

NEUROSCIENCE RESEARCH AT THE UNIVERSITY OF NEW MEXICO HEALTH SCIENCES CENTER

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A MULTIDISCIPLINARY APPROACH TO PROGRAMATIC RESEARCH IN NEUROSCIENCE

GENETIC, IMMUNOCYTOCHEMICAL, AND TISSUE AND NEUROTOXICOLOGY

Genetic, immunocytochemical, and tissue techniques are being utilized to understand basic and neuropathologies of brain development, neural stem cell differentiation, environmental factors, alcohol and nicotine on developing brain, neurotransmitter release, neurite outgrowth, and synaptic plasticity.

MEMORY, NEUROTRANSMISSION, AND SUBSTANCE ABUSE

Research emphasis is to understand the underlying long-term potentiation, the biological basis for learning and memory. Of interest is the effect of exposure to drugs of abuse (alcohol, amphetamines, cocaine and opiates) on the processes involved in learning and memory during development and adulthood.

BRAIN INJURY, REPAIR AND NEUROLOGICAL DISORDERS

Multidisciplinary approaches are being applied to understand the mechanisms of brain injury following brain trauma. Information from both patient and laboratory studies is being used to develop potential therapies that address neuronal damage and cell death (stroke) and neuroinflammatory (Multiple Sclerosis, Neuropathic chronic pain) disease states.

NEUROPSYCHIATRIC DISORDERS

Molecular genetic and neurochemical approaches are being applied to understand the role of specific proteins in neurotransmitter release and involvement in schizophrenia and hyperactivity disorder (ADHD). These studies include both the direct analysis of patients, cell culture and the development of animal models for autism, schizophrenia, and Parkinson's disease.

For more information concerning:

- Graduate Education
- Advanced Course Offerings
- Faculty Research Interests
- Seminar Schedules

Please visit our website at <http://www.unm.edu/~neurohsc>

