

FALLING WALLS LAB2014 PROGRAMME



BERLIN SATURDAY, NOVEMBER 8

Founding Partner

AT Kearney

Global Partner

FESTO

*Berlin Academy of the Konrad-Adenauer-Stiftung,
Tiergartenstraße 35, 10785 Berlin*

8.30 – 9.00 am

REGISTRATION

9.00 – 10.00 am

BREAKFAST AND BRIEFING FOR ALL JURY MEMBERS

Venue: Jury room, 1st floor

10.00 – 10.30 am

WELCOME AND INTRODUCTORY REMARKS

*Prof. Dr. Jürgen Mlynek, Chairman, Board of Trustees, Falling Walls Foundation
Dr. Martin Sonnenschein, Managing Director Central Europe, A.T. Kearney
Ulli Dannath, Master of Ceremonies, A.T. Kearney*

10.30 – 12.00 pm

SESSION 1 PRESENTATIONS 1 TO 30

*Please feel free to raise questions and make comments using the ?/!-sign.
At the end of this session, our assistants will collect the first page of your voting sheets.*

12.00 – 1.15 pm

LUNCH BREAK

1.15 – 3.15 pm

SESSION 2 PRESENTATIONS 31 TO 70

*Please feel free to raise questions and make comments using the ?/!-sign.
At the end of this session, our assistants will collect the second page of your voting sheets.*

3.15 – 4.15 pm

GROUP PHOTO AND COFFEE BREAK

4.15 – 5.45 pm

SESSION 3 PRESENTATIONS 71 TO 100

*Please feel free to raise questions and make comments using the ?/!-sign.
At the end of this session, our assistants will collect the third page of your voting sheets.*

CONCLUSION BY THE CHAIRMAN OF THE JURY

Prof. Dr. Carl-Henrik Heldin, Chairman of the Board, Nobel Foundation

5.45 – 6.30 pm

**EVALUATION OF THE JURY VOTES AND JURY MEETING:
NOMINATION OF THE 3 WINNERS**

The voting sheets of all jury members and the audience awards sheets will now be evaluated by means of an assessment tool. The top 5 finalists and the winner of the audience award will be discussed by the jury. The chairman and vice chairman of the jury will have the final say if jury members disagree on the result.

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6.30 – 6.45 pm

AWARD CEREMONY: ANNOUNCEMENT OF THE FALLING WALLS YOUNG INNOVATORS OF THE YEAR 2014 AND THE WINNER OF THE AUDIENCE AWARD

7.00 pm

TRANSFER TO WELCOME RECEPTION: *Ground transport will be provided at 7 pm at the main entrance of the Academy*

7.30 pm

WELCOME RECEPTION FOR ALL GUESTS OF THE FALLING WALLS CONFERENCE
Venue: Neue Nationalgalerie, Potsdamer Strasse 50, 10785 Berlin

10.30 pm – open end

FALLING WALLS LAB PARTY
Venue: Bar Babette, Karl-Marx Allee 3, 10178 Berlin

FALLING WALLS CONFERENCE SUNDAY, NOVEMBER 9
Radialsystem V, Holtzmarktstraße 33, 10243 Berlin

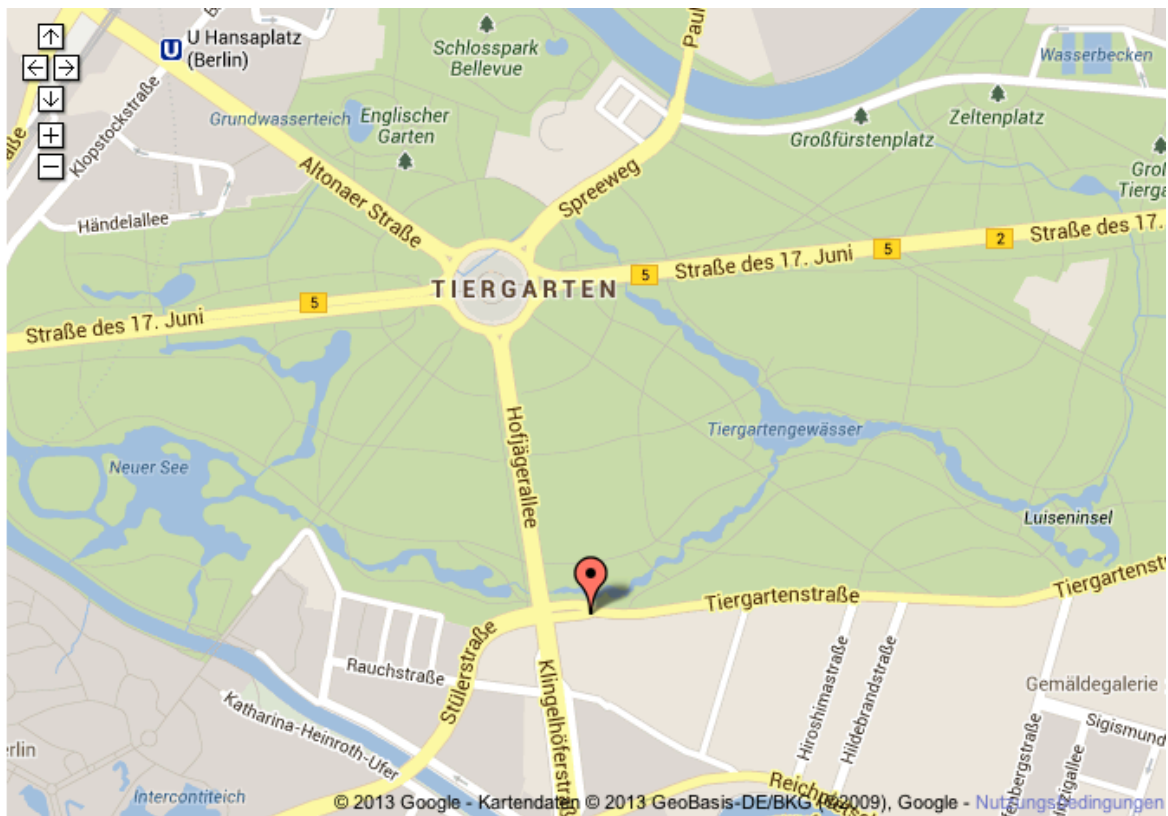
*If you have any questions, please do not hesitate to contact
Sarah Ansel, Head of Project Falling Walls Lab,
sarah.ansel@falling-walls.com, Mobile: +49 152 22 53 28 13*

Falling Walls Lab Berlin 2014 – Directions and Details

The Falling Walls Lab Berlin takes place at the
Berlin Academy of the Konrad-Adenauer-Stiftung
Tiergartenstraße 35
10785 Berlin



Berlin Academy of the Konrad-Adenauer-Stiftung



Located in the immediate vicinity of the Tiergarten



**FALLING
WALLS
LAB**

How to get there by public transport

You can reach the Berlin Academy of the Konrad-Adenauer-Stiftung with the bus lines 100, 106, 187 und 200. Get off at the stop called: Nordische Botschaften / Konrad-Adenauer-Stiftung

BVG passenger info, timetables and journey planner: www.bvg.de

Details

- The entire event will be held in English
- Dress code is smart casual.

Contact

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Falling Walls Foundation
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10115 Berlin

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sarah.ansel@falling-walls.com

FALLING WALLS LAB2014 JURY

We would like to thank the members of the jury for their time and for being part of the Falling Walls Lab Berlin.

| | | | |
|----|---|--|--|
| 01 | Prof. Dr. Carl-Henrik Heldin (Chairman of the Jury) | Chairman of the Board | Nobel Foundation |
| 02 | Dr. Martin Sonnenschein (Vice Chairman of the Jury) | Managing Director Central Europe | A.T. Kearney |
| 03 | Prof. Dr. Monique Breteler | Director of Population Health Sciences | German Center for Neuro-degenerative Diseases (DZNE) |
| 04 | Prof. Dr. Carmen Büttner | Professor for Phytomedicine | Humboldt-Universität zu Berlin |
| 05 | Prof. Dr. Rebecca Cassidy | Professor of Anthropology | Goldsmiths, University of London |
| 06 | Dr. Klaus Dieterich | President (retired) Corporate Research and Development Coordination Technology | Robert Bosch |
| 07 | Prof. Dr. Julia Fischer | Head of the Cognitive Ethology Laboratory | German Primate Center/ University of Göttingen |
| 08 | Prof. Dr. Peter Hofmann | Head of Global Product Development | Festo |
| 09 | Prof. Dr. Maria Ivanova | Co-Director, Center for Governance and Sustainability, McCormack Graduate School | University of Massachusetts Boston |
| 10 | Dr. Claus Jessen | Member of the Management Board Product Supply | Festo |
| 11 | Dr. Raphael Kübler | Head of Corporate Operating Office | Deutsche Telekom |
| 12 | Prof. Dr. Jochen Maas | General Manager R&D Germany | Sanofi-Aventis Deutschland |
| 13 | Mai-Thi Nguyen-Kim | PhD candidate | RWTH Aachen |
| 14 | Prof. Dr. Nicola Pugno | Professor of Solid and Structural Mechanics | University of Trento |
| 15 | Barbara Schneider-Kempf | Director General | Staatsbibliothek zu Berlin |
| 16 | Gretchen Vogel | Journalist/ Contributing correspondent | Science Magazine |
| 17 | Prof. Dr. Margret Wintermantel | President | German Academic Exchange Service (DAAD) |
| 18 | Prof. Dr. Maciej Zylicz | President of the Board | Foundation for Polish Science |

FALLING WALLS LAB2014 JURY

PROF. DR. CARL-HENRIK HELDIN

Chairman of the Board, Nobel Foundation
Chairman of the Falling Walls Lab Berlin 2014



Carl-Henrik Heldin is the Branch Director of the Ludwig Institute for Cancer Research in Uppsala, Sweden, and since 1992 also Professor in Molecular Cell Biology at Uppsala University. He was born in 1952, and obtained a PhD degree in Medical and Physiological Chemistry in 1980 at the University of Uppsala, where he continued to work until 1985 in a position sponsored by the Swedish Cancer Society.

The research interest of C.-H. Heldin is related to the mechanisms whereby growth factors, in particular PDGF and TGF β , activate their receptors and control cell growth, migration, apoptosis (programmed cell death) and differentiation, and how perturbations of signaling pathways promote tumor progression. An aim is to explore the usefulness of signal transduction inhibitors for tumor treatment.

C.-H. Heldin is an elected member of the European Molecular Biology Organisation, Royal Swedish Academy of Sciences, Academia Europea and several other societies. He is Doctor honoris causa at the universities of Patras, Helsinki, Turku and Heidelberg, and has obtained several awards for his work, including the Prix Antoine Lacassagne, the EMBO Medal, the K. Fernström's Large medical prize, the Meyenburg Prize, the Pezcoller-AACR Prize, and the Honorary Medal of the Signal Transduction Society. He has served or serves on the Scientific Advisory Boards for several companies and academic institutions, and on the Editorial Boards of several scientific journals. C.-H. Heldin is currently Vice President of the European Research Council and the Chairman of the Board of the Nobel Foundation.

DR. MARTIN SONNENSCHNEIN

Managing Director Central Europe, A.T. Kearney
Vice Chairman of the Jury Falling Walls Lab Berlin 2014



Dr. Martin Sonnenschein is a Partner and Managing Director Central Europe at A.T. Kearney. He has 15 years of experience in consulting, his main focus lies on industrial growth opportunities, operational improvements and on being an entrepreneur and company director.

Prior to his appointment as Director Central Europe in 2009, he was responsible for advising telecommunications and High-Tech businesses all around the globe. In 2011, he was voted onto A.T. Kearney's Global Board of Directors.

Martin Sonnenschein has headed numerous projects for companies from a whole range of industries and on all five continents. He looks after some of A.T. Kearney's most important clients. His passion for quantifiable results led to the creation of an annual benchmark evaluation of telcos around the world in 2002 (A.T. Kearney Global Competitive Benchmark). He was involved in the setting-up of what is today's most successful B2B marketplaces. The emphasis of his work is on transformation, growth & innovation, and technology & sustainability. Before his arrival at A.T. Kearney in 2000, Sonnenschein, who earned a PhD in Business Administration and Engineering from the University of Karlsruhe, Germany, had spent ten years gaining extensive and valuable management experience as the CEO of a rapidly growing service provider.

Martin Sonnenschein is a backer of some leading industry initiatives and think tanks. He is a member of the senate of the Deutsche Akademie der Technikwissenschaften (acatech – German Academy of Science and Engineering) and of the executive committee of Stiftung Neue Verantwortung (snv – New Responsibility Foundation), he sits on various supervisory and advisory boards, and is co-author of the books „Digital Value Networks“, „Ne(x)t Economy“, „Innovative Regulierung“ (Innovative Regulation), „Organisches Wachstum“ (Organic Growth) and „Customer Energy“. Together with his partners in Germany, he has established a number of initiatives, including „A.T. Kearney 361° – Reinventing the Family“ and „Our Children's World“. He is also the co-founder of the Falling Walls Lab, an interdisciplinary platform for outstanding talents. Martin Sonnenschein sees family policy as a growth policy for the economy and as the basis for social cohesion.

FALLING WALLS LAB2014 JURY

PROF. DR. MONIQUE BRETELER

Director of Population Health Sciences,
German Center for Neurodegenerative Diseases (DZNE)

For more than two decades, Monique Breteler's primary affiliation was with the Department of Epidemiology & Biostatistics of Erasmus University Rotterdam, where she developed and led the neurological component of the Rotterdam Study and founded the Rotterdam Scan Study, internationally leading population studies in the area of neurodegenerative diseases. In 2011, she joined the newly founded German Center for Neurodegenerative Diseases (DZNE) as its Director for Population Health Sciences, where she established the Rhineland Study, a prospective cohort study of 30,000 individuals. Primary goals of this cohort study are to identify causes and preclinical multimodal biomarker profiles of neurodegenerative and neuro-psychiatric diseases, and to investigate normal and pathological brain structure and function over the adult life course.

PROF. DR. CARMEN BÜTTNER

Professor for Phytomedicine, Humboldt-Universität zu Berlin

Carmen Büttner studied agriculture at the Rheinische Friedrich-Wilhelms-Universität Bonn. Following her PhD studies, she joined a post-doctoral project on epidemiology of viruses and environmental studies in Bonn and Berkeley, USA. She completed her thesis of "Habilitation" at the Universität Hamburg. After two years at the chair of tree physiology at the Albert-Ludwigs-Universität Freiburg, she was appointed as full professor for phytomedicine at the Humboldt-Universität zu Berlin in 1999. Her main expertise lies on management of plant health, diagnosis, epidemiology and characterization of plant pathogens with focus on plant viruses. Her mission statement concerns the implementation of an interconnected team of scientists of molecular and applied science to tap their synergy potential that will enable the phytomedicine to move forward overall. Carmen Büttner is author and co-author of many publications, such as Hong Ch, Moormann G, Wohanka W, Büttner C, 2014: Biology, Detection and Management of Plant Pathogens in Irrigation Water, USA, APS Press, 2014. Her expertise is in great demand as evaluator, reviewer and supporting editor for the Deutsche Forschungsgemeinschaft (DFG), European Commission, GiZ (Deutsche Gesellschaft für Internationale Zusammenarbeit) and the Federal Ministry of Food and Agriculture (BMEL).

PROF. DR. REBECCA CASSIDY

Professor of Anthropology, Goldsmiths, University of London

Rebecca Cassidy studied Philosophy and Social Anthropology at Cambridge where she received her MA and MPhil. She moved to Edinburgh to undertake her PhD in Social Anthropology, conducting fieldwork with racehorse breeders and trainers in Newmarket, England. Returning to Cambridge for her Postdoc, she studied the thoroughbred industry in the Bluegrass of Kentucky. Since joining Goldsmiths her research focuses on commercial gambling and working in betting shops. Her work currently deals with the international expansion of gambling and how this process is made knowable.

DR. KLAUS DIETERICH

President (retired) Corporate Research and
Development Coordination Technology, Robert Bosch

Klaus Dieterich studied physics and earned his doctorate at the Max-Planck-Institute for Solid State Physics in Stuttgart. He began his professional career as a trainee in the Gasoline Systems division at Bosch. He was subsequently responsible for the development of motronic systems and new automotive systems at Corporate Research before being appointed to a sales management position in the Gasoline Systems division. Early in 2000 he relocated to Hildesheim as a member of the Car Multimedia executive management with responsibility for development. Since 2004 he was the President of Corporate Research and is now retired.

PROF. DR. JULIA FISCHER

Head of the Cognitive Ethology Laboratory,
German Primate Center/Universität Göttingen

Julia Fischer studied Biology at the Freie Universität Berlin where she also received her PhD. Her research centers on the vocal communication, cognition and social behavior of nonhuman primates. As a postdoctoral fellow at the University of Pennsylvania, she conducted 18 months field research on wild baboons in the Okavango delta in Botswana. In 2001, she moved to the Max-Planck-Institute for Evolutionary Anthropology in Leipzig. In 2004, she was awarded a Heisenberg Fellowship, and became professor at the Georg-August-Universität Göttingen, a joint appointment with the German Primate Center. Together with her team, she runs the field station "Simenti" in Senegal to study Guinea baboons. In 2013, she received the Werner-and-Inge Gräter Award for Science Communication, acknowledging her activities in this realm, including the publication of her book "Affengesellschaft" (Suhrkamp, 2012).

PROF. DR. PETER HOFMANN,

Head of Global Product Development, Festo

Peter Hofmann studied Aerospace Engineering and Computer Science at the Universität Stuttgart. After receiving his PhD in Informatics at the universities of Karlsruhe and Stuttgart, he worked in the automotive industry at Daimler Benz AG and was appointed Director of the Competence Center Electrical and Electronic Architecture at the Technische Universität Dresden in 2003. From 2005 to 2010 he worked as CTO for Bürkert, a manufacturer of measuring, control and regulating systems for liquids and gases, before he joined Festo, global provider of automation technology, in 2010 as Head of Process Automation Development. Since 2013 Prof. Hofmann is Head of Global Product Development at Festo and responsible for Festo's development activities worldwide.

FALLING WALLS LAB2014 JURY

PROF. DR. MARIA IVANOVA

Co-Director, Center for Governance and Sustainability,
McCormack Graduate School, University of Massachusetts Boston

Maria Ivanova is Associate Professor of Global Governance and Co-Director of the Center for Governance and Sustainability at the McCormack Graduate School for Policy and Global Studies at the University of Massachusetts Boston. Her research focuses on the performance of international organizations. Currently, she and her team are working on the creation of an Environmental Conventions Index measuring the implementation of global environmental agreements. She served as coordinating lead author for the Global Environmental Outlook (GEO-5), the flagship UN environmental assessment, has numerous publications including three short documentaries on global environmental governance, and is editor of the Governance and Sustainability Issue Brief Series. She serves on the Scientific Advisory Board of the UN Secretary-General and the Board of UN University.

DR. CLAUDIUS JESSEN

Member of the Management Board Product Supply, Festo

Claus Jessen studied Mechanical Engineering at the Universität Darmstadt and Aerospace Engineering at RWTH Aachen. In 1993 he received his PhD from RWTH Aachen with a thesis on re-entry aerodynamics, hypersonic measurement techniques and gas dynamics of real gases. From 1993 to 2003 he worked for Fresenius Medical Care in the areas of strategic marketing, development and manufacturing technologies and plant management. In 2003, he joined Festo, global provider of automation technology, as the plant manager of Festo's production centre in St. Ingbert. From 2009 to 2010 he set up the global production network of Festo before he became a member of the management board in 2010. As Board Member Product Supply he is responsible for the divisions of product management, product development, global purchasing and logistics.

DR. RAPHAEL KÜBLER

Head of Corporate Operating Office, Deutsche Telekom

Raphael Kübler is Senior Vice President of the Corporate Operating Office of Deutsche Telekom AG (DT) since January 2014. He is also a member of the DT's Executive Committee and reports directly to the CEO. From 2009 to 2013, he was the Senior Vice President of Group Controlling at DT, where he was responsible for the financial planning, analysis and steering of the overall Deutsche Telekom Group as well as the financial management of central headquarters and shared services. From 2003 to 2009, he served as Chief Financial Officer of T-Mobile Deutschland GmbH. From 2000 to 2003, he was Head of Mergers & Acquisition of DT. Raphael Kübler presently serves on the board of Hellenic Telecommunications Organization and on the Board of Directors of T-Mobile US, Inc. where he is a member of the Compensation Committee and Executive Committee. He studied Business Administration at the École des Hautes Études Commerciales (HEC) in Paris and at the Universität Bonn and Universität Köln. He holds a doctoral degree from the Universität Köln.

PROF. DR. JOCHEN MAAS

General Manager R&D Germany, Sanofi-Aventis Deutschland

Jochen Maas was appointed General Manager, Research & Development (R&D) at Sanofi-Aventis Deutschland GmbH in 2010. He is a member of the Global R&D Management Board and of the German Management Board of Sanofi-Aventis. Jochen Maas started his career in PK and later expanded his responsibilities to Preclinical Development, Preclinical and Clinical Development and Research & Development. He was also responsible for Global Research & Development in the Diabetes Division and acted as Vice President R&D Europe at Sanofi-Aventis. Jochen Maas is a professor of pharmacokinetics and administering medication at Technische Hochschule Mittelhessen. He has studied biology and veterinary medicine at the Universität Zürich, at the Ruprecht-Karls-Universität Heidelberg and at the Ludwig-Maximilians-Universität München.

MAI-THI NGUYEN-KIM

Falling Walls Young Innovator of the Year 2012, RWTH Aachen

Mai-Thi Nguyen-Kim is a Falling Walls Lab alumnus. She was a finalist in the 2012 Lab where she talked about "Breaking the Wall of the Human Cell". She studied chemistry at the Johannes Gutenberg Universität Mainz and at the Massachusetts Institute of Technology, before she moved to Aachen in 2012 to start her PhD at the DWI – Leibniz Institute for Interactive Materials. While she focuses on the design of smart materials for biomedical applications in her research, she discovered her passion for science communication during the Falling Walls Lab and has committed herself to making science more popular among a greater audience. In her most unconventional project, she combined her love for dance and science in a hip hop dance video called Dancing Drug Delivery, for which she won the contest Forscher Tanzen in 2013. She was also a speaker at TEDxBerlin 2014 'The Next Step', where she talked about making science cooler.

PROF. DR. NICOLA PUGNO

Professor of Solid and Structural Mechanics, University of Trento

Nicola M. Pugno is the Founder and Head of the Laboratory of Bio-Inspired and Graphene Nanomechanics at the University of Trento, Italy. He is also the Scientific Responsible of Graphene Nanocomposites at the Fondazione Bruno Kessler in Trento, and Professor of Materials Science at Queen Mary University of London, UK. He has published about 230 papers on Solid-, Structural-, Fracture-, Bio- and Nano-Mechanics in leading international journals, mainly on nanotubes and graphene and bio-inspired nanomaterials (e.g. mimicking nacre for strength, spider silk for toughness, gecko foot for smart adhesion, lotus leaf for self-cleaning, bone for self-healing, etc.). He holds Master degrees in Mechanical Engineering and Theoretical Physics as well as a PhD in Fracture Mechanics (Mathematical Foundations) and is currently completing a PhD in Biology (Learning Solid and Structural Mechanics from Spiders). He has received the 2011 ERC Starting Grant and in 2013 the two ERC Proof of Concept assigned to Italy by the European Research Council.

FALLING WALLS LAB2014 JURY

BARBARA SCHNEIDER-KEMPF

Director General, Staatsbibliothek zu Berlin

Following her architecture studies in Mainz, Hannover and Aachen, Barbara Schneider-Kempf completed an eight months' study visit at the University of California, Los Angeles. From 1982 to 1992, she first did a traineeship in Librarianship at Kaiserslautern Universität followed by different positions in Cologne and Duisburg, the latest as director of the General Administration Department. From 1992 to 2002, she was Director of the newly founded Potsdam University Library. She entered the Staatsbibliothek zu Berlin (Berlin State Library) in 2002 and was appointed its Director General in 2004. Barbara Schneider-Kempf is a member of the advisory board of the Deutsche Nationalbibliothek Frankfurt am Main / Leipzig (German National Library) and of the advisory board Information and Library of the steering committee of the Goethe-Institut. Furthermore, she is Chairwoman of the working group Special Collection Libraries of the Deutsche Bibliotheksverband (German Library Association) and member of the German National Committee of the International Federation of Library Associations (IFLA).

GRETCHEN VOGEL

Journalist, Science Magazine

Gretchen Vogel studied biochemistry and journalism at Iowa State University in Ames, Iowa, and then completed the graduate program in science communication at the University of California, Santa Cruz. She joined the staff of Science Magazine as a news writer in 1996. She has covered astronomy, evolutionary biology, developmental biology, biomedical science, infectious disease and global health for the magazine. In 2001 she moved to Berlin to be the magazine's first full-time Berlin correspondent, covering German and European science politics. A piece she wrote about using stem cells to treat children with major heart defects was included in the Best American Science Writing 2012 anthology.

PROF. DR. MARGRET WINTERMANTEL

President, German Academic Exchange Service (DAAD)

Margret Wintermantel has been President of the German Academic Exchange Service (DAAD) since 2012. Previously she was President of the German Rectors' Conference, a post she held until 2012. She was also Vice-President of the German Rectors' Conference responsible for Research (2001-2006) and has been EUA Board member since March 2009. Margret Wintermantel studied psychology and media studies at the Universität Mainz, followed by research periods in Ann Arbor and at Berkeley and a Research Fellowship of Deutsche Forschungsgemeinschaft. She gained her 'Habilitation' degree in psychology at the Universität Heidelberg (1986). Her research fields of interest are social forming of opinion, language production and communication. She started her career in 1992 as university professor for social psychology at the Universität des Saarlandes, followed by the Vice-Presidency for Study and Teaching (1994-1997). From 2000-2006 she was President of the Universität des Saarlandes. Since 2005 she has been Knight of the French Legion of Honour in recognition of her merits towards the German-French academic friendship.

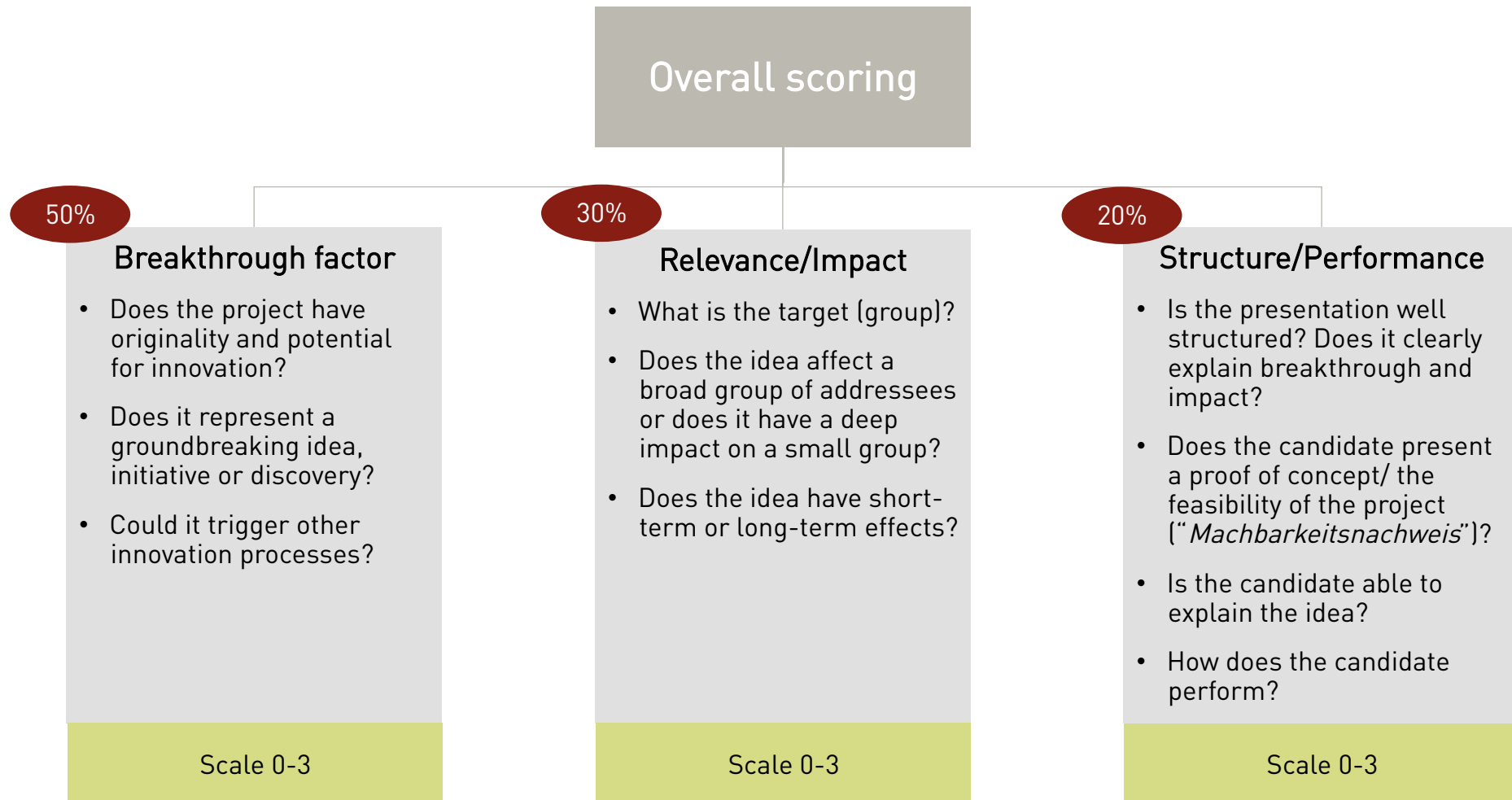
PROF. DR. MACIEJ ZYLICZ

President of the Board, Foundation for Polish Science

Maciej Zyllicz studied experimental physics and biology at the University of Gdansk. In 1980 he graduated from the Medical Academy of Gdansk. He then worked as a post-doctoral fellow at the University of Gdansk, Utah State University and Stanford University (1980-1984). In 1986 he was awarded the habilitation degree in molecular biology, and in 1992 he became a full professor (Head of the Department of Molecular Biology, Faculty of Biology and next Faculty of Biotechnology; 1991-1999). He was elected a Vice-Rector for science of the University of Gdansk (1990-1993). From 1993 to 1994 he was a visiting professor at the Institute of Oncology at the University of Utah. Since 1999 he has been head of the Molecular Biology Department of the International Institute of Molecular and Cell Biology in Warsaw. Maciej Zyllicz is best known for his work on molecular chaperone activity of heat shock proteins. He is author of almost 90 scientific papers (over 6000 citations). He is a member of the Polish Academy of Sciences, German National Academy of Sciences Leopoldina, European Molecular Biology Organization (EMBO) and a member of the Senate of the Max Planck Society.

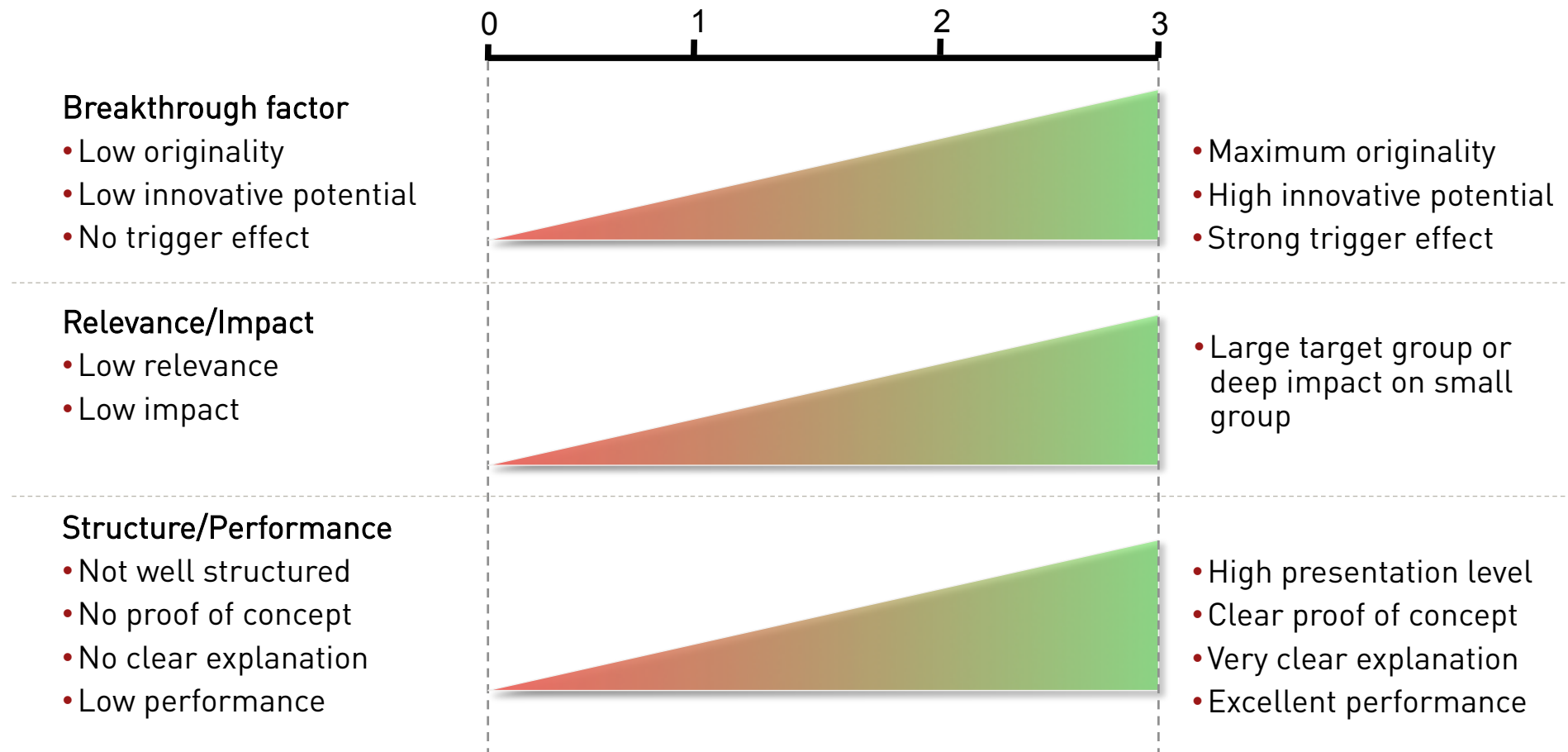
Falling Walls Lab Scoring System

Each presentation is evaluated with a score, based on three criteria



Falling Walls Lab Scoring System

Each criterion will be evaluated using a scale reaching from 0 to 3 – the higher the value, the better



| Nr. | Title | First Name | Last Name | Country | Title | Associated |
|---|-------|------------|--------------------|-----------|---|---|
| 1 | | Mattias | Ivarsson | Sweden | Breaking the Wall of a Hospital Superbug | ETH Zürich |
| <i>Idea: To develop a new, non-antibiotic treatment, which will revolutionise the therapy of a hospital superbug.</i> | | | | | | |
| 2 | | Diana | Martinez Tobon | Colombia | Breaking the Wall of Plastic Waste Accumulation | University of Alberta |
| <i>Idea: Improving polymer degradation by bacteria to reduce accumulation of plastic waste.</i> | | | | | | |
| 3 | | Ananya | Renuka Balakrishna | India | Breaking the Wall of Ferroelectric Actuation | University of Oxford |
| <i>Idea: Nano-actuator concepts to enhance fuel injection control in engines and reduce vehicular emissions.</i> | | | | | | |
| 4 | | Josef | Singer | Austria | Breaking the Wall of Orphan Forlorness in Nakuru, Kenya | Nafasi Nakuru |
| <i>Idea: Nafasi Nakuru aims to support orphans via establishing a self-sustaining education institution.</i> | | | | | | |
| 5 | | Constanza | Petrarca | Argentina | Breaking the Wall of Political Participation and Representation | Universität Mannheim |
| <i>Idea: Technology can bring democracy to a completely new level.</i> | | | | | | |
| 6 | Dr. | Derek | Lundberg | USA | Breaking the Wall of the Greenhouse Microcosm | Max-Planck-Institut für Entwicklungsbiologie |
| <i>Idea: It's time to go outside, embrace complexity, and do deep genetics with wild plants and microbes.</i> | | | | | | |
| 7 | | Stefano | Troncone | Italy | Breaking the Wall of Architectural Barriers | Universita' degli Studi di Napoli Federico II |
| <i>Idea: An ultra-light wheelchair can give you back the perception of balance.</i> | | | | | | |
| 8 | | Nermeen | Youssef | Egypt | Breaking the Wall of Type I Diabetes | University of Alberta |
| <i>Idea: Engineering fat cells to secrete insulin, as an alternative to insulin injections in Type I diabetes.</i> | | | | | | |
| 9 | | Ning | Yang | China | Breaking the Wall of Brain Tumors | Shandong University |
| <i>Idea: A novel animal design can be used to test immunotherapy on malignant brain tumors.</i> | | | | | | |
| 10 | | Simon | Turschner | Germany | Breaking the Wall of the Inequality of Chances | Vensinya |
| <i>Idea: Mindchanging Entertainment-Education media for teenagers closing the achievement gap in education.</i> | | | | | | |

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|---|------------|-------------------|--------------|---|--|
| 11 | Jule | Kunkel | Germany | Breaking the Wall of Unhealthy Lifestyles | Auckland University of Technology |
| <i>Idea: Democratic collaboration and modern communication are the answers to our current health crisis.</i> | | | | | |
| 12 | Stephen | Lerner | Canada | Breaking the Wall of Limited Rainfall | Kenes International |
| <i>Idea: We made plants that are more capable of pulling water from the soil, so they need less irrigation.</i> | | | | | |
| 13 | Tiphaine | Arlabosse | Switzerland | Breaking the Wall of Immune System Deficiency | École polytechnique fédérale de Lausanne |
| <i>Idea: The regeneration of a functional thymus can help to decrease morbidity and mortality caused by infections in elderly and immunocompromised people.</i> | | | | | |
| 14 | Naoya | Onizawa | Japan | Breaking the Wall of the Paradigm Shift in Computing | Tohoku University |
| <i>Idea: Changing the paradigm in computing from deterministic to probabilistic, inspired by the brain.</i> | | | | | |
| 15 | Vinu | Nair | South Africa | Breaking the Wall of Deterring Young Engineers | GenWye |
| <i>Idea: Generation Y Engineers possess incredible potentia. I want to unlock it and rejuvenate the sector.</i> | | | | | |
| 16 | Dr. Aliona | Nacu | Moldova | Breaking the Wall of Acute Stroke Treatment | Universitetet i Bergen |
| <i>Idea: Crushing the brain clot with ultrasound and microbubbles in acute stroke patients.</i> | | | | | |
| 17 | Guerric | d'Aviau de Ternay | France | Breaking the Wall of Conservative Legal Industry | London Business School |
| <i>Idea: Using algorithms and internet to encourage fairer outcomes to communicate and settle legal issues.</i> | | | | | |
| 18 | Frauke | Mörike | Germany | Breaking the Wall of Misunderstandings in the Office | Ruprecht-Karls-Universität Heidelberg |
| <i>Idea: Emails, Meetings, Chats, Calls...: how "I'm busy" really looks like. One year of office observations.</i> | | | | | |
| 19 | Dr. Matyas | Gutai | Hungary | Breaking the Wall of Solid Buildings | University of Tokyo |
| <i>Idea: When bricks are drops: Fluid architecture employs water as dynamic and responsive building material.</i> | | | | | |
| 20 | Dr. Vera | Demberg | Germany | Breaking the Wall between People and their Digital Assistants | Universität des Saarlandes |
| <i>Idea: Breaking walls between speech apps and cognitive science for safe multitasking in aging populations.</i> | | | | | |
| 21 | Aftab | Hussain | India | Breaking the Wall of Chronic Pain | King Abdullah University of Science and Technology |

Idea: *I have developed a stretchable, reusable, programmable, smart thermal patch for thermotherapy.*

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|----|-------|----------|---------|--|---------------------|
| 22 | Vilja | Siitonen | Finland | Breaking the Wall of Serious Diseases and Us | University of Turku |
|----|-------|----------|---------|--|---------------------|

Idea: *Let's not break the wall between serious diseases and us.*

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|----|--------|-------|-------|---|-------|
| 23 | Selene | Biffi | Italy | Breaking the Wall of Landmine Detection | BIBAK |
|----|--------|-------|-------|---|-------|

Idea: *The PODTECTOR is a modular pod of sensors that communities can build and deploy to detect landmines.*

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|----|-----|--------------|------------|----------|--|------------|
| 24 | Dr. | Edgar Andrés | Ochoa Cruz | Colombia | Breaking the Wall of Molecular Biology Privatisation | Syntechbio |
|----|-----|--------------|------------|----------|--|------------|

Idea: *Create tools to make genetic engineering open source and accessible to everybody.*

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|----|----------|-----------|---------|--------------------------------------|---|
| 25 | Caroline | Szymanski | Germany | Breaking the Wall of the Ivory Tower | Max-Planck-Institut für Bildungsforschung |
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Idea: *To record EEG-oscillations for two people simultaneously to explore if two persons can be literally 'on the same wavelength'.*

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|----|--------|---------|---------|--|---|
| 26 | Nicole | Nischan | Germany | Breaking the Wall of Protein Drug Delivery | Leibniz-Institut für Molekulare Pharmakologie |
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Idea: *By attaching a positive charged disc to functional proteins we make them pass the cellular membrane.*

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|----|-----|-------|-------|-------|---|--------------------|
| 27 | Dr. | Mehul | Bhatt | India | Breaking the Wall of Computer-Aided Architecture Design | Universität Bremen |
|----|-----|-------|-------|-------|---|--------------------|

Idea: *To provide a new paradigm advancing the theory and professional practice of architecture design.*

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|----|----------|------------|---------|--------------------------------------|---|
| 28 | Stefanie | Mühlhausen | Germany | Breaking the Wall of the Early Earth | Max-Planck-Institut für Biophysikalische Chemie |
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Idea: *Decipher building blocks of an extant protein to predict their presence in the primordial soup.*

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|----|-----|-----------|----------|-------|--|---|
| 29 | Dr. | Jabadurai | Jayapaul | India | Breaking the Wall of Lung Cancer Imaging | Leibniz-Institut für Molekulare Pharmakologie |
|----|-----|-----------|----------|-------|--|---|

Idea: *Novel biomarker for early detection of lung cancer using non-invasive and non-ionising MRI.*

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|----|-----|---------|--------|---------|---|-----------|
| 30 | Dr. | Justyna | Zander | Germany | Breaking the Wall of Emergency Response | MathWorks |
|----|-----|---------|--------|---------|---|-----------|

Idea: *Smart Emergency Response System (SERS) using humanoids, drones, UAVs, cars, and simulation to save lives.*

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|----|-----|--------|---------|---------|--|--|
| 31 | Dr. | Gustav | Sievers | Germany | Breaking the Wall of Fuel Cell Catalysts | Leibniz-Institut für Plasmaforschung und Technologie |
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Idea: *Triple-phase boundary electrocatalyst: break the limits of catalysts by reducing complexity.*

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|--|-----|--------------------------------------|----------|--|---|
| 32 | | Teresa Berninger | Germany | Breaking the Wall of Sustainable Agriculture | Austrian Institute of Technology |
| <i>Idea: Capsules containing plant growth-promoting microbes are a sustainable alternative to agrochemicals.</i> | | | | | |
| 33 | | Eric Malmi | Finland | Breaking the Wall of Family Trees | Aalto University |
| <i>Idea: To develop computational methods to automatically reconstruct and analyse family trees.</i> | | | | | |
| 34 | Dr. | Felix Günther | Germany | Breaking the Wall of Discrete Complex Analysis | Institut des Hautes Études Scientifiques |
| <i>Idea: Using the medial graph makes discrete complex analysis accessible to other professions.</i> | | | | | |
| 35 | Dr. | Andrea Noelle | Germany | Breaking the Wall of Social and Sustainable Handbags | beliya |
| <i>Idea: beliya handbags are made by upcycling and each purchase enables a child in Africa to attend school.</i> | | | | | |
| 36 | Dr. | Susanne Becker | Germany | Breaking the Wall of Suffering from Pain | Zentralinstitut für Seelische Gesundheit |
| <i>Idea: The power of mind cannot be underestimated. Use it to generate pain relief in health and disease.</i> | | | | | |
| 37 | | Serge Alain Fobofou Tanemossu | Cameroon | Breaking the Wall of Infectious Diseases | Leibniz-Institut für Pflanzenbiochemie |
| <i>Idea: To present a new metabolomic approach for the discovery of new drug candidates.</i> | | | | | |
| 38 | Dr. | Ashok Chandrasekaran | Germany | Breaking the Wall of Human Behaviour | Karlsruhe Institute of Technology |
| <i>Idea: Propose a technology-based solution to influence individual behaviours in an effort to reduce obesity.</i> | | | | | |
| 39 | | Soyanni Holness | Jamaica | Breaking the Wall of Virus Identification and Characterisation | University of the West Indies |
| <i>Idea: To identify and characterise viruses affecting tomatos, sweet and hot peppers in Jamaica using MiRNA base techniques.</i> | | | | | |
| 40 | | Bianka Grosshäuser | Germany | Breaking the Wall of Drug Development | Karlsruhe Institute of Technology |
| <i>Idea: Engineering microchips containing human cells that build organ-level functions for drug screening.</i> | | | | | |
| 41 | | Harshita Jhavar | India | Breaking the Wall of Educational Barricades for the Deaf | Maulana Azad National Institute of Technology |
| <i>Idea: To develop a mathematics sign language animator for the educational enhancement of the deaf.</i> | | | | | |
| 42 | | Kai Kornhuber | Germany | Breaking the Wall of Extreme Weather Early Warning | Potsdam-Institut für Klimafolgenforschung |

Idea: Developing an extreme weather early warning system based on recent findings in atmosphere wave dynamics.

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|----|-----|--------|------|---------|---|------------|
| 43 | Dr. | Moritz | Haag | Germany | Breaking the Wall of Human-Molecule Interaction | ETH Zürich |
|----|-----|--------|------|---------|---|------------|

Idea: A virtual environment to interact with molecules and feel reactivity: Empathise with molecules!

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|----|--|----------|---------|-------------|--|--------------------------|
| 44 | | Salvador | Regilme | Philippines | Breaking the Wall of Human Rights Abuses | Freie Universität Berlin |
|----|--|----------|---------|-------------|--|--------------------------|

Idea: Aid is neither good nor bad for rights - shared ideas about the purpose of aid do matter instead.

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| 45 | | Konstantina | Zoehrer | Greece | Breaking the Wall of Inclusive Employment | 180 Moires |
|----|--|-------------|---------|--------|---|------------|

Idea: The transformation of the status quo of employment through social inclusion and financial dignity.

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|----|--|-----------|--------|---------|--|---------------------|
| 46 | | Sebastian | Dümcke | Germany | Breaking the Wall of Microbial Diagnostics | Universität zu Köln |
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Idea: I will present a fast and sensitive method for the diagnosis of bacterial infections.

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|----|--|--------|--------|---------|---|--------------------------|
| 47 | | Niklas | Laasch | Germany | Breaking the Wall of Personal Creativity and Research | Freie Universität Berlin |
|----|--|--------|--------|---------|---|--------------------------|

Idea: Tearing down the wall between individual creativity and research to enhance collaboration.

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|----|--|-------|--------|-----|---|------------------------------------|
| 48 | | Sarah | Harris | USA | Breaking the Wall of What (We Think) it Means to be Human | University of California, Berkeley |
|----|--|-------|--------|-----|---|------------------------------------|

Idea: To examine E.T.A. Hoffmann's short story "Der Sandmann" as an expression of growing tensions between humans and machines in Romanticism.

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|----|--|------|----|-------|---|--------------------------------|
| 49 | | Yide | He | China | Breaking the Wall of SME Environmental Technologies | Humboldt-Universität zu Berlin |
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Idea: A platform for sharing the market and environmental technology information between China and Germany.

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|----|--|--------|----------|-------|--|-------------------|
| 50 | | Noriko | Tsuruoka | Japan | Breaking the Wall of Acupuncture Treatment | Tohoku University |
|----|--|--------|----------|-------|--|-------------------|

Idea: To use focused ultrasound for acupoint stimulation as a new method of non-invasive acupuncture.

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|----|-----|---------|--------|-----|----------------------------------|-----------------------|
| 51 | Dr. | Zachary | Storms | USA | Breaking the Wall of Food Safety | University of Alberta |
|----|-----|---------|--------|-----|----------------------------------|-----------------------|

Idea: A simple, inexpensive pathogen detection system built into food packaging materials.

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| 52 | Dr. | Rebecca | Boll | Germany | Breaking the Wall of Molecular Movies | Deutsches Elektronen-Synchrotron |
|----|-----|---------|------|---------|---------------------------------------|----------------------------------|

Idea: Shooting movies of single molecules, to understand how the world works on its most fundamental level.

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|--|-----|-----------------------|----------|--|--|
| 53 | Dr. | Jie Zhuang | China | Breaking the Wall of Tumor Ablation | Leibniz-Institut für Plasmaforschung und Technologie |
| <i>Idea: Using nanosecond pulsed electric fields, we can revolutionise the way of tumor ablation.</i> | | | | | |
| 54 | | Slaven Stekovic | Croatia | Breaking the Wall of Nutrition for Natural Longevity | Karl-Franzens-Universität Graz |
| <i>Idea: To apply precise medical diagnostic tools for the estimation of biological age and to introduce fine, natural autophagy regulators for age-related disease prevention and health span increase.</i> | | | | | |
| 55 | | Andreas Zeiselmair | Germany | Breaking the Wall of Low-Cost Off-Grid Energy Supply | Mobile Hydro |
| <i>Idea: Empowering people through our mobile hydropower plant as a low-cost solution for off-grid areas.</i> | | | | | |
| 56 | | Johanna Fiebeck | Germany | Breaking the Wall of Colorectal Cancer Therapy | Hochschule Kaiserslautern |
| <i>Idea: Current cancer drugs could be screened on the patient's sample and so help to optimise chemotherapy.</i> | | | | | |
| 57 | | Ekaterina Karabasheva | Bulgaria | Breaking the Wall around Eating Disorders | Jourvie |
| <i>Idea: Supporting people suffering from eating disorders like anorexia or bulimia through a smartphone app.</i> | | | | | |
| 58 | | Robert Orzanna | Germany | Breaking the Wall of Mindful Behavioural Change | Universiteit Utrecht |
| <i>Idea: Developing concepts to attract the public for a shift to sustainable lifestyles.</i> | | | | | |
| 59 | | Erin Westman | Canada | Breaking the Wall of Chemotherapy Consequences | McMaster University |
| <i>Idea: Environmental bacteria create and modify drugs, important for curing both cancer and infections.</i> | | | | | |
| 60 | | Uuriintuya Batsaikhan | Mongolia | Breaking the Wall of SME Financing | Hertie School of Governance |
| <i>Idea: Access to finance by SMEs through trade networks in complementary currencies.</i> | | | | | |
| 61 | | Michael Glatza | Germany | Breaking the Wall of Parkinson's Disease | Max-Planck-Institut für molekulare Biomedizin |
| <i>Idea: Finding a cure for Parkinson's disease using stem cell-derived human neurons.</i> | | | | | |
| 62 | | Julia Bendul | Germany | Breaking the Wall of Social Production | Jacobs University Bremen |
| <i>Idea: It is my idea to simplify production systems to allow decentralisation and usage of local resources.</i> | | | | | |
| 63 | Dr. | Ngoc Lieu Le | Vietnam | Breaking the Wall of Green Energy | King Abdullah University of Science and Technology |

Idea: To produce green energy from the ocean by means of the pressure-retarded osmosis process.

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|----|-------|----------|---------|------------------------------------|--|
| 64 | Denys | Holovaty | Ukraine | Breaking the Wall of Poor Eyesight | Ludwig-Maximilians-Universität München |
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Idea: Healing eyes effectively at home has become simple and convenient.

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|----|-------|-------|---------|--|------------------|
| 65 | Mario | Krenn | Austria | Breaking the Wall of Quantum Physics in 100 Dimensions | Universität Wien |
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Idea: The idea is to create very complex entangled quantum systems, which can be used for practical futuristic devices such as quantum cryptography.

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|----|-------|----------|---------|---|----------------------|
| 66 | David | Rohrmann | Germany | Breaking the Wall of Collective Intelligence in Organisations | Universität Bayreuth |
|----|-------|----------|---------|---|----------------------|

Idea: How to use collective intelligence to make the business world a better place.

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|----|-------------|--------|--------|---|-------------------|
| 67 | Dr. Antoine | Vergne | France | Breaking the Wall of Global Citizen Participation | Mission Publiques |
|----|-------------|--------|--------|---|-------------------|

Idea: Bringing the voice of the citizens of the world to international negotiations.

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|----|-------|-------|---------|--|---------|
| 68 | Pablo | Rojas | Ecuador | Breaking the Wall of Syphilis and Lyme Disease | Charité |
|----|-------|-------|---------|--|---------|

Idea: Intravital microscopy for understanding the dissemination of pathogens using Lyme disease as a model.

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|----|--------|-------|-------|---|--|
| 69 | Manuel | Gomez | Spain | Breaking the Wall of Nano-Fabrication and SERS Substrates | Universidade de Santiago de Compostela |
|----|--------|-------|-------|---|--|

Idea: Liquid teflon for nanostructure replication and SERS substrates fabrication.

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|----|--------|------|-------|--|--|
| 70 | Anubha | Garg | India | Breaking the Wall of Global Protein Security | Deutsches Institut für Lebensmitteltechnik |
|----|--------|------|-------|--|--|

Idea: Meat analog production from plant proteins using high moisture extrusion holds the potential to break the wall of global protein security.

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|----|---------------|------------|-------------|------------------------------------|------------|
| 71 | Dr. Stephanie | Vuillermot | Switzerland | Breaking the Wall of Schizophrenia | ETH Zürich |
|----|---------------|------------|-------------|------------------------------------|------------|

Idea: I will discuss prenatal exposure to infection as an environmental risk factor of schizophrenia.

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|----|-----|-----------------|---------|-------------------------------|---|
| 72 | Max | Von Grafenstein | Germany | Breaking the Wall of Oblivion | Alexander von Humboldt Institut für Internet und Gesellschaft |
|----|-----|-----------------|---------|-------------------------------|---|

Idea: Contemporary witnesses lead by our teichoscopia app through their eminent historical stories on-site.

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|----|-------|-------|---------|---|----------------------|
| 73 | Ridha | Azaiz | Germany | Breaking the Wall of Cleaner Solar Energy | Aerial Power Limited |
|----|-------|-------|---------|---|----------------------|

Idea: We enable drones for the cleaning of solar panels.

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|-------|--|-----------|-------------|---|--|--|
| 74 | Sareen | Siddarth | India | Breaking the Wall of Natural Resource Governance | Københavns Universitet | |
| Idea: | The manner in which access and equity are structured by state, functioning in local political arenas. | | | | | |
| 75 | Hany | Elkhodary | Egypt | Breaking the Wall of Biogas | Biogas People | |
| Idea: | Biogas People utilises chicken manure to produce biogas, which in turn would be used to facilitate farms in Egypt. This method aims at a long-term substitution of diesel. | | | | | |
| 76 | Johana | Luna | Colombia | Breaking the Wall of Colorectal Cancer Diagnosis | Austrian Institute of Technology | |
| Idea: | To create minimally invasive colorectal cancer diagnostics by identifying protein profile biomarkers. | | | | | |
| 77 | Andries | de Vries | Netherlands | Breaking the Wall of Antibiotic Resistance | iGEM | |
| Idea: | A smart bandage that detects infections and moderates the use of antibiotics in modern healthcare. | | | | | |
| 78 | Debdatta | Ray | India | Breaking the Wall of Scaling Devices | Indian Institute of Technology Madras | |
| Idea: | Let's talk about plasmonics leading to nanoscaled devices. | | | | | |
| 79 | Dr. | Yuehui | Li | China | Breaking the Wall of CO2 Utilisation | Leibniz-Institut für Katalyse |
| Idea: | My idea is to selectively build CO2 into useful chemicals via metal-acid dual catalysis. | | | | | |
| 80 | Dr. | Kerry | Gilmore | USA | Breaking the Wall of Affordable Medicine | Max-Planck-Institut für Kolloid- und Grenzflächenforschung |
| Idea: | Assembly-line production of pure medicines in shipping containers will allow for the poor to produce. | | | | | |
| 81 | Dr. | Friedrich | Borchers | Germany | Breaking the Wall of Patient Empowerment | Charité |
| Idea: | Establishing hypnotherapy as a patient empowerment strategy in perioperative intensive care. | | | | | |
| 82 | Benjamin | Ineichen | Switzerland | Breaking the Wall of Progressive Multiple Sclerosis | Universität Zürich | |
| Idea: | In Multiple Sclerosis (MS) lesions, absence of significant spontaneous remyelination may be attributable to the presence of inhibitory elements preventing myelin repair. | | | | | |
| 83 | Claudia | Heffttler | Germany | Breaking the Wall of the EU Democratic Deficit | Universität zu Köln | |
| Idea: | National parliaments debate EU initiatives simultaneously every month creating an EU public sphere. | | | | | |
| 84 | Juliane | Lippmann | Germany | Breaking the Wall of Antibiotic Resistance | Institut Pasteur | |

Idea: I have revealed a strategy to overcome the threats arising from the post-antibiotic era.

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|----|--------------|---------------|----------|---|----------------------------------|
| 85 | Rafael David | Castro Rivera | Colombia | Breaking the Wall of Electromagnetic Renewable Energy | Universidad Catolica de Colombia |
|----|--------------|---------------|----------|---|----------------------------------|

Idea: To recycle electromagnetic waves.

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|----|---------------|------------|---------|-------------------------------------|--------------------------------------|
| 86 | Marie Therese | Fatou Sall | Senegal | Breaking the Wall of Skin Bleaching | Université Cheikh Anta Diop de Dakar |
|----|---------------|------------|---------|-------------------------------------|--------------------------------------|

Idea: To provide an alternative to the current skin whitening products used in Senegal, free of any harmful substances.

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|----|--------|--------|-------------|-------------------------------------|-----------------------------|
| 87 | Stefan | Knapen | Netherlands | Breaking the Wall of How Women Work | Rijksuniversiteit Groningen |
|----|--------|--------|-------------|-------------------------------------|-----------------------------|

Idea: Data from a recent study suggest expectations before treatment have a positive effect on therapy outcome. However this effect is only shown in women.

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|----|-----------|-------|---------|--|------------------------------|
| 88 | Dr. Donat | Alpar | Hungary | Breaking the Wall of Evolutionary Cancer Treatment | Institute of Cancer Research |
|----|-----------|-------|---------|--|------------------------------|

Idea: We should channel cancer evolution into a cul-de-sac instead of trying to eradicate tumors directly.

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|----|---------|------|------------|--|-------------------------|
| 89 | Matluba | Khan | Bangladesh | Breaking the Wall of the Classroom for Childrens' Learning | University of Edinburgh |
|----|---------|------|------------|--|-------------------------|

Idea: To develop an outdoor environment for primary schools which improves childrens' learning.

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|----|-----|---------|-------|--|-------------------|
| 90 | Liu | Huihong | China | Breaking the Wall of Metallic Biomaterials | Tohoku University |
|----|-----|---------|-------|--|-------------------|

Idea: A developed Ti alloy possesses excellent properties to serve as a promising material for spinal fixation applications.

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|----|------------|------------|---------|--|---------------------|
| 91 | Veli-Matti | Karhulahti | Finland | Breaking the Wall of Videogames as Games | University of Turku |
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Idea: We used to think of whales as fish until they became mammals, I argue that videogames aren't games.

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|----|-------|-----------|--------|---|---|
| 92 | Edgar | Rodriguez | Mexico | Breaking the Wall of Obtaining Water from Air | Universidad Nacional Autónoma de México |
|----|-------|-----------|--------|---|---|

Idea: A water generator that uses solar radiation to produce an air current, which is filtered in mesh.

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|----|-------|-----------|---------|------------------------------|----------------------|
| 93 | Anush | Seyranyan | Armenia | Breaking the Wall of Poverty | Universität Konstanz |
|----|-------|-----------|---------|------------------------------|----------------------|

Idea: Financial aid inflows can absorb the volatility of economic outcomes and stabilise the economy.

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|----|---------|-----|-------|---|------------------------------|
| 94 | Yanling | Guo | China | Breaking the Wall of Rationality and Mobility | Goethe-Universität Frankfurt |
|----|---------|-----|-------|---|------------------------------|

Idea: The rational behaviour and the moral behaviour, though working differently, often yield the same outcome.

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|--|-----|--------------|------------|--------------|---|--|
| 95 | Dr. | Dyllon Garth | Randall | South Africa | Breaking the Wall of Wastewater using Eutectic Freeze Crystallisation | Aurecon |
| <i>Idea: How eutectic crystallisation can be used to recover value from wastewater.</i> | | | | | | |
| 96 | Dr. | Jamila | Andoh | France | Breaking the Wall of Chronic Pain | Zentralinstitut für Seelische Gesundheit |
| <i>Idea: Modulation of deep brain structures with non-invasive magnetic fields.</i> | | | | | | |
| 97 | | Moritz | Zaiss | Germany | Breaking the Wall of Molecular Imaging | Deutsches Krebsforschungszentrum |
| <i>Idea: To develop and apply MR imaging of protein folding states as a marker for ageing, stress, and cancer.</i> | | | | | | |
| 98 | Dr. | Anna | Aleksanyan | Armenia | Breaking the Wall of the Social Values Crisis | Yerevan State University |
| <i>Idea: To draw attention to the problem of transformation of post-soviet societies.</i> | | | | | | |
| 99 | | Ankit | Bahuguna | India | Breaking the Wall of Building Effective Communities | Technische Universität München |
| <i>Idea: A short story about the world's biggest community of volunteers protecting the web we all love!</i> | | | | | | |
| 100 | | Tom | Bieling | Germany | Breaking the Wall of Deaf-Blind Isolation | Design Research Lab |
| <i>Idea: A communication device for the deaf-blind, allowing to communicate with anybody, anytime.</i> | | | | | | |



FALLING WALLS CONFERENCE 2014: Provisional Programme

8 November WELCOME RECEPTION – Neue Nationalgalerie Potsdamer Str. 50, Berlin-Tiergarten

6.00 pm **RECEPTION**

7.00 pm **SEBASTIAN TURNER** Falling Walls Foundation **WELCOME**

ANGELA MERKEL Chancellor of the Federal Republic of Germany **OFFICIAL OPENING**

8.00 pm **MICHAEL EISENHAEUER** Staatliche Museen zu Berlin **HOST'S WELCOME**

DAVID CHIPPERFIELD David Chipperfield Architects **ON STICKS, STONES AND WALLS**

9 November FALLING WALLS CONFERENCE – Radialsystem Holzmarktstr. 33, Berlin-Friedrichshain

8.00 am **REGISTRATION & BREAKFAST**

9.00 am **SEBASTIAN TURNER** Falling Walls Foundation **MORNING GREETINGS**

9.05 am **JOHANNA WANKA** German Federal Minister of Education and Research **OFFICIAL WELCOME**

9.20 am – 10.45 am **SESSION 1** Host: **DIANE GRIFFIN** United States National Academy of Sciences

Speakers:

(1) **ANTON ZEILINGER** University of Vienna **BREAKING THE WALL OF ILLUSION**

(2) **SUCHITRA SEBASTIAN** University of Cambridge **BREAKING THE WALL OF ENERGY LOSS**

(3) **MARIANA MAZZUCATO** University of Sussex **BREAKING THE WALL TO A STATE OF INNOVATION**

(4) **ADAH ALMUTAIRI** UC San Diego **BREAKING THE WALL OF MEDICAL IMPRECISION**

(5) **STEFAN HELL** Max Planck Institute for Biophysical Chemistry **BREAKING THE WALL OF RESOLUTION IN LIGHT MICROSCOPY**

10.45 am *FORUM + Coffee Break*

11.30 am – 1.00 pm **SESSION 2** Host: **LEV ZELENYI** Российская академия наук – Russian Academy of Sciences

THE WINNERS OF THE FALLING WALLS LAB for young academics and professionals

Speakers:

(6) **THIERRY ZOMAHOUN** AIMS Next Einstein Initiative **BREAKING THE WALL TO UNTAPPED GENIUS**

(7) **LISA KALTENEGGER** Cornell University **BREAKING THE WALL TO THOUSANDS OF NEW WORLDS**

(8) **ALAN RUSBRIDGER** The Guardian **BREAKING THE WALL TO TRUE PRESS FREEDOM**

(9) **NATHAN LEWIS** Caltech **BREAKING THE WALL OF THE GLOBAL ENERGY CHALLENGE**

1.00 pm *FORUM + Lunch Break*

2.15 pm – 3.45 pm **SESSION 3** Host: **PAUL NURSE** Royal Society

JÜRGEN MLYNEK Helmholtz Association **INTRODUCTION TO THE PANEL**

THE FOUR-POWER TALK Representatives of the Science Academies of the former Four-Power nations, **Diane Griffin (USA)**, **Lev Zelenyi (Russia)**, **Paul Nurse (United Kingdom)** and **Philippe Taquet (France)** discuss the global challenges the sciences are facing in the next 25 years. The panel is lead by **Jörg Hacker**, President, German National Academy of Sciences – Leopoldina.

Speakers:

(10) **ZAHAVA SOLOMON** Tel Aviv University **BREAKING THE WALL OF MASS TRAUMA**

(11) **KARL DEISSEROTH** Stanford University **BREAKING THE WALL TO NEUROENGINEERING**

(12) **CHRISTOF KOCH** Allen Institute for Brain Science **BREAKING THE WALL TO UNDERSTANDING CONSCIOUSNESS**

(13) **ALINA MUNGIU-PIPIDI** Hertie School of Governance **BREAKING THE WALL OF CORRUPTION**

3.45 pm *FORUM + Coffee Break*

4.30 pm – 6.00 pm **SESSION 4** Host: **PHILIPPE TAQUET** Académie des sciences – French Academy of Sciences

THE WINNERS OF FALLING WALLS VENTURE for science based start-ups

Speakers:

(14) **SUZANNE TOPALIAN** Johns Hopkins Medicine **BREAKING THE WALL OF CANCER'S DEFENSE**

(15) **JOSEPH COUGHLIN** MIT **BREAKING THE WALL OF LIVING LONGER, BETTER**

(16) **ROLAND FLETCHER** University of Sydney **BREAKING THE WALL AROUND VULNERABLE MEGACITIES**

(17) **SVANTE PÄÄBO** Max Planck Institute for Evolutionary Anthropology **BREAKING THE WALL OF THE NEANDERTAL GENOME**

SEBASTIAN TURNER Falling Walls Foundation **GOOD BYE**

6.00 pm *FORUM + Farewell Drinks*

6.45 pm **BUSES DEPART FOR DINNER**

9 November FESTIVE DINNER – DZ Bank at the Brandenburg Gate Pariser Platz 3, Berlin-Mitte

8.00 pm **FESTIVE DINNER**

As of 20 October. Updates: www.falling-walls.com