

# ARMITA RAZIEH MANAFZADEH

*Ahr-MEE-tuh Rah-zee-EH Man-off-ZAH-deh*

Gaylord Donnelley Postdoctoral Environmental Fellow & NSF Postdoctoral Research Fellow in Biology, Yale University  
210 Whitney Avenue, New Haven, CT 06511 | [armita.manafzadeh@yale.edu](mailto:armita.manafzadeh@yale.edu) | (630) 818-7686 | [manafzadeh.com](http://manafzadeh.com)

## APPOINTMENTS

---

Aug. 2026 *[Upcoming.]* Assistant Professor, School of Biological Sciences, Georgia Institute of Technology  
2022-2026 Postdoctoral Fellow/Associate, Yale Institute for Biospheric Studies, Yale University

## EDUCATION

---

2022 PhD, Ecology, Evolution, and Organismal Biology, Brown University Advisor: Stephen Gatesy  
2019 ScM, Ecology and Evolutionary Biology, Brown University  
2016 BA, Integrative Biology, University of California, Berkeley

## FELLOWSHIPS

---

2023-2025 Postdoctoral Research Fellowship in Biology, National Science Foundation  
2022-2026 Gaylord Donnelley Postdoctoral Environmental Fellowship, Yale University  
2022-2025 Miller Research Fellowship, UC Berkeley *[Declined to accept Yale Donnelley and NSF PRFB.]*  
2021-2022 Samuel M. and Ann S. Menco Fellowship, Brown University  
2016-2022 Presidential Fellowship, Brown University  
2016-2021 Graduate Research Fellowship, National Science Foundation

## HONORS & AWARDS

---

2026 Carl Gans Young Investigator Award, Society for Integrative and Comparative Biology  
2023 D. Dwight Davis Award, Society for Integrative and Comparative Biology  
2022 Alfred Sherwood Romer Prize, Society of Vertebrate Paleontology  
2022 Early Career Scientist Award, JF Crow Institute for the Study of Evolution, UW Madison  
2022 Dorothy M. Skinner Award, Society for Integrative and Comparative Biology  
2020, 2021 Mimi A. R. Koehl and Steven Wainwright Award Finalist, Society for Integrative and Comp. Biol.  
2019 Winifred Goldring Award, Association for Women Geoscientists and Paleontological Society  
2016 Award in Natural History (formerly the Joseph LeConte Award), UC Berkeley  
2016 High Distinction in General Scholarship and Highest Honors in Integrative Biology, UC Berkeley  
2012-2016 College of Letters and Science Dean's Honors, UC Berkeley

## REFEREED PUBLICATIONS

Google Scholar: 608 citations; h-index = 14; i10-index = 18

\*denotes equal contribution; §denotes mentee

---

### In Review/Revision

36. *[In review.]* Nolan F, Sieberer J<sup>§</sup>, Park N<sup>§</sup>, **Manafzadeh AR**, Rainbow MJ, Fulkerson JP, Clouthier AL. Whole-joint shape and positional changes in recurrent patellofemoral instability: a statistical shape analysis.
35. *[In review.]* Sieberer J<sup>§</sup>, **Manafzadeh AR**, Fulkerson JP. Author response: Measures of patellofemoral morphology predict risk of local cartilage damage progression.
34. *[In review.]* Sieberer J<sup>§</sup>, McGinley B, **Manafzadeh AR**, Lynch J, Segal NA, Lewis CE, Fulkerson JP, Felson DT, Stefanik J. The relation of patellofemoral lateral tracking metrics to knee pain: a Yale/MOST collaborative study.
33. *[In minor revision for iScience.]* Montanez-Rivera I<sup>§</sup>, Toussaint SLD, Stoessel A, **Manafzadeh AR**, Radespiel U, Bruhn V, Newbon M, Nyakatura J. Powerful or non-powerful? Revisiting pedal grasping in small arboreal mammals.

32. Sieberer J<sup>§</sup>, Park N<sup>§</sup>, Desroches S<sup>§</sup>, Brennan K<sup>§</sup>, Rancu A<sup>§</sup>, **Manafzadeh AR**, Lewis CE, Segal NA, Lynch J, Felson D, Tommasini SM, Wiznia DH, Fulkerson JP. 2025. Breaking down tibial tuberosity to trochlear groove distance into two components to enable patient-specific treatment strategies. *Journal of ISAKOS*, 16:101025.
31. Fulkerson JP, Park N<sup>§</sup>, **Manafzadeh AR**, Glennon A, Sieberer J<sup>§</sup>. 2025. Three-dimensional tibial tubercle transfer planning. *Video Journal of Sports Medicine*, 5.
30. Park N<sup>§</sup>, Sieberer J<sup>§</sup>, McGinley B, **Manafzadeh AR**, Lynch J, Segal NA, Lewis CE, Guermazi A, Roemer FW, Stefanik J, Felson D, Fulkerson JP. 2025. Measures of Patellofemoral Morphology Predict Risk of Local Cartilage Damage Progression: A Yale/MOST Collaborative Study. *American Journal of Sports Medicine*, 53: 2881-2888.
29. Sieberer J<sup>§</sup>, Park N<sup>§</sup>, Desroches S<sup>§</sup>, **Manafzadeh AR**, Tommasini SM, Wiznia DH, Yu K, Fulkerson JP. 2025. The patellofemoral Entry Point - Transition Point (EP-TP) angle: digitalization and reliability analysis. *The Orthopaedic Journal of Sports Medicine*, 13: 23259671251343235
28. Park N<sup>§</sup>, Sieberer J<sup>§</sup>\*, **Manafzadeh AR**, Fulkerson JP. 2025. Three-dimensional analysis of patellar instability: a review of current concepts. *Sports Medicine and Arthroscopy Review*, 33:7-13.
27. Sieberer J<sup>§</sup>, Rancu A<sup>§</sup>, Park N<sup>§</sup>, Desroches S<sup>§</sup>, **Manafzadeh AR**, Tommasini SM, Wiznia DH, Fulkerson JP. 2025. Patellar tilt calculation utilizing artificial intelligence on CT knee imaging. *The Knee*, 54:217-221.
26. Schindler M, Flaum B, **Manafzadeh AR**, Kamska V, Rajan KC, Malagamba MJR, Hu R, Baum D, Dean M. 2025. Helmeted hornbill cranial kinesis: balancing mobility and stability in a high-impact joint. *The Anatomical Record*, 1-14.
25. **Manafzadeh AR**, Gatesy SM, Nyakatura JA, Bhullar B-AS. 2025. Fibular reduction and the evolution of theropod locomotion. *Nature* 637:113-117.
24. Park N<sup>§</sup>, Sieberer J<sup>§</sup>, **Manafzadeh AR**, Hackbarth R-M<sup>§</sup>, Desroches S<sup>§</sup>, Ghankot R<sup>§</sup>, Lynch J, Segal NA, Felson D, Fulkerson JP. 2024. Semiautomated three-dimensional landmark placement on knee models is a reliable method to describe bone shape and alignment. *Arthroscopy, Sports Medicine, and Rehabilitation*, 7:101036.
23. Sieberer J<sup>§</sup>, Park N<sup>§</sup>, **Manafzadeh AR**, Desroches S<sup>§</sup>, Brennan K<sup>§</sup>, McDonald C, Tommasini SM, Wiznia DH, Fulkerson JP. 2024. Visualization of trochlear dysplasia using three-dimensional curvature analysis in patients with patellar instability facilitates understanding and improves the reliability of the entry point to trochlear groove angle. *Arthroscopy, Sports Medicine, and Rehabilitation*, 7:101010.
22. Sieberer J<sup>§</sup>, Park N<sup>§</sup>, Rancu A<sup>§</sup>, Desroches S<sup>§</sup>, Tommasini SM, **Manafzadeh AR**, Wiznia DH, Fulkerson JP. 2024. Analyzing the alignment error in Tibial Tuberosity-Trochlear Groove Distance (TT-TG) in clinical scans using 2D and 3D methods. *American Journal of Sports Medicine*, 52:2996-3003.
21. Schulz AK\*, Schwamer MJ\*, Manafzadeh AR\*. 2024. Five key strategies for organizing interdisciplinary scientific events to strengthen careers, collaborations, and creativity. *Integrative and Comparative Biology*, icac050.
20. **Manafzadeh AR**, Gatesy SM, Bhullar B-AS. 2024. Articular surface interactions distinguish dinosaurian locomotor joint poses. *Nature Communications*, 15:854.
19. Hatala KG, Gatesy SM, **Manafzadeh AR**, Lusardi EM, Falkingham PJ. 2024. A volumetric method for measuring the longitudinal arch of human tracks and feet. *American Journal of Biological Anthropology*, ajpa.24897.
18. Young MW<sup>§</sup>, Wilken AT<sup>§</sup>, **Manafzadeh AR**, Schurr AF, Bastian A, Dickinson E, Granatosky MC. 2023. The dual function of prokinesis in the feeding and locomotor systems of parrots. *Journal of Experimental Biology*, jeb.246659.
17. Merten L<sup>§</sup>, **Manafzadeh AR**, Herbst EC, Amson E, Tambusso PS, Arnold P\*, Nyakatura JA\*. 2023. The functional significance of aberrant cervical counts in sloths: insights from automated exhaustive analysis of cervical range of motion. *Proceedings of the Royal Society B*, 290: 20231592.
16. **Manafzadeh AR**. 2023. Joint mobility as a bridge between form and function. *Journal of Experimental Biology*, jeb.245042.
15. Herbst EC\*, Manafzadeh AR\*, Hutchinson JR. 2022. Multi-joint analysis of pose viability supports the possibility of salamander-like hindlimb configurations in the Permian tetrapod *Eryops megacephalus*. *Integrative and Comparative Biology*, icac083.

14. **Manafzadeh AR**, Gatesy SM. 2022. Advances and challenges in paleobiological reconstructions of joint mobility. *Integrative and Comparative Biology*, icac008.
13. Gatesy SM, **Manafzadeh AR**, Bishop PJ, Turner ML, Kambic RE, Cuff AR, Hutchinson JR. 2022. A proposed standard for quantifying 3-D hindlimb poses in living and extinct archosaurs. *Journal of Anatomy*, 241:101-118.
12. **Manafzadeh AR**, Gatesy SM. 2021. Paleobiological reconstructions of articular function require all six degrees of freedom. *Journal of Anatomy*, 239:1516-1524.
11. **Manafzadeh AR**, Kambic RE, Gatesy SM. 2021. A new role for joint mobility in reconstructing vertebrate locomotor evolution. *Proceedings of the National Academy of Sciences*, 118:e2023513118.
10. **Manafzadeh AR**. 2020. A practical guide to measuring *ex vivo* joint mobility using XROMM. *Integrative Organismal Biology*, obaa041.
9. **Manafzadeh AR**, Gatesy SM. 2020. A coordinate-system-independent method for comparing joint rotational mobilities. *Journal of Experimental Biology*, jeb.227108.
8. Laurence-Chasen JD, **Manafzadeh AR**, Hatsopoulos NG, Ross CF, Arce-McShane FI. 2020. Integrating XMALab and DeepLabCut for high-throughput XROMM. *Journal of Experimental Biology*, jeb.226720.
7. Weller HI<sup>§</sup>, Olsen AM, Camp AL, **Manafzadeh AR**, Hernandez LP, Brainerd EL. 2020. An XROMM study of food transport and swallowing in the channel catfish. *Integrative Organismal Biology*, obaa018.
6. **Bhullar B-AS\***, **Manafzadeh AR\***, Miyamae JA, Hoffman EA, Brainerd EL, Musinsky C, Crompton AW. 2020. Reply to: Jaw roll and jaw yaw in early mammals. *Nature*, 582:E9-E12.
5. Tsai HP, Turner ML, **Manafzadeh AR**, Gatesy SM. 2020. Contrast-enhanced XROMM reveals *in vivo* soft tissue interactions in the hip of *Alligator mississippiensis*. *Journal of Anatomy*, 236:288-304.
4. van Meer NMME<sup>§</sup>, Weller HI<sup>§</sup>, **Manafzadeh AR**, Kaczmarek EB<sup>§</sup>, Scott B, Gussekloo SWS, Wilga CD, Brainerd EL, Camp AL. 2019. Intra-oropharyngeal food transport and swallowing in white-spotted bamboo sharks. *Journal of Experimental Biology*, 222:jeb201426.
3. **Bhullar B-AS\***, **Manafzadeh AR\***, Miyamae JA, Hoffman EA, Brainerd EL, Musinsky C, Crompton AW. 2019. Rolling of the jaw is essential for mammalian chewing and tribosphenic molar function. *Nature*, 566:528-532.
2. **Manafzadeh AR**, Padian K. 2018. ROM mapping of ligamentous constraints on avian hip mobility: implications for extinct ornithomirans. *Proceedings of the Royal Society B*, 285:1879.

### Book Chapters

1. *[In press.]* **Manafzadeh AR**, Bishop PJ. "Dinosaur locomotion." In *The Complete Dinosaur* (Third Edition). Bloomington: Indiana University Press.

### GRANTS

2025	Biomechanics Core Facilities Grant Program, Brown University	\$10,410
2025	Biomechanics Core Facilities Grant Program, Brown University	\$6,532
2023	Postdoctoral Scholars Travel Fund Award, Yale University	\$1,000
2020	Jackson School of Geosciences Travel Grant, Society of Vertebrate Paleontology	\$600
2020	Doris O. and Samuel P. Welles Research Fund Grant, UC Museum of Paleontology	\$650
2019	Steven Cohen Award for Student Research, Society of Vertebrate Paleontology	\$3,000
2019	Grant-in-Aid of Research, Sigma Xi Scientific Honors Society	\$993
2019	Doris O. and Samuel P. Welles Research Fund Grant, UC Museum of Paleontology	\$743
2019	Dissertation Enhancement Grant, Bushnell Graduate Research and Education Fund	\$12,343
2017	Grant-in-Aid of Research, Sigma Xi Scientific Honors Society	\$371
2015	Academic Opportunity Fund Award, Associated Students of the University of California	\$250
2014	Research Experience for Undergraduates Scholarship, National Science Foundation	\$6,250
2012	Exemplary Student Research Program Grant, Argonne National Laboratory	\$1,500

## INVITED TALKS

---

### Research Seminars

- 2026 [Upcoming.] Ohio Univ. Heritage College of Osteopathic Medicine, Dept. of Biomedical Sciences  
2026 Royal Veterinary College, Structure & Motion Lab  
2025 University of Chicago, Department of Organismal Biology and Anatomy  
2025 Stony Brook University, Department of Anatomical Sciences  
2025 Georgia Institute of Technology, School of Biological Sciences  
2025 Yale University, Department of Ecology & Evolutionary Biology  
2025 KU Leuven, De Groote Lab  
2024 University of Chicago, Biological Sciences Division Rising Stars Symposium  
2024 Interurban Orthopaedic Society Meeting, Yale Peabody Museum of Natural History  
2024 The Patellofemoral Foundation Research Meeting, Yale School of Medicine  
2024 University of Chicago, Committee on Evolutionary Biology  
*\*Sewall Wright Lecture (Graduate Student Invited Speaker)*  
2024 Humboldt University, Institute for Biology & Museum Für Naturkunde Berlin  
2024 Max Planck Institute for Evolutionary Anthropology, Department of Human Origins  
2023 UC Berkeley, Department of Integrative Biology  
2023 Yale University, Department of Earth & Planetary Sciences Postdoc Seminar Series  
2023 Des Moines University, Department of Anatomy  
2023 New York Institute of Technology College of Osteopathic Medicine, Department of Anatomy  
2022 California State University Long Beach, Department of Biology  
2022 University of Wisconsin-Madison, JF Crow Institute for the Study of Evolution  
*\*Early Career Scientist Seminar Awardee*  
2022 Yale University, Yale Institute for Biospheric Studies  
2022 Yale University, Computer Graphics Group  
2022 The Mathematical Laws of Morphology and Biomechanics Working Group  
2021 Duke University, Musculoskeletal Bioengineering Laboratory  
2021 Bangor University, Behaviour, Ecology, and Physiology Seminar Series  
2021 Burke Museum of Natural History and Culture, Paleo Lunch Seminar Series  
2020 Royal Veterinary College, Structure and Motion Laboratory  
2020 California State University Fresno, Department of Biology  
2020 Harvard Museum of Comparative Zoology, 'Virt' Paleo Seminar Series  
2020 University of Calgary, Comparative Biomechanics Discussion Group  
2020 University of Akron, Astley Lab  
2020 University of Chicago, Ross Lab ('Mandible Meeting')  
2020 University of Missouri, Holliday Lab  
2016-2020 Brown University, Department of Ecology, Evolution, and Organismal Biology (x3)  
2015-2020 UC Museum of Paleontology, Seminar in Paleontology (x5)

### Public Talks

- 2025 The Parrot Club of Connecticut  
2025 Yale University, Class of 1962 Coffee Hour Series  
2024 Yale University, '66 LIVE Discussion Series  
2023 Yale University, Women in Earth and Planetary Sciences Day  
2021 American Museum of Natural History, Volunteer Office Lecture Series  
2020 Providence, RI Nerd Nite  
2019 Burpee Museum of Natural History, PaleoFest

## Workshops, Panels, Symposia, and Plenaries

- 2026 [Upcoming.] “Evolution of functional specializations in birds,” American Association for Anatomy Annual Meeting Symposium
- 2026 “Joints: form, function, and the future of comparative biomechanics” Society for Integrative and Comparative Biology Gans Award Plenary Lecture
- 2025 “Functional Anatomy Using Classical and Cutting-Edge Techniques [FAC2ET],” University of Antwerp Workshop
- 2025 [Declined due to US funding freezes.] “Muscle-tendon mechanics across species,” International Society of Biomechanics Satellite Event (University of Jyväskylä and Comparative Neuromuscular Biomechanics Working Group [CNB])
- 2025 “Biomechanical simulation techniques,” Université de Bordeaux Symposium
- 2024 “Advances in Digital Media Workshop Series”, iDigBio (Integrated Digitized Biocollections) and the Yale Peabody Museum
- 2024 “Morphological methods in evolutionary biomechanics,” Integrative Organismal Modeling of Movement (IOMM) Workshop at Society for Integrative and Comparative Biology Annual Meeting
- 2023 “Future Paleontology,” Society of Vertebrate Paleontology Virtual Annual Meeting Panel
- 2022 “Morphological methods in evolutionary biomechanics,” Integrative Organismal Modeling of Movement (IOMM) NSF-IOS Workshop
- 2022 “Evolutionary conservation and diversity in a key vertebrate behavior: ‘walking’ as a model system,” Society for Integrative and Comparative Biology Annual Meeting Symposium

## CONFERENCE PRESENTATIONS

§denotes mentee

74. Sieberer J<sup>§</sup>, McGinley B, **Manafzadeh AR**, Lynch J, Torner J, Segal N, Lewis E, Fulkerson JP, Felson D, Stefanik J. 2026. The relation of three-dimensional patellofemoral alignment and morphology to knee pain: data from the Multicenter Osteoarthritis Study. 2026 World Congress of Osteoarthritis.
73. Krivka NJ<sup>§</sup>, Irmis RB, **Manafzadeh AR**, Nesbitt SJ. 2025. An articulated hindlimb of *Dromomeron romeri* (Lagerpetidae) and its implications for interpreting early ornithodiran footprints. Society of Vertebrate Paleontology, 85<sup>th</sup> Annual Meeting, Birmingham, United Kingdom.
72. **Manafzadeh AR**, Violet G, Gatesy SM. 2026. The articular foundation of adaptive radiations: insights from the avian knee. Society for Integrative and Comparative Biology 2026 Annual Meeting.
71. Margulis-Ohnuma M<sup>§</sup>, Bhullar B-AS, Ryerson W, **Manafzadeh AR**. 2026. Testing for functional regionalization in the snake vertebral column. Society for Integrative and Comparative Biology 2026 Annual Meeting. (D. Dwight Davis Award Session Finalist.)
70. Brady A<sup>§</sup>, Anderson DJ, Schneider N, Shideler HE, Callis HR, Smith AE, Kennedy ME, Smith HI, Pradhan CE, Stroud T, Kaczmarek EB, **Manafzadeh AR**, Gignac P, Anderson CV, Mayerl CJ. 2026. One system, two tasks: hyolingual mechanics of eating and drinking in bearded dragons. Society for Integrative and Comparative Biology 2026 Annual Meeting.
69. Anderson DJ<sup>§</sup>, Schneider N, Brady A, Shideler HE, Callis HR, Smith AE, Kennedy ME, Smith HI, Pradhan CE, Stroud T, Kaczmarek EB, **Manafzadeh AR**, Gignac P, Anderson CV, Mayerl CJ. 2026. Flexible tongue, constrained hyoid: bearded dragon hyolingual kinematics vary with prey size. Society for Integrative and Comparative Biology 2026 Annual Meeting.
68. Nolan F<sup>§</sup>, Sieberer J<sup>§</sup>, Park N<sup>§</sup>, **Manafzadeh AR**, Rainbow M, Fulkerson J, Clouthier A. 2025. Determining geometric and bone pose differences between knees with and without patellofemoral instability using statistical shape modelling. The XXX Congress of the International Society of Biomechanics.
67. Krivka NJ<sup>§</sup>, Irmis RB, **Manafzadeh AR**, Nesbitt SJ. 2025. An articulated hindlimb of *Dromomeron romeri* (Lagerpetidae) and its implications for interpreting dinosauiromorph footprints. 75<sup>th</sup> Annual Meeting of the Rocky Mountain Section of the Geological Society of America.
66. Sieberer J<sup>§</sup>, Park N<sup>§</sup>, Rancu A<sup>§</sup>, Desroches S<sup>§</sup>, Tommasini SM, **Manafzadeh AR**, Wiznia DH, Fulkerson JP. 2025. Analyzing the alignment error in Tibial Tuberosity-Trochlear Groove Distance (TT-TG) in clinical scans using 2D and 3D methods. 15<sup>th</sup> Biennial Congress of the International Society of Arthroscopy, Knee Surgery, and Orthopaedic Sports Medicine.

65. Sieberer J<sup>§</sup>, Park N<sup>§</sup>, **Manafzadeh AR**, Brennan K<sup>§</sup>, Tommasini S, Wiznia DH, Yu K, Fulkerson JP. 2025. The Patellofemoral Entry Point-Transition Point (EP-TP) Angle: Digitalization And Reliability Analysis. 15<sup>th</sup> Biennial Congress of the International Society of Arthroscopy, Knee Surgery, and Orthopaedic Sports Medicine.
64. Sieberer J<sup>§</sup>, Park N<sup>§</sup>, Rancu A<sup>§</sup>, Brennan K<sup>§</sup>, **Manafzadeh AR**, Tommasini S, Wiznia DH, Fulkerson JP. 2025. Patellar Tilt Calculation Utilizing Artificial Intelligence on CT Knee Imaging. 15<sup>th</sup> Biennial Congress of the International Society of Arthroscopy, Knee Surgery, and Orthopaedic Sports Medicine.
63. Park N<sup>§</sup>, Sieberer J<sup>§</sup>, **Manafzadeh AR**, McGinley B, Segal NA, Lynch JA, Stefanik J, Lewis CE, Felson DT, Fulkerson JP. 2025. A Mechanical Etiology of Lateral Patellofemoral Arthritis. 15<sup>th</sup> Biennial Congress of the International Society of Arthroscopy, Knee Surgery, and Orthopaedic Sports Medicine.
62. Sieberer J<sup>§</sup>, Park N<sup>§</sup>, Desroches S<sup>§</sup>, Brennan K<sup>§</sup>, Rancu A<sup>§</sup>, **Manafzadeh AR**, Lynch JA, Segal NA, Lewis CE, Felson DT, Wiznia DH, Fulkerson JP. 2025. Tibial Tuberosity to Trochlear Groove Distance (TT-TG): A Breakdown into Two Principal Components. 15<sup>th</sup> Biennial Congress of the International Society of Arthroscopy, Knee Surgery, and Orthopaedic Sports Medicine.
61. Sieberer J<sup>§</sup>, Park N<sup>§</sup>, **Manafzadeh AR**, Venkadesan M, Fulkerson JP. 2025. Curvature Analysis Of The Distal Femur As A Tool To Classify Trochlear Dysplasia. 15<sup>th</sup> Biennial Congress of the International Society of Arthroscopy, Knee Surgery, and Orthopaedic Sports Medicine.
60. Sieberer J<sup>§</sup>, Park N<sup>§</sup>, Desroches S<sup>§</sup>, McDonald C, Brennan K<sup>§</sup>, **Manafzadeh AR**, Tommasini SM, Wiznia DH, Fulkerson JP. 2025. 3D curvature analysis as a visualization tool for trochlear dysplasia. 15<sup>th</sup> Biennial Congress of the International Society of Arthroscopy, Knee Surgery, and Orthopaedic Sports Medicine.
59. Manafzadeh AR. Joint mobility as a bridge between form and function, or, the power of *ex vivo* XROMM. 2025. Society for Integrative and Comparative Biology 2025 Annual Meeting.
58. Park N<sup>§</sup>, Sieberer J<sup>§</sup>, **Manafzadeh AR**, McKinley B, Segal N, Lynch J, Stefanik J, Lewis C, Felson D, Fulkerson J. 2025. A mechanical etiology of laterall patellofemoral arthritis. American Academy of Orthopaedic Surgeons 2025 Annual Meeting.
57. Nolan F<sup>§</sup>, Sieberer J<sup>§</sup>, Park N<sup>§</sup>, **Manafzadeh AR**, Rainbow M, Fulkerson J, Clouthier A. 2024. The use of statistical shape modeling in determining 3D geometric difference between healthy knees and patients with patellofemoral instability. Canadian Society for Biomechanics 2024 Biennial Conference.
56. Dean M, Baum D, Rajan KC, Doube M, Flaum B, Hu R, Kamska V, Kong TF, **Manafzadeh AR**, Malagamba MJR, Schindler M, Surapaneni VA. 2024. The helmeted hornbill's hammer: complex anatomy and impact-resistant structural design of the casque. Society for Experimental Biology 2024 Annual Meeting.
55. Sieberer J<sup>§</sup>, Park N<sup>§</sup>, Rancu A<sup>§</sup>, **Manafzadeh AR**, McDonald C, Yu K, Wiznia D, Fulkerson JP. 2024. Entry Point-Transition Point angle as a novel 3-dimensional metric of patellar instability. American Orthopaedic Society for Sports Medicine 2024 Annual Meeting.
54. Sieberer J<sup>§</sup>, Park N<sup>§</sup>, Rancu A<sup>§</sup>, **Manafzadeh AR**, Wiznia D, Fulkerson JP. 2024. Tibial Tuberosity to Trochlear Groove (TT-TG) distance: A break-down in three principal components. American Orthopaedic Society for Sports Medicine 2024 Annual Meeting.
53. Park N<sup>§</sup>, Crasta N, Islam W, Sieberer J<sup>§</sup>, **Manafzadeh AR**, Rancu A<sup>§</sup>, Fulkerson JP, Tanaka M. 2024. Short-term complications after Medial Quadriceps Tendon-Femoral Ligament (MQTFL) reconstruction for patellar instability. Arthroscopy Association of North America 2024 Annual Meeting.
52. Sieberer J<sup>§</sup>, Park N<sup>§</sup>, Rancu A<sup>§</sup>, Desroches S<sup>§</sup>, **Manafzadeh AR**, Fulkerson JP. 2024. Semiautomated patellar tilt calculation utilizing artificial intelligence on knee imaging landmarks. Medical Student Orthopedic Society 2024 Virtual Research Symposium.
51. Park N<sup>§</sup>, Crasta N, Islam W, Sieberer J<sup>§</sup>, **Manafzadeh AR**, Rancu A<sup>§</sup>, Fulkerson JP, Tanaka M. 2024. Short-term complications after Medial Quadriceps Tendon-Femoral Ligament (MQTFL) reconstruction for patellar instability. Orthopaedic Research Society 2024 Annual Meeting.
50. Sieberer J<sup>§</sup>, Park N<sup>§</sup>, Rancu A<sup>§</sup>, **Manafzadeh AR**, Wiznia D, Fulkerson JP. 2024. Tibial Tuberosity to Trochlear Groove (TT-TG) distance: A break-down in three principal components. Orthopaedic Research Society 2024 Annual Meeting.
49. Sieberer J<sup>§</sup>, Park N<sup>§</sup>, Rancu A<sup>§</sup>, **Manafzadeh AR**, McDonald C, Yu K, Wiznia D, Fulkerson JP. 2024. Entry Point-Transition Point angle as a novel 3-dimensional metric of patellar instabililty. Orthopaedic Research Society 2024 Annual Meeting.

48. Sieberer J<sup>§</sup>, Park N<sup>§</sup>, Rancu A<sup>§</sup>, **Manafzadeh AR**, Wiznia D, Fulkerson JP. 2024. Tibial Tuberosity to Trochlear Groove (TT-TG) distance: A patellar instability gold standard prone to errors? Orthopaedic Research Society 2024 Annual Meeting.
47. Rubenson J, Arellano CJ, Arias AA, Daley M, Dick T, Holt N, **Manafzadeh AR**, Richards CT, Sawicki GS, Schulz AK. 2024. Comparative Neuromuscular Biomechanics (CNB): The intersection of comparative and human biomechanics. Society for Integrative and Comparative Biology 2024 Annual Meeting.
46. Margulis-Ohnuma M<sup>§</sup>, **Manafzadeh AR**, Brainerd EL, Bhullar B-AS. 2024. Integrating GM and XROMM illuminates the role of the quadratus as a keystone of cranial kinesis. Society for Integrative and Comparative Biology 2024 Annual Meeting.
45. **Manafzadeh AR**, Gatesy SM, Bhullar B-AS. 2024. Extreme long-axis rotation: the functional consequences of fibular reduction in theropod dinosaurs. Society for Integrative and Comparative Biology 2024 Annual Meeting.
44. **Manafzadeh AR**, Gatesy SM, Bhullar B-AS. 2023. Extreme long-axis rotation: the functional consequences of fibular reduction in theropod dinosaurs. The 13<sup>th</sup> International Congress of Vertebrate Morphology, Cairns.
43. Trail SE<sup>§</sup>, Mayerl CJ, Capano JG, **Manafzadeh AR**, van Meer NMME<sup>§</sup>, Blob RW, Wyneken J, Brainerd EL. 2023. XROMM analysis of flipper movement during locomotion in loggerhead sea turtles. The 13<sup>th</sup> International Congress of Vertebrate Morphology, Cairns.
42. Gidmark NJ, McParland E<sup>§</sup>, **Manafzadeh AR**, Stringer A<sup>§</sup>, Siddique A<sup>§</sup>. 2023. Comparative functional anatomy, for clinical sake. Midwest Regional Meeting of the Society for Integrative and Comparative Biology.
41. Trail SE<sup>§</sup>, Mayerl CJ, Capano JG, **Manafzadeh AR**, van Meer NMME<sup>§</sup>, Blob RW, Wyneken J, Brainerd EL. 2023. More than just ‘flapping’ flippers: A new understanding of powerstroking in neonate loggerhead sea turtles. International Sea Turtle Symposium.
40. **Manafzadeh AR**, Gatesy SM, Bhullar B-AS. 2023. Joint surface interactions distinguish dinosaurian locomotor poses. Society for Integrative and Comparative Biology 2023 Annual Meeting. (D. Dwight Davis Award Session Winner.)
39. Macrander J, Philson C, MacNeill B, **Manafzadeh AR**, Munley K, Stager M, Houtz J, Shankar A, Hulett R, Varney R, Rogers L, Lessner E, Arias A. 2023. Questions you didn’t know you had: postdoc and graduate student edition. Society for Integrative and Comparative Biology 2023 Annual Meeting.
38. Violet G<sup>§</sup>, **Manafzadeh AR**, Gatesy SM. 2023. Knee long-axis rotation in the Common Loon, *Gavia immer*. Society for Integrative and Comparative Biology 2023 Annual Meeting.
37. Trail SE<sup>§</sup>, Mayerl CJ, Capano JG, **Manafzadeh AR**, van Meer NMME<sup>§</sup>, Blob RW, Wyneken J, Brainerd EL. 2023. XROMM analysis of flipper movement during locomotion in loggerhead sea turtles. Society for Integrative and Comparative Biology 2023 Annual Meeting.
36. **Manafzadeh AR**. 2022. Joint surface interactions distinguish dinosaurian locomotor poses. Society of Vertebrate Paleontology, 82<sup>nd</sup> Annual Meeting, Toronto, Canada, Meeting Program and Abstracts. (Alfred Sherwood Romer Prize Session Winner.)
35. **Manafzadeh AR**, Gatesy SM. 2022. Reconstructing locomotion: lessons from the joints of living animals. Society for Integrative and Comparative Biology 2022 Annual Meeting (Virtual; Invited Symposium Talk).
34. **Manafzadeh AR**, Gatesy SM. 2021. Paleobiological reconstructions of articular function require all six degrees of freedom. Society of Vertebrate Paleontology, 81<sup>st</sup> Annual Meeting (Virtual).
33. **Manafzadeh AR**, Gatesy SM. 2021. All six degrees of freedom are essential to reconstructions of articular function. Society for Integrative and Comparative Biology 2021 Annual Meeting (Virtual): Abstract BSP-2-8. (Mimi A. R. Koehl and Steven Wainwright Award Session Finalist.)
32. **Manafzadeh AR**, Gatesy SM. 2021. A coordinate-system-independent method for comparing joint rotational mobilities. Society for Integrative and Comparative Biology 2021 Annual Meeting (Virtual): Abstract P33-6.
31. Herbst EC, Eberhard E, **Manafzadeh AR**, Richards C, Hutchinson JR. 2021. New methods support the possibility of a salamander-like walk in the Permian tetrapod *Eryops*. Society for Integrative and Comparative Biology 2021 Annual Meeting (Virtual): Abstract BSP-11-4. (D. Dwight Davis Award Session Winner.)

30. Laurence-Chasen JD, **Manafzadeh AR**, Hatsopoulos NG, Ross CF, Arce-McShane FI. 2021. XROMM Tools for DeepLabCut: Bringing deep learning to XROMM marker tracking. Society for Integrative and Comparative Biology 2021 Annual Meeting (Virtual): Abstract P33-7.
29. Herbst EC, Eberhard E, **Manafzadeh AR**, Richards C, Hutchinson JR. 2020. Was the early tetrapod *Eryops* capable of a salamander-like walk? Developing new methods to test paleontological hypotheses about posture and gait. 18<sup>th</sup> Swiss Geoscience Meeting (Virtual). (Swiss Commission of Palaeontology Prize Winner.)
28. **Manafzadeh AR**, Gatesy SM. 2020. From bones to mobility to locomotion: reconstructing hindlimb poses in extant archosaurs. Society of Vertebrate Paleontology, 80<sup>th</sup> Annual Meeting (Virtual), Meeting Program and Abstracts, p. 181.
27. Bhullar B-AS, **Manafzadeh AR**, Miyamae JA, Hoffman EA, Brainerd EL, Musinsky C, Crompton AW. 2020. Mammalian chewing depends on rolling of the jaw and deep conservation of tooth form and function. Society of Vertebrate Paleontology, 80<sup>th</sup> Annual Meeting (Virtual), Meeting Program and Abstracts, p. 23.
26. **Manafzadeh AR**, Kambic RE, Gatesy SM. 2020. How informative is joint mobility? A 3-D analysis of potential versus realized joint poses in archosaurs. Society for Integrative and Comparative Biology 2020 Annual Meeting: Abstract 14-1. (Mimi A. R. Koehl and Steven Wainwright Award Session Finalist.)
25. Bhullar B-AS, **Manafzadeh AR**, Miyamae JA, Hoffman EA, Brainerd EL, Musinsky C, Crompton AW. 2020. The origin of chewing in mammals required rolling of the jaw and involved broad continuity in molar form and function. Society for Integrative and Comparative Biology 2020 Annual Meeting: Abstract S3-9.
24. **Manafzadeh AR**, Gatesy SM. 2019. What assumptions do paleontologists make about how joints work (and how can we test them)? Northeast Regional Meeting of the Society for Integrative and Comparative Biology, Divisions of Vertebrate Morphology and Comparative Biomechanics.
23. **Manafzadeh AR**, Kambic RE, Gatesy SM. 2019. How informative is joint mobility? A 3-D analysis of potential versus realized joint poses in archosaurs. The 12<sup>th</sup> International Congress of Vertebrate Morphology, Prague: Abstract S172.
22. Tsai HP, Turner ML, **Manafzadeh AR**, Gatesy SM. 2019. Contrast-enhanced XROMM reveals *in vivo* soft tissue interactions in the hip of *Alligator mississippiensis*. The 12<sup>th</sup> International Congress of Vertebrate Morphology, Prague: Abstract S230.
21. Weller HI, Olsen AM, Camp AL, Hernandez LP, **Manafzadeh AR**, Brainerd EL. 2019. 3-D intra-oral prey trajectories indicate distinct phases in how channel catfish (*Ictalurus punctatus*, Siluriformes: Ictaluridae) swallow food. The 12<sup>th</sup> International Congress of Vertebrate Morphology, Prague: Abstract S237.
20. Weller HI, **Manafzadeh AR**, Olsen AM, Hernandez LP, Camp AL, Brainerd EL. 2019. An XROMM study of intra-oral transport and swallowing in catfish. Society for Integrative and Comparative Biology 2019 Annual Meeting: Abstract 17-8.
19. van Meer NMME,<sup>§</sup> Weller HI, **Manafzadeh AR**, Kaczmarek EB, Scott B, Gussekloo SWS, Wilga CD, Brainerd EL, Camp AL. 2019. Food capture, transport, and swallowing in white-spotted bamboo sharks (*Chiloscyllium plagiosum*). Society for Integrative and Comparative Biology 2019 Annual Meeting: Abstract 129-3.
18. **Manafzadeh AR**, Padian K. 2018. Could pterosaurs and basal maniraptorans adopt a batlike hip pose? An analysis using “ROM Mapping,” a new method for comparing joint mobilities. Society of Vertebrate Paleontology, 78<sup>th</sup> Annual Meeting, Albuquerque, New Mexico, Meeting Program and Abstracts, p. 175.
17. Tsai HP, Turner ML, **Manafzadeh AR**, Gatesy SM. 2018. Contrast-enhanced XROMM reveals *in vivo* soft tissue interactions in the hip of *Alligator mississippiensis*: implications for Pseudosuchia. Society of Vertebrate Paleontology, 78<sup>th</sup> Annual Meeting, Albuquerque, New Mexico, Meeting Program and Abstracts, p. 229.
16. Tsai HP, Turner ML, **Manafzadeh AR**, Gatesy SM. 2018. Contrast-enhanced XROMM reveals *in vivo* soft tissue interactions in the hip of *Alligator mississippiensis*: implications for Archosauria. Midwest Regional Meeting of the Society for Integrative and Comparative Biology, Divisions of Vertebrate Morphology and Comparative Biomechanics.
15. **Manafzadeh AR**, Gatesy, SM. 2018. How informative is joint mobility? A 3-D analysis of potential versus actualized joint poses. Northeast Regional Meeting of the Society for Integrative and Comparative Biology, Divisions of Vertebrate Morphology and Comparative Biomechanics.
14. **Manafzadeh AR**. 2018. Post-hatching development of hind limb articular morphology in the common quail. Society for Integrative and Comparative Biology 2018 Annual Meeting: Abstract P3-177.

13. Napoli JG,<sup>§</sup> Tsai HP, Turner ML, **Manafzadeh AR**, Gatesy SM. 2018. In- and ex vivo analysis of the kinematics and function of the tendon of Sutton in *Alligator mississippiensis*. Society for Integrative and Comparative Biology 2018 Annual Meeting: Abstract P2-228.
12. Tsai HP, Turner ML, **Manafzadeh AR**, Gatesy SM. 2018. Significance of hip kinematics for interpreting articular soft tissue function in *Alligator mississippiensis*. Society for Integrative and Comparative Biology 2018 Annual Meeting: Abstract P2-227.
11. Tsai HP, Turner ML, **Manafzadeh AR**, Gatesy SM. 2017. Significance of hip kinematics for interpreting articular soft tissue function in *Alligator mississippiensis*: evolutionary and biomechanical implications for Saurischia. Last Days of Pangea Triassic-Jurassic Research Symposium.
10. **Manafzadeh AR**, Padian K. 2016. Could pterosaurs adopt a batlike hindlimb pose?: Ground-truthing ligamentous limits on ornithodiran hip mobility. Northeast Regional Meeting of the Society for Integrative and Comparative Biology, Divisions of Vertebrate Morphology and Comparative Biomechanics.
9. Tsai HP, Turner ML, **Manafzadeh AR**, Gatesy SM. 2016. Hip joint kinematics of *Alligator mississippiensis*: Significance of articular soft tissues for interpreting hindlimb function. Northeast Regional Meeting of the Society for Integrative and Comparative Biology, Divisions of Vertebrate Morphology and Comparative Biomechanics.
8. **Manafzadeh AR**, Padian K. 2016. Could pterosaurs adopt a batlike wing pose?: Implications of a functional analysis of the avian hip ligaments for the evolution of ornithodiran stance and gait. Society of Vertebrate Paleontology, 76<sup>th</sup> Annual Meeting, Salt Lake City, Utah, Meeting Program and Abstracts, p. 182.
7. **Manafzadeh AR**, Holroyd PA, Rankin BD. 2016. Modeling fragmentary jaws as beams to test hypotheses of differing diets. The 11<sup>th</sup> International Congress of Vertebrate Morphology, Washington, D. C.
6. Padian K, Cunningham JR, Langston WA, Conway J, **Manafzadeh AR**. 2016. How the largest known flying animal, the pterosaur *Quetzalcoatlus*, walked on land. The 11<sup>th</sup> International Congress of Vertebrate Morphology, Washington, D. C.
5. **Manafzadeh AR**, Holroyd PA, Rankin BD. 2016. Using the geometric properties of jaws to constrain dietary reconstructions of phylogenetically ambiguous taxa. Society for Integrative and Comparative Biology 2016 Annual Meeting: Abstract P2-168.
4. **Manafzadeh AR**, Holroyd PA, Rankin BD. 2015. Using the geometric properties of jaws to constrain dietary reconstructions of Eocene faunivores. Society of Vertebrate Paleontology, 75<sup>th</sup> Annual Meeting, Dallas, Texas, Meeting Program and Abstracts, p. 173.
3. **Manafzadeh AR**, Angielczyk KD. 2015. Morphological integration in the mandibles of living reptiles and fossil synapsids. Society for Integrative and Comparative Biology 2015 Annual Meeting: Abstract 2.4.
2. **Manafzadeh AR**, Angielczyk KD. 2014. Morphological integration in the mandibles of living reptiles and fossil synapsids. 6th Annual Chicagoland Undergraduate Research Symposium Abstract Volume: p. 7.
1. Venkatesan N, Tae K, **Manafzadeh AR**, Choudhary T, Zhao KT, Noblett T, Dera P. 2012. Effect of chemical treatment on the structure of graphene. Argonne National Laboratory Advanced Photon Source Users Meeting, Program & Abstracts Volume: p. 97.

## TEACHING AND MENTORSHIP

---

### Teaching Positions

Term	School	Course Title	Course Code	Role	Enrollment	Mean Evaluation
S 2021	Brown University	Human Anatomy & Biomechanics	BIOL 1885	Laboratory TA	60	–
F 2020	Brown University	Reflective Teaching	–	Facilitator	8	5.00/5
F 2020	Brown University	Evolutionary Biology	BIOL 0480	Co-Designer and Head TA	71	4.93/5
S 2019	Warren Alpert School of Medicine	Human Anatomy II	BIOL 3655	TA	146	4.81/5
F 2018	Warren Alpert School of Medicine	Human Anatomy I	BIOL 3644	TA	146	4.81/5

F 2017	Brown University	Evolutionary Biology	BIOL 0480	TA	82	4.83/5
S 2013	UC Berkeley	Introduction to Robotics	CS 98	Co-Instructor	30	–

### Guest Lectures

2025	Functional Anatomy (BIOL 3425), Texas A&M University – Corpus Christi
2023	Biomechanics (BIOL 214), College of the Holy Cross
2022	Cats’ Paws and Catapults: Animal Biomechanics (BIO 240), St. Mary’s College
2022	Evolution (BIOL 348), St. Ambrose University
2021	Comparative Vertebrate Anatomy (BIO 331), Albright College
2021	Seminar in Evolutionary Biology (BIO 424), Hamilton College
2020	Animal Structure and Motion (BIO 5550), California State University San Bernardino
2018, 2020	Comparative Biology of the Vertebrates (BIOL 1880), Brown University (x2)
2017-2021	Evolutionary Biology (BIOL 0480), Brown University (x5)
2019	Human Anatomy II (BIOL 3655), Warren Alpert School of Medicine
2018	Human Anatomy I (BIOL 3644), Warren Alpert School of Medicine
2017	Biological Design (BIOL 0400), Brown University
2016	The Age of Dinosaurs (IB 24), UC Berkeley
2013	Introduction to Robotics (CS 98), UC Berkeley

### Curriculum Development

2024	<a href="#">QUBES Resources for Inclusive Evolution Education</a> (RIE2) Working Group Member
2021	Developed lab exercises for new Human Anatomy & Biomechanics course (Brown BIOL 1885)
2019	<i>Evo in the News</i> Resource: <a href="#">“Reconstructing locomotion with fossils, footprints, and... robots?”</a>
2019	<i>Evo in the News</i> Resource: <a href="#">“How did early mammals chew?”</a>
2013-2020	Contributor to <i>Understanding Global Change</i> , <a href="http://ugc.berkeley.edu">ugc.berkeley.edu</a>

### Certificates

2020	<a href="#">Graduate Certificate in Teaching Consultation</a> , Sheridan Center, Brown University
2020	<a href="#">Graduate Certificate in Course Design</a> , Sheridan Center, Brown University
2017	<a href="#">Graduate Certificate in Reflective Teaching</a> , Sheridan Center, Brown University

### Other

2024-2026	Mentor, Divisions of Comparative Biomechanics and Vertebrate Morphology, SICB
2023-2024	Outside Reviewer for Undergraduate Honors Thesis, Knox College
2022-	Mentor, Women in Science at Yale
2021-	Mentor, Broadening Participation Mentorship Program, SICB
2021-	Mentor, Women of Color in Ecology and Evolutionary Biology Mentoring Program
2018-2020	Graduate Student Peer Mentor, Brown EEOB
2017-2021	K-College Tutor, Kaplan Tutoring Services, Barrington, RI
2017	Grader, Diversity of Life (BIOL 0210), Brown University
2014-2016	K-12 Tutor, Classroom Matters, Berkeley, CA
2013-2016	Educational Resource Development Intern, National Center for Science Education, Oakland, CA
2012-2013	Mentorship Coordinator, Pioneers in Engineering, Berkeley, CA

### **SERVICE**

#### To the Profession

SICB = Society for Integrative and Comparative Biology; SVP = Society of Vertebrate Paleontology

2026-2029	Associate Editor, <i>Proceedings of the Royal Society B</i>
-----------	---

2026 Division of Comparative Biomechanics Nominating Committee Member, SICB  
 2025-2027 Communications Officer, ISB Comparative Neuromuscular Biomechanics Working Group  
 2025 Best Student Poster Competition Judge, Division of Comparative Biomechanics, SICB  
 2025 Division of Vertebrate Morphology Nominating Committee Member, SICB  
 2024-2027 Broadening Participation Committee Member, SICB  
 2024-2025 Guest Editor, Special Issue (topic: the evolution of vertebrate joints), *Journal of Anatomy*  
 2023-2025 Student/Postdoctoral Officer, ISB Comparative Neuromuscular Biomechanics Working Group  
 2023-2024 Assistant Editor, *Integrative and Comparative Biology*  
 2023 Platform Session Moderator, The 13<sup>th</sup> International Congress of Vertebrate Morphology  
 2022-2023 Scientific Program Officer, The 13<sup>th</sup> International Congress of Vertebrate Morphology  
 2022-2023 Dorothy M. Skinner Award Committee Member, SICB  
 2021-2022 Guest Assistant Editor, *Integrative and Comparative Biology*  
 2021, 24-25 Session Chair, SICB Annual Meeting  
 2020-2024 Community Outreach Board Member, International Women in Biomechanics  
 2020-2024 Student and Postdoctoral Liaison Committee Member, SVP  
 2020-2023 Student/Postdoctoral Affairs Committee Rep., Division of Comparative Biomechanics, SICB  
 2020-2021 Planning Committee Member, Womxn in STEM (WiSTEM) Symposium  
 2020 Code of Conduct Ally, SICB Annual Meeting  
 2019-2026 Preprint Editorial Team Member/Paleontology Section Leader, *Proceedings of the Royal Society B*  
 2018-2022 Outreach Associate and Social Media Co-Coordinator, *Integrative Organismal Biology*  
 2018 Platform Session Moderator, SVP Annual Meeting  
 2016 Platform Session Moderator, The 11<sup>th</sup> International Congress of Vertebrate Morphology  
 2015-2018 Student Volunteer (Charlotte Mangum Student Support Program), SICB Annual Meeting

Peer Reviewer for: *US National Science Foundation – Division of Integrative Organismal Systems (NSF IOS), US National Science Foundation – Division of Earth Sciences (NSF EAR), The Leverhulme Trust, The Anatomical Record, Biology Letters, Current Biology, Evolution, Integrative Organismal Biology, Journal of Anatomy, Journal of Experimental Biology, Nature Ecology & Evolution, Palaeontologia Electronica, PeerJ, PLOS ONE, PLOS Biology, Proceedings of the Royal Society B, Scientific Reports, Zoological Journal of the Linnean Society*

To the Institution

Brown EEOB = Brown University Department of Ecology, Evolution, and Organismal Biology

2024-2026 Leadership Team Member, Women in Earth and Planetary Sciences at Yale (WEPSY)  
 2024-2025 Grant Reviewer, Yale Institute for Biospheric Studies Small Grants Program  
 2023-2026 Departmental Service Committee Member, Yale Earth & Planetary Sciences  
 2023-2026 Exhibit Design Consultant, Yale Peabody Museum of Natural History  
 2020-2021 Diversity/Inclusion Action Plan Committee Student Representative, Brown EEOB  
 2019-2021 College Curriculum Council Student Representative, Brown University  
 2019-2020 Graduate Student Association Secretary, Brown EEOB  
 2019 GRE Elimination Evaluation Committee Student Representative, Brown EEOB  
 2018-2019 Graduate Student Grievance Ad Hoc Committee Student Representative, Brown University  
 2018 External and Internal Departmental Review Student Representative, Brown EEOB  
 2017-2020 Ecology and Evolutionary Biology Book Club Organizer, Brown EEOB  
 2017-2019 Ecology and Evolutionary Biology Brown Bag Seminar Organizer, Brown EEOB  
 2017 *Form and Function* Reading Group Organizer, Brown University Morphology Group  
 2016 Morphology Reading Group Organizer, UC Museum of Paleontology  
 2014-2016 Curatorial Assistant, UC Museum of Paleontology

To the Community

2024-2026 Participant in Various One-Off Outreach Events, Yale Peabody Museum of Natural History  
 2022 Panelist, Girls Advancing in STEM (GAINS) Conference  
 2020-2021 Regional Science Olympiad Tournament Event Coordinator, Providence, RI

2018-2019 Rhode Island Science and Engineering Fair Judge, Providence, RI  
 2017- Correspondent, Letters to a Pre-Scientist  
 2017- Visiting K-12 Science Instructor: Vartan Gregorian Elementary School, Providence, RI; Wild Ones, Providence, RI; Neuqua Valley High School, Naperville, RI; Skype-a-Scientist (virtual); etc.  
 2017-2018 Marine Biology Club Co-Leader, Paul Cuffee Upper School, Providence, RI  
 2014-2016 Cal Day and Public Short Course Assistant/Open House Presenter, UC Museum of Paleontology  
 2012-2013 Visiting Science Instructor at John Muir Elementary School, Berkeley, CA  
 2012 Open House Presenter, Lawrence Hall of Science, Berkeley, CA

## SCIENCE COMMUNICATION AND MEDIA COVERAGE

---

### Articles Written

*IOB Open* = Journal of Integrative Organismal Biology Blog

2022 “How can we see inside muscles?” *IOB Open*  
 2021 “How do birds jump?” *IOB Open*  
 2020 “How do birds keep their balance?” *IOB Open*  
 2020 “What can the Industrial Revolution teach us about animal motion?” *IOB Open*  
 2020 “Can beards protect against punches?” *IOB Open*  
 2019 “What determines the force a muscle can produce?” *IOB Open*  
 2019 “Do frogs really breathe with their eyes?” *IOB Open*  
 2019 “How do owls fly so silently?” *IOB Open*  
 2019 “Why do crocs eat rocks?” *IOB Open*

### Media Coverage

2026 Carl Gans Young Investigator Award reception covered by *Yale News*, *GT COS*  
 2025 Manafzadeh et al., 2025 *Nature* covered in *Yale News*, *The Independent*, *NHM London News*, *CBC’s “Quirks and Quarks”*  
 2024 Postdoctoral work featured in *Yale News* piece about Yale’s “science renaissance”  
 2024 Featured Paleo Spotlight on *Dr. Neurosaurus Youtube Channel* and bilingual English/Spanish [Blog](#)  
 2024 Manafzadeh et al., 2024 *Nature Communications* covered in *Yale News*, *Yale Alumni Magazine*, *NSF “Science Now”*, *Futurity*, etc.  
 2022 Alfred Sherwood Romer Prize reception covered in *Yale Daily News*  
 2021 Manafzadeh et al., 2021 *PNAS* covered in *News from Brown*, *Inverse*, *Freethink*, *Futurity*, etc.  
 2020 Thesis work featured in university-wide research coverage, *Scene at Brown*  
 2019 Bhullar & Manafzadeh et al., 2019 *Nature* covered in *Yale News*  
 2018 Manafzadeh & Padian, 2018 *Proceedings of the Royal Society B* covered in *News from Brown*, *Brown Medicine Magazine*, *Parsing Science Podcast*, *Gizmodo io9*, *Atlas Obscura*, *Daily Mail*, etc.  
 2017 Interviewed for and featured in illustrated English/Spanish/Chinese children’s book about female paleontologists, *She Found Fossils / Ella Encontró Fósiles / 寻找化石的她*, by Gold, West, and Gardiner  
 2015 Featured in national news coverage about UC Museum of Paleontology fossils, “[At UC Berkeley Bell Tower, Fossils Get a New Life](#)” *NBC Nightly News*  
  
 Interviewed for Expert Commentary by: *BBC*, *New York Times*, *Scientific American*, *The Atlantic*, *Gizmodo*, *Live Science*, etc.

## AFFILIATIONS

---

2016- International Society for Vertebrate Morphology; Sigma Xi Scientific Honors Society  
 2015- Society of Vertebrate Paleontology  
 2014- Society for Integrative and Comparative Biology