Contribution ID: **194** Type: **Talk**

ALLOSTERIC REGULATION OF GTP CYCLOHYDROLASE I

Tuesday, 15 March 2022 15:40 (20 minutes)

We determined high resolution structures of human GCH1 and GCH1-GFRP complexes by cryoEM and X-ray crystallography and studied the mechanisms of allosteric regulation by biophysical methods. Inhibition of the enzymatic activity, a drug discovery target in the field of pain disorders, is not a result of hindrance of substrate binding, but rather a consequence of accelerated substrate binding kinetics.

Primary author: NAR, Herbert

Presenter: NAR, Herbert

Session Classification: Biocrystallography: Drug Design

Track Classification: Main conference: Biologic Structure, Function, Reactivity, and Regulation