

# Manipulation of Product Formation by a Novel Thermophilic Host Microorganism

Contact: John Nghiem (574-1184; ndp)

Funding Source: State Partnership Program (SPP)

**Objective:** Develop thermophilic (55-60°C) microbial strains for production of industrial chemicals.

**Application:** Simultaneous saccharification and fermentation under optimum conditions for both enzymes and microorganisms (55°C, pH 5).

**Approach:** Isolate suitable hosts then add/modify biochemical pathways.

**Progress:** Isolated three microbial cultures, which:

- Are facultative anaerobes
- Grow in simple media at pH 5 and 55°C
- Tolerate ethanol up to 45 g/L