

# JINS

**JOURNAL OF THE INTERNATIONAL  
NEUROPSYCHOLOGICAL SOCIETY**

**Volume 19, Number 3**

**March 2013**

**ISSN 1355-6177**



**EDITOR-IN-CHIEF**

Kathleen Y. Haaland

**FOUNDING EDITOR**

Igor Grant

**ASSOCIATE EDITORS**

Mark W. Bondi

Jennifer J. Manly

Skye McDonald

Stephen E. Nadeau

Yaakov Stern

Yana Suchy

Keith Owen Yeates

**DEPARTMENTS**

**Reviews and Dialogues**

Sterling Johnson

**Symposia**

Mary Pat Mc Andrews

**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, USA

**FOUNDING EDITOR**

Igor Grant  
University of California  
San Diego

**ASSOCIATE EDITORS**

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

Jennifer J. Manly  
Cognitive Neuroscience Division  
Department of Neurology  
Columbia University, USA

Skye McDonald  
University of New South Wales  
Sydney, Australia

Stephen E. Nadeau  
Gainesville VA Medical Center  
University of Florida

Yaakov Stern  
Cognitive Neuroscience Division  
Dept. of Neurology,  
Columbia Univ.

Yana Suchy  
University of Utah

Keith Owen Yeates  
Nationwide Children's Hospital  
The Ohio State University,  
USA

**DEPARTMENT EDITORS****Reviews and Dialogues**

Sterling Johnson  
Wm. S. Middleton Memorial  
Veterans Hospital  
University of Wisconsin-Madison

**Symposia**

Mary Pat McAndrews  
University Health Network  
University of Toronto, Toronto,  
Canada

**Book Reviews**

Ida Sue Baron  
Independent Practice  
Potomac, Maryland

**Editorial Assistant**

Donna Epler  
NM VA Healthcare System

**EDITORIAL BOARD**

Peter Anderson  
Murdoch Childrens Research Institute  
University of Melbourne

Vicki Anderson  
Royal Children's Hospital

Peter A. Arnett  
Pennsylvania State University

Marcia Barnes  
University of Texas-Houston

Heather G. Belanger  
Tampa VA Hospital  
University of South Florida

Robert A. Bornstein  
The Ohio State University

Adam M. Brickman  
Taub Institute for Research  
Columbia University

Michelle C. Carlson  
Johns Hopkins Bloomberg School  
of Public Health

Cathy Catroppa  
Murdoch Childrens Research Institute  
Royal Children's Hospital  
University of Melbourne

Agnes S. Chan  
The Chinese University of  
Hong Kong

Anjan Chatterjee  
University of Pennsylvania

Cynthia R. Cimino  
University of South Florida

H. Branch Coslett  
University of Pennsylvania  
Hospital of the University of  
Pennsylvania

Sureyya Dikmen  
University of Washington

Jacobus Donders  
Mary Free Bed Hospital

Leslie K. Fellows  
McGill University

Christopher Filley  
University of Colorado School of  
Medicine

Raul Gonzalez  
University of Illinois

Benjamin M. Hampstead  
Atlanta VA Medical Center  
Emory University

Erik Hassen  
Akershus University Hospital  
Oslo, Norway

Amy Jak  
VA San Diego Healthcare System  
University of California San Diego

Mary H. Kosmidis  
Aristotle University of Thessaloniki,  
Greece

Joel Kramer  
University of California,  
San Francisco

Glenn J. Larrabee  
Independent Practice  
Sarasota, Florida

David J. Libon  
Drexel University  
College of Medicine

John A. Lucas  
Mayo Clinic, College of Medicine

E. Mark Mahone  
Kennedy Krieger Institute  
Johns Hopkins University School of  
Medicine

Andrew Mayer  
University of New Mexico

William Milberg  
VA Boston Healthcare System  
Harvard Medical School

Feggy Ostrosky-Solis  
National University of Mexico

Jennie Ponsford  
Monash University, Australia

Catherine C. Price  
University of Florida

Christopher Randolph  
Loyola University Medical Center

Marianne Regard  
Private Practice  
University of Zurich, Switzerland

Jamie Reilly  
University of Florida

Monica Rivera Mindt  
Fordham University  
Mount Sinai School of Medicine

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

David P. Salmon  
University of California  
San Diego

Paula K. Shear  
University of Cincinnati

Elisabeth M.S. Sherman  
Alberta Children's Hospital  
University of Calgary

Julie S. Snowden  
University of Manchester,  
United Kingdom

Nikki Horne Stricker  
VA Boston Healthcare System  
Boston University School of  
Medicine

Robyn Tate  
University of Sydney  
Sydney Medical School

Nancy R. Temkin  
University of Washington

Alexander I. Tröster  
University of North Carolina

Jennifer J. Vasterling  
VA Boston Healthcare System  
Boston University School of  
Medicine  
Harvard Medical School

John L. Woodard  
Wayne State University

**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 ten times a year: January, February, March, April, May, July, August, September, October and November. Annual institutional print and electronic subscription rates: US \$910.00 in the USA, Canada, and Mexico; UK £520.00 + VAT elsewhere. Institutional electronic rates only: US \$670.00 in the USA, Canada, and Mexico; UK £383.00 + VAT elsewhere. Print Only subscription no longer available in 2013 for Institutions. Please order bundle if print is required. Individual print rates only: US \$261.00 in the USA, Canada, and Mexico; UK £145.00 + VAT elsewhere. Single part rates: US \$138.00 in the USA, Canada, and Mexico; UK £78.00 + 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](mailto: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 © 2013 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 1355-6177/13 \$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.