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THE Current

October 29, 2004
Gail Gallessich

UCSB Geographer Wins NASA Award in Earth Sciences

Christopher Still, assistant professor of geography at UC Santa Barbara, has been honored with a NASA New Investigator Program in Earth Sciences Award. His proposal was one of 31 chosen nationally.

Still's proposal is entitled "C4 Photosynthesis and the Carbon Cycle: An Integrated Plan of Research and Education." The three-year award will provide a total of $350,000.

For

this project, Still plans to combine remote sensing data provided by several NASA satellites with models of atmospheric circulation and the terrestrial carbon cycle.

He explains that his project is aimed at understanding plants known as "C4," which refers to the number of carbon atoms produced in an early stage of photosynthesis. These are mostly tropical and subtropical grasslands and savannas. Still will study their role in the global carbon cycle. Many of the world's most aggressive weeds are C4 plants and they can grow very quickly. But they are also important crop plants such as corn, sorghum and sugar cane.

Understanding these plants is important because they respond differently than most other plant types to changes in light, temperature, and atmospheric carbon dioxide. Still is interested in finding out how these plants will respond to climate change and

changes in atmospheric composition. He is particularly interested in learning how much carbon dioxide they remove from and release into the atmosphere during photosynthesis and respiration, given the uncertainties about the role of terrestrial ecosystems in the global carbon cycle.

Related Links

Christopher Still's Website

About UC Santa Barbara

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