May 3 Afternoon Parallel Session: 1:15 - 1:45pm
Track 1: Acquiring, processing, and transporting woody biomass for biofuels and co-products
Todd Morgan, University of Montana
Mid-project findings, challenges, and successes
Track 2: Economic, social and environmental issues surrounding woody biomass utilization for biofuels and value-added co-products
Dennis Becker, University of Idaho
State policy developments in biofuels utilization and impact on business investment
Track 3: Pretreatment and conversion for biofuels and value-added co-products
Johnway Gao, Weyerhaeuser Company
Clean sugar and lignin production using microwaved wood pretreatment
Track 4: Bioenergy Literacy in STEM Education
Steve Hollenhorst, Western Washington University
Education Track Welcome
Danica Hendrickson, Western Washington University
Energy Education and Bioenergy Literacy: Starting now

2:15 - 2:45pm
Track 1: Acquiring, processing, and transporting woody biomass for biofuels and co-products
Natalie Martinkus, Washington State University
NARA Eastside Analysis: A distributed supply chain model
Track 2: Economic, social and environmental issues surrounding woody biomass utilization for biofuels and value-added co-products
Ross MacFarlane, Climate Solutions
Scaling Sustainable Biofuels in the Pacific Northwest: Why policy matters’ approach to this opportunity/challenge
Track 3: Pretreatment and conversion for biofuels and value-added co-products
Andrew Hawkins, Gevo
Commercializing isobutanol and the path toward lignocellulosic ATJ
Track 4: Bioenergy Literacy in STEM Education
Halley Faulkner, and Matt Daniels
University of Idaho McCull Outdoor Science School Development of digital teaching resources for exploring the NARA supply chain

3:15 - 3:45pm
Track 1: Acquiring, processing, and transporting woody biomass for biofuels and co-products
Woodam Chung, Oregon State University
Developing an integrated logistics model for biofuel and residue supply in the Pacific Northwest
Track 2: Economic, social and environmental issues surrounding woody biomass utilization for biofuels and value-added co-products
Bill Drumheller, Washington State Department of Ecology
The Clean Air Act in Washington State: Implications for forest product industries
Track 3: Pretreatment and conversion for biofuels and value-added co-products
Birgitte Ahring, Oregon State University
Making high value polymers out of lignin from western Washington University
Track 4: Bioenergy Literacy in STEM Education
Jay Well, (continued)
Bioenergy Education Pipeline: K12 through undergraduate bioenergy education

4:15 - 4:45pm
Track 1: Acquiring, processing, and transporting woody biomass for biofuels and co-products
Brendan McCarthy, Portland General Electric Company
Challenges and opportunities with large scale biomass utilization
Track 2: Economic, social and environmental issues surrounding woody biomass utilization for biofuels and value-added co-products
Vikram Ravi, Washington State University
Assessment of regional air quality and health impacts from the NARA aviation biofuel supply chain
Track 3: Pretreatment and conversion for biofuels and value-added co-products
Edward Rode, DNV GL
Renewable feedstocks supplying the petrochemical industry
Track 4: Bioenergy Literacy in STEM Education
Jay Well, (continued)
Bioenergy Education Pipeline: K12 through undergraduate bioenergy education
Track 1: Acquiring, processing, and transporting woody biomass for biofuels and co-products
Karl Olsen and Tammi Laninga, Washington State University and Western Washington University
Exploring the feasibility for a micronized wood depot on Washington’s Olympic Peninsula.

Track 2: Economic, social and environmental issues surrounding woody biomass utilization for biofuels and value-added co-products
Rodrigo Morales-Vera, University of Washington
Techno-economic feasibility and environmental impacts of acetic acid production from poplar biomass via fermentation

Track 3: Pretreatment and conversion for biofuels and value-added co-products
Danica Hendrickson, Washington State University
How can sustainability be used as a context for energy education?

10:30 - 11:00am
Track 1: Acquiring, processing, and transporting woody biomass for biofuels and co-products
Karl Englund, Washington State University
Bioenergy feedstocks derived from recovering wood from construction and demolition debris.

Track 2: Economic, social and environmental issues surrounding woody biomass utilization for biofuels and value-added co-products
Indronil Ganguly, University of Washington
‘Woods-to-Wake’ life cycle assessment of residual woody biomass based jet-fuel using mild bisulfite pretreatment

Track 3: Pretreatment and conversion for biofuels and value-added co-products
Mary Dinh, Red Rock Biofuels
From Waste to Value: Forest and mill residue to drop-in jet and diesel fuels

Track 4: Bioenergy Literacy in STEM Education
Panel Discussion: How does bioenergy literacy converge with STEM careers, economics and industry?
Moderator: Justine Hougham, NARA
Panelists: Karl Olsen, Tammi Laninga, and Jessica boards.

11:00 - 11:30am
Track 1: Acquiring, processing, and transporting woody biomass for biofuels and co-products
Karl Englund, Washington State University
Bioenergy feedstocks derived from recovering wood from construction and demolition debris.

Track 2: Economic, social and environmental issues surrounding woody biomass utilization for biofuels and value-added co-products
Daisuke Saatani, University of Washington
Economic impacts of bio-refinery project in Western Washington and Oregon

Track 3: Pretreatment and conversion for biofuels and value-added co-products
Bill Quigley, Barrier West, Inc.
Experiences and lessons learned with standing up a pretreatment and conversion facility

Track 4: Bioenergy Literacy in STEM Education
Panel Discussion: How does bioenergy literacy converge with STEM careers, economics and industry?
Moderator: Justine Hougham, NARA
Panelists: Karl Olsen, Tammi Laninga, and Jessica boards.

1:00 - 4:30pm
Morning Parallel Session: 8:00 - 8:30am
Track 1: Acquiring, processing, and transporting woody biomass for biofuels and co-products
Gareth McDonald, Advisor
Solid biomass for power generation – current & future

Track 2: Economic, social and environmental issues surrounding woody biomass utilization for biofuels and value-added co-products
John Field, Colorado State University, BANR
GHG implications of dead wood removal for bioenergy: problem framing, system modeling, and sensitivity analysis

Track 3: Pretreatment and conversion for biofuels and value-added co-products
Xiao Zhang, Washington State University
Oxidative conversion of lignin to hydrocarbon fuel and chemicals

Track 4: Bioenergy Literacy in STEM Education
Jennifer Schoen and Sadie Perrin, University of Idaho McCall Outdoor Science School
What’s the Value of a Tree? Using STEM and bioenergy to field passion in energy literacy

9:00 - 9:30am
Track 1: Acquiring, processing, and transporting woody biomass for biofuels and co-products
Joel Bisson, Humboldt State University
Production of quality feedstock from forest residues for biomass conversion

Track 2: Economic, social and environmental issues surrounding woody biomass utilization for biofuels and value-added co-products
Kim Littke, University of Washington
Evaluation of soil for sustainable productivity of biofuel feedstock from coastal Douglas-fir plantations

Track 3: Pretreatment and conversion for biofuels and value-added co-products
Rodrigo Morales-Vera, University of Washington
Techno-economic feasibility and environmental impacts of acetic acid production from poplar biomass via fermentation

Track 4: Bioenergy Literacy in STEM Education
Panel Discussion: How does bioenergy literacy converge with STEM careers, economics and industry?
Moderator: Justine Hougham, NARA
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10:30 - 11:00am
Track 1: Acquiring, processing, and transporting woody biomass for biofuels and co-products
Karl Englund, Washington State University
Bioenergy feedstocks derived from recovering wood from construction and demolition debris.

Track 2: Economic, social and environmental issues surrounding woody biomass utilization for biofuels and value-added co-products
Season Hoard, Washington State University
A step-wise techno-feasibility and social analysis approach to site selection of bio-refineries

Track 3: Pretreatment and conversion for biofuels and value-added co-products
Jinwen Zhang, Washington State University
Mechanochemical modification of lignin and application of the modified lignin for polymer materials

Track 4: Bioenergy Literacy in STEM Education
Panel Discussion: How does bioenergy literacy converge with STEM careers, economics and industry?
Moderator: Justine Hougham, NARA
Panelists: Karl Olsen, Tammi Laninga, and Jessica boards.

11:30 - 12:00am
Track 1: Acquiring, processing, and transporting woody biomass for biofuels and co-products
Patricia Townsend, Washington State University Extension
The Dual Benefits of Poplar in the Pacific Northwest: Sustainable feedstock and wastewater management

Track 2: Economic, social and environmental issues surrounding woody biomass utilization for biofuels and value-added co-products
Darin Saul, University of Idaho
Evaluation of bioenergy development strategies in the Northern Rocky Mountain Forests of the Northwest

Track 3: Pretreatment and conversion for biofuels and value-added co-products
Loukas Petridis, Oak Ridge National Laboratory
Why is lignin so effective at stopping enzymes from hydrolysing cellulose and how does heat-treatment change lignin characteristics?

Track 4: Bioenergy Literacy in STEM Education
Panel Discussion: How does bioenergy literacy converge with STEM careers, economics and industry?
Moderator: Justine Hougham, NARA
Panelists: Karl Olsen, Tammi Laninga, and Jessica boards.

12:00 - 1:00pm
Lunch & Salons A-C