Description of Research

The work in Professor Banich’s laboratory focuses on the neural bases of mental and emotional processes through the use of brain imaging techniques, more specifically functional magnetic resonance imaging (fMRI). In particular, research in her laboratory focuses on the cognitive and neural underpinning of attention and executive processes. She examines these issues in neurologically intact adolescents and adults as well as clinical populations, including adults with attention-deficit/hyperactivity disorder and adolescents with severe substance and conduct problems.

Recent projects in the laboratory have examined questions such as the neural bases of memory suppression, risk-taking, and decision-making adolescents, the cognitive mechanisms involved in rumination and response to trauma, and the association between patterns of brain volume and brain activation to symptomology in clinical populations. The fellowship is an opportunity to obtain training in translational research that uses models of brain function derived from neurologically intact populations to understand the nature of dysfunction in clinical populations.

Professor Banich, who serves as Director of the Institute of Cognitive Science at the University of Colorado at Boulder, has an appointment in the Psychology Department on the Boulder campus and the Psychiatry Department on the Denver campus.

Methodology

Neuroimaging

Clinical and special developmental populations

ADHD; Adolescents; Child

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Faculty/Lab Website

Banich Lab website

Mentor since

5/14/2007