

# BIOMIMICRY EUROPE INNOVATION AND FINANCE SUMMIT

August 29–31, 2012  
Zurich, Switzerland

## BIOMIMICRY – THE BUSINESS LINK TO BIODIVERSITY

The Foundation for Global Sustainability (FFGS) in cooperation with swisscleantech, San Diego Zoo, Zurich Zoo, Biomimicry 3.8, Wyss Institute Harvard and Ethical Markets, are pleased to announce the **Biomimicry Europe Innovation and Finance Summit 2012** in Zurich/Switzerland.

Biodiversity serves vital functions for our living planet and creates value to the economy. It provides important environmental services, such as pollination for agriculture, worth billions. In addition, Biodiversity provides the economy with highly valuable insights in design, structures and organizational systems. During 3.8 billion years of evolution, nature has developed effective strategies and lasting solutions to the very problems that confound modern society.

Designs, products and systems inspired by nature's principles – called Biomimicry – are poised to be industry leaders in innovation, energy efficiency, radical resources productivity and



overall sustainability. There are numerous concrete examples in the market today – high speed train designs, photovoltaics, natural ventilation systems, architecture, urban planning, textiles, new adhesives, and more. Whether it is understood as an approach to producing sustainable products or a complete transformation of the way that humans view and interact with nature, **Biomimicry has the potential to be a key driver of economic growth and the transition into a more energy and resources efficient economy.**

To accelerate the concrete translation of bio-inspired technologies into commercial products and organizational change, appropriate **financing models** and metrics will have to be developed and implemented.

# SUMMIT HIGHLIGHTS

The **Biomimicry Europe Innovation and Finance Summit** offers the opportunity to learn about Biomimicry, to consider solutions nature can provide, and to discuss the latest commercialization platforms and financing instruments that will accelerate the path to market for bio-inspired innovation.

The Summit is organized by the not-for-profit Foundation **FFGS**, a Zurich-based **Think & Do** tank founded in 2007. The 3-day event is held in **Zurich**, according to many ratings, a city with a globally leading standard of living. It is held in the beautiful Zurich Zoo area, close to the lake and downtown area. Accommodation information is available for all foreign visitors.



## You should be there and experience:

- **A collaborative platform and lively knowhow exchange among the world's thought leaders in Biomimicry**
- **1,5-day Conference with focus on commercialization and financing of bio-inspired innovation**
- **1-day Workshop offering latest insights in Biomimicry, by Biomimicry Institute, Biomimicry.CH and Biomimicry Iberia**
- **Table exhibition in conjunction with speakers and activities**
- **Access and networking opportunities with key Biomimicry stakeholders – innovators, entrepreneurs, investors, and governmental representatives**
- **Special tour of Zurich Zoo and the Masoala Rainforest Hall, promoting Zoo's as natural hubs and drivers for Biomimicry**

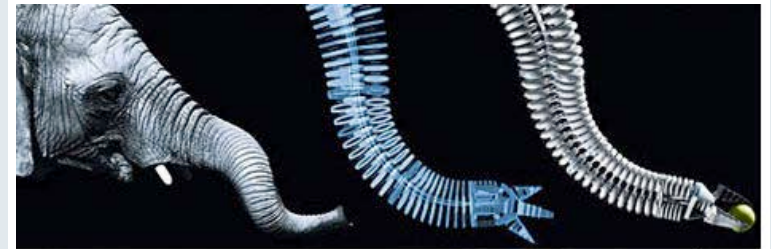
The Summit is organized in cooperation with the San Diego Zoo's Biomimicry Conference, which in 2011 included participants from Hallmark, IDEO, NASA, Procter and Gamble, Qualcomm, and more, and will take place again in San Diego in 2013.

# TABLE EXHIBITION

The Summit will feature a table exhibition in conjunction with speakers and activities. The exhibition will take place during the Conference days (Thursday all day, Friday morning). All sponsors and selected other exhibitors can showcase their activities, including biomimicry-related products and services to attendees. Tables, displays and prototypes will be located at the Conference area.

## The exhibitor package (included in all sponsorship packages) offers:

- Expo table for 1,5 days (Thursday all day, Friday morning) to be located at the Conference
- Profile listing in the Conference program (handed to all Conference attendees)
- Recognition on the Summit website
- Conference registration for 1 participant (with all meals and materials included)



## The expo hours are:

Thursday, August 30, 8:00 am - 6:30 pm (Set up at Conference location: 7:00 am)

Friday, August 31, 8:00 am – 12:30 pm (Close down: 12:30 pm)

# CORE PARTNERS



**Biomimicry 3.8** - The Biomimicry Institute was founded 2005 by Janine Benyus and Dayna Baumeister as a not-for-profit organization promoting the study and imitation of nature's remarkably efficient designs, bringing together scientists, engineers, architects and innovators who use those models to create sustainable technologies. The Biomimicry Institute's mission is to nurture and grow a global community of people who are learning from, emulating, and conserving life's genius to create a healthier, more sustainable planet. The institute offers short-term workshops and two-year certificate courses in biomimicry for professionals, and helps to develop and share biomimicry-related curricula used in a range of educational venues, from K-12 classrooms to universities, as well as in non-formal settings such as zoos and museums.  
[www.biomimicryinstitute.org](http://www.biomimicryinstitute.org)



**The Wyss Institute** for Biologically Inspired Engineering at Harvard University uses nature's design principles to develop bio-inspired materials and devices that will transform medicine and create a more sustainable world. The Wyss Institute crosses disciplinary and institutional barriers to engage in high-risk research that leads to transformative technological breakthroughs. These technologies are translated into commercial products and therapies through collaboration with clinical investigators, corporate alliances, and new start-ups.  
[wyss.harvard.edu](http://wyss.harvard.edu)



**Ethical Markets** - With over 40 years of foresight, insight and integrity in our leadership, Ethical Markets Media works to reform markets and metrics to grow the green economy worldwide. We provide news and perspective with the Green Transition Scoreboard®, the Transforming Finance initiative, research on Beyond GDP, finding strong support worldwide for ESG metrics in national accounting, and with reports, articles, newsletters and analysis by Hazel Henderson, our editor-in-chief, on EthicalMarkets.com. We focus on systems thinking and best practices to raise global standards. Ethicalmarkets.tv streams original Ethical Markets productions and video gathered from around the world.  
[www.ethicalmarkets.com](http://www.ethicalmarkets.com)

**The Zurich Zoo** is a cultural institution in Zurich, acting as the ambassador between human beings, animals and nature. The Zoo's mission is to engage and educate a wide range of visitors and stakeholders in order to protect natural habitats, support sustainability and biodiversity, according to the slogan "knowing animals leads to protecting them". As one of the world's most respected Zoo's Zurich is building a global network to further drive its mission. One result in 2012 is the Biomimicry Innovation and Finance Summit held for the first time at the Zurich Zoo in Switzerland, as a partner event to the San Diego Zoo Biomimicry Conference.  
[www.zoo.ch](http://www.zoo.ch)



**The San Diego Zoo** aims to become a key center in the biomimicry movement. The Zoo is collaborating with regional, national and global organizations to build San Diego into a global hub for biomimicry education, awareness, research, and application. Every year the educational staff reaches more than 300'000 students, building on a base of 4000 animals representing 840 species, and 40'000 plant species. In 2011 the San Diego Zoo realized the fourth Biomimicry Conference.  
[www.sandiegozoo.org/biomimicry](http://www.sandiegozoo.org/biomimicry)



**swisscleantech** is the leading swiss business association promoting a sustainable market economy. Its main targets are to position Switzerland as a cleantech leader and foster sustainable development on a global level. swisscleantech bundles the interests of 300+ member companies (startups, SMEs, multinationals). In 2010 swisscleantech co-founded the Global Cleantech Cluster Association/GCCA, today representing 36 Cleantech clusters from Europe, North America and Asia. In 2011 swisscleantech had a major impact on the adaption of the Swiss CO2 Law as well as the country's decision to exit from nuclear. swisscleantech looks at Biomimicry as the business link to Biodiversity. Biomimicry.CH was initiated in 2012 to support and accelerate the development of biomimicry research, educational programs, funding mechanisms and commercialization frameworks in Switzerland.  
[www.swisscleantech.ch](http://www.swisscleantech.ch)

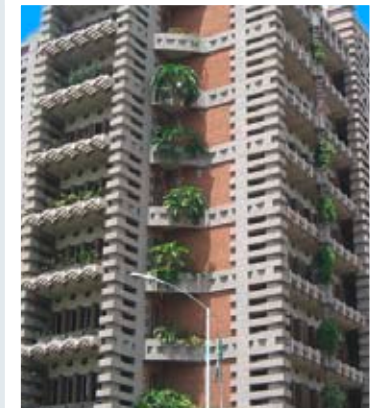




# PROGRAM OVERVIEW

	WEDNESDAY AUGUST 29	THURSDAY AUGUST 30	FRIDAY AUGUST 31
MORNING	<b>Swiss Backyard Workshop:</b> Basics and latest insights in Biomimicry, by Biomimicry 3.8 Group	<b>Conference Session 1:</b> Business Opportunities in Biomimicry	<b>Conference, Session 3:</b> Latest Funding Instruments
LUNCH		Networking	Networking
AFTERNOON			<b>Conference, Session 2:</b> Applied Biomimicry Transfer, Case Studies
EVENING	Welcome Apéro and Dinner	Dinner Reception, Zoo Tour Masoala Rainforest	

 Table Exhibition



# WORKSHOP PROGRAM

**Wednesday, August 29 2012**

## **Workshop**

### **Swiss Backyard Workshop -Basics and latest insights in Biomimicry**

Biomimicry 3.8 Group

Facilitator: Dayna Baumeister, Theresa Millard, Jacques Chirazi

8:00	Registration
9:15	<b>Welcome to Zurich and Swiss Biomimicry Workshop</b> Nick Beglinger
9:25	<b>Swiss Backyard Workshop, Part 1</b> Biomimicry 3.8 Group, Dayna Baumeister, Theresa Millard, Jacques Chirazi
12:30	Networking Lunch
13:30	<b>Swiss Backyard Workshop, Part 2</b> Biomimicry 3.8 Group, Dayna Baumeister, Theresa Millard, Jacques Chirazi
17:00	<b>Closing remarks</b> Nick Beglinger
17:30	Welcome Apéro and Dinner

Through classroom and small group work, you will be introduced to the rules and latest insights for well-adapted design as developed over the last 3.8 billion years called Life's Principles as well as the process for integrating biology into any design challenge.

# CONFERENCE PROGRAM

**Thursday, August 30 2012**

## Session 1

### Business Opportunities in Biomimicry

Host: Nick Beglinger

Co-Moderator: Jacques Chirazi

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8:00	Registration
9:15	<b>Welcome to Zurich and Biomimicry Europe Innovation and Finance Summit 2012</b> Nick Beglinger and all Core Partners
9:30	Keynote: <b>The Swiss Biodiversity Strategy - a driver for Biomimicry innovation and funding?</b> Bruno Oberle, Director of the Federal Office for the Environment (tbc)
10:00	Keynote: <b>What else could nature teach us? Growing the next generation of sustainability leaders</b> Dayna Baumeister, Biomimicry 3.8 Group, Co-founder
10:45	Break
11:10	Keynote: <b>The path to market - Learnings from the <math>\mu</math>Mist® platform technology</b> Andrew Copestake, Swedish Biomimetics 3000, CEO
11:40	Panel 1: <b>The Wyss Institute at Harvard - Role Model translating bio-inspired high risk research into commercial products</b> Moderator: Mary Tolikas, Wyss Institute Harvard, Director of Operations
13:00	Networking Lunch Expo

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## Session 2

### Applied Biomimicry Transfer: Case Studies and Nature Conservation

Co-Moderators: Christian Häuselmann, Alain Schilli

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14:15	Keynote: <b>The role of conservation organizations in the field of bio-inspired innovation</b> Paula Brock, Helen Cheng, San Diego Zoo
15:00	Keynote: <b>Organizational Biomimicry - what conflict and change managers learn from nature</b> Samuel Furrer, Curator Zurich Zoo
15:30	Break
16:20	Panel 2: <b>Translation of discovery - models &amp; platforms</b> Moderator: Alain Schilli, Gaia Global SA  Input Keynote: <b>Success factors of the Swiss Commission for Technology and Innovation/CTI</b> Walter Steinlin, CTI President
17:45	TED-Talk: <b>How can architects build a new world of sustainable beauty?</b> Michael Pawlyn, Exploration Architecture 3000, Director
18:15	Break
19:15	Dinner Reception, <b>with Zoo Tour Masoala Rainforest</b>

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# CONFERENCE PROGRAM

**Friday, August 31 2012**

## **Session 3**

### **Latest Biomimicry Funding Instruments**

Co-Moderators: Nick Beglinger, Jacques Chirazi

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7:30	Breakfast, Roundtables
8:30	<b>Welcome back and opening remarks</b> Nick Beglinger
8:40	Keynote: <b>A new world order - sustainable consequences for our economy, technology and policy</b> Burkhard Varnholt, Bank Sarasin, Chief Investment Officer
9:10	Keynote: <b>Launching the first Ethical Biomimicry Fund; Green Transition Scoreboard(R)reports; Transforming Finance Initiative</b> Hazel Henderson, Ethical Markets, Founder
9:40	Keynote: <b>NYSERDA's Biomimicry program, collaboration potentials (NYSERDA/New York State Energy Research and Development Authority)</b> Chris Garvin, Terrapin Bright Green (tbc)
10:10	<b>Introduction for working groups</b> Nick Beglinger
10:15	Break
10:30	<b>Working Groups</b> Parallel working groups <b>Discuss challenges, benefit on sustainability, and latest solutions for Biomimicry funding instruments</b> Moderated by Core Partners
11:45	<b>Plenary closing session</b> Short presentations of group results, closing inputs for the Conference
12:45	<b>Closing remarks</b> , preview Biomimicry Conference 2013, San Diego

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# KEYNOTE-SPEAKERS



## **Chris Allen**

Biomimicry 3.8 Group, Missoula/Montana, CEO

Chris is the CEO of The Biomimicry Group, Biomimicry Guild + Institute. He was among the fifteen graduates of the first cohort of the Biomimicry Institute's two-year professional program. Trained in International Business at the McCombs School of Business at the University of Texas (1985), Chris has over twenty years experience providing strategy and management consulting services related to sustainable development for a variety of private sector clients as well as the US Department of Energy, the National Center for Appropriate Technology, the Northwest Area Foundation, and the United Nations Man and Biosphere Program. His international experience includes work and studies in Europe, Southeast Asia, and Mexico and he serves on the Board of Directors of A World Institute for Sustainable Humanity.



## **Paula Brock**

San Diego Zoo Global, San Diego/California, CFO



## **Dayna Baumeister**

Biomimicry 3.8 Group, Missoula/Montana, Co-founder

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 Janine Benyus since 1998 as a business catalyst, educator, researcher, and design consultant. Together they founded the Biomimicry Guild, The Biomimicry Institute, and Biomimicry 3.8, collectively fertilizing the movement of biomimicry as an innovative practice and philosophy to meet the world's sustainability challenges. Dayna designed and teaches the world's first Biomimicry Professional Certification Program and compiled over a decade of experience in biomimicry into the Biomimicry Resource Handbook: A Seed Bank of Knowledge and Best Practices (2011).



## **Andrew Copestake**

Swedish Biomimetics 3000, Stockholm/Sweden, Founder and CEO

Entrepreneurial, commercially focused, senior executive with 20 years experience in pharmaceutical and technology innovation research and development fields, including 14 years in supervisory and senior management positions in various high technology research sectors. Worked at all levels from academic research to Chief Executive, including significant international experience as well as experience of Board-level engagement and fund raising. Specialist in pharmaceutical industry commercial activities, business development, partnering and product development with particular interest and knowledge of clinical development Phases I-IV and technologies/methodologies used to improve R&D productivity.

# KEYNOTE-SPEAKERS



## Samuel Furrer

Zoo Zurich, Curator

Since 1999 Samuel Furrer is curator for reptiles, amphibians and fish at the Zoo Zurich, and also teaches seminars to deal with snake and spider phobias. Since 2009 he developed and realizes bionic seminars together with psychologist André Angstmann, for example in conflict and change management. Samuel Furrer holds a PhD from the University of Zurich.



## Hazel Henderson

Ethical Markets, St. Augustine/Florida, Founder

Hazel Henderson, D.Sc.Hon., FRSA, is a futurist, evolutionary economist and author of nine books including the Axiom and Nautilus award-winning book *Ethical Markets: Growing the Green Economy* (2006). The founder of Ethical Markets Media, LLC, and creator of its TV series, her editorials are syndicated by InterPress Service, with articles appearing in journals such as *Harvard Business Review*, *New York Times*, *Christian Science Monitor* and many international ones. She leads the Transforming Finance initiative, created the Green Transition Scoreboard®, co-developed the GDP alternative the Calvert-Henderson Quality of Life Indicators and co-organized the Beyond GDP conference for the European Commission, funding two Beyond GDP surveys, finding strong support worldwide for ESG metrics in national accounting, now tracked by the OECD. She is an Honorary Member of the Club of Rome and shared the 1996 Global Citizen Award with Nobelist A. Perez Esquivel of Argentina.



## Michael Pawlyn

Exploration Architecture, London/UK, Director

Michael Pawlyn established Exploration in 2007 to focus exclusively on biomimicry. In 2008 Exploration was short-listed for the Young Architect of the Year Award and the internationally renowned Buckminster Fuller Challenge. Prior to setting up the company Michael Pawlyn worked with Grimshaw for ten years and was central to the team that radically re-invented horticultural architecture for the Eden Project. He was responsible for leading the design of the Warm Temperate and Humid Tropics Biomes and the subsequent phases that included proposals for a third Biome for plants from dry tropical regions. He initiated and developed the Grimshaw environmental management system. In 2011, he became one of only a small handful of architects to have a talk posted on TED.com.



## Lynn Reaser

Chief Economist, Fermanian Business & Economic Institute/FBEI, Point Loma Nazarene University, San Diego/California

The FBEI Institute engages in economic analysis, modeling, and forecasting with practical and actionable recommendations for corporations, non-profit organizations, and government agencies. From 1999 to 2009, Dr. Reaser served as the Chief Economist for the Bank of America Investment Strategies Group. She provided the global and U.S. economic framework for investment strategy for high net-worth, institutional, and brokerage clients, encompassing over \$500 billion under management. She also previously served as Barnett Bank's and First Interstate Bank's (Wells Fargo Corporation) Chief Economist. Dr. Reaser is active in many professional organizations, including serving as immediate past President of the National Association for Business

# KEYNOTE-SPEAKERS

Economics (NABE), an association comprising 2300 of the nation's leading economists in business, academia, and government. In 2010 she published the economic impact study Global Biomimicry Efforts: An Economic Game Changer, commissioned by the San Diego Zoo Global.



## Walter Steinlin

President of the Swiss Confederation's Commission for Technology and Innovation (CTI), Berne/Switzerland

Walter Steinlin works part time for Swisscom, managing Institutional Relations, and part time as President of CTI, the Swiss Innovation Promotion Agency. He graduated as Electronics Engineer from ETH Zürich in 1977 and is an alumnus of the INSEAD Executive Education Program. He worked at Hasler Research (now Ascom), and in different positions with Swisscom, heading "Swisscom Innovations" for twelve years. Walter was active in international telecommunications standardization (ITU, ETSI) until 1996. From 2005-2007 he was President of EIRMA (European Industrial Research Management Institute). He participates on the boards of several organisations, such as the Committee on Research and Education of *economiesuisse*, the Advisory Board of I&C School at EPFL, on the founders' board of IDIAP and EURECOM and as President of the Board of iimt (International Institute of Management in Technology) in Fribourg.



## Mary Tolikas

The Wyss Institute for Biologically Inspired Engineering, Harvard/Boston, Director of Operations

Mary Tolikas is responsible for the implementation and management of the research and program development operations of the Wyss Institute. Mary brings experience in start-up operations, product development,

strategic planning and business development in a number of technology markets and applications, including software, electromechanical devices, biological and electromagnetic modeling. As an engineer, she has designed and built products for a number of diverse customers, such as the U.S. Navy, Carrier Corp. and General Motors. She is the Co-Chair of the Women in Medicine Committee at Children's Hospital Boston and a member of the Hospital's Circle of Care. In addition she is a Fellow of the Emerging Leaders Program 2005 at the Center for Collaborative Leadership, University of Massachusetts.



## Burkhard Varnholt

Bank Sarasin, Basel/Switzerland, Head of the Asset Management, Products & Sales Division, Chief Investment Officer (CIO)

Prior to joining Bank Sarasin, Burkhard Varnholt spent 10 years with Credit Suisse where he was a member of the Global Executive Council. He previously held various investment banking positions with Morgan Stanley in London. Varnholt, who continues to lecture regularly at the Executive MBA Program at the University of St. Gallen, also had a distinguished academic career, teaching at the University of St Gallen, the Massachusetts Institute of Technology (MIT) and the Stern School of Business at New York University. He has published more than 100 articles and five books. A keen art lover and collector, Varnholt served as a Member of the Acquisition Committee of the Tate Modern in London. Beginning with charitable initiatives in 1999, in 2004 he established the charity «Kids of Africa - The Swiss African Orphanage» ([www.kids-of-africa.com](http://www.kids-of-africa.com)). In 2006 he was awarded the Swiss Re Milizpreis/Civilian Service Prize in recognition of his achievements.

# SPONSORSHIP OPPORTUNITIES

	PRESENTING SPONSOR	PREMIER SPONSOR	DIAMOND SPONSOR	GOLD SPONSOR	SILVER SPONSOR	EXHIBITOR
	1	3	4	5	6	20
	50'000 CHF	30'000 CHF	20'000 CHF	10'000 CHF	5'000 CHF	1'500 CHF
<b>Price for swisscleantech members</b>	40'000 CHF	24'000 CHF	16'000 CHF	8'000 CHF	4'000 CHF	1'000 CHF
1 Recognition as Presenting Sponsor at the pre-conference receptions and all events of the Biomimicry Innovation and Finance Summit, 2012 Zurich	x					
2 Recognition in all associated public relations efforts (i.e. press releases, media alerts etc.)	x	x	x	x	x	
3 Recognition and logo placement throughout Summit, on the Summit landing web-pages (Zurich Zoo, San Diego Zoo, swisscleantech), and in upcoming articles on the Summit	x	x	x	x	x	
4 Full/Half page ad including logo placement in Summit program	Full	Full	Full	Half		
5 Reserved Expo table booth	Priority	Priority	Priority	Priority	Priority	x
6 Conference registration for .. participants	7	4	3	2	2	1
7 Workshop registration for .. people to «Swiss Backyard Workshop» with Dayna Baumeister, Biomimicry Institute	4	3	2	1		
8 Opportunity to introduce keynote speakers	x	x	x			
9 Keynote address at .. (August 30, 2012)	Conference Dinner (5')	Conference Lunch (2')				

# CONTACT

## Register now on [www.ffgs.org](http://www.ffgs.org)

and choose from the following Summit packages:

PACKAGE I: Workshop and Conference (29.-31. August)

Price CHF 1'150.- / swisscleantech member: 980.- / Students\*: 360.-

PACKAGE II: Workshop only (29. August)

Price CHF 580.- / swisscleantech member: 490.- / Students\*: 160.-

PACKAGE III: Conference only (30.-31. August)

Price CHF 780.- / swisscleantech member: 650.- / Students\*: 240.-

\*limited availability

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## Nick Beglinger

Summit Chair,  
FFGS CEO



## Jacques Chirazi

Summit Program Manager,  
swisscleantech



## Christian Häuselmann

Summit Program Manager,  
swisscleantech Co-founder



## Alain Schilli

Summit Partners Outreach,  
Gaia Global SA, CEO