Bio

ACADEMIC APPOINTMENTS
• Emeritus Faculty-Med Ctr Line, Psychiatry and Behavioral Sciences

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS
I work with event-related brain potentials (ERPs), a functional brain imaging tool, giving millisecond to millisecond temporal information about sensory and cognitive processes. Recently, I have been combining functional Magnetic Resonance Imaging (fMRI) techniques with ERP data to provide high spatial resolution information about cortical sources of the various components of the ERP. ERPs enable assessment of cognition even in the absence of overt behavior, making them an ideal tool for understanding clinical groups in whom responses are unreliable or difficult to acquire. To understand how patients with schizophrenia experience auditory hallucinations, we are using fMRI and ERPs to probe the brain during periods with and without hallucinations. To understand the role of self-monitoring deficits in symptoms of schizophrenia, we are using ERP paradigms that elicit a negative wave in normal subjects when they realize they have made a mistake.

Publications

PUBLICATIONS
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• Out-of-synch and out-of-sorts: Dysfunction of motor-sensory communication in schizophrenia BIOLOGICAL PSYCHIATRY
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• Fine-tuning of auditory cortex during speech production PSYCHOPHYSIOLOGY
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• Acquiring and inhibiting prepotent responses in schizophrenia - Event-related brain potentials and functional magnetic resonance imaging ARCHIVES OF GENERAL PSYCHIATRY
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• Electrophysiological evidence of corollary discharge dysfunction in schizophrenia during talking and thinking Conference on Non Schizophrenic Psychoses
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• Reduced communication between frontal and temporal lobes during talking in schizophrenia. *BIOLOGICAL PSYCHIATRY*
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• Cortical responsiveness during inner speech in schizophrenia: An event-related potential study. *AMERICAN JOURNAL OF PSYCHIATRY*
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• Left temporal deficit of P300 in patients with schizophrenia: effects of task. *INTERNATIONAL JOURNAL OF PSYCHOPHYSIOLOGY*
  Ford, J. M., Mathalon, D. H., White, P. M., Pfefferbaum, A.
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  Mathalon, D. H., Ford, J. M., Pfefferbaum, A.
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• Schizophrenia: The broken P300 and beyond. *PSYCHOPHYSIOLOGY*
  Ford, J. M.
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• P300 amplitude is related to clinical state in severely and moderately ill patients with schizophrenia. *Meeting of the Biological-Psychiatry-Society*
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• Failures of automatic and strategic processing in schizophrenia: comparisons of event-related brain potential and startle blink modification. *SCHIZOPHRENIA RESEARCH*
  Ford, J. M., Roth, W. T., Menon, V., Pfefferbaum, A.
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• P300 amplitude is related to clinical state in severely and moderately ill schizophrenic. *Biological Psychiatry*
  Ford, J., Mathalon, D, Marsh, L, Faustman, WO, Harris, D, Hoff, AL, Beal, DM, Pfefferbaum, A
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• **EVENT-RELATED POTENTIALS AND EYEBLINK RESPONSES IN AUTOMATIC AND CONTROLLED PROCESSING - EFFECTS OF AGE** *ELECTROENCEPHALOGRAPHY AND CLINICAL NEUROPHYSIOLOGY*
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• **ERPs AND BRAIN STRUCTURE - RELATIONSHIPS ACROSS THE ADULT AGE SPAN IN ALCOHOLICS AND IN A PATIENT WITH HERPES-SIMPLEX ENCEPHALITIS** *INTERNATIONAL CONF ON EVENT-RELATED POTENTIALS (EPIC IX)*
  Ford, J. M., Rosenbloom, M. J., SULLIVAN, E. V., Pfefferbaum, A.
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