

CZ

Medicinal chemistry site

Masaryk University (MU) – Laboratory of Organic Synthesis and Medicinal Chemistry

Masaryk University, Kamenice 5, Brno, Czech Republic

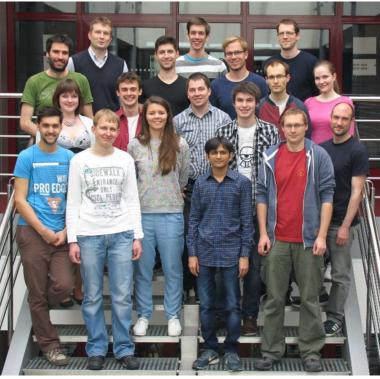


- History of successful collaboration within chemical biology projects
- Long-term expertize in identification of new (patentable) organic compounds with targeted biological activity
- Strong track record in identification of new kinase inhibitors

Infrastructure and technical focus

- > Facilities in new campus
- More than 20 fully equipped workplaces for organic synthesis
- State-of-the-art technology for purification and structural characterization of organic compounds







Dr. Kamil Paruch (Head of Unit)

"We support the challenges of biological research with state-of-the-art expertise in medicinal chemistry."

Projects past and present

2020 - 2022 | CZ-OPENSCREEN National infrastructure for chemical biology → Link

2019 - 2023 | EU-OPENSCREEN DRIVE Ensuring long-term sustainability of chemical biology services within Europe and beyond ◆ Link

2018 - 2022 | PRECLINPROGRESS Preclinical progression of new compounds with targeted biological activity ◆ Link

Our science in selected publications

Novel Chk1 inhibitor MU380 exhibits significant single-agent activity in TP53mutated chronic lymphocytic leukemia cells

◆ Haematologica 2019, 104, 2443

Furo[3,2-b]pyridine: A novel privileged scaffold for highly selective kinase inhibitors and effective modulators of the Hedgehog pathway

◆ Angewandte Chemie 2019, 58, 1062

A concise synthesis of forskolin

→ Angewandte Chemie 2017, 56, 12586

The CHK1 inhibitor MU380 significantly increases sensitivity of human docetaxel resistant prostate cancer cells to gemcitabine by induction of mitotic catastrophe

◆ Molecular Oncology 2020, 14, 2487

Further info and site-contact

Dr. Kamil Paruch: paruch@chemi.muni.cz | +42 (0) 549 49 5477

Website: http://orgsyn.sci.muni.cz/