



Sociedad de Científicos
Españoles en la República
Federal de Alemania

10TH ANNIVERSARY OF CERFA SYMPOSIUM: A DECADE OF INNOVATION

2013

22-23
September

IN-PERSON EVENT

FREE REGISTRATION AT
[CERFA2023.EVENTBRITE.DE](https://cerfa2023.eventbrite.de)



MORE INFO AT [CERFA.DE](https://cerfa.de)



Address

Spanish Embassy
Lichtensteinallee 1
10787 Berlin

10th International Symposium
Title: Beyond Human Frontiers



2016

2019



2020

2022



SYMPOSIUM 2023



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ABSTRACT BOOK

A Decade of Innovation: 10th Anniversary of CERFA Symposium. PROGRAM

Friday, 22nd September

18:00 h Opening ceremony

- Mr [Ricardo Martínez Vázquez](#), Spanish Ambassador in Germany
- “Mr [Guillermo Pérez-Hernández](#), CERFA President
- Mr Raimundo Pérez-Hernández y Torra, director [Ramón Areces Foundation](#), video intervention
- Mrs [Imma Aguilar](#), general director of FECYT (Fundación Española para la Ciencia y la Tecnología), video intervention

18:20-19:20 h Interview & discussion moderated by CERFA

- [Dr Belén Garijo](#), chair of the executive board and CEO of Merck

19:20-20:30 h Welcome drinks

Saturday, 23rd September

08:30 h Registrations

09:00 h Welcome – [Dr Guillermo Pérez Hernández](#), CERFA president

09:05 h Welcome – Former culture advisor at the Embassy, Mr Juan Manuel Vilaplana

09:10 h [FECYT | Spanish Foundation for Science and Technology](#)

Moderated by CERFA member [Dr Celia Escudero Hernández](#)

09:30 h Humanities and Social Sciences

Moderated by CERFA member [Mireia Paulo Noguera](#), head of management of the Centre for EU-Asia Connectivity (CEAC), Jean Monnet Centre of Excellence, lecturer and research associate Ruhr Universität Bochum.

- [Miquel Salvadó Gracia](#), PhD candidate, Alliance for Research on East Asia (AREA) Ruhr, University of Duisburg-Essen
- [Dr Izaskun Zuazu-Bermejo](#), Institute for Socio-economics, University of Duisburg-Essen. *Gender-biased technological change*
- [Vicent Plana Aranda](#), PhD candidate, Institute of East Asian Studies, University of Duisburg-Essen. *Party system institutionalization and democracy in South Korea*
- [Miguel Rodríguez Andreu](#), [balkan studies](#), [Institute IGADI, Spain](#). *Research and dissemination of knowledge on the Balkans*
- [Dr Begoña Gonzalez Otero](#), research officer, Max Planck Institute for Innovation and Competition, München

10:45 h Galician ecosystem of I+D+i (investigation, development, innovation) and programs for attracting talent. [Axencia Galega de Innovación](#)

11:00 h Coffee break and poster session. Poster jury Dr Adela Calvente, Dr Tania Romacho, Dr Alejandra de Miguel

11:30 h Natural Sciences

Moderated by CERFA member [Dr Gema Martínez Méndez](#), scientific coordinator, marine scientist, climate protection manager

- [Prof. Dr Olga García Mancheño](#), Organisch-Chemisches Institut, WWU Münster. *Research path and experience in Germany*
- [Dr Daniel Zapata](#), group leader, Physikalisch-Technische Bundesanstalt, Braunschweig. *Environmental radioactivity*
- [Dr Mar Fernández Méndez](#), Alfred-Wegener-Institute Helmholtz Zentrum für Polar- und Meeresforschung, Bremerhaven. *Seaweed to products*

12:15 h Interview & discussion moderated by CERFA member Pamela Villar to [Prof. Dr Beatriz Roldán Cuenya](#), director of Interface Science Department at the Fritz Haber Institute of the Max Planck Society.

12:45 h Lunch break

14:00 Life Sciences

Moderated by CERFA members [Anna Salamero-Boix](#) PhD candidate, Georg Speyer Haus, Institute for Tumor Biology and Experimental Therapy, Frankfurt am Main, and [Dr Marta Méndez Couz](#), Institute of Physiology, Uniklinikum Münster/ WW-Universität Münster.

- [Dr Inmaculada Martínez Reyes](#), [Max-Delbrück-Center for Molecular Medicine, Berlin, Germany](#)
- [Dr Silvia Vega Rubín de Celis](#), head of the junior research group 'Autophagy in Cancer', Universitätsklinikum Essen. *Autophagy in Cancer*
- [Dr Livia de Hoz](#), head of statistical learning group, Charité Berlin. *Statistical learning in the hearing system*
- [Prof. Dr Carlos Silvestre](#) Roig, Zentrum für Molekularbiologie der Entzündung, WW Universität Münster. *Neutrophils in chronic inflammatory diseases*

15:00 Engineering & AI

Moderated by CERFA members [Dr Teresa Rincón Domínguez](#), product manager of medical devices and [Begoña Rojas López](#), PhD candidate in Optoacoustics and AI, Technical University Munich

- [Miguel Molina Romero](#), CTO and co-founder at Orbem
- [Dr-Ing. José de Gea Fernández](#), vice-president Manipulation & Control, Yardstick Robotics GmbH, Bremen. *Robotics, artificial intelligence*
- [Dr Pablo Lanillos](#), Consejo Superior de Investigaciones Científicas (CSIC, Spain). *Artificial intelligence and robotics inspired in neurosciences*

16:00 h Coffee break and poster session. Poster jury Dr Adela Calvente, Dr Tania Romacho, Dr Alejandra de Miguel

17:00 h Industry & Administration

Moderated by CERFA members [Daniel García Rodríguez](#), research assistant, Evotec GmbH, Hamburg and [Dr Maite Ogeta Gutierrez](#), Institut für Neuro- und Verhaltensbiologie (INVB), WWUUniversität Münster.

- [Dr Pablo González Arias](#), patent examiner, European Patent Office, Berlin
- [Dr Verónica Torres Barthelemy](#), chief of staff, Chemical & Pharmaceutical Development, Bayer AG, Berlin
- Dr Raquel Fiz

18:00 h Closing round table perspective on 10 years of associationism (moderated by Dr Almudena Gómez Román, first communication officer of CERFA and Dr Alejandra de Miguel Catalina coordinator CERFA Berlin-Brandenburg, data scientist – Bayer AG):

- Dr Guillermo Pérez Hernández
- Dr Elisa García
- Dr Cristina Murcia
- Dr José Gámez
- Dr Raúl Delgado
- Dr Sergio Acebrón
- Irene Echeverria Altuna, PhD candidate, president CERU/SRUK
- Dr Francisco Vilaplana, president RAICEX

18:45 h Closing words,

Dr Celia Escudero Hernández (BES-IV)

Dr Marta Méndez Couz, vice-president CERFA

20:00 h Symposium dinner (upon registration)

Sunday, 24th September

09:00 h Yearly CERFA assembly (only for CERFA Members)

Balance of year: activities, delegations, finances

Results photo competition

Requests and questions

15:00 h Guided visit to the exhibition of [drawings by Santiago Ramón in Cajal](#) in the [Natural History Museum in Berlin](#).

CERFA members have preference in case of high demand

POSTERS

1-The NTM-iSpot and its potential in the management of pulmonary NTM infections

Raquel Villar Hernández

GenID GmbH, Straßberg, Germany.

Villar-Hernández R ^{1,2,3,4}, Strecker K¹, Stojanovic Z ^{4,5}, Latorre I ^{2,3,4}, Marín A ^{4,5}, Gonçalves-Carvalho F ^{4,5}, Domínguez M ⁶, Sánchez-Montalva A ^{7,8,9}, Sabriá J ¹⁰, Rodríguez Molino P ¹¹, Baquero-Artigao F ¹¹, Millet JP ^{12,13}, Casas X ^{12,13}, Prat C ^{2,3,4,14}, Torrelles JB ¹⁵, Preyer R ¹, Domínguez J ^{2,3,4}
1- GenID GmbH, Strassberg, Germany; 2- Institut d'Investigació Germans Trias i Pujol, Badalona, Spain; 3- Departamento de Genética y Microbiología, Universitat Autònoma de Barcelona, Barcelona, Spain; 4- CIBER Enfermedades Respiratorias, CIBERES, Instituto de Salud Carlos III, Madrid, Spain; 5- Servei de Pneumologia, Hospital Universitari Germans Trias i Pujol, Barcelona, Spain; 6- Servei de Pneumologia Hospital del Mar, Barcelona, Spain; 7- Infectious Diseases Department, Vall d'Hebron University Hospital, PROSICS Barcelona, Universitat Autònoma de Barcelona, Barcelona, Spain; 8- Grupo de Estudio de Micobacterias (GEIM), Sociedad Española de Enfermedades Infecciosas y Microbiología Clínica (SEIMC), Madrid, Spain; 9- Center for Biomedical Research in Infectious Diseases Network (CIBERINFEC), Institute of Health Carlos III, Madrid, Spain. 10- Servei de Pneumologia, Hospital Sant Joan Despí Moises Broggi, Sant Joan Despí, Barcelona, Spain; 11- Hospital Universitario de La Paz, Madrid, Spain; 12- Unidad Clínica de Tratamiento Directamente Observado "Serveis Clinics", Barcelona, Spain; 13- CIBER de Epidemiología y Salud Pública, CIBERESP, Instituto de Salud Carlos III; 14- Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht, Utrecht University, Utrecht, Netherlands; 15- Texas Biomedical Research Institute, San Antonio, Texas, USA.

Commonly considered as less relevant, nontuberculous mycobacteria (NTM) infections are increasing and represent a challenge for public health. Their diagnosis is based on clinical, microbiological, and radiological evidence, and the clinical relevance of NTM presence in patients with pulmonary disease remains difficult to determine. Considering the need of alternative tests, and the key role of the immune system, we decided to develop an NTM-specific immunodiagnostic test: the NTM-iSpot (AID GmbH, Straßberg, Germany). This 2-color fluorescence EliSpot, evaluates the immune response to NTM-specific antigens through T-cell production of two cytokines: IFN- γ and IL-2. Our preliminary results show that the NTM-iSpot is able to detect NTM-positive patients (pulmonary and extrapulmonary). Additionally, among patients with pulmonary NTM, those with NTM-related disease have a higher positivity rate than those classified as colonized or past infection. These results indicate that such test may have the potential to help guide the clinical evaluation of NTM infections.

2-Crystal-mediated inflammation in lung fibrosis

Sonia Giambelluca¹, Mariza Vaso¹, Matthias Ochs^{1,2}, Elena Lopez-Rodriguez¹

1- Institute of Functional Anatomy, Charité - Universitätsmedizin Berlin, Berlin, Germany

2- German Center for Lung Research (DZL), Berlin, Germany

Accumulation of crystals has been observed in lung of mouse models of lung fibrosis as well as in an idiopathic pulmonary fibrosis patient. Interestingly, in surfactant protein C deficient mice (SP-C KO), which spontaneously develop lung fibrosis with age, the crystal appearance precedes fibrotic injury. These structures occur along with altered cholesterol metabolism and resemble cholesterol crystals, known to activate inflammation through NLRP3 pathway in cardiovascular diseases. We addressed the hypothesis that a similar mechanism of inflammasome activation, due to altered cholesterol metabolism, may occur in lung fibrosis. Crystals were detected in macrophages of old SP-C mice, consistent with increased cholesterol levels. SP-C KO mice showed up-regulation of genes coding for steroid catabolism and for cytokines and interleukins. Molecular cartography suggested the co-localization of NLRP3 pathway mediators and macrophage markers in lungs of old SP-C KO mice. These data support the hypothesis of a link between altered cholesterol metabolism, crystal nucleation and inflammatory response in the context of lung fibrosis.

3-Understanding the role of tetraspanins as modulators of the metalloprotease ADAM10

Maria Diez Tellez, Lisa Seipold, Paul Saftig

Biochemical Institute, Christian-Albrechts-University, Kiel, Germany

ADAM10 is a key metalloprotease involved in the ectodomain shedding of over 100 cell surface proteins, for example, the Amyloid Precursor Protein (APP), one of the main proteins involved in Alzheimer's Disease (AD). Multiple proteases, including the gamma secretase complex, are involved in the proteolytic processing of APP, which generates either neurotoxic A β plaques, a clinical hallmark of AD, or non-toxic forms of APP, such as ADAM10-mediated cleavage. Tetraspanins, a family of small proteins, are major regulators of ADAM10 mediated proteolysis. Tspan 3 and Tspan 15 have been found to be upregulated in the brains of Alzheimer's Disease patients and mouse AD model. Using a mouse model that lacks Tspan 15 and expresses AD mutations, we show that the deficiency of Tspan 15 in 6-month-old females lead to an increase in the generation and formation of A β plaques in the cortex. These results suggest that Tspan 15 may have a key role in AD pathology.

4-Maternal diabetes and metformin exposure affect offspring brain development in a sex-dependent manner.

Lídia Cantacorps^{1,2}, Jiajie Zhu¹, Selma Yagoub¹, Rachel Lippert^{1,2,3}.

1- German Institute of Human Nutrition Potsdam-Rehbrücke, Germany.

2- German Center for Diabetes Research (DZD), Neuherberg, Germany.

3- NeuroCure Cluster of Excellence, Charité-Universitätsmedizin Berlin, Germany.

Maternal gestational diabetes is associated with an increased risk of metabolic disorders for the offspring. One of the pharmacological treatments that has been recently approved for its treatment during pregnancy is metformin. However, the effects of *in utero* metformin exposure on the offspring brain are still unknown, although increased adiposity parameters in 9-year-old children born to metformin-treated mothers have been reported.

Metformin promotes AMPK activation, which has a key role on axonal growth during development. Alteration of AMPK signalling during early postnatal life may have an impact on axonal projection formation in the hypothalamus, which is a key brain region regulating energy homeostasis and feeding behaviours.

Our data show a differential response to anti-diabetic interventions depending on the maternal nutritional status, as shown by differential effects on offspring's growth and circulating metabolic hormones. Furthermore, metformin treatment is not able to rescue the neuronal innervation impairments induced by maternal overnutrition.

5-Simulation and Analysis of GPCR G-protein complexes

Simulations, Experiments & Software

Dr. Guillermo Pérez-Hernández

Institute of Medical Physics and Biophysics, Charité Universitätsmedizin Berlin

The family of proteins called G protein-coupled receptors (GPCRs) constitutes the largest group of receptors sharing a common seven transmembrane helix (TM) structure. They relay extracellular stimuli

to the inside of the cell, via the activation of heterotrimeric G proteins ($G\alpha\beta\gamma$), initiating downstream signaling cascades. Receptor-mediated G-protein activation plays a major role in many key physiological processes, and almost one-third of all medical drugs aim to modulate GPCR signaling.

In this poster, I present an overview of different projects I have been involved in, dealing with the simulation, analysis and interpretation of the mechanism by which receptors, in particular the beta 2 adrenergic receptor, B2AR, engage and activate a G protein. These are highly collaborative efforts, in which experimentalists and computational scientists come together to understand how biology handles pure information transfer via the intricate dance of moving proteins.

6-Unveiling the Circadian Clock in a Soil Bacterium: Insights from *Bacillus subtilis*

Borja Ferrero-Bordera, Francesca Sartor, Martha Merrow

Institute of Medical Psychology, Medical Faculty, LMU Munich, Munich, Germany.

Molecular clocks are timekeeping mechanisms that evolved across various life forms to anticipate cyclic environmental changes. Circadian clocks orchestrate biological processes within approximately 24 hours cycles. They are pervasive throughout nature, yet they remain unexpectedly unexplored and uncharacterized in non-photosynthetic bacteria.

Our previous work revealed that gene expression in the model gram-positive bacteria *Bacillus subtilis* follows a predictable 24-hour cycle sharing the canonical properties of circadian clocks: free-running period, entrainment, and temperature compensation (1). Moreover, the circadian clock of *B. subtilis*, like complex multicellular systems, has the ability to integrate information on zeitgebers (environmental cues) that it experienced in the past (2). Altogether, these discoveries underscore the fundamental nature of circadian rhythms across of life kingdoms, opening the field of chronobiology in the free-living, soil bacteria.

By combining chemostat cultures and -omic approaches, we now aim to discover the molecular clock mechanism. The identification of circadian clocks in non-photosynthetic bacteria will have a great impact on health, industry, and ecology.

1. Zheng Eelderink-Chen et al., A circadian clock in a nonphotosynthetic prokaryote. *Sci. Adv.*7, eabe2086(2021). DOI: 10.1126/sciadv.abe2086
2. Francesca Sartor et al., The circadian clock of the bacterium *B. subtilis* evokes properties of complex, multicellular circadian systems. *Sci. Adv.*9, eadh1308(2023). DOI: 10.1126/sciadv.adh1308

7-Papel de SLAMF1 en un modelo de hígado graso alcohólico en hepatocarcinoma humano HepG2

Antonio Rodríguez Peña

Universidad de Castilla-La Mancha

SLAMF1 es un receptor que se encuentra principalmente en células del sistema inmune activadas y está relacionado con el comienzo de la respuesta inmune innata y adaptativa. En otras investigaciones se descubrió que existía una relación entre la presencia de esta molécula en muestras de hígado y plasma y la aparición de la enfermedad de hígado graso no alcohólico.

La enfermedad de hígado graso alcohólico es una de las enfermedades hepáticas crónicas más comunes del mundo y es causada por un excesivo consumo de etanol, que al ser metabolizado en el hígado puede dar lugar a esteatosis, cirrosis e incluso carcinoma hepatocelular. Esta enfermedad comparte una gran similitud con la enfermedad de hígado graso no alcohólico, lo que ha llevado a la hipótesis de que pudiese presentar la misma relación con la presencia de SLAMF1, que tratamos de probar en este proyecto.

8-Personalized Nutrition for Healthy Living (PROTEIN-Study): Evaluation of a Mobile Application in Subjects with Type 2 Diabetes and Prediabetes

Marta Csanalosi Artigas

An inadequate diet and sedentary lifestyle are major contributors to the rise of non-communicable diseases. An individualized approach with recommendations for a healthy lifestyle increases adherence to a nutrition therapy. The availability and usage of mobile health apps has increased in the recent years but the scientific evidence for the effectiveness of apps offering personalized recommendations is still scarce.

The aim is to investigate whether the use of our newly developed App for personalized nutrition, incorporating information of wearables (continuous glucose monitoring and fitness tracker), improves lifestyle in patients with type 2 diabetes (T2D) or prediabetes. Our primary outcome is to improve glucose time in range (TIR) by 5%. We also assessed the engagement and acceptance of the App with the mHealth App Usability Questionnaire (MAUQ).

For this randomized trial, 26 participants used the PROTEIN-App and were allocated to two groups: (1) the starting group used the PROTEIN-App and wearables for 12 weeks, followed by a 6-weeks-period without the App, (2) the waiting group used the wearables for 6 weeks and afterwards incorporated the PROTEIN-App for 12 weeks.

The participants improved their TIR significantly ($p = 0,045$) from 70,9% to 76,4%, an increase of 5,5%. When separating between groups, the one that started and the one that waited, there were no significant differences in TIR. Participants used the Protein-App for an average of 45 ± 30 days out of the 84 day planned period, with an attrition rate of 50%. The MUAQ questionnaire showed that the application was not easy to but was easy to learn. Participants felt comfortable communicating and sharing information with the health provider.

The study shows that personalized recommendations lead to changes towards a healthy lifestyle that consequently improves diabetes control. Apps need to be easier to use, more simplified and intuitive to better promote healthier choices.

Personalized nutrition can be a key component for the adherence of healthy behavior to improve the diabetes control. The usage of personalized applications can help and improve TIR.

9-Scientific Pandemic

A Successful Case of Science Communication Through Social Media... Or not.

Pamela Villar González, M. Sc.

An important, and often neglected branch of Science is Science Communication. Due to the interest in Science which started with the Pandemic situation in 2020, I took the opportunity to start communicating it through Social media. In the beginning, I presented my own research, and then moved to introduce colleagues and researchers from different fields in different stages of their careers, from Bachelor/Master Thesis to PIs and Professors.

Currently, the contents from the Pandemia Científica (Scientific Pandemic) includes researchers and projects from almost every field of Humanities, Science, and Technology. Furthermore, an explanation of techniques and how Science works at different levels is included, together with recommendations for other Science Communication projects.

The research developed and the obtained results should reach a broad audience if we want our research to have a real impact and we want to involve society. However... is this the best way to do it?

10- 10 Commandments to promote the internationalization of the Spanish system of Science, Technology, and Innovation

Decálogo para fomentar la internacionalización del Sistema Español de Ciencia, Tecnología e Innovación

Scientific Policy and Talent Attraction Commission of the Network of Spanish Societies of Scientists and Researchers Abroad (RAICEX)¹

1 Member involved (Society of Spanish Researchers abroad):

Celia Escudero-Hernández (Germany, CERFA), Javier Pardo and Igor Arritea (United Kingdom, CERU), Álvaro Dombriz (South Africa, ACESDA), Ana Barragán (Belgium, CEBE), Eva Ortega-Paíno (General Secretary, RAICEX), Fran Vilaplana (President, RAICEX)

The Global Finance 2023 Ranking of the world's most technologically advanced countries and territories places Spain in position 28. Particularly for science, Spain invests 1.24% of its Gross Domestic Product (GDP), which is below the European average of 2.12% GDP and ranks the country in position 16 out of 28 countries. The European Commission agreed that every country should reach 3% of GDP investment for science in 2030, 1.2% of which needs to be addressed to public investments. To reach a superior position compared to most advanced European countries (Sweden, Austria, Germany), Spain still needs to make significant efforts. To motivate political decisions that will improve the current System of Science, Technology, and Innovation (SECTI), the Network of Spanish Societies of Scientists and Researchers Abroad (RAICEX), has highlighted 10 commandments based on our previous report for talent return and attraction (ATRAE). Measurements include ambitious goals such as further increasing current investment objectives the European Commission fixed for 2030 (>3% GDP investment), stimulating national and international agreements between academic and industrial sectors, improving work and research environment conditions with stable funding agendas and open, simplified evaluation systems for University Professor figures (including expedited validation of qualifications). Promoting double affiliations and mentoring for international, newly recruited scientists as well facilitating the study of Spanish and disseminating information in English, will boost the opportunities to attract a wide range of excellent scientists and stakeholders to Spain.

1. <https://www.gfmag.com/global-data/non-economic-data/best-tech-countries>
2. https://www.lasexta.com/constantes-vitales/causas/objetivo-ciencia/ranking-europeo_202010125f841b08ab1a0700011e8689.html
3. <https://raicex.org/2023/07/19/decalogo-para-fomentar-la-internacionalizacion-del-sistema-espanol-de-ciencia-tecnologia-e-innovacion/>

11-Once upon a time... more scientific fairy tales! Showcase of the synergies between CERFA and its members

Gema Martínez Méndez, and the OUAT Team

Marine and Climate Scientist and Manager. CERFA treasurer – <https://cerfa.de>

Member Scientist for Future – <https://scientists4future.org>

Scientific story writing and telling – <https://sites.google.com/view/onceuponatime-scientific-story>

“Once upon a time... a scientific fairy tale” is a project in which an international group of young scientists working in different research fields (marine geochemistry, marine microbiology, marine geology, marine ecology) at various institutions near Bremen have written short stories (tales) with scientific content in a simple language. The aim: Communicating Science in an entertaining way and promoting the dialogue between scientists and society.

The major focus of the stories has been human impact on the oceans. After successfully finishing our first book in 2017, which can be downloaded for free as PDF in different languages here: <https://sites.google.com/view/onceuponatime-scientific-story/> many of us wanted to continue. Energy and ideas were there but no funds. The funds used for book 1 were provided by *Science im Dialog* as part of a competition (which we won) but were expired and we could not initially find any further source until Gema presented a poster at the CERFA Symposium 2018. The poster won a prize and CERFA liked it so much that suggested including the development of the second book in its proposal. And so is how the team (with some CERFA members in it, including the main coordinator) could carry on and produce a second book (also to be downloaded as PDF on the webpage). In this poster, we show the development of the idea and books and also the two books produced so far. It is a showcase of how CERFA members can benefit from the association bringing back to it a lot of publicity through the distribution of the books, mouth-to-mouth, and more importantly making reading events with kids... Thank you CERFA!

12-Climate change and me. Are we too late, can I do something?

Martínez Méndez, G., and the Bremen S4F Team

Marine and Climate Scientist and Manager. CERFA treasurer – <https://cerfa.de>

Member Scientist for Future – <https://scientists4future.org>

Scientific story writing and telling – <https://sites.google.com/view/onceuponatime-scientific-story>

Back in 2018 the school girl Greta Thunberg started demonstrating every Friday alone in front of the Swedish Parliament. Soon other kids joined her, not only in her hometown but also in other cities and shortly after in other countries. Children have gotten what many scientists could not in decades: a lot of media attention for a rising, big problem for our societies. The Fridays for Future movement was born. To the demand of the children “listen to the scientist” evolved the movement Scientists for Future (S4F) in Austria and Germany. Later it expanded to other countries. Here, many scientists from many disciplines (you do not need to be a climate expert to understand and support what actual climate experts are saying about the warming climate) join to communicate the science behind the climate crisis and to ask for action. In this context, I would like to show you one of the posters the working group Bremen has been using to sensitize people not only about the problem but more importantly, about the solutions. What a difference does it make to drive a petrol car or an electric car? Is it worthy to install solar panels on my roof? Heat pump, is that not too expensive? Is it not too late anyway? No, it is not too late, and YES I CAN do a lot.