

JINS

**JOURNAL OF THE INTERNATIONAL
NEUROPSYCHOLOGICAL SOCIETY**

Volume 17, Number 4

July 2011

ISSN 1355-6177



EDITOR-IN-CHIEF

Kathleen Y. Haaland

FOUNDING EDITOR

Igor Grant

ASSOCIATE EDITORS

Mark W. Bondi

Thomas A. Hammeke

Jennifer Manly

Skye McDonald

Stephen E. Nadeau

Yaakov Stern

Keith Owen Yeates

DEPARTMENTS

Critical Reviews/Dialogues

Bruce Crosson

Symposia

Mieke Verfaellie

Book Reviews

Ida Sue Baron

Official Publication



CAMBRIDGE

Journal of the International Neuropsychological Society

EDITOR-IN-CHIEF

Kathleen Y. Haaland
NM VA Healthcare System
University of New Mexico

FOUNDING EDITOR

Igor Grant
University of California
San Diego

ASSOCIATE EDITORS

Mark W. Bondi
VA San Diego Healthcare System
Univ. of Calif., San Diego

Thomas A. Hammke
Zablocki VA Medical Center
Medical College of Wisconsin

Jennifer J. Manly
Taub Institute for Research
Columbia University

Skye McDonald
University of New South Wales
Sydney, Australia

Stephen E. Nadeau
Gainesville VA Medical Center
University of Florida

Yaakov Stern
G.H. Sergievsky Center
Columbia University

Keith Owen Yeates
Nationwide Children's Hospital
Ohio State University

DEPARTMENT EDITORS**Critical Reviews/Dialogues**

Bruce Crosson
Gainesville VA Medical Center
University of Florida

Symposia

Mieke Verfaellie
VA Boston Healthcare System

Book Reviews

Ida Sue Baron
Independent Practice
Potomac, Maryland

Editorial Assistant

Donna Epler
NM VA Healthcare System
University of New Mexico

EDITORIAL BOARD

John Adair
NM VA Healthcare System
University of New Mexico

Vicki Anderson
Royal Children's Hospital

Peter A. Arnett
Pennsylvania State University

Marcia Barnes
Univ. of Texas-Houston

William B. Barr
New York University
School of Medicine

Sue R. Beers
University of Pittsburgh
School of Medicine

Linus A. Bieliauskas
VA Ann Arbor Healthcare System
University of Michigan

Julie A. Bobholz
Medical College of Wisconsin

Kyle Boone
Harbor-UCLA Medical Center

Robert A. Bornstein
Ohio State University

Meryl A. Butters
University of Pittsburgh
School of Medicine

Agnes S. Chan
The Chinese University of
Hong Kong

Mariana Cherner
University of California San Diego

Ronald A. Cohen
Brown University

Munro C. Cullum
University of Texas
Southwestern Medical Center

Dean Delis
University of California San Diego

Sureyya Dikmen
University of Washington

Jacobus Donders
Mary Free Bed Hospital

Philip S. Fastenau
Indiana University

Josette G. Harris
University of Colorado
School of Medicine

Keith A. Hawkins
Yale University
School of Medicine

Robert Heaton
University of California San Diego

Kenneth Heilman
University of Florida
College of Medicine

Ramona O. Hopkins
Brigham Young University

Diane B. Howieson
Oregon Health & Science University

Mary H. Kosmidis
Aristotle University of
Thessaloniki, Greece

Joel Kramer
University of California
San Francisco

John Langfitt
University of Rochester

Glenn J. Larrabee
Independent Practice
Sarasota, Florida

Bonnie Levin
University of Miami
School of Medicine

Eileen M. Martin
University of Illinois

Andrew Mayer
University of New Mexico

William Milberg
VA Boston Healthcare System
Harvard Medical School

Scott R. Millis
Wayne State University
School of Medicine

Wiley Mittenberg
Nova Southeastern
University

Feggy Ostrosky-Solis
National University of Mexico

Andrew A.C. Papanicolaou
University of Texas, Medical
School

Jennie Ponsford
Monash University Australia

Joseph R. Sadek
NM VA Healthcare System
University of New Mexico

David J. Schretlen
Johns Hopkins University
School of Medicine

Paula K. Shear
University of Cincinnati

Glenn E. Smith
Mayo Clinic
College of Medicine

Julie Stout
Indiana University

Yana Suchy
University of Utah

Daniel Tranel
University of Iowa Hospitals and
Clinics

Alexander I. Tröster
University of North Carolina

Holly A. Tuokko
University of Victoria

Frederick W. Unverzagt
Indiana University
School of Medicine

Jennifer J. Vasterling
Tulane University
School of Medicine

Kathleen A. Welsh-Bohmer
Duke University
Medical Center

Aims and Scope: The *Journal of the International Neuropsychological Society* welcomes original, creative, high quality research papers covering all areas of neuropsychology. The focus of articles may be primarily experimental, more applied or clinical. Contributions will broadly reflect the interest of all areas of neuropsychology, including but not limited to: development of cognitive processes, brain-behavior relationships, adult neuropsychology, child neuropsychology, developmental neuropsychology, disorders of speech and language, and the interfaces of neuropsychology with related areas such as behavioral neurology, neuropsychiatry, neuroimaging, and electrophysiology. Book Reviews will also be published.

Editorial Office: Kathleen Y. Haaland, Ph.D., Editor-in-Chief, *Journal of the International Neuropsychological Society*, Veterans Administration Research Scientist, New Mexico VA Healthcare System, University of New Mexico, 1501 San Pedro Drive SE (151), Albuquerque, NM 87108. E-mail: jins@unm.edu; Telephone: (505) 256-2898; Fax: (505) 256-5498.

Publishing, Advertising, Subscription Offices, and Indexing: Cambridge University Press, 32 Avenue of the Americas, New York, NY 10013-2473. Telephone: (212) 337-5000; Fax (212) 337-5959. Outside the USA, Canada, and Mexico: Cambridge University Press, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 8RU, England (Telephone: 144(0) 1223 312-393; Fax: 144(0)1223 315-052. For advertising rates and data, contact the Journals Advertising Coordinator at the appropriate Cambridge University Press office. The *Journal of the International Neuropsychological Society* is covered by the major abstracting and indexing services, including Index Medicus, ISI Current Contents/Clinical Medicine, PubMed, Science Citation Index, SciSearch (also known as the Science Citation Index-expanded), Research Alert, the Neuroscience Citation Index, and PsycInfo.

Books for Review: Ida Sue Baron, Ph.D. ABPP, 10116 Weatherwood Ct., Potomac, MD 20854.

Subscription Information: Published six times a year: January, March, May, July, September, and November. Annual institutional print and electronic subscription rates: US \$754.00 in the USA, Canada, and Mexico; UK £408.00 + VAT elsewhere. Institutional electronic rates only: US \$599.00 in the USA, Canada, and Mexico; UK £326.00 + VAT elsewhere. Institutional print rates only: US \$679.00 in the USA, Canada, and Mexico; UK £367.00 + VAT elsewhere. Individual print rates only: US \$246.00 in the USA, Canada, and Mexico; UK £134.00 + VAT elsewhere. Single part rates: US \$124.00 in the USA, Canada, and Mexico; UK £67.00 + VAT elsewhere. Prices include surface postage and insurance.

Member Subscription: The *Journal of the International Neuropsychological Society* is an official publication of The International Neuropsychological Society. Members of the Society automatically receive the *Journal of the International Neuropsychological Society* as part of their annual membership dues. For further information on membership, please visit the INS website <http://www.the-ins.org>. INS office contact: Robert A. Bornstein, Ph.D., Executive Secretary, International Neuropsychological Society, Suite 625, 700 Ackerman Road, Columbus, OH 43202. E-mail: ins@osu.edu; Telephone: (614) 263-4200; Fax: (614) 263-4366.

Information on Journal of the International Neuropsychological Society and all other Cambridge journals is available via <http://www.cambridge.org/> in North America and in the UK. Full text for this journal can be found at <http://journals.cambridge.org/>

Copyright © 2011 The International Neuropsychological Society

All rights reserved. No part of this publication may be reproduced, in any form or by any means, electronic, photocopying or otherwise, without permission in writing from Cambridge University Press, except when permission is obtained through a bona fide copyright clearinghouse, such as the Copyright Clearance Center (USA) or the Copyright Licensing Agency (UK). For further information please visit <http://us.cambridge.org/information/rights/> or <http://www.cambridge.org/uk/information/rights/>. The CCC Item-Fee Code for this publication is 1355-6177/11 \$25.00. Specific written permission must be obtained for all other copying. **Photocopying for Classroom Use:** Permission to reproduce parts of this publication for course anthologies may be obtained directly from Cambridge University Press or through duly authorized services such as the Academic Permissions Service of the CCC, 222 Rosewood Drive, Danvers, MA 01923 and the Copyright Permissions Service of the National Association of College Stores, or through any photoduplication service that properly secures permission from Cambridge or the CCC.

Periodicals postage paid at New York, NY, and additional mailing offices. Return Postage Guaranteed. **Postmaster:** Send address changes in the USA and Canada to: *Journal of the International Neuropsychological Society*, Cambridge University Press, Journals Fulfillment Dept., 100 Brook Hill Drive, West Nyack, NY 10994-2133.

Printed in the United States of America.

This publication is printed on acid-free paper.