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Curriculum Vitae

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Education

- M.S. Biomedical Visualization, University of Illinois at Chicago, 2012
Graduate Research Project: Visualizing the Parasagittal Step Cycle of *Kryptobaatar dashzevegi*, a Multituberculate with Transitional Shoulder Girdle.
- B.A. Biology, University of Vermont, 2010
Minor in Studio Art

Publications

Published Art and Illustrations

- Luo, Z. X., Schultz, J. A., & Ekdale, E. G. (2016). Evolution of the Middle and Inner Ears of Mammaliaforms: The Approach to Mammals. In *Evolution of the Vertebrate Ear* (pp. 139-174). Springer International Publishing.
- Brusatte, S., Luo, Z. X. (2016, June). Ascent of the Mammals. *Scientific American*, 30-35.
- Luo, Z. X., Gatesy, S. M., Jenkins, F. A., Amaral, W. W., & Shubin, N. H. (2015). Mandibular and dental characteristics of Late Triassic mammaliaform Haramiyavia and their ramifications for basal mammal evolution. *Proceedings of the National Academy of Sciences*, 112(51), E7101-E7109.
- Chang, Kenneth. (2015, November 16). Jawbone in Rock May Clear Up a Mammal Family Mystery. *The New York Times*.
- Hopson, James A. (2015). Fossils, Trackways, and Transitions in Locomotion. In Dial, Kenneth P., Neil Shubin, and Elizabeth L. Brainerd, eds. *Great transformations in vertebrate evolution* (pp. 125-141). University of Chicago Press.
- Luo, Z. X., Meng, Q. J., Ji, Q., Liu, D., Zhang, Y. G., & **Neander, A. I.** (2015). Evolutionary development in basal mammaliaforms as revealed by a docodontan. *Science*, 347(6223), 760-764.
- Meng, Q. J., Ji, Q., Zhang, Y. G., Liu, D., Grossnickle, D. M., & Luo, Z. X. (2015). An arboreal docodont from the Jurassic and mammaliaform ecological diversification. *Science*, 347(6223), 764-768.
- Zhou, C. F., Wu, S., Martin, T., & Luo, Z. X. (2013). A Jurassic mammaliaform and the earliest mammalian evolutionary adaptations. *Nature*, 500(7461), 163-167.
- Yuan, C. X., Ji, Q., Meng, Q. J., Tabrum, A. R., & Luo, Z. X. (2013). Earliest evolution of multituberculate mammals revealed by a new Jurassic fossil. *Science*, 341(6147), 779-783.

Work in Exhibits

3D reconstruction of Haramiyavia jaw on display at Smithsonian National Museum of Natural History, Washington, D.C. Reopening 2019.

Megaconus illustration featured in Cliff Field Gardens Timeline, Seaton, Devon, England. 2015.

Awards

2016 Lanzendorf PaleoArt Prize for Computer imaging and Animation.
Haramiyavia: Publicity Video for Mandible Reconstruction

Professional Experience

Micro CT

- Initial CT training, Steinmann-Institut für Geologie, Mineralogie und Paläontologie at Universität Bonn, Germany, 2014
- X-ray Computer Tomography (CT) – Advanced Scan Operator/Intermediate Data Analyst, GE Inspection Academy, 2015
- Manage and maintain GE phoenix v|tome|x s micro and nano CT scanner at UChicago PaleoCT lab
- Train new users of UChicago PaleoCT lab

CT Segmentation

- Mimics, Materialise Training, 2012
- Familiar with various CT segmentation softwares including Materialise Mimics and 3-matic, FEI Avizo, VG Studio Max, and OsiriX

Illustration and Animation

- Continuing education in watercolor, gouache, figure drawing and other traditional media
- Professional experience 2D software: Adobe Illustrator (7+ years experience), Adobe Photoshop (13+ years)
- Professional experience with 3D software: Autodesk Maya (6 years), Autodesk Meshmixer (3 years), Pixologic Sculptiris (2 years), MeshLab (4 years), Occlusal Fingerprint Analyser (4 years)
- Professional experience with animation software: Adobe After Effects (6 years)

3D printing

- Use and maintain a Makerbot Replicator 2 since 2013, including installing new thermocouple
- Train students on use of Makerbot Replicator 2 and how to prepare models for printing

Professional Affiliations

Student Member Association of Medical Illustrators 2011-2012

Guild of Natural Science Illustrators, 2013-Present

Society of Vertebrate Paleontology, 2014-Present