

## **Prof. Dr. Jill Scott**

**Institute of Cultural Studies in Art, Media and Design,  
Academy of Art and Design. Zurich, Switzerland**

1. OVERVIEW: The AIL project: exploring interface between art and Science i in the lab context.
2. New Innovative potentials: in engineering and computing, physics and natural sciences:
3. Ongoing projects from the AIL project: Z-Node and „Women in Science“

## Artists-in-Labs (AIL) HISTORY:

**1. Feasibility Study:** (50 responses Labs in Switzerland )

**2. Securing the interest (financial) of 9 Labs:**

a) Natural Sciences

Geobotanical Institute, ETH, Zürich

Centre for Biosafety and Sustainability, Basel

Center for Microscopy, University Basel Pharmacentre, Basel

b) Physics

Paul Scherer Institute, Villingen

Museum of Transport, Planetarium

b) Technological Sciences

CSEM, Centre Suisse d'Electronique et Microtechnique

Department of Computer Science, ETH, Zürich

AI-Lab ifi, Institute for computer Science, Universität Zürich

Institute for Computational Science, ETH, Zürich

**3. Web Site for Artists.** <http://www.artistsinlabs.ch>

**350 Artists**

Supply and demand -Competition-210 April-34 countries

## ***AIMS of the AIL Project***

1. Public Access-Could artists help link for Science to the public?  
improve communications between the scientists?  
accurately address ethical or social issues in research?
2. Process and Methodology: Could the lab context-improve the know-how transfer between Artist and the Scientist?  
open up communication between the lab members and encourage clearer levels of discourse?.
3. Collaborations: Could this lead to the development of more "true" Art-Science collaborations?  
the creation of new tools and innovative approaches.

Results of Competition

Adrienne Wortzel (USA), Robotic Theatre.

Margarete Jahrman (A) / Max Moswitzer (A), GoApe Bot-Intelligence and Gaming.

Shirley Soh (Singapur), Food for Thought.

Margaret Tan (Singapur) Smart Apron.

Tiffany Holmes (USA), Floating Point.

Thomas Isler (Schweiz,) Vietnam Connection.

Axel Vogelsang (UK), Augmented Fairy Tale.

Dominik Bastianello (Schweiz), Il mondo secondo.

Nigel Helyer (UK/Australien), Paul Scherrer Institute (PSI)

Villigen. Projekttitle: I.D.E.A.S. Interactive Digital Environmental Audio Systems.

Andrew Quinn (Italien/Australien)

Clea T. Waite (Deutschland/USA), Moon Walk.

N.S. Harsha (Indien), Room for Degression.

Isabel Rohner (Schweiz), Wounds – or the Search of a Cybernetic System.

## **Building Bridges-The AIL Project** **14 Artists in 9 Swiss Science Labs**

### **SCIENTISTS diciplines**

**BIOMEMETIC ROBOICS**  
**ARTIFICIALINTELIGENCE**  
**COMPUTATIONAL SCIENCE**  
**INFORMATION SCIENCE**  
**MICRO/NANOTECHNOLOGY**  
**PHARMACY-ECOLOGY**  
**GEOBOTANICS-BIOSAFTY**  
**PARTICAL PHYSICS**  
**ENERGY ENGINEERNG**  
**ELECTRON MICROSCOPY**  
**NANOWORLDS**  
**ASTRONOMY**  
**ASTRO-PHYSICS**

### **ARTISTS diciplines**

**ROBOTIC THEATRE**  
**MEDIATED BOT INTELLIGENCE**  
**VISUALIZATION**  
**HUMAN MACHINE INTERFACE**  
**WEARABLE COMPUTING**  
**LIVING SCULPTURE**  
**DOCUMENTARY FILM**  
**VIDEO ART**  
**SOUND ART**  
**CONCEPTUAL ART**  
**PERFORMANCE/SCULPTURE**  
**EDITING AND COMPOSITING**  
**COMPUTER ANIMATION**

# A.I.L. project

ArtistsInLabs-Switzerland



Isabelle Rohner. Cybernetic Systems



Dominik Bastinello Where in the world am I



Nigel Helyer. Therom



Margaret Tan. Wearable Apron



Axel Vogelsang. Straight lines and curves

# A.I.L. project

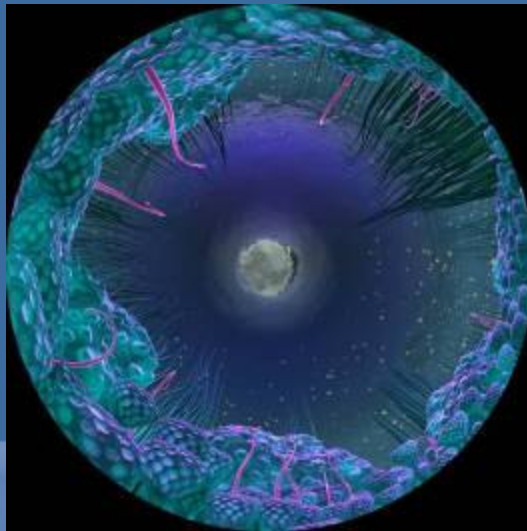
ArtistsInLabs-Switzerland



Shirly Soh. The writing is on the wall



Thomas Isler. Genetics in Vietnam



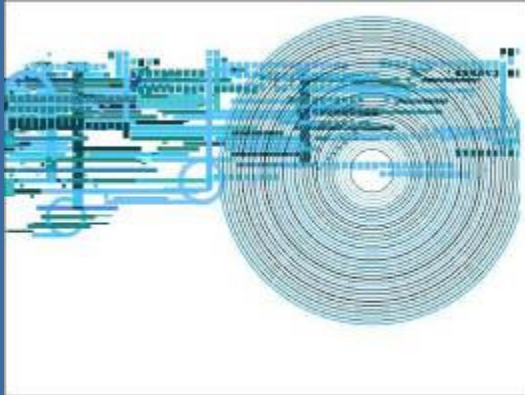
Andrew Quinn. Moonlight.



Harsha NS. MicroCow

# A.I.L. project

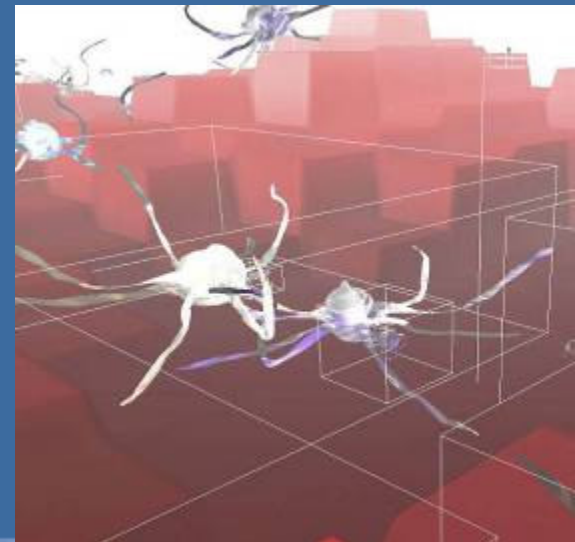
ArtistsInLabs-Switzerland



Tiffany Holmes. Floating Point



Adrainne Wortzel. Darwin at the AI Lab



Margarette Jahrman. Simulation Platform

1. Public Access was improved:

*Scientist felt that the results made a difference-exhibitions -press-conferences helped.*

2. Comparisons of Processes and Methodologies helped to:

*Encourage conceptual and social discourse.*

*Shift both the scientists and artists perspectives about their own practice*

*Expand the Know-how transfer between artists and Scientists*

*Raise more questions about the relationship between the skills, methods and processes of art and design and those of science.*

3. Potentials for collaboration resulted in:

*New Recommendations*

*-scientist work with the artist right from the beginning*

*-a longer period of time for the Artist to be "in Resident"*

*Collaborative innovation*

*Actual product development.*

Collaborative Innovation potentials:.

**The Artists who worked on a specific scientific research project relevant to a very specific research project in the lab were more integrated=higher level of innovation.**

**The artists who commented on the research in the lab were encouraged by the leaders of the lab**

**Artists contributed more to innovative potentials if they took on the task of learning seriously (scientific terminology etc)**

**Future recommendations-**

**Scientists must choose a theme of research, which they specifically look for an artist to accompany their project (labs in computer science**

**An artist and a scientist must apply together for a specific project and true collaboration (lab in natural / life sciences)**

.

▪

# A.I.L. project

## ArtistsInLabs-Switzerland

Pure Innovation: Influenced by interest of the artist and by the type of scientific research and the levels of knowledge transfer.

Our Case: artist considered to be “the soft factor” of Innovation.

a) Natural Science

( Interpretation) Artists as a commentator=innovative angle (ethics)

(Manipulation) Life as a raw material=novel combinations

b) Physics

(Illustration) Artists who illustrate research=public science education

(Re-application) Artists using physics components as art=new approach

b) Technological Sciences

(Development) Artists as part of the research team=encourages new tools and new applications.

(Communication) Artists as a catalyst for social impact=shared tools

*Pure Innovation?*

*Development of tools,  
Result: the AIL Encouraged innovation Potentials*

CSEM "Margaret is using the fall detector for her artwork. This invention is a copyrighted piece of hard ware and software from our company and it has found a new purpose"

AI LAB "The project "GoAPE" will continue to be developed by us, in our lab because of further funding from the Swiss Ministry for Culture. ( inc. wages for scientists to work on the project)".

GLOBUS "We would like to offer this same platform to other artists to see what they would like to make with it. The tool and the project turned into an authoring tool for interactive narrative."

**The AIL project has evolved into Z-node  
-integral part of the Planetary Collegium (Grad  
Program-University of Plymouth).**

**AIMS OF Z\_NODE-10 PHD art and science researchers.**

- To explore the relationship between design, art, science and technology
- To search for a comparisons of processes and technical methodologies and philosophies which might encourage collaboration
- To focus on critical, social and ethical discourses in relation to scientific research, trans-disciplinary practice, sustainability, learning and cultural difference.

## **RESEARCH FELLOWS (ACTUAL)**

**NADIA GISLER ( Designer/Artist) Academy of Art Zurich.  
Cognitive Science: learning and Memory**

**TIFFANY HOLMES (media artist) School of the Art Institute, Chicago.  
Environmental Science: Water**

**KIRSTEN JOHANNSEN (Media Artist) Independent Berliner.  
Astrophysics:Human sustainability**

**JURGEN MORITZ (Austrian Designer/Artist)Chang Mai University.  
Thailand.  
Nanotechnology: biology and sports**

**TREBOR SCHOLTZ (German/USA Media Artist)  
Assistant professor: SUNY Buffalo. New York.  
Sociology and computer Science: on-line Collaboration**

**LOUIS PHILLIP DEMERES (Canadian Robotic-Theatre Artist)**

**University of Singapore**

**Artificial Intelligence: robotics**

**MARIA MABITI (Swiss Filmmaker)(School of Art. Bern)**

**Anthropology: evolution**

**NEW RESEARCH FELLOWS:**

**HUNG KEUNG (Media Artist) Hong Kong Polytechnic (Computer Science)**

**VALERIE ANN BURGMANN (Electronic artist. Colombia) (Electronics)**

**TIM OTTO ROTH (Media Artist) Researcher-ZKM Karlsruhe (Computer Science)**

**BRANDON BALLANGEE (Environmental artist). Natural History Mus. N.Y.  
( Environmental Science-global warming)**

**ANDREAS SCHIFFLER (Physics and media) Apwares.com. Canada  
(Particle Physics)**

**KARMAN FRANINOVIC (Architect) Zero-Th Split Croatia (Cognitive Science)**

**HONOR HARGER (Sound Artist) Director A6 Festival UK(Radio astronomy)**

**Prof. Dr. Jill Scott**

[www.jillscott.org](http://www.jillscott.org)

[www.artistsinlabs.ch](http://www.artistsinlabs.ch)

[www.e-skin.ch](http://www.e-skin.ch)