Comparative Mitochondrial Health Assessment Core (CMHAC)

Contact: Jianhua Zhang (zhanja@uab.edu)
        Victor Darley-Usmar, PhD (darley@uab.edu)
        Scott Ballinger, PhD (sballing@uab.edu)
        ShockCenter@uab.edu

https://www.uab.edu/shockcentercores/cmhac/cmhac-application

Mitochondrial Bioanalytical Services

☐ Mitochondrial Oxidative Phosphorylation Complex Activity Assays

☐ Mitochondrial Protein Content Analysis.

☐ Mitochondrial Citrate Synthase Assay

☐ Bioenergetics' Analysis of Tissues (fresh and frozen), Mitochondria, and Cells

Mitochondrial models and mtDAMPs

☐ Mitochondrial nuclear exchange (MNX) models

☐ mtDNA damage and haplotyping analysis

☐ Measurement of mtDAMPs

Autophagy and Mitophagy Assessments
☐ Ratio of LC3 I and II proteins by western blot.

☐ Autophagic flux assays

**Oxidative Stress Measurements**

☐ Measurement of reduced Glutathione

☐ Determination of Oxidation of Thiols (as well as protein thiols)

☐ Protein S-glutathionylation

☐ F2-Isoprostane Measurements

**Targeted Proteomics and Metabolomics**

☐ F2-Isoprostane Measurements

☐ Krebs cycle and glycolysis intermediates

$\textsuperscript{55}$ Targeted metabolomics and isoprostane assays require the use of the UAB Targeted Metabolomics and Proteomics Laboratory and will cost $200/sample (this includes sample preparation in NSC core at $140 / sample, as well as the UAB Targeted Metabolomics and Proteomics Laboratory and will start at a rate of $60/sample). We will act as an intermediary for samples that need to be processed by mass spectrometry.

All other assays will start at a base cost of $200. A more thorough cost cannot be assessed until the experimental details have been discussed, i.e., sample matrix, sample number and endpoint desired.
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