



## 2008 Seed Grants

### *Feedstock Engineering, Plant Biotechnology & Crop Science*

**Seed Grant:** High throughput measurements of algal photosynthetic efficiency, growth, and triacylglycerol content with a lab-on-a-chip cytometer

Principal Investigator: Ralph Jimenez

C2B2 Institution: University of Colorado

**Seed Grant:** Elucidation of Algal Lipid Biosynthesis Pathways Using Proteomics and Lipidomics

Principal Investigator: Kenneth Reardon

C2B2 Institution: Colorado State University

### *Biochemical Engineering*

**Seed Grant:** Bioinformatic tools for the parallel assessment of genomic and meta-genomic data

Principal Investigator: Rob Knight

C2B2 Institution: University of Colorado

**Seed Grant:** Bioconversion of Extracted Algal Biomass into Ethanol

Principal Investigator: Kenneth Reardon

C2B2 Institution: Colorado State University

### *Thermochemical Engineering*

**Seed Grant:** Gasification of Lignin from Lignocellulosic Biomass

Principal Investigator: Robert Baldwin

C2B2 Institution: National Renewable Energy Laboratory

**Seed Grant:** Preparation and testing of a hybrid catalyst for LPG production from syngas

Principal Investigator: John Falconer

C2B2 Institution: University of Colorado

**Seed Grant:** A Novel Moving-Bed Reactor Configuration for Steam Reforming Pyrolysis Oil

Principal Investigator: Thomas McKinnon

C2B2 Institution: Colorado School of Mines

**Seed Grant:** Catalyst Engineering for Thermochemical Biomass Conversions to Fuels

Principal Investigator: Ryan Richards

C2B2 Institution: Colorado School of Mines

### **Process Engineering**

**Seed Grant:** Pyrolysis of Fractionated Lignocellulosic Biomass

Principal Investigator: Robert Baldwin

C2B2 Institution: National Renewable Energy Laboratory

**Seed Grant:** Study of New Polymer Membranes with Uniform, Sub-1-nanometer Pores for Molecular-Size-Selective Removal of Water from Bioprocess Product Mixtures

Principal Investigator: Douglas Gin

C2B2 Institution: University of Colorado

### **Product Engineering**

**Seed Grant:** Biorefinery Integration through Coproduction of Bioplastics (Renewal)

Principal Investigator: John Dorgan

C2B2 Institution: Colorado School of Mines

### **System Assessment and Analysis**

**Seed Grant:** A Test of the Viability of *Anabaenopsis elenkenii* for Production of Biofuel Feedstocks

Principal Investigator: William Lewis

C2B2 Institution: University of Colorado