At a glance

- Medicinal Chemistry based hit identification and evaluation as well as hit-to-chemical tool and lead optimization
- State-of-the-art medicinal chemistry laboratory equipment for solution-phase chemistry, parallel synthesis and automated purification
- Access to co-localized resources for screening (EU-OPENSCREEN partner site), computational chemistry, chemoinformatics, cellular imaging, NMR, peptide synthesis
- Tailor-made probes based on chemical tools e.g. for target deconvolution, fluorescent labeling for assay development and imaging studies

Infrastructure and technical focus

- State-of-the-art medicinal chemistry lab equipped to industry standards
- Hit-triage and chemical optimization of small molecule modulators
- Fragment-based drug discovery approaches
- Structure-based design, scaffold hopping and hybridization
- Consultancy and support for developing chemistry strategies for projects

Dr. Marc Nazaré (Head of Research Group)

"Developing a chemical tool is a very collaborative approach. EU-OPENSCREEN is essential for us to network and join forces to develop new chemical tools and leads together with our partners."

Projects past and present

- 2021 - 2024 | ALOOD - Allostery in Drug Discovery (EU)
- 2021 - 2023 | Battling Drug Resistance of Tumors using novel SHP2 Inhibitors (DFG)
- 2021 - 2023 | Design of ligand-based targeted delivery vehicles for the murine C-type lectin receptor Langerin (DFG)
- 2017 - 2021 | Tumor-targeting SMART imaging agents (DFG/NSF)

Our science in selected publications

- From Pyrazolones to Azaindoles: Evolution of Active-Site SHP2 Inhibitors Based on Scaffold Hopping and Bioisosteric Replacement
  - Med. Chem. 2020, 63, 14780 - 14804
- An Activatable Lanthanide Luminescent Probe for Time-Gated Detection of Nitroreductase in Live Bacteria
  - Angew. Chem. Int. Ed.2020, 59, 8728
- Probing 2H-Indazoles as Templates for SGK1, Tie2, and SRC Kinase Inhibitors
  - ChemMedChem 2019, 14, 1514-1527
- Allosteric Inhibition of a Mammalian Lectin
  - J. Am. Chem. Soc. 2018, 140, 14924-14934
- Mutant KRAS-driven cancers depend on PTPN11/SHP2 phosphatase
  - Nat. Med. 2018, 24, 954-960

Further info and site-contact

Dr. Marc Nazaré: nazare@fmp-berlin.de | +49 (0) 30 9406 3083
Website: https://www.leibniz-fmp.de/nazare