



# Guide 2018

National Centres of Competence in Research



SWISS NATIONAL SCIENCE FOUNDATION

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# 1. The NCCRs at a glance

## Overview of NCCR Calls

	Submitted pre-proposals	Submitted full proposals	Approved proposals	Years of operation
1st Call (1999)*	82	34	14	2001-2013
2nd Call (2003)	44	17	6	2005-2017
3rd Call (2008)	54	28	8	2010-2022
4th Call (2011)	63	23	8	2014-2026

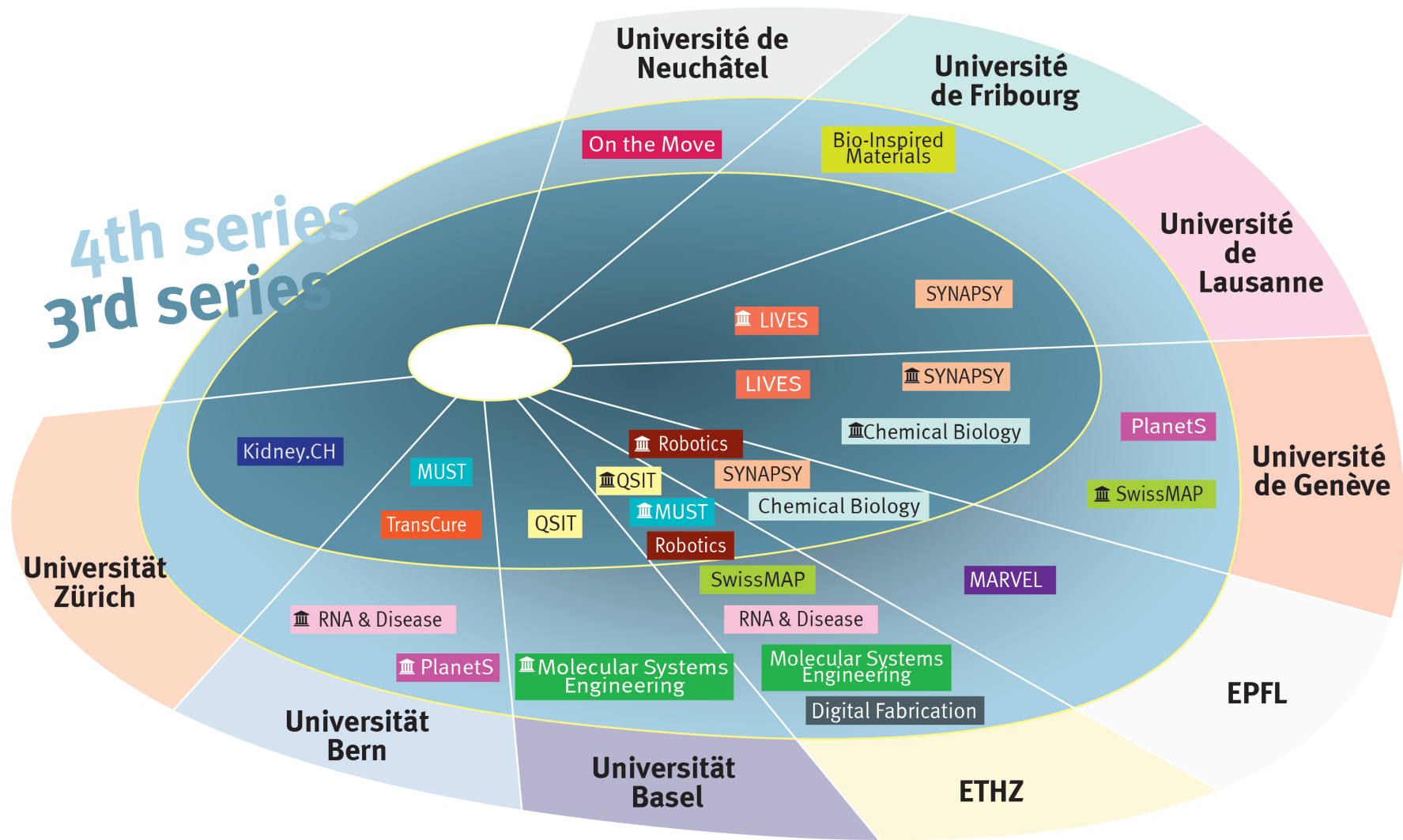
\* The NCCRs of the 1<sup>st</sup> and the 2<sup>nd</sup> Call are terminated. For more information see [www.snf.ch](http://www.snf.ch)

## 3<sup>rd</sup> Call of NCCRs


Short Name	NCCR-Director	Home Institutions	Starting date
Chemical Biology	Prof. Howard Riezman	University of Geneva, EPFL	December 1, 2010
Kidney.CH	Prof. François Verrey	University of Zurich	August 1, 2010
LIVES	Prof. Dario Spini	University of Lausanne, University of Geneva	January 1, 2011
MUST	Prof. Ursula Keller	ETH Zurich, University of Bern	July 1, 2010
QSIT	Prof. Klaus Ensslin	ETH Zurich, University of Basel	January 1, 2011
Robotics	Prof. Dario Floreano	EPFL, ETH Zurich	December 1, 2010
SYNAPSY	Prof. Alexandre Dayer	Universities of Geneva and Lausanne, EPFL	October 1, 2010
TransCure	Prof. Hugues Abriel	University of Bern	November 1, 2010

## 4<sup>th</sup> Call of NCCRs

Short Name	NCCR-Director	Home Institutions	Starting date
Bio-Inspired Materials	Prof. Christoph Weder	University of Fribourg	June 1, 2014
Digital Fabrication	Prof. Philippe Block	ETH Zurich	June 1, 2014
MARVEL	Prof. Nicola Marzari	EPFL	May 1, 2014
Molecular Systems Engineering	Prof. Thomas R. Ward	University of Basel, ETH Zurich	July 1, 2014
On the Move	Prof. Gianni D'Amato	University of Neuchatel	June 1, 2014
PlanetS	Prof. Willy Benz	University of Bern, University of Geneva	June 1, 2014
RNA & Disease	Prof. Oliver Mühlemann	University of Bern, ETH Zurich	May 1, 2014
SwissMAP	Prof. Stanislav Smirnov	University of Geneva, ETH Zurich	July 1, 2014



Legend:

 First Home Institution

3rd series: Start 2010, 8 NCCR

4th series: Start 2014, 8 NCCR

### 3<sup>rd</sup> Call of NCCRs: Funding in phase 1 and phase 2: 2014–2017

<b>Funding source (CHF)</b>	<b>Phase 1</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>Phase 2 total</b>
SNSF funding	124'694'314	35'731'620	34'725'876	32'718'514	25'391'760	128'567'770
Self-funding from Home Institutions <sup>1</sup>	72'822'637	19'543'888	22'300'756	19'300'989	21'250'403	82'396'036
Self-funding from project participants	95'700'593	28'830'363	28'501'861	27'364'200	21'656'233	106'352'657
Third-party funding <sup>2</sup>	9'461'241	793'527	613'760	698'203	439'329	2'544'819
<b>Total</b>	<b>302'678'785</b>	<b>84'899'398</b>	<b>86'142'253</b>	<b>80'081'906</b>	<b>68'737'725</b>	<b>319'861'282</b>

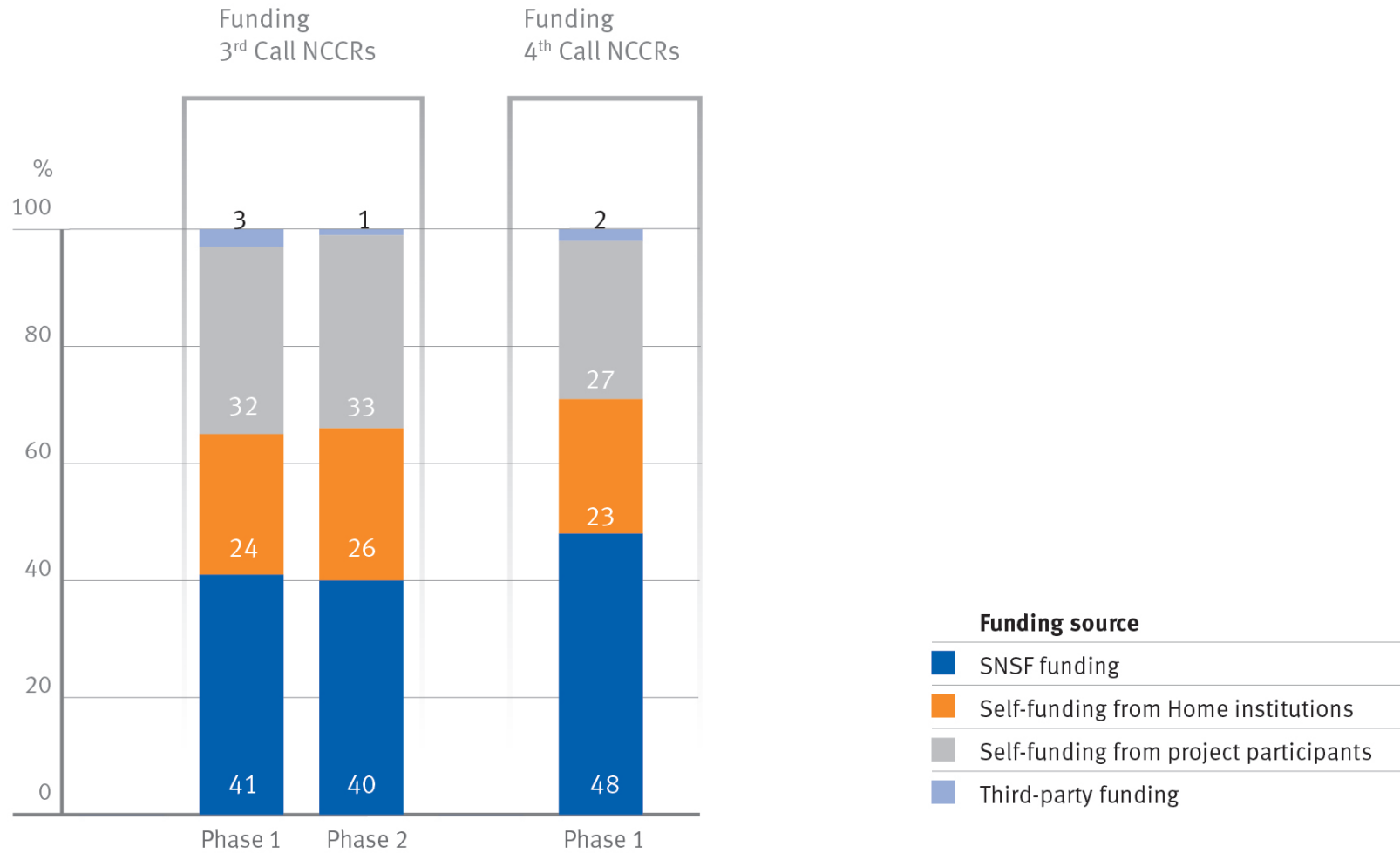
### 4<sup>th</sup> Call of NCCRs: Funding in phase 1: 2014–2017

<b>Funding source (CHF)</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>Phase 1 total</b>
SNSF funding	29'989'032	30'810'179	31'396'526	31'111'749	123'307'486
Self-funding from Home Institutions <sup>1</sup>	8'216'016	12'519'487	17'162'775	21'910'040	59'808'318
Self-funding from project participants	15'821'639	18'995'924	20'900'355	13'355'539	69'073'457
Third-party funding <sup>2</sup>	1'040'486	973'176	3'890'142	440'000	6'343'804
<b>Total</b>	<b>55'067'173</b>	<b>63'298'766</b>	<b>73'349'798</b>	<b>66'817'328</b>	<b>258'533'065</b>

<sup>1</sup> Personnel costs, equipment and consumables, not included infrastructure and basic equipment

<sup>2</sup> Not included is CTI funding

## Funding of the NCCRs



## Persons involved in the NCCRs in the last reporting period (12 months)

### 3<sup>rd</sup> and 4<sup>th</sup> Call of NCCRs

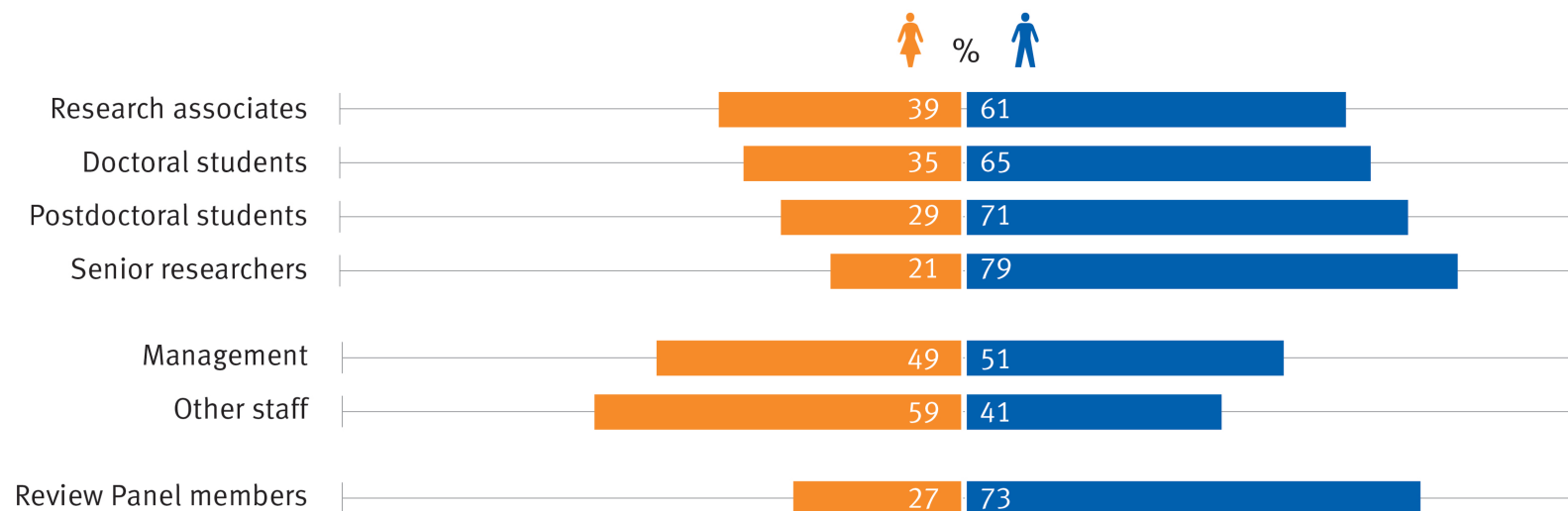
Personnel	Total of Persons	Female	Male	Swiss	Other nationalities
Research associates <sup>1</sup>	125	56	88	52	27
Doctoral students	668	244	458	186	209
Postdoctoral students	490	147	359	50	186
Senior researchers <sup>2</sup>	707	156	589	283	166
Management <sup>3</sup>	84.18	113	118	138	38
Other staff	245	153	105	150	30
<b>Total</b>	<b>2319</b>	<b>869</b>	<b>1717</b>	<b>859</b>	<b>656</b>

<sup>1</sup> Includes graduate scientists (level master) but not registered as doctoral students or undergraduate students participating in research projects.

<sup>2</sup> Including leaders of the individual projects and other organisational units of the NCCRs

<sup>3</sup> Full-time equivalent, including NCCR-Director and persons in charge of knowledge and technology transfer, equal opportunities, communication, education and training

## Gender in the NCCRs



# NCCR Bio-Inspired Materials

## Using Concepts from Nature to Create “Smart” Materials

NCCR Director: Prof. Christoph Weder  
Home Institution: University of Fribourg  
Start date: 1<sup>st</sup> of June 2014 (4<sup>th</sup> NCCR series)

### Heads of Research Groups

Prof. **Michal Borkovec**, Section de Chimie et Biochimie, Université de Genève  
Prof. **Carole Bourquin**, Section Sciences Pharmaceutiques, Université de Genève  
Prof. **Joseph Brader**, Physikdepartement, Universität Freiburg  
Prof. **Nico Bruns**, Adolphe Merkle Institute, Faculty of Science, Universität Freiburg  
Prof. **Alke Fink**, Adolphe Merkle Institute, Faculty of Science, Universität Freiburg  
Prof. **Katharina Fromm**, Departement Chemie, Universität Freiburg  
Prof. **Andreas Kilbinger**, Departement Chemie, Universität Freiburg  
Prof. **Marco Lattuada**, Departement Chemie, Universität Freiburg  
Prof. **Michael Mayer**, Adolphe Merkle Institute, Faculty of Science, Universität Freiburg  
Prof. **Aleksandra Radenovic**, Institut Interfacultaire de Bioingénierie, EPFL  
Prof. **Barbara Rothen-Rutishauser**, Adolphe Merkle Institute, Faculty of Science, Universität Freiburg  
Prof. **Curzio Rüegg**, Departement für Medizin, Universität Freiburg  
Prof. **Frank Scheffold**, Physikdepartement, Universität Freiburg  
Prof. **Ullrich Steiner**, Adolphe Merkle Institute, Faculty of Science, Universität Freiburg  
Prof. **Francesco Stellacci**, Institut de Science et Génie des Matériaux, EPFL  
Prof. **André Studart**, Departement Materialwissenschaft, ETH Zurich  
Prof. **Christoph Weder**, Adolphe Merkle Institute, Faculty of Science, Universität Freiburg  
Prof. **Andreas Zumbühl**, Departement Chemie, Universität Freiburg

### [Overview of all Research Projects](#)



## BIO-INSPIRED MATERIALS

NATIONAL CENTER OF COMPETENCE  
IN RESEARCH

### Participating Institutions

Universität Freiburg (13 groups)/Université de Genève (2 groups)  
EPFL (2 groups)/ETH Zürich (1 group)

### Members of the Review Panel

Prof. **Joanna Aizenberg**, Harvard School of Engineering and Applied Sciences, US  
Prof. **Hans-Jürgen Butt**, Physik der Grenzflächen, Max-Planck-Institut für Polymerforschung, DE  
Prof. **Stephen Craig**, Department of Chemistry, Duke University, US  
Prof. **Kenneth A. Dawson**, School of Chemistry and Chemical Biology, University College Dublin, IE  
Prof. **Eva Marie Harth**, Department of Chemistry, Vanderbilt University, US  
Prof. **Phillip B. Messersmith**, Departments of Bioengineering and Materials Science and Engineering, University of California, Berkeley, US  
Prof. **Meital Reches**, Institute of Chemistry, The Hebrew University of Jerusalem, IL

Prof. **Anna Fontcuberta i Morral** (Chair), SNF, Bern, CH  
Dr. **Marc Bohner**, SNF, Bern, CH  
Prof. **Jan Carmeliet**, SNF, Bern, CH

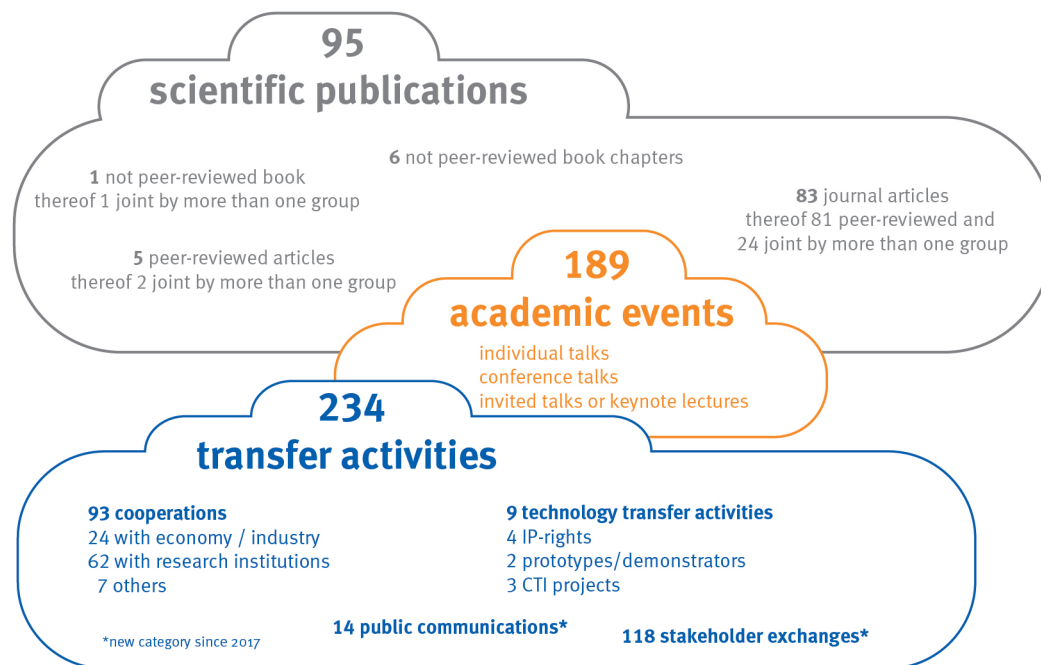
### Management/Coordination

Dr. Lucas Montero  
NCCR Bio-Inspired Materials  
Adolphe Merkle Institute  
Université de Fribourg  
Chemin des Verdiers 4  
CH-1700 Fribourg  
+41 26 300 91 72

[www.bioinspired-materials.ch](http://www.bioinspired-materials.ch)



**Output Data**  
Data: since start



**Key collaborations with third parties**

**Academia**

Case Western Reserve University, Cleveland (OH), US  
 University of Basel, CH  
 University of Bayreuth, DE  
 Bulgarian Academy of Sciences, BG  
 University of California, Irvine, US  
 University of California, Los Angeles, US  
 Philipps Universität Marburg, DE  
 University of Bordeaux, FR  
 Zurich University of Applied Sciences, CH  
 University of Cambridge, UK  
 Albert-Ludwigs-Universität Freiburg, DE  
 Université de Strasbourg, FR  
 Erasmus University Medical Center, NL

**Private and public sector**

BASF Schweiz AG, CH  
 Artimet AG, CH  
 Firmenich SA, CH  
 Ivoclar Vivadent AG, LI  
 LS Instruments AG, CH  
 regenHU Ltd., CH

**Funding**

Funding Source (CHF)	Total Phase 1 2014 - 2017	2014	2015	2016	2017	Phase 1 %
SNSF-funding <sup>1</sup>	<b>12'015'719</b>	3'000'000	3'000'000	3'000'000	3'015'719	43
Self-funding from Home Institution <sup>2</sup>	<b>7'347'985</b>	1'234'501	1'103'726	2'157'218	2'852'540	27
Self-funding from project participants	<b>7'555'422</b>	1'728'344	2'158'699	1'948'324	1'720'055	27
3rd party-funding	<b>824'348</b>	533'648	58'850	91'850	140'000	3
<b>Total</b>	<b>27'743'474</b>	6'496'493	6'321'275	7'197'392	7'728'314	100

<sup>1</sup> incl. 120%-grant in year 2017

<sup>2</sup> Personnel costs, equipment and consumables, not included infrastructure and basic equipment

## Persons involved

Personnel <sup>3</sup>	Total of persons	Female %	CH	Top 5 – Most represented nations					Other nations
				DE	FR	IT	IR	ES	
Doctoral students	40	55	8	9	4	3	3	1	13
Postdoctoral students	15	53	0	2	3	0	2	2	8
Senior researchers <sup>4</sup>	26	23	7	10	2	3	0	1	6
Management <sup>5</sup>	4.99	42	8	1	0	3	0	0	5
Other staff	11	55	9	1	1	0	0	0	0
<b>Total</b>	<b>96.99</b>	<b>45</b>	<b>32</b>	<b>23</b>	<b>10</b>	<b>9</b>	<b>5</b>	<b>4</b>	<b>32</b>

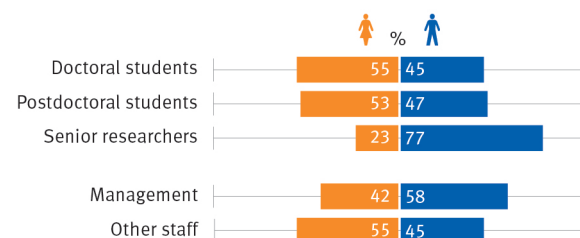
<sup>3</sup> Persons involved in the NCCR in the last reporting period (12 months)

<sup>4</sup> Including leaders of the individual projects and other organisational units of the NCCR

<sup>5</sup> Full-time equivalent, including NCCR-Director and persons in charge of knowledge and technology transfer, equal opportunities, communication and education and training

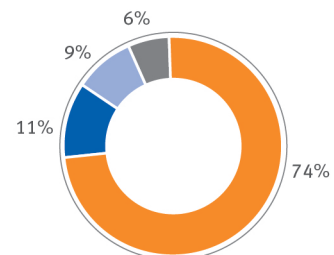
### Gender in the NCCR

Data: current year



### Training state of doctoral students

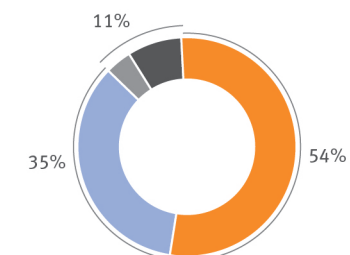
Data: since start



in progress	34
completed	5
continuation outside NCCR	4
dropout	3
<b>Total</b>	<b>46</b>

### Next employer of doctoral and postdoctoral students

Data: since start



Academic sector	14
Private sector	9
Public sector	0
Other	1
None/not known	2
<b>Total</b>	<b>26</b>

# NCCR Chemical Biology

## Visualisation and Control of Biological Processes Using Chemistry



NCCR Director: Prof. Howard Riezman, NCCR Co-Director: Prof. Christian Heinis  
Home Institutions: University of Geneva, EPFL  
Start date: 1<sup>st</sup> of December 2010 (3<sup>rd</sup> NCCR series)

### Heads of Research Groups

Prof. **Nicolai Cramer**, Institut des sciences et ingénierie chimiques, ISIC, EPFL  
Prof. **Beat Fierz**, Institut des sciences et ingénierie chimiques, ISIC, EPFL  
Prof. **Pierre Gönczy**, Institut suisse de recherche expérimentale sur le cancer (ISREC), EPFL  
Prof. **Marcos Gonzalez Gaitan**, Département de Biochimie, Université de Genève  
Prof. **Monica Gotta**, Faculté de Médecine, Université de Genève  
Prof. **Elena Goun**, Institut des sciences et ingénierie chimiques, ISIC, EPFL  
Prof. **Jean Gruenberg**, Département de Biochimie, Université de Genève  
Prof. **Oliver Hantschel**, Institut suisse de recherche expérimentale sur le cancer (ISREC), EPFL  
Prof. **Christian Heinis**, Institut des sciences et ingénierie chimiques, ISIC, EPFL  
Prof. **Marko Kaksonen**, Département de Biochimie, Université de Genève  
Prof. **Karten Kruse**, Département de Biochimie & Département de Physique Théorique appliquée à la Biologie, Université de Genève  
Prof. **Robbie Loewith**, Département de Biologie Moléculaire, Université de Genève  
Prof. **Suliana Manley**, Institut de physique des systèmes biologiques, EPFL  
Prof. **Stefan Matile**, Département de Chimie Organique, Université de Genève  
Prof. **Howard Riezman**, Département de Biochimie, Université de Genève  
Prof. **Aurélien Roux**, Département de Biochimie, Université de Genève  
Prof. **Kaori Sugihara**, Département de Chimie Physique, Université de Genève  
Dr. **Gerardo Turcatti**, Plateformes technologiques SV, EPFL  
Prof. **Gisou van der Goot**, Institut de recherche en infectiologie EPFL  
Prof. **Jérôme Waser**, Institut de recherche en infectiologie EPFL  
Prof. **Nicolas Winssinger**, Département de Chimie Organique, Université de Genève  
Prof. **Andreas Zumbühl**, Département de Chimie, Université de Fribourg

### [Overview of all Research Projects](#)

### Participating Institutions

Université de Fribourg (1 group)/Université de Genève (12 groups)  
EPFL (11 groups)

### Members of the Review Panel

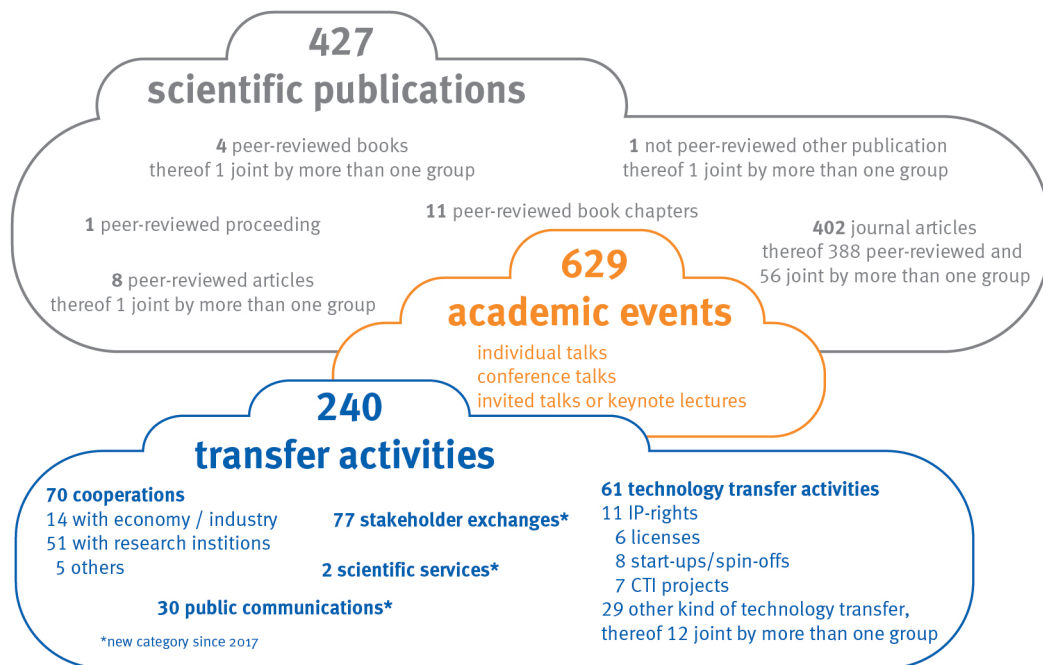
Prof. **Pieter Cullis**, Department of Biochemistry, Life Sciences Center, CA  
Dr. **Walter Fischli**, Idorsia Pharmaceuticals Ltd, CH  
Prof. **Tom Kirchhausen**, Harvard Medical School, Boston, US  
Prof. **Suzanne Pfeffer**, Stanford University School of Medicine, US  
Prof. **Carsten Schultz**, Department of Physiology and Pharmacology, Oregon Health & Science University (OHSU), US  
Prof. **Dirk Trauner**, New York University, US

Prof. **Andreas Mayer** (Chair), SNF, Bern, CH  
Prof. **Katharina Fromm**, SNF, Bern, CH  
Prof. **Bernard Thorens**, SNF, Bern, CH

### Management/Coordination

Dr. Phaedra Simitsek  
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Sciences II, sale 146  
30 quai Ernest Ansermet  
CH-1211 Genève 4  
+41 22 379 64 07  
[www.nccr-chembio.ch](http://www.nccr-chembio.ch)

**Output Data**  
Data: since start



**Key collaborations with third parties**

**Research Institutions**

Biozentrum, University of Basel, CH  
 Curie Institute Orsay, FR  
 ETHZ, Zurich, CH  
 INSERM, Lyon, FR  
 Laboratory of Computational Systems Biotechnology LCSB, EPFL, CH  
 Max Planck Institute for Colloids and Surfaces, Potsdam-Golm, DE  
 MPI Physics of Complex systems, Dresden, DE  
 Scripps research institute, Florida, US

**Private and public sector**

Geneva Business School, Geneva, CH  
 Networks, New York, US  
 NCCR Transcure, Bern, CH  
 NCCR RNA & Disease, Bern, CH  
 Swiss Integrative Center for Human Health (SICHH), Fribourg, CH  
 Swiss Federal Institute of Intellectual Property (IPI), Bern, CH  
 School of Management, Fribourg, CH  
 SystemsX, Zurich, CH  
 TCI Europe N.V., Zwijndrecht, BE

**Funding**

Funding Source (CHF)	Total Phase 1 2010 - 2013	Total Phase 2 2014 - 2017	2014	2015	2016	2017	Phase 2 %
SNSF-funding <sup>1</sup>	13'520'000	14'676'706	4'206'706	4'150'000	3'660'000	2'660'000	45
Self-funding from Home Institutions <sup>2</sup>	13'145'250	12'675'055	3'642'376	4'143'291	1'242'336	3'647'052	38
Self-funding from project participants	3'631'371	5'634'185	1'269'330	1'138'774	2'621'081	605'000	17
3rd party-funding	130'596	18'390	18'390	0	0	0	0
<b>Total</b>	<b>30'427'217</b>	<b>33'004'336</b>	9'136'802	9'432'065	7'523'417	6'912'052	100

<sup>1</sup> incl. funding of transfer projects (strong Swiss franc package) in 2012 and compensation for PhD salaries increase in 2014

<sup>2</sup> Personnel costs, equipment and consumables, not included infrastructure and basic equipment

## Persons involved

Personnel <sup>3</sup>	Total of persons	Female %	CH	Top 5 – Most represented nations					Other nations
				FR	DE	ES	IT	IN	
Research associates <sup>4</sup>	19	26	5	7	1	1	2	1	2
Doctoral students	36	44	5	6	4	4	1	2	14
Postdoctoral students	26	35	2	6	5	2	1	2	8
Senior researchers <sup>5</sup>	27	22	9	3	5	1	1	0	8
Management <sup>6</sup>	4.02	55	6	1	0	0	1	0	4
Other staff	10	80	8	1	0	0	1	0	0
<b>Total</b>	<b>122.02</b>	<b>39</b>	<b>35</b>	<b>24</b>	<b>15</b>	<b>8</b>	<b>7</b>	<b>5</b>	<b>36</b>

<sup>3</sup> Persons involved in the NCCR in the last reporting period (12 months)

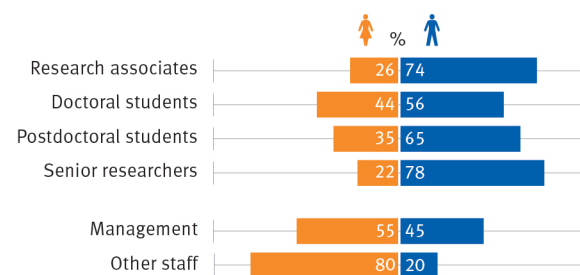
<sup>4</sup> Includes graduate scientists (level master) but not registered as PhD students or undergraduate students participating in research projects.

<sup>5</sup> Including leaders of the individual projects and other organisational units of the NCCR

<sup>6</sup> Full-time equivalent, including NCCR-Director and persons in charge of knowledge and technology transfer, equal opportunities, communication and education and training

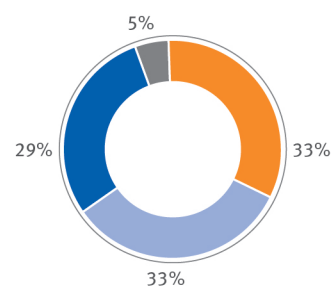
### Gender in the NCCR

Data: current year



### Training state of doctoral students

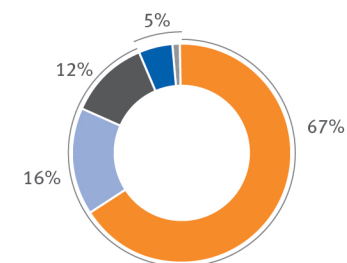
Data: since start



in progress	30
completed	26
continuation outside NCCR	30
dropout	5
<b>Total</b>	<b>91</b>

### Next employer of doctoral and postdoctoral students

Data: since start



Academic sector	97
Private sector	23
Public sector	7
Other	1
None/not known	17
<b>Total</b>	<b>145</b>

# NCCR Digital Fabrication

## Innovative Building Processes in Architecture



NCCR Director: Prof. Philippe Block  
Home Institution: ETH Zurich  
Start date: 1<sup>st</sup> of June 2014 (4<sup>th</sup> NCCR series)

### Heads of Research Groups

Prof. **Philippe Block**, Departement Architektur, ETH Zürich  
Prof. **Robert Flatt**, Institut für Baustoffe, ETH Zürich  
Prof. **Matthias Kohler**, Departement Architektur, ETH Zürich  
Prof. **Yves Weinand**, Laboratoire de construction en bois, EPFL  
Prof. **Melanie Zeilinger**, Departement Maschinenbau und Verfahrenstechnik, ETH Zürich

### [Overview of all Research Projects](#)

### Participating Institutions

EPFL (1 group)/ETH Zürich (4 groups)

### Members of the Review Panel

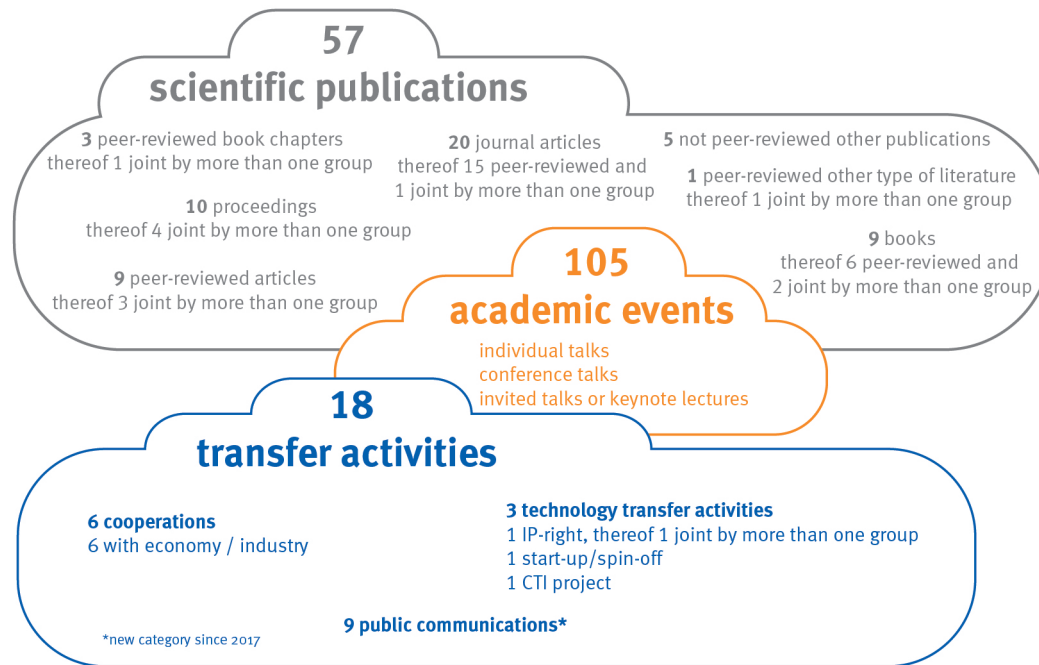
Prof. **Oliver Brock**, Institut für Technische Informatik und Mikroelektronik, TU Berlin, DE  
Prof. **Mark Burry**, Smart Cities Research Institute, Hawthorn, AUS  
Prof. **Rüdiger Dillmann**, Institut für Anthropomatik und Robotik, Karlsruhe Institut für Technologie, DE  
Prof. **Gregor Engels**, Institut für Informatik, Universität Paderborn, DE  
Prof. **Gerti Kappel**, Institut für Softwaretechnik und Interaktive Systeme, TU Wien, AT  
Prof. **Hanif Kara**, Graduate School of Design, Harvard University, UK  
Prof. **Wojciech Matusik**, MIT CSAIL, US  
Prof. **Mette Ramsgaard Thomsen**, CITA, Det Kongelige Danske Kunstakademis Skoler, DK  
Prof. **Petra von Both**, Karlsruher Institut für Technologie KIT, Karlsruhe, DE

Prof. **Anastasia Ailamaki** (Chair), SNF, Bern, CH  
Prof. **Friedrich Eisenbrand**, SNF, Bern, CH  
Prof. **Oscar Nierstrasz**, SNF, Bern, CH

### Management/Coordination

Dr. Russell Loveridge  
NCCR Digital Fabrication  
ETH Zürich  
HIB E 25 / Stefano-Francini-Platz 1  
CH-8093 Zürich  
+41 44 633 36 99  
[www.dfab.ch](http://www.dfab.ch)

**Output Data**  
Data: since start



**Key collaborations with third parties**

**Private and public sector**

- BAWO Befestigungstechnik AG
- ERNE AG Holzbau
- Gruschwitz GmbH Tech-Twists
- Krinner GmbH Schweiz
- Moog - Robotics & Autonomous Systems
- NOE Schaluntechnik GmbH
- Rotho Blaas GmbH
- SACAC AG
- Schilliger Holz AG
- Schlatter Industries AG
- SIKA Technology AG
- Stahl Gerlafingen AG
- Steiner AG
- Sulser AG

**Funding**

Funding Source (CHF)	Total Phase 1 2014 – 2017	2014	2015	2016	2017	Phase 1 %
SNSF-funding <sup>1</sup>	<b>13'441'280</b>	2'800'000	3'500'000	3'713'680	3'427'600	47
Self-funding from Home Institution <sup>2</sup>	<b>8'996'137</b>	357'858	1'372'981	2'764'504	4'500'794	32
Self-funding from project participants	<b>3'087'030</b>	333'600	577'330	1'467'600	708'500	11
3rd party-funding	<b>2'789'500</b>	0	0	2'789'500	0	10
<b>Total</b>	<b>28'313'947</b>	3'491'458	5'450'311	10'735'284	8'636'894	100

<sup>1</sup> incl. 120% support-grant in 2016 and 2017

<sup>2</sup> Personnel costs, equipment and consumables, not included infrastructure and basic equipment

## Persons involved

Personnel <sup>3</sup>	Total of persons	Female %	CH	Top 5 – Most represented nations					Other nations
				DE	FR	AT	BE	ES	
Research associates <sup>4</sup>	18	6	3	5	0	2	0	1	8
Doctoral students	25	48	3	3	1	2	1	1	14
Postdoctoral students	14	14	4	1	1	0	0	1	7
Senior researchers <sup>5</sup>	18	10	8	3	4	0	2	0	5
Management <sup>6</sup>	7.78	23	4	5	0	0	1	0	3
Other staff	3	0	3	0	0	0	0	0	0
<b>Total</b>	<b>85.78</b>	<b>75</b>	<b>25</b>	<b>17</b>	<b>6</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>37</b>

<sup>3</sup> Persons involved in the NCCR in the last reporting period (12 months)

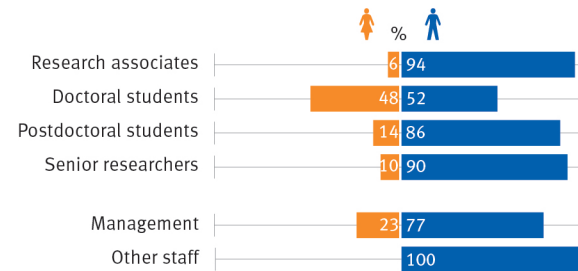
<sup>4</sup> Includes graduate scientists (level master) but not registered as PhD students or undergraduate students participating in research projects.

<sup>5</sup> Including leaders of the individual projects and other organisational units of the NCCR

<sup>6</sup> Full-time equivalent, including NCCR-Director and persons in charge of knowledge and technology transfer, equal opportunities, communication and education and training

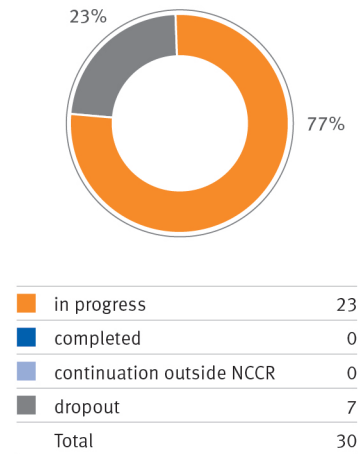
### Gender in the NCCR

Data: current year



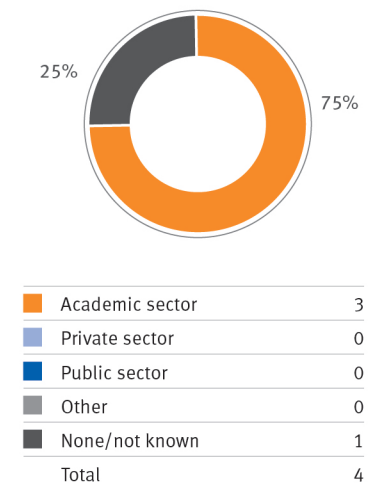
### Training state of doctoral students

Data: since start



### Next employer of doctoral and postdoctoral students

Data: since start





# NCCR Kidney.CH

## Kidney Control of Homeostasis

NCCR Director: Prof. François Verrey  
Home Institution: University of Zurich  
Start date: 1<sup>st</sup> of August 2010 (3<sup>rd</sup> NCCR series)



### Heads of Research Groups

Prof. **Murielle Bochud**, Institut Universitaire de Médecine Sociale et Préventive, Université de Lausanne  
Prof. **Olivier Bonny**, Département de pharmacologie et de toxicologie, Université de Lausanne  
Prof. **Olivier Devuyst**, Physiologisches Institut, Universität Zürich  
Prof. **Sophie De Seigneux**, Département Physiologie cellulaire et métabolisme, Université de Genève  
Prof. **Eric Feraille**, Département Physiologie cellulaire et métabolisme, Université de Genève  
Prof. **Andrew Hall**, Anatomisches Institut, Universität Zürich  
Prof. **Edith Hummler**, Département de Pharmacologie et Toxicologie, Université de Lausanne  
Prof. **Uyen Huynh-Do**, Departement Nephrologie / Hypertonie, Universitätsspital Bern  
Prof. **Reto Krapf**, Klinik St. Anna, Luzern  
Prof. **Vartan Kurtcuoglu**, Physiologisches Institut, Universität Zürich  
Dr. **Andreas Pasch**, University Institute of Clinical Chemistry, Center of Laboratory Medicine, Universitätsspital Bern  
Prof. **Johannes Loffing**, Anatomisches Institut, Universität Zürich  
Prof. **Jean-Pierre Montani**, Département de Médecine / Physiologie, Université de Fribourg  
Prof. **Alex Odermatt**, Pharmazentrum, Universität Basel  
Prof. **Olivier Staub**, Département de Pharmacologie et Toxicologie, Université de Lausanne  
Prof. **François Verrey**, Physiologisches Institut, Universität Zürich  
Prof. **Carsten Wagner**, Physiologisches Institut, Universität Zürich  
Prof. **Roland Wenger**, Physiologisches Institut, Universität Zürich  
Prof. **Zhihong Yang**, Département de Médecine / Physiologie, Université de Fribourg

### [Overview of all Research Projects](#)

### Participating Institutions

Universität Basel (Pharmazentrum) (1 group)/Université de Fribourg (2 groups)/Université de Genève (2 groups)/Université de Lausanne (4 groups)/Universität Zürich (7 groups)/Universitätsspital Bern (2 groups) Klinik St. Anna Luzern (1 group)

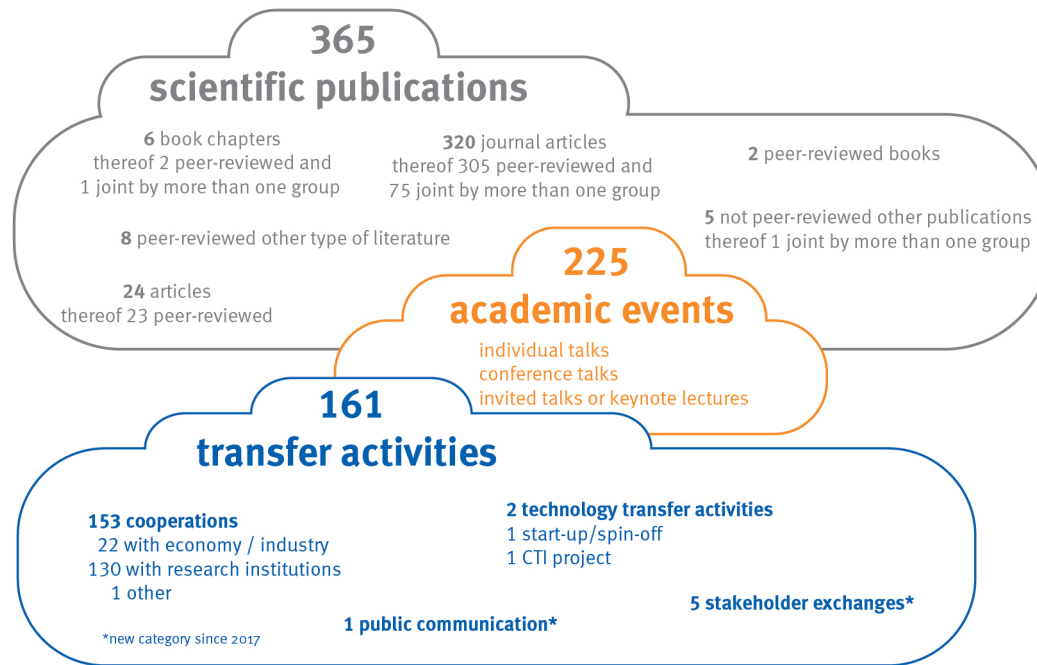
### Members of the Review Panel

Prof. **Robert Alpern**, Yale School of Medicine, US  
Prof. **Kai-Uwe Eckardt**, Nephrologie und Hypertensiologie, Universitätsklinikum Erlangen, DE  
Prof. **Armin Kurtz**, Institut für Physiologie, Universität Regensburg, DE  
Prof. **Alicia A. McDonough**, Keck School of Medicine of USC, US  
Prof. **David Pearce**, Medicine and Cellular and Molecular Pharmacology, University of California, US  
Prof. **Jonathan Seckl**, Center Cardiovascular Science, The Queen's Medical Research Institute, UK  
Prof. **Fabiola Terzi**, INSERM, Université de Paris, FR  
  
Prof. **Nicolas Rodondi** (Chair), SNF, Bern, CH  
Prof. **Michael O. Hottiger**, SNF, Bern, CH  
Prof. **Markus Stoffel**, SNF, Bern, CH

### Management/Coordination

Dr. Jens Selige  
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[www.nccr-kidney.ch](http://www.nccr-kidney.ch)

**Output Data**  
Data: since start



**Key collaborations with third parties**

**Academia**

Department of Physiology and Pharmacology, University of Salamanca, ES  
 Dept. of Physiology, University College London, GB  
 Division of Osteoporosis, University of Berne, CH  
 Human Genetics Unit, Medical Research Council, Edinburgh, GB  
 Institute of molecular bioscience, University of Tokyo, JP  
 Institute of Physiology, Universität Tuebingen, DE  
 Institute of Veterinary Physiology, University of Zurich, CH  
 Internal Medicine, National Center of Integrative Biomedical Informatics, Ann Arbor, US  
 Internal medicine, CHUV - Centre Hospitalier Universitaire Vaudois, Lausanne, CH  
 Mineral metabolism clinic, Ut Southwestern Medical Centre, Dallas, TX, US  
 NHLBI, Framingham Hear Study, US  
 Oncology - Medical Imaging, University Hospital Zurich, CH

**Private and public sector**

Insphero AG, Zurich, CH  
 Novartis, Basel, CH  
 Calciscon AG, Bern, CH

**Funding**

Funding Source (CHF)	Total Phase 1 2010 - 2013	Total Phase 2 2014 - 2017	2014	2015	2016	2017	Phase 2 %
SNSF-funding <sup>1</sup>	16'530'000	16'568'958	4'518'915	4'402'000	4'424'043	3'224'000	69
Self-funding from Home Institution <sup>2</sup>	2'168'316	4'937'784	1'133'042	1'017'346	1'702'396	1'085'000	21
Self-funding from project participants	5'271'515	2'351'391	981'759	748'689	620'943	0	10
3rd party-funding	146'955	2	2	0	0	0	0
Total	24'116'786	23'858'135	6'633'718	6'168'035	6'747'382	4'309'000	100

<sup>1</sup> incl. compensation for PhD salaries increase in 2014 and 120%-grant in 2016

<sup>2</sup> Personnel costs, equipment and consumables, not included infrastructure and basic equipment

## Persons involved

Personnel <sup>3</sup>	Total of persons	Female %	CH	Top 5 – Most represented nations					Other nations
				DE	FR	GB	IN	IT	
Research associates <sup>4</sup>	5	40	3	1	0	0	1	0	0
Doctoral students	9	44	2	2	0	1	0	2	2
Postdoctoral students	11	36	1	1	2	1	2	0	4
Senior researchers <sup>5</sup>	36	39	16	4	5	3	1	1	6
Management <sup>6</sup>	4.37	56	5	2	2	0	0	0	0
Other staff	10	90	7	1	1	0	1	0	0
<b>Total</b>	<b>75.37</b>	<b>48</b>	<b>34</b>	<b>11</b>	<b>10</b>	<b>5</b>	<b>5</b>	<b>3</b>	<b>12</b>

<sup>3</sup> Persons involved in the NCCR in the last reporting period (12 months)

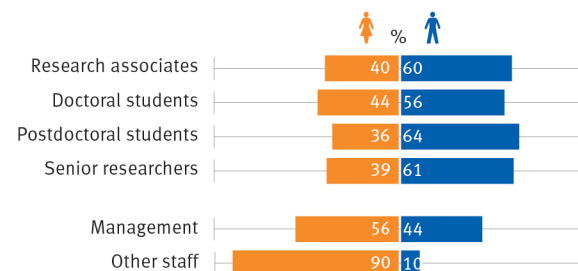
<sup>4</sup> Includes graduate scientists (level master) but not registered as PhD students or undergraduate students participating in research projects.

<sup>5</sup> Including leaders of the individual projects and other organisational units of the NCCR

<sup>6</sup> Full-time equivalent, including NCCR-Director and persons in charge of knowledge and technology transfer, equal opportunities, communication and education and training

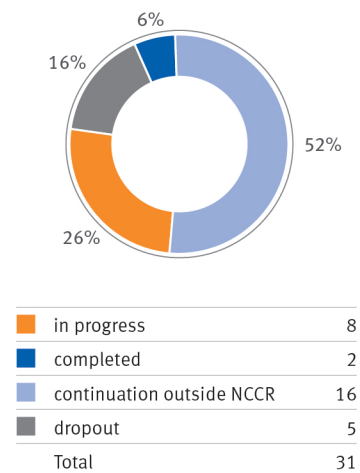
### Gender in the NCCR

Data: current year



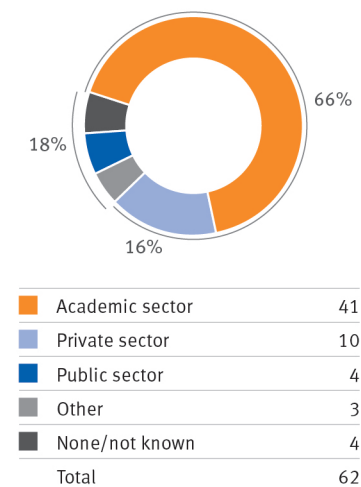
### Training state of doctoral students

Data: since start



### Next employer of doctoral and postdoctoral students

Data: since start



# NCCR LIVES

## Overcoming vulnerability: life course perspectives

NCCR Director: Prof. Dario Spini, NCCR Co-Director: Prof. Eric Widmer  
Home Institutions: University of Lausanne, University of Geneva  
Start date: 1<sup>st</sup> of January 2011 (3<sup>rd</sup> NCCR series)



### Heads of Research Groups

Prof. **André Berchtold**, Centre de recherche sur les parcours de vie et les inégalités, Université de Lausanne  
Prof. **Laura Bernardi**, Centre de recherche sur les parcours de vie et les inégalités, Université de Lausanne  
Prof. **Jean-François Bickel**, Haute école de travail social de Fribourg, Haute école spécialisée de Suisse occidentale  
Prof. **Giuliano Bonoli**, Institut de hautes études en administration publique, Université de Lausanne  
Prof. **Jean-Michel Bonvin**, Institut de socio-économie, Université de Genève  
Prof. **Felix Bühlmann**, Centre de recherche sur les parcours de vie et les inégalités, Université de Lausanne  
Prof. **Eric Davoine**, Chaire Ressources Humaines et Organisation, Université de Fribourg  
Prof. **Jörg Dittmann**, Hochschule für Soziale Arbeit, Fachhochschule Nordwestschweiz  
Prof. **Alexandra Freund**, Psychologisches Institut, Universität Zürich  
Prof. **Paolo Ghisletta**, Faculté de psychologie et des sciences de l'Éducation, Université de Genève  
Prof. **Daniela Jopp**, Institut de psychologie, Université de Lausanne  
Prof. **Dominique Joye**, Centre de recherche sur les parcours de vie et les inégalités, Université de Lausanne  
Prof. **Matthias Kliegel**, Laboratoire du Vieillissement Cognitif, Université de Genève  
Prof. **Rafael Lalive**, Département d'économétrie et d'économie politique, Université de Lausanne  
Prof. **Nicky Le Feuvre**, Laboratoire de sociologie, Université de Lausanne  
Prof. **Daniel Oesch**, Centre de recherche sur les parcours de vie et les inégalités, Université de Lausanne  
Prof. **Michel Oris**, Centre inter-facultaire de gérontologie et d'études des vulnérabilités, Université de Genève  
Prof. **Michele Pellizzari**, Département des Sciences Économiques, Université de Genève  
Prof. **José Ramirez**, Haute école de gestion de Genève, Haute école spécialisée de Suisse occidentale  
Prof. **Gilbert Ritschard**, Institut d'études démographiques et du parcours de vie, Université de Genève  
Prof. **Jérôme Rossier**, Laboratoire de psychologie du développement, conseil et Intervention, Université de Lausanne  
Prof. **Willibald Ruch**, Psychologisches Institut, Universität Zürich

### Participating Institutions

Universität Bern (1 group)/Université de Fribourg (1 group)/Université de Genève (6 groups)/Université de Lausanne (11 groups)/Universität Zürich (2 groups)/Fachhochschule Nordwestschweiz (1 group)/Haute école spécialisée de Suisse occidentale (1 group)/

### Members of the Review Panel

Prof. **Alain Chenu**, Directeur de l'Observatoire sociologique du changement, Paris, FR  
Prof. **Michael Eid**, Erziehungswissenschaften und Psychologie, Freie Universität Berlin, DE  
Prof. **Jutta Heckhausen**, Department of Psychology and Social Behavior, University of California, Irvine, US  
Prof. **François Héran**, INED – Institut national d'études démographiques, Paris, FR  
Prof. **Ingrid Schoon**, Department of Quantitative Social Science, Institute of Education, University of London UK  
Prof. **Joan Miquel Verd Pericàs**, Departamento de Sociologia, Univeristat Autònoma de Barcelona, ES  
  
Prof. **Alexander Grob** (Chair), SNF, Bern, CH  
Prof. **Uschi Backes-Gellner**, SNF, Bern, CH  
Prof. **Jörg Rössel**, SNF, Bern, CH

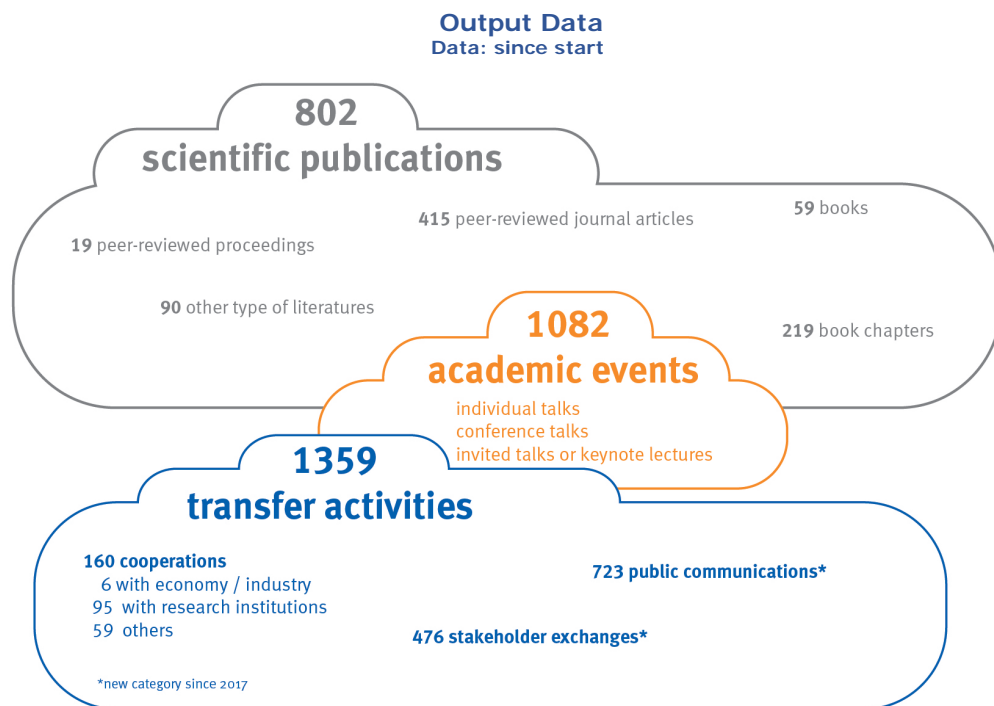
### Management/Coordination

Dr. Stéphane Guérard  
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Université de Lausanne  
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CH-1015 Lausanne  
+41 21 692 38 52  
[www.lives-nccr.ch](http://www.lives-nccr.ch)

## Heads of Research Groups (continued)

Prof. **Dario Spini**, Centre de recherche sur les parcours de vie et les inégalités, Université de Lausanne  
 Prof. **Christian Staerklé**, Laboratoire de psychologie sociale, Université de Lausanne  
 Prof. **Jean-Pierre Tabin**, Haute école de travail social et de la santé de Lausanne, Haute école spécialisée de Suisse occidentale  
 Prof. **Boris Wernli**, Fondation Suisse pour la recherche en Sciences Sociales, Université de Lausanne  
 Prof. **Eric Widmer**, Institut d'études démographiques et du parcours de vie, Université de Genève  
 Prof. **Hansjörg Znoj**, Institut für Psychologie, Universität Bern

## [Overview of all Research Projects](#)



## Key collaborations with third parties

### Academia

Institut National Etude Démographiques (INED), Paris, FR  
 NCCR on the move, University of Neuchatel, CH  
 Oregon State University, Center for Healthy Ageing Research and Hallie Ford Center for Healthy Children and Families, Corvallis, US  
 Population Europe – Network of Europe's leading demographic research centres, Berlin, DE  
 Umeå University, Ageing and Living Conditions Programme, SE  
 University College London, International Centre for Lifecourse Studies in Society and Health, UK  
 University of Bremen, Institut für Soziologie, Bremen, DE  
 University of Oslo, Centre of Gender Research, Oslo, NO  
 University of Western Ontario, Department of Sociology, London, CA  
 Vrije Universiteit Amsterdam, Amsterdam, NL

### Private and public sector

Centre de compétence suisse en sciences sociales (FORS), Lausanne, CH  
 Centre for Economic Policy Research, London, GB  
 Département de la santé et de l'action sociale du Canton de Vaud, Lausanne, CH  
 Départements des affaires régionales, de l'économie et de la santé du Canton de Genève, CH  
 Fondation Leenards, Lausanne, CH  
 German Institute for Economic Research, Department of German Socio-Economic Panel Study, Berlin, DE  
 Organisation for Economic Co-operation and Development, Paris, FR  
 Federal Social Insurance Office (OFAS), Bern, CH  
 Pro Senectute Switzerland, Basel, Bern, Valais, Vaud, CH  
 State Secretariat of Economic Affairs, Bern, CH

## Funding

Funding Source (CHF)	Total Phase 1 2011 - 2014	Total Phase 2 2015 - 2018	2015	2016	2017	2018	Phase 2 %
SNSF-funding <sup>1</sup>	<b>14'551'895</b>	<b>14'745'512</b>	4'536'156	4'327'952	3'553'404	2'328'000	35
Self-funding from Home Institutions <sup>2</sup>	<b>5'636'219</b>	<b>13'898'717</b>	3'279'265	3'103'830	3'541'010	3'974'612	33
Self-funding from project participants	<b>13'721'239</b>	<b>12'747'620</b>	3'230'016	3'146'074	3'110'006	3'261'524	30
3rd party-funding	<b>5'440'407</b>	<b>935'538</b>	168'901	248'081	278'706	239'850	2
Total	<b>39'349'760</b>	<b>42'327'387</b>	11'214'338	10'825'937	10'483'126	9'803'986	100

<sup>1</sup> incl. Mobility-grant in 2014 and 2015, compensation for PHD salaries increase in 2015 and 120% support-grant in 2015, 2016 and 2017

<sup>2</sup> Personnel costs, equipment and consumables, not included infrastructure and basic equipment

## Persons involved

Personnel <sup>3</sup>	Total of persons	Female %	CH	Top 5 – Most represented nations					Other nations
				FR	DE	IT	CA	ES	
Research associates <sup>4</sup>	25	42	14	4	1	0	0	0	6
Doctoral students	49	44	22	3	3	3	2	1	11
Postdoctoral students	19	37	9	6	0	0	0	1	3
Senior researchers <sup>5</sup>	77	26	46	9	7	5	1	1	11
Management <sup>6</sup>	8.93	37	17	1	0	0	1	0	0
Other staff	16	41	10	5	1	0	0	0	0
<b>Total</b>	<b>194.93</b>	<b>36</b>	<b>118</b>	<b>28</b>	<b>12</b>	<b>8</b>	<b>4</b>	<b>3</b>	<b>31</b>

<sup>3</sup> Persons involved in the NCCR in the last reporting period (12 months)

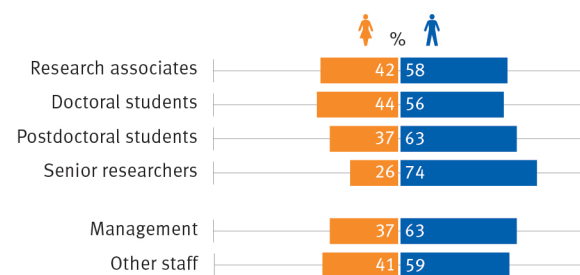
<sup>4</sup> Includes graduate scientists (level master) but not registered as PhD students or undergraduate students participating in research projects

<sup>5</sup> Including leaders of the individual projects and other organisational units of the NCCR

<sup>6</sup> Full-time equivalent, including NCCR-Director and persons in charge of knowledge and technology transfer, equal opportunities, communication and education and training

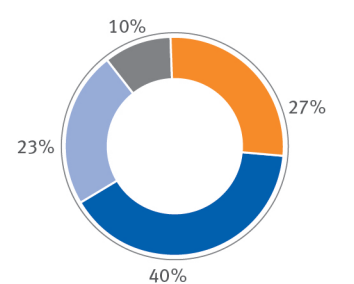
### Gender in the NCCR

Data: current year



### Training state of doctoral students

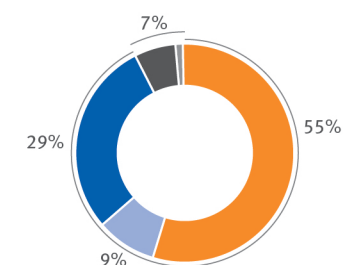
Data: since start



in progress	28
completed	42
continuation outside NCCR	25
dropout	10
<b>Total</b>	<b>105</b>

### Next employer of doctoral and postdoctoral students

Data: since start



Academic sector	57
Private sector	9
Public sector	30
Other	1
None/not known	6
<b>Total</b>	<b>103</b>

# NCCR MARVEL

## Materials' Revolution: Computational Design and Discovery of Novel Materials

NCCR Director: Prof. Nicola Marzari  
Home Institution: EPFL  
Start date: 1<sup>st</sup> May 2014 (4<sup>th</sup> NCCR series)

### Heads of Research Groups

Prof. **Ulrich Aschauer**, Departement für Chemie und Biochemie, Universität Bern  
Prof. **Raffaella Buonsanti**, Institut des sciences et ingénierie chimiques, EPFL  
Prof. **Michele Ceriotti**, Institut des matériaux, EPFL  
Dr. **Claudia Cancellieri**, Fügetechnologie und Korrosion, Empa Dübendorf  
Prof. **Clémence Corminboeuf**, Institut des sciences et ingénierie chimiques, EPFL  
Prof. **Volkan Cevher**, Institut de génie électrique et électronique, EPFL  
Dr. **Alessandro Curioni**, IBM Research GmbH, Rueschlikon  
Prof. **William Curtin**, Institut de génie mécanique, EPFL  
Prof. **Antoine Georges**, Department of Quantum Matter Physics, Université de Genève  
Prof. **Stefan Goedecker**, Departement Physik, Universität Basel  
Dr. **Pierangelo Gröning**, Moderne Materialien und Oberflächen, Empa Dübendorf  
Prof. **Jürg Hutter**, Institut für Chemie, Universität Zürich  
Prof. **Martin Jaggi**, Institut d'informatique et de communications, EPFL  
Prof. **Michel Kenzelmann**, Laboratory for Neutron Scattering and Imaging, PSI Villigen  
Prof. **Christoph Koch**, Institut d'informatique et de communications, EPFL  
Prof. **Thomas Lippert**, Materials Group, PSI Villigen  
Prof. **Nicola Marzari**, Institut des matériaux, EPFL  
Dr. **Maria Luisa Medarde Barragan**, Laboratory for Scientific Developments and Novel Materials, PSI Villigen  
Prof. **Frithjof Nolting**, Laboratory for Condensed Matter Physics, PSI Villigen  
Prof. **Michele Parrinello**, Facoltà di scienze informatiche, Università della Svizzera Italiana, Lugano and Departement Chemie und Angewandte Biowissenschaften, ETH Zürich  
Prof. **Alfredo Pasquarello**, Institut de physique, EPFL  
Dr. **Daniele Passerone**, Nanotech@surfaces, Empa Dübendorf  
Dr. **Daniele Pergolesi**, Materials Group, PSI Villigen  
Prof. **Wendy Lee Queen**, Institut des sciences et ingénierie chimiques, EPFL  
Dr. **Marco Ranocchiari**, Laboratory for Synchrotron Radiation – Catalysis and Sustainable Chemistry, PSI Villigen  
Dr. **Marta D. Rossell**, Zentrum für Elektronenmikroskopie, Empa Dübendorf  
Prof. **Ursula Röthlisberger**, Institut des sciences et ingénierie chimiques, EPFL  
Prof. **Christian Rüegg**, Laboratory for Neutron Scattering and Imaging, PSI Villigen and Department of Quantum Matter Physics, Université de Genève  
Prof. **Thomas J. Schmidt**, Electrochemistry Laboratory, PSI Villigen  
Dr. **Thorsten Schmitt**, Laboratory for Condensed Matter Physics, PSI Villigen



### Participating Institutions

Universität Basel (2 groups)/Universität Bern (1 group)/Université de Fribourg (1 group)/Université de Genève (3 groups)/Università della Svizzera Italiana (1 group)/Universität Zürich (1 group)/EPFL (13 groups) ETH Zürich (4 groups)/Centro Svizzero di Calcolo Scientifico (2 groups) Empa (4 groups)/IBM Research GmbH (1 group)/Paul Scherrer Institut (12 groups)

### Members of the Review Panel

Prof. **Ali Alavi**, Max-Planck-Institut für Festkörperforschung, DE/  
Department of Chemistry, University of Cambridge, UK  
Prof. **Massimo Capone**, Scuola Internazionale Superiore di Studi Avanzati (SISSA), IT  
Prof. **Angelos Michaelides**, Thomas Young Centre, London, UK  
Prof. **Klaus-Robert Müller**, Machine Learning Group, TU Berlin, DE  
Prof. **Shobhana Narasimhan**, Theoretical Sciences Unit, JNCASR, IN  
Prof. **Mike Payne**, Theory of Condensed Matter Group, University of Cambridge, UK  
Prof. **Christopher M. Wolverton**, Department of Materials Science & Engineering, Northwestern University, US  
  
Prof. **Jan Carmeliet** (Chair), SNF, Bern, CH  
Prof. **Alberto Morpurgo**, SNF, Bern, CH  
Prof. **Katharina Fromm**, SNF, Bern, CH

### Management / Coordination

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Dr. Nathalie Jongen  
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EPFL STI PRN-MARVEL  
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CH-1015 Lausanne  
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## Heads of Research Groups (continued)

Prof. **Thomas Schulthess**, Centro Svizzero di Calcolo Scientifico (CSCS), Lugano and Institut für Theoretische Physik, ETH Zürich  
 Prof. **Ming Shi**, Laboratory for Condensed Matter Physics, PSI Villigen  
 Prof. **Berend Smit**, Institut des sciences et ingénierie chimiques, EPFL  
 Dr. **Grigory Smolentsev**, Bioenergy and Catalysis Laboratory, PSI Villigen  
 Prof. **Nicola Spaldin**, Departement Materialwissenschaft, ETH Zürich  
 Dr. **Urs Staub**, Laboratory for Condensed Matter Physics, PSI Villigen  
 Prof. **Matthias Troyer**, Institut für Theoretische Physik, ETH Zürich  
 Prof. **Dirk van der Marel**, Department of Quantum Matter Physics, Université de Genève  
 Dr. **Joost VandeVondele**, Centro Svizzero di Calcolo Scientifico (CSCS), Lugano  
 Prof. **Anatole von Lilienfeld**, Departement Chemie, Universität Basel  
 Prof. **Philipp Werner**, Département de Physique, Université de Fribourg  
 Prof. **Oleg Yazeyev**, Institut de physique, EPFL

## [Overview of all Research Projects](#)

## Key collaborations with third parties

### Academia

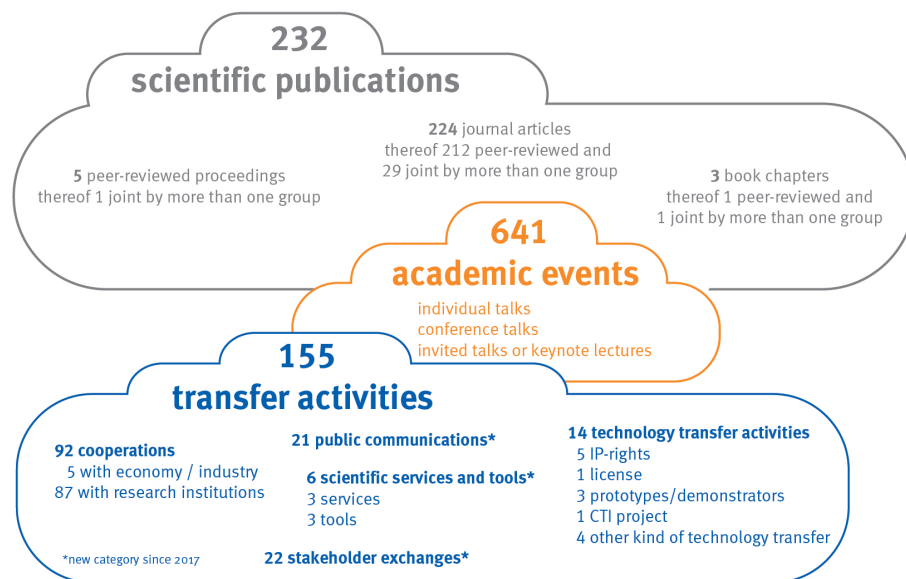
Centre Européen de Calcul Atomique et Moléculaire (CECAM), EPFL  
 SCCER Heat & Electricity Storage, PSI, Villigen  
 Platform for Advanced Scientific Computing (PASC)  
 H2020 Flagship Human Brain Project, EPFL  
 H2020 Flagship Graphene  
 H2020 Centre of Excellence on Materials Design at the Exascale (MaX)  
 H2020 European Materials Modelling Council (EMMC)  
 H2020 Nanoscience Foundries & Fine Analysis (NFFA)  
 Consorzio Interuniversitario CINECA, Bologna  
 Psi-k  
 Thomas Young Centre, London  
 Max-Planck-EPFL for Molecular Nanoscience and Technology  
 Quantum ESPRESSO Foundation, London  
 Crystallography Open Database, Vilnius  
 Simons Collaboration on the Many Electron Problem, Columbia University  
 African School series on Electronic Structure Methods and Applications (ASESMA), Urbana  
 Open Quantum Materials Database, Northwestern University

### Private and public sector

ChemAlive, Lausanne  
 Varinor-Richemont, Delémont  
 Material Phases Data System (MPDS), Vitznau  
 Robert Bosch Research and Technology Center, Cambridge MA  
 Microsoft Corporation, Santa Barbara CA

## Output Data

Data: since start



## Funding

Funding Source (CHF)	Total Phase 1 2014 – 2017	2014	2015	2016	2017	Phase 1 %
SNSF-funding	<b>18'000'000</b>	5'250'000	4'390'000	4'200'000	4'160'000	42
Self-funding from Home Institution <sup>1</sup>	<b>6'286'016</b>	1'135'195	1'614'724	1'501'097	2'035'000	15
Self-funding from project participants	<b>18'633'909</b>	4'008'660	5'309'829	6'748'653	2'566'767	42
3rd party-funding	<b>334'187</b>	100'069	143'478	90'640	0	1
<b>Total</b>	<b>43'254'112</b>	10'493'924	11'458'031	12'540'390	8'761'767	100

<sup>1</sup> Personnel costs, equipment and consumables, not included infrastructure and basic equipment

## Persons involved

Personnel <sup>2</sup>	Total of persons	Female %	CH	Top 5 – Most represented nations					Other nations
				IT	DE	CN	RU	FR	
Doctoral students	47	19	10	9	7	1	1	2	17
Postdoctoral students	82	16	1	21	9	8	6	3	34
Senior researchers <sup>3</sup>	62	16	17	18	7	2	2	2	15
Management <sup>4</sup>	4.26	75	8	3	0	0	0	0	5
Other staff	3	67	1	1	0	0	0	0	1
<b>Total</b>	<b>198.26</b>	<b>21</b>	<b>37</b>	<b>52</b>	<b>23</b>	<b>11</b>	<b>9</b>	<b>7</b>	<b>72</b>

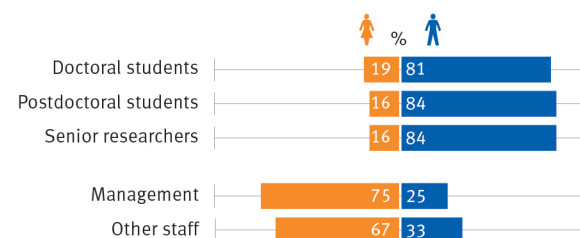
<sup>2</sup> Persons involved in the NCCR in the last reporting period (12 months)

<sup>3</sup> Including leaders of the individual projects and other organisational units of the NCCR

<sup>4</sup> Full-time equivalent, including NCCR-Director and persons in charge of knowledge and technology transfer, equal opportunities, communication and education and training

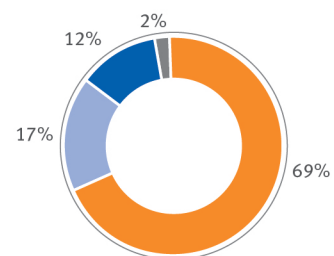
### Gender in the NCCR

Data: current year



### Training state of doctoral students

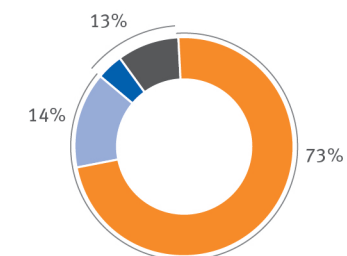
Data: since start



in progress	41
completed	7
continuation outside NCCR	10
dropout	1
<b>Total</b>	<b>59</b>

### Next employer of doctoral and postdoctoral students

Data: since start



Academic sector	40
Private sector	8
Public sector	2
Other	0
None/not known	5
<b>Total</b>	<b>55</b>

# NCCR MSE

## Molecular Systems Engineering



NCCR Director: Prof. Thomas R. Ward, NCCR Co-Director: Prof. Daniel Müller  
Home Institutions: University of Basel, ETH Zurich  
Start date: 1<sup>st</sup> of July 2014 (4<sup>th</sup> NCCR series)

### Heads of Research Groups

Prof. **Yaakov Benenson**, Departement Biosystems Science and Engineering, ETH Zürich  
Prof. **Nikola Biller-Andorno**, Institut für Biomedizinische Ethik und Medizingeschichte, Universität Zürich  
Dr. **Michel Calame**, Materials Meet Life, Empa, Dübendorf  
Prof. **Petra Dittrich**, Departement Biosystems Science and Engineering, ETH Zürich  
Prof. **Dimitrios Fotiadis**, Institut für Biochemie und Molekulare Medizin, Universität Bern  
Prof. **Martin Fussenegger**, Departement Biosystems Science and Engineering, ETH Zürich  
Prof. **Karl Gademann**, Departement Chemie, Universität Zürich  
Prof. **Catherine Housecroft**, Departement Chemie, Universität Basel  
Prof. **Roderick Lim**, Biozentrum, Universität Basel  
Dr. **Emanuel Lörtscher**, IBM Research GmbH, Zürich  
Prof. **Ivan Martin**, Departement Biomedizin, Universitätsspital Basel  
Prof. **Stefan Matile**, Section Chimie et Biochimie, Université de Genève  
Prof. **Marcel Mayor**, Departement Chemie, Universität Basel  
Prof. **Wolfgang Meier**, Departement Chemie, Universität Basel  
Prof. **Daniel Müller**, Departement Biosystems Science and Engineering, ETH Zürich  
Prof. **Michael Nash**, Departement Chemie, Universität Basel  
Prof. **Cornelia Palivan**, Departement Chemie, Universität Basel  
Prof. **Sven Panke**, Departement Biosystems Science and Engineering, ETH Zürich  
Prof. **Randall Platt**, Departement Biosystems Science and Engineering, ETH Zürich  
Prof. **Sai Reddy**, Departement Biosystems Science and Engineering, ETH Zürich  
Prof. **Botond Roska**, Neurobiologie, Friedrich Miescher Institut, Basel  
Prof. **Gebhard Schertler**, Paul Scherrer Institut PSI, Villigen  
Prof. **Hendrik Scholl**, Augenklinik, Universitätsspital Basel  
Prof. **Christof Sparr**, Departement Chemie, Universität Basel  
Prof. **Francesco Stellacci**, Institut Bioengineering, EPFL  
Prof. **Jörg Stelling**, Departement Biosystems Science and Engineering, ETH Zürich  
Prof. **Konrad Tiefenbacher**, Departement Chemie, Universität Basel  
Prof. **Viola Vogel**, Departement Gesundheitswissenschaften und Technologie, ETH Zürich  
Prof. **Janos Vörös**, Institut für Biomedizinische Technik, ETH Zürich  
Prof. **Thomas R. Ward**, Departement Chemie, Universität Basel  
Prof. **Oliver Wenger**, Departement Chemie, Universität Basel  
Dr. **Heiko Wolf**, IBM Research GmbH, Zürich

### [Overview of all Research Projects](#)

### Participating Institutions

Universität Basel (10 groups)/Universität Bern (1 group)/Université de Genève (1 group)/Universität Zürich (2 groups)/EPFL (1 group)/ETH Zürich (10 groups)/Empa (1 group)/Friedrich Miescher Institut (1 group)  
IBM Research GmbH (2 groups)/Paul Scherrer Institut (1 group)  
Universitätsspital Basel (2 groups)

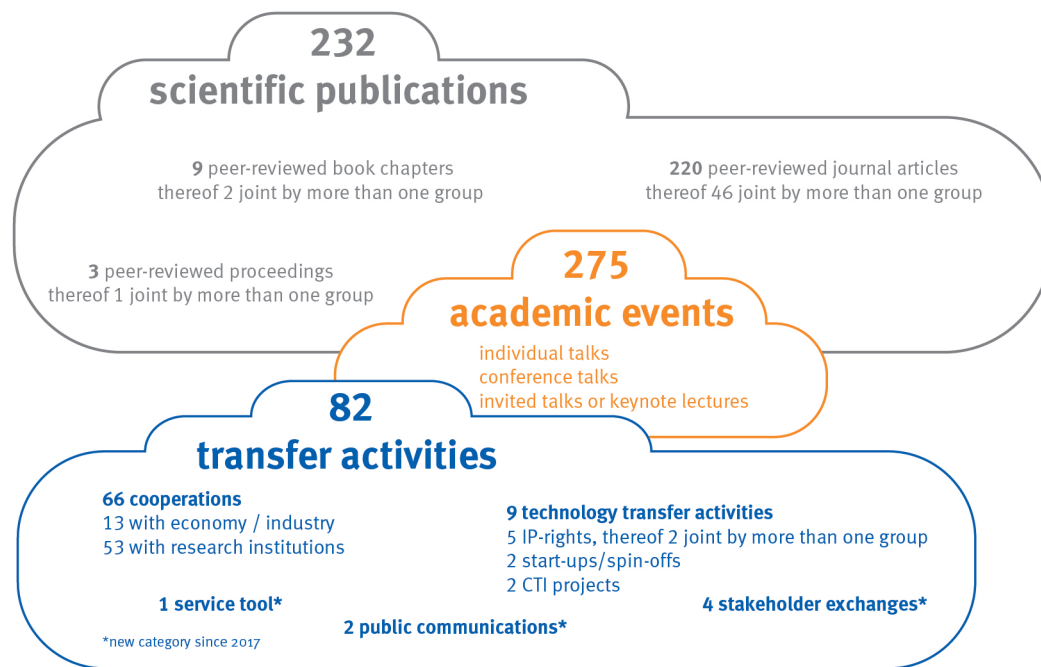
### Members of the Review Panel

Prof. **Luisa De Cola**, Institut de Science et d'Ingénierie, Supramoléculaires, Université de Strasbourg, FR  
Prof. **Jean M. J. Frechet**, Department of Chemistry, University of California, US  
Prof. **Wolfgang Knoll**, AIT Austrian Institute of Technology, AT  
Prof. **Timothy K. Lu**, Department of Electrical Engineering and Computer Science, MIT Synthetic Biology Center, MIT, US  
Prof. **Joachim P. Spatz**, Max-Planck-Institut für intelligente Systeme, DE  
Prof. **Gregory Stephanopoulos**, MIT, US  
Prof. **Gerhard Wegner**, Max-Planck-Institut für Polymerforschung, DE  
Prof. **Tanja Weil**, Institut für Organische Chemie III, Universität Ulm, DE  
  
Prof. **Philipp Rudolf von Rohr** (Chair), SNF, Bern, CH  
Prof. **Kai Johnsson**, SNF, Bern, CH  
Prof. **Isabelle Mansuy**, SNF, Bern, CH

### Management/Coordination

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Head Finance & HR  
NCCR Molecular Systems Engineering  
University of Basel  
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+41 61 267 19 90  
[www.nccr-mse.ch](http://www.nccr-mse.ch)

**Output Data**  
Data: since start



**Key collaborations with third parties**

**Academia**

Laboratory of Molecular Biology, MRC, Cambridge, UK  
 Cavendish Laboratory, University of Cambridge, UK  
 Technical University Delft, NL  
 Department of Physics, Georgia Tech, Atlanta, US  
 Institute of Bioprocess Engineering, University of Stuttgart, DE  
 Department of Bioengineering, MIT, US  
 Department of Mathematics, Rutgers University, Piscataway, US  
 Molecular and Cellular Physiology and Medicine, Stanford University, US  
 Max Planck Institute for Biophysics, Frankfurt, DE  
 Systems Neurobiology Laboratories, Salk Institute, La Jolla, US  
 Department of Chemistry, Colorado State University, US  
 School of Chemistry, University of Manchester, UK  
 Institut de Science et d'Ingénierie Supramoléculaires, Université de Strasbourg, FR  
 Abteilung Physikalische Chemie Mikroskopischer Systeme, Karlsruhe Institut für Technologie, DE  
 Instituto de Ciencia Molecular, University of Valencia, SP  
 Department of Chemistry and Biotechnology, University of Tokyo, JP  
 Theoretische und computergestützte Biophysik, Max Planck Institut für Biophysikalische Chemie Göttingen, DE  
 Max-Planck-Institut für Kolloid und Grenzflächenforschung, Potsdam, DE  
 Molecular Environmental Microbiology Laboratory, Centro Nacional de Biotecnología, SP  
 Institut für Chemie, Technische Universität Berlin, DE  
 BIOSS Centre for Biological Signaling Studies, Albert-Ludwigs-Universität Freiburg, DE  
 FP 7 CELLO, FP 7 HYSENS, FP 7 HETEROMOLMAT, FP 7 METACODE

**Private and public sector**

Avails Medical Inc., Menlo Park, US  
 DSM Nutritional Products AG, Kaiseraugst, CH  
 Gensight Biologics, Paris, FR  
 Lonza LTD, Basel, CH  
 Nanosurf AG, Liestal, CH  
 Roche (Genia Technologies), Mountain View, US  
 SwissLitho AG, Zurich, CH

**Funding**

Funding Source (CHF)	Total Phase 1 2014 – 2017	2014	2015	2016	2017	Phase 1 %
SNSF-funding <sup>1</sup>	<b>16'913'800</b>	4'225'000	4'225'000	4'238'800	4'225'000	54
Self-funding from Home Institutions <sup>2</sup>	<b>6'739'154</b>	1'073'652	1'306'204	2'218'863	2'140'435	22
Self-funding from project participants	<b>7'049'267</b>	1'878'797	2'977'217	2'193'253	0	22
3rd party-funding	<b>583'497</b>	140'000	255'005	188'492	0	2
Total	<b>31'285'718</b>	7'317'449	8'763'426	8'839'408	6'365'435	100

<sup>1</sup> incl. 120%-grant in year 2016

<sup>2</sup> Personnel costs, equipment and consumables, not included infrastructure and basic equipment

## Persons involved

Personnel <sup>2</sup>	Total of persons	Female %	CH	Top 5 – Most represented nations					Other nations
				DE	IT	FR	CN	US	
Research associates <sup>3</sup>	3	33	1	0	0	0	0	0	3
Doctoral students	46	37	11	17	4	2	0	0	13
Postdoctoral students	25	16	1	7	0	3	5	1	9
Senior researchers <sup>4</sup>	42	21	16	8	1	0	0	4	15
Management <sup>5</sup>	5.28	42	7	4	1	0	0	1	1
Other staff	6	50	2	1	2	1	0	0	0
<b>Total</b>	<b>127.28</b>	<b>29</b>	<b>38</b>	<b>37</b>	<b>8</b>	<b>6</b>	<b>5</b>	<b>6</b>	<b>41</b>

<sup>2</sup> Persons involved in the NCCR in the last reporting period (12 months)

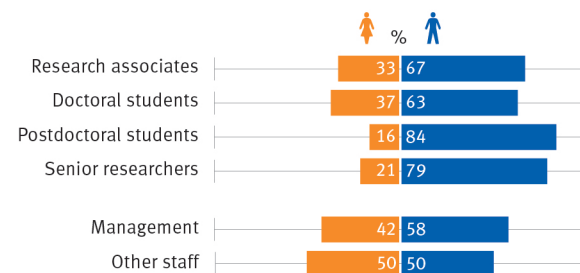
<sup>3</sup> Includes graduate scientists (level master) but not registered as PhD students or undergraduate students participating in research projects.

<sup>4</sup> Including leaders of the individual projects and other organisational units of the NCCR

<sup>5</sup> Full-time equivalent, including NCCR-Director and persons in charge of knowledge and technology transfer, equal opportunities, communication and education and training

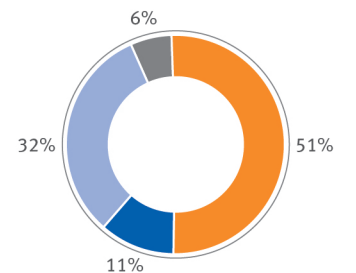
### Gender in the NCCR

Data: current year



### Training state of doctoral students

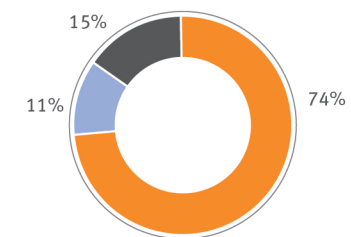
Data: since start



in progress	37
completed	8
continuation outside NCCR	23
dropout	4
<b>Total</b>	<b>72</b>

### Next employer of doctoral and postdoctoral students

Data: since start



Academic sector	40
Private sector	6
Public sector	0
Other	0
None/not known	8
<b>Total</b>	<b>54</b>

# NCCR MUST

## Molecular Ultrafast Science and Technology



NCCR Director: Prof. Ursula Keller, NCCR Co-Director: Prof. Thomas Feurer  
Home Institutions: ETH Zurich, University of Bern  
Start date: 1<sup>st</sup> July 2010 (3<sup>rd</sup> NCCR series)

### Heads of Research Groups

Prof. **Natalie Banerji**, Institut für Angewandte Physik, Universität Bern  
Dr. **Paul Beaud**, Laboratory for Synchrotron Radiation – Condensed Matter, PSI Villigen  
Prof. **Andrea Cannizzo**, Institut für Angewandte Physik, Universität Bern  
Prof. **Fabrizio Carbone**, Institut de Physique de la Matière Condensée, EPFL  
Prof. **Majed Chergui**, Institut des Sciences et Ingénierie Chimiques, EPFL  
Prof. **Thomas Feurer**, Institut für Angewandte Physik, Universität Bern  
Prof. **Peter Hamm**, Physikalisch-Chemisches Institut, Universität Zürich  
Dr. **Matthias Hengsberger**, Physik-Institut, Universität Zürich  
Prof. **Steve Johnson**, Institut für Quantenelektronik, ETH Zürich  
Prof. **Ursula Keller**, Institut für Quantenelektronik, ETH Zürich  
Prof. **Markus Meuwly**, Departement Chemie, Universität Basel  
Dr. **Chris Milne**, SwissFEL, Paul Scherrer Institut PSI, Villigen  
Prof. **Jacques-E. Moser**, Institut des Sciences et Ingénierie Chimiques, EPFL  
Prof. **Jürg Osterwalder**, Physik-Institut, Universität Zürich  
Prof. **Jeremy Richardson**, Laboratorium für Physikalische Chemie, ETH Zürich  
Prof. **Ursula Röthlisberger**, Institut des Sciences et Ingénierie Chimiques, EPFL  
Dr. **Hans Sigg**, Laboratory for Micro and Nanotechnology, PSI Villigen  
Dr. **Urs Staub**, Laboratory for Synchrotron Radiation – Condensed Matter, PSI Villigen  
Prof. **Thomas Südmeyer**, Laboratoire Temps-Fréquence, Université de Neuchâtel  
Prof. **Jeroen van Bokhoven**, Institut für Chemie- u. Bioingenieurwissenschaften, ETH Zürich  
Prof. **Jiri Vanicek**, Institut des Sciences et Ingénierie Chimiques, EPFL  
Prof. **Jean-Pierre Wolf**, Groupe de Physique Appliquée, Université de Genève  
Prof. **Hans Jakob Würner**, Laboratorium für Physikalische Chemie, ETH Zürich

### [Overview of all Research Projects](#)

### Participating Institutions

Universität Basel (1 group)/Universität Bern (3 groups)/Université de Fribourg (1 group)/Université de Genève (1 group)/Université de Neuchâtel (1 group)/Universität Zürich (2 groups)/EPFL (5 groups) ETH Zürich (5 groups)/ Paul Scherrer Institut PSI (3 groups)

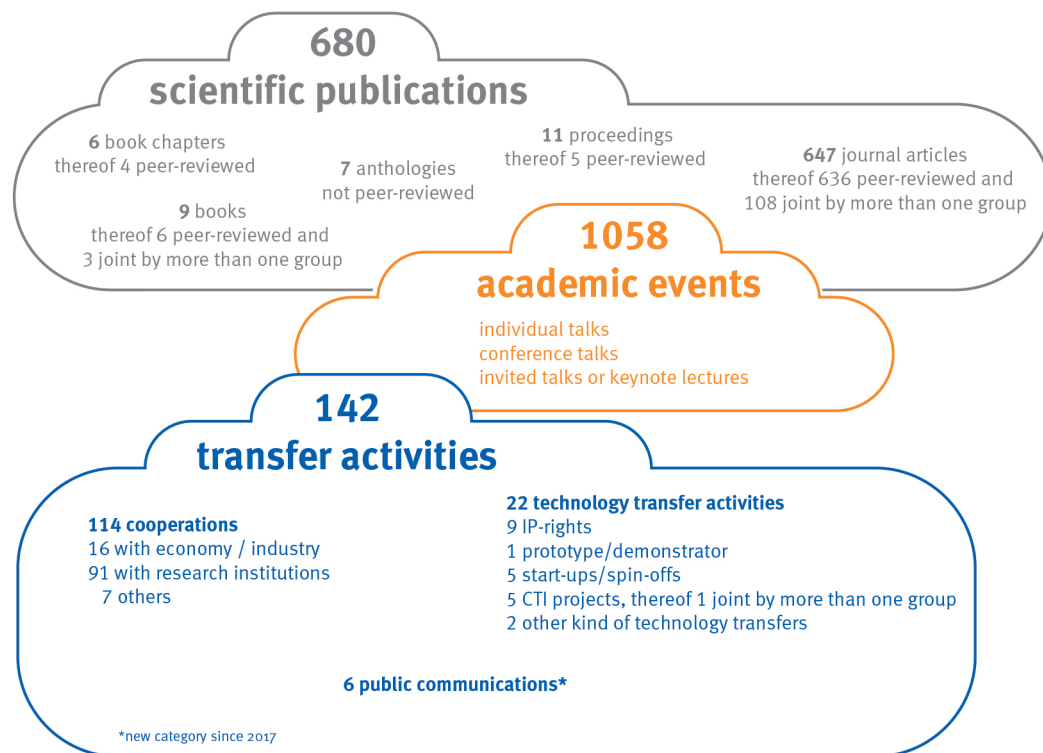
### Members of the Review Panel

Prof. **Regina de Vivie-Riedle**, Department Chemie, Ludwig-Maximilians-Universität München, DE  
Prof. **Thomas Elsaesser**, Max-Born-Institut, Berlin, DE  
Prof. **Roger W. Falcone**, Physics Department, University of California, Berkeley, US  
Prof. **Shaul Mukamel**, Department of Chemistry, University of California Irvine, US  
Prof. **Anthony W. Parker**, Rutherford Appleton Laboratory, Harwell Science and Innovation, Oxfordshire, UK  
Prof. **Villy Sundström**, Kemiska Institutionen, Lunds Universitet, SE  
Prof. **Martin Wolf**, Abteilung Physikalische Chemie, Fritz-Haber Institut der MPG, DE  
Prof. **Dirk van der Marel** (Chair), SNF, Bern, CH  
Prof. **Samuel Leutwyler**, SNF, Bern, CH  
Prof. **Frank Scheffold**, SNF, Bern, CH

### Management/Coordination

Dr. Jan van Beilen and Dr. Anna Garry  
Institut für Quantenelektronik (IQE)  
ETH Zürich  
Wolfgang-Pauli-Strasse 16  
CH-8093 Zürich  
+41 44 633 29 90  
[www.nccr-must.ch](http://www.nccr-must.ch)

**Output Data**  
Data: since start



**Key collaborations with third parties**

**Academia**

Institute of Physical Chemistry, Polish Academy of Sciences, Warsaw, PL  
 Physikalisches Institut, Alberts-Ludwigs-Universität Freiburg, DE  
 Combustion Research Facility, Sandia National Laboratories, Livermore, US  
 Center for Physical Sciences and Technology, Institute of Physics, Vilnius, LT  
 Department of Chemistry, Princeton University, NY, US  
 Department of Chemistry, University of California, Irvine, US  
 Institute of Applied Physics, KIT Karlsruhe, DE  
 Stanford Linear Accelerator Center, Menlo Park CA, US  
 Department of Physics, Imperial College London, UK  
 Department of Chemistry, Massachusetts Institute of Technology, Cambridge, USA  
 Graduate School of Advanced Integration Science, University of Chiba, JP  
 Laboratory of Photonics and Interfaces, EPFL, CH  
 Max-Planck-Institut für Physik Komplexer Systeme, Dresden, DE  
 Max-Planck-Institut für Struktur und Dynamik der Materie/CFEL, Hamburg, DE  
 Department of Chemistry, Copenhagen University, DK

**Private and public sector**

Bystronic, Niederoenz, CH  
 Novartis, Basel, CH  
 OneFive, Zürich, CH  
 Rainbow Photonics AG, Zürich, CH  
 IONIGHT, Bern, CH  
 Clair, Genève, CH  
 AME GmbH, Bern, CH  
 SThAR, Lausanne, CH  
 Supercomputing Systems AG, Zürich CH  
 Aekip SA, Saint Sulpice, CH

**Funding**

Funding Source (CHF)	Total Phase 1	Total Phase 2	2014	2015	2016	2017	Phase 2 %
	2010 - 2013	2014 - 2017					
SNSF-funding <sup>1</sup>	17'790'000	17'371'642	4'971'842	4'470'000	4'471'800	3'458'000	41
Self-funding from Home Institutions <sup>2</sup>	9'616'456	6'111'363	1'808'335	1'513'441	1'579'587	1'210'000	15
Self-funding from project participants	14'445'287	18'082'783	4'392'548	4'634'879	4'502'658	4'552'698	43
3rd party-funding	867'189	263'346	112'513	-39'167	90'000	100'000	1
<b>Total</b>	<b>42'718'932</b>	<b>41'829'134</b>	11'285'238	10'579'153	10'644'045	9'320'698	100

<sup>1</sup> incl. funding of transfer projects (strong Swiss franc package) in 2012, 120% support-grant in 2013, 2014, 2015 and 2016 and compensation for PhD salaries increase in 2014

<sup>2</sup> Personnel costs, equipment and consumables, not included infrastructure and basic equipment



## Persons involved

Personnel <sup>3</sup>	Total of persons	Female %	CH	Top 5 – Most represented nations					Other nations
				DE	IT	FR	IN	GB	
Doctoral students	61	26	15	13	5	8	3	1	16
Postdoctoral students	45	24	3	11	7	4	5	2	15
Senior researchers <sup>4</sup>	51	22	22	8	6	2	0	4	11
Management <sup>5</sup>	3.48	50	8	2	0	0	0	1	2
Other staff	10	0	10	0	0	0	0	0	0
<b>Total</b>	<b>170.48</b>	<b>24</b>	<b>58</b>	<b>34</b>	<b>18</b>	<b>14</b>	<b>8</b>	<b>8</b>	<b>44</b>

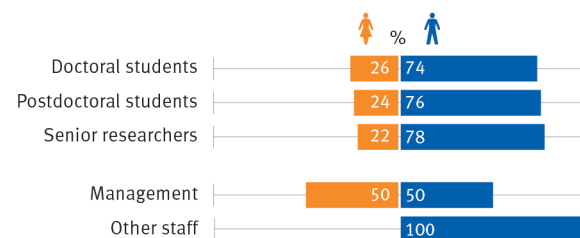
<sup>3</sup> Persons involved in the NCCR in the last reporting period (12 months)

<sup>4</sup> Including leaders of the individual projects and other organisational units of the NCCR

<sup>5</sup> Full-time equivalent, including NCCR-Director and persons in charge of knowledge and technology transfer, equal opportunities, communication and education and training

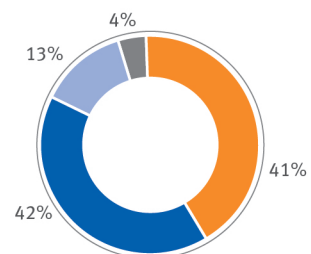
### Gender in the NCCR

Data: current year



### Training state of doctoral students

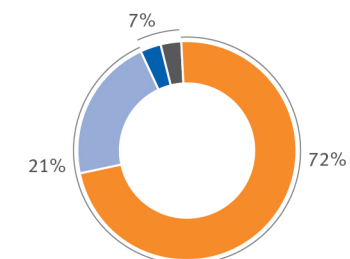
Data: since start



in progress	53
completed	55
continuation outside NCCR	17
dropout	4
<b>Total</b>	<b>129</b>

### Next employer of doctoral and postdoctoral students

Data: since start



Academic sector	137
Private sector	39
Public sector	6
Other	0
None/not known	7
<b>Total</b>	<b>189</b>

# NCCR On the Move

## The Migration-Mobility Nexus

NCCR Director: Prof. Gianni D'Amato  
Home Institution: University of Neuchâtel  
Start date: 1<sup>st</sup> of June 2014 (4<sup>th</sup> NCCR series)

### Heads of Research Groups

Prof. **Alberto Achermann**, Institut für öffentliches Recht, Universität Bern  
Prof. **Christin Achermann**, Centre de droit des migrations, Université de Neuchâtel  
Prof. **Giuliano Bonoli**, Institut des hautes études en administration publique (IDHEAP), Université de Lausanne  
Prof. **Martina Caroni**, Rechtswissenschaftliche Fakultät, Universität Luzern  
Prof. **Janine Dahinden**, Maison d'analyse des processus sociaux (MAPS), Université de Neuchâtel  
Prof. **Gianni D'Amato**, Forum suisse pour l'étude des migrations et de la population, (SFM), Université de Neuchâtel  
Dr. **Rosita Fibbi**, Forum suisse pour l'étude des migrations et de la population, (SFM), Université de Neuchâtel  
Prof. **Matteo Gianni**, Institut d'études de la citoyenneté, Université de Genève  
Dr. **Eva Green**, Institut de psychologie, Université de Lausanne  
Prof. **Dominik Hangartner**, London School of Economics, UK/ETH Zürich  
Prof. **Jörg Künzli**, Institut für öffentliches Recht, Universität Bern  
Prof. **Walter Leimgruber**, Seminar für Kulturwissenschaft und Europäische Ethnologie, Universität Basel  
Prof. **Anita Manatschal**, Forum suisse pour l'étude des migrations et de la population (SFM), Université de Neuchâtel  
Prof. **Tobias Müller**, Institut d'économie et d'économétrie, Université de Genève  
Prof. **Etienne Piguet**, Institut de géographie, Université de Neuchâtel  
Prof. **Sarah Progin-Theuerkauf**, Rechtswissenschaftliche Fakultät, Universität Freiburg  
Prof. **Alois Stutzer**, Wirtschaftswissenschaftliche Fakultät, Universität Basel  
Prof. **Philippe Wanner**, Institut de démographie et socioéconomie, Université de Genève  
Prof. **Tania Zittoun**, Institut de psychologie et éducation, Université de Neuchâtel

### [Overview of all Research Projects](#)

**nccr**   
**on the move**

National Center of Competence in Research–  
The Migration-Mobility Nexus  
[nccr-onthemove.ch](http://nccr-onthemove.ch)

### Participating Institutions

Universität Basel (2 groups)/Universität Bern (2 groups)/Université de Fribourg (1 group)/Université de Genève (4 groups)/Université de Lausanne (2 groups)/Universität Luzern (1 group)/Université de Neuchâtel (6 groups)/ETH Zürich (1 group)

### Members of the Review Panel

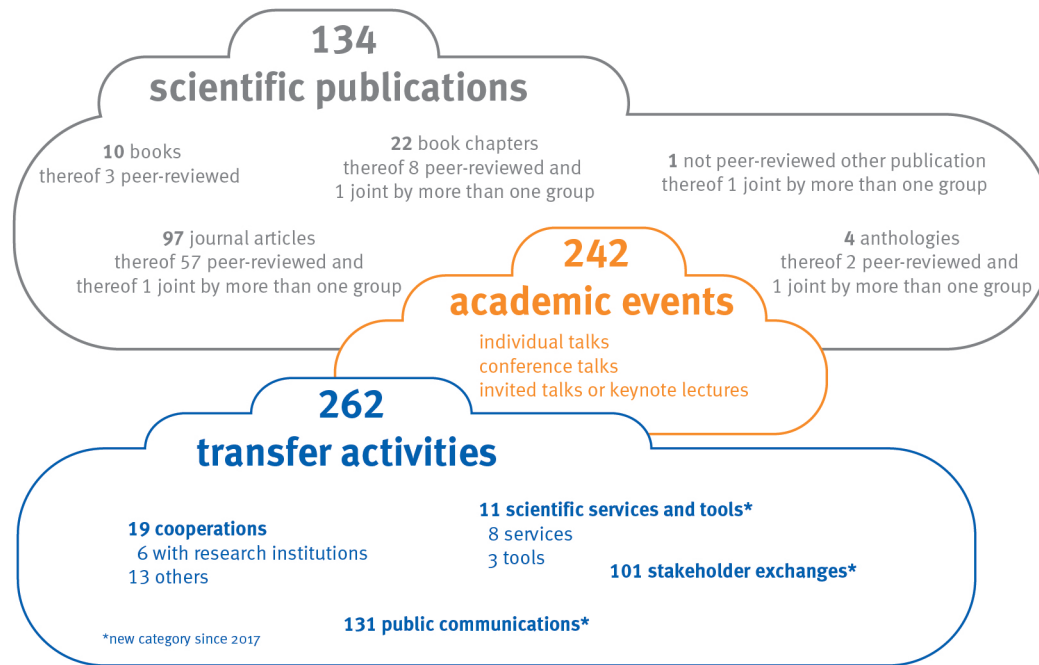
Prof. **Ayşe Caglar**, Institut für Kultur- und Sozialanthropologie, Universität Wien, AT  
Prof. **Helga de Valk**, Faculteit Economische en Sociale Wetenschappen, Vrije Universiteit Brussel, BE  
Prof. **Gil S. Epstein**, Department of Economics, School of Graduate Studies, Bar-Ilan University, IL  
Prof. **Susan Martin**, Georgetown University, Washington, US  
Prof. **Maarten Vink**, Faculty of Arts and Social Sciences, Maastricht University, NL

Prof. **Katharina Michaelowa** (Chair), SNF, Bern, CH  
Prof. **Max Bergman**, SNF, Bern, CH  
Prof. **Franz Caspar**, SNF, Bern, CH

### Management / Coordination

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[www.nccr-onthemove.ch](http://www.nccr-onthemove.ch)

**Output Data**  
Data: since start



**Key collaborations with third parties**

**Academia**

Center for the Study of Poverty and Social Justice, School for Policy Studies, University of Bristol, UK  
 Center of Migration Research, University of Warsaw, PL  
 Centre d'Etudes de l'Ethnicité et des Migrations (CEDEM), Université de Liège, BE  
 Department of Politics, University of Sheffield, UK  
 IMISCOE, Network of Scholars International Migration, Integration and Social Cohesion, Erasmus University Rotterdam, NL  
 Institute for Advanced Studies in the Humanities, University of Edinburgh, UK  
 Institute for Demographic Studies INED, Paris, FR  
 Institute for the Study of Labor, Bonn, DE  
 International and European Forum on Migration Research, Torino, IT  
 Justus Liebig University Giessen, DE  
 Maastricht Centre for Citizenship, Migration and Development, Maastricht University, NL  
 Malmö Institute for Studies of Migration, Diversity and Welfare, SE  
 Odysseus Network, Academic Network for Legal Studies on Asylum and Immigration in Europe, Malmö University, SE  
 Radboud University Nijmegen, NL  
 Southern Methodist University, Dallas, US

**Private and public sector**

Centre de compétence suisse en sciences sociales – FORS, Université de Lausanne, CH  
 Centre suisse de compétence pour les droits humains CSDH, CH  
 The Centre for European Policy Studies, Bruxelles, BE  
 Commission fédérale pour les questions de migration (CFM), Wabern, CH  
 Stiftung Mercator Schweiz, Zürich, CH  
 Stiftung Stapferhaus Lenzburg, Lenzburg, CH  
 International Labour Organization, Labour Migration Branch  
 Office fédéral de la statistique, Neuchâtel, CH  
 Secrétariat d'Etat aux migrations, Wabern, CH

**Funding**

Funding Source (CHF)	Total Phase 1 2014–2017	2014	2015	2016	2017	Phase 1 %
SNSF-funding <sup>1</sup>	17'361'261	4'308'125	4'339'444	4'375'342	4'338'350	70
Self-funding from Home Institution <sup>2</sup>	3'094'288	593'477	757'450	791'361	952'000	13
Self-funding from project participants	4'177'000	840'000	750'000	1'050'000	1'537'000	17
3rd party-funding	0	0	0	0	0	0
Total	24'632'549	5'741'602	5'846'894	6'216'703	6'827'350	100

<sup>1</sup> incl. Mobility-grant in 2014, 2016 and 2017 and 120% Support in 2015, 2016 and 2017

<sup>2</sup> Personnel costs, equipment and consumables, not included infrastructure and basic equipment

## Persons involved

Personnel <sup>3</sup>	Total of persons	Female %	CH	Top 5 – Most represented nations					Other nations
				DE	IT	AT	FR	ES	
Research associates <sup>4</sup>	8	63	5	3	0	0	1	0	1
Doctoral students	31	58	17	5	1	1	1	0	10
Postdoctoral students	21	67	5	6	4	1	1	1	3
Senior researchers <sup>5</sup>	23	48	19	1	1	1	0	1	2
Management <sup>6</sup>	6.77	64	19	3	3	0	2	0	1
<b>Total</b>	<b>89.77</b>	<b>59</b>	<b>65</b>	<b>18</b>	<b>9</b>	<b>3</b>	<b>5</b>	<b>2</b>	<b>17</b>

<sup>3</sup> Persons involved in the NCCR in the last reporting period (12 months)

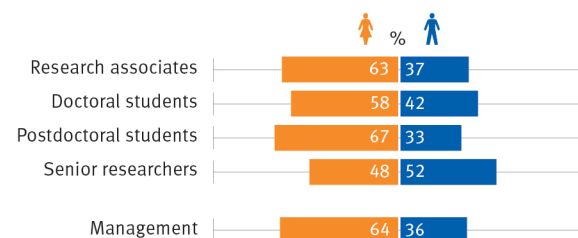
<sup>4</sup> Includes graduate scientists (level master) but not registered as PhD students or undergraduate students participating in research projects.

<sup>5</sup> Including leaders of the individual projects and other organisational units of the NCCR

<sup>6</sup> Full-time equivalent, including NCCR-Director and persons in charge of knowledge and technology transfer, equal opportunities, communication and education and training

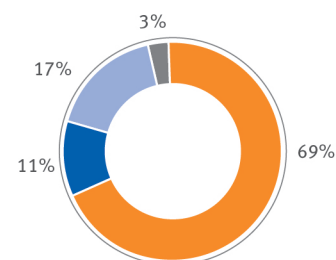
### Gender in the NCCR

Data: current year



### Training state of doctoral students

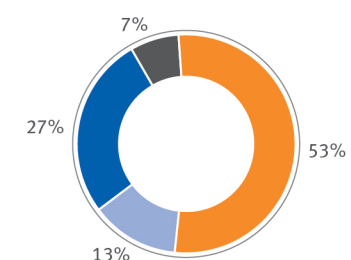
Data: since start



in progress	25
completed	4
continuation outside NCCR	6
dropout	1
<b>Total</b>	<b>36</b>

### Next employer of doctoral and postdoctoral students

Data: since start



Academic sector	8
Private sector	2
Public sector	4
Other	0
None/not known	1
<b>Total</b>	<b>15</b>

# NCCR PlanetS

## Origin, Evolution and Characterisation of Planets



NCCR Director: Prof. Willy Benz, NCCR Co-Director: Prof. Stéphane Udry  
Home Institutions: University of Bern, University of Geneva  
Start date: 1<sup>st</sup> of June 2014 (4<sup>th</sup> NCCR series)

### Heads of Research Groups

Prof. **Willy Benz**, Physikalisches Institut, Universität Bern  
Prof. **Klaus Mezger**, Institut für Geologie, Universität Bern  
Prof. **Ben Moore**, Institut für Computergestützte Wissenschaften, Universität Zürich  
Prof. **Francesco Pepe**, Observatoire, Université de Genève  
Prof. **Hans-Martin Schmid**, Institut für Teilchen und Astrophysik, ETH Zürich  
Prof. **Maria Schönbacher**, Institut für Geochemie und Petrologie, ETH Zürich  
Prof. **Nicolas Thomas**, Physikalisches Institut, Universität Bern  
Prof. **Stéphane Udry**, Observatoire, Université de Genève

### [Overview of all Research Projects](#)

### Participating Institutions

Universität Bern (2 groups)/Université de Genève (2 groups)/Universität Zürich (1 group)/ETH Zürich (2 groups)

### Members of the Review Panel

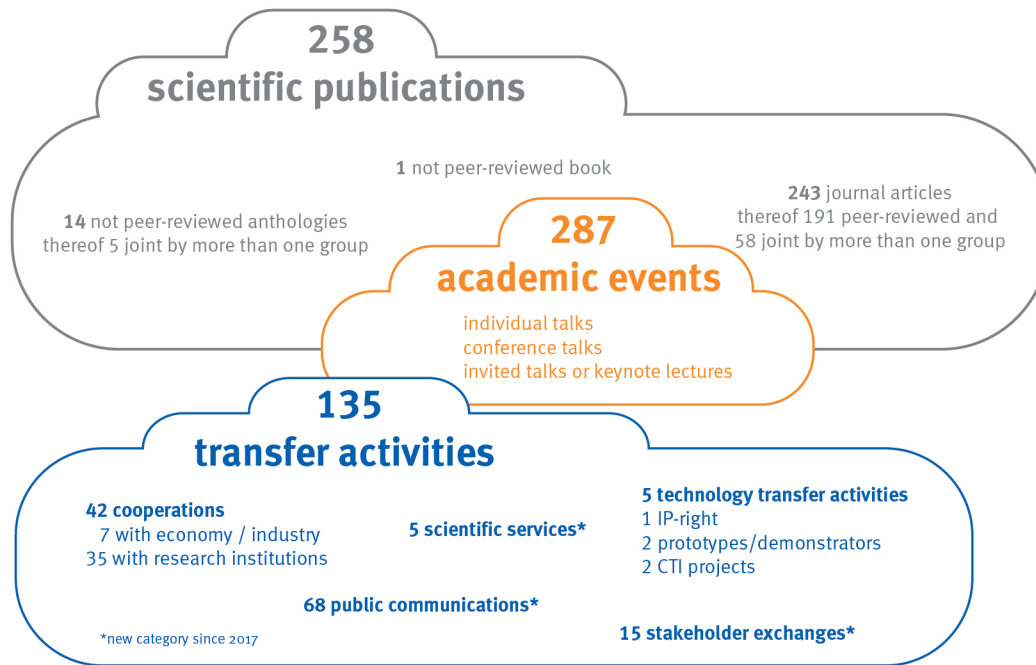
Prof. **Imke de Pater**, Department of Astronomy, University of California, Berkeley, US  
Prof. **Debra Fischer**, Department of Astronomy, Yale University, New Haven, US  
Prof. **Jamie Gilmour**, School of Earth, Atmospheric and Environmental Sciences, The University of Manchester, UK  
Prof. **Lisa Kaltenegger**, Department of Astronomy, Cornell University, Ithaca, US  
Prof. **Douglas N. C. Lin**, Astronomy & Astrophysics Department, UC Santa Cruz, US  
Dr. **Larry R. Nittler**, Department of Terrestrial Magnetism, Carnegie Institution of Washington, US  
Prof. **Ewine F. van Dishoeck**, Leiden Observatory, NL

Prof. **Frank Scheffold** (Chair), SNF, Bern, CH  
Prof. **Anna Fontcuberta i Morral**, SNF, Bern, CH  
Prof. **Christoph Heinrich**, SNF, Bern, CH

### Management/Coordination

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[www.nccr-planets.ch](http://www.nccr-planets.ch)

**Output Data**  
Data: since start



**Key collaborations with third parties**

**International Organisations / Agencies**

European Space Agency (ESA)  
European Southern Observatory (ESO)

**Private and public sector**

Burgergemeinde Zermatt  
Swiss Museum of Transport

**Funding**

Funding Source (CHF)	Total Phase 1 2014–2017	2014	2015	2016	2017	Phase 1 %
SNSF-funding <sup>1</sup>	<b>17'614'760</b>	4'400'000	4'400'000	4'400'000	4'414'760	52
Self-funding from Home Institutions <sup>2</sup>	<b>7'408'905</b>	865'451	1'789'765	2'304'309	2'449'380	22
Self-funding from project participants	<b>8'612'562</b>	2'163'666	2'037'332	2'002'347	2'409'217	26
3rd party-funding	<b>0</b>	0	0	0	0	0
Total	<b>33'636'227</b>	7'429'117	8'227'097	8'706'656	9'273'357	100

<sup>1</sup> incl. 120% support grant in Year 2017

<sup>2</sup> Personnel costs, equipment and consumables, not included infrastructure and basic equipment

## Persons involved

Personnel <sup>3</sup>	Total of persons	Female %	CH	Top 5 – Most represented nations					Other nations
				FR	DE	GB	US	IT	
Research associates <sup>4</sup>	2	33	0	1	0	0	1	0	0
Doctoral students	28	25	5	8	3	5	1	0	7
Postdoctoral students	33	24	3	6	6	2	1	3	13
Senior researchers <sup>5</sup>	32	9	11	5	5	3	3	2	7
Management <sup>6</sup>	8.76	52	18	2	1	1	2	2	4
Other staff	14	14	9	3	0	0	1	0	2
<b>Total</b>	<b>117.76</b>	<b>25</b>	<b>46</b>	<b>25</b>	<b>15</b>	<b>11</b>	<b>9</b>	<b>7</b>	<b>33</b>

<sup>3</sup> Persons involved in the NCCR in the last reporting period (12 months)

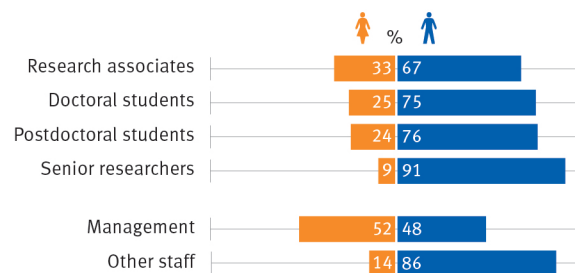
<sup>4</sup> Includes graduate scientists (level master) but not registered as PhD students or undergraduate students participating in research projects.

<sup>5</sup> Including leaders of the individual projects and other organisational units of the NCCR

<sup>6</sup> Full-time equivalent, including NCCR-Director and persons in charge of knowledge and technology transfer, equal opportunities, communication and education and training

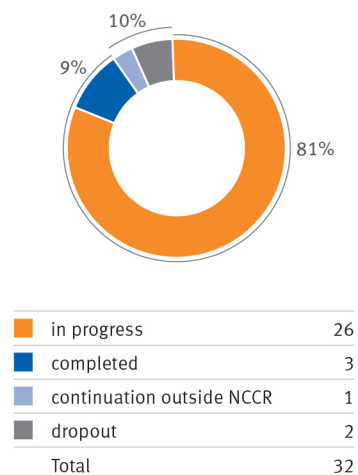
### Gender in the NCCR

Data: current year



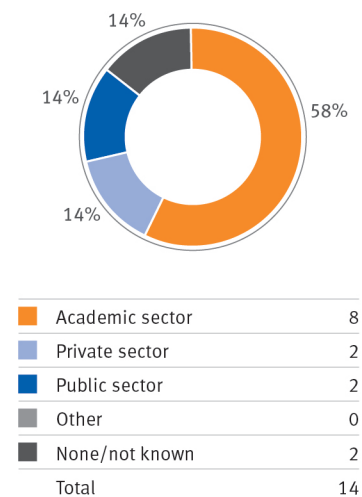
### Training state of doctoral students

Data: since start



### Next employer of doctoral and postdoctoral students

Data: since start



# NCCR QSIT

## Quantum Science and Technology



NCCR Director: Prof. Klaus Ensslin, NCCR Co-Director: Prof. Richard Warburton  
Home Institutions: ETH Zurich, University of Basel  
Start date: 1<sup>st</sup> of January 2011 (3<sup>rd</sup> NCCR series)

### Heads of Research Groups

Prof. **Johann Blatter**, Institut für Theoretische Physik, ETH Zürich  
Prof. **Christoph Bruder**, Departement Physik, Universität Basel  
Prof. **Christian Degen**, Laboratorium für Festkörperphysik, ETH Zürich  
Prof. **Klaus Ensslin**, Laboratorium für Festkörperphysik, ETH Zürich  
Prof. **Tilman Esslinger**, Institut für Quantenelektronik, ETH Zürich  
Prof. **Jérôme Faist**, Institut für Quantenelektronik, ETH Zürich  
Prof. **Anna Fontcuberta i Morral**, Laboratoire des matériaux semiconducteurs, EPFL  
Dr. **Andreas Fuhrer**, IBM Research - Zürich  
Prof. **Nicolas Gisin**, GAP-Optique, Université de Genève  
Prof. **Jonathan Home**, Institut für Quantenelektronik, ETH Zürich  
Prof. **Thomas Ihn**, Laboratorium für Festkörperphysik, ETH Zürich  
Prof. **Atac Imamoglu**, Institut für Quantenelektronik, ETH Zürich  
Prof. **Tobias Kippenberg**, Laboratoire de photonique et mesures quantiques, EPFL  
Prof. **Jelena Klinovaja**, Departement Physik, Universität Basel  
Prof. **Daniel Loss**, Departement Physik, Universität Basel  
Prof. **Patrick Maletinsky**, Departement Physik, Universität Basel  
Prof. **Frédéric Merkt**, Laboratorium für Physikalische Chemie, ETH Zürich  
Prof. **Alberto Morpurgo**, Département de physique de la matière quantique, Université de Genève  
Prof. **Lukas Novotny**, Department Informationstechnologie und Elektrotechnik, ETH Zürich  
Prof. **Martino Poggio**, Departement Physik, Universität Basel  
Prof. **Renato Renner**, Institut für Theoretische Physik, ETH Zürich  
Dr. **Gian Salis**, IBM Research - Zürich  
Prof. **Christian Schönenberger**, Departement Physik, Universität Basel  
Prof. **Philipp Treutlein**, Departement Physik, Universität Basel  
Prof. **Matthias Troyer**, Institut für Theoretische Physik, ETH Zürich  
Prof. **Andreas Wallraff**, Laboratorium für Festkörperphysik, ETH Zürich  
Prof. **Richard Warburton**, Departement Physik, Universität Basel  
Prof. **Werner Wegscheider**, Laboratorium für Festkörperphysik, ETH Zürich  
Prof. **Stefan Willitsch**, Departement Chemie, Universität Basel  
Prof. **Stefan Wolf**, Facoltà di Lugano, Scienze informatiche, Università della Svizzera italiana  
Prof. **Vanessa Wood**, Department Informationstechnologie und Elektrotechnik, ETH Zürich  
Prof. **Hugo Zbinden**, GAP-Quantum Technologies, Université de Genève  
Prof. **Dominik Zumbühl**, Departement Physik, Universität Basel

### [Overview of all Research Projects](#)

### Participating Institutions

Universität Basel (10 groups)/Université de Genève (3 groups)/Università della Svizzera Italiana Lugano (1 group)/EPFL (2 groups)/ETH Zürich (15 groups)/IBM Research Laboratory Rüschlikon (2 groups)

### Members of the Review Panel

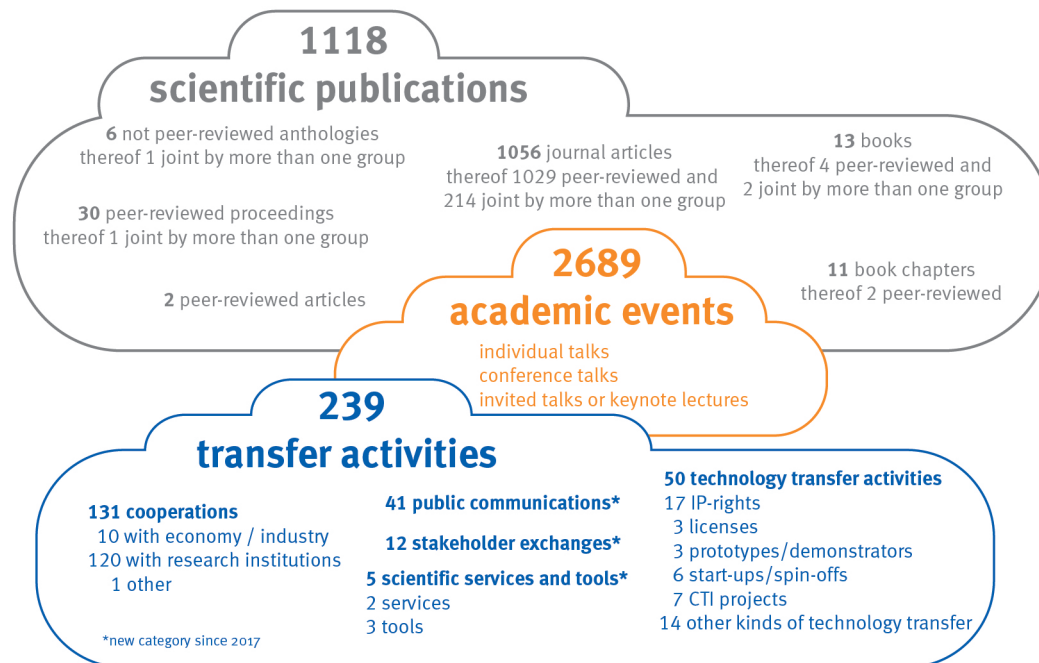
Prof. **Alain Aspect**, Laboratoire Charles Fabry, Institut d'Optique, Palaiseau, FR  
Prof. **Guenther Bauer**, Institut für Halbleiter- und Festkörperphysik, Universität Linz, AT  
Prof. **Jacqueline Bloch**, C2N-CNRS and UPSud, Marcoussis, FR  
Prof. **Juan Ignacio Cirac**, Max-Planck Institut für Quantenoptik, Garching, DE  
Prof. **Elisabeth Giacobino**, Laboratoire Kastler Brossel, Université Pierre et Marie Curie, Paris, FR  
Prof. **Leonid Glazman**, Department of Physics, Yale University, New Haven, US  
Prof. **Charles M. Marcus**, Niels Bohr Institutet, Københavns Universitet DK,  
Prof. **Elke Scheer**, Fachbereich Physik, Universität Konstanz, DE  
Prof. **Gerd Schön**, Institut für Theoretische Festkörperphysik, Karlsruher Institut für Technologie, DE  
Prof. **Dirk van der Marel** (Chair), SNF, Bern, CH  
Prof. **Christian Bernhard**, SNF, Bern, CH  
Prof. **Friedrich Eisenbrand**, SNF, Bern, CH

### Management/Coordination

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**Output Data**  
Data: since start



**Key collaborations with third parties**

**Academia**

L.D. Landau Institute of Theoretical Physics, RUS  
 Keio University Yokohama, ITOH group, JP  
 Instituto di Fotonica e Nanotecnologie, IT  
 Dept. of Physics, National University, SIN  
 Inst. für Theoretische Physik, University of Innsbruck, AT  
 Ecole normale supérieure, FR  
 Quantum optics laboratory, Harvard University, Cambridge, US  
 Niels Bohr Institute, Copenhagen, DK  
 Department of material science, Tohoku University, JP  
 METAS Swiss Federal Office for Metrology, CH  
 Département de Physique, Université de Sherbrooke, CAN  
 Lehrstuhl für Angewandte Festkörperphysik, Ruhr-Universität Bochum, DE  
 Kavli Institute of NanoScience, Technische Universität Delft, NL  
 Fachhochschule Nordwestschweiz, Muttenz, CH  
 Ludwig-Maximilians Universität München, DE  
 Stanford University, Stanford, US  
 University of Texas, Austin, US  
 California Institute of Technology, CALTECH, Pasadena, United States of America, Computing and Mathematical Sciences, US  
 National Institute for Material Science, Tsukuba, JP  
 NIST National Institute of Standards and Technology, Gaithersburg, MD, United States of America, Material Measurement, US

**Private and public sector**

Google, US  
 Microsoft Corporation, US  
 Corning, New York, US  
 ID Quantique, CH

**Funding**

Funding Source (CHF)	Total Phase 1 2011-2014	Total Phase 2 2015-2018	2015	2016	2017	2018	Phase 2 %
SNSF-funding <sup>1</sup>	17'301'437	20'605'331	5'547'000	5'412'924	4'925'407	4'720'000	31
Self-funding from Home Institutions <sup>2</sup>	17'394'837	17'489'869	3'720'854	4'240'303	4'541'206	4'987'506	26
Self-funding from project participants	18'759'166	28'464'149	8'744'825	8'457'189	6'352'135	4'910'000	43
3rd party-funding	171'450	0	0	0	0	0	0
<b>Total</b>	<b>53'626'890</b>	<b>66'559'349</b>	18'012'679	18'110'416	15'818'748	14'617'506	100

<sup>1</sup> incl. funding of transfer projects (strong Swiss franc package) in 2012, compensation for PhD salaries increase in 2015 and 120% support-grant in 2014, 2015, 2016 and 2017.

<sup>2</sup> Personnel costs, equipment and consumables, not included infrastructure and basic equipment

## Persons involved

Personnel <sup>3</sup>	Total of persons	Female %	CH	Top 5 – Most represented nations					Other nations
				DE	IT	FR	US	IL	
Research associates <sup>4</sup>	4	0	2	0	0	0	0	0	2
Doctoral students	82	17	33	16	5	2	0	3	26
Postdoctoral students	39	15	5	9	3	6	3	1	12
Senior researchers <sup>5</sup>	46	7	16	12	4	2	2	0	11
Management <sup>6</sup>	4.67	33	5	5	0	1	2	0	4
Other staff	17	18	10	4	0	0	0	0	3
<b>Total</b>	<b>192.67</b>	<b>15</b>	<b>71</b>	<b>46</b>	<b>12</b>	<b>11</b>	<b>7</b>	<b>4</b>	<b>58</b>

<sup>3</sup> Persons involved in the NCCR in the last reporting period (12 months)

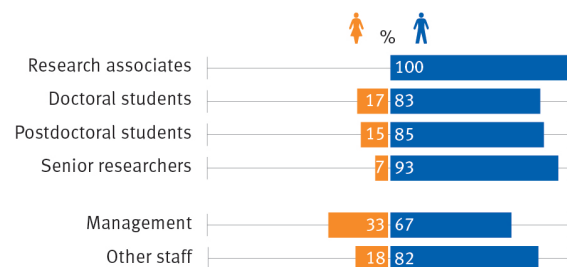
<sup>4</sup> Includes graduate scientists (level master) but not registered as PhD students or undergraduate students participating in research projects.

<sup>5</sup> Including leaders of the individual projects and other organisational units of the NCCR

<sup>6</sup> Full-time equivalent, including NCCR-Director and persons in charge of knowledge and technology transfer, equal opportunities, communication and education and training

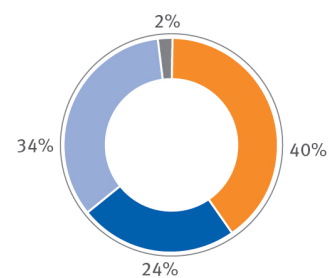
### Gender in the NCCR

Data: current year



### Training state of doctoral students

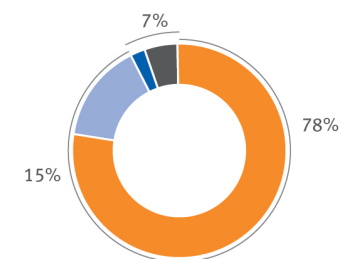
Data: since start



in progress	77
completed	47
continuation outside NCCR	65
dropout	2
<b>Total</b>	<b>191</b>

### Next employer of doctoral and postdoctoral students

Data: since start



Academic sector	150
Private sector	29
Public sector	4
Other	0
None/not known	9
<b>Total</b>	<b>192</b>

# NCCR RNA & Disease

## The Role of RNA in Disease Mechanisms



NCCR Director: Prof. Oliver Mühlemann, NCCR Co-Director: Prof. Frédéric Allain  
Home Institutions: University of Bern, ETH Zurich  
Start date: 1<sup>st</sup> of May 2014 (4<sup>th</sup> NCCR series)

### Heads of Research Groups

Prof. **Frédéric Allain**, Departement Biologie, ETH Zürich  
Prof. **Nenad Ban**, Departement Biologie, ETH Zürich  
Prof. **Marc Bühler**, Friedrich Miescher Institute for Biomedical Research, Basel  
Prof. **Constance Ciaudo**, Departement Biologie, ETH Zürich  
Dr. **Jeffrey Chao**, Friedrich Miescher Institute for Biomedical Research, Basel  
Prof. **David Gatfield**, Faculté de biologie et de médecine, Université de Lausanne  
Dr. **Helge Grosshans**, Friedrich Miescher Institute for Biomedical Research, Basel  
Prof. **Jonathan Hall**, Departement Chemie und Angewandte Biowissenschaften, ETH Zürich  
Prof. **Michael Hall**, Biozentrum, Universität Basel  
Prof. **Martin Jinek**, Biochemisches Institut, Universität Zürich  
Prof. **Rory Johnson**, Department for BioMedical Research, Universität Bern  
Prof. **Stefanie Jonas**, Departement Biologie, ETH Zürich  
Prof. **Ulrike Kutay**, Departement Biologie, ETH Zürich  
Prof. **Joachim Lingner**, Institut Suisse de Recherche Expérimentale sur le Cancer, EPFL  
Prof. **Oliver Mühlemann**, Departement für Chemie und Biochemie, Universität Bern  
Prof. **Ana-Claudia Marques**, Département de Physiologie, Université de Lausanne  
Prof. **Mariusz Nowacki**, Institut für Zellbiologie, Universität Bern  
Prof. **Ramesh Pillai**, Département de biologie moléculaire, Université de Genève  
Prof. **Norbert Polacek**, Departement für Chemie und Biochemie, Universität Bern  
Prof. **Magdalini Polymenidou**, Institut für Molekulare Biologie, Universität Zürich  
Dr. **Marc-David Ruepp**, Departement für Chemie und Biochemie, Universität Bern  
Prof. **André Schneider**, Departement für Chemie und Biochemie, Universität Bern  
Prof. **Markus Stoffel**, Departement Biologie, ETH Zürich  
Prof. **Mihaela Zavolan**, Biozentrum, Universität Basel

### [Overview of all Research Projects](#)

### Participating Institutions

Universität Basel (2 groups)/Universität Bern (6 groups)/Université de Genève (1 group)/Université de Lausanne (2 groups)/Universität Zürich (2 groups)/EPFL (1 group)/ETH Zürich (7 groups)/Friedrich Miescher Institut FMI (3 groups)

### Members of the Review Panel

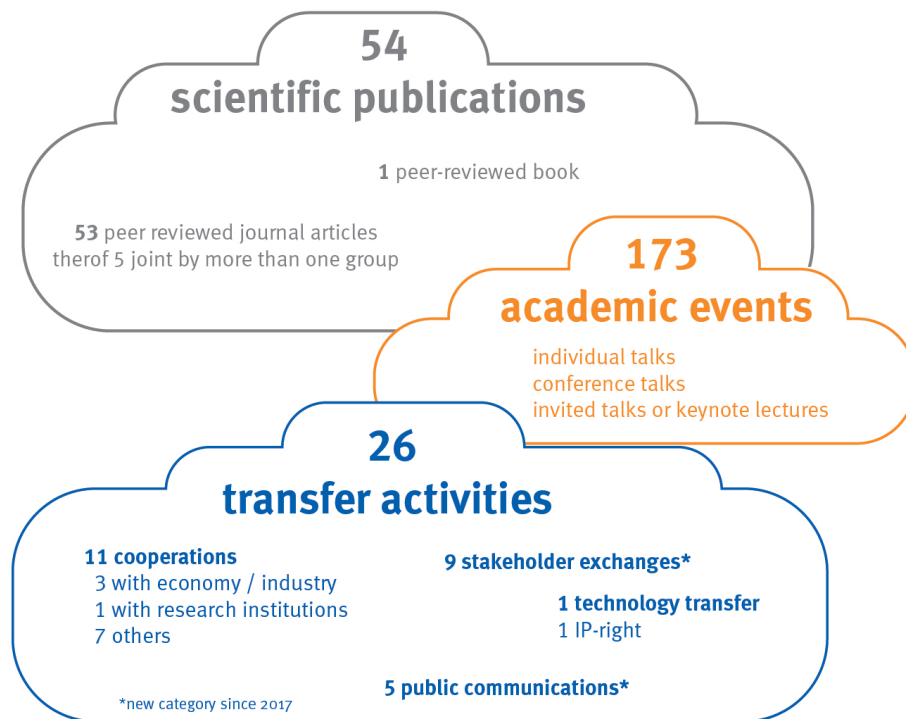
Prof. **Javier F. Caceres**, Institute of Genetics and Molecular Medicine, University of Edinburgh, UK  
Prof. **Thomas A. Cooper**, Department of Pathology and Immunology, Baylor College of Medicine, US  
Prof. **Bryan R. Cullen**, Department of Molecular Genetics and Microbiology, Duke University Medical Center, US  
Prof. **Fátima Gebauer**, Centre for Genomic Regulation, Barcelona, ES  
Prof. **Elisa Izaurralde**, Max-Planck-Institute für Entwicklungsbiologie, DE  
Prof. **Bertrand Séraphin**, IGBMC, CNRS, Illkirch, FR  
Prof. **Maurice S. Swanson**, Department of Molecular Genetics and Microbiology, University of Florida, US

Prof. **Andreas Mayer** (Chair), SNF, Bern, CH  
Prof. **Michael O. Hottiger**, SNF, Bern, CH  
Prof. **Didier Trono**, SNF, Bern, CH

### Management/Coordination

Dr. Larissa Grolimund  
Dr. Dominik Theler  
NCCR RNA & Disease  
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**Output Data**  
Data: since start



**Key collaborations with third parties**

**Academia**

Swiss reference center for porphyrias, Triemli Hospital, Zurich, CH  
Institute for Research in Biomedicine, Università della Svizzera italiana, Bellinzona, CH

**Private and public sector**

Fondation Dufloateau, Zürich, CH  
Hofmann-La Roche, Reinach, CH  
Holcim Stiftung zur Förderung der wissenschaftlichen Forschung, Holderbank, CH  
NOMIS Foundation, Samedan, CH  
Novartis, Basel, CH  
Promedica Stiftung, Chur, CH  
Schweizerische Stiftung für die Erforschung der Muskelkrankheiten, SSEM, Cortaillod, CH  
T3 Pharmaceuticals AG, Basel, CH

**Funding**

Funding Source (CHF)	Total Phase 1 2014 – 2017	2014	2015	2016	2017	Phase 1 %
SNSF-funding <sup>1</sup>	<b>16'751'666</b>	3'705'907	4'055'735	4'468'704	4'521'320	41
Self-funding from Home Institutions <sup>2</sup>	<b>12'419'136</b>	1'817'886	2'939'658	3'441'701	4'219'891	30
Self-funding from project participants	<b>9'818'108</b>	2'594'173	2'588'078	2'705'857	1'930'000	24
3rd party-funding	<b>1'812'272</b>	266'769	515'843	729'660	300'000	5
<b>Total</b>	<b>40'801'182</b>	8'384'735	10'099'314	11'345'922	10'971'211	100

<sup>1</sup> incl. 120% support-grant in 2014, 2015, 2016 and 2017 and mobility-grant in 2015, 2016 and 2017

<sup>2</sup> Personnel costs, equipment and consumables, not included infrastructure and basic equipment

## Persons involved

Personnel <sup>3</sup>	Total of persons	Female %	CH	Top 5 – Most represented nations					Other nations
				DE	FR	IN	IT	GB	
Doctoral students	41	59	11	8	3	3	5	0	13
Postdoctoral students	40	40	1	4	5	7	2	4	17
Senior researchers <sup>4</sup>	47	23	11	8	7	2	2	2	16
Management <sup>5</sup>	3.56	50	5	0	1	0	0	1	3
Other staff	31	71	11	6	3	1	0	0	11
<b>Total</b>	<b>162.56</b>	<b>46</b>	<b>39</b>	<b>26</b>	<b>19</b>	<b>13</b>	<b>9</b>	<b>7</b>	<b>60</b>

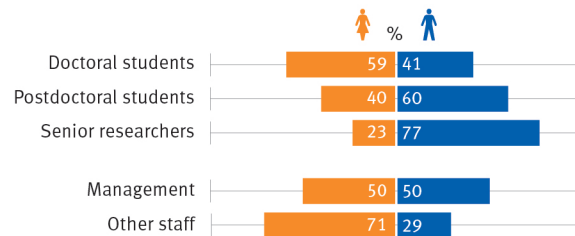
<sup>3</sup> Persons involved in the NCCR in the last reporting period (12 months)

<sup>4</sup> Including leaders of the individual projects and other organisational units of the NCCR

<sup>5</sup> Full-time equivalent, including NCCR-Director and persons in charge of knowledge and technology transfer, equal opportunities, communication and education and training

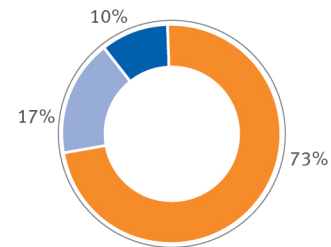
### Gender in the NCCR

Data: current year



### Training state of doctoral students

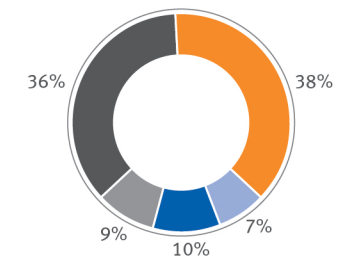
Data: since start



in progress	46
completed	6
continuation outside NCCR	11
dropout	0
<b>Total</b>	<b>63</b>

### Next employer of doctoral and postdoctoral students

Data: since start



Academic sector	22
Private sector	4
Public sector	6
Other	5
None/not known	21
<b>Total</b>	<b>58</b>

# NCCR Robotics

## Intelligent Robots for Improving the Quality of Life



NCCR Director: Prof. Dario Floreano, NCCR Co-Director: Prof. Robert Riener  
Home Institutions: EPFL, ETH Zurich (since 01.12.2014)  
Start date: 1<sup>st</sup> of December 2010 (3<sup>rd</sup> NCCR series)

### Heads of Research Groups

Prof. **David Atienza**, Embedded Systems Laboratory (ESL), EPFL  
Prof. **Aude Billard**, Laboratory of Learning Algorithms and Systems (LASA), EPFL  
Prof. **Olaf Blanke**, Cognitive Neuroscience Brain-Mind Institute (INCO), EPFL  
Prof. **Grégoire Courtine**, Chair in Spinal Cord Repair (IRP), EPFL  
Prof. **Tobias Delbruck**, Institut für Neuroinformatik, Universität Zürich, ETH Zürich  
Prof. **Pierre Dillenbourg**, Computer Human Interaction in learning and instruction (CHILI), EPFL  
Prof. **Dario Floreano**, Laboratory of Intelligent Systems (LIS), EPFL  
Prof. **Luca Gambardella**, Swiss AI Lab IDSIA (Istituto Dalle Molle di Studi sull'Intelligenza Artificiale), Manno  
Prof. **Roger Gassert**, RELab, ETH Zürich  
Prof. **Marco Hutter**, Robotics Systems Lab (RSL), ETH Zürich  
Prof. **Auke Ijspeert**, BIORob, EPFL  
Prof. **Stéphanie Lacour**, Laboratory for Soft Bioelectronic Interfaces (LSBI), EPFL  
Prof. **Silvestro Micera**, Translational Neural Engineering Lab (TNE), EPFL  
Prof. **José Millán**, DEFITECH Chair in Brain-Machine Interface CNBI, EPFL  
Prof. **Francesco Mondada**, Laboratory of Robotics Systems (LSRO), EPFL  
Prof. **Jamie Paik**, Reconfigurable Robotics Laboratory (RRL), EPFL  
Prof. **Robert Riener**, Sensory Motor Systems Lab (SMS), ETH Zürich  
Prof. **Davide Scaramuzza**, Robotics and Perception Group, Universität Zürich  
Prof. **Roland Siegwart**, Autonomous Systems Lab (ASL), ETH Zürich

### Heads of Associated Research Groups

Prof. **Hannes Bleuler**, Robotic Systems Lab (LSRO), EPFL  
Prof. **Margarita Chli**, Vision for Robotics Lab (V4RL), ETH Zürich  
Prof. **Walter Karlen**, Mobile Health Systems Laboratory (MHSL), ETH Zürich  
Prof. **Laura Marchal-Crespo**, ARTORG Center for Biomedical Engineering Research, Universität Bern

### [Overview of all Research Projects](#)

### Participating Institutions

Universität Bern (1 group)/Universität Zürich (2 group)  
EPFL (13 groups)/ETH Zürich (5 groups)/IDSIA (1 group)

### Members of the Review Panel

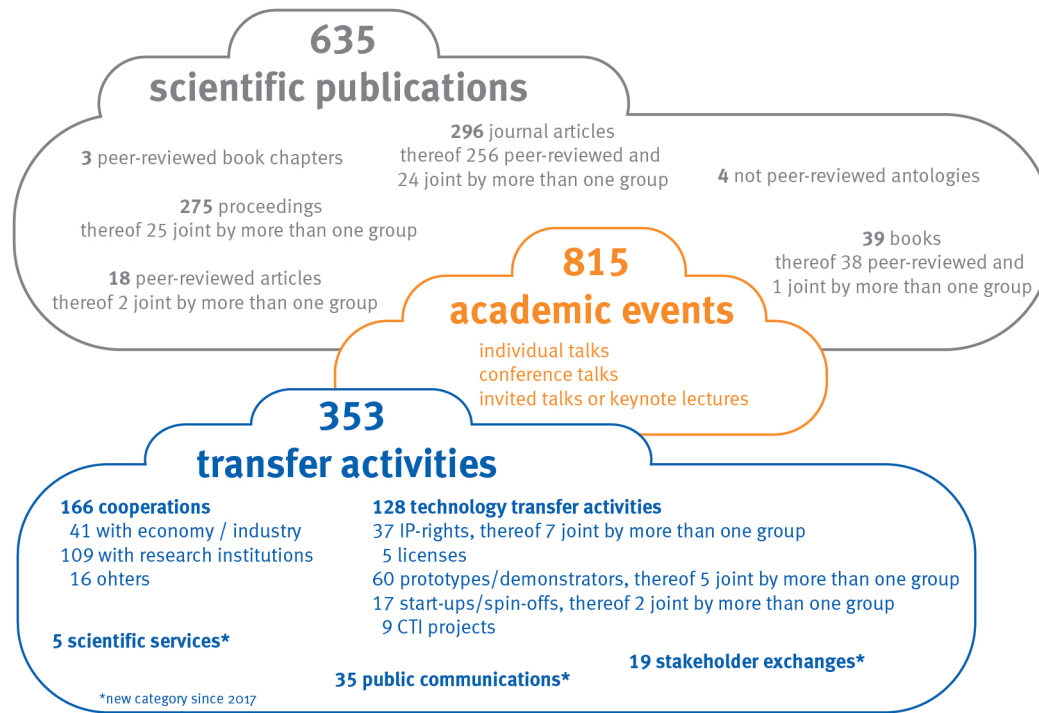
Prof. **Rüdiger Dillmann**, Institut für Anthropomatik und Robotik, Karlsruhe Institut für Technologie, DE  
Prof. **Robert J. Full**, Department of Integrative Biology, University of California at Berkeley, US  
Dr. **Martin Hägele**, Fraunhofer-Institut für Produktionstechnik und Automatisierung PIA, DE  
Prof. **William Harwin**, School of Systems Engineering, University of Reading, UK  
Prof. **Katherine J. Kuchenbecker**, Max-Planck-Institut für intelligente Systeme, Stuttgart, DE  
Prof. **David J. Reinkensmeyer**, Biorobotics Laboratory, Department of Mechanical and Aerospace Engineering, University of California at Irvine, US  
Prof. **Carme Torras**, Institut de Robòtica i Informàtica Industrial (CSIC-UPC), ES  
Prof. **Alan Winfield**, Faculty of Environment and Technology, UWE Bristol, UK

Prof. **Katharina Fromm** (Chair), SNF, Bern, CH  
Prof. **Lothar Thiele**, SNF, Bern, CH  
Prof. **Dirk van der Marel**, SNF, Bern, CH

### Management/Coordination

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**Output Data**  
Data: since start



**Key collaborations with third parties**

**Academia**

Biominimetric Millisystems Lab, UC Berkeley, USA  
 Biorobotics Institute, SSSA, IT  
 Delft Biorobotics Lab, TU Delft, NL  
 DLR, Deutsches Zentrum für Luft- und Raumfahrt, DLR, DE  
 Dynamic legged systems Lab, Advanced Italian Institute of Technology, Genova, IT  
 IST, Lisbon TG  
 NEUWalk (EU-FP7)  
 Service de Gériatrie, Centre Hospitalier Universitaire Vaudois CHUV, Lausanne, CH  
 Spinal Cord Injury Center, University Hospital Balgrist, Zürich, CH

**Private and public sector**

Clinique romande de réadaptation CRR,  
 Schweizerische Unfallversicherungsanstalt SUVA, Sion, CH  
 Hocoma AG, Volketswil, CH  
 Inilabs GmbH, Zürich, CH  
 Zürcher Höhenklinik Wald, Wald, CH

**Funding**

Funding source (CHF)	Total Phase 1 2010 – 2013	Total Phase 2 2014 – 2017	2014	2015	2016	2017	Phase 2 %
SNSF-funding <sup>1</sup>	13'300'000	15'322'317	4'260'000	4'260'000	4'142'317	2'660'000	51
Self-funding from Home Institutions <sup>2</sup>	6'126'703	9'294'862	1'595'124	3'084'655	2'137'782	2'477'301	31
Self-funding from project participants	10'387'838	5'327'964	1'329'456	1'660'090	760'418	1'578'000	18
3rd party-funding	115'360	0	0	0	0	0	0
<b>Total</b>	<b>29'929'901</b>	<b>29'945'143</b>	7'184'580	9'004'745	7'040'517	6'715'301	100

<sup>1</sup> incl. compensation for PhD salaries increase in 2014, 120% support-grant and mobility grant in 2017

<sup>2</sup> Personnel costs, equipment and consumables, not included infrastructure and basic equipment

## Persons involved

Personnel <sup>3</sup>	Total of persons	Female %	CH	Top 5 – Most represented nations					Other nations
				IT	FR	DE	ES	GB	
Doctoral students	36	11	7	4	5	6	0	0	14
Postdoctoral students	10	30	2	2	1	0	0	0	5
Senior researchers <sup>4</sup>	29	14	11	7	2	2	2	0	5
Management <sup>5</sup>	4.40	50	6	1	2	2	0	2	0
Other staff	30	57	19	2	3	2	1	1	2
<b>Total</b>	<b>109.4</b>	<b>29</b>	<b>45</b>	<b>16</b>	<b>13</b>	<b>12</b>	<b>3</b>	<b>3</b>	<b>26</b>

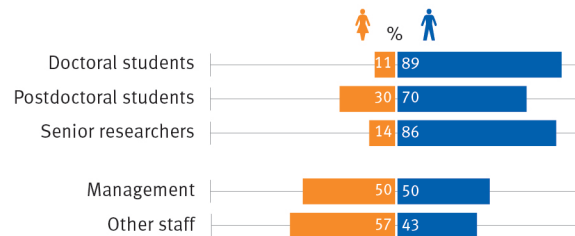
<sup>3</sup> Persons involved in the NCCR in the last reporting period (12 months)

<sup>4</sup> Including leaders of the individual projects and other organisational units of the NCCR

<sup>5</sup> Full-time equivalent, including NCCR-Director and persons in charge of knowledge and technology transfer, equal opportunities, communication and education and training

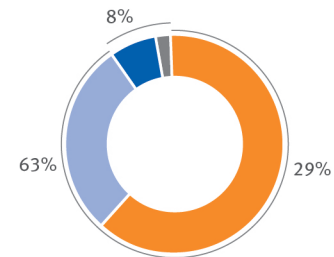
### Gender in the NCCR

Data: current year



### Training state of doctoral students

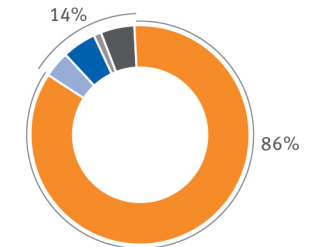
Data: since start



in progress	37
completed	9
continuation outside NCCR	81
dropout	2
<b>Total</b>	<b>129</b>

### Next employer of doctoral and postdoctoral students

Data: since start



Academic sector	121
Private sector	5
Public sector	7
Other	1
None/not known	7
<b>Total</b>	<b>141</b>



# NCCR SwissMAP

## The Mathematics of Physics



NCCR Director: Prof. Stanislav Smirnov, NCCR Co-Director: Prof. Giovanni Felder  
Home Institutions: University of Geneva, ETH Zurich  
Start date: 1<sup>st</sup> of July 2014 (4<sup>th</sup> NCCR series)

### Heads of Research Groups

Prof. **Anton Alekseev**, Section de Mathématiques, Université de Genève  
Prof. **Niklas Beisert**, Institut für Theoretische Physik, ETH Zurich  
Prof. **Anna Beliakova**, Institut für Mathematik, Universität Zürich  
Prof. **Matthias Blau**, Institut für Theoretische Physik, Universität Bern  
Prof. **Erwin Bolthausen**, Institut für Mathematik, Universität Zürich  
Prof. **Alberto Cattaneo**, Institut für Mathematik, Universität Zürich  
Prof. **Hugo Duminil-Copin**, Section de Mathématiques, Université de Genève  
Prof. **Ruth Durrer**, Département de Physique Théorique, Université de Genève  
Prof. **Jean-Pierre Eckmann**, Département de Physique Théorique, Université de Genève  
Prof. **Giovanni Felder**, Département Mathematik, ETH Zurich  
Prof. **Jürg Fröhlich**, Institut für Theoretische Physik, ETH Zurich  
Prof. **Matthias Gaberdiel**, Institut für Theoretische Physik, ETH Zurich  
Prof. **Gian Michele Graf**, Institut für Theoretische Physik, ETH Zurich  
Prof. **Clément Hongler**, Section de Mathématiques, EPFL  
Prof. **Rinat Kashaev**, Section de Mathématiques, Université de Genève  
Prof. **Christoph Keller**, Département Mathematik, ETH Zurich  
Prof. **Horst Koenig**, Département Mathematik, ETH Zurich  
Prof. **Antti Knowles**, Section de Mathématiques, Université de Genève  
Prof. **Wolfgang Lerche**, Theory Division, CERN  
Prof. **Michele Maggiore**, Département de Physique Théorique, Université de Genève  
Prof. **Ioan Manolescu**, Département de Mathématiques, Université de Fribourg  
Prof. **Marcos Mariño Beiras**, Section de Mathématiques et Département de Physique Théorique, Université de Genève  
Prof. **Grigory Mikhalkin**, Section de Mathématiques, Université de Genève  
Prof. **Pierre Nolin**, Département Mathematik, ETH Zurich  
Prof. **Rahul Pandharipande**, Département Mathematik, ETH Zurich  
Prof. **João Penedones**, Section de Physique, EPFL  
Prof. **Tudor Ratiu**, Section de Mathématiques, EPFL  
Prof. **Riccardo Rattazzi**, Section de Physique, EPFL  
Prof. **Susanne Reffert**, Institut für Theoretische Physik, Universität Bern  
Prof. **Vyacheslav Rychkov**, Theory Division, CERN  
Prof. **Benjamin Schlein**, Institut für Mathematik, Universität Zürich  
Prof. **Amit Sever**, Theory Division, CERN  
Prof. **Stanislav Smirnov**, Section de Mathématiques, Université de Genève  
Prof. **Julian Sonner**, Département de Physique Théorique, Université de Genève

### Participating Institutions

Universität Bern (2 groups)/Université de Fribourg (1 group)/Université de Genève (15 groups)Universität Zürich (4 groups)/EPFL (6 groups)  
ETH Zurich (13 groups)/ CERN (3 groups)

### Members of the Review Panel

Prof. **François David**, Institut de Physique Théorique, CEA/DSM/IPhT, FR  
Prof. **Krzysztof Gawedzki**, Ecole Normale Supérieure, FR  
Prof. **Peter Goddard**, School of Natural Sciences, Institute for Advanced Study, US  
Prof. **Daniel Huybrechts**, Institut für Mathematik, Universität Bonn, DE  
Prof. **Herbert Spohn**, Zentrum Mathematik, TU München, DE  
Prof. **Michèle Vergne**, Institut de Mathématiques de Jussieu, CNRS, FR  
  
Prof. **Friedrich Eisenbrand** (Chair), SNF, Bern, CH  
Prof. **Eva Bayer-Flückiger**, SNF, Bern, CH  
Prof. **Frank Scheffold**, SNF, Bern, CH

### Management / Coordination

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## Heads of Research Groups (continued)

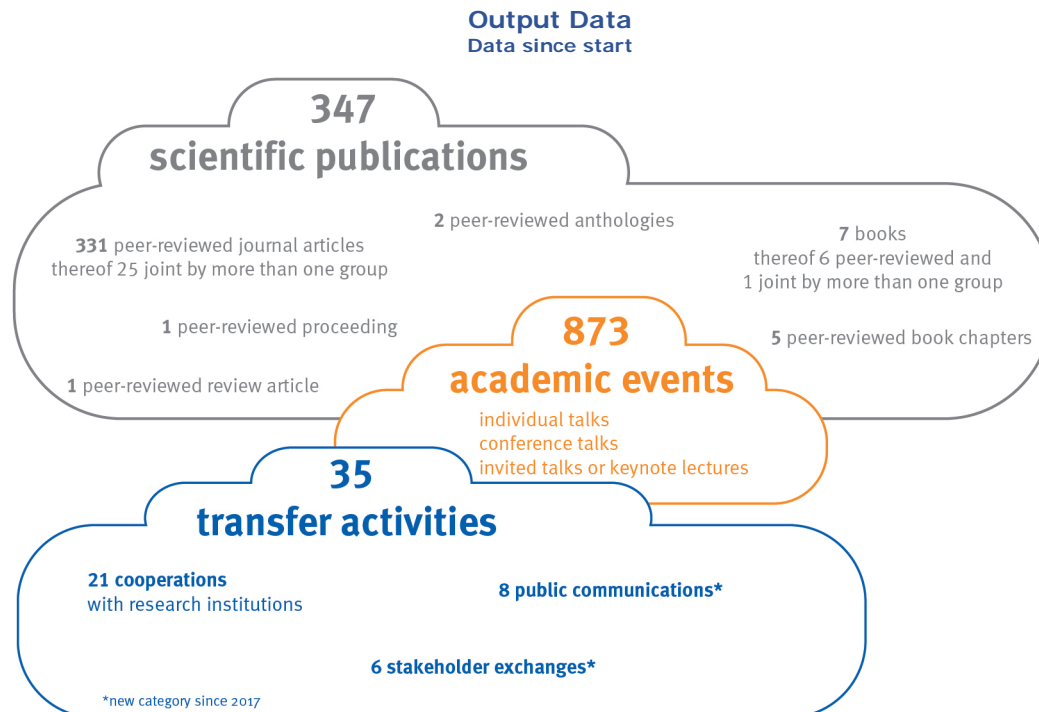
Prof. **Eugene Sukhorukov**, Département de Physique Théorique, Université de Genève  
 Prof. **Andras Szenes**, Section de Mathématiques, Université de Genève  
 Prof. **Alain-Sol Sznitman**, Département Mathematik, ETH Zurich  
 Prof. **Vincent Tassion**, Département Mathematik, ETH Zurich  
 Prof. **Yvan Velenik**, Section de Mathématiques, Université de Genève  
 Prof. **Maryna Viazovska**, Section de Mathématiques, EPFL  
 Prof. **Alessandro Vichi**, Section de Physique, EPFL  
 Prof. **Werner Werner**, Département Mathematik, ETH Zurich  
 Prof. **Thomas Willwacher**, Département Mathematik, ETH Zurich  
 Prof. **Peter Wittwer**, Section de Mathématiques, Université de Genève

[Overview of all Research Projects](#)

## Key collaborations with third parties

### Academia

Massachusetts Institute of Technology, US  
 Columbia University, US  
 Cornell University, US  
 University of Chicago, US  
 University of Michigan, US  
 University of British Columbia, CA  
 University of Toronto, CA  
 Institut de Physique Théorique, CEA-Saclay, FR  
 Université Paris-7, FR  
 Université Claude Bernard Lyon 1, FR  
 University of Cambridge, UK  
 University of Oxford, UK  
 University of Loughborough, UK  
 University of Helsinki, FI  
 Lund University, SE  
 Technion - Israel Institute of Technology, IL  
 Hebrew University of Jerusalem, IL  
 HRI Allahabad, IN  
 University of Chicago, US  
 University of Michigan, US



## Funding

Funding Source (CHF)	Total Phase 1 2014 – 2017	2014	2015	2016	2017	Phase 1 %
SNSF-funding <sup>1</sup>	<b>11'209'000</b>	2'300'000	2'900'000	3'000'000	3'009'000	39
Self-funding from Home Institutions <sup>2</sup>	<b>7'516'697</b>	1'137'996	1'634'979	1'983'722	2'760'000	26
Self-funding from project participants	<b>10'140'159</b>	2'274'399	2'597'439	2'784'321	2'484'000	35
3rd party-funding	<b>0</b>	0	0	0	0	0
<b>Total</b>	<b>28'865'856</b>	5'712'395	7'132'418	7'768'043	8'253'000	100

<sup>1</sup> incl. mobility grant in year 2017

<sup>2</sup>Personnel costs, equipment and consumables, not included infrastructure and basic equipment

## Persons involved

Personnel <sup>3</sup>	Total of persons	Female %	CH	Top 5 – Most represented nations					Other nations
				IT	RU	DE	FR	CN	
Research associates <sup>4</sup>	16	38	12	0	1	0	3	0	1
Doctoral students	86	17	16	14	11	9	5	5	29
Postdoctoral students	46	13	2	7	3	3	4	8	20
Senior researchers <sup>5</sup>	75	7	18	13	8	9	5	2	26
Management <sup>6</sup>	5.81	53	8	1	4	1	2	0	4
Other Staff	1	100	1	1	0	0	0	0	0
<b>Total</b>	<b>229.81</b>	<b>17</b>	<b>57</b>	<b>36</b>	<b>27</b>	<b>22</b>	<b>19</b>	<b>15</b>	<b>80</b>

<sup>3</sup> Persons involved in the NCCR in the last reporting period (12 months)

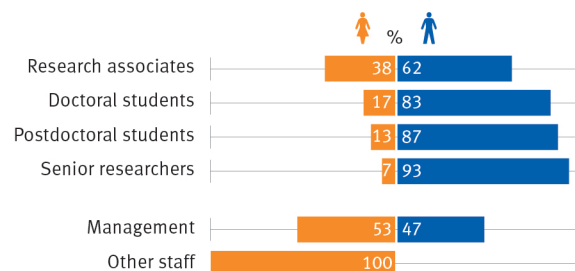
<sup>4</sup> Includes graduate scientists (level master) but not registered as PhD students or undergraduate students participating in research projects.

<sup>5</sup> Including leaders of the individual projects and other organisational units of the NCCR

<sup>6</sup> Full-time equivalent, including NCCR-Director and persons in charge of knowledge and technology transfer, equal opportunities, communication and education and training

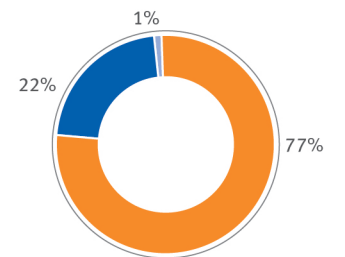
### Gender in the NCCR

Data: current year



### Training state of doctoral students

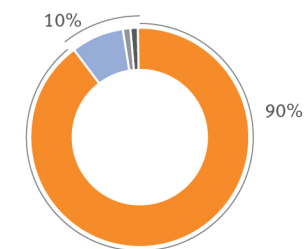
Data: since start



in progress	77
completed	22
continuation outside NCCR	1
dropout	0
<b>Total</b>	<b>100</b>

### Next employer of doctoral and postdoctoral students

Data: since start



Academic sector	68
Private sector	6
Public sector	0
Other	1
None/not known	1
<b>Total</b>	<b>76</b>

# NCCR SYNAPSY

## The synaptic bases of mental diseases



NCCR Director: Prof. Alexandre Dayer, NCCR Co-Director: Prof. Pierre Magistretti  
Home Institutions: University of Geneva, EPFL, University of Lausanne  
Start date: 1<sup>st</sup> of October 2010 (3<sup>rd</sup> NCCR series)

### Heads of Research Groups

Prof. **Jean-Michel Aubry**, Service de Psychiatrie générale et Programme troubles de l'humeur, HUG-Hôpitaux Universitaires de Genève  
Prof. **Claudia Bagni**, Département des neurosciences fondamentales (DNF) CHUV-Université de Lausanne  
Prof. **Camilla Bellone**, Département des neurosciences fondamentales (NEUFO) Université de Genève, Faculté de biologie et médecine  
Prof. **Bernhard Bettler**, Département Biomedizin, Universität Basel  
Prof. **Paola Bezzi**, Département des neurosciences fondamentales (DNF), Université de Lausanne, Faculté de biologie et médecine  
Prof. **Olaf Blanke**, Brain Mind Institute, EPFL  
Prof. **Alan Carleton**, Département des neurosciences fondamentales (NEUFO), Université de Genève, Faculté de biologie et médecine  
Prof. **Pico Caroni**, Friedrich Miescher Institute for Biomedical Research, Universität Basel  
Prof. **Stephanie Clarke**, Neuropsychologie et neuro-réhabilitation, CHUV-Université de Lausanne  
Prof. **Philippe Conus**, Service de Psychiatrie générale, Clinique psychiatrique universitaire, Cery-CHUV Lausanne  
Prof. **Alexandre Dayer**, Département des neurosciences fondamentales (NEUFO), Université de Genève, Faculté de biologie et médecine  
Prof. **Kim Do**, Centre de neurosciences psychiatriques, Unité de recherche sur la schizophrénie, Cery-CHUV Lausanne  
Prof. **Stephan Eliez**, Office médico-pédagogique, Université de Genève  
Prof. **Johannes Gräff**, Brain Mind Institute, EPFL  
Prof. **Patric Hagmann**, Service de radiodiagnostic et radiologie interventionnelle, CHUV-Université de Lausanne  
Prof. **Michael Herzog**, Brain Mind Institute, EPFL  
Prof. **Kathryn Hess Bellwald**, Faculté des sciences de base, EPFL, Brain Mind Institute, EPFL  
Prof. **Anthony Holtmaat**, Département des neurosciences fondamentales (NEUFO), Université de Genève, Faculté de biologie et médecine  
Prof. **Christian Lüscher**, Département des neurosciences fondamentales (NEUFO), Université de Genève, Faculté de biologie et médecine  
Prof. **Andreas Lüthi**, Friedrich Miescher Institute for Biomedical Research, Universität Basel  
Prof. **Pierre Magistretti**, Centre de Neurosciences psychiatriques, Cery-CHUV Lausanne  
Prof. **Pierre Marquet**, Unité mixte internationale en neurodéveloppement et psychiatrie infantile, Dept. Psychiatrie-CHUV, Université de Lausanne et Université Laval; Département de psychiatrie et neuroscience, Université Laval, Québec, Canada

### Participating Institutions

Universität Basel/Friedrich-Miescher-Institut (4 groups)/Université de Genève/HUG Genève (10 groups)/Université de Lausanne/CHUV Lausanne (11 groups)/EPFL (6 groups)

### Members of the Review Panel

Prof. **Wade Berrettini**, Center for Neurobiology and Behavior, University of Pennsylvania School of Medicine, US  
Prof. **Elisabeth Binder**, Max Planck Institute für Psychiatrie, München, DE  
Prof. **Jamel Chelly**, Institut de génétique et de biologie moléculaire et cellulaire, Illkirch, FR  
Prof. **Joseph Thomas Coyle**, McLean Hospital a Harvard Medical School Affiliate, US  
Prof. **Takao K. Hensch**, Department Molecular & Cellular Biology, Department Neurology, Center for Brain Science, Harvard University, US  
Prof. **Helmut Kettenmann**, Max Delbrück-Centrum für Molekulare Medizin, Berlin, DE  
Prof. **Julio Licinio**, College of Medicine, Weiskotten Hall, Syracuse, New York, US  
Prof. **Robert C. Malenka**, Stanford University School of Medicine, US  
  
Prof. **Michael Hottiger** (Chair), SNF, Bern, CH  
Prof. **Isabelle Mansuy**, SNF, Bern, CH  
Prof. **Hanns Ulrich Zeilhofer**, SNF, Bern, CH

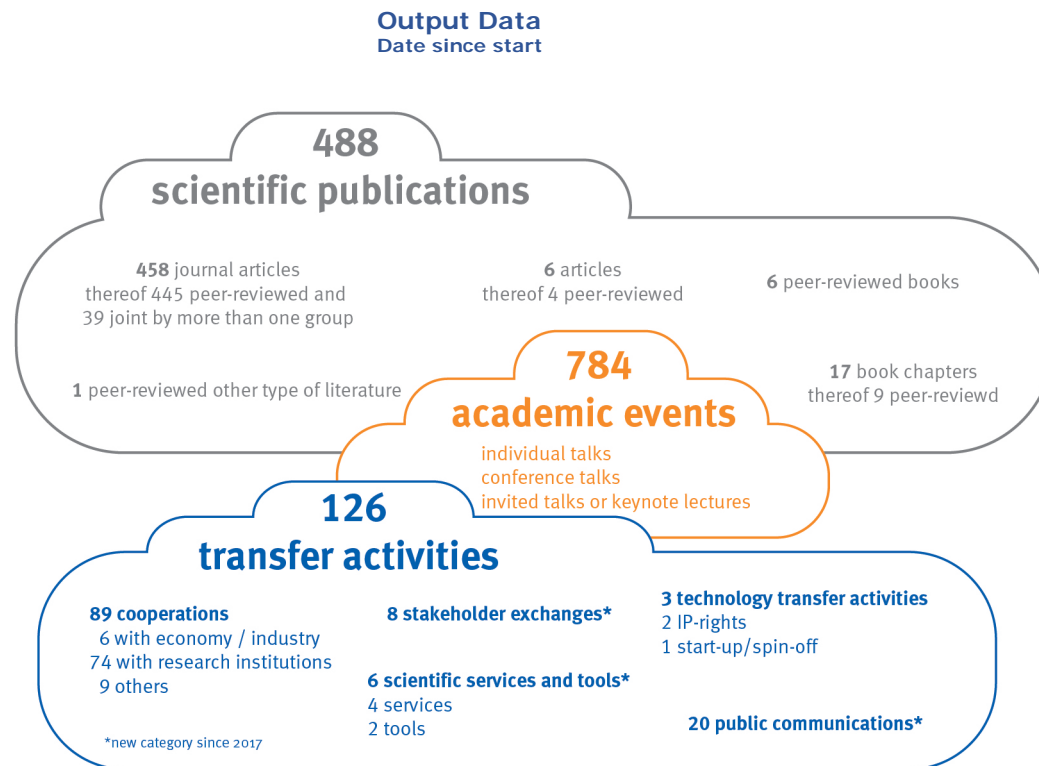
### Management/Coordination

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NCCR Synapsy  
Campus Biotech  
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CH-1202 Genève  
+41 22 379 11 21  
[www.nccr-synapsy.ch](http://www.nccr-synapsy.ch)

## Heads of Research Groups (continued)

Prof. **Christoph Michel**, Département des neurosciences fondamentales (NEUFO), Université de Genève, Faculté de biologie et médecine  
 Prof. **Micah Murray**, Center for Biomedical Imaging, CHUV, Université de Lausanne  
 Prof. **Martin Preisig**, Clinique psychiatrique universitaire, Cery-CHUV Lausanne  
 Prof. **Carmen Sandi**, Brain Mind Institute, EPFL  
 Prof. **Marie Schaer**, Office médico-pédagogique, Université de Genève  
 Dr. **Daniel Schechter**, Psychiatrie de l'enfant et de l'adolescent, HUG-Hôpitaux Universitaires de Genève  
 Prof. **Peter Scheiffele**, Biozentrum, Universität Basel  
 Prof. **Ralf Schneggenburger**, Brain Mind Institute, EPFL  
 Prof. **Andrea Volterra**, Département des neurosciences fondamentales (DNF), CHUV-Université de Lausanne

## Overview of all Research Projects



## Key collaborations with third parties

**Academia**  
 University of Munich, Institute of Psychiatric Phenomics and Genomics, DE  
 Mount Sinai, Department of Psychiatry, US  
 Free University Amsterdam, Department of Integrative Neurophysiology, Center for Neurogenomics and Cognitive Research, NL  
 Karolinska Institute, Department of Neuroscience, SW  
 University of Milan, Neuroscience Institute, IT  
 Columbia University Medical Center, Department of Epidemiology and Psychiatry, US  
 King's College, Department of Psychosis Studies, UK  
 University of North Carolina School of Medicine, Department of Psychiatry, US  
 Mannheim University, Central Institute of Mental Health, DE  
 University of California, Los Angeles, Semel Institute for Neuroscience and Human Behaviour, US  
 Harvard Medical University, Department of Psychiatry, US  
 University of Pennsylvania, Department of Psychiatry, US  
 Centre for genomic regulation, CNAG, ES  
 King's College London, Inst. of Psychiatry, Psychology & Neuroscience, UK  
 INSERM, Translational Psychiatry, FR  
 NIMH, Genetic Epidemiology Research Branch (GEB-SDGE), US  
 Simon Fraser University, Faculty of Health Sciences, CA

## Private and public sector

F. Hoffman-La Roche Ltd, CH  
 Illumina, DE  
 Fondation Pôle Autisme, CH

## Funding

Funding Source (CHF)	Total Phase 1 2010 - 2013	Total Phase 2 2014 – 2017	2014	2015	2016	2017	Phase 2 %
SNSF-funding <sup>1</sup>	<b>17'513'890</b>	<b>17'540'743</b>	4'662'000	4'662'000	4'705'983	3'510'760	32
Self-funding from Home Institutions <sup>2</sup>	<b>14'144'189</b>	<b>13'501'476</b>	3'250'658	4'091'215	3'449'103	2'710'500	25
Self-funding from project participants	<b>15'637'967</b>	<b>22'027'214</b>	6'072'488	5'599'256	5'840'238	4'515'232	41
3rd party-funding	<b>2'254'204</b>	<b>999'482</b>	387'462	370'442	241'578	0	2
<b>Total</b>	<b>49'550'250</b>	<b>54'068'915</b>	14'372'608	14'722'913	14'236'902	10'736'492	100

<sup>1</sup> incl. compensation for PhD salaries increase in 2014 and 120% support grant in 2016 and 2017

<sup>2</sup> Personnel costs, equipment and consumables, not included infrastructure and basic equipment

## Persons involved

Personnel <sup>3</sup>	Total of persons	Female %	CH	Top 5 – Most represented nations					Other nations
				FR	IT	DE	ES	IN	
Research associates <sup>4</sup>	25	68	7	7	2	2	2	1	4
Doctoral students	31	65	9	5	5	3	0	4	6
Postdoctoral students	40	65	8	4	11	0	0	0	19
Senior researchers <sup>5</sup>	79	33	40	11	10	4	1	1	16
Management <sup>6</sup>	4.53	50	8	2	0	0	0	1	1
Other staff	57	84	30	9	3	4	3	0	9
<b>Total</b>	<b>236.53</b>	<b>59</b>	<b>102</b>	<b>38</b>	<b>31</b>	<b>13</b>	<b>6</b>	<b>7</b>	<b>55</b>

<sup>3</sup> Persons involved in the NCCR in the last reporting period (12 months)

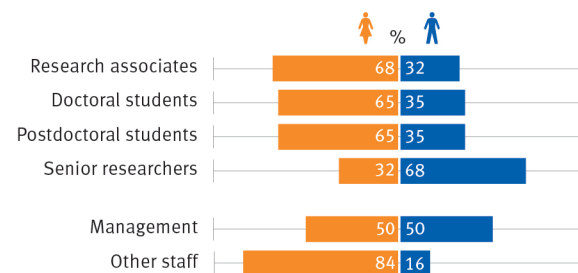
<sup>4</sup> Includes graduate scientists (level master) but not registered as PhD students or undergraduate students participating in research projects.

<sup>5</sup> Including leaders of the individual projects and other organisational units of the NCCR

<sup>6</sup> Full-time equivalent, including NCCR-Director and persons in charge of knowledge and technology transfer, equal opportunities, communication and education and training

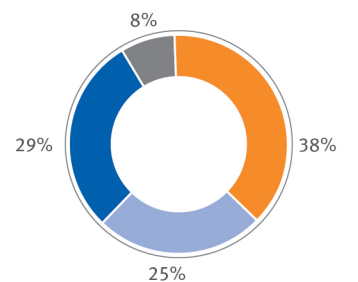
### Gender in the NCCR

Data: current year



### Training state of doctoral students

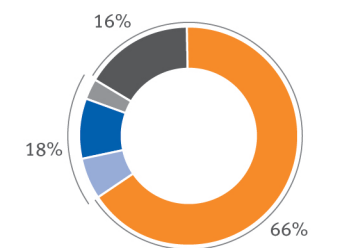
Data: since start



in progress	28
completed	22
continuation outside NCCR	19
dropout	6
<b>Total</b>	<b>75</b>

### Next employer of doctoral and postdoctoral students

Data: since start



Academic sector	63
Private sector	6
Public sector	9
Other	3
None/not known	15
<b>Total</b>	<b>96</b>



# NCCR TransCure

## From transport physiology to identification of therapeutic targets



NCCR Director: Prof. Hugues Abriel  
Home Institution: University of Bern  
Start date: 1<sup>st</sup> of November 2010 (3<sup>rd</sup> NCCR series)

### Heads of Research Groups

Prof. **Hugues Abriel**, Institut für Biochemie und Molekulare Medizin, Universität Bern  
Prof. **Christiane Albrecht**, Institut für Biochemie und Molekulare Medizin, Universität Bern  
Prof. **Karl-Heinz Altmann**, Institut für Pharmazeutische Wissenschaften, ETH Zürich  
Dr. **Paola Bezzi**, Département des neurosciences fondamentales, Université de Lausanne  
Prof. **Murielle Bochud**, Institut Universitaire de Médecine Sociale et Préventive, Université de Lausanne  
Prof. **Roch-Phillippe Charles**, Institut für Biochemie und Molekulare Medizin, Universität Bern  
Prof. **Raimund Dutzler**, Biochemisches Institut, Universität Zürich  
Prof. **Dimitrios J. Fotiadis**, Institut für Biochemie und Molekulare Medizin, Universität Bern  
Prof. **Daniel G. Fuster**, Institut für Biochemie und Molekulare Medizin, Universität Bern  
Prof. **Jürg Gertsch**, Institut für Biochemie und Molekulare Medizin, Universität Bern  
Prof. **Matthias A. Hediger**, Institut für Biochemie und Molekulare Medizin, Universität Bern  
Prof. **Wilhelm Hofstetter**, Department for BioMedical Research, Universität Bern  
Prof. **Kaspar Locher**, Institut für Molekulare Biologie und Biophysik, ETH Zürich  
Prof. **Martin Lochner**, Institut für Biochemie und Molekulare Medizin, Universität Bern  
Prof. **Christine Peinelt**, Institut für Biochemie und Molekulare Medizin, Universität Bern  
Prof. **Jean-Louis Reymond**, Département für Chemie und Biochemie, Universität Bern  
Prof. **Henning Stahlberg**, Biozentrum, Department for Biosystems Science and Engineering, Universität Basel  
Prof. **Bruno Stieger**, Abteilung für Klinische Pharmakologie und Toxikologie, Universitätsspital Zürich  
Prof. **Andrea Volterra**, Département des neurosciences fondamentales, Université de Lausanne

### [Overview of all Research Projects](#)

### Participating Institutions

Universität Basel (1 group)/Universität Bern (11 groups)/Université de Lausanne (3 groups)/ Universität Zürich (2 groups)/ETH Zürich (2 groups)

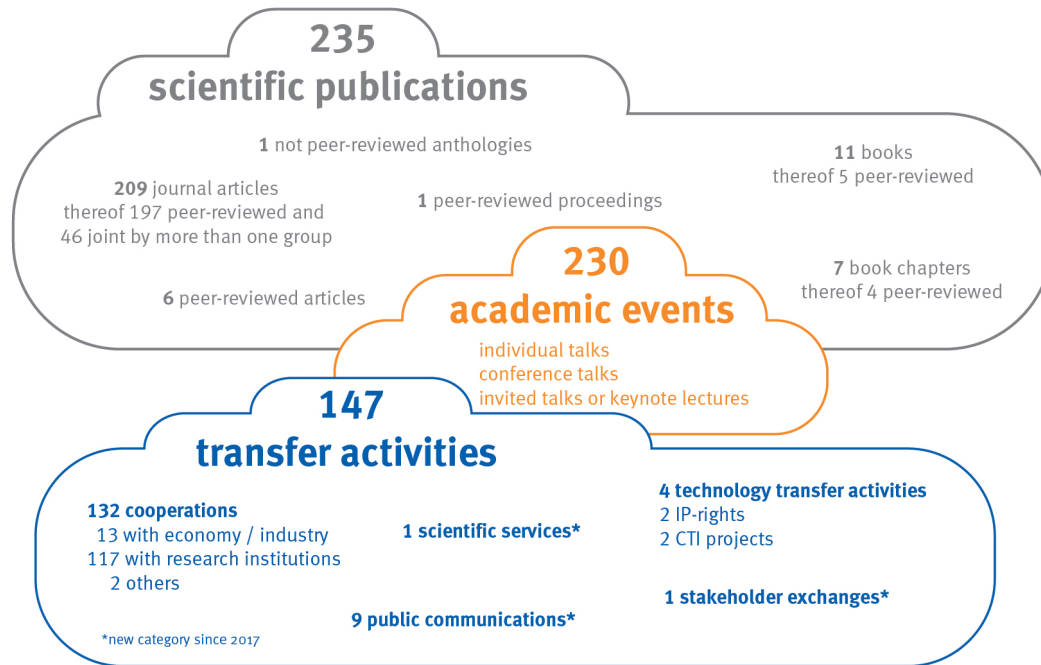
### Members of the Review Panel

Prof. **Ruben Abagyan**, School of Pharmacy & Pharmaceutical Sciences, University of California, US  
Prof. **Seth L. Alper**, Renal Division and Molecular and Vascular Medicine Unit, US  
Prof. **Susan Bates**, Center for Cancer Research, National Cancer Institute, US  
Prof. **Dennis A. Dougherty**, Division of Chemistry and Chemical Engineering, California Institute of Technology, US  
Prof. **Jeanne M. Nerbonne**, Division of Biology and Biomedical Sciences, Washington University, US  
Prof. **Lutz Schmitt**, Lehrstuhl für Biochemie, Heinrich Heine Universität, Düsseldorf, DE  
Prof. **Hans Ulrich Stiltz**, Academic Partnerships, Novo Nordisk A/S, DK  
Prof. **Hendrik van Veen**, Department of Pharmacology, University of Cambridge, UK  
Prof. **Da-Neng Wang**, Skirball Institute of Biomolecular Medicine, New York University School  
  
Prof. **Katharina Fromm** (Chair), SNF, Bern, CH  
Prof. **Michael Detmar**, SNF, Bern, CH  
Prof. **Andreas Mayer**, SNF, Bern, CH

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**Output Data**  
Data since start



**Key collaborations with third parties**

**Academia**

Aarhus University Hospital, Dept. of Nuclear Medicine and PET Center, Aarhus, DK  
 CNCR, Neuroscience Campus Amsterdam, VU University, Amsterdam, NL  
 Departments of Pharmacology and Systems, Icahn School of Medicine at Mount Sinai, New York, US  
 Computational Biomolecular Dynamics Group, MPI for Biophysical Chemistry, Göttingen, DE  
 Department of Behavioral Sciences, University of Ariel, Ariel, IL  
 Department of Biochemistry and Biophysics, Stockholm University, Stockholm, SWE  
 Department of Neuroscience, Columbia University, New York, US  
 Department of Pharmaceutical Chemistry, University of Vienna, Vienna, AT  
 Department of Pharmacology, University of Warwick, Coventry, GB  
 Department of Physiology, Johns Hopkins University, Baltimore, US  
 Department of Surgery & Cancer, Imperial College, London, GB  
 Heart Institute, University of Ottawa, Ottawa, CA  
 Institut du Thorax, Université de Nantes, Nantes, FR  
 Institute for Research in Biomedicine, University of Barcelona, Barcelona, ES  
 Institute of Pharmacy, University of Regensburg, Regensburg, DE  
 Membrane Research Group, Hungarian Academy of Sciences, Budapest, HU  
 Division of Child Health, Obstetrics & Gynaecology, University of Nottingham, Nottingham, UK

**Private and public sector**

Dr. August Wolff GmbH, Bielefeld, DE  
 Krebsforschung Schweiz, Bern, CH  
 Swiss Multiple Sclerosis Foundation, Zürich, CH  
 Novartis, Basel, CH

**Funding**

Funding Source (CHF)	Total Phase 1 2010 - 2013	Total Phase 2 2014 – 2017	2014	2015	2016	2017	Phase 2 %
SNSF-funding <sup>1</sup>	14'187'092	11'736'560	3'029'000	3'041'000	2'835'560	2'831'000	42
Self-funding from Home Institution <sup>2</sup>	4'590'667	4'486'910	1'114'234	1'106'675	1'107'569	1'158'432	16
Self-funding from project participants	13'846'209	11'717'351	2'809'941	3'116'910	3'556'721	2'233'779	41
3rd party-funding	335'080	328'061	106'259	34'404	87'919	99'479	1
<b>Total</b>	<b>32'959'048</b>	<b>28'268'882</b>	7'059'434	7'298'989	7'587'769	6'322'690	100

<sup>1</sup> incl. compensation for PhD salaries increase in 2014 and 120% support-grant in 2016 and 2017

<sup>2</sup> Personnel costs, equipment and consumables, not included infrastructure and basic equipment

## Persons involved

Personnel <sup>3</sup>	Total of persons	Female %	CH	Top 5 – Most represented nations					Other nations
				IT	DE	FR	IN	PL	
Doctoral students	26	46	12	3	2	4	1	1	4
Postdoctoral students	24	17	3	3	3	1	4	1	9
Senior researchers <sup>4</sup>	34	15	16	7	4	2	0	1	6
Management <sup>5</sup>	2.56	60	6	2	1	0	0	1	1
Other staff	26	77	20	3	1	0	0	0	2
<b>Total</b>	<b>112.56</b>	<b>39</b>	<b>57</b>	<b>18</b>	<b>11</b>	<b>7</b>	<b>5</b>	<b>4</b>	<b>22</b>

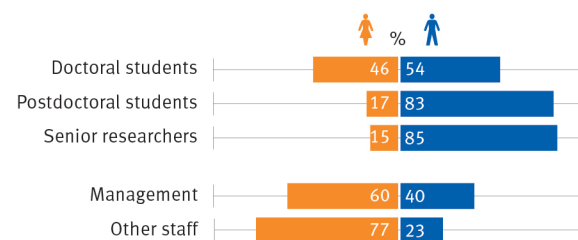
<sup>3</sup> Persons involved in the NCCR in the last reporting period (12 months)

<sup>4</sup> Including leaders of the individual projects and other organisational units of the NCCR

<sup>5</sup> Full-time equivalent, including NCCR-Director and persons in charge of knowledge and technology transfer, equal opportunities, communication and education and training

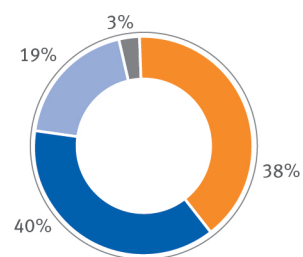
### Gender in the NCCR

Data: current year



### Training state of doctoral students

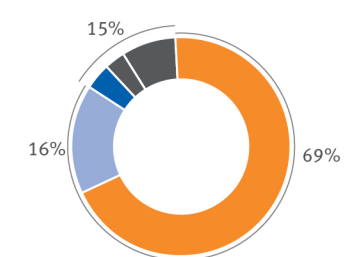
Data: since start



in progress	22
completed	23
continuation outside NCCR	11
dropout	2
<b>Total</b>	<b>58</b>

### Next employer of doctoral and postdoctoral students

Data: since start



Academic sector	93
Private sector	22
Public sector	5
Other	4
None/not known	10
<b>Total</b>	<b>134</b>

## Overview of terminated NCCRs – 2<sup>nd</sup> series (2005–2017)

### List of the six NCCRs (2<sup>nd</sup> series, restricted call for humanities and social sciences)

Short Name	NCCR-Director	Home Institution
<b>Affective Sciences</b> Emotion in Individual Behaviour and Social Processes	Prof. Klaus R. Scherer (2005–2013) Prof. David Sander (2013–2017)	University of Geneva
<b>Democracy</b> Challenges to Democracy in the 21 <sup>st</sup> Century	Prof. Hanspeter Kriesi (2005–2013) Prof. Daniel Kübler (2013–2017)	University of Zurich
<b>Iconic Criticism</b> The Power and Meaning of Images	Prof. Gottfried Böhm (2005–2013) Prof. Ralph Ubl (2013–2017)	University of Basel
<b>International Trade Regulation</b> From Fragmentation to Coherence	Prof. Thomas Cottier (2005–2013) Prof. Manfred Elsig (2014–2017)	University of Bern
<b>Mediality</b> Historical Perspectives	Prof. Christian Kiening (2005–2017)	University of Zurich
<b>SESAM*</b> (2005-2010) Swiss etiological study of adjustment and mental health	Prof. Jürgen Margraf (2005–2010)	University of Basel

\*Terminated 2010

### 2<sup>nd</sup> Call of NCCRs: Funding in phase 1, 2 and 3

Funding source (CHF)	Phase 1	Phase 2	Phase 3	Total all phases	%
SNSF funding	50'500'000	45'065'020	30'023'578	125'588'598	44
Self-funding from Home Institutions <sup>1</sup>	21'665'810	21'232'514	20'700'572	63'598'896	22
Self-funding from project participants	25'566'273	30'308'106	25'840'149	81'714'528	28
Third-party funding	6'783'879	6'035'036	5'773'989	18'592'904	6
Total	104'515'962	102'640'676	82'338'288	289'494'926	100

<sup>1</sup> Personnel costs, equipment and consumables, not included infrastructure and basic equipment

### Knowledge and technology transfer – Output Data\*

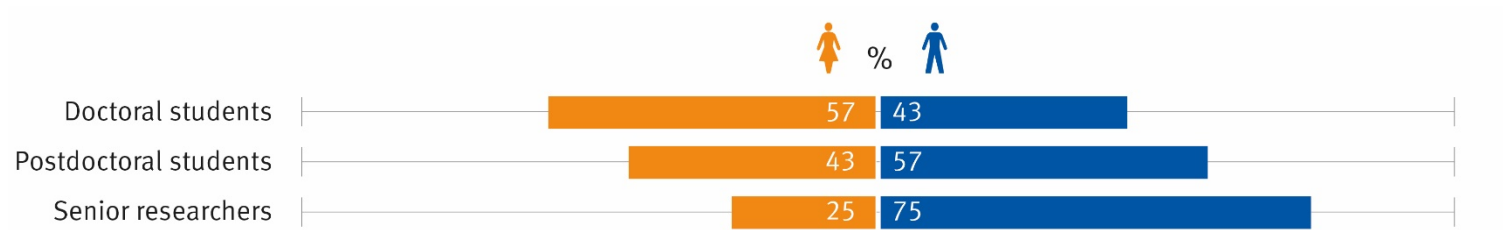
Type of output	Total
Publications	2256 Peer-reviewed  1141 Not peer-reviewed  2193 Anthology articles  707 Books  162 Reports
Presentations at congresses	5718
Cooperation	51 Economy/Industry sector  976 Research institutions  155 Other
Transfer activities	1 Start-up  46 Prototypes/processes  1 CTI project
	48

\*without NCCR SESAM

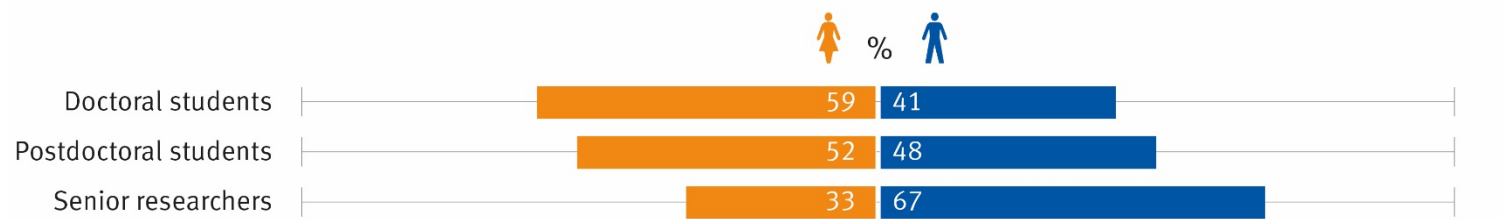
Education and Training - Equal opportunities - Researchers involved in all 2nd series NCCRs (2005–2013)

Personnel	Total of persons	Female %	CH	Other nations
Doctoral students	432	58	199	75
Postdoctoral students	247	52	56	56
Senior researchers	358	32	53	54

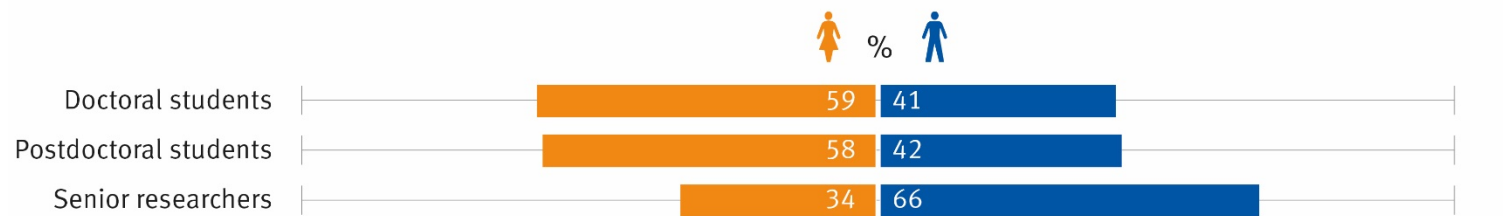
Phase 1



Phase 2



Phase 3



## First employer after training

Category	Doctoral students %	Postdoctoral students %
Academic sector	48	63
Private sector	7	7
Public sector	8	4
Other	3	1
Unknown	18	11
Training ongoing*	16	14
Total	100	100

\* Training not yet finished when the NCCR has ended.

## Structural measures - Impact on research structures

Number of professorial positions	
New assistant professorships	15
New full professorships	6
Replacement of existing professorships	15
Total	36

## Most important research centres

NCCR	Centres	Research infrastructure	Education programmes
Affective Sciences Home Institution: (2005–2017)	Swiss Centre for Affective Sciences (CISA), University of Geneva (Interfaculty Centre)	Brain and behaviour laboratory / Campus Biotech laboratories	Doctoral programme at University of Geneva (accessible Swiss-wide) International Summer School in Affective Sciences
Democracy (2005–2017)	Center for Democracy Aarau (ZDA) (Multi-institutional Centre)	Democracy Barometer (Data infrastructure at ZDA)	Doctoral programme at University of Zurich and others (accessible Swiss-wide) Swiss Summer School Democracy Studies
Iconic Criticism (2005–2017)	eikones – Zentrum für Theorie und Geschichte des Bildes, Universität Basel (Interfaculty Centre)	-	Doctoral programme, accessible for doctoral students of University of Basel / ETH Zurich NOMIS Fellowship Programme
Mediality (2005–2017)	Zentrum für historische Mediologie UZH (Faculty Centre)	-	Doctoral programme University of Zurich (association possible for students of other Universities)
Trade Regulation (2005–2017)	World Trade Institute, University of Bern (Interfaculty Centre)	Design of Trade Agreements Database (DESTA)	Graduate School at the World Trade Institute, University of Bern

# Impressum

The brochure "Guide" presents an overview on the currently running NCCRs. The statistical data is based on the latest progress reports of the NCCRs submitted during 2017. It is updated every year and can be downloaded as a pdf on our website: [www.snsf.ch/Publications](http://www.snsf.ch/Publications)

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