

The SIMB Annual Meeting was held July 21-24, 2019 in Washington, D.C.

Presentations

[S114 A cell-free extract \(CFE\) system in *Clostridium thermocellum* for ethanol production and metabolomics analysis.](#) **Jingxuan Cui**, Lee R. Lynd and Daniel G. Olson - Dartmouth College

[S137 Expanding the molecular toolkit for lignin valorization by rapid pathway identification in non-model microbes and prospecting for novel aromatic compound-degrading bacteria](#) **Gerald N. Presley**, David Garcia, Richard J. Giannone, Olivia N. Cannon, Dawn M. Klingeman, James G. Elkins and Joshua Michener - ORNL

[S138 Metabolism of S-lignin by *Pseudomonas putida* KT2440](#) **Christopher W. Johnson**, Sandra Notonier, Linda Dumalo, Paul E. Abraham, Elizabeth A. Hatmaker, Allison Werner, Antonella Amore, Lin Wang, Richard J. Giannone, Adam M. Guss, Robert L. Hettich, Costas D. Maranas, Lindsay D. Eltis and Gregg T. Beckham - NREL, UBC, ORNL, and PSU

[S39 Pectic polymers – bioactive glycans for improved growth and saccharification of bioenergy feedstock](#) **Ajaya Biswal**, Melani Atmodjo, Mi Li, Chang Yoo, Yunqiao Pu, Allison Tolbert, Sushree Mohanty, David Ryno, Arthur Ragauskas and Debra Mohnen – UGA, ORNL, SUNYC, GTECH, UT, and UGA.

[S49 Genetic transformation and tool development for domestication of diverse non-model microbes](#) Lauren Riley, Neely Wood, Joshua Elmore, Jay Huenemann, George Peabody, Jan Westpheling and **Adam M. Guss** – ORNL, PNNL, and UGA.

[S50 Development of an Emerging Model Microorganism *Megasphaera elsdenii* for the Conversion of Biomass and Organic Acids to Fuels and Chemicals](#) **Jan Westpheling** – UGA.

[S19 Alterations to pyruvate metabolism in *Clostridium thermocellum* LL1210 reduce amino acid secretion and improve biofuel yields](#) **Heidi Schindel**, Kaela O'Dell, David Cowan, Alex Steiner and Sarah Thurmon and Adam Guss - ORNL

[S23 Simultaneous catabolism of all major components of lignocellulosic biomass by engineered *Pseudomonas putida*](#) **Joshua Elmore**, Davinia Salvachúa, George Peabody, Ramesh Jha, Gara Dexter, Marykate O'Brien, Dawn M. Klingeman, Darren J. Peterson, Kent Gorday, Taraka Dale, Gregg T. Beckham and Adam M. Guss – PNNL, NREL, ORNL, and LANL

[S19 Alterations to pyruvate metabolism in *Clostridium thermocellum* LL1210 reduce amino acid secretion and improve biofuel yields](#) **Heidi Schindel**, Kaela O'Dell, David Cowan, Alex Steiner, Adam Guss and Sarah Thurmon - ORNL

Posters

[P5 Exploring microbial biodiversity to expand the molecular toolkit for biological lignin valorization](#) Gerald N. Presley, Olivia N. Cannon, Joshua K. Michener and **James G. Elkins** – ORNL.

[P17 Caldicellulosiruptor species use surface \(s\)-layer glycoside hydrolases and novel binding proteins \(tāpirins\) for plant cell wall deconstruction](#) **Tunyaboon Laemthong**, Vladimir Lunin, Yannick J. Bomble, Michael E. Himmel, Michael W. W. Adams and Robert M. Kelly – NCSU, NREL, and UGA.

[P58 Metabolic engineering of *Escherichia coli* for direct fermentative production of lactate esters-](#) **Jong-Won Lee** and Cong T. Trinh – UT.

[P104 Enabling Transformation of Non-Model Organisms by Overcoming DNA Restriction-Modification Systems](#) **Lauren Riley**, Neely Wood, Anne Hatmaker, Kaela O'Dell, Irene Paye, Jan Westpheling and Adam M. Guss – ORNL, and UGA.