

Medical Winter School

From Macroscopy to Histology: Organization of the Central Nervous System

March 21st to 29th 2026

Program Overview

Duration: 6 days **Location:** Institute of Anatomy and selected research laboratories, University Medical Center Rostock and University Rostock

Core Components

- **Human brain dissections** (supervised by anatomical experts)
- **Histology sessions** using high-resolution microscopy and digital imaging systems
- **Lectures and seminars** on major CNS diseases (e.g., multiple sclerosis, Parkinson's disease, stroke)
- **Interactive discussions** on the organization of medical education in different countries
- **Career development sessions** with insights into clinical and research paths

Further Program

- One day visit to Schwerin, the capital city of the state of Mecklenburg-Vorpommern
- Presentation "Report of a ship's doctor" by Dr. Gert Schroeter followed by dinner aboard the ship "Likedeeler"
- trip to Berlin with a visit to the Charité Museum, the German Parliament and free time to explore the city on your own terms
- more program parts will be announced

Specific Aims

- To provide deep insight into the structural and functional organization of the CNS
- To foster neuroanatomical knowledge through human brain dissection
- To introduce students to neuropathological concepts and neurological disease patterns

- To promote international exchange among students in medicine and related disciplines
- To offer early career guidance and orientation within the field of neuroscience and above

Participant Support

- Travel support: €300 per participant
- The University of Rostock will cover accommodation, Breakfast, Public Transport in Rostock, Course Program and social activities

Highlight Speakers:

Karen Tashima, MD is a professor of medicine in the Division of Infectious Diseases at the Brown University in the United States. She is the Director of the HIV Clinical Studies and Clinical Research Site Leader of the AIDS Clinical Trials Unit at The Miriam Hospital. Dr. Tashima is the study chair of an ACTG study evaluating the effectiveness of a new strategy to treat HIV-infected persons with drug resistant virus. In 2005, she received the HIV Leadership Award as Outstanding HIV/AIDS Clinical.

Since 2018 Prof. Dr. **Markus Kipp** is Director of the Institute of Anatomy. He and his research group are interested to understand the physiology and pathology of the axon-oligodendrocyte-myelin unit. Particularly, they are interested to understand to what extent stressed oligodendrocytes regulate peripheral immune cell recruitment, and by which neuroanatomical pathways peripheral immune cells gain access into the CNS parenchyma. To address their scientific challenges they use state of the art techniques such as design-based stereology, a set of behavioral analyses such as high speed ventral plane videography, or positron emission tomography/computed tomography. Whenever possible, they compare their pre-clinical results with post-mortem samples, obtained from MS patient donors.

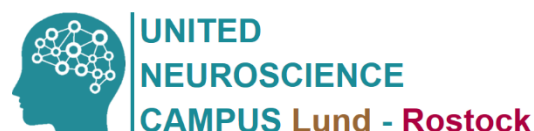
Sonia Mayoral is a cellular neuroscientist interested in studying cell-cell interactions in the brain focused around the development and function of oligodendrocytes, specialized glial cells that wrap myelin around neurons. She is currently Robert J. and Nancy D. Carney

Assistant Professor of Neuroscience at the Carney Institute for Brain Science, Brown University.

Background and Rationale

The human brain remains one of the most complex and fascinating structures in medicine and biology. Understanding its macroscopic and microscopic organization is fundamental not only for future clinicians, but also for students in neuroscience and biomedical research. To address this need, the Medical Winterschool Rostock offers a unique, hands-on opportunity to explore the central nervous system (CNS) through guided dissections, histological workshops, and lectures on major neurological disorders. This Winterschool also serves as an international platform for interdisciplinary exchange, where students can connect across countries and systems. Through a strong collaboration with ERASMUS partner institutions and the United Neurocampus Lund – Rostock, this initiative supports cross-border academic integration and highlights Rostock as a hub for neuroscience and health-tech research.

Partner Institutions:



Contact:

Dr. Christoph Rothenbuecher

International Office – Rostock University

medwin.io@uni-rostock.de