

Ian N. Cost

www.ianncost.com

icost@albright.edu

Albright College
Department of Biological Sciences
PO Box 15234, 13th and Bern Streets
Reading Pennsylvania, 19612

Current Position

Assistant Professor, Department of Biological Sciences, Albright College, Reading, PA. 2019 – Present

Education

University of Missouri, Columbia, MO. 2019
Ph.D., Integrative Anatomy
Fort Hays State University, Hays, KS. 2014
M.S., Biological Sciences
Lesley University, Cambridge, MA. 2007
M.Ed., Elementary and Special Education in Moderate Disabilities
Bridgewater State University, Bridgewater, MA. 2004
B.A., Asian History

Research Interests

I am a broadly trained vertebrate functional anatomist and paleontologist. My research is interested in: 1) Functional cranial biomechanics in suboscine birds; 2) Cranial kinesis in avians and non-avian theropod dinosaurs; 3) Ecology of birds; and 4) Statistical analyses of large finite element data sets.

Teaching Experience

As faculty at Albright College I have taught the following courses:

| | |
|---|----------------|
| Dinosaurs and Paleontology (BIO115/215; lab: field experience at fossil sites in MT & WY) | 2023 – Present |
| Medical Terminology (BIO207/WLC207; cotaught with Hartman – WLC) | 2022 – Present |
| Comparative Vertebrate Anatomy (BIO331; Lecture and Lab) | 2021 – Present |
| General Biology II (BIO152; cotaught with Samuelsen – BIO) | 2021 – Present |
| Behavior and Morphology (BIO485; Senior Seminar) | 2020 – Present |
| Human Anatomy and Physiology II (BIO235 Lecture and Lab) | 2020 – Present |
| Human Anatomy and Physiology I (BIO234 Lecture and Lab) | 2019 – Present |
| Tropical Ecology (BIO113/313; cotaught with Mech – BIO) | 2022 |
| General Biology I Lab (BIO151) | 2019 – 2020 |

Graduate Teaching Assistant Experience:

| | |
|---|-------------|
| University of Missouri (Cadaver based anatomy) | 2014 – 2019 |
| Fort Hays State University (Introductory biology and anatomy) | 2012 – 2014 |

Public Schools

| | |
|--|-------------|
| Special Education Instructor , Gosnell Public Schools | 2007 – 2012 |
| Special Education Assistant , Weymouth Public Schools | 2005 – 2007 |

Invited Presentations and Lectures

| | |
|--|------------------|
| 13 th Street Partnership afterschool outreach programs, Reading Public Schools | 2021 – Present |
| Skype-A-Scientist and informal virtual presentations in Biology, Paleontology, and Ornithology | 2013 – Present |
| Ornithology: Taxonomy and Systematics, University of Missouri, FW 2600 | 26 February 2019 |

| | |
|--|-----------------|
| Ornithology: Skeleton and Digestion, University of Missouri, FW 2600 | 31 January 2019 |
| Science on Tap, Outreach Lectures for Public Audiences (Presentation available online) | 27 January 2019 |
| Biological Sciences EcoLunch, Biology Dept. University of Missouri | Spring 2017 |
| Human Biology Lecture: Evolution, Fort Hays State University, BIOL 100 | Spring 2014 |
| Ornithology Field Trip Leader, Fort Hays State University, BIOL 650L | 2012 – 2014 |

Publications

- Leidig, Charles M.; MacDonald, Drew; Kerby, Joanna; Kerby, Justin; **Cost, Ian N.** *In prep.* Role-playing medical cases in Human Anatomy and Physiology courses with undergraduate students using principles from Dungeons and Dragons.
- Wilken, Alec T.; Sellers, Kaleb C.; **Cost, Ian N.**; Davis, Julian; Middleton, Kevin M.; Witmer, Lawrence M.; Holliday, Casey M. *In press.* Avian cranial kinesis is the result of increased encephalization during the origin of birds. *Science*.
- Amendano, B., Spriggs, S. and **Cost, I. N.** 2021. A comparative description of the maxillary and mandibular divisions of the trigeminal nerve in birds. *J. Pa. Acad. Sci.* 95, 121–134. doi: [10.5325/jpennacadsci.95.2.0121](https://doi.org/10.5325/jpennacadsci.95.2.0121)
- Cost, I. N.**, Sellers, K. C., Rozin, R. E., Spates, A. T., Middleton, K. M. and Holliday, C. M. 2022. 2D and 3D visualizations of archosaur jaw muscle mechanics, ontogeny and phylogeny using ternary diagrams and 3D modeling. *J. Exp. Biol.* **225**, doi: [10.1242/jeb.243216](https://doi.org/10.1242/jeb.243216).
- Wilken A. T., Sellers K. C., **Cost I. N.**, Rozin R. E., Middleton K. M., Holliday C. M. 2020. Connecting the chondrocranium: Biomechanics of the suspensorium in reptiles. *Vertebrate Zoology* 70:275–90. doi: [10.26049/VZ70-3-2020-02](https://doi.org/10.26049/VZ70-3-2020-02)
- Cost, I. N.**, Sellers, K. C., Middleton, K. M., Echols, M. S., Witmer, L. M., Davis, J. L., and Holliday, C. M. 2020. Palatal biomechanics and its significance for cranial kinesis in *Tyrannosaurus rex*. *Anat Rec.* doi: [10.1002/ar.24219](https://doi.org/10.1002/ar.24219).
- Wilken A. T., Middleton K. M., Sellers K. C., **Cost I. N.**, Holliday C. M. 2019. The roles of joint tissues and jaw muscles in palatal biomechanics of the Savannah monitor (*Varanus exanthematicus*) and their significance for cranial kinesis. *J Exp Biol.* doi: [10.1242/jeb.201459](https://doi.org/10.1242/jeb.201459).
- Gignac, P. M., Kley N. J., Clarke J. A., (and 20 others including **Cost I. N.**) 2016. Diffusible iodine-based contrast-enhanced computed tomography (diceCT): an emerging tool for rapid, high-resolution, 3-D imaging of metazoan soft tissues. *J Anat.* doi: [10.1111/joa.12449](https://doi.org/10.1111/joa.12449).

Undergraduate Research Mentoring

Albright College

| | |
|---|-----------|
| Yamilex Vargas Acevedo, Outreach and lesson plan development | Fall 2024 |
| Sthelsy Arias Velásquez, Outreach and lesson plan development | Fall 2024 |
| Brandon Lennon, Outreach and lesson plan development | Fall 2024 |
| Chelsey Nieves, Outreach and lesson plan development | Fall 2024 |
| Elicia Aponte, Outreach and lesson plan development | Fall 2024 |
| Lia Bueno Pichardo, Outreach and lesson plan development | Fall 2024 |
| Yazmin Hernandez, Outreach and lesson plan development | Fall 2024 |
| Jocelyn McLaughlin, Outreach and lesson plan development | Fall 2024 |
| Hannah Tudge, Outreach and lesson plan development | Fall 2024 |
| Camila DePena, Outreach and lesson plan development | Fall 2024 |
| Ted Ngaleu, Aerodynamics of the avian skull | Fall 2024 |

| | |
|--|----------------------------|
| Charles Leidig, Applying RPG mechanics to medical case study learning | Spring 2024 – Spring 2024 |
| Isabelle Spangler-Geisler, Avian respiration | Spring 2023 – Spring 2024 |
| Kassidy Filosa, Anatomy, paleontology, and art | Spring 2023 – Spring 2024 |
| Kathryn Baptiste, (Geisinger Health post bacc.) wing muscle physiology | Interim 2023 – Spring 2024 |
| Drew MacDonald, Physiology case studies as DnD games | Spring 2023 |
| Samantha Seador, wing muscle mechanics | Spring 2022 – Spring 2023 |
| Kamaryn Koch, (Alvernia PA program) cardiovascular comparative anatomy | Spring 2022 – Fall 2022 |
| Brigitte Amendano, (BU Medical Sciences) anatomy of trigeminal nerve in raptorial birds | Fall 2021 – 2022 |
| Phuong Chau, comparative anatomy of dentition in bats | Spring 2021 – 2022 |
| Suzanne Spriggs, comparative anatomy of bill tip organs in waterfowl | Summer 2020 – 2021 |
| Robert Schwartz (Currently: Trinity School of medicine), comparative anatomy of avian perching | Fall 2019 – 2021 |

University of Missouri

| | |
|---|-------------|
| London Bales, dissection methods in avian specimens | 2018 – 2019 |
| Conner Verhulst, contrast-enhanced muscle imaging in Grey Parrot | 2018 – 2019 |
| Anmol Sethi, contrast-enhanced muscle imaging in Tokay Gecko | 2017 – 2019 |
| Alec Wilken (Currently: Univ. of Chicago PhD program), feeding biomechanics in <i>Varanus</i> | 2016 – 2019 |
| Caitlyn Smith (Currently: Univ. of Missouri School of Medicine), Mallard duck jugal material properties | 2016 – 2018 |
| Rachel Rozin, (Currently: Florida Aquarium) feeding biomechanics in gallanseriform birds | 2015 – 2018 |
| Jake Cooper, <i>T. rex</i> biomechanics | Summer 2016 |
| Eva Herbst (Currently: Post-Doc, Universitat Zurich), <i>Desmotosuchus</i> modelling and biomechanics | Summer 2016 |
| Anthony Spates (Currently: Aspen Dental, St. Joseph, MO), cranial biomechanics in Red-tailed Hawk | 2014 – 2016 |

Fort Hays State University

| | |
|-----------------------------------|-------------|
| Nathan Honas, Teaching in Biology | Spring 2014 |
| Garrit Flax, Teaching in Biology | Spring 2014 |
| David Adams, Teaching in Biology | Spring 2013 |

Outreach

| | |
|---|----------------|
| 13 th Street Educational Partnership | 2021 – Present |
| Letters to A Pre-Scientist | 2019 – Present |
| Skype-A-Scientist | 2019 – Present |
| North American Migratory Bird Count (Audubon Society) | 2015 – Present |
| Christmas Bird Count (Audubon Society) | 2012 – Present |
| Baird Ornithological Club Secretary, Nature Interpreter, and Walk Leader | 2022 – 2024 |
| Author of Extinct Animal of the Week (previously Dinosaur of the Week) blog | 2010 – 2023 |
| Scrub into A Health Career Presenter | 2015 – 2018 |
| CALEB Science Club Anatomy Educator | 2015 – 2018 |
| Dinosaurs and Cavemen Science Expo Educator | 2015 – 2018 |
| Missouri Department of Conservation Wetlands Bird Survey | 2015 – 2018 |
| High School Outreach Presenter, Gross Anatomy Lab | 2014 – 2018 |
| Soaring into Science, Mizzou ReSTEM Institute Presenter | 2014 – 2018 |
| Mizzou IGNITES High School Camp | Summer 2018 |
| University of Missouri Adventure Club afterschool program | 2018 |
| Benton STEM Elementary School Science Showcase | 2014 – 2017 |
| St. Louis Science Center Rock, Fossil, Quake | 2017 |
| Museum at Prairie Fire, Kansas City, KS | 2015 |
| Exhibit Presenter, National Fossil Day at the Sternberg Museum of Natural History, Hays, KS | 2013 |

External Grants and Awards Received

| | | |
|-------------|--|---------|
| 2024 | Paleontological Society Education and Outreach Grant | \$2,500 |
| 2019 | Charlotte Mangum Program for Student Support (Society for Integrative and Comparative Biology), 2019 | \$160 |
| 2017 | American Association of Anatomists Student Travel Grant 2017 | \$250 |
| 2016 | Jackson Student Travel Grant (Society of Vertebrate Paleontology) 2016 | \$400 |
| | Carl Gans Collections and Charitable Fund 2016 | \$150 |
| 2002 | National Conference on Undergraduate Research and Lancy Foundation 2002 | \$3,000 |

Internal Grants and Awards Received

| | | |
|-------------|---|----------|
| 2023 | Albright Creative Research Experience, January Interim (Leidig) | \$600 |
| 2023 | Dr. Henry P. and M. Paige Laughlin Distinguished Faculty Award | \$3,000 |
| | Albright Creative Research Experience, Summer Term (Baptiste) | \$2,800 |
| | Albright Creative Research Experience, January Interim (Seador and Baptiste) | \$600 |
| 2022 | Albright Creative Research Experience, Summer Term (Koch) | \$2,800 |
| | Albright Creative Research Experience, January Interim (Amendano and Chau, Hearst Research Fellows) | \$600 |
| 2020 | Albright Creative Research Experience, Summer Term (Spriggs, Hearst Research Fellow) | \$2,800 |
| | Albright Creative Research Experience, January Interim (Schwartz) | \$600 |
| 2019 | Integrative Anatomy Student Association Travel Grant Spring 2018 | \$220 |
| 2018 | Graduate Student Association Travel Award, University of Missouri April 2018 | \$100 |
| | Integrative Anatomy Student Association Travel Grant Spring 2018 | \$220 |
| 2017 | Best Oral Presentation – Missouri Life Sciences Week 2017 | \$100 |
| 2016 | Graduate Professional Council Travel Award, University of Missouri 2016 | \$300 |
| 2015 | Graduate Student Association Travel Award, University of Missouri April 2015 | \$100 |
| 2014 | Integrative Anatomy Program Anatomy Teaching Fellowship (renewed annually through Spring 2019) | \$24,000 |
| 2013 | Biology Student Travel Honorarium, Fort Hays State University October 2013 | \$300 |

Peer Reviewed Abstracts

*Undergraduate author

32 Total Abstracts

32. Baptiste, K.*, Cost I. N., 2023. 3-D Flight Model Reconstruction and Biomechanical Muscle Force Application of the Great Horned Owl. Society for Integrative and Comparative Biology, Medford, MA (talk at regional meeting).
31. Koch, K.*, Cost I. N., 2022. Comparing Cardiovascular Anatomy of Avian Species Across Flying Style. Society of Vertebrate Paleontology, Toronto, ON (virtual poster).

30. Amendano, B.*, Spriggs, S. N., **Cost I. N.**, 2022. A Comparative Analysis of the Trigeminal Nerve in the Orbits of Predatory Birds. Pennsylvania Academy of Sciences, DeSales University, Center Valley, PA.
29. Chau, P.*, **Cost I. N.**, 2022. Comparing Dental Measurement in North American Bats with Corresponding Diets. Pennsylvania Academy of Sciences, DeSales University, Center Valley, PA.
28. Holliday, C. M., Wilken, A. T., Sellers, K. C., **Cost, I. N.**, Middleton, K. M., 2022. Flat or flexible? Evolutionary cranial biomechanics and the origins of modern archosaur skulls. *The FASEB Journal*, 36. 134th Annual Meeting of the American Association of Anatomists, Experimental Biology Conference, Philadelphia, PA.
27. Fortner, J. D., Wilken, A. T., Sellers, K. C., **Cost, I. N.**, Middleton, K. M., Holliday, C. M. 2021. The Role of the Intramandibular Joint, Symphyseal Tissues, and Wrapping Muscles on Theropod Dinosaur Mandibular Function. *The FASEB Journal*, 35. 133rd Annual Meeting of the American Association of Anatomists, Experimental Biology Conference (virtual).
26. Schwartz, R. M.*, **Cost, I. N.**, 2021. Getting a Grip on the Avian Tendon Locking Mechanism. Annual Meeting of the Society for Integrative and Comparative Biology, Washington D. C. (virtual).
25. Spriggs, S. N.*, **Cost, I. N.**, 2021. A Comparative Analysis of the Remote Touch Mechanism in Birds. Annual Meeting of the Society for Integrative and Comparative Biology, Washington D. C. (virtual).
24. Fortner, J. D., Wilken, A. T., Sellers, K. C., **Cost, I. N.**, Holliday, C. M. 2021. Finite element modeling the effect of symphyseal tissue properties and the intramandibular joint on *Tyrannosaurus rex* mandibular biomechanics. Annual Meeting of the Society for Integrative and Comparative Biology, Washington D. C. (virtual).
23. Holliday C. M., Wilken A. T., Sullivan, S. P., Sellers K. C., **Cost I. N.**, Middleton K. M. 2021. Myology of the Reptilia. Annual Meeting of the Society for Integrative and Comparative Biology, Washington D. C. (virtual).
22. Wilken, A. T.*, Sellers, K. C., **Cost, I. N.**, Middleton, K. M., Witmer, L. M., Holliday, C. M. 2021. Bird brains, jaw muscles, and the origin of avian cranial kinesis. Annual Meeting of the Society for Integrative and Comparative Biology, Washington D. C. (virtual).
21. Holliday C. M., Wilken A. T., Bailleul A. M., Sellers K. C., **Cost I. N.**, Rozin R. E., Middleton K. M. 2019. Connecting the Chondrocranium: Biomechanics of the Palatocranial Joints of Sauropsids. *The 12th International Congress of Vertebrate Morphology Meeting*.
20. Middleton K. M., Sellers K. C., **Cost I. N.**, Spates A. T., Holliday C. M. 2019. Methods for Visualizing and Comparing Force Vectors in Two- and Three-Dimensions, with Applications for Vertebrate Feeding and Locomotion. *The 12th International Congress of Vertebrate Morphology Meeting*.
19. Wilken A. T.*, Middleton K. M., Sellers K. C., **Cost I. N.**, Holliday C. M. 2019. Functional Morphology of the Palate in *Varanus exanthematicus* (Squamata: Varanidae) and Its Significance for the Evolution of Cranial Kinesis. *The 12th International Congress of Vertebrate Morphology Meeting*.
18. **Cost, I. N.**, Echols, M. S., Middleton, K. M., Holliday, C. M. 2019. Assessing the Biomechanical Environment of an Extinct Parrot (Psittaciformes) Using Extant Parrot Models. Annual Meeting of the Society for Integrative and Comparative Biology, Tampa, FL.
17. **Cost, I. N.**, Sellers, K. C., Middleton, K. M., Davis, J. L., Witmer, L. M., Holliday, C. M. 2018. Cranial Kinesis in *Tyrannosaurus rex*: Interpreting the Biomechanical Environment of Skulls. *Journal of Vertebrate Paleontology Supplement – Meeting Program and Abstracts*: 110.
16. **Cost, I. N.**, Middleton, K. M., Holliday, C. M. 2018. Mechanical Performance in the Skulls of Parrots (Aves: Psittaciformes). Annual Meeting of the Society for Integrative and Comparative Biology, San Francisco, CA.
15. Holliday, C. M., **Cost, I. N.**, Sellers, K. C., Middleton, K. M. 2018. Using Ternary Plots to Convey 3D Jaw Muscle Orientation in Space and Time. Annual Meeting of the Society for Integrative and Comparative Biology, San Francisco, CA.
14. Rozin, R. E.*, **Cost, I. N.**, Holliday, C. M. 2018. Feeding Biomechanics in Gallinaceous Birds and its Significance for Avian Cranial Evolution. Annual Meeting of the Society for Integrative and Comparative Biology, San Francisco, CA.
13. Sethi, A.*, Sellers, K. C., **Cost, I. N.**, McGeachie, F., Middleton, K. M., Holliday, C. M. 2018. 3D Fiber Tracking of Jaw Muscles Reveals a Diversity of Muscle Architectures in the Heads of Reptiles. Annual Meeting of the Society for Integrative and Comparative Biology, San Francisco, CA.

12. Wilken, A. T.*, Middleton, K. M., Sellers, K. C., **Cost, I. N.**, Holliday, C. M. 2018. Finite Element Analysis of the Savannah Monitor, *Varanus exanthematicus*, and its Implications for Lepidosaur Cranial Kinesis. Annual Meeting of the Society for Integrative and Comparative Biology, San Francisco, CA.
11. **Cost, I. N.**, Middleton, K. M., Witmer, L. M., Echols, M. S., Holliday, C. M. 2017. Comparative Anatomy and Biomechanics of the Feeding Apparatus of Parrots (Aves: Psittaciformes). *The FASEB Journal*, 31. 129th Annual Meeting of the American Association of Anatomists, Experimental Biology Conference, Chicago, IL.
10. **Cost, I. N.**, Sellers, K. C., Davis, J. L., Middleton, K. M., Witmer, L. M., Holliday, C. M. 2016. Postural changes and kinetic competency in the palates of birds and other diapsids. *Journal of Vertebrate Paleontology Supplement – Meeting Program and Abstracts*: 120.
9. Rozin, R. E.*, **Cost, I. N.**, Holliday, C. M. 2016. Feeding biomechanics in galliform birds and its significance for avian cranial evolution. Society of Vertebrate Paleontology, Salt Lake City.
8. **Cost, I. N.**, Spates, A., Sellers, K. C., Davis, J. L., Middleton, K. M., Witmer, L. M., Holliday, C. M.; 2016. Relative Kinetic Competency in the Palatal Complexes of Birds and Other Diapsids. *The 11th International Congress of Vertebrate Morphology Meeting*: 144.
7. Holliday C. M., Bailleul, A. M., **Cost I. N.**, Sellers K. C., Witmer L. M., Vickaryous, M. K. 2016. The significance of novel palatal joints in the adaptive radiations of archosaurs. *The 11th International Congress of Vertebrate Morphology Meeting*: 145.
6. Holliday C. M., Tsai H. P., **Cost I. N.**, Sellers K. C., Lautenschlager S., Witmer L. M. 2016. DiceCT and its applications for understanding the reptile musculoskeletal system. *The 11th International Congress of Vertebrate Morphology Meeting*: 202.
5. Spates, A.*, **Cost, I. N.**, Sellers, K. C., and Holliday, C. M. 2016. Using Novel Methods to Visualize Jaw Muscle Biomechanics and its Significance for the Evolution of the Avian Feeding Apparatus. 128th Annual Meeting of the American Association of Anatomists, Experimental Biology Conference, San Diego, CA.
4. **Cost, I. N.**, Spates, A., Sellers, K. C., Davis, J. L., Middleton, K. M., Witmer, L. M., Holliday, C. M. 2015. Biomechanics of the Avian Feeding Apparatus. 75th Annual Meeting of the Society of Vertebrate Paleontology, Dallas, TX. *Journal of Vertebrate Paleontology Supplement—Meeting Program and Abstracts*: 110.
3. **Cost I. N.** 2013. An Unusual Cervical Vertebral Column of a Plesiosaur from the Kiowa Shale Described with a Note on Preservation. Geological Society of America *Abstracts with Programs*: 326.
2. **Cost, I. N.**, Deramos-King, C. 2003. Stormwater Runoff Levels of Inorganic Anions in the Town River and South Brook of Bridgewater, Massachusetts. National Conference on Undergraduate Research, Salt Lake City, UT.
1. **Cost, I. N.**, Deramos-King, C. 2002. Stormwater Runoff Levels of Inorganic Anions in the Town River and South Brook of Bridgewater, Massachusetts. American Chemical Society, Boston, MA.

Other Presentations

*Undergraduate author

18 Total Abstracts

18. Baptiste, K.*, **Cost I. N.**, 2023. 3-D Flight Model Reconstruction and Biomechanical Muscle Force Application of the Great Horned Owl. 24th Annual Berks County Undergraduate Research and Creativity Conference, Reading, PA.
17. Seador, S.*, Baptiste, K., **Cost, I. N.**, 2023. 3D Flight Muscle Architecture Reconstruction on *Tyto alba* Skeletal Model and Muscle Force Analysis. 23rd Annual Berks County Undergraduate Research and Creativity Conference, Reading, PA.
16. Amendano, B.*, Spriggs, S. N., **Cost I. N.**, 2022. A Comparative Analysis of the Trigeminal Nerve in the Orbits of Predatory Birds. 22nd Annual Berks County Undergraduate Research and Creativity Conference, Reading, PA.
15. Chau, P.*, **Cost I. N.**, 2022. Comparing Dental Measurement in North American Bats with Corresponding Diets. 22nd Annual Berks County Undergraduate Research and Creativity Conference, Reading, PA.
14. Schwartz, R. M.*, **Cost, I. N.** 2020. Getting a Grip on the Avian Tendon Locking Mechanism (TLM). 21st Annual Berks County Undergraduate Research and Creativity Conference, Reading, PA.
13. Sethi, A.*, McGeachie, F., Sullivan, S. O., Sellers, K. C., **Cost, I. N.**, Holliday, C. M. 2019. 3-D Reconstruction of the Muscle Architecture of Jaw muscles in *Gekko gecko*. Life Sciences Week, University of Missouri, Columbia, MO.

12. Wilken, A. T.*, Middleton, K. M., Sellers, K. C., **Cost, I. N.**, Holliday, C. M. 2019. Functional Morphology of the Palate of *Varanus exanthematicus* and its Significance for Lepidosaur Cranial Kinesis. Life Sciences Week, University of Missouri, Columbia, MO.
11. **Cost, I. N.**, Sellers, K. C., Middleton, K. M., Echols, M. S., Davis, J. L., Witmer, L. M., Holliday, C. M. 2018. Cranial Kinesis in Extant and Fossil Animals. Society for Integrative and Comparative Biology Regional Meeting, University of Missouri.
10. **Cost, I. N.**, Middleton, K. M., Witmer, L. M., Echols, M. S., Holliday, C. M. 2017. Comparative Anatomy and Biomechanics of the Feeding Apparatus of Parrots (Aves: Psittaciformes). Life Sciences Week, University of Missouri, Columbia, MO.
9. Wilken, A. T.*, Middleton, K. M., Sellers, K. C., **Cost, I. N.**, Davis, J. L., Holliday, C. M. 2017. Modeling Complex Cranial Joints in *Varanus exanthematicus*. Life Sciences Week, University of Missouri, Columbia, MO.
8. Sethi, A.*, McGeachie, F., Sellers, K. C., **Cost, I. N.**, Holliday, C. M. 2017. 3-D Reconstruction of the Muscle Architecture of Pterygoideus Ventralis in *Gekko gekko*. Life Sciences Week, University of Missouri, Columbia, MO.
7. Cooper, J.*, Herbst, E., Sellers, K. C., **Cost, I. N.**, Middleton, K. M., Holliday, C. M. 2016. The Impact of Muscle Anatomy on Skull Loading in Hard-Biting Animals. University of Missouri Summer REU Forum.
6. Herbst, E.*, Cooper, J., **Cost, I. N.**, Sellers, K. C., Middleton, K. M., Holliday, C. M. 2016. 3D Reconstruction of the Feeding Biomechanics of the North American Aetosaur *Desmotosuchus*. University of Missouri Summer REU Forum.
5. **Cost, I. N.** 2016. Biomechanics of Feeding and Cranial Kinesis in Parrots (Aves: Psittaciformes) and Other Dinosaurs. Research Proposal Defense, University of Missouri.
4. Rozin R. E.*, **Cost, I. N.**, and Holliday, C. M. 2015. Feeding biomechanics in the wild turkey, *Meleagris gallopavo*, and its significance for avian cranial evolution. Summer Research REU Forum
3. Spates, A.*, **Cost, I. N.**, Sellers, K. C., and Holliday, C. M. 2015. A Tale of Two Birds: Biomechanics of the Avian Feeding Apparatus. Life Sciences Week, University of Missouri, Columbia, MO.
2. **Cost, I. N.**, Sellers, K. C., and Holliday, C. M. 2015. Diffusible-Iodine Contrast-Enhanced CT and 3D Visualization of Cranial Muscles. Life Sciences Week, University of Missouri, Columbia, MO.
1. **Cost, I. N.** 2014. Description of An Unusual Cervical Vertebral Column of a Plesiosaur from The Kiowa Shale. Master's Thesis presentation.

Service

Albright College

| | |
|--|----------------|
| Educational Policy Council | 2021 – Present |
| Health Sciences Advisory Committee | 2020 – Present |
| Undergraduate Research Committee | 2024 – Present |
| Teacher Education Committee | 2020 – 2024 |
| Noyce STEM Education Capacity Building grant team member, Albright College | 2022 – 2023 |
| Curriculum Subcommittee, Task Force on Race Relations at Albright College; Co-leader | 2020 – 2024 |
| Curriculum Development Committee | 2020 – 2021 |

Professional Societies

| | |
|---|----------------|
| Paleontological Society | 2024 – Present |
| Pennsylvania Academy of Science | 2020 – Present |
| American Ornithological Society | 2016 – Present |
| Wilson Ornithological Society | 2015 – Present |
| Society for Integrative and Comparative Biology | 2014 – Present |
| Society of Vertebrate Paleontology | 2011 – Present |
| American Audubon Society | 2013 – 2023 |
| American Association of Anatomists | 2016 – 2018 |

| | |
|------------------------------------|-------------|
| American Ornithologists' Union | 2015 – 2016 |
| Cooper Ornithological Society | 2015 – 2016 |
| Kansas Academy of Science | 2012 – 2014 |
| Massachusetts Teachers Association | 2005 – 2007 |

Fieldwork

| | |
|---|-------------|
| Dinosaurs and Paleontology: Tate Museum of Geology | Summer 2024 |
| Dinosaur and Paleontology: Burke Museum | Summer 2023 |
| Audubon Raptor Survey Assistant and Photographer | 2013 – 2014 |
| Photographer for Jessica Casey: “Timing and intensity of steer use on old world bluestem (<i>Bothriocola ischaemum</i>) and blue grama (<i>Bouteloua gracilis</i>) in southern mixed-grass prairie.” | 2013 |
| Small mammal trapping Assistant and Photographer for Nina Luna: “Possible effects of black-tailed prairie dogs on abundance and diversity of raptors and small mammals in mixed and shortgrass prairie of western Kansas” | 2013 |