

DNA-encoded chemical librariesAndreas GlogerPhilochem AG, Libernstrasse 3, 8112 Otelfingen (Switzerland)
andreas.gloger@philochem.ch

DNA-encoded chemical libraries are sets of organic molecules, individually coupled to distinct DNA fragments, serving as amplifiable identification barcodes. Since the chemical compounds in the library can be individually identified and quantified by virtue of the cognate DNA tag, they can be used as a mixture and screened simultaneously. The technology allows the construction and screening of libraries, containing billions of compounds.

In this lecture, I will briefly present the foundations of DNA-encoded chemical library technology and show how this methodology can be used for the discovery of ligands to protein targets of pharmaceutical interest.

- [1] D. Neri, R. Lerner, *Annu. Rev. Biochem.*, **2018**, *87*, 479-502.
- [2] Y. Li, R. De Luca, S. Cazzamalli, F. Pretto, D. Bajic, J. Scheuermann, D. Neri, *Nat. Chem.*, **2018**, *10*, 441-448.
- [3] G. Zimmermann, D. Neri, *Drug Discov. Today*, **2016**, *21*, 1828-1834.
- [4] M. Wichert, N. Krall, W. Decurtins, R.M. Franzini, F. Pretto, P. Schneider, D. Neri, J. Scheuermann, *Nat. Chem.*, **2015**, *7*, 241-249.