

# Comprehensive Proteome Characterization of *Rhodopseudomonas palustris*

*Rhodopseudomonas palustris*



- **Purpose:**
  - An important facet of understanding the metabolic diversity of the bacterium *Rhodopseudomonas palustris* involves comprehensive characterization of the proteome of this organism under different growth conditions.
  - State-of-the-art mass spectrometric approaches combined with multidimensional liquid chromatographic separations are being developed and implemented for these “shotgun” proteome measurements.
  - Work in this project will involve both qualitative and quantitative proteome measurements.
  - The longer term objective is to collaborate with biological colleagues to compare gene-knockout forms of *R. palustris* with the wild-type species to understand how functional activity is regulated.
- **PIs:** Robert Hettich and Greg Hurst
- **Sponsor:** U.S. DOE, Office of Biological and Environmental Research, Microbial Cell Program (FY 2004-2006)