Results
High-fat diet potentiates lipopolysaccharide-induced preterm birth by affecting the maternal gut microbiome and uterine transcriptome and reduces antioxidant capacity in a murine model. High-fat diet consumption also increases the colonization of the gut by 5 immunogenic bacteria and decreases colonization by Lachnospiraceae_NK4A136_group. Uteri from high-fat diet mice had increased expression of genes that stimulate the inflammatory-oxidative stress axis, autophagy/apoptosis, and smooth muscle contraction. Repetitive endotoxin priming protects high-fat diet dams from spontaneous preterm birth, increases colonization of the gut by Lachnospiraceae_NK4A136_group, decreases levels of immunogenic bacteria in the gut microbiome, and reduces the number of dysregulated genes after high-fat diet consumption from 994 to 74 (Figure).

Conclusion
High-fat diet-potentiated spontaneous preterm birth is mediated by increased inflammation, oxidative stress, and gut dysbiosis. The induction of immune tolerance via endotoxin priming reverses these effects and protects high-fat diet dams from spontaneous preterm birth. Based on this work, the role of immunomodulation as a novel therapeutic approach to prevent preterm birth among women who consume high-fat diets should be explored.

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CORRECTIONS
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Under “Author and article information,” after the reference list of the September 2018 Original Research article cited above, the third paragraph begins: “Supported by a philanthropic grant from GlaxoSmithKline . . . .” This should have stated: “This work was funded by GlaxoSmithKline Global Health R&D.”

The next paragraph states: “These funding organizations had no role in the collection, analysis and interpretation of data, or the decision to publish this work.” Instead, this should have stated: “The above funding organizations had no role in the collection of data, but did contribute to the decision to publish this work.”

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A misspelling occurred in the name of the fourth author of abstract number 841, “Stroke in pregnancy,” in the January 2019 supplement containing the program for the 2019 annual meeting of the Society for Maternal—Fetal Medicine. Her name is Agnès Ditishiem, not Agnes Ditisheim.