Kristen “Kricket” Ressler

RESEARCH ASSISTANT · SCIENCE COMMUNICATOR

lilacmess@vt.edu

PROFESSIONAL SUMMARY

Versatile and experienced professional combining a strong foundation in cellular biology research, species discovery, and scientific communication with a background in clinical social work. Proven expertise in laboratory techniques, genomic isolation, digital light microscopy, proficient identification of freshwater ciliates and micro-invertebrates, and live-stream science communication reaching an engaged audience of 50,000 followers. Adept at bridging complex scientific concepts with public audiences while bringing exceptional organizational, analytical, and interpersonal skills to multidisciplinary environments.

PROFESSIONAL EXPERIENCE · SCIENTIFIC RESEARCH & COMMUNICATION

Research Assistant

04/2024 - Present

Dr. Daniel Cortes Lab, Virginia Tech | Blacksburg, VA

- Spearheading the discovery, molecular verification via 18S sequencing, and manuscript preparation for 14 potentially new *Stentor* species.
- Execute targeted PCR amplification of the 18S rRNA gene marker from card-bound matrices to profile novel*Stentor* taxa.
- Conduct structured field work to collect environmental water samples, identifying optimal micro-environments for active aquatic micro-life.
- Utilize digital light microscopy techniques to isolate, track, and observe complex cellular behaviors, identifying diverse ciliates and micro-invertebrates.
- Culture and isolate *Stentor* ciliates from environmental samples using micro-pipetting and stereomicroscopy techniques to identify candidate novel species.
- Handle specialized DNA matrices and collection cards to stabilize, preserve, extract, purify, and recover viable genomic DNA directly for downstream molecular assays.

Research Assistant

Summers 2025 - Present

Dr. Daniel Cortes Lab, Marine Biological Laboratory (MBL) | Woods Hole, MA

- Sampled from diverse aquatic habitats including ponds, marshes, and ocean jetties across Cape Cod to collect and survey local *Stentor* populations.
- Documented precise geographic locations and ecological distributions of known*Stentor* species.
- Identified and isolated potential new *Stentor* species from field samples for further analysis.

Social Media Science Communicator

07/2022 - Present

TikTok and Instagram

- Build and manage a digital science community of 50,000 followers, translating microscopic biological and chemical processes into accessible concepts.
- Collaborate with science-focused brands to promote educational products, seamlessly integrating curated partnerships into digital content.
- Host recurring live educational broadcasts utilizing advanced microscopy equipment to stream real-time scientific observations, micro-organism identification, and wet-mount slide preparations to a global audience.
- Moderate high-volume live Q&A sessions, delivering unscripted scientific commentary and debunking misconceptions in real time.

- Explain complex ecological concepts, food webs, and microbial behaviors using active aquatic specimens under live-streaming constraints.
- Repurpose live broadcast highlights into high-performing short-form video assets to maximize cross-platform reach and viewer retention.

PUBLICATIONS

Rajan, D. H., Lee, B., Albright, A., Tang, E., Ressler, K., Maravillas, A., Vargas, C., Marshall, W. F., & Cortes, D. B. *Stentor stipatus* is a new unicellular species that demonstrates habituation and unique phototaxis.*Scientific Reports* 16, 9984 (2026).
doi.org/10.1038/s41598-026-40277-0

PROFESSIONAL MEMBERSHIPS

- The Society for Integrative and Comparative Biology
- The Society for Women in Marine Science

BRAND PARTNERSHIPS & AFFILIATIONS

Brand Ambassador: GIANTmicrobes Promoting science education and biology-themed outreach.
Brand Ambassador: Fahlo Supporting wildlife conservation and tracking awareness through community engagement.
Amazon Affiliate: Curate and recommend science, laboratory, and educational products to a targeted digital audience.