

UC SANTA BARBARA

# THE *Current*

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## Turning Waste into Energy

Could the study of grass-eating animals lead to the discovery of new sustainable fuels and chemicals? It's not as far fetched as you might think.

Cows and other large herbivores evolved to graze on grasses and other woody forage and have the ability to "unlock" the energy contained in plant cellulose, and convert it to sugar. By understanding and cultivating the microbes that these animals have in their digestive system, we could use similar processes to create fuels and chemicals from agricultural waste rather than fossil fuels.

Chemical engineer discusses her work to do just that in this video from UC Santa Barbara's ongoing "Research in 60 Seconds" series.

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### About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the

edge of the Pacific Ocean.