

Nanoparticle Technology Provides Healthy Trans, Saturated Fat Alternative

[Yangchao Luo, an associate professor](#) in UConn's College of Agriculture, Health and Natural Resources, is using an innovative emulsification process for the development of a healthier shelf-stable fat for food manufacturing. This new approach could have a major impact on how food is produced and could make it easier for food manufacturers to include healthier fats.

Promising New Materials Mimic Muscle Structure and Function

[Inspired by the structure of muscles](#), an innovative new strategy for creating fiber actuators could lead to advances in robotics, prosthetics, and smart clothing, according to a Penn State led team of scientists who discovered the process.

Researchers Study How Nutrient Sources Make It to The Base of the Food Web

[A Florida State University and University of New Hampshire](#) research team has published a new study that looks at how one important nutrient source, dissolved organic phosphorous, is distributed through the global surface ocean where it is consumed by phytoplankton. The work is published today in *Nature Geoscience*.

Research Team Develops Wood-Based Foam to Keep Buildings Cooler

[Researchers reporting in the ACS journal Nano Letters](#) have designed a lightweight foam made from wood-based cellulose nanocrystals that reflects sunlight, emits absorbed heat and is thermally insulating. They suggest that the material could reduce buildings' cooling energy needs by more than a third.

Breeding with 'Wild Relatives' to Produce Disease and Climate Resistant Wheat

[Scientists from the University of Nottingham](#) have transferred genetic variability into wheat from its wild relatives to enable resistance to a major disease of wheat, fusarium head blight (FHB) and to breed new wheat varieties that are high yielding but also adapted to climate change. Their findings have been published in two papers in *Frontiers in Plant Science*.

Artificial Photosynthesis Can Produce Food Without Sunshine

[Scientists have found a way to bypass the need](#) for biological photosynthesis altogether and create food independent of sunlight by using artificial photosynthesis. The technology uses a two-step electrocatalytic process to convert carbon dioxide, electricity, and water into acetate.

Major Infrared Breakthrough Could Lead To Solar Power At Night

[Researchers within the School of Photovoltaic](#) and Renewable Energy Engineering at UNSW Sydney have successfully tested a device capable of converting infrared heat into electrical power. They used a power-generation device called a 'thermo-radiative diode', which is similar to the technology in night-vision goggles.