SystemsX.ch
Project Overview
2nd Generation Projects
from 2012 onwards
SystemsX.ch: Project categories

Medical Research and Development (MRD) Projects
... are large-scale projects in which systems biology approaches are specifically applied to medically or clinically relevant topics. These projects involve a number of interdisciplinary research groups working in at least two different partner institutions.

Project duration: 3 years
Funds*: approximately CHF 18 million

Research, Technology and Development (RTD) Projects
... focus on quantitative biology, integrating a number of different scientific approaches including the most recent developments in theory and modeling. At least two partner institutions and several research groups representing complementary fields contribute to these large-scale projects. SyBiT, SystemsX.ch’s bioinformatics project, supports as a central service the initiative’s RTD Project groups in coping with their flood of digital data.

Project duration: 4 years
Funds*: approximately CHF 150 million

Transfer Projects (TF)
... are collaborations between research groups working in the academic and private sectors (industry, SMEs, hospitals, etc.). The aim of these projects is to promote knowledge transfer between academia and private institutions and to strengthen applied research in systems biology.

Project duration: 2 years, with optional one-year extension
Funds*: approximately CHF 3 million

Transition Postdoc Fellowships (TPdf)
... are aimed at expanding young scientists’ basic knowledge in systems biology. Having completed their doctorates, emerging researchers switch to a new area or discipline in order to implement innovative ideas at the interface between classically separate fields.

Project duration: 2 years, with optional one-year extension
Funds*: approximately CHF 10.5 million

Interdisciplinary PhD Projects (IPhD)
... serve the purpose of training and encouraging future systems biologists. The main focus of these PhD positions is on collaboration between two different disciplines relevant to systems biology. The young scientists are therefore jointly supervised by two advisors working in different fields.

Project duration: 3 years, with optional one-year extension
Funds*: approximately CHF 18 million

Special Opportunities Fund (SpecOpp)
... promotes projects which do not qualify for other types of funding, but which have the potential to contribute significantly to systems biology research in Switzerland. Thanks to this fund, SystemsX.ch can flexibly support new projects, as well as co-finance novel technologies required for existing projects.

Funds*: approximately CHF 1.6 million

* Represents the total investment sum in this category (2008–2016).
Research, Technology and Development (RTD) Projects

**AgingX**
Systems Genetics
Approach to the Biology of Aging

Principal investigator
Prof. Bart Deplancke
Laboratory of Systems Biology and Genetics
EPF Lausanne
bart.deplancke@epfl.ch

Partners
EPFL, UniL

Scientific fields
• Biology of aging
• Genetic and phenotypic variation
• Systems genetics
• Regulatory genomics
• Metabolism

Technologies
High-throughput sequencing, metabolomics, statistical genetics, network modeling

Approved 2013

**HostPathX**
Modeling and Manipulating the Phagocyte-Mycobacteria Interface

Principal investigator
Prof. Thierry Soldati
Department of Biochemistry
University of Geneva
thierry.soldati@unige.ch

Partners
UniGE, UZH, TU Darmstadt, SIB

Scientific fields
• Host-pathogen interactions
• Metabolism
• Bacterial virulence
• Innate immunity
• Engineering
• Anti-infection drugs

Technologies
Infection monitoring, live cell microscopy, molecular genetics, high-throughput dual RNA-sequencing, bioinformatics, mathematics and modeling, small compound screening, model systems

Approved 2013

**MalariaX**
Systems Medicine of Malaria

Principal investigator
Prof. Vassily Hatzimanikatis
Laboratory of Computational Systems
EPF Lausanne
vassily.hatzimanikatis@epfl.ch

Partners
EPFL, UniGE, UnIBE

Scientific fields
• Engineering
• Medical microbiology
• Malaria
• Metabolomics
• Molecular parasitology
• Cell biology

Technologies
Mathematics and modeling, live and intravital microscopy, 3D cell culture, LC-MS/MS

Approved 2013

**MERIC**
Mechanisms of Evasive Resistance in Cancer

Principal investigator
Prof. Niko Beerenwinkel
Department of Biosystems Science and Engineering
ETH Zurich
niko.beerenwinkel@bsse.ethz.ch

Partners
ETHZ, UniBas

Scientific fields
• Hepatocellular carcinoma
• Signaling pathways
• Liver cancer
• Genetic tumor
• Progression
• Genomics
• Phosphoproteomics

Technologies
Mathematics and modeling

Approved 2013

**MicroScapeX**
Design and Systems Biology of Functional Microbial Landscapes

Principal investigator
Prof. Jan Roelof van der Meer
Department of Fundamental Microbiology
University of Lausanne
janroelof.vandermeer@unil.ch

Partners
UnIL, EPFL, ETHZ, CHUV

Scientific fields
• Experimental microbiology
• Environmental sciences
• Medical microbiology
• Synthetic ecology
• Bioremediation
• Metabolomics

Technologies
Experimental ecology, mathematics and modeling, genomics

Approved 2013

**MorphogenetIX**
Modeling the 3-Dimensional Shaping of Tissue Systems

Principal investigator
Prof. Damian Brunner
Institute of Molecular Life Sciences
University of Zurich
damian.brunner@ims.bio.unizh.ch

Partners
UZH, UniBas, MPI Cologne

Scientific fields
• Embryology
• Cell-to-cell variability
• Intestinal organoids
• Wing imaginal discs
• Embryonic dorsal closure
• Cell biology

Technologies
Experimental biology, mathematics and modeling, 3D tissue morphogenesis, cell-to-cell variability, 3D live fluorescence imaging

Approved 2013

**SignalIX**
Model-Driven Experimental Design of TOR Signaling

Principal investigator
Prof. Uwe Sauer
Institute of Molecular Systems Biology
ETH Zurich
sauer@imsb.bioc.ethz.ch

Partners
ETHZ, UniGE

Scientific fields
• Engineering
• Cell signaling
• Proteomics
• Metabolomics

Technologies
Mathematics and modeling, computational biochemistry

Approved 2013

**TargetInfectIX**
Multi-ProXed Perturbation of Pathogen Infection in Human Cells

Principal investigator
Prof. Christoph Dehio
Biozentrum
University of Basel
christoph.dehio@unibas.ch

Partners
UniBas, ETHZ, UZH

Scientific fields
• RNA interference
• mRNA
• Bacterial infection
• Signaling pathway reconstruction
• Anti-infectives
• Cell biology

Technologies
Cell biology, computational biology, genomics, mathematics and modeling

Approved 2013
Transfer Projects (TF)

Foes or friends? Reprogramming tumor-associated macrophages to fight cancer by targeted signaling network modulation

Collaboration between
Prof. Bernd Bodenmiller
University of Zurich and
F. Hoffmann – La Roche Ltd.

Scientific fields, keywords
- Medicine
- Tumor associated
- Macrophages
- Single cell analysis
- Reprogramming
- Drug screening
- Signaling network analysis

Approved 2013

In vivo endoscopic fluorescence imaging in the dopamine system of the healthy and diseased brain

Collaboration between
Prof. Fritjof Helmchen
University of Zurich and
F. Hoffmann – La Roche Ltd.

Scientific fields, keywords
- Fluorescence imaging
- 2-Photon microscopy
- Calcium indicator
- Neocortex
- Striatum
- Dopamine

Approved 2012

Mechanisms of cancer drug resistance

Collaboration between
Dr. Matthias Gstaiger
ETH Zurich and
Novartis Pharma AG

Scientific fields, keywords
- Drug resistance
- Biomarker
- Personalized medicine
- Mass spectrometry
- Proteomics
- Cancer therapy
- PSK signaling

Approved 2012

EvolutionX – analyzing evolution of adaptation to a novel siderophore antibiotic in gram-negative bacteria by next generation sequencing

Collaboration between
Dr. Marc Creus
University of Basel and
Basilea Pharmaceutica International Ltd.

Scientific fields, keywords
- Genomics
- Transgenomics
- Laboratory evolution
- Next generation sequencing
- Antibiotics
- Antibiotic resistance

Approved 2012

Multi-modal assessment of mutated predictors BRAF and DDR2 at lung carcinoma invasion fronts by topographic DNA extraction and micro-immunohistochemistry using the microfluidic probe

Collaboration between
Prof. Alex Soltermann
University Hospital Zurich and
IBM Research Laboratory Zurich

Scientific fields, keywords
- Lung cancer
- Immunohistochemistry
- Microfluidic probe
- Oncogenic mutation
- Predictive biomarker

Approved 2012

Statistical reverse engineering of the signaling network involved in cachexia

Collaboration between
Prof. Heinz Wolfgang Koeppi
Technical University of Darmstadt
Prof. Ruedi Aebersold
ETH Zurich and
Novartis Pharma AG

Scientific fields, keywords
- Mathematics
- Reverse engineering
- Molecular biology

Approved 2012

StatGenetiX
Cellular Systems Genetics in Humans

Principal investigator
Prof. Emmanouil Dermitzakis
Department of Genetic Medicine and Development
University of Geneva Medical School
emmanouil.dermitzakis@unige.ch

Partners
UniGE, EPFL, UniL, MIT

Scientific fields
- Cytology
- Genome variation
- Systems genetics
- Local regulatory networks
- Medicine
- Genomics
- Cell biology

Technologies
Computer sciences, mathematics and modeling

Approved 2012

SystemsX.ch

Principal investigator
Prof. Yves Barral
Institute of Biochemistry
ETH Zurich
yves.barral@bc.biol.ethz.ch

Partners
ETHZ, PSI

Scientific fields
- Microtubule cytoskeleton
- Saccharomyces cerevisiae
- Cytoskeleton
- Proteomics
- Cell biology

Technologies
Molecular genetics, X-ray crystallography, mathematics and modeling, imaging

Approved 2012

TubeX
Multiscale Biophysics of Microtubule Dynamics

Principal investigator
Prof. Yves Barral
Institute of Biochemistry
ETH Zurich
yves.barral@bc.biol.ethz.ch

Partners
ETHZ, PSI

Scientific fields
- Microtubule cytoskeleton
- Saccharomyces cerevisiae
- Cytoskeleton
- Proteomics
- Cell biology

Approved 2012
# Transition Postdoc Fellowships (TPdF)

| Mediation of specificity in mRNA translation by heterogeneous ribosomes | Membrane-based memory formation in bacteria: scaling up from single-cell behavior to the dynamics of populations | Systems biology of scaling: biophysics of gradient expansion |
| Principal investigator | Principal investigator | Principal investigator |
| Dr. Joao Guimaraes | Dr. Susan Schlegel | Dr. Maria Luisa Merino |
| University of Basel | ETH Zurich | University of Geneva |
| Approved 2014 | Approved 2014 | Approved 2014 |

| 4-dimensional analysis of neural stem cell commitment in the developing telencephalon | Applications of network reconstruction, graph theoretic analysis and qualitative modeling to virus-host interaction networks | Assessing the impact of cancer-associated mutations on the kinase interaction networks |
| Principal investigator | Principal investigator | Principal investigator |
| Dr. Marion Betizeau | Dr. Maria Pamela Dobay | Dr. Marija Buljan |
| ETH Zurich | SIB Swiss Institute of Bioinformatics | MRC Laboratory of Molecular Biology |
| Host research group | Host research group | Host research group |
| Prof. Dagmar Iber | Dr. Mauro Delorenci | Prof. Ruedi Aebersold |
| ETH Zurich | SIB Swiss Institute of Bioinformatics | ETH Zurich |
| Approved 2013 | Approved 2013 | Approved 2013 |

| Interplay between lipid composition and ER structure and function: a systems approach | Mathematical modeling of population epigenetics | Morphogenesis of monolayer epithelia: models and experiments |
| Principal investigator | Principal investigator | Principal investigator |
| Dr. Maria Eugenia Zaballa | Dr. Ønder Kartal | Dr. Séverine Urdy |
| EPF Lausanne | University of Zurich | University of Zurich |
| Host research group | Host research group | Host research group |
| Prof. Gisou van der Goot | Prof. Ueli Grossniklaus | Dr. Christof Aegerter |
| EPF Lausanne | University of Zurich | University of Zurich |
| Approved 2013 | Approved 2013 | Approved 2013 |

| The influence of pH signaling on the regulation of brain energy metabolism | Understanding the genotype to phenotype transformation for cholesterol regulation using a network based approach | Cortical tension and stiffness during asymmetric cell division |
| Principal investigator | Principal investigator | Principal investigator |
| Dr. Guillaume Azarias | Dr. Peter Blattmann | Dr. Tri Thanh Pham |
| University of Zurich | ETH Zurich | University of Basel |
| Host research group | Host research group | Host research group |
| Prof. Bruno Weber | Prof. Ruedi Aebersold | Prof. Clemens Cabernard |
| University of Zurich | ETH Zurich | University of Basel |
| Approved 2013 | Approved 2013 | Approved 2012 |

| Expounding epigenetiX | Computational fate prediction of embryonic stem cell subpopulations | Systems modeling of the metabolic network of a gut microbial community |
| Principal investigator | Principal investigator | Principal investigator |
| Dr. Dimitrios Spiliotopoulos | Dr. Stavroula Skylaki | Dr. Julian Lemenitakis |
| University of Zurich | ETH Zurich | University of Bern |
| Host research group | Host research group | Host research group |
| Prof. Amedeo Caffisco | Prof. Timm Schroeder | Prof. Andrew Macpherson |
| University of Zurich | ETH Zurich | ETH Zurich |
| Approved 2013 | Approved 2013 | Approved 2013 |

| High-throughput super-resolution imaging reveals contextual effects in gene expression | Membrane-based super-resolution imaging of cell membrane topology | Systems-level study on the origin and variation of lag times in E. coli |
| Principal investigator | Principal investigator | Principal investigator |
| Dr. Kyle Douglass | Dr. Markus Basan | Dr. Markus Wymann |
| EPF Lausanne | ETH Zurich | University of Basel |
| Host research group | Host research group | Host research group |
| Prof. Suliana Manley | Prof. Bernd Bodenmiller | Prof. Bernd Bodenmiller |
| EPF Lausanne | University of Zurich | University of Zurich |
| Approved 2014 | Approved 2014 | Approved 2014 |

| High-throughput super-resolution imaging reveals contextual effects in gene expression | Membrane-based super-resolution imaging of cell membrane topology | Systems-level study on the origin and variation of lag times in E. coli |
| Principal investigator | Principal investigator | Principal investigator |
| Dr. Kyle Douglass | Dr. Markus Basan | Dr. Markus Wymann |
| EPF Lausanne | ETH Zurich | University of Basel |
| Host research group | Host research group | Host research group |
| Prof. Suliana Manley | Prof. Bernd Bodenmiller | Prof. Bernd Bodenmiller |
| EPF Lausanne | University of Zurich | University of Zurich |
| Approved 2014 | Approved 2014 | Approved 2014 |
## Interdisciplinary PhD Projects (iPhD)

<table>
<thead>
<tr>
<th>Project Overview</th>
<th>IPhD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Establishment of in vivo verified molecular networks that control T cell function in chronic infection</strong></td>
<td><strong>Approved 2014</strong></td>
</tr>
<tr>
<td><strong>PhD student</strong> Iba</td>
<td><strong>Supervisors</strong> Prof. Dietmar Zehn University Hospital of Lausanne Dr. Mauro Delorenzi SIB Swiss Institute of Bioinformatics</td>
</tr>
<tr>
<td><strong>Micro2X: micropatterning of microbial communities – tailoring cooperation versus competition</strong></td>
<td><strong>Approved 2014</strong></td>
</tr>
<tr>
<td><strong>PhD student</strong> Iba</td>
<td><strong>Supervisors</strong> Prof. Julia Vorholt Dr. Tomaso Zambroni ETH Zurich</td>
</tr>
<tr>
<td><strong>Systematic characterization of the cell biological and mechanical properties of asymmetrically dividing Drosophila neuroblasts</strong></td>
<td><strong>Approved 2014</strong></td>
</tr>
<tr>
<td><strong>PhD student</strong> Iba</td>
<td><strong>Supervisors</strong> Prof. Clemens Cabernard University of Basel Prof. Daniel Jobst Müller ETH Zurich</td>
</tr>
<tr>
<td><strong>Cause and necessity of metabolic adaptation in human epidermis</strong></td>
<td><strong>Approved 2013</strong></td>
</tr>
<tr>
<td><strong>PhD student</strong> Andreas Kühne ETH Zurich</td>
<td><strong>Supervisors</strong> Dr. Nicola Zamboni Prof. Manfred Claassen ETH Zurich</td>
</tr>
<tr>
<td><strong>Interdisciplinary</strong></td>
<td><strong>PhD Projects</strong></td>
</tr>
<tr>
<td><strong>Interconnectedness</strong></td>
<td><strong>of systems pathology of prostate cancer</strong></td>
</tr>
<tr>
<td><strong>PhD student</strong> Iba</td>
<td><strong>Supervisors</strong> Prof. Peter Wild University Hospital Zurich Dr. Maria Rodriguez Martinez IBM Research Laboratory Zurich</td>
</tr>
<tr>
<td><strong>Comprehensive analysis of transcription factor – promoter interaction in vitro and in vivo</strong></td>
<td><strong>Approved 2014</strong></td>
</tr>
<tr>
<td><strong>PhD student</strong> Iba</td>
<td><strong>Supervisors</strong> Prof. Sebastian Josef Maerki EPF Lausanne Prof. David Shore University of Geneva</td>
</tr>
<tr>
<td><strong>Computational modeling of pluripotent stem cell transcription factor networks</strong></td>
<td><strong>Approved 2014</strong></td>
</tr>
<tr>
<td><strong>PhD student</strong> Oliver Hilsenbeck ETH Zurich</td>
<td><strong>Supervisors</strong> Prof. Timm Schroeder Prof. Jörg Stelling ETH Zurich</td>
</tr>
<tr>
<td><strong>Toxoplasma gondii persistence and transmission</strong></td>
<td><strong>Approved 2014</strong></td>
</tr>
<tr>
<td><strong>PhD student</strong> Iba</td>
<td><strong>Supervisors</strong> Prof. Dominique Soldati-Favre University of Geneva Prof. Vassily Hatzimanikatis EPF Lausanne Prof. Adrian Hehl University of Zurich</td>
</tr>
<tr>
<td><strong>Spectral deconvolution of SWATH data for peptide identification and deciphering HIV-1 antiviral response mechanisms</strong></td>
<td><strong>Approved 2014</strong></td>
</tr>
<tr>
<td><strong>PhD student</strong> Aivett Bilbao University of Geneva</td>
<td><strong>Supervisors</strong> Dr. Frédérique Lisacek SIB Swiss Institute of Bioinformatics Prof. Gérard Hopfgartner University of Geneva</td>
</tr>
<tr>
<td><strong>A massively parallel space-time connected approach based on implicit active contour methods to track leukocytes observed by multiphoton intra vital and confocal microscopy</strong></td>
<td><strong>Approved 2014</strong></td>
</tr>
<tr>
<td><strong>PhD student</strong> Diego Ulisse Pizzagalli Università della Svizzera italiana</td>
<td><strong>Supervisors</strong> Dr. Santiago Fernandez Gonzalez Prof. Rolf Krause, Prof. Marcus Thelen, Prof. Michael Bronstein Università della Svizzera italiana</td>
</tr>
<tr>
<td><strong>High-throughput microfluidic single cell analysis platform for deciphering heterogeneity in stress-responsive signalling</strong></td>
<td><strong>Approved 2013</strong></td>
</tr>
<tr>
<td><strong>PhD student</strong> Ranjan Mishra ETH Zurich</td>
<td><strong>Supervisors</strong> Prof. Matthias Peter Prof. Andrew deMello ETH Zurich</td>
</tr>
<tr>
<td><strong>Integrating transcriptional and allosteric regulation in central metabolism of E. coli</strong></td>
<td><strong>Approved 2013</strong></td>
</tr>
<tr>
<td><strong>PhD student</strong> Dimitris Christodoulou ETH Zurich</td>
<td><strong>Supervisors</strong> Prof. Uwe Sauer Prof. Jörg Stelling ETH Zurich</td>
</tr>
</tbody>
</table>
| PhD student | Antonio Martins  
University of Geneva |
| PhD student | Mehdi Tasлим  
University of Zurich |
| PhD student | Alexandre Franz  
University of Zurich |
| PhD student | Marek Konrad Krzyzanowski  
ETH Zurich |
| PhD student | Mehl Taslimifar  
University of Zurich |
| PhD student | François Verrey  
University of Zurich |
| PhD student | Alexandra Franz  
University of Zurich |
| PhD student | Konrad Basler  
University of Zurich |
| PhD student | Yves deMello  
ETH Zurich |
| PhD student | Alice Sarah Breda  
University of Lausanne |
| PhD student | Sunil Kumar  
ETH Zurich |
| PhD student | Isabelle Stevant  
University of Geneva |
| PhD student | Vera Bilan  
University of Zurich |
| PhD student | Niko Beerenwinkel  
ETH Zurich |
| PhD student | Ariel Bensimon  
ETH Zurich |
| PhD student | Philipp Ihmor  
ETH Zurich |
| PhD student | Tiziano Dallavilla  
EPF Lausanne |
| PhD student | Marcela Rincon-Restrepo  
EPF Lausanne |
| PhD student | Artur Yakimovich  
University of Zurich |
| PhD student | Vassily Hatzimanikatis  
EPF Lausanne |
| PhD student | Prof. Mark Robinson  
University of Zurich |
| PhD student | Prof. Sai T. Reddy  
ETH Zurich |
| PhD student | Prof. Urs Greber  
University of Zurich |
| PhD student | Prof. Ivo F. Sbalzarini  
Max Planck Institute, Dresden |

**Numerical models of reaction-diffusion/chemotaxis determining complex patterns of skin appendages and skin coloration: incorporating 3D, growth, and realistic networks of activators/inhibitors**

**QuantX – quantification of amino acid transporter interaction through system identification**

**Systems analysis of a morphogen response**

**A microfluidics-based pipeline for the quantitative analysis of yeast aging**

**Collective dynamics and crosstalk in MAPK signaling**

**Dynamics of Sertoli cell transcriptomes during the progression of spermatogenesis using ultrahigh-throughput sequencing technologies**

**Generation of biomarkers for the detection of ADP-ribosylated proteins during cellular stress**

**Genomic and transcriptomic characterization of heterogeneous tumor cell populations**

**Modeling dynamics of protein synthesis and degradation in Arabidopsis thaliana**

**Quantitative approaches for the reconstruction of palmitylation networks in ER**

**Systems analysis of neutralizing antibody repertoires for nanoparticulate-based antiviral vaccine design**

**Towards systems biology of adenovirus transmission**

**An extended computational morphodynamics approach to understand self-organization in plant growth control**
<table>
<thead>
<tr>
<th>Project Overview</th>
<th>SpecOpp</th>
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</thead>
<tbody>
<tr>
<td><strong>Entrepreneur in residence (EIR):</strong></td>
<td><strong>Micronaut:</strong></td>
</tr>
<tr>
<td>Innovation scouting service</td>
<td>Recording high-resolution stereo-SEM images</td>
</tr>
<tr>
<td>Principal investigator: Michael Dillhyon</td>
<td>Principal investigator: Prof. Henning Stahlberg</td>
</tr>
<tr>
<td>Dillhyon Ventures</td>
<td>University of Basel</td>
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<td>Approved 2012</td>
<td>Approved 2012</td>
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<tr>
<td><strong>Micronaut:</strong></td>
<td><strong>SIB fellowship program:</strong></td>
</tr>
<tr>
<td>Recording high-resolution stereo-SEM images</td>
<td>SIB PhD-fellowships</td>
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<tr>
<td>Principal investigator: Prof. Henning Stahlberg</td>
<td>Principal investigator: Prof. Ron Appel</td>
</tr>
<tr>
<td>University of Basel</td>
<td>SIB Swiss Institute of Bioinformatics</td>
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<td>Approved 2012</td>
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<tr>
<td><strong>SIB fellowship program:</strong></td>
<td><strong>Visible networks − research politics and life sciences in the 21st century:</strong></td>
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<tr>
<td>SIB PhD-fellowships</td>
<td>PhD project in history of technology</td>
</tr>
<tr>
<td>Principal investigator: Prof. Ron Appel</td>
<td>Principal investigator: Prof. David Gugerli</td>
</tr>
<tr>
<td>SIB Swiss Institute of Bioinformatics</td>
<td>ETH Zürich</td>
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<td>Approved 2012</td>
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<tr>
<td><strong>Visible networks − research politics and life sciences in the 21st century:</strong></td>
<td><strong>Lunaphore:</strong></td>
</tr>
<tr>
<td>PhD project in history of technology</td>
<td>Development of a microfluidic tissue processor for high throughput and multiplexed molecular profiling of tumors</td>
</tr>
<tr>
<td>Principal investigator: Prof. David Gugerli</td>
<td>Principal investigator: Dr. Ata Tuna Ciftlik</td>
</tr>
<tr>
<td>ETH Zürich</td>
<td>EPFL Lausanne</td>
</tr>
<tr>
<td>Approved 2011</td>
<td>Approved 2013</td>
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</tbody>
</table>

**Special Opportunities Fund (SpecOpp):**

- **SwissLipids:**
  - Dedicated knowledgebase for comprehensive curated information on lipids
  - Principal investigator: Dr. Alan Bridge
  - SIB Swiss Institute of Bioinformatics
  - Approved 2012

- **Lunaphore:**
  - Development of a microfluidic tissue processor for high throughput and multiplexed molecular profiling of tumors
  - Principal investigator: Dr. Ata Tuna Ciftlik
  - EPFL Lausanne
  - Approved 2013