

SOAK

Biomimicry

SUMMER ACADEMY

2 0 2 4

T Y R O L

Preparatory Online Sessions
6, 20, 27 June + 4 July 2024

Biomimicry Immersion Week
Innsbruck—Seefeld—Hochzirl
Karwendel Region, Tyrol, Austria
14—20 July 2024

Application Deadline
31 March 2024

www.nachhaltige-hochschulen.at/SOAK2024
www.mci4me.at/soak2024

»To be whole. To be complete. Wildness reminds us what it means to be human, what we are connected to rather than what we are separate from.«

TERRY TEMPEST WILLIAMS, NATURALIST AND "CITIZEN WRITER" (1955)



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About SOAK

SOAK (SOMmer AKademie) is an initiative of the **COOP Sustainable Universities**—a cooperative of 14 Austrian Universities of Applied Sciences that collaborate with other Austrian and international universities toward sustainable futures. The COOP runs this summer academy every year in different regions.



From 2023 to 2025 the focus is placed on climate change, one of the greatest challenges for humanity and life-threatening to all species. All living beings, including people and communities, must develop and implement ways to respond to the changing conditions that are present already and will accelerate in the foreseeable future.

In these three years, the **SOAK Biomimicry Trilogy** is explored through the Biomimicry Innovation Process in order to propose potential solutions to human problems connected to climate change. Biomimicry is a philosophy and praxis for sustainable innovation inspired by Nature. SOAK participants learn about the strategies Nature has developed to survive and thrive on this planet and apply them to human systems.

SOAK Biomimicry 2024

SOAK Biomimicry—Summer Academy 2024 is taking place in Tyrol, Austria. It is led by the **University of Applied Sciences Burgenland**, organized and hosted by **MCI | The Entrepreneurial School®**, a University of Applied Sciences in Innsbruck, and supported by the **FHV - Vorarlberg University of Applied Sciences**. In this effort, they partner with the **University of Applied Arts Vienna**.



The **focus** of SOAK Biomimicry 2024 concerns the interplay between the **climate** and **biodiversity crises** hitting the **Karwendel Region**, in particular, the local woodlands and forests. Foundational learnings include understanding how Nature responds to these problems as well as becoming familiar with people's ideas and methods for mitigating climate change and reducing the loss of biodiversity.

The **vision** of SOAK Biomimicry 2024 is **a)** to motivate people to integrate Nature-inspired, regenerative concepts and actions for alleviating the climate and biodiversity crises in their own lives and environments and **b)** to empower them to demand, initiate and contribute to the necessary sustainability actions in their spheres of influence.

SOAK Biomimicry 2024 participants will be engaged in all steps of the **Biomimicry Innovation Process** in order to develop ideas and design concepts for triggering a transformation in people's ways of thinking and behaving.

For this collaboration to be successful, COOP is bringing into dialogue a number of disciplines, sustainability experts and innovation facilitators. SOAK Biomimicry 2024 is sure to evolve into an unforgettable week of learning, experiencing Nature and building community across boundaries.



Focus of SOAK Biomimicry 2024

Theme

In a nutshell, SOAK Biomimicry 2024 is about melting the boundaries between Culture and Nature—two different systems that work best in synergy. Even though people realize today that everything and everybody is interconnected with everything else on planet Earth, they often ignore (are overwhelmed by) the impact they have upon the complexity of life. Most likely, life on Earth will continue without humans if they keep causing devastating consequences to the natural environment—or with humans if they manage to live "in harmony with Nature."

Driving Questions

On a Human Level:

How might we transform our thinking and acting in the world to better fit into the ecosystem(s) that we are part of and upon which resilience our lives depend?

On the Level of Nature:

When conditions opportune or dangerous to an ecosystem emerge in the system, how does Nature signal and spread new important information, so that actors are prompted to respond appropriately in order to keep the system resilient, thriving and conducive to life?

Biomimicry Innovation Process

As a first step, SOAK Biomimicry 2024 participants will receive information to understand the dynamics of climate change and biodiversity loss, how humanity ended up in this situation and what must be done to keep planet Earth inhabitable for humans and all other species for generations to come. These issues will be part of the first two phases in the Biomimicry Innovation Process: **1)** scoping the problem and **2)** researching how Nature deals with it. The following two phases involve **3)** developing Nature-inspired ideas and concepts for empowering people to reconsider their actions and **4)** benchmarking these concepts against the Biomimicry Sustainability Mandate.

Working Language

English
German will, most likely, be spoken, for instance, when communicating with local stakeholders. The SOAK team is ready to support with translating between languages.

Participants

The Biomimicry Innovation Process works best with optimum diversity in the room. Hence different levels of education, disciplines, generations, work and life experiences need to be present. Participants will be selected according to this notion.

Biomimicry Immersion Week

Date 14–20 July 2024

Location Innsbruck—Seefeld—Hochzirl
Karwendel Region, Tyrol, Austria

University The SOAK Biomimicry Immersion Week 2024 will be held at **MCI | The Entrepreneurial School®**, a University of Applied Sciences in Innsbruck. A spacious studio at the campus of the university will function as the base camp for all activities during the immersion week.

Indoor Studio **SOAK DESIGN STUDIO**
MCI | The Entrepreneurial School®

Outdoor Studios **SOAK URBAN NATURE LAB**
Natural environments near MCI
SOAK ALPINE NATURE LAB
Karwendel Mountains (Seefeld Lake Wildsee, Reither Moor Natural Reserve, Hochzirl, Kranebitten)

The City **Innsbruck** is an internationally renowned Alpine city in Central Europe that stretches at the foot of the Nordkette mountain chain, with the Karwendel Mountains in the north and Mt. Patscherkofel in the south. Its beneficial location and the possibility to cross the Alps was already appreciated by the Romans who built the important commercial road Verona-Brennero-Augsburg in the 4th century AD. Today, Innsbruck is the city with the most dense student population in Austria which makes it a magnificent place for future-oriented education and innovative enterprises.

The Mountains Outdoor experiences in the **Karwendel Mountains** will offer insights about the local and regional ecosystems and ecosystem services that trees and forests provide to the level of biodiversity in the system as well as a means to reduce CO₂ in the atmosphere, sink CO₂ in its materials, and provide additional oxygen to the ecosystem in which they thrive. Trees are of particular interest to the region as wood is a major industrial product of local businesses. Woodlands and forests protect the locals and their living quarters from landslides and avalanches, serve as recreation areas and as a home to a wide range of wildlife, and, last but not least, as a tourist attraction.

The **Karwendel Nature Park** has been subject to a preservation order since 1928 and is one of Europe's oldest nature reserves. The primordial vegetation has remained intact and many rare animal and plant species have found an alpine version of "Noah's Ark" here.





Learning Journey

The Biomimicry core team consists of a Biomimicry Expert who leads and facilitates the innovation process, a Scientist at the Design Table who guides the scientific research tasks and assures that the information is ecologically and biologically accurate and an Artist at the Design Table who inspires creativity and thinking outside of the box. These three are supported by the other SOAK Teaching Team members.

Online

General Information

Public Webinar

Thurs, 21 March, 18:30–20:00

ONLINE

To join the Zoom meeting use this link:

<https://dieangewandte-at.zoom.us/j/97720530340?pwd=QXNaVjA5OTBhWFV1Sm5kK2lpbFNMQT09>
Meeting-ID: 977 2053 0340, Passcode: 435590

Application

Deadline

Thurs, 31 March

Details for Application see page 22

Online

For Accepted Participants

4 Preparatory Webinars

Prior to the Biomimicry Immersion Week in July there will be interactive online lectures about Biomimicry Foundations, the Climate and Biodiversity Crises, and organizational details. Each session will last approximately 2 hours. Weekly assignments will expand the knowledge base and anchor the learnings. Each weekly set of assignments will require 4 to 5 hours.

SOAK Day 1

Thurs, 6 June, 18:30

ONLINE

Welcome to SOAK Biomimicry 2024

Overview of the Program

Lecture Topics: Planetary Boundaries, Climate and Biodiversity Crises, Ecosystem Forest

SOAK Day 2

Thurs, 20 June, 18:30

ONLINE

Lecture Topics: Biomimicry Philosophy & Framework

SOAK Day 3

Thurs, 27 June, 18:30

ONLINE

Lecture Topic: 26 Biomimicry Life Principles exemplified through the Ecosystem of a Tree

SOAK Day 4

Thurs, 4 July, 18:30

ONLINE

Lecture Topics: Biomimicry Scoping Phase, Methods for Mitigating Climate Change and Loss of Biodiversity
Preview: Biomimicry Immersion Week

Face to Face

14–20 July 2024

Biomimicry Immersion Week

Innsbruck—Seefeld—Hochzirl, Karwendel Region, Tyrol, Austria

Hosted by MCI | The Entrepreneurial School®

Stepping into an intensive face-to-face work week participants will experience exciting excursions into Nature and challenging design opportunities. Work days start early, punctually and end in the evenings. Participants are expected to arrive on time and participate fully until the very end of the Biomimicry Immersion Week.

Sun, 14 July 18:30

Welcome Session

MCI DESIGN STUDIO

MCI | The Entrepreneurial School®

SOAK Day 5
Mon, 15 July 9:00

Beginning of the Work Week

MCI | The Entrepreneurial School®

OUTDOOR NATURE LAB

(Re-)Connecting to Nature

Biomimicry Life Principles, Live!

MCI DESIGN STUDIO

Scoping Phase

Diving into the Defined Problem State

Discussing Design Criteria

SOAK Day 6
Tue, 16 July

Research Phase

Whole-Day Excursion to Seefeld and Hochzirl

OUTDOOR NATURE LAB

Experiencing the Natural Environment in the Region / Ecosystem Forest

Exploring the Consequences of Climate & Biodiversity Crises in the Region

SOAK Day 7
Wed, 17 July

Research Phase

MCI DESIGN STUDIO

Discovering Nature's Ways to address the Defined Design Challenge

OUTDOOR NATURE LAB & MCI DESIGN STUDIO

Abstracting Nature's Strategies

SOAK Day 8
Thurs, 18 July

Creating Phase

MCI DESIGN STUDIO

Brainstorming and Ideation

Creating Design Concepts by Applying Nature's Strategies

SOAK Day 9

Fri, 19 July

Creating Phase

MCI DESIGN STUDIO

Developing Design Concepts into Innovation Concepts

Refining Innovation Concepts

SOAK Day 10

Sat, 20 July

Evaluating Phase

MCI DESIGN STUDIO

Benchmarking Innovation Concepts against Biomimicry Sustainability Mandate and all Design Criteria

Finalizing Innovation Concepts

15:00 Presenting Innovation Concepts

17:00 Evaluating SOAK Biomimicry 2024 Experience & Fare Well

18:00 End of SOAK Biomimicry 2024

& Closing Celebration (optional)

Book Purchase

In order to complete the work during all of SOAK Biomimicry 2024, these two books must be purchased by participants:

"Biomimicry Resource Handbook: A Seed Bank of Best Practices"
by Dayna Baumeister, 2014

Digital: <https://biomimicry.net/product/digital-handbook/>

Hardcopy (in Europe only available on Amazon.de):

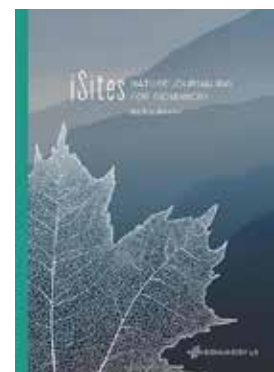
https://www.amazon.de/Biomimicry-Resource-Handbook-Seed-Practices/dp/1505634644/ref=asc_df_1505634644/?tag=googshop-de-21&linkCode=df0&hvadid=310644330856&hvpos=&hvnw=g&hvrand=3724618007512318827&hvpone=&hvptwo=&hvgmt=&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=1000711&hvtargid=pla-433006204009&psc=1&mcid=e17cc880bd273e4e9ba8b0dd111caa0a&th=1&psc=1&tag=&ref=&adgrp_id=57334095730&hvpone=&hvptwo=&hvadid=310644330856&hvpos=&hvnw=g&hvrand=3724618007512318827&hvgmt=&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=1000711&hvtargid=pla-433006204009



"iSites: Nature Journaling for Biomimicry"
by Erin Rovalo, 2019

Hardcopy (in Europe only available on Amazon.de):

https://www.amazon.de/iSites-Journaling-Biomimicry-Erin-Rovalo/dp/1795052112/ref=sr_1_1?__mk_de_DE=%C3%85M%C3%85%C5BD%C3%95%C3%91&crd=G1Y9B6ZTRIXL&keywords=iSites%3A+Nature+Journaling+for+Biomimicry&qid=1703089093&sprefix=isites+nature+journaling+for+biomimicry%2Caps%2C123&sr=8-1



Biomimicry Links & Tutorials

Biomimicry

Biomimicry 3.8 www.biomimicry.net

Biomimicry Institute www.biomimicry.org

Janine Benyus, Co-founder of Biomimicry www.n2k.world/biomimicry

Alphabet of Life Tutorials

Regina Rowland, Biomimicry Expert, SOAK Lead

www.alphabet-des-lebens.net/biomimicry_thinking.html



Dayna Baumeister, Co-founder of Biomimicry 3.8 and

Thomas Baumeister, Biologist www.alphabet-des-lebens.net/biomimicry_thinking.html



Daniel Bayer, SOAK Scientist at the Design Table, National Park & Climate Ranger

www.alphabet-des-lebens.net/ecosystem_tree.html



Review SOAK Biomimicry 2023

SOAK Biomimicry 2023 took place in the Region Lake Neusiedl in Burgenland, Austria.
If you would like to review SOAK Biomimicry 2023 Events:

Visit COOP Website

www.nachhaltige-hochschulen.at/soak2023/

View the Publication

www.nachhaltige-hochschulen.at/soak2023/



Go to YouTube

www.youtube.com/watch?v=vRIVF9kaLcg





Learning Objectives

By the end of the Biomimicry Immersion Week, participants will:

- Have (re-)connected to Nature
- Have had the chance to realize how life creates conditions conducive to life and connect this realization to the climate and biodiversity crises and the associated design challenge
- Be able to discuss the Biomimicry Approach
- Have explored the three essential elements of the Biomimicry Framework
- Have become familiar with the Biomimicry Sustainability Mandate
- Have practiced the four phases of the Biomimicry Innovation Process, including multi-sensory creative design steps
- Have explored the natural environment in the region
- Have discussed the interplay between climate change and loss of biodiversity in the region
- Have been exposed to the problems in the region caused by the climate and biodiversity crises
- Have researched, abstracted and applied Nature's strategies to address the defined design challenge
- Have had the chance to build community, in a deep way, with co-participants, the SOAK Biomimicry 2024 Team, and local sustainability experts and stakeholders
- Have been challenged to shift their perspectives and transform their hearts and minds
- Have the tools in their pockets and resources at their fingertips to integrate Biomimicry in their future work



Certificate with Academic Credit Recommendation

The **COOP Sustainable Universities** is in itself not an academic institution, but an association of 15 collaborating universities. It can therefore not grant but only recommend academic credit.

The **COOP** and partnering **University of Applied Arts Vienna** will jointly issue **SOAK Biomimicry Certificates of Participation** including **recommendations for 3 ECTS** academic (graduate and undergraduate) credit—which can be negotiated by participants with their home universities.

To earn a **SOAK Biomimicry Certificate of Participation** it is necessary to have participated* in, completed and submitted

- all the online work and associated assignments (Days 1-4)
- all the group work during the Biomimicry Immersion Week (Days 5-10)

* Participation means:

- full participation in the work of Days 1-10
- full physical (and punctual) attendance during Days 5-10 of the Biomimicry Immersion Week

Note

SOAK guarantees that the depth and quantity of required performance and assigned work will be representative of ECTS standard as listed above. The quality of the submitted deliverables will have to be evaluated by the credit-giving institutions.



General Information

Costs

Tuition	Free! Participation in SOAK Biomimicry 2024 is free of charge. The COOP Sustainable Universities and partnering University of Applied Arts Vienna believe in the importance of collaborative sustainability efforts for the common good and are therefore using their own resources to organize this summer academy. However, all personal costs occurring during the Biomimicry Immersion Week must be paid by participants directly.
Registration Fee	EUR 199.- non-refundable
Work-related Expenses	Minor expenses may occur associated with learning activities
Personal Expenses	Transportation to and from and during immersion week Accommodation Meals
Scholarship	If financial support is needed stipends or other funding sources might be available at home universities or funding organizations (to be self organized)

Legal Issues

General	Participants need to confirm that they take responsibility for their own safety (form to sign will be provided in notification letter)
Insurance	Participants need to have their own health insurance that is valid in Austria (form to sign will be provided in notification letter)
Copyrights	Participants need to waive copyright in favor of Creative Commons Licence (CC0) for all work created during SOAK Biomimicry 2024 (form to sign will be provided in notification letter)
Model Release	Participants need to sign a model release form allowing the organizers of SOAK to use images of participants and their work in all media and in all kinds of materials (form to sign will be provided in notification letter)

Gear

- Outdoor clothing and shoes for any type of summer weather and hiking opportunity
- Protection against sun and insects (incl. ticks)
- Backpack
- Water bottle (reusable)
- Flash light (recommended)
- Binoculars (recommended)

Provisions

- Snacks that can easily be carried in the backpack
- Drinks (nonalcoholic)

Tools & Materials

- Personal sketch book (bound, white pages, no lines)
- Photo and film camera (mobile phone will suffice)
- Design tools and design materials (list will be provided)
- Special workshop materials to build creative models or prototypes: tchotchkes/small objects (list will be provided)

Accommodation & Travel & Meals**IMPORTANT**

All travel arrangements and accommodation need to be self-organized and paid by participants. Meals will also be paid by participants themselves.

Travel

Travel options to MCI can be found on the MCI-SOAK Webpage: www.mci4me.at/soak2024

Hotel/airbnb/B&B

Accommodation recommendations in the area can be found on the MCI-SOAK Webpage: www.mci4me.at/soak2024

Application & Registration

Maximum Number of Participants: 25

Application Deadline **31 March 2024**

- Who can apply**
- Students/alumni of all levels or employees from all Austrian Universities of Applied Sciences
 - Students/alumni of all levels or employees from the University of Applied Arts Vienna
 - Students/alumni of all levels or employees from other universities and tertiary educational institutions
- How to apply**
- STEP 1 Go to the SOAK 2024 webpage, complete the Application Form and submit the required application materials by **31 March 2024**.
- STEP 2 You will receive a notification letter to let you know whether or not you have been accepted to participate by **15 April 2024**.
- Important**
- In order to become a confirmed participant you must register (see STEP 3). **Attention:** The Biomimicry Immersion Week takes place during high season in the popular travel destination of Innsbruck. Be aware that timely arrangement of accommodation and travel may be critical.
- How to register**
- STEP 3 If you have been accepted follow the instructions for registration (provided in the notification letter), pay the **non-refundable registration fee of EUR 199.-** and submit legal forms and emergency contact at the latest by **29 April 2024**.
- If you miss this deadline your seat may be given to the next person on the waiting list.
- STEP 4 The completion of your registration will be confirmed by **27 May 2024** with a welcome letter and further details.

APPLY NOW



SOAK Biomimicry 2024 Team

Biomimicry Team

Lead, Biomimicry Expert

Regina Rowland, University of Applied Sciences Burgenland
Sustainability Officer, Professor for Innovation, Process Designer,
COOP Sustainable Universities Co-Chair

Co-Lead, Scientist at the Design Table

Daniel Bayer, National Park Lake Neusiedl—Seewinkel
National Park Ranger, Climate Ranger, Naturalist, Agricultural Scientist

Co-Lead, Artist at the Design Table

Elisabeth Kopf, University of Applied Arts Vienna/IPSD
Project and Communication Designer, Lecturer for International
Programmes in Sustainable Developments, UniNEtZ Member

Teaching Support Team

Zuzana Tončíková, Technical University Zvolen, Slovakia
Associate Professor of Design, Product Designer, Vice-Dean for
Development and International Relations

Marilena Tumler, FHV - Vorarlberg University of Applied Sciences
COOP Sustainable Universities Member

Magdalena Haidacher FHV - Vorarlberg University of Applied Sciences
COOP Sustainable Universities Member

Organization Team

SOAK Organizing Team Lead

Regina Obexer, MCI | The Entrepreneurial School®
Head, MCI Center for Responsible Management & Social Impact,
COOP Sustainable Universities Member

SOAK Organizing Team Support

Angelika Mikula, MCI | The Entrepreneurial School®
Senior Office Management, MCI Student & Career Center,
COOP Sustainable Universities Member

SOAK Organizing Team Support

Janine Prokesch, MCI | The Entrepreneurial School®
Assistance & Project Management, MCI Career & Student Center,
COOP Sustainable Universities Member

External Experts

Scientist at the Design Table

Timo Kopf, University of Innsbruck
Open Lands Zoologist, Environmental Researcher and Auditor

Environmental Lawyer

Liliana Dagostin, Österreichischer Alpenverein
Head, Department Spatial Planning and Nature Conservation

SOAK Biomimicry 2024 Organizers & Partner

Initiator

Cooperative (COOP) Sustainable Universities, Austria
www.nachhaltige-hochschulen.at



SOAK Lead

University of Applied Sciences Burgenland, Austria
www.fh-burgenland.at



Host & Organizer

MCI | The Entrepreneurial School®, Austria
www.mci.edu



Partner & Co-Organizer

University of Applied Arts Vienna, Austria
www.dieangewandte.at



Supporting Role

FHV - Vorarlberg University of Applied Sciences, Austria
www.fhv.at



Addresses, Contacts, Imprint

SOAK Biomimicry 2024

Web Addresses

COOP Sustainable Universities	www.nachhaltige-hochschulen.at/SOAK2024
MCI The Entrepreneurial School®	www.mci4me.at/soak2024
University of Applied Arts Vienna/ IPSD/Experimental Project Work	base.uni-ak.ac.at/courses/2024S/S04072/

Contacts

Administration & Logistics	Regina Obexer , SOAK Biomimicry 2024 Administrator Head, Center for Responsible Management & Social Impact MCI The Entrepreneurial School® Email: SOAK2024@mci.edu, Phone +43 512 2070 1922
Biomimicry Process & Academic Matters	Regina Rowland , SOAK Biomimicry 2024 Lead Sustainability Officer University of Applied Sciences Burgenland Email: Regina.Rowland@fh-burgenland.at, Mobile: +43 677 62004534
Art & Design Matters	Elisabeth Kopf , SOAK Biomimicry 2024 Co-Lead Artist at the Design Table, University of Applied Arts Vienna/IPSD Email: elisabeth.kopf@uni-ak.ac.at, Mobile: +43 676 3289657

Imprint

Content	Regina Rowland, University of Applied Sciences Burgenland Elisabeth Kopf, University of Applied Arts Vienna/IPSD
Photos	Page 1: MCI/D'Assissi Page 3, 5: Elisabeth Kopf Page 7: Th G from Pixabay / Luc Kopf / Conrad Amber Page 10: Julie-Kolibrie from Pixabay / MCI/Geisler / MCI/Geisler / Walteri Paulaharju from Pixabay / Elsemargriet from Pixabay / MCI/D'Assissi Page 11: all images Wikimedia Commons Page 17: all images Luc Kopf Page 18: Elisabeth Kopf Page 23: all images Conrad Amber
Communication Design	Elisabeth Kopf, Design Buero Baustelle
Webpages	MCI: Katja Tschenett (Senior Office Management & Student Support) COOP: Harald Wipfler (Board Member)



UN Agenda 2030

SOAK contributes to the Sustainable Development Goals (SDGs):



SOAK Biomimicry 2024 contributes to the Sustainable Development Goals (SDGs):



Sustainable Development Goals

sdgs.un.org

»Never doubt that a small group of thoughtful,
committed citizens can change the world.«

MARGARET MEAD, ANTHROPOLOGIST (1901-1978)