



National Institute of Food and Agriculture
www.nifa.usda.gov

Biomass Research and Development Initiative

Current Status

Daniel Cassidy

National Institute of Food and Agriculture

National Program Leader – Forest Based Bioenergy





Biomass Research and Development Initiative (2009-2012)

- \$118 M supporting 25 projects
 - Advanced Biofuels
 - Bioproducts
 - Biobased chemicals
- Technical Areas
 - Feedstock Development
 - Fuels/Product Development
 - Development Analysis (LCA)



Process

- Broad eligibility
- Pre-application Review overseen by DOE
- Full Application Review overseen by USDA
- Awards made by each Department
 - No comingling of funds between Departments
 - No comingling of R&D and Demonstration



Applications and Budget

- 414 LOI/Pre-applications
- 47 Full Proposals
- \$67.72 Million ask
 - USDA Combined year budget ~\$7.2 Million
 - DOE up to \$3 Million



Topical Areas

- Feedstock Development: 7
- Biofuels/Bioproducs Development: 36
- Systems Analysis: 4



Review Committee

- 14 Members plus a Panel Manager
 - 3 Federal Scientists
 - 3 Industry representative
 - 6 Academia representatives
 - 2 Private Consultants



Committee Diversity

- 6 Females
- 5 Minority
- 12 States Represented
- 8 Former BRDI Panelists
- 4 Members of the TAC involved



USDA Awardees

- *“Integrated biorefinery to produce ethanol, high value polymers, and chemicals from lignocellulosic biomass”*
 - *University of California-Riverside*
 - *University of Tennessee*
 - *\$1.3 Million*



USDA Awardees

- *“Cotreatment for low-cost fermentation of cellulosic biomass”*
 - Dartmouth College
 - Penn State, Bioenergy Science Center, Enchi Corp.
 - \$1.8 Million



USDA Awardees

- *“Development of stochastic techno-economic and life cycle models for quantifying the economic and environmental costs of cellulosic bioenergy”*
 - *State University of New York*
 - *\$907,000*



USDA Awardees

- *“Forest bioenergy and biofuels integration: Sustainability, energy balance, and emissions from forest restoration in the southern Rocky Mountains”*
 - *University of Montana*
 - *University of N. Arizona, USFS RMRS*
 - *\$1.3 Million*



USDA Awardees

- *“Mid-Atlantic Biomass Sorghum Collaborative to Optimize Agronomic Production and Grower Profitability ”*
 - *North Carolina Biotechnology Center*
 - *NCSU, Virginia Tech, Chemtex International*
 - *\$1.9 Million*



DoE Awardees

- “Improving tolerance of yeast to lignocellulosic feedstocks and products”
 - Massachusetts Institute of Technology
- “Biomass gasification for chemical production using chemical looping techniques”
 - Ohio State University
 - 8 Industrial partners