



2008 and 2011 Certified Biomimicry Professionals

BIOMIMICRY PROFESSIONAL CERTIFICATION PROGRAM

Spring of 2016–Spring 2018

Biomimicry 3.8



BIOMIMICRY 3.8

Biomimicry.net
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Missoula, MT 59802 USA

“We’re awake now, and the question is how do we stay awake to the living world? How do we make the act of asking nature’s advice a normal part of everyday inventing?”

~ Janine Benyus

Become a Certified Biomimicry Professional

< START HERE >

Biomimicry.net/educating/professional-training/bprofessional



“(Biomimicry) provides an opportunity for us to manifest love for our planet in a way that is just full of hope. I have no doubt that when any of us stand up and talk about biomimicry, we’re touching people’s hearts, because they, too, love this planet.”

~ Dr. Dayna Baumeister,
Lead Co-instructor

“The BPro program has forever changed my career path. I am thrilled with the new knowledge, new perspectives, and new friends I’ve made as a result of my two- year investment and I wouldn’t change it for the world.”

~ Amy Coffman-Phillips
Architect, Chicago, Illinois, USA

“This has been an incredible journey. The richness of the classes, along with working with (the BPro) cohort has been really fascinating.”

~ Diana Hammer,
Environmental Scientist,
Helena, Montana, USA

BRING LIFE BACK INTO YOUR LIFE

The globally renowned Biomimicry Professional (BPro) Certification program is a part-time, two-year course that integrates an accredited Master’s of Science in Biomimicry degree through Arizona State University with an in-person immersion program. It is designed to empower change-agents passionate about a world mentored by life’s genius. Graduates work toward innovative and sustainable solutions to the most pressing global challenges, from the way we conduct business, design buildings and products, run governments, provide healthcare, manufacture our goods, to how we educate future generations, drawing upon time-tested sustainable solutions that have evolved from nature during the last 3.8 billion years.

CORE PURPOSE

The core purpose of the BPro program is to train and mobilize an international, networked community of professional biomimics who become the leaders in this burgeoning practice. Practitioners will join us as consultants, educators, designers, and inventors, bringing nature's best design strategies into the solution space across all disciplines, industries, and practices. This transformative program builds on the three core values of biomimicry: **the ethics of sustainability, the innovative emulation of the natural world, and reconnection with the natural world.**



My journey into biomimicry has been indeed life changing, this new vision of the world came to me in one of the most important and transitional periods of my life and my country.

*~ Sara El Sayed
Biologist, Cairo, Egypt*

- >> **EXPERIENCE THE GENIUS OF PLACE**
in six unique and spectacular ecosystems around the world
- >> **DEVELOP A COMPELLING VISION**
for your role in the world's sustainable transformation
- >> **SOLIDIFY PROFESSIONAL LEADERSHIP SKILLS**
specifically focused on your core assets, in order to grow individually and thereby into a more effective leader
- >> **ESTABLISH TIGHT-KNIT RELATIONSHIPS**
with the diverse members of your cohort from around the world
- >> **EMBARK ON A TRANSFORMATIVE JOURNEY**
that develops personal and professional leadership helping to usher in a world fostered and empowered by nature's genius

PROGRAM OUTCOMES



DISCOVER AND EXPLORE

Nature's Patterns And Strategies

By quieting cleverness, awakening senses, reconnecting, and echoing nature's elegant survival strategies across many applications, Certified Biomimicry Professionals are trained to:

- **Cultivate** awe for the natural world and inspire others to engage with nature
- **Hone** deep observation skills while learning a wealth of information about life's strategies for success
- **Facilitate** the generation of biologically-inspired design ideas in the field
- **Share** compelling visions for locally-attuned sustainable innovation



INNOVATE AND LEAD

Based on 3.8 Billion Years Of R&D

Certified Biomimicry Professionals solve design challenges using nature as mentor, model, and measure for developing truly sustainable solutions. By inspiring and enabling others with biomimicry, they are capable of:

- **Supporting** and **growing** biomimicry practices through training, consulting, facilitating, and speaking to others
- **Accelerating** a widespread cultural shift to sustainable innovation
- **Adopting** and **elevating** whole systems thinking
- **Affecting** global positive change through biomimicry leadership

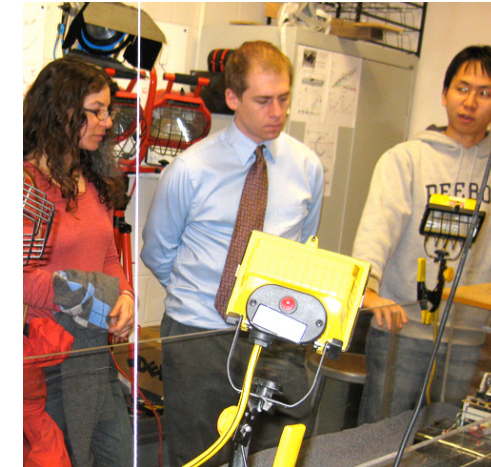


SERVE THE GROWING DEMAND

For Emerging Biomimicry Practices

As early adopters and innovators, Certified Biomimicry Professionals have a critical voice within the leadership community that's inspired by nature to foster a more functional and sustainable world. They help transition individuals, organizations, cultures and, ultimately, all of society by:

- **Disseminating** biomimicry thinking, methodology, and Life's Principles
- **Inspiring** new and diverse audiences through speaking
- **Consulting** and **educating** current and future generations of adopters
- **Leveraging** change as "trim tab" leaders (as envisioned by Buckminster Fuller)



CONNECT AND COLLABORATE

Across Disciplinary Boundaries

Trained to cross the boundaries of design, biology, business, and engineering, Certified Biomimicry Professionals engage with and draw upon the world's most trained and experienced emerging global network. Their interdisciplinary training and community of practitioners, enables them to:

- **Connect** with the core Biomimicry 3.8 practitioners network to identify relevant and cutting-edge collaboration opportunities
- **Keep current** on the latest advancements and best practices in sustainable innovation through biomimicry
- **Foster** interdisciplinary teamwork for breakthrough thinking and doing
- **Access** the latest tools, information and resources that support emerging biomimicry practices

PROGRAM FORMAT

The BPro program is an elite, one-of-a-kind experience accessible to working professionals, enhancing the Master's of Science in Biomimicry through Arizona State University online learning program with six, face-to-face, week-long learning sessions. The BPro program is open only to applicants who have successfully been admitted to the MS program through ASU Online in Fall of 2015 or Spring of 2016 (MS deadline is November 15, 2015). This highly selective program is comprised of only 20 participants, forming a tight-knit cohort that will work together for the duration of the two-year program.

Applications for BPro will be emailed in December to students admitted to the MS program at ASU. Co-enrollment is required for participation in BPro. The 2016–18 cohort will be selected in Spring of 2016 and the first in-person week will be in May in Louisiana.



“An invaluable and personally enriching element of this program is the connections you will make with other, like-minded souls from many cultures around the world. This is the key to a hopeful future; discovering that you are part of a world movement. In the end, the BPro Program is for those who truly want to make a difference, create change and work with others on this planet to spread the biomimicry meme.”

*~ Doug Paige
Industrial Designer
Cleveland, Ohio, USA*

INSTRUCTORS



DAYNA BAUMEISTER, PhD

*Partner & Co-Founder, Biomimicry 3.8
Helena, Montana USA*

Dr. Dayna Baumeister is a world-renowned biomimicry lecturer and consultant, Director of the Certified Biomimicry Professional Program and a Professor of Practice and Co-director of The Biomimicry Center at Arizona State University. With a background in biology, a devotion to applied natural history, and a passion for sharing the wonders of nature with others, Dayna has worked in the field of biomimicry with business partner Janine Benyus since 1998 as a business catalyst, educator, researcher, and design consultant. Among multiple endeavors, Dayna and Janine most recently founded Biomimicry 3.8, a B-Corp social enterprise committed to using the power of business to solve social and environmental problems and has helped more than 100 companies, including Nike, General Mills, and Procter & Gamble, tap into biological intelligence for elegant and sustainable solutions. As senior editor, Dayna compiled a decade of

experience in biomimicry into a practical how-to guide, *"Biomimicry Resource Handbook: A Seed Bank of Knowledge and Best Practices (2014)."*

Dayna was instrumental in designing Biomimicry 3.8's professional training programs, which due to overwhelming success, were the catalyst of the partnership between Biomimicry 3.8 and ASU to form the world's first Master's of Science in Biomimicry.

As a workshop leader and instructor for this course, Dayna shares her visionary leadership in biomimicry drawing from 17+ years of experience bringing biological intelligence to a wide range of audiences. This will be the fourth cohort of the program that Dayna has taught and led.

ASU FACULTY

KAREN ALLEN, MS

Ecologist, Educator
Certified Biomimicry Professional (2008–2010)

ERIN ROVALO

Design Strategist, Biomimicry 3.8
Certified Biomimicry Professional (2008–2010)

MARIE BOURGEOUS, MS

Biomimicry Professional, EPA
Certified Biomimicry Professional (2008–2010)

ZEYNEP ARHON, MBA

Innovation consultant
Certified Biomimicry Professional (2008–2010)

THOMAS BAUMEISTER, PhD

Wildlife Biologist, Conservation Educator
Executive Director, Montana WILD, Montana FWP



TOBY HERZLICH

*Leadership trainer and facilitator
Certified Biomimicry Specialist & Founder,
Biomimicry for Social Innovation
Santa Fe, New Mexico*

Toby Herzlich is a leadership trainer, master facilitator, Certified Biomimicry Specialist, and the founder of Biomimicry for Social Innovation. Toby is committed to the creation of a just, healthy, and regenerative society, and heartfully enthused about the transformative potential of applying nature's wisdom to humanity's sustainability aspirations. Toby is a Senior Trainer with the Rockwood Leadership Institute, co-founder of Cultivating Women's Leadership, and on the faculty of several national training programs. Toby finds much of her purpose in catalyzing diverse networks of social change innovators, including the Young Climate Leaders Network, the National Cross-Movement yearlong fellowship, and the Jewish Social Justice Roundtable. Through Biomimicry for Social Innovation, she is germinating a co-evolving network of leaders who turn to nature's intelligence as guidance for organizational and social change.

SIX IN-PERSON SESSIONS

A key characteristic of a biomimicry leader is the ability to interpret and connect with nature’s complex ecosystems. Over the course of the two years, you will study the awe-inspiring genius of place during six different one-week sessions in unique ecologies around the world.

“My experiences in the in-person sessions have embedded me with the skills and the desire to continue to connect and reconnect people to the natural world. Biomimicry has become very natural and passionate and real.”

~ Joe Zazzera,
Living Building Expert,
Phoenix, Arizona, USA

In-Person Key Topics and Activities

Field Trips • Guest Lectures • Biomimicry Methodology • Facilitation Skills
Reconnecting With Nature • Genius Of Place • Presentation Skills • Systems Thinking
Group Communication Skills • Professional Development Support • Life’s Principles
Enabling Technologies • Current Biomimicry Applications



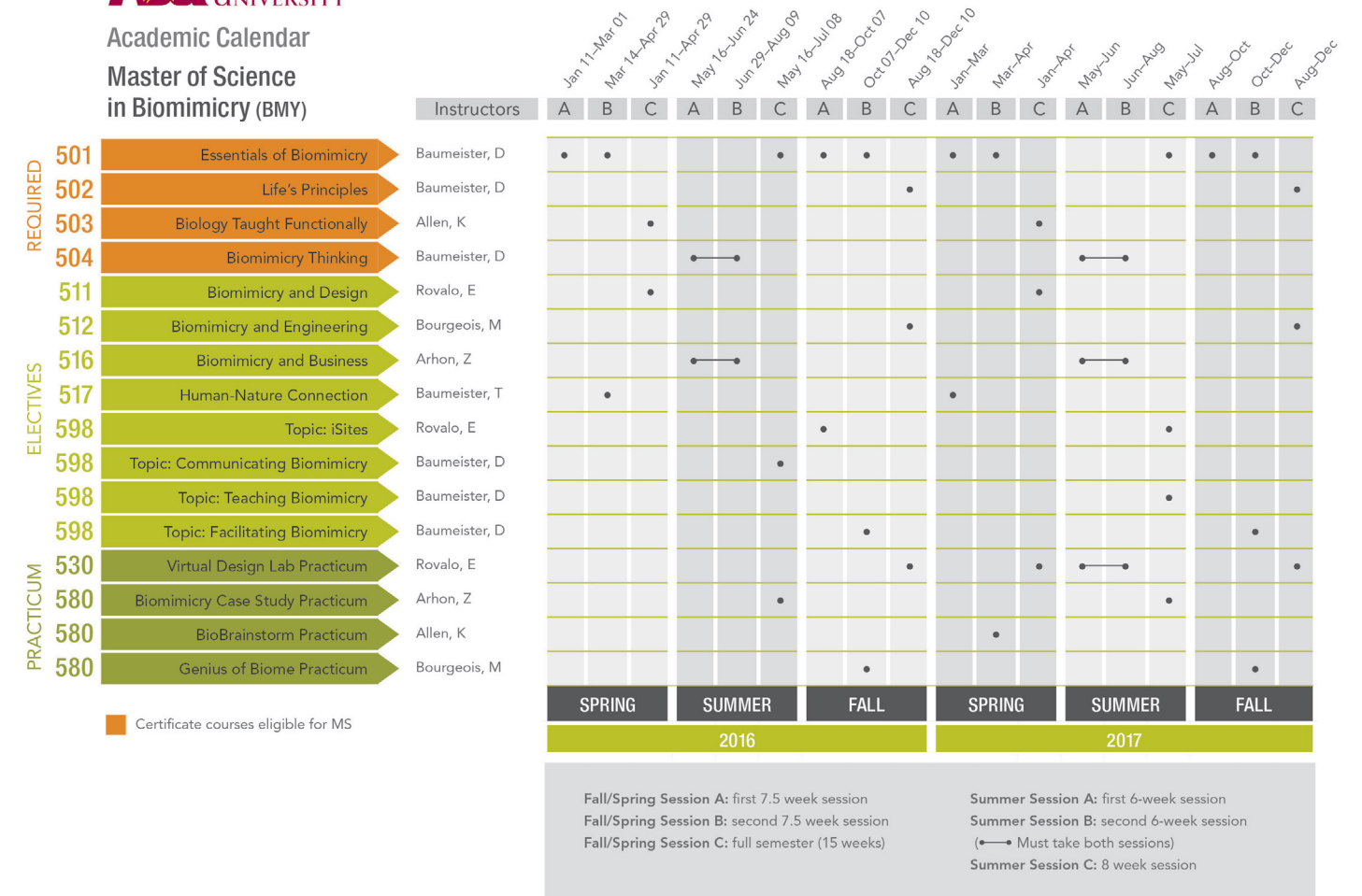
Mississippi River Delta	Temperate Rainforest	Sonoran Desert	Canadian Rockies	Tropical Rainforest	Islands of Hawai'i
Covington, Louisiana, USA	Tofino, British Columbia, Canada	Oracle, Arizona, USA	Location TBD	Uvita, Costa Rica	Puna District, Big Island
Rivers Retreat	Tofino Biological Gardens Ec lodge	El Rancho Robles	Venue TBD	La Cusinga Eco Lodge	Kalani Retreat Center
May, 2016	October 10–16, 2016	March 7–12, 2017	July, 2017	December 10–16, 2017	Late April, 2018

ONLINE COURSEWORK

In 2014, Biomimicry 3.8 partnered with Arizona State University to create **The Biomimicry Center**. As part of these efforts, all the online coursework portion previously part of the BPro program is now accredited through ASU Online as a **Master's of Science in Biomimicry**. The coursework itself is unchanged. It continues to be taught by Dr. Dayna Baumeister and seasoned faculty who bring their practical experience to the online classroom. Participants in the BPro program need to be simultaneously enrolled in the MS program at ASU, and in doing so will participate in online courses with other MS students who are not part of the BPro program.



Academic Calendar Master of Science in Biomimicry (BMY)



REQUIRED COURSES

ESSENTIALS OF BIOMIMICRY BMY 501 | 1 Credit

The Essentials of Biomimicry is a one quarter class (7.5 weeks) offered as an introductory sampler to the various topics (discipline, emulate, ethos, (re)connect & iSites, human-nature connection, Biomimicry Thinking, and Life's Principles) within the discipline of biomimicry. Each week is devoted to a specific topic and is led by a different instructor. The course is intended to provide a basic overview of each aspect of the discipline with ample opportunity for conversation and dialogue around the specific components, with an understanding that greater depth into each topic can be learned by taking the advanced BMY courses.

BIOMIMICRY TAUGHT FUNCTIONALLY BMY 503 | 4 Credits

Biomimicry teaches biology through the lens of function, thereby providing a core understanding in biology for all students, no matter their background. This 15 week course explores how biologists gather and research information and how that knowledge can inform other disciplines. It also introduces the art of translating biological concepts into strategies for application, which is then carried throughout all the courses. You will learn how to work with biologists on a biomimicry team and how to weave biology and biomimicry together. You will learn to look at nature through the function lens, and how to identify subject matter experts needed for interdisciplinary teams.

LIFE'S PRINCIPLES BMY 502 | 4 Credits

Life's Principles are nature's universal design guidelines based on 3.8 billion years of successful strategies across all life. With instruction by Dr. Dayna Baumeister, this 15-week course takes participants on a deep dive of Life's Principles. It includes the review and study of life's operating conditions on Earth, the six primary principles, and their related sub-principles. This course gives participants the knowledge necessary to bring these design guidelines into practice and provides opportunity to integrate them into one's discipline.

BIOMIMICRY THINKING BMY 504 | 4 Credits

Biomimicry Thinking is the practice of biomimicry from a methodology-based approach. Led by Dr. Dayna Baumeister, this 15-week exploration into the biomimicry methodology reviews how biology and biomimicry can be incorporated into the four major phases of any design process: scoping, discovering, creating, and evaluating. It introduces the art of translating biological concepts into strategies for application and building a taxonomy of design principles.

BIOMIMICRY & DESIGN BMY 511 | 3 Credits

This 15-week course will prepare participants to design sustainable innovations using the biomimicry methodology. Students will learn to demystify the design thinking process, understand how to harness the potential of approaching challenges with a design mind, distill a design challenge, understand user needs, build a bridge between biology and design, use a methodology for discovering models from nature, abstract design principles from bio-inspired strategies, and translate those principles into sustainable innovations. The course is not designed to teach how the discipline works in order to facilitate involvement of designers into the practice of biomimicry.

BIOMIMICRY & BUSINESS BMY 516 | 3 Credits

Biomimicry and Business Course is a three credit course that resides at the overlap of the two disciplines. The course addresses business topics from the biomimicry point of view—it explains mechanisms and tools for comparing and contrasting business and nature. As part of the course, participants are challenged to question conventional ways of conducting business and come up with new approaches based on a different point of view. The course is not designed to teach one how to run a business, but rather how the discipline works in order to facilitate involvement of business in the practice of biomimicry.

BIOMIMICRY & ENGINEERING BMY 512 | 3 Credits

Biomimicry & Engineering will prepare participants to understand the field of engineering, identify the types of engineers and what each one does, what constrains engineers work under, materials selected by engineers, how to present biological ideas to engineers and how to integrate ideas from their discipline into sustainable engineering designs using biomimicry principles. The course is not designed to teach one how to be an engineer, but rather how the discipline works in order to facilitate involvement of engineers in the practice of biomimicry. A final team project designed to put these ideas into practice is required.

HUMAN-NATURE CONNECTION BMY 517 | 2 Credits

This 15-week course seeks to ground the emerging discipline of biomimicry as a continuation of our ancestral connection with nature. Human-Nature Connection engages participants in an exploration of the meaning and value of connecting with nature. Topics include defining humans, nature, and our connection with nature; establishing the evolutionary, personal, and socio-cultural influences on the different expressions of this connection; and illustrating the relevance of biomimicry to the human-nature connection.

CREATING LEADERS

Deciding to focus your career on biomimicry can be both exhilarating and daunting. BPro participants will likely find themselves undergoing significant professional and even personal transformations as they journey through the program. The BPro program has evolved to focus on professional leadership, ensuring students are prepared to advance themselves and their skills, and motivate and inspire others around biomimicry. Among many other components, the focus on leadership throughout the programs will help students refine decision-making, communication and conflict resolution skills, and help them lead high performing teams toward a shared goal.



“The leadership component of BPro helps to build people’s capacity to bring biomimicry into a range of different fields, as champions, ambassadors, and leaders. We work with the students to help them fully develop a sense of their own purpose in biomimicry, and express that in a clear vision for how they’ll integrate their experience into the larger ecosystem of their work.”

~ Toby Herzlich
Co-lead Instructor,
BPro 2016–18 Cohort



PROGRAM TUITION AND FEES

Master's of Science through ASU tuition

The online coursework portion of the program to secure a **Master's of Science in Biomimicry** from ASU costs \$750 per credit hour. At 30 total credits, the cost for this portion of the program is \$22,500 spread across the duration of enrollment, with payment made directly to ASU.

Certified Biomimicry Professional tuition

The in-person immersion sessions required for BPro certification cost an additional \$17,500 and include room and board at each of the six locations, ground transportation, tuition, and fees. Travel expenses to and from the in-person session meetup location (usually the airport), or any additional optional single room charges and personal incidentals are not included.

All in-person sessions are specifically designed to foster a group experience and as such we will not allow for students to arrange their own accommodations and meals in order to discount the cost of their session expenses. Expenses are non-negotiable.

Tuition associated with the MS program through ASU: \$22,500 (USD)

+

Program fees associated with BPro program enrollment: \$17,500 (USD)

Total program costs: \$40,000 (USD)

* Plus an estimated travel expense (varies for each person) of \$6,000

FINANCING

Lump Sum Payment | For those who are able to make a lump sum up-front payment for the BPro program in April 2016, we are able to offer a 2% cash discount. Credit card payments do not apply.

Payment Plan | Program tuition, fees, and expenses are payable in installments throughout the course of the program. Whether or not you will require a payment plan will be discussed during your interview (if and when granted). Payment information will be further detailed in the program enrollment form upon acceptance to the program.

SCHOLARSHIPS

ASU and Biomimicry 3.8 offer several merit and need-based scholarships for both MS students and those working toward BPro certification.

We offer a limited number of \$5,000 need-based scholarships for the BPro program portion. The scholarship application is included in the program application. Full information can be found at biomimicry.asu.edu.

ACCREDITATION

The online coursework portion required to participate in the BPro program is now accredited through ASU as a **Master's of Science in Biomimicry**. Simultaneous enrollment in the MS program is required to earn the Certified Biomimicry Professional title.

APPLYING FOR THE PROGRAM

MORE INFO >>

Those eligible to apply for the BPro 2016–18 cohort can submit applications beginning December 11, 2015. Application for the BPro 2016–18 cohort is open only to applicants who have successfully been admitted to the MS program through ASU Online in Fall of 2015 or Spring of 2016. Selection for the 2016–18 BPro cohort occurs in Spring of 2016.

Full application details will be emailed to eligible applicants in early December.

APPLICATION PROCESS

Upon receiving and reviewing all applications, we will notify you of your status regardless of whether you have been selected for an interview. If you have not been selected for an interview, your notification will include recommended next steps. If you are selected for an interview, you will be directed to an online scheduling tool to schedule your telephone/online interview with Dr. Dayna Baumeister and Toby Herzlich.

After all interviews have been completed, we will send out final notification of program acceptance to the 20 individuals that have been selected to participate. If you are not selected, you may be offered a wait list position. Please note, due to past experience and the expected number of applicants, the application process is very competitive.

APPLICATION SCHEDULE

Application period opens
December 11, 2015

Applications due
January 15, 2016

Selected requests for interviews sent
February 3, 2016

Notification of program acceptance
March 2, 2016

Cohort finalized
March 25, 2016

Program Kickoff
May 4–12, 2016

“I thought you’d like to hear the news! I’ve been promoted to report directly to our CEO of our Americas business.

He will be counting on me to lead us towards Mission Zero, specifically using biomimicry as an innovation tool. Wow! I’d like to thank you for contributing to my success so deeply. I have learned much from you, in terms of the art and science of biomimicry, and also as a mentor. I am grateful for your guidance in cultivating my leadership.”

~ Lindsay James

Director of Strategic Sustainability, Interface
Chicago, Illinois

“I was always looking for the highest standard. I think biomimicry is something that is very hopeful and the BPro program has been a very hopeful journey. One I wouldn’t trade for anything else in the world.”

~Jane Toner

Architect
Sydney, Australia

