

Dear colleagues,

As the first full year of existence of the TübingenNeuroCampus is coming to an end, I would like to thank all of you for your important contributions. I guess we all had a busy year, and a successful one, when I look at all that has happened – only a small part of it is mentioned in the little recap below. The most spectacular event for academics in Tübingen happened on July 19th: the University of Tübingen achieved excellence status (again!).

But this success obviously builds on a great number of individual achievements all across the Tübingen campus. My own impression is that the TNC had a good start, but there always remains a lot to be done to live up to our aspiration to create the most exciting Neuroscience environment possible.

I wish you all a happy and relaxing holiday season and health and success in the New Year!

Thomas Gasser

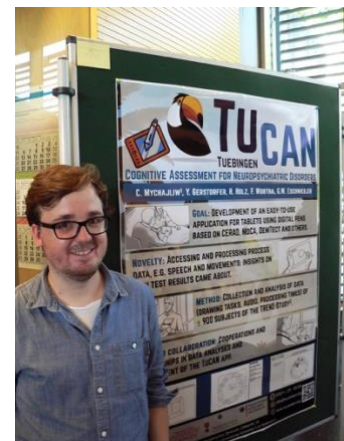
Highlights of the Year 2019

1. Events

1.1. 1st TNC Research Day

The TNC hosted the 1st TNC Research Day on June 27th. More than 140 neuroscientists from Tübingen, Stuttgart and Switzerland joined the event and took part in various lectures, workshops, interactive sessions and poster presentations. The keynote speakers came from the Hertie Institute for Clinical Brain Research (HIH), the University of Tübingen, the Department of Psychiatry & Psychotherapy at the University Hospital (UKT) and the Centre for Integrative Neuroscience (CIN). The event was closed by an informal Get Together.

The TNC Research Day provided the Tübingen Neuro community with the great opportunity to exchange information on current projects and possible future collaborations.



1.2. TNC Elevator Pitches

After the University of Tübingen had retained its excellence status in July 2019 and had been granted funding until 2026, the idea of a new Excellence Cluster Application in the Neurosciences in the next round became more concrete.

We therefore decided to start a new TNC format in October, the “TNC Elevator Pitches”.

We wanted to give PIs the opportunity to pitch in 3 to 5 minutes their ideas for innovative project ideas, novel technologies, or other interesting research areas, which could lead not only to an excellence cluster application for 2026, but also to collaborative research centers (SFBs), graduate schools, research groups etc. in the next few years.

Furthermore, these meetings provided an opportunity to foster exchange between the research group leaders in the various fields of neuroscience.

The three events took place on October 8th, November 5th and December 3rd – each time with 5 to 8 pitches with PIs from the NMI in Reutlingen, the University Department of Psychiatry & Psychotherapy, the Tübingen University, the Institute of Neuroanatomy & Developmental Biology, the University Children's Hospital, the Tübingen Hearing Research Center, the Department of Radiology, the HIH, and many more.



2. Funding

Tübingen's Neuroscientists were successful in several funding programs in 2019 – a selection:

2.1. ERC Grants

Prof. Dr. Martin Giese from the Hertie Institute for Clinical Brain Research (HIH) received a **Synergy Grant** from the **European Research Council (ERC)**, together with Prof. Rufin Vogels (KU Leuven) and Prof. Beatrice de Gelder (University of Maastricht). He will investigate how our brain analyzes body language for non-verbal communication in the project "How body relevance drives brain organization" (RELEVANCE). The Research Council is funding the project for a period of six years with a total of eight million euros, of which around 2.7 million euros are earmarked for the research work of the Tübingen team.



Prof. Dr. Markus Siegel from the HIH and the Centre for Integrative Neuroscience (CIN) received an **ERC Consolidator Grant** for his project "Neuronal Information through Neuronal Interactions". He will combine electrophysiological and analytical techniques in order to investigate the development of sensory, cognitive, and motoric information in the brain and the interactions between different nerve cells.

An **ERC Starting Grant** went to **Christina Schwarz, PhD**, to explore Visual Processes with Two-Photon Ophthalmoscopy. Dr. Schwarz will take the opportunity to perform her innovative work at the Institute for Ophthalmic Research. The development of an advanced optical instrument will allow her to study the retina in the living human eye.

2.2. EJP RD & JPND

Prof. Dr. Matthis Synofzik from the HIH will receive 2 million euros in funding in total for the transatlantic project "PROSPAX: an integrated multimodal progression chart in spastic ataxias" from the **EJP RD (European Joint Programme on Rare Diseases)**. PROSPAX will establish a paradigmatic IRDiRC-guided integrated trial-ready model of disease progression and mechanistic evolution in SPAX, which will allow to track and understand selective as well as overlapping dysfunction of the cerebellum and CST.

Prof. Synofzik will receive another 300.000€ for the project "GENFI-prox: Defining measures of proximity to symptom onset in the GENetic Frontotemporal dementia Initiative" from the **JPND (EU Joint Programme – Neurodegenerative Disease Research)**. The Genetic FTD Initiative (GENFI) is a European and Canadian multicentre natural history study of genetic FTD with detailed phenotyping of both presymptomatic and symptomatic mutation carriers with the aim to identify robust biomarkers. GENFI-prox wants to characterize the prodromal period of genetic FTD, establishing cognitive, imaging and fluid biomarker measures.

2.3. DFG Research Unit

TNC Board member **Prof. Dr. Barbara Kaup** from the Department of Psychology at the University of Tübingen was successful in acquiring a new **DFG (Deutsche Forschungsgemeinschaft)** research unit called „Modal and Amodal Cognition: Functions and Interactions“ (FOR 2718) with the goal to develop an extensive theory of human cognition.

2.4. Hertie Network of Excellence in Clinical Neuroscience

Tübingen is one of six top research locations in Germany that are now being funded as part of the newly initiated **Hertie Network of Excellence in Clinical Neuroscience**. The Hertie Foundation's network and junior researcher support programme, which is funded with five million euros, aims to facilitate the transfer of scientific findings into clinical practice in the field of clinical neurosciences. Over the next three years, a total of 660,000 euros will be invested in the Tübingen site with speaker **Prof. Dr. Thomas Gasser** & co-speaker **Prof. Dr. Martin Giese**, which will involve scientists from the HIH, the University of Tübingen and the German Centre for Neurodegenerative Diseases (DZNE).



2.5. IMPRES: The Mechanisms of Mental Function and Dysfunction

A new **International Max Planck Research School (IMPRS)** “The Mechanisms of Mental Function and Dysfunction” will start at the beginning of 2020 with a 5-Year PhD Track in Neuroscience. The GTC (Graduate Training Centre of Neuroscience) with its new Head and TNC board member **PD Dr. Marc Himmelbach** hosts the school – TNC Board member **Dr. Peter Dayan** from the Max Planck Institute for Biological Cybernetics will be the speaker.

3. Awards & prizes

Tübingen’s Neuroscientists were also successful in receiving several awards and honors – a selection:

The University of Tübingen is to host another Humboldt Professorship. TNC Board member **Dr. Peter Dayan**, one of the world's leading experts in theoretical neuroscience, is now conducting research in the Department of Informatics. He recently became director of the Max Planck Institute for Biological Cybernetics, where he is establishing the Department of Computational Neuroscience. He received the **Alexander von Humboldt Professorship** to further intensify the cooperation between university, hospital and other research institutes.

TNC speaker **Prof. Dr. Thomas Gasser** became a new member of the **German National Academy of Sciences (Nationale Akademie der Wissenschaften) Leopoldina**. The Leopoldina originated in 1652 as a classical scholarly society and now has 1,600 members from almost all branches of science. It scientifically reviews and addresses key issues of prospective significance to society.

This year’s **Clinical and Translational Proteomics Award (HUPO Award)** went to TNC founding member **Prof. Dr. Marius Ueffing** from the Institute for Ophthalmic Research. The award recognizes a scientist in the field of clinical and translational proteomics. Prof. Ueffing has developed research strategies to combine bioanalytic, proteomic, functional genomics and computational research towards investigation of disease mechanisms and markers.

Dr. Simone Behrens (born Mölbert) from TNC founding member **Prof. Dr. Stephan Zipfel**’s Department at the Psychosomatic Medicine & Psychotherapy at the UKT won the **KlarTextPreis für Wissenschaftskommunikation**, awarded by the Klaus Tschira Stiftung. She received the price for writing an article that is easily understood by the public about her dissertation “Body Size Estimation in Eating and Weight Disorders”.

This year's **Attempto Prizes**, awarded by the Tübingen Attempto Foundation, went to **Svenja Brodt** and **Anuck Sawangjit** of the Institute of Medical Psychology and Behavioural Neurobiology. The doctoral candidates are working on different aspects of memory formation. The Attempto Prize was inaugurated in 1983 by the psychiatrist Konrad Ernst and his wife Dorothea. It is awarded annually to early-career researchers for outstanding work on brain functions and disorders carried out at the University of Tübingen and at the Max Planck Society's Tübingen institutions.



4. Web presence of the TNC

The homepage was filled step by step with more information:

<https://tuebingenresearchcampus.com/research-in-tuebingen/tnc/>

The Twitter channel was successfully initiated and tweets about the Neuroscience community are sent out almost every day: <https://twitter.com/TueNeuroCampus>

A new calendar with all the Neuro Talks in Tübingen was implemented:

<https://hih-oc.neurologie.uni-tuebingen.de/index.php/apps/calendar/p/nS9zkForKs2BcPaT/Neuro-Talks-Tbingen>

An article about the history of the TNC will be published in the next edition of “neuromag” (the magazine of the GTC students). It is already online:

<http://blog.neuromag.net/2019/08/17/tuebingenneurocampus/>

5. Governance of the TNC

5.1. Institutional Steering Board (ISB)

The **Institutional Steering Board (ISB)** serves as an intermediary structure to implement initiatives and ideas of the TNC within the participating institutions of the University and other research institutions and also to convey institutional strategies to TNC members.

The ISB met three times in 2019: on 23.1., 23.5. and 14.10. and discussed current developments and future plans for the TNC.

The members of the ISB can be found here:

<https://tuebingenresearchcampus.com/research-in-tuebingen/tnc/partners/>

5.2. Neuro Campus Initiatives (NCIs)

The TNC relies on the self-motivated activity of neuroscientists in Tübingen, who can form **Neuro Campus Initiatives (NCIs)** in order to promote the priority goals of the TNC as well as their own research fields. These activities are supported by Coordinator Silke Dutz who will help to organize meetings and foster exchange and communication.

5.2.1. NCI “Single cell transcriptomics of intact neural tissues & data science challenges”

TNC founding members **Prof. Dr. Philipp Berens** (Institute for Ophthalmic Research), **Prof. Dr. Thomas Euler** (CIN) and **Prof. Dr. Peter Heutink** (DZNE) founded the first NCI called “Single cell transcriptomics of intact neural tissues and data science challenges”.

The idea of this NCI is that data scientists and bioinformaticians from different centers get to know each other during meetings where postdocs and PhD students present their work and discuss it among each other.

5.2.2. NCI “Molecular and Functional Neuroimaging”

The second NCI “Molecular and Functional Neuroimaging” was founded by **Dr. Kristina Herfert** from the Werner Siemens Imaging Center and she is currently looking for collaborations. Dr. Herfert is very interested in collaborating with research groups focusing on mouse and rat models of neurodegenerative and neuropsychological disorders and combining in vivo molecular and functional brain imaging with other molecular imaging technologies and methods from molecular biology, microscopy, electrophysiology and others.

5.2.3. NCI “The Developing brain”

Dr. Simone Mayer (Hertie Institute for Clinical Brain Research) initiated the third NCI “The Developing Brain” in July 2019. Several research groups with an interest in different aspects of brain development and plasticity are spread through TNC member institutions. This NCI aims to raise awareness for developmental neuroscience questions within the TNC and provide a platform for exchange that fosters collaborations with the long-term goal of strengthening a developmental neuroscience research focus within the TNC.

Other members are: **Prof. Dr. Birgit Derntl** (Department of Psychiatry and Psychotherapy), **Prof. Dr. Manfred Hallschmid** (Institute for Medical Psychology & Behavioural Neurobiology), **Prof. Dr. Ingeborg Krägeloh-Mann & PD Dr. Samuel Gröschel** (University Children's Hospital, Department of Neuropediatrics) and **Prof. Dr. Hubert Preißl** (fMEG Center/Institute for Diabetes Research and Metabolic Diseases of the Helmholtz Center Munich at the University of Tübingen)

TNC Seminars with different speakers are hosted quarterly, the next one will take place on Tuesday, 21.01.20, 13.30h at the DZNE seminar room.



Special Seminar
by the Neuro Campus Initiative „The Developing Brain”
Host: Dr. Simone Mayer (Hertie Institute for Clinical Brain Research)

Tuesday, 21st January 2020 13:30h
@ German Center for Neurodegenerative Diseases (DZNE)
Otfried-Müller-Str. 23, Conference room (ground floor)

Speakers:

Prof. Dr. Katrin Giel & Annika Dörsam (Arbeitsbereich Psychobiologie des Essverhaltens, Abteilung Innere Medizin VI, Psychosomatische Medizin und Psychotherapie):
„Investigating the influence of maternal eating and weight disorders on fetal development and pregnancy outcomes - the EMKIE-Study”

Prof. Dr. Karl Oliver Kagan (Universitäts-Frauenklinik, UKT):
„Challenges in advising upon conspicuous prenatal central nervous system results”

Everyone is welcome to join!



6. Coming up in 2020

21.1.2020	TNC Seminar “The Developing Brain”, 13:30h, DZNE
27.1.2020	New Year’s Reception , 18:00h, DZNE
February-April 2020	TNC Elevator Pitches #4, #5 + #6
Summer term 2020	TNC Neurocolloquium
June 2020	2nd TNC Research Day
21.09.-25.09.2020	TNC Summer School “Understanding how life history affects ageing”

Future of the GTC (Graduate Training Centre of Neuroscience)

Several projects are ongoing to strengthen the GTC as a major player in Neuroscience education in Tübingen.

Plans of the GTC for 2020:

- Moving the GTC to the Neurocampus Schnarrenberg
- Overhaul of the Master’s programmes with re-accreditation in 2021
- Expanding the doctoral programs
- Strengthen the links between medically oriented and basic neuroscience oriented components of the programs
- Participate in the presentation of Tübingen Neuroscience education as part of a common platform

If you want to participate in the TNC or have any questions, please contact:

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Homepage: <https://tuebingenresearchcampus.com/research-in-tuebingen/tnc/>