

The expertise offered by the interested researchers (Mônica A. Coronado and Raphael J. Eberle):

Identification of lead L-peptide inhibitors against viral target proteins using phage display and natural peptide sources. These mother peptides form the basis to develop D-peptide based antivirals. In our group we produce and purify several virus target proteins, perform the identification of potential lead peptides and biochemical, biophysical, structural characterization of the target-peptide complex.

In addition, the group has projects on the investigation of pathogen-host relationships on the metabolic level using NMR metabolomics approach.

- Mônica A. Coronado and Raphael J. Eberle leading together the group [Structural-guide drug development to combat neglected and emerging diseases](#) at the IBI-7, Forschungszentrum Jülich, Germany. You can find information about their research [here](#).
- Looking to be a partner in [HORIZON-HLTH-2023-DISEASE-03-04: Pandemic preparedness and response: Broad spectrum anti-viral therapeutics for infectious diseases with epidemic potential \(RIA\)](#)

A brief description of the host institution, the Institute of Biological Information Processing, Structural Biochemistry (IBI-7) at Forschungszentrum Jülich:

<https://www.fz-juelich.de/en/ibi/ibi-7>

The institute's research is specialized in interdisciplinary programs and provides top equipment and optimal conditions for basic and applied research, especially in the field of the development of D-peptide drugs.

IBI-7 is home to leading experts in structural biology, biophysics, NMR, computational biology, analytics, neuroscience and D-peptide drug development.

The institute hosts in the Biomolecular NMR Center a new 1200 MHz NMR (one of two in the world) and several NMRs ranging from 600 to 900 MHz.

Contact details:

Mônica A. Coronado: m.coronado@fz-juelich.de

Raphael J. Eberle: r.eberle@fz-juelich.de