

CONRAD FISCHER, PHD

COURSES

- CHE 343, CHE 343L Organic Chemistry with Lab, I
- CHE 344, CHE 344L Organic Chemistry with Lab, II
- CHE 352, CHE 352L Biochemistry I with Lab
- CHE 395, CHE 495 Research

RESEARCH INTERESTS

- Cardiovascular active peptides and GPCR receptor signaling
- Viral protease inhibitors
- Nature-inspired supramolecular inclusion hosts

SELECTED PUBLICATIONS

- Fischer, C.; Lamer, T.; Fernandez, K.; Gheblawi, M.; Wang, W.; Pascoe, C.; Lambkin, G.; Iturrioz, X.; Llorens-Cortes, C.; Oudit, G.Y.; Vederas, J.C. Optimizing PEG-extended apelin analogues as cardioprotective drug leads. Importance of the KFRR motif and aromatic head group for improved physiological activity. *J. Med. Chem.*, **63**, 12073-12082, 2020
- Vuong, W.; Khan, M.B.; Fischer, C.; Arutyunova, E.; Lamer, T.; Shields, J.; Bandi, H.; McKay, R.T.; van Belkum, M.J.; Joyce, M.; Young, H.S.; Tyrrell, L.; Vederas, J.C.; Lemieux, M. J. Feline coronavirus drug inhibits the main protease of SARS-CoV-2 and blocks virus replication, *Nature Commun.*, **11**, 4282, 2020
- Fischer, C. A patent review of apelin receptor modulators (2014-2019), *Expert Opin. Ther. Pat.*, **30**, 251-261, 2020
- Masoud, A.G.T.; Lin, J.X.; Farhan, M.A.; Fischer, C.; Zhu, L. F.; Anderson, C. C.; Sis, B.; Kassiri, Z.; Moore, R. B.; Kim, D.; Vederas, J. C.; Adam, B. A.; Oudit, G. Y.; Murray, A. G. Apelin directs endothelial cell differentiation and vascular repair following immune-mediated injury, *J. Clin. Invest.*, **130**, 94-107, 2020

SELECTED CONFERENCE PRESENTATIONS

- Apelin analogues as novel cardioprotective drugs, 102nd Canadian Chemistry Conference and Exhibition, June 2019, Québec, Canada

- **PEGylated apelin analogues as cardiovascular active drugs, 101st Canadian Chemistry Conference and Exhibition, May 2018, Edmonton, Canada**
- **Apelin as key peptide for heart disease treatment, 1st RSC Anglo-Nordic Medical Chemistry Symposium, June 2017, Snekkersten Conference Center, Helsingør, Denmark**
- **Engineered apelin and natriuretic peptides as potent therapeutics for the treatment of cardiovascular diseases. Invited talk, June 2017, University of Lincoln, Lincoln, UK**
- **Apelin as key peptide for heart disease treatment. 34th European Peptide Symposium, September 2016, University of Leipzig, Leipzig, Germany**
- **Laterally modified calix[4]arenes as potential sensor materials. 20th Junior Research-Symposium in Bioorganic chemistry, September 2011, KIT Karlsruhe, Karlsruhe, Germany**

HONORS / AWARDS

- **2016-2018 Postdoctoral Fellowship, Alberta Innovates Health Solutions**
- **2014-2015 Postdoctoral Fellowship, Deutsche Forschungsgemeinschaft (DFG, German Research Foundation)**
- **2008 M.Sc. thesis award, Agricola Medal and Price for best MSc thesis in 2008, University Freiberg, Germany**

PROFESSIONAL MEMBERSHIPS

- **ACS - American Chemical Society, 2021-present**
- **CSC - Canadian Society of Chemistry, 2018-present**
- **GDCh - German Chemical Society, 2008-present**