

Dayna Baumeister, PhD

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The Biomimicry Center at ASU
Biomimicry 3.8
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PROFESSIONAL PREPARATION

The University of Montana, Missoula
Division of Biological Sciences
PhD, May 2002
Organismic Biology and Ecology

The University of Montana, Missoula MT
School of Forestry
MS, May 1995
Natural Resource Conservation

New College, Sarasota FL
BA, May 1993
Major: Environmental Biology
Minor: Fine Arts

SYNERGISTIC ACTIVITIES

1999-pres Partner, Biomimicry 3.8, Missoula, MT (0.5 FTE)

Co-founder with Janine Benyus, author of Biomimicry (1997, 2002), of the Biomimicry Guild and Biomimicry 3.8. Responsibilities include concept development, design, execution, and lead instructor of the two-year, graduate level, Biomimicry Professional Program, lead on-line instructor of the graduate level 8-month Biomimicry Specialist program, senior researcher and lead for client services, design and development of new biomimicry tools and resources, and organizational management. World recognized speaker and workshop facilitator. To date, over 40,000 individuals have attended speeches and workshops; countless virtual views of recordings. The certificate programs to date have graduated >200 individuals and the week-long trainings have >800 alumni.

2014-pres Professor of Practice, , Arizona State University (0.5 FTE)

Director of the Biomimicry Graduate Studies. Founder and designer of the world's first MS in biomimicry. Responsible for coordinating biomimicry research activities across campus, educational endeavors, and outreach. Faculty in the College of Global Futures, School of Complex Adaptive Systems; teach six graduate courses. Co-founder of the Biomimicry Center and Director/Co-Director from 2014-2024

2005-2013 Co-founder, Biomimicry Institute (501(c)3)

The Institute works within the realms of K-12 education, Global Design Challenges, conservation through an Innovation for Conservation, and the globally renowned database: AskNature.org. Advised on vision and strategy of projects from founding until end of Board term in 2013. On-going formal ad-hoc collaborations.

- 2003-2005 Dana Meadows Fellow**, Sustainability Institute, Heartland Four Corners, VT
Selected through competitive process to be a member of the second cohort. Program trains individuals in sustainability, visioning, reflective conversation and systems thinking. Run by graduates of MIT and associated with the systems thinking resources at MIT.
- 1999-2000 Intern**, National Center for Appropriate Technology, Butte, MT
Developed and implemented models to bring biology to industry within the realm of biomimicry. Established relationships with clients that have carried through to the Biomimicry Guild and Biomimicry 3.8.
- 1996-2002 Training Within Environmental Biology NSF Fellow**: Division of Biological Sciences, The University of Montana, Missoula, MT.
Supported by a 5-year NSF fellowship conducting interdisciplinary research linking human systems and ecology. Research focuses on interspecific dynamics from the individual to the landscape scale as influenced by limber pine on the Rocky Mountain Front and on bring biological knowledge to industry through the field of biomimicry. (Sept. 1996- May 2002)

RELEVANT PUBLICATIONS

- Stevens, L., Fehler, M., Bidwell, D., Singhal, A. and D. Baumeister. 2022. Building from the Bottom Up: A Closer Look into the Teaching and Learning of Life's Principles in Biomimicry Design Thinking Courses. *Biomimetics*. 7(1), 25.
- Benyus, J., J. Dwyer, S. El-Sayed, S. Hayes, D Baumeister, and C. Penick. (2022). Ecological Performance Standards for Regenerative Urban Design. *Frontiers in Ecology and the Environment*. *Sustainability Science*. 17(6):2631-2641.
- Hayes, S., Desha, C. and D. Baumeister. 2020. Biomimicry innovation to support infrastructure sustainability and resilience. *Technological Forecasting and Social Change* (161)120287.
- Baumeister, D., Pedersen Zari, M. and S. Hayes. 2020. Biomimicry: an opportunity for buildings to relate to place. In: *Ecologies Design: Transforming Architecture, Landscape, and Urbanism*. Routledge Press. Pp 85-95.
- Baumeister, D. 2013. Senior Editor & Lead Author. *Biomimicry Resource Handbook: A Seed Bank of Knowledge and Best Practices*. Biomimicry 3.8. 247 pp.
- Muisenberg, S., Baumeister, D. and J. Appelman. 2013. *Chapter 10: Biomimicry: Design and innovation that can help reach eco-effective solutions*. *Green ICT & Energy*. J. Appelman, M Warnier, and A Osseyran eds.
- McGee, T. and D. Baumeister. 2009. *Chapter 5: Systems Thinking: Biomimicry*. *Packaging Sustainability: Innovative Packaging Design*. Wendy Jedlicka, ed.
- Reap, J., D. Baumeister, and B. Bras. 2005. Holism, Biomimicry and sustainable engineering. *Proceedings of ASME International Mechanical Engineering Society*.
- Benyus, J. and D. Baumeister 2003. *Packaging Tips from the Porcupine Fish (and Other Wild Packagers)*. *Whole Earth Review*. 110:26-29.

THESIS ADVISOR AND POST-GRADUATE SCHOLAR SPONSOR; BIOMIMICRY GRADUATE THESES

Outside advisor/Thesis committee for:

Nicholas Heier, PhD, Griffith University, Australia

Sara el Sayad, PhD, Arizona State University

Saskia van den Muijsenberg, PhD, Radboud University, The Netherlands

Daphne Fechey-Lippens, PhD, University of Akron

Lidia Badarnah, PhD, Architecture, Delft University of Technology

Ingrid de Pauw, PhD, Design Engineering, Delft University of Technology

Corina Logan, PhD, Biology, The University of British Columbia

Laura Merrick, MA, Industrial Design, Savannah College of Art and Design

Carl Hastrich, MA, Industrial Design, Ontario College of Art and Design

John Reap, PhD, Engineering, Georgia Technology

Derek Esposito, MS, Construction Management, Colorado State University

Elizabeth Powers, MA, Urban Ecological Design, University of Washington

Karen Blackerby, BA, San Diego School of Design