PNIRS and GEBIN 2019
26th ANNUAL SCIENTIFIC MEETING
BERLIN, GERMANY
JUNE 4-8, 2019

pnirs.org
Welcome to the 26th Meeting of the Psychoneuroimmunology Research Society. I would like to extend my sincere thanks to those on the Executive, Program, and Local Organizing Committees, for their hard work in bringing together an exciting program of great science. This meeting is a landmark meeting as we celebrate the first time that the society has come together in partnership with the German Endocrine Brain Immune network (GEBIN). Having a joint meeting with GEBIN is an exciting initiative and is sure to create a vibrant conference atmosphere, facilitating new research, new friendships, and enhancing opportunities for new collaborations. The conference will take place in a historic building, the Virchow-Langenbeck-House, built in 1915. It is centrally located, next to the Charité University Hospital, near the main central train station and within walking distance from the famous central street ‘Unter den Linden’. The meeting will have a special focus theme on “Inflammation across the lifespan” and will be preceded by a half day Educational Short Course addressing novel techniques in our field; Neuroinflammation and Aging: Novel Techniques and Emerging Technologies.

Two exciting initiatives that will be implemented at this meeting include, firstly, a dedicated member-sponsored symposium for Mid-Career Researchers on Saturday June 8th. The second is the introduction of the new Equity Travel Awards sponsored by Professor Michael Irwin. The intent of these awards is to facilitate attendance by academics/researchers at the annual PNIRS conference who are a) from underrepresented groups and/or b) conduct research dedicated to issues related to equity and diversity. The goal of these awards is to facilitate greater diversity within PNIRS, and to support and encourage research that is dedicated to having a significant impact on diverse and underrepresented communities. Other highlights of the meeting include the GEBIN sessions on 4th and 5th of June and a special GEBIN sponsored session to be held on Friday June 7th entitled “Microbes and Stress Resilience”.

The meeting will showcase the great advances being made in our field by a wonderful array of exciting researchers. The Ronald Glaser-Frontiers in Psychoneuroimmunology Lecture: a special Award Lecture in honor of Ronald Glaser is the “cutting edge special lecture”. Rainer H. Straub will introduce our speaker, Lluis Quintana-Murci, speaking on “Nature, Nurture, and your inner Neanderthal: Dissecting Evolutionary Drivers of Immune Function”. The Norman Cousins Memorial Lecture will be delivered by Monika Fleshner, The Robert Ader Lecture by Judith Carroll, and the George Solomon Memorial Lecture by Susan Lutgendorf. We have two symposia nominated by members, one specially targeted at Mid-Career researchers (Saturday June 8th). Plus, we have the Presidential Symposium: Early Life Trajectories toward Health; the Brain, the Gut, and the Immune System. This is to be delivered on the Friday morning after which, we will announce and present the BBI impact award.

It is a packed schedule but don’t forget to attend the welcome reception and for trainees there is the trainee dinner and Teresa Reyes will hold her wildly successful PNIRS Mentoring Colloquium on Wednesday evening. Finally, don’t miss the PNIRS Asia-Pacific lunch on Friday, June 7th. Each year the numbers attending this session grow and it is great to see new members from the Asia-Pacific region. If you need some recovery time before the final days then enjoy the free afternoon on Friday to give you time to get out and enjoy the sights, sounds and tastes of the great city of Berlin.

Finally, thanks to the Executive Committee (Secretary/Treasurer Staci Bilbo, Past-President Bill Banks, President-Elect Julie Bower, Executive Director Susan Solomon), Jackie and Karl Newman, the Program Committee, the Local Organizing Committee (Stefan Gold, Rainer H. Straub, Manfred Schledlowski, Harald Engler, Silvia Capellino and Georg Pongratz), the GEBIN committee members, and to the many other PNIRS members who either through committee work or as individuals have contributed to this meeting. And my very final thanks you for giving me the privilege of serving as your President for this past year. It has been an honor and a pleasure. PNIRS is a wonderful, warm and collegial society with great history, science, people and energy. I wish Julie Bower, your incoming President the very best wishes as she steps into the role. I know she will do a magnificent job. See you in Berlin.
Sincerely,

Deb Hodgson
PNIRS President

Follow us on Twitter @PNIRS #PNIRS2019
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Acknowledgements and Sponsors

We gratefully appreciate the support of Elsevier, Inc. for sponsoring the Brain, Behavior, and Immunity Editorial Board luncheon, providing the complimentary copies of Brain, Behavior, and Immunity for registrants as well as additional financial support for the trainee scholar awards.

We also appreciate the support of the following sponsors of PNIRS and GEBIN 2019:
About PNIRS

The PsychoNeuroImmunology Research Society is an international organization for researchers in a number of scientific and medical disciplines, including psychology, neurosciences, immunology, physiology, pharmacology, psychiatry, behavioral medicine, infectious diseases, endocrinology and rheumatology, who are interested in interactions between the nervous and immune systems, and the relationship between behavior and health. An important goal is to conduct basic research that can be translated into clinically relevant health applications.

The PsychoNeuroImmunology Research Society (PNIRS) was incorporated in the state of Pennsylvania in 1993 after a meeting in April of that year and is a nonprofit organization. During the meeting the founding members determined that the purpose of the Society is to promote the study of interrelationships among behavioral, neural, endocrine and immune processes and to encourage collaborations among immunologists, neuroscientists, clinicians, health psychologists and behavioral neuroscientists.

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Bill Banks (Past President)
Julie Bower (President-Elect)
Staci Bilbo (Secretary/Treasurer)
Susan Solomon (Executive Director)

PNIRS Staff
Jackie Newman

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Manfred Schedlowski
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Susan Solomon (Executive Director)
Monika Fleshner
Andrew Miller
Jennifer Felger
Jeanette Bennett

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Quentin Pittman
Jan-Pieter Konsman
Chris Coe
Annemieke Kavelaars
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Erin Costanzo
Jessica Bolton (Trainee Member)

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Silvia Capellino (GEBIN Spokeswoman)
Harald Engler (GEBIN Spokeswoman)
Georg Pongratz
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Cobi Heijnen
Peter Grace
Ning Quan
Sarah Spencer
Suzanne Segerstrom
Christopher Fagundes
Rainer H. Straub
Manfred Schedlowski
Luba Sominsky (Trainee Member)
Attila Szabo (Trainee Member)
About GEBIN

GEBIN is a network that combines activities in different German scientific societies with a special interest in Behaviour-Neuro-Endocrine-Immune interactions. People interested in GEBIN typically concentrate on interdisciplinary research foci.

The GEBIN is a non-profit network without strict formal rules. It is open for interested people who are dedicated to interdisciplinary thinking and research. The GEBIN was founded in November 1997 in Munich during the Volkswagen-Symposium "Neuroimmunologie, Verhalten und Befinden". The promotion of scientific interactions and the coordination of information exchange between the different groups is one of the main aims of this network.

This year, GEBIN will celebrate the 14th meeting.

GEBIN Steering Committee

Judith Alferink, Münster
Hugo Besedovsky, Marburg
Markus Böhm, Münster
Jan Born, Tübingen
Silvia Capellino, Dortmund (Spokeswoman)
Harald Engler, Essen (Spokesman)
Bernd Fiebich, Freiburg
Ulike Gimsa, Dummerstorf
Stefan Gold, Berlin
Tanja Lange, Lübeck
Norbert Müller, München
Eva Peters, Berlin/Giessen
Georg Pongratz, Düsseldorf
Stefan Reber, Ulm
Adriana del Rey, Marburg
Nicolas Rohleder, Erlangen-Nürnberg
Christoph Rummel, Giessen
Manfred Schedlowski, Essen
Markus Schwarz, München
Volker Stefanski, Stuttgart
Rainer H. Straub, Regensburg
Eberhard Weihe, Marburg

Get in contact:

www.gebin.org
Email: info@gebin.org
Follow us in Twitter: @GEBIN01
PNIRS 2020
27th Annual Scientific Meeting

Los Angeles, California
June 3-6, 2019

Conference Location:
Luskin Conference Center
University of California at Los Angeles
**General Information**

**Registration Desk**
The registration desk is located in foyer of the main lecture hall in the Langenbeck-Virchow-Haus beginning on Wednesday, June 5. Registration will be held in the Hörsaalruine on Tuesday, June 4. Please check in to receive your name badge and conference materials. Name badges are required at all times in order to access sessions and events. The registration desk will be open during the following hours:

**Meetings**
- Tuesday, June 4 (Hörsaalruine): 11:00 am – 5:00 pm
- Wednesday, June 5 (Langenbeck-Virchow-Haus): 9:00 am – 5:00 pm
- Thursday, June 6 (Langenbeck-Virchow-Haus): 8:00 am – 3:00 pm
- Friday, June 7 (Langenbeck-Virchow-Haus): 8:00 am – 6:00 pm
- Saturday, June 8 (Langenbeck-Virchow-Haus): 8:00 am – 2:00 pm

The registration desk will be closed Friday and Saturday during lunch.

**Meeting Code of Conduct**
The PNIRS Annual Meeting aims to provide a forum for the exchange of ideas in a collaborative and collegial environment. All delegates, speakers, sponsors and volunteers at the Conference are required to abide by the following Code of Conduct.

- All individuals have the right to expect they will be treated with respect regardless of gender, sexual orientation, disability, physical appearance, body size, race, nationality, or religion.
- PNIRS will not tolerate harassment of participants in any form. Harassment and sexist, racist, or exclusionary comments or jokes are not appropriate. Harassment includes sustained disruption of talks or other events, inappropriate physical contact, sexual attention or innuendo, deliberate intimidation, stalking, and photography or recording of an individual without consent. It also includes offensive comments related to gender, sexual orientation, disability, physical appearance, body size, race, or religion.
- All communication should be appropriate for a professional audience including people of many different backgrounds. Sexual language and imagery is not appropriate.
- Alcoholic beverages may be provided at some PNIRS events. Should excessive alcohol consumption result in behaviour that is not respectful, PNIRS reserves the right to ask the attendee to leave the PNIRS sponsored event.
- PNIRS aims to ensure that conferences are characterised by a collegial, collaborative, supportive environment. At all times, commentary and critique should be of a constructive and respectful nature.
- Any participant who wishes to report a violation of this policy is asked to speak, in confidence, to any of the local organizing committee (LOC) members.
- We value your attendance. That is why we expect all participants to follow these rules at all conference venues or related social events.

**Chairs/Co-Chairs**
Chairs of the sessions should be in the designated room at least 10 minutes before the session starts in order to assist the speakers. Every effort should be made to keep the session on schedule.

**Symposium and Oral Session Speakers**
Speakers should go to the designated room a minimum of 10 minutes before the session starts. Please introduce yourself to the Chair of your session. Speakers must strictly adhere to the allocated time.

**Poster Presenters**
The Poster Sessions will be held in the Bernhard von Langenbeck Room, Langenbeck-Virchow-Haus. Adhesive poster strips for mounting the posters will be provided. Poster size is limited to a width of 92 cm and height of 121 cm. Look for your poster number in this Program Book. Remaining posters may be discarded if they are not taken down promptly.
**GEBIN Poster Session:** You may begin to hang your posters the morning of Wednesday, June 5th. Please remove your posters no later than the morning of Thursday, June 6th.

**PNIRS Poster Session 1:** You may begin to hang your posters the morning of Thursday, June 6th. Please remove your posters no later than the morning of Friday, June 7th.

**PNIRS Poster Session 2:** You may begin to hang your posters the evening of Friday, June 7th. Please remove your posters after the session on Saturday, June 8th.

**Poster Data Blitz**
The Poster Data Blitz talks will take place in the main lecture hall in the Langenbeck-Virchow-Haus. All Data Blitz participants will give a 2-minute oral presentation with a maximum of 2 slides. Given their brevity, please upload all files the day before your talk at the registration desk. *If you do not upload your talk in time, we cannot include your presentation.*

**GEBIN and PNIRS Trainee Social**
GEBIN Trainee Social is on **Tuesday, June 4** from 8-10 pm at Arminiusmarkthalle. GEBIN Trainee Social is invite only. PNIRS Trainee Social is on **Friday, June 7** from 7:30-10 pm at Arminiusmarkthalle. Directions will be available at the registration desk. Nametag will be required for entrance.

**Guests**
Guests accompanying registrants are welcome to attend the Opening Reception and Banquet as long as they have registered. Guest tickets for both events can be purchased at the registration desk.

**Phones and WiFi**
As a courtesy to presenters, speakers, and attendees, please switch cell phones to silent mode during all sessions and speakers. Please leave the session when answering calls. WiFi will be available at the meeting.

**Lost and Found**
If you find articles left behind by other conference attendees, please bring items to the PNIRS registration desk for safe-keeping.

**Certificates of Attendance and Participation**
Please e-mail pnirs@pnirs.org to request a certificate. It will be e-mailed to you after the conference.

**PNIRS Commitment to Equity and Diversity**
PNIRS is committed to equity and diversity. The society will promote inclusivity and transparency, to improve diversity across all categories of membership and to increase representation of members from underrepresented groups in the society and attending the PNIRS annual conference.

The Annual Meeting will aim to fulfill its commitment to equity and diversity in the following ways:
- Every facet of the conference is committed to facilitating gender balance and cultural diversity
- There is a range of diverse speakers in terms of gender, culture, age and seniority.
- Abstracts will be solicited from a diverse range of people, particularly in areas where those groups are in a minority, and that the gender distribution of the final selected spectra, when compared to the distribution of the submissions, should strive to be similar.
- Where possible, travel support is made available to attendees from under-represented groups who would otherwise not be able to attend the conference.
- All conference materials are accessible, including promotion, signage and abstract submission processes.
- A question on the registration form informs of any support or access requirements that participants may have.
- An equity report will be made accessible on our website for measuring change over time which will include information such as the gender and cultural balance of speakers, participants, and session chairs.
The Norman Cousins Award Lecture

The Norman Cousins Award is the highest honor given by the *PsychoNeuroImmunology Research Society* to an individual for outstanding contributions to research in psychoneuroimmunology. Norman Cousins was an articulate spokesman and advocate for psychoneuroimmunology, whose support and generosity has facilitated the career development of many investigators in this interdisciplinary field of endeavor. To contribute to the advancement of knowledge in psychoneuroimmunology, Ellen Cousins, Norman’s wife, created the Norman Cousins Memorial Fund, and the California Wellness Foundation provided the endowment for the Norman Cousins Memorial Award and Lecture to be delivered as a highlight of the annual meeting of the *PsychoNeuroImmunology Research Society*.

2019 Norman Cousins Award Lecture

*Integrative Stress Physiology: Brain, Behavior & Immunity*

**Monika Fleschner, PhD**
Professor
Department of Integrative Physiology
University of Colorado, Boulder, CO

The Robert Ader New Investigator Award

In honor of Dr. Robert Ader, a pioneer in the field of psychoneuroimmunology, the *PsychoNeuroImmunology Research Society* presents the Robert Ader New Investigator Award. This prestigious award is presented to an outstanding new research scientist who has made exciting basic science or clinical contributions to the field of PNI. The award honors Dr. Ader’s innovation and creativity as a scientist and recognizes his contributions to the instantiation of PNI as a meaningful endeavor dedicated to the betterment of health and the prevention of disease.

2019 Robert Ader New Investigator Award Lecture

*Aging Biology in PNI*

**Judith Carroll, PhD**
Associate Professor
David Geffen School of Medicine
Department of Psychiatry
University of California Los Angeles, Los Angeles, CA
The BBI Impact Award

Professor Keith W. Kelley, spouse Sara and daughter Megan established the Brain, Behavior, and Immunity Impact Award. The goal is to promote submission and publication of high-quality, cutting-edge research in *Brain, Behavior, and Immunity* and to increase visibility and participation in the Psychoneuroimmunology Research Society. The winner is the corresponding author of the paper with the most citations from those articles published three and four years prior to the award. For example, the 2019 award winner, announced in 2018, is the corresponding author of the paper that achieved the highest level of citations in 2017 to papers published in 2016 and 2015. The Kelley Family provides an annual gift of $5,000 per year and a commemorative plaque for the PNIRS to present to the winner of the Brain, Behavior, and Immunity Impact Award at the annual PNIRS meeting.

2019 BBI Impact Award

Bing Ruan, PhD; Lanjuan Li, MD; and Hai-yin Jiang, MD
State Key Laboratory for Diagnosis and Treatment of Infectious Diseases, the First Affiliated Hospital, School of Medicine, Zhejiang University

2020 Cousins, Ader and BBI Impact Awards

The winners of the 2020 Norman Cousins Award Lecture, Robert Ader New Investigator Award and BBI Impact Award will be announced at the Closing Banquet on Saturday, June 8th.

The George Solomon Memorial Lecture

The George Solomon Memorial Lecture was newly established in 2014 and is named for a most prominent figure in the history of PNI. George Solomon was truly a visionary; very early in his career, he came to believe that certain diseases, such as autoimmune diseases, were modified by psychological factors. His formal investigations into the connections between the mind and body, as well as their implications for health and disease date back to his first published reports in the early 1960’s. Throughout his illustrious career, Dr. Solomon was a strong leader of our field, an outspoken advocate for our science, and a warm and generous collaborator, mentor and friend. This lecture has been endowed by his wife, Susan Keran Solomon, to honor the history of PNI and the Society, and to provide an annual forum for discussion of the important interconnections between psychological and physical processes for health and illness.

2019 George Solomon Memorial Lecture

*From Social Connection to Cell Signaling: Biobehavioral Influences on Cancer Progression*

Susan Lutgendorf, PhD
Professor & Starch Faculty Fellow
Department of Psychological and Brain Sciences
University of Iowa, Iowa City, IA
The Ronald Glaser Frontiers in Psychoneuroimmunology lecture, formerly the Frontiers in Psychoneuroimmunology lecture, is supported by generous donations to the Ronald Glaser Fund. The Ronald Glaser Fund was established in 2017 to honor Ron for all his contributions to the field of psychoneuroimmunology. As a pioneer in our field, Ron made contributions that have advanced psychoneuroimmunology in many ways. His efforts provided exemplary support for colleagues, trainees and patients around the world with stress-associated illnesses. The “Frontiers” lecture will serve as recognition of Ron’s influence across a broad spectrum of biology and medicine and honor those contributions. To make a donation, please visit https://www.pnirs.org/portal/donations/.

2019 Ronald Glaser Frontiers in PNI Lecture

Nature, Nurture, and your inner Neanderthal: Dissecting Evolutionary Drivers of Immune Function

Lluis Quintana-Murci, PhD
Department of Genomes and Genetics
Institut Pasteur, Paris, France
### PNIRS Trainee Scholars

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*◇ Indicates a Trainee Scholar throughout the program*

**Congratulations 2019 Trainee Scholars!**

### PNIRS Michael Irwin Equity and Diversity Travel Awardees

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**Congratulations 2019 Michael Irwin Equity & Diversity Awardees!**
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<td>18:00 - 18:30</td>
<td>Break</td>
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<td>Norman Cousins</td>
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<td>18:30 - 19:00</td>
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<td>19:00 - 19:30</td>
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<td>Trainee-Mentor</td>
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<td>19:30 - 20:00</td>
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<td>Colloquium</td>
<td>Reception</td>
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<td>20:00 - 20:30</td>
<td>GEBIN Trainee</td>
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<td>Museum für Naturkunde</td>
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<td>20:30 - 21:00</td>
<td>Dinner</td>
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Tuesday, June 4

12:45-13:00  GEBIN - WELCOME  
Room: Hörsaalruine (Lecture Hall Ruin), Berlin Museum of Medical History at the Charité  
Silvia Capellino and Harald Engler, Spokespersons GEBIN

13:00-15:00  GEBIN - ORAL SESSION 1  
Room: Hörsaalruine (Lecture Hall Ruin), Berlin Museum of Medical History at the Charité  
Chairs: Silvia Capellino, Ulrike Gimsa

13:00  The dopaminergic pathway - a potential new route to modulate inflammation in rheumatoid arthritis [3209]  
Karolin Wieber  
Leibniz Research Centre for Working Environment and Human Factors, Dortmund, Germany

13:15  The opposite sides of the same coin: Norepinephrine aggravates cartilage degeneration but attenuates subchondral bone changes [4292]  
Karima El Bagdadi  
University Hospital Regensburg, Germany

13:30  Hints for catecholamine-driven autocrine mechanisms to regulate regulatory B cells [4339]  
Nadine Honke  
University Hospital Düsseldorf, Germany

13:45  Catecholamines and supernatants of catecholamine-treated bacteria differently modulate porcine immune function in vitro [4333]  
Lena Reiske  
University of Hohenheim, Stuttgart, Germany

14:00  Age dependent changes of adipokine- and adipo-cytokine secretion from rat adipose tissue by endogenous and exogenous toll-like receptor agonists [3243]  
Christoph Rummel  
Justus Liebig University of Giessen, Germany

14:15  The ghrelin system is regulated by nutrient availability and pro-inflammatory cytokines in rheumatoid arthritis synovial fibroblasts [4269]  
Torsten Lowin  
University Hospital Düsseldorf, Germany

14:30  The role of neutrophil granulocytes in immune-to-brain communication during LPS-induced systemic versus lung inflammation [3234]  
Jessica Hernandez  
Justus Liebig University Giessen, Germany

14:45  Modulation of the brain and peripheral response to systemic inflammation and stress by omega-3 fatty acids [3245]  
Fabian Pflieger  
Justus Liebig University Giessen, Germany

15:00-15:30  BREAK
15:30-18:00  GEBIN - ORAL SESSION 2  
Room: Hörsaalruine (Lecture Hall Ruin), Berlin Museum of Medical History at the Charité  
Chairs: Manfred Schedlowski, Volker Stefanski  

15:30  *Mycobacterium vaccae promotes resilience when administered subcutaneously prior to or during chronic psychosocial stress [4340]*  
**Mattia Amoroso**  
University Clinic Ulm, Germany  

15:45  *Chronic stress is associated with greater mood impairment during experimental systemic inflammation [3246]*  
**Harald Engler**  
University Hospital Essen, Germany  

16:00  *Vulnerability to chronic stress: The role of frontal alpha asymmetry [4274]*  
**Mauro Larra**  
Leibniz Research Centre for Working Environment and Human Factors, Dortmund, Germany  

16:15  *C-reactive protein levels in children aged 3-5 years with verified exposure to maltreatment: Sex differences and association with depression [4336]*  
**Karin De Punder**  
Charité Universitätsmedizin Berlin, Germany  

16:30  *Lifetime stress exposure and its association with anti-inflammatory markers in young adults [4319]*  
**Sarah Sturmbauer**  
Friedrich-Alexander University Erlangen-Nürnberg, Germany  

16:45  *Effect of retention interval length on the memory trace of behaviorally conditioned immunosuppression with cyclosporine A in rats [4271]*  
**Tina Hörbelt**  
University Hospital Essen, Germany  

17:00  *Adolescent asthma during development and its impact on the physiological stress response and the brain: a mouse model [4265]*  
**Jasmine Caulfield**  
Pennsylvania State University, USA  

17:15  *Stress perception and mediators following the diagnosis of early-stage malignant melanoma, a comparison group and follow-up study in patients displaying psychooncologic need [4363]*  
**Eva Peters**  
Justus Liebig University of Giessen, Germany  

17:30  *Combined metabolite and lipid fingerprinting in women with childhood maltreatment reveals novel serum biomarkers linked to inflammation, oxidative stress and energy metabolism [4255]*  
**Alexander Karabatsiakis**  
University of Ulm, Germany  

17:45  *Stocking density during rearing affects the immune system of laying hens [4273]*  
**Tanja Hofmann**  
University of Hohenheim, Stuttgart, Germany  

18:00-18:30  BREAK
18:30-20:00 GEBIN - ORAL SESSION 3
Room: Hörsaalruine (Lecture Hall Ruin), Berlin Museum of Medical History at the Charité
Chairs: Stefan Gold, Bernd Fiebich

18:30 Rat model of prenatal Zika virus infection and associated neural and behavioral consequences in the offspring [3221]
Morgan Sherer
Psychological and Brain Sciences, Newark, USA

18:45 Telomerase-dependent senescence and inflammation with ageing in the zebrafish brain [3231]
Raquel Martins
University of Sheffield, United Kingdom

19:00 Lipopolysaccharide induces mitochondrial dysfunction and activates the cGAS-STING pathway in the mouse brain: possible involvement in inflammation-induced anergia [4358]
Angela Casaril
Federal University of Pelotas, Pelotas, USA

19:15 Analysis of brain microglia and behavior after peripherally-induced neuroinflammation in mice [3242]
Jan-Sebastian Grigoleit
Janssen Research & Development, San Diego, USA

19:30 Anti-neuroinflammatory effects of GPR55 antagonists in LPS-activated primary microglial cells [3250]
Bernd Fiebich
University Hospital Freiburg, Germany

19:45 Primary cultures of the rat dorsal root ganglia: influence of lipopolysaccharide and cisplatin on properties of neuronal and glial elements [3228]
Stephan Leisengang
Justus Liebig University of Giessen, Germany

20:00 GEBIN Trainee Dinner
(Invite Only)
Der Schmarrnkaiser Arminiusmarkthalle
Arminiusstraße 2-4, 10551 Berlin
Wednesday, June 5

8:30-3:00  PNIRS COMMITTEE MEETINGS
Room: Business Lounge at Langenbeck-Virchow-Haus (LVH)

8:30  Financial Committee
9:30  Scientific Affairs Committee
10:30 Membership Committee
11:15 Nominating Committee
12:00 Communications Committee
12:30 Board of Directors Meeting (lunch included)

8:00-10:00  GEBIN - ORAL SESSION 4
Room: Hörsaalruine (Lecture Hall Ruin), Berlin Museum of Medical History at the Charité
Chairs: Eva Peters, Judith Alferink

8:00  Mnemonic-like representation of immune-related information in the insular cortex [3237]
Tamar Koren
Technion - Israel Institute of Technology, Haifa, Israel

8:15  Plasma tryptophan metabolite concentrations in depression and the response to electroconvulsive therapy [4258]
Karen Ryan
Trinity College Dublin, Ireland

8:30  Severity of psychomotor retardation in depressed patients is associated with mRNA enrichment of Toll-like receptor, cytokine and mTOR signaling pathways [4315]
Mandakh Bekhbat
Emory University, Atlanta, USA

8:45  Depressive patients producing high cytokine levels by peripheral blood mononucleocytes show good success of multi-modal psychotherapeutic inpatient therapy [4364]
Eva Peters
Justus Liebig University of Giessen, Germany

9:00  Propentofylline prevents body weight loss, motor behavior impairments, depressive-like behavior, and TNF increase in rats which were exposed to LPS [3241]
Thiago Kirsten
Paulista University, Sao Paulo, Brazil

9:15  Associations between hypovitaminosis-D and tic severity and comorbidities in children and adolescents with chronic tic-disorders: A large pan-European cross-sectional study [4381]
Natalie Moll
Institute of Laboratory Medicine, LMU Munich, Germany

9:30  Reduced immunity to measles and rubella, but not polio in adults with major depressive disorder: a follow up study [3240]
Bart Ford
Laureate Institute for Brain Research, Tulsa, USA

9:45  Alterations of the serum N-glycan profile in female patients with major depressive disorder [4268]
Melissa Hitzler
University of Ulm, Germany
10:00-10:30  BREAK

10:30-12:00  GEBIN - ORAL SESSION 5
Room: Hörsaalruine (Lecture Hall Ruin), Berlin Museum of Medical History at the Charité
Chairs: Adriana del Rey, Christoph Rummel

10:30  Effective connectivity within the insula mediates the association between inflammation and human sickness behavior [4295]
Kristian Stefanov
University of Glasgow, Great Britain & Northern Ireland

10:45  Sleep supports integrin activation on antigen-specific T cells via suppression of Galphas-coupled receptor signaling [3233]
Tanja Lange
University of Lübeck, Germany

11:00  Maximal telomerase activity capacity (mTAC) mediates the effect of the cortisol stress response on leukocyte telomere length [4288]
Karin De Punder
Charité Universitätsmedizin Berlin, Germany

11:15  Relationship between HPA axis reactivity and innate immunity in mice [4342]
Oliver Ambree
University of Osnabrück, Germany

11:30  A mouse model for benign obesity? [4353]
Ulrike Gimsa
Leibniz Institute for Farm Animal Biology, Dummerstorf, Germany

11:45  Cardiovascular neuroimmune circuits regulate atherosclerosis [4286]
Sarajo Mohanta
Ludwig-Maximilians-University Munich, Germany

12:00-12:30  BREAK

12:30-2:30  GEBIN POSTER SESSION
Room: Bernhard von Langenbeck Room, Langenbeck-Virchow-Haus
Lunch Provided
See poster number list in back of program.

2:30-3:00  BREAK

3:00-4:00  GEBIN STEERING COMMITTEE MEETING

3:00-6:00  EDUCATIONAL SHORT COURSE
Room: Hörsaalruine (lecture hall ruin)
Moderator: Staci Bilbo

Neuroinflammation and Aging: Novel Techniques and Emerging Technologies

Cytof Mapping of the Brains Immune System
Asya Rolls
Technion-Israel Institute of Technology, Haifa, Israel
Mapping of Central and Peripheral Cells using Single Cell Sequencing
Francesco Bifari
University of Milan, Milan, Italy

Imaging of Monocytes vs. Microglia in-vivo
Martin Kerschensteiner
Ludwig-Maximilians-Universität München, Munich, Germany

Translational Opportunities
Steve Cole
University of California, Los Angeles College of Medicine, Los Angeles, California

6:15-8:00  PNIRS TRAINEE MENTOR COLLOQUIUM
Room: Hörsaalruine (lecture hall ruin)
(All Trainees, refreshments will be provided)

6:15  President’s Welcome
Deb Hodgson
PNIRS President

6:30-8:00  Speed mentoring
The goal is to facilitate interactions between trainees and more senior members of the PNIRS community through a series of brief small group meetings
Thursday, June 6

8:30-9:00  WELCOME  
Room: Main lecture hall in the Langenbeck-Virchow-Haus  
Deb Hodgson, President PNIRS

9:00-11:00  MEMBER SPONSORED SYMPOSIUM  
Room: Main lecture hall in the Langenbeck-Virchow-Haus  
Chair: Mats Lekander and John Axelsson

Disease avoidance: our first line of defense against pathogenic threats

Evolution of behaviors to avoid pathogens and to improve recovery from infection  
Benjamin Hart  
University of California, Davis, School of Veterinary Medicine, Davis, California

Avoidance of biological contaminants in non-human primates  
Cécile Sarabian  
Primate Research Institute, Kyoto University, Inuyama, Aichi, Japan

Perceptual disease detection, social consequences and human sickness  
Mats Lekander & John Axelsson  
Stockholm University and Karolinska Institutet, Stockholm, Sweden

Disgust as an adaptive system for disease avoidance behavior  
Valerie Curtis  
London School of Hygiene and Tropical Medicine, London, UK

Discussants: Mats Lekander & John Axelsson, Stockholm University and Karolinska Institutet, Stockholm, Sweden

11:00-11:30  BREAK  
Room: Foyer of the Langenbeck-Virchow-Haus

11:30-12:30  RONALD GLASER-FRONTIERS IN PSYCHONEUROIMMUNOLOGY LECTURE  
Room: Main lecture hall in the Langenbeck-Virchow-Haus  
Chair: Rainer H. Straub

Nature, Nurture, and your inner Neanderthal: Dissecting Evolutionary Drivers of Immune Function  
Lluis Quintana-Murci, PhD  
Department of Genomes and Genetics  
Institut Pasteur, Paris, France
<table>
<thead>
<tr>
<th>Poster Number</th>
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<tr>
<td>5*</td>
<td>The Role of Inflammation and Aging in Motivated Learning Behaviors -- A Conceptual Replication in Chronic Inflammation</td>
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<td><strong>L. J. Balter</strong>, J. A. Bosch, S. Aldred, J. E. Raymond, S. Higgs [4373]</td>
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<tr>
<td>12*</td>
<td>Anxiety symptoms predict sickness-induced hyperalgesia in a model of musculoskeletal pain</td>
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<td>14*</td>
<td>Maximal telomerase activity capacity (mTAC) mediates the effect of the cortisol stress response on leukocyte telomere length</td>
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<td><strong>K. de Punder</strong>, C. Heim, P. D. Wadhwa, S. Entringer [4288]</td>
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<tr>
<td>22*</td>
<td>The impact of circadian rhythms disruption on cancer progression and CNS toxicities</td>
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<td>53*</td>
<td>The neuronal IL-1b receptor is necessary and sufficient for paired fighting-induced social withdrawal and cognitive impairment</td>
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<td><strong>D. Di Sabato</strong>, D. Nemeth, X. Liu, B. Oliver, J. Godbout, N. Quan [4311]</td>
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<tr>
<td>54*</td>
<td>The potential clinical use of CpG-C immune stimulation in the stressful context of oncological surgery</td>
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<td><strong>A. Eckerling</strong>*, E. Sandbank*, S. Scarlat, T. Levine, R. Haldar, E. Rosen, S. Ben-Eliyahu [4310]</td>
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<tr>
<td>55*</td>
<td>Peri-operative novel psychological intervention in breast cancer patients aiming to reduce stress responses and improve biomarkers of cancer progression</td>
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<td>56*</td>
<td>Glucocorticoid receptor sensitivity and stress predict motivated effort expenditure</td>
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<td><strong>T. Lacourt</strong>, C. Fagundes, A. Kavelaars, R. Dantzer, C. Heijnen [4270]</td>
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<tr>
<td>57*</td>
<td>Microbial composition and restraint stress induce anxiety-like behavior related to inflammation and GABA signaling along the gut-brain axis of mice</td>
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<td><strong>B. R. Loman</strong>, E. Kolanci, G. De Palma, N. Quan, P. Bercik, M. T. Bailey [4379]</td>
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<tr>
<td>58*</td>
<td>Does acute inflammation change gut memories? Effects of experimental endotoxemia on the extinction of conditioned visceral pain-related fear</td>
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<tr>
<td>59*</td>
<td>Macrophage Migration Inhibitory Factor Promotes Neuroinflammation and Pain During Stress</td>
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<tr>
<td>60*</td>
<td>Maternal psychological resilience during pregnancy and fetal cellular aging</td>
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<tr>
<td>63*</td>
<td>Sleep supports integrin activation on antigen-specific T cells via suppression of Galphas-coupled receptor signaling</td>
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1:00-2:00  **LUNCH**  
*Room: Foyer of the main lecture hall in the Langenbeck-Virchow-Haus*

**Concurrently: Leader Luncheon** (Invitation only)  
*Room: Virchow Room at LVH*

2:00-3:30  **ORAL SESSION 1**  
*Room: Main lecture hall in the Langenbeck-Virchow-Haus*

**Chair:** Sarah Spencer

2:00  
**Excitability of spinal networks involved in pain processing is enhanced following a neonatal immune challenge**  
M. Tadros, I. Zouikr, **D. M. Hodgson**, R. J. Callister [4382]

2:15  
**The Role of Microglia in Synaptic Rewiring by Early-Life Adversity**  

2:30  
**Maternal Pro-Inflammatory State during Pregnancy and Newborn Leukocyte Telomere Length: A Prospective Investigation**  

2:45  
**Pars Triangularis Volumes Mediates the Association Between Maternal Interleukin-6 Concentration During Pregnancy and Offspring Fluid Intelligence**  

3:00  
**The role of adolescent microglia for adult executive function after maternal high fat diet**  

3:15  
**Maternal immune activation induces transgenerational effects on prefrontal cortex structure and function**  

3:30-5:00  **POSTER SESSION 1**  
*Room: Langenbeck-Virchow-Haus, Bernhard von Langenbeck Room*

See poster number list in back of program. The number in bracket [nnnn] indicates the abstract number in the booklet.

5:00-6:00  **NORMAN COUSINS MEMORIAL LECTURE**  
*Room: Main lecture hall in the Langenbeck-Virchow-Haus*

Nominators: Mark Laudenslager, Keith Kelley, Michael Irwin, and Andrew Miller  
**Chair:** Andrew Miller

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*Integrative Stress Physiology: Brain, Behavior & Immunity*

**Monika Fleschner, PhD**  
Professor, Department of Integrative Physiology  
University of Colorado, Boulder, CO
6:00-7:00  **BREAK and SNACKS**  
*Room: Foyer of the Langenbeck-Virchow-Haus*

7:00-10:00  **WELCOME RECEPTION** (Included)  
*Natural History Museum*  
*Invalidenstraße 43, 10115 Berlin, Germany*
**Friday, June 7**

**8:30-10:25**  
**PRESIDENTIAL SYMPOSIUM**  
*Room: Main lecture hall in the Langenbeck-Virchow-Haus*

Chair: Deb Hodgson

**Early Life Trajectories toward Health; the Brain, the Gut, and the Immune System**

*Prenatal Inflammation by Combined Environmental Stressors and Implications for Health throughout the Lifespan.*  
Staci Bilbo  
Harvard University, Director of Research, Lurie Center for Autism, Boston, MA

*Microglia at the Crossroads of Early Brain Circuits and Microbiota*  
Sonia Garel  
Institute of Biology of the Ecole Normale Supérieure (IBENS), Paris, France

*Hot Baby: How Early Life Inflammation Programs the Brain*  
Quentin Pittman  
Department of Physiology and Pharmacology, University of Calgary, Calgary, Alberta, Canada

*Susceptibility and Resilience in Immune-mediated Neurodevelopmental Disorders*  
Urs Meyer  
Institute of Veterinary Pharmacology and Toxicology, University of Zurich, Vetsuisse, Switzerland

**10:25**  
**PRESENTATION OF THE BBI IMPACT AWARD**  
*Room: Main lecture hall in the Langenbeck-Virchow-Haus*

Presenter: Carmine Pariante and Rachael Engels

Bing Ruan, PhD; Lanjuan Li, MD; and Hai-yin Jiang, MD  
State Key Laboratory for Diagnosis and Treatment of Infectious Diseases, the First Affiliated Hospital, School of Medicine, Zhejiang University

**10:30-11:00**  
**BREAK**  
*Room: Foyer of the Langenbeck-Virchow-Haus*

**11:00-12:30**  
**GEBIN SPONSORED SYMPOSIUM**  
*Room: Main lecture hall in the Langenbeck-Virchow-Haus*

Chair: Stefan Reber

**Microbes and Stress Resilience**

*Prebiotics and probiotics to attenuate the exacerbating effects of stress on intestinal inflammation.*  
Michael T. Bailey  
Center for Microbial Pathogenesis, the Research Institute at Nationwide Children's Hospital, Columbus, Ohio [4378]

Matt Frank
Department of Psychology and Neuroscience, University of Colorado Boulder, Boulder, Colorado [4318]

Peripheral and central effects of Mycobacterium vaccae on mice exposed to both early life adversity and chronic stress during adulthood.

Stefan O. Reber
University of Ulm, Department of Psychosomatic Medicine and Psychotherapy, Laboratory for Molecular Psychosomatics, Ulm, Germany [4266]

12:30-1:00 ROBERT ADER LECTURE
Room: Main lecture hall in the Langenbeck-Virchow-Haus
Nominators: Anna Marsland, Julie Bower, Steve Cole, Lisa Christian, and Michael Irwin
Chair: Lisa Christian

Aging Biology in PNI
Judith Carroll, PhD
Associate Professor, David Geffen School of Medicine
University of California at Los Angeles, Los Angeles, CA

1:00-2:00 LUNCH
On your own

Concurrently: PNIRS Asia-Pacific Lunch
Room: Wandelhalle at LVH
Invited Lecturer: Atsuyoshi Shimada, MD, PhD
Tokyo, Japan

2:00-2:15 SPECIAL TRIBUTE
Room: Main lecture hall in the Langenbeck-Virchow-Haus
Lisa Christian, Colleague of Dr. Glaser

Ronald Glaser, PhD, 1939-2019

2:15-3:45 ORAL SESSION 2
Room: Main lecture hall in the Langenbeck-Virchow-Haus
Chair: Carmine Pariante

2:15 Immune cell mitochondrial respiration in postpartum women with a history of childhood maltreatment: Associations with the stress-related hormone cortisol and the attachment-related hormone oxytocin

A. M. Gumpp, C. Boeck, E. Calzia, P. Radermacher, C. Waller, A. Karabatsiakis, I. T. Kolassa [4275]

2:30 Blood endotoxin levels may contribute to gender differences in the link between depressive symptoms and ex vivo inflammatory responses

2:45 Intestinal Permeability Markers Predict Future Depressive Symptoms in Women: A Two-Year Observational Study  

3:00 High Inflammation is Associated with Low Functional Connectivity in Reward Circuitry and Symptoms of Anhedonia and PTSD in a High-Trauma Population  
N. D. Mehta, V. Michopoulos, J. S. Stevens, A. H. Miller, Z. Li, J. C. Felger [4328]

3:15 Microglia are not necessary for the resolution of LPS-induced inflammation.  
L. Sominsky, S. Malik, S. Younesi, A. Soch, S. Xavier, S. J. Spencer [4284]

3:30 Harnessing microglia to fight depression  

FREE AFTERNOON

4:00-  
Boat Tour  
Starting Point: Stern und Kreisschifffahrt

7:30-10:00 PNIRS Trainee Social  
Arminiusmarkthalle  
Arminiusstraße 2-4, 10551 Berlin
Saturday, June 8

8:30-10:00 ORAL SESSION 3
Room: Main lecture hall in the Langenbeck-Virchow-Haus
Chair: Julie Bower

8:30 Neuroinflammation does not mediate fatigue induced by tumor growth in an inflammatory murine model of lung cancer
E. G. Vichaya, B. Ford, C. Quave, A. M. Casaril, R. M. Rishi, R. Dantzer [4377]

8:45 G(alpha)s-to-G(alpha)i switch of G protein-coupled receptor signaling in rheumatoid arthritis synovial fibroblasts
B. Dufner, R. H. Straub [3202]

9:00 Tumor-secreted factors are elevated by surgery-induced sympathetic-inflammatory responses and promote the outbreak of human breast cancer dormant micrometastases

9:15 Molecular correlates of socioeconomic status predict acute myelogenous leukemia relapse following hematopoietic cell transplantation

9:30 Gustatory-immune integration in the insular cortex

9:45 Neurodegeneration in Asthma
M. A. Rosenkranz, D. C. Dean, S. Esnault, J. Mumford, M. Evans, R. J. Davidson, W. W. Busse [3213]

10:00-10:30 BREAK
Room: Foyer of the Langenbeck-Virchow-Haus

10:30-12:30 MEMBER SPONSORED SYMPOSIUM (Early Career Scientists)
Room: Main lecture hall in the Langenbeck-Virchow-Haus
Chair: Eric Wohleb

The ‘formative’ role of microglia across development, stress, and aging

Microglia as regulators of sex differences in brain and behavioral development
Kathryn M. Lenz
The Ohio State University, Columbus, Ohio

Dynamic neuron-microglia interactions contribute to stress-induced synaptic deficits and depressive-like behaviors
Eric S. Wohleb
University of Cincinnati College of Medicine, Cincinnati, Ohio
**Microglia-endothelial-monocyte interactions augment stress-induced anxiety**

Dan McKim  
University of Illinois, Urbana-Champaign, Illinois [4384]

**Dark microglia across contexts of health and disease**  

Marie-Eve Tremblay  
Université Laval, Quebec City, Quebec, Canada

Discussant: Jonathan P. Godbout, The Ohio State University, Columbus, Ohio

**12:30-1:00 POSTER DATA BLITZ 2**  
Room: Main lecture hall in the Langenbeck-Virchow-Haus  
Chair: Christoph Rummel

<table>
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<tr>
<th>Poster Number</th>
<th>Title</th>
<th>Authors</th>
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<tbody>
<tr>
<td>18*</td>
<td>You sleep, but your heart is not in it - the importance of nocturnal autonomic signalling.</td>
<td>U. Vollmer-Conna, M. Joubert, S. Fatt, J. Beilharz, A. Lloyd, E. Cvejic [3251]</td>
</tr>
<tr>
<td>48*◊</td>
<td>Lamina-specific microglial phenotypes are associated with stress-induced synaptic deficits in the prefrontal cortex</td>
<td>J. L. Bollinger, S. C. Woodburn, E. S. Wohlb [3253]</td>
</tr>
<tr>
<td>50*</td>
<td>Combined metabolite and lipid fingerprinting in women with childhood maltreatment reveals novel serum biomarkers linked to inflammation, oxidative stress and energy metabolism.</td>
<td>A. Karabatsiakis, A. Koenig, T. Stoll, S. Wilker, T. Hennessy, M. Hill, I. Kolassa [4255]</td>
</tr>
<tr>
<td>53*◊</td>
<td>Environmental circadian desynchronization prolongs sickness behavior and alters immune responses in mice</td>
<td>G. L. Pearson, M. Savenkova, I. N. Karatsoreos [4322]</td>
</tr>
<tr>
<td>54*</td>
<td>Modulation of the brain and peripheral response to systemic inflammation and stress by omega 3 fatty acids</td>
<td>F. Pflieger, J. Bredehöft, D. Bhandari, V. Peek, B. Spengler, S. Schulz, K. Mayer, J. Roth, C. Rummel [3245]</td>
</tr>
<tr>
<td>56*</td>
<td>Microglia regulate cognitive function in the healthy brain</td>
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1:00-2:00 LUNCH  
Room: Foyer of the main lecture hall in the Langenbeck-Virchow-Haus  
Concurrently: BBI Editorial Board Meeting (Invitation only)

2:00-3:30 POSTER SESSION 2  
Room: Langenbeck-Virchow-Haus, Bernhard von Langenbeck Room

See poster number list in back of program. The number in bracket [nnnn] indicates the abstract number in the booklet.

3:30-4:30 GEORGE SOLOMON MEMORIAL LECTURE  
Room: Main lecture hall in the Langenbeck-Virchow-Haus  
Chair: Steve Cole

From Social Connection to Cell Signaling: Biobehavioral Influences on Cancer Progression

Susan Lutgendorf, PhD
Professor and Starch Faculty Fellow  
Department of Psychological and Brain Sciences  
University of Iowa, Iowa City, IA

4:30-5:30 BUSINESS MEETING (All attendees are encouraged to attend)  
Room: Main lecture hall in the Langenbeck-Virchow-Haus

7:00- CLOSING BANQUET (Included)  
Clärchens Ballhaus, Auguststrasse 24, 10117 Berlin.

Presentation of the 2020 Norman Cousins and Robert Ader New Investigator Awards
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41 Cognitive deficits in survivors of childhood leukemia: a role for inflammation
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42 Role of Microglia Deficiency in Brain Maturation and Behaviors Relevant to Neurodevelopmental Disorders

43 Genetic variation of IL-6 expression modulates age-related memory decline

44 Rat Model of Prenatal Zika Virus Infection and Associated Neural and Behavioral Consequences in the Offspring.

45 Effective connectivity within the insula mediates the association between inflammation and human sickness behaviour
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Welcome to Berlin!

How to get to the city from Tegel

Various bus connections are available from Berlin Tegel Airport to Berlin city center, making the airport very well integrated in Berlin's public transport network. Four BVG (Berlin Transport Services) stops are located right outside Terminal A and B.

The ticket machine is located at the bus stop at Terminal A. To get to Berlin city center you need a ticket for fare zone AB. One way ticket fare is 2,80 Euro, but it will be convenient to purchase a 4-way or day ticket or a Berlin Welcome Card - depending on possibly further rides.

The trip from the airport to the Berlin city center (East) takes about 30 minutes

Tickets and information for public transportation, route planner: https://www.bvg.de/en/
Meeting location and Hotels:

The bus stop ‘Charité Campus Mitte’ is located right in front of the Meeting location; from Tegel airport the TXL shuttle bus goes directly to the Langenbeck-Virchow-Haus

The closest Metro station is Oranienburger Tor

Walking distance from the meeting location to some of the suggested hotels
Hotel Adlon Kempinski 14 Minutes
Arte Luise Kunsthotel 6 Minutes
Motel One Berlin Hauptbahnhof 16 Minutes
Hotel Berlin Mitte by Campanile 6 Minutes
Mercure Hotel Berlin City 8 Minutes
Within the Charite: Between the Hörsaalruine (HSR) and the Langenbeck-Virchow-Haus (LVH)
The walk between the different locations in the Charite is given on the following map.

From the Conference location to the Natural History Museum (Museum für Naturkunde Berlin)
In the Natural History Museum the Welcome reception will take place. Do not forget to use the refreshment break after the Norman Cousin Lecture in the LVH between 18:00 and 18:45 to prepare yourself for the Welcome reception. Then, walk over!
From conference location to banquet location
The banquet will be held at Clärchens Ballhaus, which is located at Auguststraße 24, 10117 Berlin. It is accessible by walking (aprox. 20 minutes).

To the banquet by bus
The bus stop is located in front of the conference location. Take bus no. 147, direction ‘U Märkisches Museum’. Leave the bus after 3 stops at station ‘Friedrichstraße/Reinhardtstraße’. Then walk in driving direction until ‘Friedrichstraße’ and turn left. Take first street to the right ‘Johannistraße’. Walk till ‘Tucholskystraße’ where you turn left. Walk till Auguststraße where you turn right. After approx.. 100 meter you find Clärchens Ballhaus on the right.
Restaurants

Budget (Lunch/Dinner)

$-$ $$ Dada Falafel: Middle Eastern. Linienstr. 132, 10115 Berlin
http://dadafalafel.de

$$ Restaurant im Deutschen Theater: German, located below the German Theater (Deutsches Theater). Relaxed atmosphere, particularly during the day when the actors get their lunch there, can get busy in the evening during intermissions and after shows. Schumannstraße 13a, 10117 Berlin.
https://www.kantine-dt.de/

Drinks

$$ Böse Buben Bar. Laid back cafe/bar with an edge. Marienstraße 18, 10117 Berlin
http://www.boesebubenbar.de/

$$ Ständige Vertretung: German food and drinks by the river (nice but a bit touristy). Schiffbauerdamm 8, 10117 Berlin https://www.staev.de/berlin-mitte.html

Mid-range (Lunch/Dinner)

$$-$$$ Kartoffelkeller: German. Albrechtstraße 14B, 10117 Berlin
http://www.kartoffelkeller.com

https://www.boccondivino.de/de/index.html

$$-$$$ Volver: Spanish/Tapas. Reservation recommended. Luisenstraße 41, 10117 Berlin
https://www.volver-tapas.berlin/

Premium (Dinner)

$$$ Ganymed: French, with views of the river Spree. Schiffbauerdamm 5, 10117 Berlin
https://ganymed-brasserie.de/le-restaurant/


Activities and sightseeing

The official Website of Berlin: https://www.berlin.de/en/

Official Website of Berlin Tourism: https://www.visitberlin.de/en
Berlin Tour by Public Bus Line 100
An insiders’ tip to explore Berlin easily and on budget is to take the public bus line number 100. A ride on this double decker bus is a “Must Do” for each tourist. The tour starts at Zoo station in the City West and ends at Alexanderplatz in the City East.

Brandenburger Tor
Brandenburg Gate is Berlin's most famous landmark. A symbol of Berlin and German division during the Cold War, it is now a national symbol of peace and unity.

Berliner Dom
The Protestant Berlin Cathedral on Museum Island in the Mitte district is Berlin's largest church and one of the major sights in the city's center.

Checkpoint Charlie
Checkpoint Charlie was the best-known border crossing between East and West Berlin during the Cold War. At the height of the Berlin Crisis in 1961 U.S. and Soviet tanks faced each other here.

East Side Gallery
The East Side Gallery, one of Berlin's most popular sights, is a former section of the Berlin Wall. Artists have turned it into the largest open-air gallery in the world with over one hundred paintings.

Fernsehturm
The tower visit is one of the absolute highlights of this city and worthwhile several times. Here you can enjoy the whole of Berlin in one place and a perfect combination of interesting history, exciting architecture, great views, good food and friendly service.

Especially during the high season a reservation a few days in advance is recommended for your visit without any waiting period. You can book your tickets without queuing at: www.tv-turm.de

Gendarmenmarkt
Once, soldiers matched here, but today Berliners and tourists stroll across the square. It’s said to be the most beautiful public square in Berlin, and perhaps the most beautiful north of the Alps. The ensemble of the concert house and two church buildings embellished with towers is in perfect harmony.

Hackesche Höfe
A rare example of art nouveau architecture in Berlin, the courtyard complex Hackesche Höfe in the Mitte district is a vibrant urban quarter combing art, work, gastronomy and entertainment.

Holocaust-Mahnmal
The Memorial to the Murdered Jews of Europe or Holocaust Memorial near Brandenburg Gate commemorates the up to six million Jewish victims of the Nazi Holocaust.
**Jüdisches Museum**
The Jewish Museum is one of the most striking examples of contemporary architecture in Berlin. The three buildings, two of which were designed by Libeskind, display two millennia of German-Jewish history.

**Kaiser-Wilhelm-Gedächtniskirche**
Kaiser Wilhelm Memorial Church at Breitscheidplatz is one of Berlin's most famous landmarks. The ruin of the old church has been converted into a war memorial.

**Neue Synagoge**
The New Synagogue on Oranienburger Straße was the main synagogue of the Berlin Jewish community. An important architectural monument of late 19th century Berlin, it is now home to the Centrum Judaicum.

**Reichstag**
The Reichstag building with the famous glass dome is one of the most frequently visited sights in Berlin. It is seat of the German parliament, the Bundestag.

**Schloss Charlottenburg**
This is the largest and most magnificent palace in Berlin – a highlight for any Berlin visitor. The park of Charlottenburg Palace is Berlin's most beautiful baroque garden. A splendid and stately green refuge in the city.
The Boat Cruise in Berlin, Meeting of the GEBIN & PNIRS, June 4-8, 2019

This lovely boat cruise on Berlin waterways, like the River Spree and its Canals goes through the heart of the City. It connects many famous places that can be seen from the boat. Explore the main attractions in the city from the water including the government district, Bellevue Palace, Berlin Cathedral, the Reichstag building, and the Federal Chancellery and Museum Island. On this tour, you will get to learn about the intriguing history of Berlin and see all the major attractions from the comfort of a river cruise. Enjoy a boat tour along the River Spree and admire both the Berlin skyline and the beautiful river landscape.

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