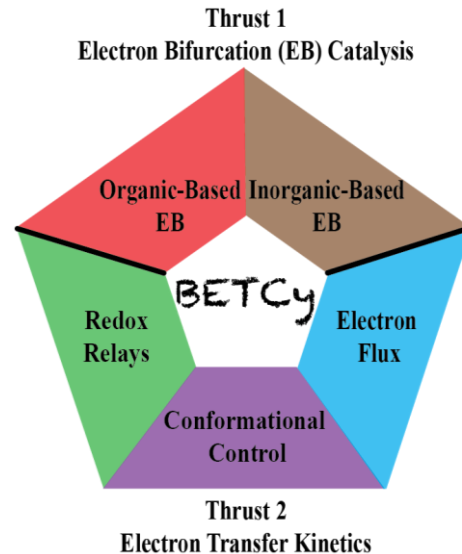


Biological Electron Transfer and Catalysis Center (BETCy)

John W. Peters (Washington State University); Class: 2014-2020

MISSION: To understand the means by which biology controls the kinetics and thermodynamics of electron bifurcation at both organic and inorganic centers, electron transfer relays, allosteric coupling, and cooperative conformational dynamics.



<http://betcy-efrc.org/>

RESEARCH PLAN

Develop a collective knowledge of metalloenzymes as models for redox reactions by applying physical science and computational tools to characterize biochemical reactions catalyzed by multi-subunit enzymes harboring arrays of iron-sulfur clusters and flavin cofactors. Understanding these mechanisms is central to overcoming the thermodynamic barriers that currently limit production of reduced products and fuels.



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