

Journal of the
**American
Society of
Nephrology**

EDITOR

C. Craig Tisher, M.D.
Gainesville, Florida

SENIOR DEPUTY EDITOR

Kirsten M. Madsen, M.D., Ph.D.
Gainesville, Florida

DEPUTY EDITOR

R. Tyler Miller, M.D.
Gainesville, Florida

ASSOCIATE EDITORS

Alfred K. Cheung, M.D.
Salt Lake City, Utah

Mark A. Knepper, M.D., Ph.D.
Bethesda, Maryland

Alan M. Krensky, M.D.
Stanford, California

Richard P. Lifton, M.D., Ph.D.
New Haven, Connecticut

William E. Mitch, M.D.
Atlanta, Georgia

Giuseppe Remuzzi, M.D.
Bergamo, Italy

EDITORIAL BOARD

Kamal F. Badr, M.D.
Atlanta, Georgia

L. Lee Hamm, M.D.
New Orleans, Louisiana

Arvid B. Maunsbach, M.D., Ph.D.
Aarhus, Denmark

Theodore I. Steinman, M.D.
Boston, Massachusetts

Christine Baylis, Ph.D.
Morgantown, West Virginia

J. Harold Helderman, M.D.
Nashville, Tennessee

Paolo Mené, M.D.
Rome, Italy

R. Bernd Sterzel, M.D.
Erlangen, Germany

Gavin J. Becker, M.D.
Victoria, Australia

Walter H. Hörl, M.D., Ph.D.
Wien, Austria

Timothy W. Meyer, M.D.
Palo Alto, California

Terry B. Strom, M.D.
Boston, Massachusetts

Daniel G. Bichet, M.D.
Montreal, Canada

Enyu Imai, M.D.
Osaka, Japan

Bruce A. Molitoris, M.D.
Indianapolis, Indiana

Lawrence P. Sullivan, Ph.D.
Kansas City, Kansas

David A. Bushinsky, M.D.
Rochester, NY

Richard J. Johnson, M.D.
Seattle, Washington

Karl A. Nath, M.D.
Rochester, Minnesota

Nicholas Topley, Ph.D.
Cardiff, United Kingdom

David N. Churchill, M.D.
Ontario, Canada

Carolyn J. Kelly, M.D.
San Diego, California

Luis G. Navar, Ph.D.
New Orleans, Louisiana

Laurence A. Turka, M.D.
Philadelphia, Pennsylvania

Thomas M. Coffman, M.D.
Durham, North Carolina

Paul E. Klotman, M.D.
New York, New York

Brian J. Pereira, M.D.
Boston, Massachusetts

Fokko van der Woude, M.D.
Mannheim, Germany

William G. Couser, M.D.
Seattle, Washington

Bruce C. Kone, M.D.
Houston, Texas

Jeffrey L. Platt, M.D.
Durham, North Carolina

Richard A. Ward, Ph.D.
Louisville, Kentucky

Christian P. deRouffignac, M.D.
Gif sur Yvette, France

Valentina Kon, M.D.
Nashville, Tennessee

Helmut G. Rennke, M.D.
Boston, Massachusetts

David G. Warnock, M.D.
Birmingham, Alabama

Gerald F. DiBona, M.D.
Iowa City, Iowa

Wilhelm Kriz, M.D.
Heidelberg, Germany

Eberhard Ritz, M.D.
Heidelberg, Germany

Roger C. Wiggins, M.B., BCh.
Ann Arbor, Michigan

Ronald J. Falk, M.D.
Chapel Hill, North Carolina

Kiyoshi Kurokawa, M.D.
Kanagawa, Japan

David J. Salant, M.D.
Boston, Massachusetts

Charles S. Wingo, M.D.
Gainesville, Florida

Arnold J. Felsenfeld, M.D.
Los Angeles, California

Nathan W. Levin, M.D.
New York, New York

Jeff M. Sands, M.D.
Atlanta, Georgia

Richard A. Zager, M.D.
Seattle, Washington

M. Roy First, M.D.
Cincinnati, Ohio

John K. Leypoldt, Ph.D.
Salt Lake City, Utah

John S. Savill, M.D.
Nottingham, England

CONSULTING EDITORS

Agnes Fogo, M.D.
Nashville, Tennessee

David H. Lovett, M.D.
San Francisco, California

Nestor Schor, M.D., Ph.D.
Sao Paulo, Brazil

Jared J. Grantham, M.D.
Kansas City, Kansas

Jeffrey L. Garvin, Ph.D.
Detroit, Michigan

Alicia A. McDonough, Ph.D.
Los Angeles, California

Sudhir V. Shah, M.D.
Little Rock, Arkansas

Robert G. Narins, M.D.
Detroit, Michigan

Gregory C. Germino, M.D.
Baltimore, Maryland

Phillip A. Marsden, M.D.
Toronto, Canada

James A. Shayman, M.D.
Ann Arbor, Michigan

MANAGING EDITOR

Tom Greene, Ph.D.
Cleveland, Ohio

Kevin J. Martin, M.B., B.Ch.
St. Louis, Missouri

Robert A. Star, M.D.
Dallas, Texas

Bonnie O'Brien
Gainesville, Florida