The human gut is teeming with symbiotic microbes that interact with their host to maintain health. A joint Science and Science Translational Medicine special section (see page 1245) explores advances in microbial ecology, microbial and host metabolisms, and interactions between gut microbes and the host immune system. Complementary articles discuss how to apply this knowledge to boost health and nutrition, combat infectious disease, and control noncommunicable diseases such as obesity and diabetes.
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The Gut Microbiota: Joint Special Section
PERSPECTIVE: The Human Gut Microbiota and Undernutrition
J. I. Gordon et al.
Interactions between breast milk and the developing gut microbiota and immune system modulate malnutrition.

REVIEW: Microbiota-Targeted Therapies—An Ecological Perspective
K. P. Lemon et al.
Insights from ecology will help to drive the development of microbiota-targeted therapeutic.

RESEARCH ARTICLE: Coupled Activation and Degradation of eEF2K Regulates Protein Synthesis in Response to Genotoxic Stress
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PERSPECTIVE: F-Box Proteins Elongate Translation During Stress Recovery
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Stereotactic body radiation therapy enhances tumor response rate to high-dose interleukin-2 in a phase 1 study.

RESEARCH ARTICLE: A Validated Tumorgraft Model Reveals Activity of Dovitinib Against Renal Cell Carcinoma
S. Sivanand et al.
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RESEARCH ARTICLE: Noninvasive Whole-Genome Sequencing of a Human Fetus
J. O. Kitzman et al.
Sequencing of cell-free fetal-derived DNA from maternal plasma provides a noninvasive way to predict the fetal genome sequence.

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