



Mass Spectrometry Core & Analytical Redox Biology Core

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Sulfide Metabolites and Human Disease

Assistant Professor

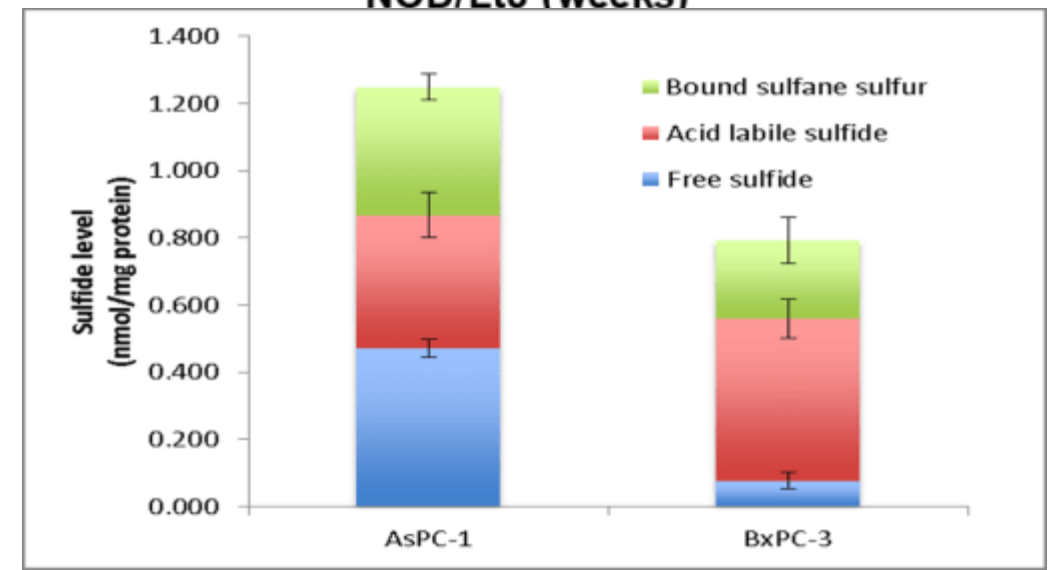
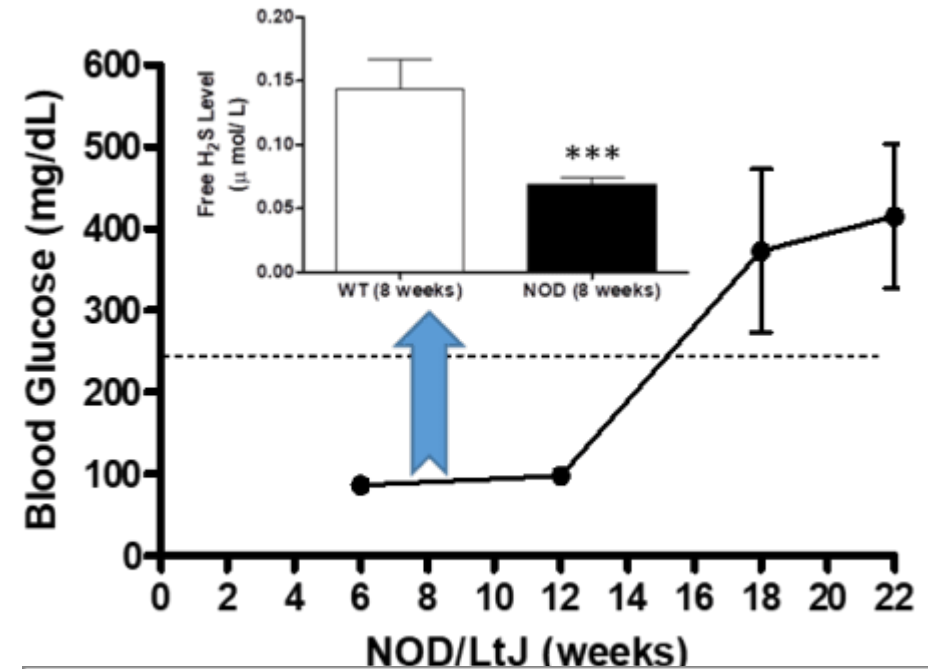
Department of Pathology and Translational Pathobiology

Core Director

Analytical Redox Biology, COBRE & MS Core

Major Research Interests:

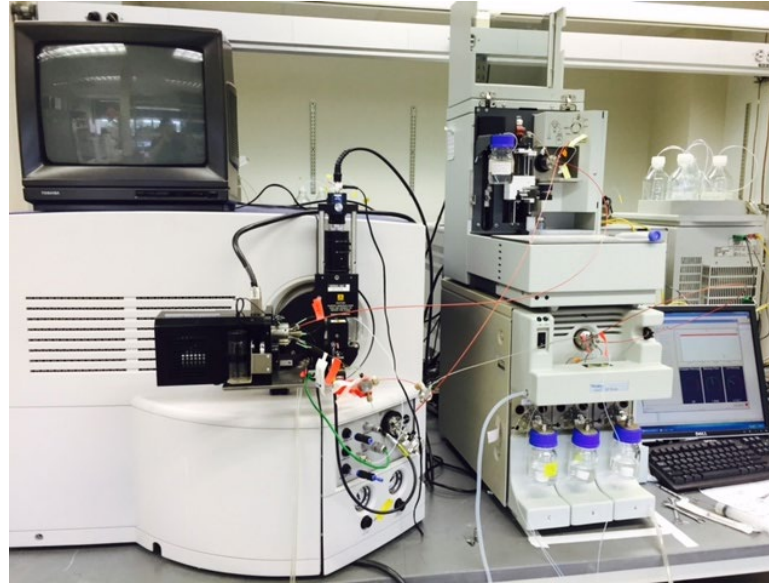
- ❑ Sulfide metabolites in the diabetes and pancreatic cancer
- ❑ Protein tyrosine phosphatase in H₂S biology
- ❑ Molecular modeling and structure prediction



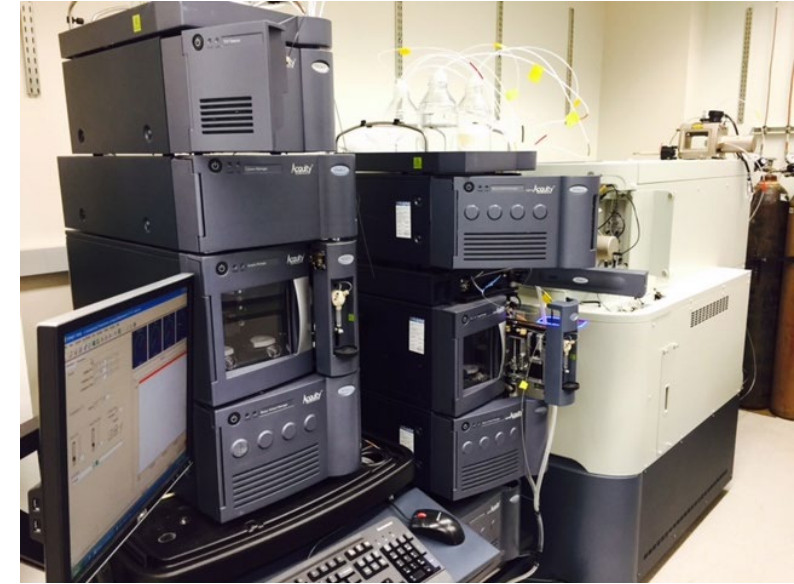
Mass Spectrometry Core



LCQ-DECA XP

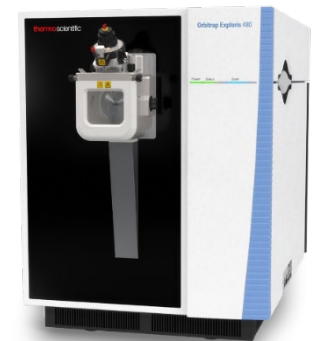


Micro- Q-TOF



SYNAPT HDMS

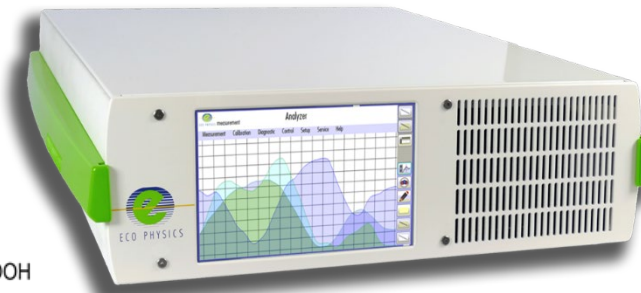
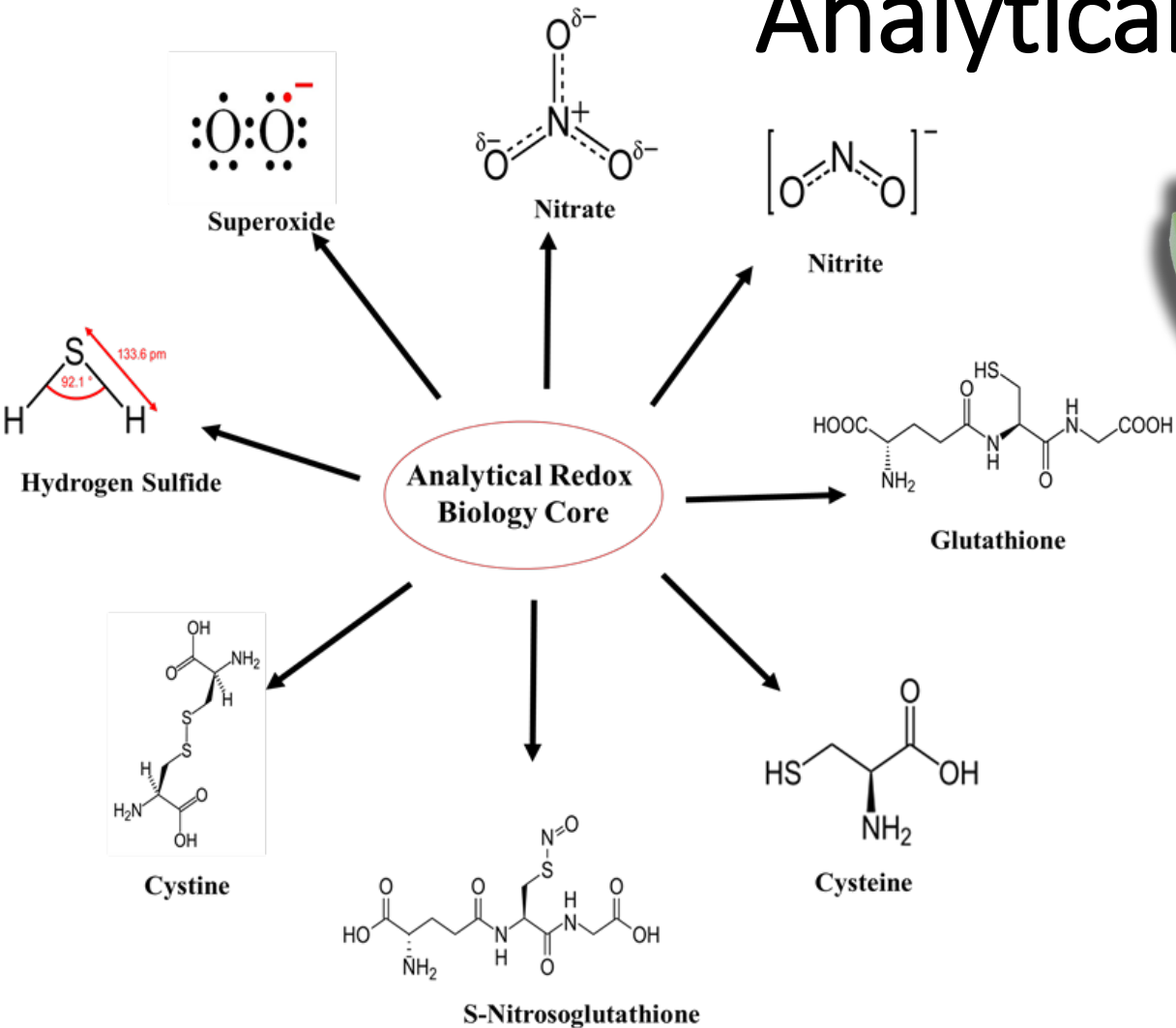
- To provide protein identification/redox-dependent post-translational modifications.
- To metabolite profiling especially the redox-dependent regulation in models of CVD.
- To develop new MS-based analytical approaches as request from our users.



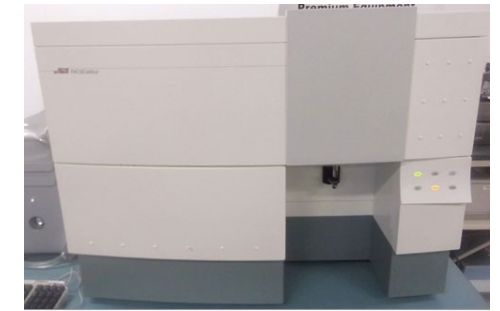
Orbitrap Exploris 480

Centers of Biomedical Research Excellence

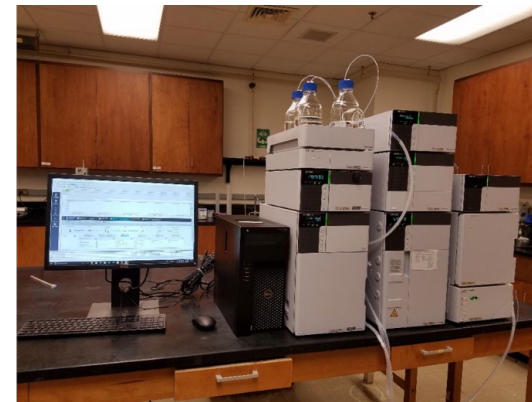
Analytical Redox Core



nCLD 88



Flow cytometry



Prominence HPLC System

- Set-up in 2018
- To provide accurate assessment of redox regulation of molecular signaling.
- Perform the requested measurement from PI.



Acknowledgements



- Lab member:

- Dr. Yahui Tang

- The collaboration in LSU Health Shreveport:

- Dr. Christopher Kevil
- Dr. Wayne Orr
- Dr. Hyung Nam
- Dr. Christopher Pattillo



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THANK YOU.

Any questions?