S., Myers, E.A., Lo, K., Yuen, S., Welt, R.S., **Juman, M.M.**, Futterman, I., Nussbaum, R.A., Schneider, G., Burbrink, F.T., Raxworthy, C.J. (2018) Unrecognized species diversity and new insights into colour pattern polymorphism within the widespread Malagasy snake *Mimophis* (Serpentes: Lamprophiidae). *Systematics and Biodiversity* 16(3): 229-244.

## MANUSCRIPTS IN PREPARATION

---

**Juman, M.M.**, Gibson, L., Suu-Ire, R., Languon, S., Quaye, O., Fleischer, G., Asumah, S., Jolma, R., Gautam, A., Laing, E., Wood, J.L.N., Cunningham, A.A., Restif, O. Ecological and reproductive cycles drive henipavirus seroprevalence in Straw-Coloured Fruit Bats. Expected submission by end of January 2024.

## RESEARCH PRESENTATIONS

---

Juman, M.M., Restif, O. Seasonal and spatial patterns of henipavirus seroprevalence in Straw-Coloured Fruit Bats (*Eidolon helvum*). **British Ecological Society Annual Meeting**, Belfast, Northern Ireland (12/15/2023).

Juman, M.M., Millien, V., Olson, L.E., Sargis, E.J. Recent and rapid ecogeographical rule reversals in Northern Treeshrews. **International Mammalogical Congress**, Anchorage, AK (7/14/2023).

Juman, M.M., Woodman, N., Miller-Murthy, A., Olson, L.E., Sargis, E.J. Taxonomic boundaries in Lesser Treeshrews. **Meeting of the American Society of Mammalogists**, virtual (6/18/2022).

Juman, M.M., Olson, L.E., Sargis, E.J. Skeletal variation and taxonomic boundaries in the Pen-tailed Treeshrew. **Meeting of the American Society of Mammalogists**, virtual (6/15/2021).

Juman, M.M., Woodman, N., Olson, L.E., Sargis, E.J. Hand proportions and taxonomic boundaries among Large Treeshrews. **Meeting of the American Society of Mammalogists**, Washington, D.C. (6/29/2019).

## IUCN RED LIST ASSESSMENTS

---

**Juman, M.M.**, Sargis, E.J. (2023) *Tupaia belangeri*. The IUCN Red List of Threatened Species.

**Juman, M.M.**, Sargis, E.J. (2023) *Tupaia minor*. The IUCN Red List of Threatened Species.

**Juman, M.M.**, Sargis, E.J. (2023) *Ptilocercus lowii*. The IUCN Red List of Threatened Species.

**Juman, M.M.**, Sargis, E.J. (2023) *Tupaia tana*. The IUCN Red List of Threatened Species.

## FELLOWSHIPS, GRANTS, AND AWARDS

---

Verena (Viral Emergence Research Initiative) Fellow-in-Residence Award (\$5000)	2024
Accelerate-C2D3 (Cambridge Centre for Data-Driven Discovery) Research and Innovation Grant (£9,303) <i>Harnessing AI to unlock natural history collections for zoonotic surveillance</i>	2023
Gates Cambridge Scholarship (full PhD tuition + £20,000/year stipend)	2022 – 2026
NSF Graduate Research Fellowship (\$138,000, <i>declined</i> )	2022
Fulbright U.S. Student Research Fellowship to Malaysia (\$18,000, <i>postponed due to COVID-19</i> )	2021
Travel Awards (\$200, \$400, \$600), American Society of Mammalogists	2021, 2022, 2023
Y-Work Award for Outstanding Student Employees, Yale University	2020
Undergraduate Research Honorarium (\$1,200), American Society of Mammalogists	2019
Dean's Research Fellowship in the Sciences (\$4,300), Yale University	2019
Alan S. Tetelman Fellowship for International Research in the Sciences (\$3,600), Yale University	2019
Yale Summer Environmental Fellowship (\$2,000), Yale School of the Environment	2019
Richter Summer Fellowship (\$1,000), Saybrook College	2019
Karen L. Von Damm Undergraduate Research Fellowship (\$3,784), Yale Earth & Planetary Sciences	2017

## TEACHING

---

**Part II Zoology: Mammal Evolution and Comparative Anatomy**, University of Cambridge      Lent Term 2023, 2024  
*Supervisor (led specimen-based small group teaching for third-year undergrads, provided writing feedback)*

**Part I Pathology: Mathematical Biology**, University of Cambridge      Easter Term 2023  
*Demonstrator (assessed students' R code for a practical assignment on epidemiological modeling)*

**S&DS S230: Data Analysis and Exploration**, Yale University      Summer 2020  
*Teaching assistant (held office hours, graded assignments, demonstrated R code)*

**ANTH S242: Human Evolutionary Biology**, Yale University      Summer 2020  
*Writing fellow (served as primary writing resource for 90 students)*

## SCIENCE COMMUNICATION

---

**Contributor**, Bat Pathogen Spillover Compendium, Johns Hopkins University 2023 – Present

- Work with a team of disease ecologists to review scientific papers on bat virus spillover for a general audience.
- These reviews will be part of a publicly available, expert-curated database (to be launched in Spring 2024).

**Species Page Contributor**, India Biodiversity Portal ([indiabiodiversity.org](http://indiabiodiversity.org)) 2022 – Present

- Validate and identify observations of Scandentia (treeshrews) in an open citizen science database.
- Edit and update species information, literature, and taxonomy for treeshrews and other small mammals.
- Founder and administrator of the Small Mammals of India microsite.

**Tour Guide and Collections Assistant**, Yale Peabody Museum of Natural History (part-time job) 2016 – 2020

- Led weekly behind-the-scenes tours to encourage public engagement with the Peabody's collections and research.
- Digitized 6,573 invertebrate and vertebrate fossils for the NSF Cretaceous World Project.

**Podcast Host and Producer**, “Inkredible: A Cephalopodcast,” published on SoundCloud, Apple, and Spotify 2019

- Created an original episode about biological ink, accompanied by a website ([inkrediblepod.wordpress.com](http://inkrediblepod.wordpress.com)).

**Photographer**, “Peabody Portraits,” presented at Yale School of Art 2019

- Edited and compiled a portfolio of DSLR images of the Yale Peabody Museum's paleontology collections.

**Writer**, “The Taming of the Treeshrew” ([tamingofthetreeshrew.wordpress.com](http://tamingofthetreeshrew.wordpress.com)) 2018

- Maintained a blog documenting collections-based research experiences at Yale and the Smithsonian.

## OUTREACH

---

**Cambridge Science Festival** March 2023

*Activity organizer (designed and ran a “bat virus hunting” activity for families visiting the veterinary school)*

**Skype a Scientist** 2023 – Present

*Guest scientist (discusses research and STEM career pathways with U.S. public high school biology students)*

**Women of Color in Ecology and Evolutionary Biology Mentor Match** ([wocineeb.org](http://wocineeb.org)) 2023 – Present

**Ecology and Evolutionary Biology Mentor Match** ([eebmentormatch.com](http://eebmentormatch.com)) 2022 – Present

*Mentor (provide personalized feedback to undergraduate students applying to graduate school and fellowships)*

**Letters to a Pre-Scientist** 2021 – Present

*STEM pen pal (write bilingual science-themed letters to middle schoolers in underserved U.S. school districts)*

**Alumni Career Panels**, American Museum of Natural History 6/22/2019, 9/10/2021, 9/30/2022

*Panelist (spoke about college admissions, academic career paths, and research opportunities with NYC high schoolers)*

**Yale Ecology & Evolutionary Biology Undergraduate Group** 2019 – 2020

*Co-President and Peer Mentor (organized research panels, social events, and workshops for students)*

## UNDERGRADUATES MENTORED

---

Lewis Drummond, University of Cambridge (*direct supervisor for Part II research project*) 2023 – Present

Gabrielle Roman, Yale University (*provided training in R-based multivariate analyses*) 2023

Katie Handler, Yale University (*provided training in R-based multivariate analyses*) 2022

## PUBLIC SERVICE

---

- COVID-19 Response Coordinator**, Philadelphia Department of Public Health (full-time job) 2020 – 2022
- Supervised a team of contact tracers and investigated high-risk COVID-19 clusters.
  - Designed monthly software updates to streamline the collection and management of epidemiological data.
  - Synthesized and presented weekly patterns to Chief of Operations and Philadelphia Health Commissioner.

## INVITED TALKS AND PANELS

---

- “Recent and Rapid Ecogeographical Rule Reversals in Northern Treeshrews”** 12/7/2022  
*Olson Lab, University of Alaska Fairbanks*
- “Viruses, Variants, Virulence: Lessons from Ecology and Evolution”** 1/25/2022  
*Philadelphia Department of Public Health*
- “Scientific and Cultural Uses of Cephalopod Ink”** 2/13/2020  
*Yale Peabody Museum of Natural History (first undergraduate student to deliver a public gallery talk)*

## OTHER SKILLS AND EXPERIENCE

---

### Museum work:

- *Research internships*: American Museum of Natural History (2014-2016, Herpetology); Smithsonian National Museum of Natural History (Summer 2018, Mammalogy); Yale Peabody Museum of Natural History (Summer 2018, Mammalogy)
- *Collection visits*: Smithsonian National Museum of Natural History (2019); Harvard Museum of Comparative Zoology (2019); Yale Peabody Museum of Natural History (2019); Field Museum of Natural History (2019); Natural History Museum, London (2019, 2023); American Museum of Natural History (2019)
- *Employment*: Yale Peabody Museum of Natural History (2016-2020, Invertebrate and Vertebrate Paleontology Collections Assistant); University of Alaska Museum (2022–, Mammalogy Research Technician)

### Field work:

- *Southeast Alaska, USA*: Collected hoary marmots and bumble bees from remote alpine regions for the University of Alaska Museum (July 2022, July 2023).

### Editor:

- *Editor-in-Chief*, The Scholar, Gates Cambridge Council ([thescholar.online](https://thescholar.online) and [Spotify](https://open.spotify.com/show/18333333333333333333)): Oversaw the production of the Gates Cambridge community’s annual magazine, which includes articles, photo essays, videos, and podcast contributions from current scholars and alumni (2022–2023).

**Reviewer:** iScience (2023), Journal of Mammalogy (2023), PLoS ONE (2022), Philippine Journal of Science (2022)

**Languages:** English, Spanish (proficient), Hindi (read/write), Malayalam (read/write)

**Software:** R, Python, ArcGIS, EMu, FileMaker, ImageJ, Adobe InDesign and Photoshop

**Professional Affiliations:** American Society of Mammalogists (2019–), British Ecological Society (2022–)