

## VISION STATEMENT FOR THE ENNS ENTOMOLOGY MUSEUM

The Enns Entomology Museum is one of the most historically significant insect collections in the United States, rooted in the legacy of C.V. Riley and shaped by generations of curators. With more than seven million specimens representing Missouri, the Ozark Plateau, and beyond, the museum is uniquely positioned to advance research, education, and public engagement in entomology. My vision is to honor this legacy while guiding the museum into its next phase as a modern, data-driven center for insect systematics, pollinator biodiversity, and integrative collections science.

I view the museum not as a static archive but as a living research engine, driving discovery, supporting student development, and connecting science to society. As Director, I would expand its digital footprint, strengthen research capacity, and broaden impact across the University of Missouri and the wider scientific community.

**Digital Modernization:** A first priority is to modernize and expand the museum's digital infrastructure and footprint. I will implement a scalable database system, develop high-resolution imaging workflows, and ensure specimen data are globally discoverable and interoperable through platforms such as iDigBio and GBIF. These efforts would make the collections accessible to researchers, educators, and the public, while enabling new analytical approaches in systematics, ecology, and conservation.

**Research-Driven Growth:** A second priority is to curate and expand the collection to directly support cutting-edge research, making specimens fully accessible to both internal and external researchers. While the Enns Museum is strong in aquatic insects, Coleoptera, Lepidoptera, Hemiptera, and slide-mounted Acarina, there is opportunity to increase representation of Hymenoptera, Diptera, and other ecologically important groups that are currently underrepresented. I would also build reference collections linking insects to their hosts, habitats, and plant associations – efforts now facilitated by platforms like TaxonWorks. Targeted imaging campaigns and a 3D morphological archive would position the museum as a leader in morphological data infrastructure, with collections openly accessible to researchers worldwide, supporting studies in insect evolution, ecological interactions, and the dynamics of the Ozark Plateau.

**Education and Outreach:** A third priority is to embed the museum into the university's educational mission. I would develop hands-on modules in collection management, databasing, biodiversity informatics, and morphological imaging for undergraduate and graduate students. These experiences would prepare students for careers in systematics, conservation, and applied entomology, connecting foundational taxonomy to real-world challenges such as pollinator monitoring, pest diagnostics, and ecological forecasting. Outreach would be expanded through K-12 programming, citizen science, and public workshops, highlighting the role of insects in agriculture, ecosystems, and daily life.

**Collaboration and Impact:** Finally, I aim to strengthen the museum as a hub for integrative biodiversity research. The Enns Museum can connect taxonomy, morphology, ecology, and informatics across DPST, the Interdisciplinary Plant Group, and state agencies such as the Missouri Department of Conservation and the USDA Biological Control of Insects Laboratory. I also plan to leverage my international collaborations to extend the museum's global reach, creating new opportunities for joint research, training, and data integration.

My overarching goal is to position the Enns Entomology Museum as a national leader in insect biodiversity research: an institution where historical collections, modern data infrastructure, and interdisciplinary collaboration converge to advance understanding of insect systematics, evolution, and ecological interactions. Given its breadth and strengths, the museum is strategically positioned to attract funding for digitization, infrastructure enhancements, and innovative research initiatives – efforts I will actively pursue. Through modernization, research-driven growth, student training, and public engagement, I aim to build a museum that preserves the past while actively shaping the future of entomology.