

SUPPLEMENTAL FIGURES

Multi-omics integration and immune profiling identify possible causal networks leading to uterine microbiome dysbiosis in dairy cows that develop metritis

S. Casaro¹, J. G. Prim², T. D. Gonzalez¹, F. Cunha¹, A. C. M. Silva³, H. Yu³, R. S. Bisinotto¹, R. C. Chebel¹, J. E. P. Santos^{3,4}, C. D. Nelson³, S. J. Jeon⁵, R. C. Bicalho⁶, J. P. Driver⁷, K. N. Galvão^{1,4*}

¹Department of Large Animal Clinical Sciences, University of Florida, Gainesville, FL, 32610

²Department of Clinical Sciences, Auburn University, Auburn, AL, 36849

³Department of Animal Sciences, University of Florida, Gainesville, FL, 32610

⁴D. H. Barron Reproductive and Perinatal Biology Research Program, University of Florida, Gainesville, FL, 32610

⁵Department of Veterinary Biomedical Sciences, Long Island University, Brookville, NY, 11548

⁶FERA Diagnostics and Biologicals, College Station, TX, 77845

⁷Division of Animals Sciences, University of Missouri, Columbia, MO, 65211

*Corresponding author: Klibs N. Galvão: galvaok@ufl.edu

Plasma Metabolome Prepartum



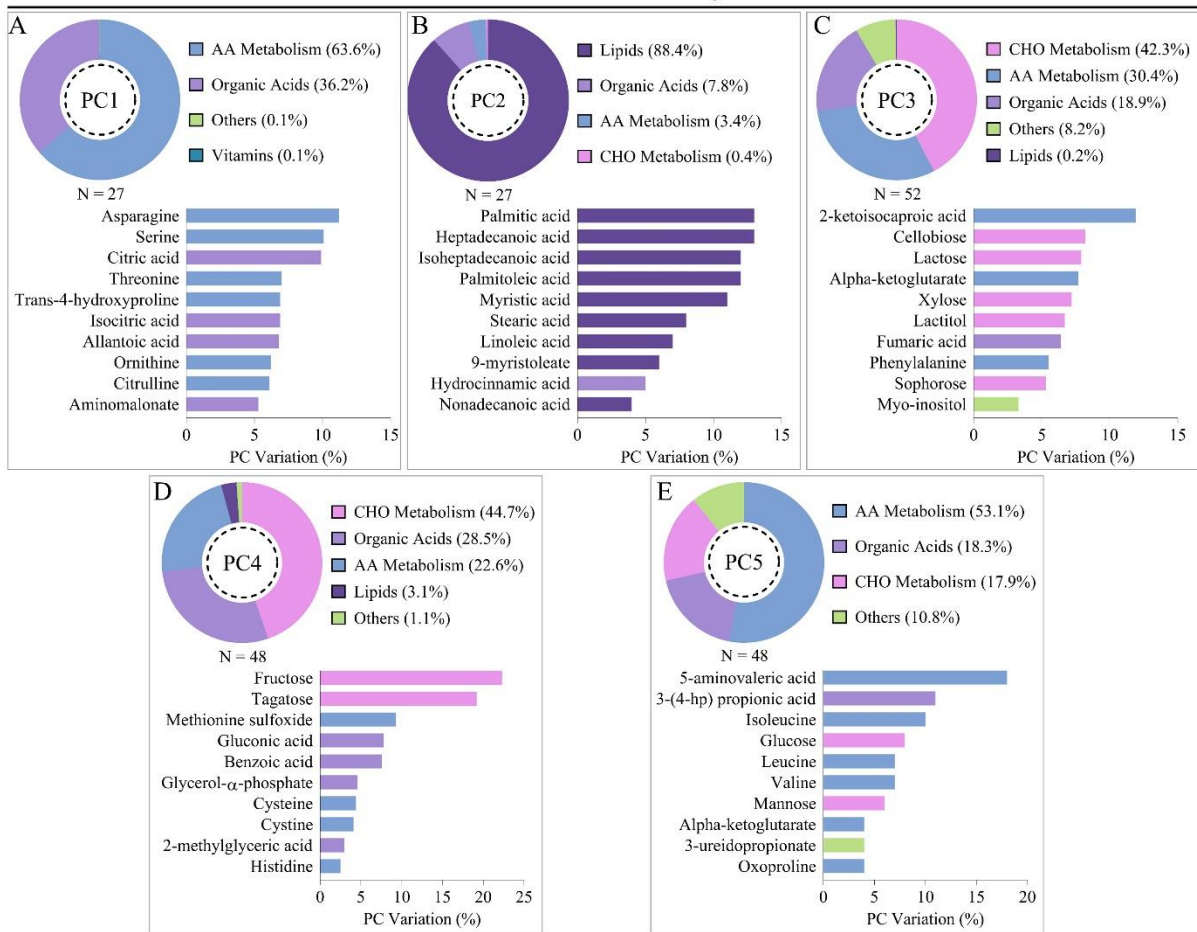
Supplemental Figure 1. Principal components (PC) generated by sparse PC analysis for the plasma metabolome in the prepartum. Panels A, B, C, D, and E show PC1, 2, 3, 4, and 5, respectively. AA, amino acids; CHO, carbohydrates. Figure created using GraphPad Prism version 8.4.3 for Windows, GraphPad Software, San Diego, California, USA.

Plasma Metabolome at Parturition



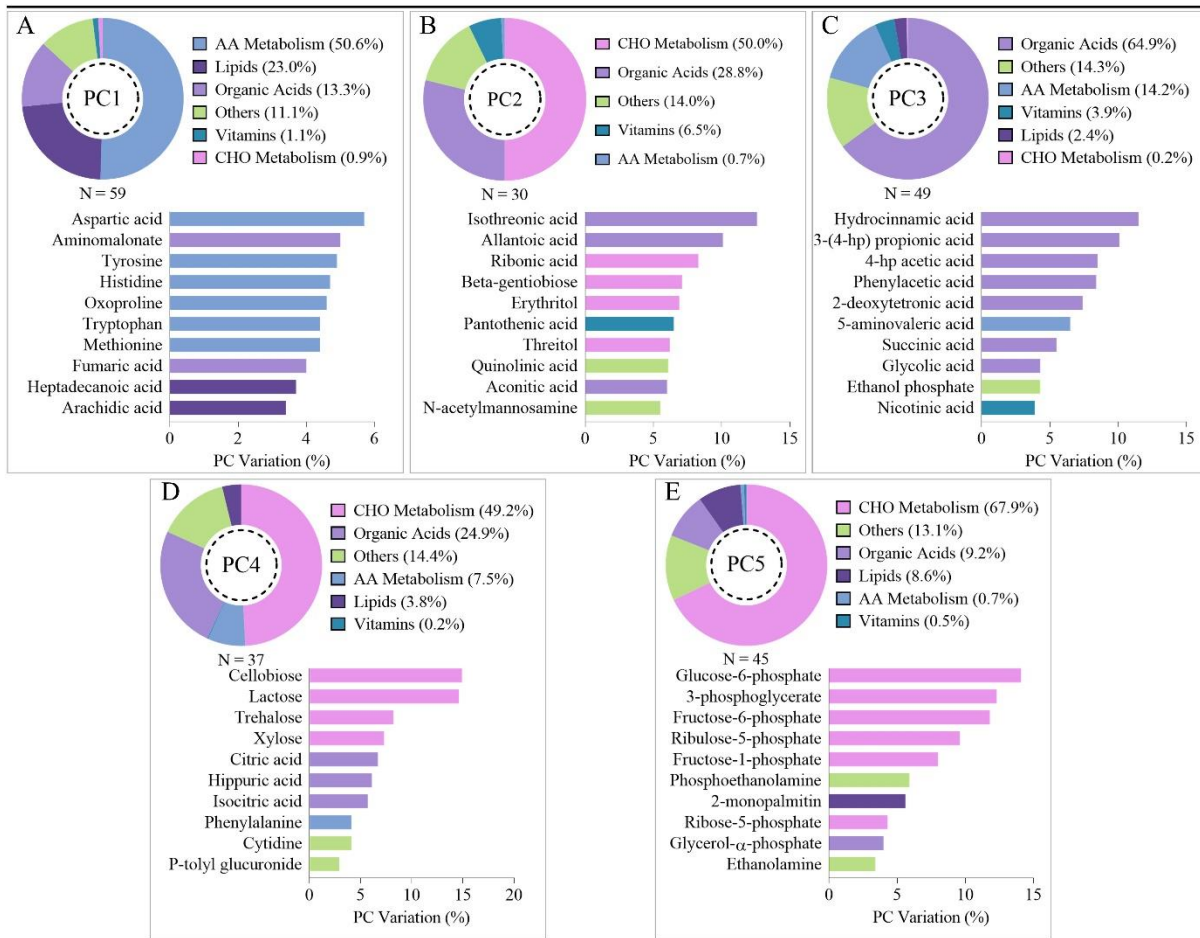
Supplemental Figure 2. Principal components (PC) generated by sparse PC analysis for the plasma metabolome at parturition. Panels A, B, C, D, and E show PC1, 2, 3, 4, and 5, respectively. AA, amino acids; CHO, carbohydrates. Figure created using GraphPad Prism version 8.4.3 for Windows, GraphPad Software, San Diego, California, USA.

Plasma Metabolome at Diagnosis



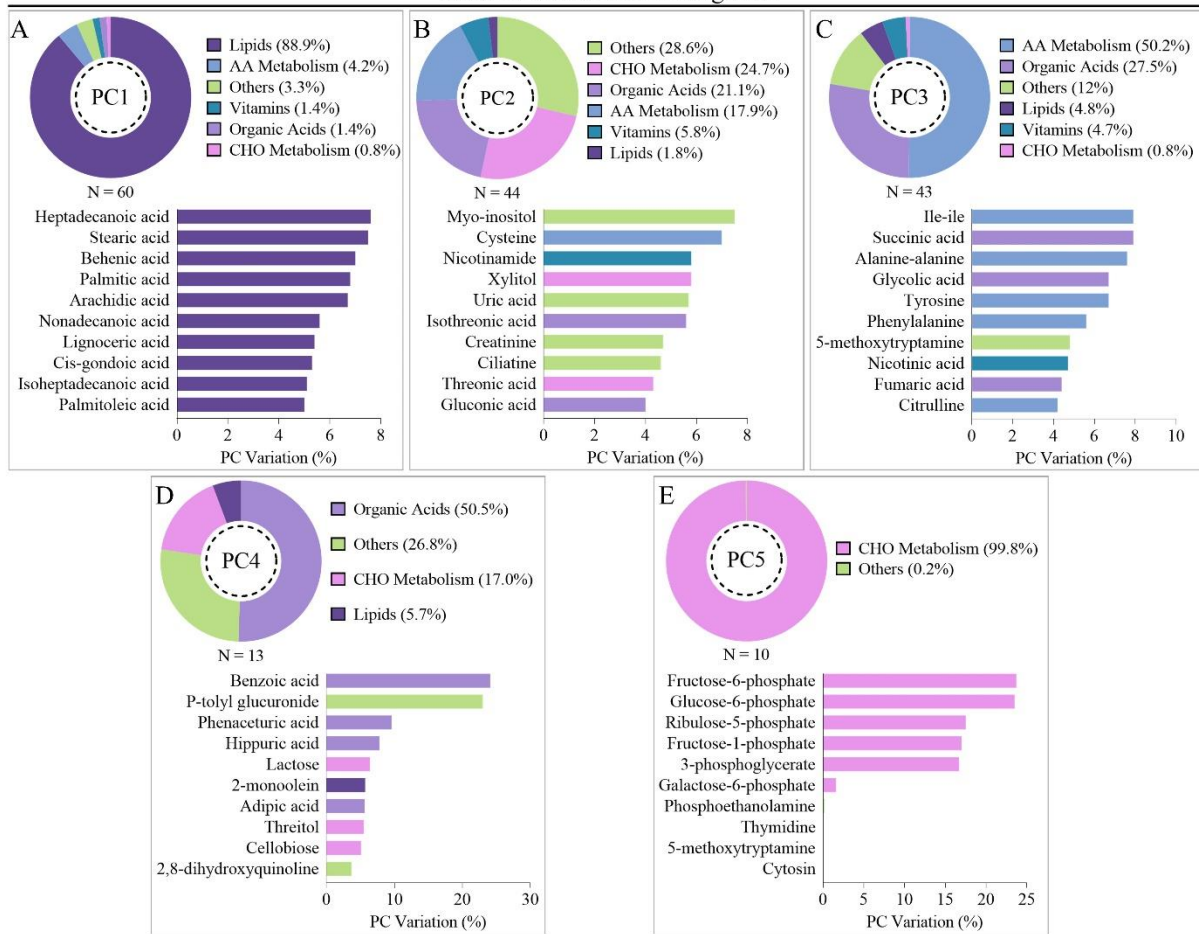
Supplemental Figure 3 Principal components (PC) generated by sparse PC analysis for the plasma metabolome on the day of metritis diagnosis. Panels A, B, C, D, and E show PC1, 2, 3, 4, and 5, respectively. AA, amino acids; CHO, carbohydrates. Figure created using GraphPad Prism version 8.4.3 for Windows, GraphPad Software, San Diego, California, USA.

Uterine Metabolome at Parturition



Supplemental Figure 4 Principal components (PC) generated by sparse PC analysis for the uterine metabolome at parturition. Panels A, B, C, D, and E show PC1, 2, 3, 4, and 5, respectively. AA, amino acids; CHO, carbohydrates. Figure created using GraphPad Prism version 8.4.3 for Windows, GraphPad Software, San Diego, California, USA.

Uterine Metabolome at Diagnosis



Supplemental Figure 5 Principal components (PC) generated by sparse PC analysis for the uterine metabolome on the day of metritis diagnosis. Panels A, B, C, D, and E show PC1, 2, 3, 4, and 5, respectively. AA, amino acids; CHO, carbohydrates. Figure created using GraphPad Prism version 8.4.3 for Windows, GraphPad Software, San Diego, California, USA.