



Introduction

The Midwest Consortium

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For gifts of enzymes

Genencor (Enzymes)

Liquid and solid fiber streams from dry mill

Big River Resources

Industrial Cooperators

Aventine

Dow AgroSciences

Big River Resources

Genencor

Countrymark Coop (Ind)



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About the Midwest Consortium (MWC)

Midwest Consortium for Biobased Products and Bioenergy

Team: Four universities and three Federal laboratories working together since 1999.

Goal: expand and improve technologies for converting plant material to industrial products and liquid fuels

Approach: combine institutional capabilities to develop opportunities for furthering the use of renewable, agricultural based materials for production of alternative chemical and fuel products.

Focus: on Midwest, with the technologies that apply throughout the United States.



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Pathways Connect Program Platforms that Represent Basic R and D Areas



Interdisciplinary Connections

Petersen et al, 2005

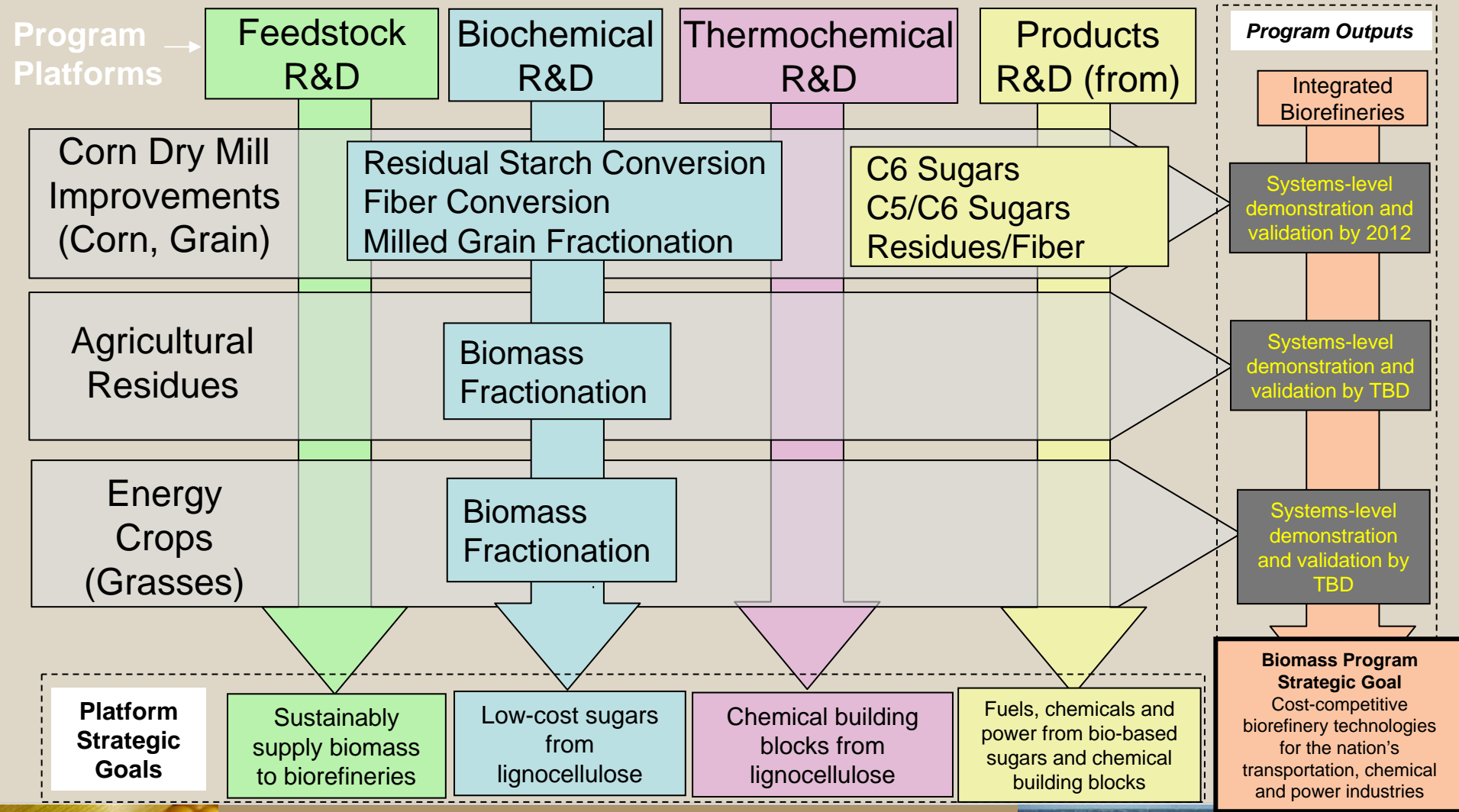


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Example Pathways: Corn Dry Mill, Corn Residue, Energy Crops



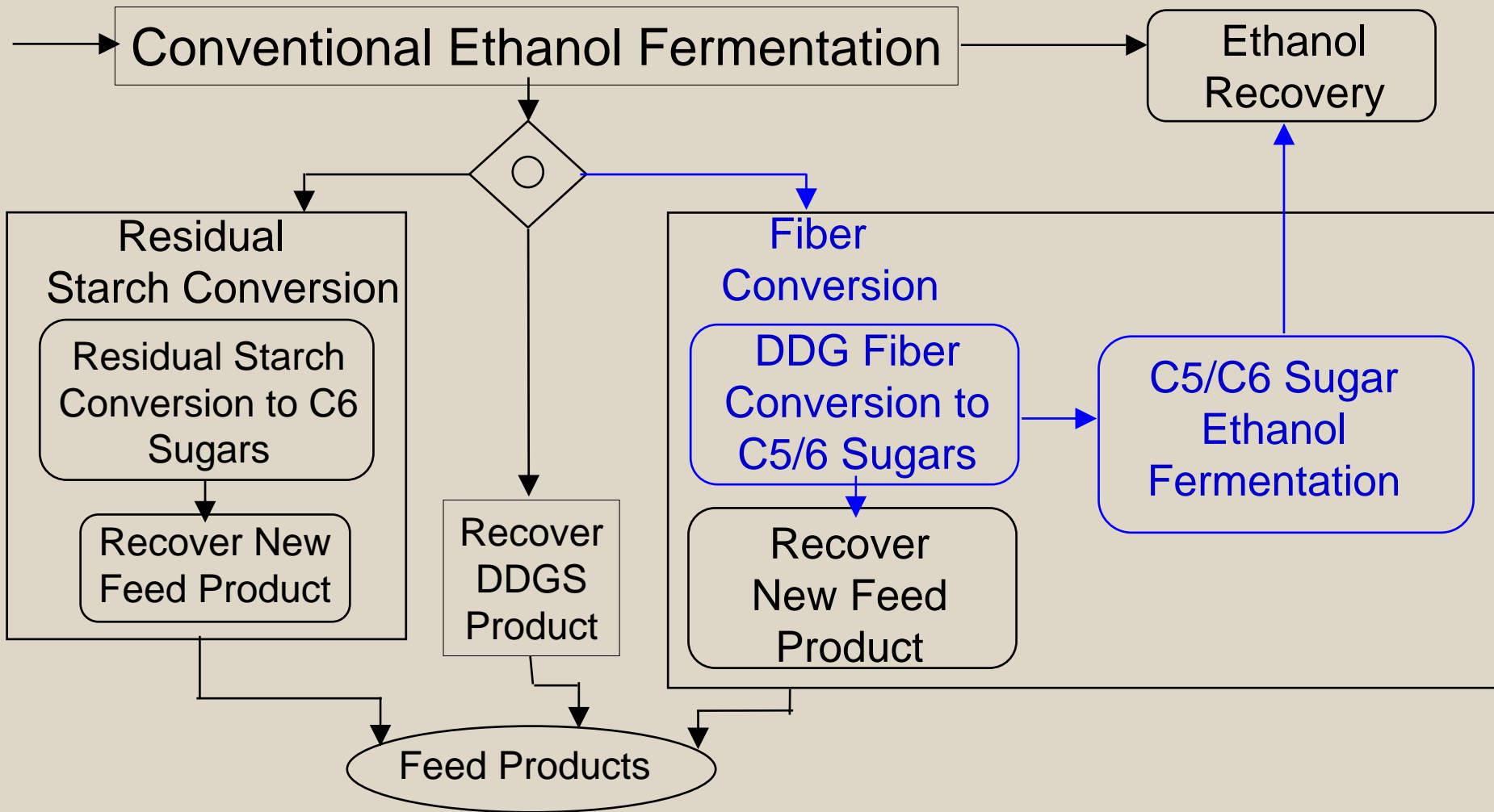
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This paper:

Mixed Sugars to Ethanol



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Today's Program

Overview of Dry Grind Industry

DOE Research Programs and Mark-ups

Compositional Analysis and Pretreatments
(Ladisich, Purdue)

Enzyme Systems (Dien, USDA NCAUR)

Converting DDGS to Values Added Solvents (Ezeji, U. Illinois)

Dry Mill Integration and Sugar Utilization (Mosier, Purdue)

Catalysis (Shanks, Iowa State)

Life Cycle Analysis (Dale, Michigan State)

Dry Mill Ethanol Model (Tyner, Purdue)



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