

Invitation to the first Biomimicry Workshop in Scandinavia



Sustainable solutions inspired by nature A six-day workshop in Arjeplog, northern Sweden

If you want to climb the stairs of sustainable value creation you will find that “nature” can inspire you to higher levels. As public scrutiny, governmental regulation, and customer expectations intensify, organizations will need to build capabilities in sustainable product development and design as well as sustainable strategies, operations and business models.

During this unique Biomimicry workshop you will learn about the basic concepts and tools of biomimicry – innovation inspired by nature. You will learn to understand what biomimicry is all about, and how to apply strategies and functions from the biological world to create sustainable solutions for everything from specific technologies to organizational systems.

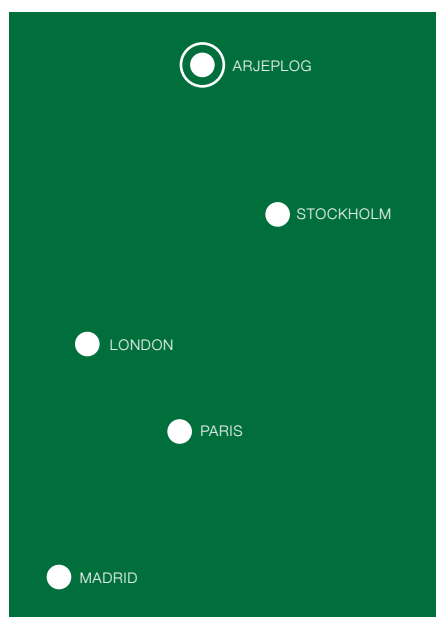
Biomimicry (from bios, meaning life, and mimesis, meaning to imitate) is a new discipline that studies nature’s best ideas and apply these strategies and functions to solve human problems. After 3.8 billion years of research and development in nature (evolution), failures are fossils, and what surrounds us is the secret to survival. 10–30 million species with time-tested genius is the inexhaustible source of inspiration for new non-toxic, energy and material efficient innovations.

Some examples of bioinspired innovations under development today are non-toxic adhesives inspired by geckos, energy efficient buildings inspired by termite mounds, and resistance-free antibiotics inspired by red seaweed. There are sustainable solutions to be found in nature that can inspire all types of products, industries and organizations. The conscious emulation of life’s genius is a survival strategy for the human race, a path to a sustainable future. Biomimicry can help your company be a winner in the market of tomorrow. It can bring new ideas to your research, product development and design as well as your business and organizational strategies.

Location

The workshop will be held in Arjeplog, northern Sweden. The flora and fauna in Arjeplog municipality is composed mostly of alpine species, and there are a number of protected plants. The municipality has national parks and 13 nature reserves and an animal welfare field with a total area of 150 210 hectares. There are 8 727 lakes and rivers, which makes Arjeplog Sweden's richest water municipality.

During the workshop you will learn more about the ecology of northern Sweden, skills for working in interdisciplinary teams, and a new way to view and value nature.



Who should attend?

This introductory course is designed for university faculty and students and professionals in disciplines including architecture, design, the sciences, engineering, community development, city planning, and business. It is for anyone serious about creating a sustainable, bio-inspired future!

What will you take home?

You will take home a methodology for bringing biological strategies and functions into your daily work, but also a sense of possibility and hope following insights about all the sustainable models that already exist in nature. In addition, you will take home access to a network of new colleagues and experts.

What will you do?

The course includes a mixture of lectures, activities, hikes, exploration, and discussions in the beautiful setting of northern subarctic Sweden. You will learn how to use the “knowledge” of local ecosystems, become acquainted with life's inherently sustainable design principles and learn how to incorporate bio-inspired thinking and design techniques into your own work.

During the workshop you will also have the opportunity to work on a design challenge by asking, “how would nature do this?” One design challenge under consideration is how biomimicry can improve climate change mitigation and adaptation activities. Case studies will be further developed depending on the specific profiles and interest among participants.

Instructors and content

Denise DeLuca, Outreach Representative for The Biomimicry Institute, USA, will be your main instructor during the week. She has a background in civil engineering focusing on hydrology. Her career has spanned the public and private sectors, including running her own sustainable resource consulting business. Denise served as Outreach Director at the Biomimicry Institute in the US before she moved to Wales (UK) in 2009. She is currently project lead for Swedish Biomimetics 3000 and co-founder of the new collaborative BCI (Biomimicry for Creative Innovation). You can read more about Denise and her current assignments at www.biomimicryinstitute.org. Another instructor from the Biomimicry Institute will assist Denise during the workshop.

The course will be taught in English. The content is built on the professional material developed by the Biomimicry Institute. It has been adjusted to the specific conditions and needs of the region in cooperation with ecologists and local experts. Assisting instructors are Professor Thomas H. DeLuca at Bangor University, Associate Professor Ingela Bergman and Associate Professor Greger Hörnberg at the Institute for Sub-arctic Landscape Research in Arjeplog.



Course Schedule: 21st–27th of August

The course is designed to fit in a five-day workweek with travel during the bracketing weekends.

- Aug 21st : Arrival and introductory lecture in the evening
- Aug 22nd : Overview, introduction to the design spirals, short design challenge using the AskNature database
- Aug 23rd : Orienting to place, Life's Principles for sustainability, Design Spiral: Identifying functions
- Aug 24th : Design Spiral: Discovering models from nature
- Aug 25th : Design Spiral: Abstracting and emulating nature's strategies
- Aug 26th : Design Challenge
- Aug 27th : Wrap up and travel home

Workshop fee

The fee is 2500 Euro, which includes accommodation, food and local travel. Discounted price for students is 1500 Euro. Travel expenses to and from Arjeplog are not included in the price.

Travel to Arjeplog

Arjeplog is located in Lappland, northern Sweden. It can be reached by air to Arvidsjaur airport and from there by shuttle to Arjeplog. Another option is to go by train to Jörn and a connecting bus to Arjeplog (approximately 18 hrs from Stockholm). For further information see www.ajr.nu/ for flights to Arvidsjaur or www.resplus.se/Resplus/.

If you want to take the opportunity to explore the sub-arctic environment on your own in connection with the workshop, Arjeplog offers fantastic outdoor and cultural experiences such as hiking, fishing and exploring the indigenous Sami culture. Read more on www.polcirkeln.nu.

How to register

For further information and registration form please contact Helen Ågren or Eva Ahlner (helen.agren@renfana.com or eva.ahlner@renfana.com). The latest day for registration is 9th of July 2010.

About the organizers

The workshop is organized by Renfana – a sustainable development consultant, (www.renfana.com) in cooperation with the Institute for Subarctic Landscape Research (www.silvermuseet.arjeplog.se).

renfana
bringing natural value



The Institute for Sub-arctic Landscape Research

66° 55' N