

SUBPROJECTS

- A01** Scheerer
Structural elucidation of neuropeptide GPCRs
- A02** Huster, Hildebrand
Investigation of the structure and dynamics of the ghrelin/GHS receptor complex
- A03** Schmidt, Sinz
Characterizing the molecular interactions of Y1 and Y2 receptors with NPY
- A04** Huster, Beck-Sickinger
Characterizing the molecular interaction between the Y receptor and arrestin
- A05** Scheerer, Sphan, Schönberg
Structures of adhesion GPCR by cryo-electron microscopy
- A06** Sträter, Langenhan
Enzymology of autoproteolysis and signaling function of the GAIN domain in adhesion GPCRs
- A07** Meiler
Innovative Rosetta algorithms for comparative modeling and docking of GPCRs
- B01** Beck-Sickinger
Molecular mechanisms of allosteric modulators at Y-receptors
- B02** Biebermann, Kühnen
Melanocortin 4 receptor signaling revisited: from ligand/receptor interphase to signaling modulation
- B03** Kaiser
Role of extracellular loop interactions in NPY receptor activation
- B04** Coin
Mapping binding sites of NPY peptides on the Y5 receptor using genetically encoded crosslinkers
- B05** Liebscher
Structural consequences of adhesion GPCR activation
- B06** Scholz, Langenhan
Dynamic modulation of adhesion GPCR function through complex formation
- C01** Stadler, Hildebrand
Evolution of functional selectivity in GPCR signal transduction
- C02** Annibale, Lohse
Microscopic methods to study how GPCR dynamics and localization impact signaling specificity
- C04** Promel, Schöneberg
The neglected receptor N terminus – signal filter, signal integration, trans-signaling of adhesion GPCR
- C05** Bock, Coin
Structural dynamics of allosteric coupling in GPCRs
- Z01** Beck-Sickinger, Schöneberg
Central Administration
- Z02** Huster
Integrated Research Training Group (IRTG)
- Z03** Scheerer, Beck-Sickinger
Peptide synthesis and membrane protein (GPCR) expression
- Z04** Meiler, Stadler, Hildebrand
Computational models of structure, dynamics and evolution of GPCRs

BASIC AND STRUCTURE

KEY FACTS

Coordinating University: Leipzig University
Research area: Biochemistry, Structural Biology, Biophysics, Bioinformatics, Bioorganic Chemistry, Molecular Pharmacology
FIRST CLASS EQUIPMENT: NMR, MS, FRET, cryo-EM, crystallography;
Core Facility: Bio-Imaging & Fluorescence Technology, NMR & HPC Center, ...

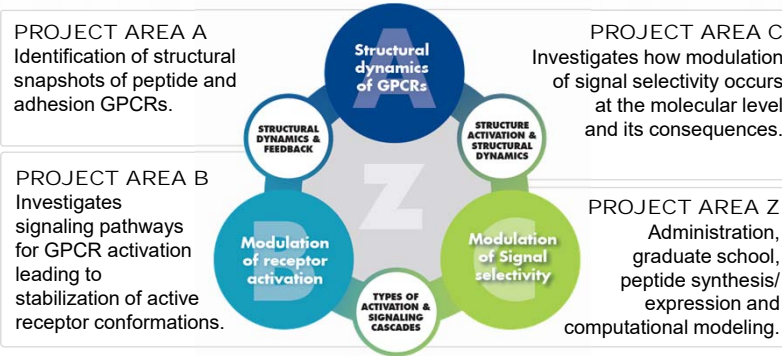
ORGANIZATIONAL STRUCTURE

Spokespersons Operational management, chairperson of Board, MPI & GM	Member Meeting Election of the Spokesperson, approval final proposal, purchase, etc.
Advisory Board	Meeting of the Project Leaders Decisions about integration of new projects, doctoral representative is a full member, etc.
	Board Participation in hiring and termination, decisions on major reallocations, etc.

OUTSTANDING FEATURES

- Highly motivated and outstanding researchers
- Long-standing research collaboration: over 170 JOINT PUBLICATIONS with at least 2 PL in the last 10 years
- International University partnership: Vanderbilt-Leipzig

RESEARCH AREAS



KNOWLEDGE TRANSFER

- PUBLICATIONS**
- ✓ Over 40 SFB1423 Publications
 - ✓ Over 10 Open Access
- INTERNATIONAL VISIBILITY**
- Organization and implementation of scientific events, e.g. workshops, modules, lecture series, faculty clubs
 - 4GPCRnet (26.-29.09.2022)
 - INTERNATIONAL SYMPOSIUM together with FOR2372, COST ACTIONS Adher'n Rise and ERNEST
 - Public Relations: Website, Press
 - Social Media: TWITTER

INTERNATIONAL NETWORK / MERCATOR

- ✓ International cooperation partners e.g. **KOBILKA, ERNST, GLORIAM, EMMITTE**
- ✓ Over 10-YEAR EXCHANGE PROGRAM with Vanderbilt University
- ✓ **Over 50 joint publications**
- ✓ Joint third-party funded projects
- ✓ MERCATOR-FELLOWS GUREVICH, MCHAOURAB



GENDER EQUALITY & DIVERSITY

42% FEMALE PL

NETWORKING — FAMILY	
Career development workshops and networking events	Flexible Child Care
Scientific talks and round table meetings	Flexibility of working hours
Internal mentoring program for female scientists	Flexible funding and support during family part-time
	Participant costs for school holiday program
	Mobile KidsBox
	Emergency family care funds
	Home Office

CAREER DEVELOPMENT FRAMEWORK



PROMOTION OF RECRUITMENT OF FEMALE SCIENTISTS

All members of the CRC can make use of equal opportunities' funds after application to the Board in advance.

SCIENTIFIC MANAGEMENT

- Development of the SCIENTIFIC PROGRAM
- Preparation and writing of **scientific reports & proposals**
- Coordination between the participating institutions
- Logistics & Management of FINANCES & PERSONAL
- Organization and support of **regular meetings / preparation of scientific topics and events**
- **Organization of the SCIENTIFIC EXCHANGE**
- Organize and support the **outreach activities**
- PROJECT MANAGEMENT & QUALITY CONTROL of Research Data Management / Good Scientific Practice

ABOUT US

COORDINATOR
Leipzig University

PARTICIPATING INSTITUTIONS

WELL ESTABLISHED RESEARCH TEAM

CONTACT

FUNDED BY
DFG - Deutsche Forschungsgemeinschaft

CHARITÉ – Universitätsmedizin Berlin, Martin-Luther-Universität Halle-Wittenberg
Max-Delbrück-Centrum for molecular Medicine, Heinrich-Heine Universität Düsseldorf

- ✓ 18 Subprojects: 22 PL, 30 PhDs, 7 PostDocs
- ✓ Over 170 joint Publications
- ✓ **First class equipment:** NMR, MS, FRET, cryo-EM, crystallography; HPC's

Leipzig University
Institute of Biochemistry
Prof. Dr. Annette Beck-Sickinger
Brüderstraße 34, 04103 Leipzig

WEB www.sfb1423.de
MAIL sfb1423@uni-leipzig.de
TWITTER #sfb1423 I JOIN US