## Santa Fe Science Café for Young Thinkers

## "Imaging the Brain's Pathways to Addiction"



## Joanna Fowler National Medal of Science, 2008 Brookhaven National Laboratory

Tuesday, October 22 6:00-7:30 PM

Georgia O'Keeffe Museum

<u>Education Annex</u>

123 Grant Avenue, Santa Fe

Why is it that addictions to substances like tobacco, alcohol and heroin are so difficult to conquer? Positron Emission Tomography (PET) is a medical imaging method which can image biochemical transformations and the movement of drugs in the brain and other organs. This can provide unique new knowledge of biological pathways and brain circuits which are altered in disease and by drugs, and can suggest strategies for prevention and treatment. Our discussion will highlight new knowledge of the neurochemical effects of drugs of abuse on the brain as well as the changes in it that lead to the loss of control which we refer to as addiction.

Admission is Free. Youth (ages 13-19) seating a priority. Light refreshments will be served. Dr. Fowler will also appear on the Santa Fe Radio Café with host Mary-Charlotte <u>Domandi</u> at 8 AM the day of the Café, on KSFR 101.1 FM and streaming on the web at <u>www.ksfr.org</u>.

Dr. Fowler has been at Brookhaven National Laboratory since 1969. She was educated at the University of South Florida and the University of Colorado. She has received many honors and awards, including the National Medal of Science from President Barack Obama in 2008.

Sponsors: Santa Fe Alliance for Science; Santa Fe Public Schools; Georgia O'Keeffe Museum; Santa Fe Institute. Call 603-7468 for more information.