

Analytical Methods for Microbial Communities

By Pedro Alvarez

I wanted to convey that we should invest in something that brings us closer to the TMC and to global health while keeping our distinctiveness.

Personally, I would like to see an investment in advanced analytical methods for microbial communities (omics), as we just hired a new person in this area (Lauren Stadler). This would benefit the small but growing microbial biotechnology community at Rice (George Bennett, Ramon Gonzalez, Ka-You San, Jane Tao, etc). Novel potentially fertile areas that improved microbial analytical facilities would enable us to pursue include: gastrointestinal microbiology (gut-brain connection, resiliency to infectious disease), understanding and exploiting the virome to enhance gene delivery or control bacterial activities, microbiology of oil and gas reservoirs (in situ biorefining, enhanced recovery, souring control) to name a few fertile areas with great funding potential and distinctive impact.