

# JOURNAL OF SHOULDER AND ELBOW SURGERY

## Editor-in-Chief

William J. Mallon, MD, *Conway, NH, USA*  
Executive Editor, JSES Family of Journals

## Deputy International Editor

Pierre Mansat, MD, PhD  
*Toulouse, France*

## Deputy Editor for Basic Science

Thay Q. Lee, PhD  
*Pasadena, CA, USA*

## Editor Emeritus - 1996-2008

Robert J. Neviaser, MD  
*Washington, DC, USA*

## Founding Editor - 1991-1996

Robert H. Cofield, MD  
*Rochester, MN, USA*

## BOARD OF TRUSTEES

Jeffrey S. Abrams, MD, Chairman, *Princeton, NJ, USA*  
Robert H. Bell, MD, Secretary-Treasurer, *Akron, OH, USA*  
Kenneth J. Faber, MD, FRCSC, MEd, *London, ON, Canada*  
Shinji Imai, MD, PhD, *Shiga, Japan*  
Jesse B. Jupiter, MD, *Boston, MA, USA*  
Bo Sanderhoff Olsen, MD, PhD, *Hellerup, Denmark*  
Anthony A. Romeo, MD, *Westmont, IL, USA*  
Jonathan B. Ticker, MD, *New York, NY, USA*  
Matthias Zumstein, MD, *Bern, Switzerland*  
William J. Mallon, MD, *Conway, NH, USA (ex officio)*

## JSES Family of Journals Editors

### JSES International

Pierre Mansat, MD, PhD, Editor-in-Chief

### Seminars in Arthroplasty: JSES

Theodore Blaine, MD, Co-Editor in Chief  
J. Michael Wiater, MD, Co-Editor in Chief

### JSES Reviews, Reports and Techniques

Edward Craig, MD, Co-Editor in Chief  
John W. Sperling, MD, Co-Editor in Chief

## Associate Editors

Samuel Antuña, MD  
*Madrid, Spain*  
April Armstrong, MD, FRCSC  
*Hershey, PA, USA*  
Peter N. Chalmers, MD  
*Salt Lake City, UT, USA*  
Alain Farron, MD  
*Lausanne, Switzerland*  
Rachel M. Frank, MD  
*Aurora, CO, USA*

Eiji Itoi, MD, PhD  
*Sendai, Japan*  
Andrew Jawa  
*Boston, MA, USA*  
In-Ho Jeon, MD, PhD  
*Seoul, Republic of Korea*  
Chunyan Jiang, MD, PhD  
*Beijing, China*  
Jörn Kircher, MD, PhD  
*Hamburg, Germany*

Joaquín Sánchez-Sotelo, MD, PhD  
*Rochester, MN, USA/Spain*  
Michael J. Sandow, MD  
*Adelaide, SA, Australia*  
Ellen Shanley, PhD, PT  
*Greenville, SC, USA*  
John Sperling, MD, MBA  
*Rochester, MN, USA*  
John M. "JT" Tokish, MD  
*Scottsdale, AZ, USA*

## Chief Social Media Editor

John Moor, MD  
*Sarasota, FL, USA*  
Alexander Aleem, MD  
*St. Louis, MO, USA*  
Stefano Carbone, MD  
*Roma, Italy*  
Shannon Carpenter, MD  
*Kansas City, KS, USA*  
Brian Grawe, MD  
*Cincinnati, OH, USA*

## Social Media Editors

Mike Kim, MD  
*Columbia, MO, USA*  
Tom Lenters, MD  
*Grand Rapids, MI, USA*  
Juan Miguel Patino, MD  
*Buenos Aires, Argentina*  
Betsy Nolan, MD  
*Oklahoma City, OK, USA*  
Shalini Ramasunder, MD  
*Durham, NC, USA*  
Miguel Ramirez, MD  
*Peoria, IL, USA*

Markus Rickerf, MD  
*Marburg, Germany*  
David Ring, MD  
*Boston, MA, USA*  
Adam Seidl, MD  
*Aurora, CO, USA*  
Scott Trenhaile, MD  
*Rickford, IL, USA*  
Peter Vezeridis, MD  
*Woburn, MA, USA*

## Review and Special Projects Editors

George S. Athwal, MD, FRCSC(C), *London, ON, Canada*  
John E. Kuhn, MD, MS, *Nashville, TN, USA*

## Basic Science Editors

Brian T. Feeley, MD, *San Francisco, CA, USA*  
Joo Han Oh, MD, PhD, *Seoul, Republic of Korea*  
Matthias A. Zumstein, MD, *Bern, Switzerland*

## Assistant Editors

Joseph A. Abboud, MD  
*Philadelphia, PA, USA*

J. Mack Aldridge III, MD  
*Durham, NC, USA*

Thomas Ambacher, MD  
*Stuttgart-Feuerbach,  
Germany*

Desmond J. Bokor, MD  
*Parramatta, NSW,  
Australia*

Juan Bruguera, MD, PhD  
*Pamplona, Spain*

Ulrich Brunner, MD  
*Hausham, Germany*

Emilio Calvo, MD  
*Madrid, Spain*

Antonio Cartucho, MD  
*Lisboa, Portugal*

Alessandro Castagna, MD  
*Milano, Italy*

Andrea Celli, MD  
*Modena, Italy*

R. Sean Churchill, MD  
*Milwaukee, WI, USA*

Carlos Alberto de  
Anquin, MD  
*Cordoba, Argentina*

Mathijs A. de Beer, MD  
*Pretoria, South Africa*

Lieven de Wilde, MD  
*Ghent, Belgium*

Fabrice Duparc, PhD  
*Rouen, France*

Xavier Duralde, MD  
*Atlanta, GA, USA*

Roger Emery, MS, FRCS  
*London, UK*

Donald Endrizzi, MD  
*Portland, ME, USA*

Edward V. Fehringer, MD  
*Omaha, NE, USA*

Mark A. Frankle, MD  
*Temple Terrace, FL, USA*

Michael Q. Freehill, MD  
*Edina, MN, USA*

Michael T. Freehill, MD  
*Stanford, CA, USA*

Barbara G. Frieman, MD  
*Philadelphia, PA, USA*

Grant E. Garrigues, MD  
*Durham, NC, USA*

Dominique F. Gazielly, MD  
*Paris, France*

Gordon I. Groh, MD  
*Asheville, NC, USA*

Frank Handelberg, MD  
*Brussels, Belgium*

Steven J. Hatstrup, MD  
*Phoenix, AZ, USA*

Marian M. "Moose" Herring, MD  
*Richmond, VA, USA*

Hsu Horn-Chaung, MD  
*Taichung, Taiwan*

Andreas B. Imhoff, MD  
*München, Germany*

Jörg Jerosch, MD  
*Neuss, Germany*

Jay D. Keener, MD  
*St. Louis, MO, USA*

Michael Khazzam, MD  
*Dallas, TX, USA*

Graham J. W. King, MD  
*London, ON, Canada*

Joyce S. B. Koh, MD  
*Singapore*

Sumant G. "Butch"  
Krishnan, MD  
*Dallas, TX, USA*

Jun Kumagai, MD, PhD  
*Yamagata, Japan*

V. Prem Kumar, MD  
*Singapore*

Ofer Levy, MD  
*Reading, UK*

Sven Lichtenberg, MD  
*Heidelberg, Germany*

Petra Magosch, MD  
*Heidelberg, Germany*

Marco Maiotti, MD  
*Rome, Italy*

Nancy M. Major, MD  
*Aurora, CO, USA*

Tetsuya Matsuura, MD  
*Tokushima, Japan*

Peter J. Millett, MD  
*Vail, CO, USA*

A. Daniel Moya, MD  
*Buenos Aires, Argentina*

George Murrell, MD, PhD  
*Sydney, NSW, Australia*

Anand Murthi, MD  
*Baltimore, MD, USA*

Gregory P. Nicholson, MD  
*Chicago, IL, USA*

Thomas J. Noonan, MD  
*Denver, CO, USA*

Richard W. Nyffeler, MD  
*Bern, Switzerland*

Jin-Young Park, MD  
*Chonan, Republic of Korea*

Steve A. Petersen, MD  
*Lutherville, MD, USA*

Giuseppe Porcellini, MD  
*Forli, Italy*

Wolfgang Pözl, MD  
*Bad Rappenau, Germany*

Shalini Ramasunder, MD  
*Burlington, NC, USA*

David C. Ring, MD, PhD  
*Austin, TX, USA*

Raffaele Russo, MD  
*Naples, Italy*

Felix H. "Buddy" Savoie III, MD  
*New Orleans, LA, USA*

Markus Scheibel, MD  
*Berlin, Germany*

Alberto G. Schneeberger,  
MD  
*Zürich, Switzerland*

Paul M. Seithi, MD  
*Greenwich, CT, USA*

Kim Seung-Ho, MD  
*Seoul, Republic of Korea*

Patrick St. Pierre, MD  
*Rancho Mirage, CA, USA*

Scott P. Steinmann, MD  
*Rochester, MN, USA*

Norbert Südkamp, MD  
*Freiburg, Germany*

Hiroyuki Sugaya, MD  
*Chiba, Japan*

Kazuya Tamai, MD, PhD  
*Tochigi, Japan*

Matthew M. Tomaino, MD  
*Rochester, NY, USA*

Carlos Torrens, MD  
*Barcelona, Spain*

Markus Wambacher, MD  
*Innsbruck, Austria*

Stephen C. Weber, MD  
*Chevy Chase, MD, USA*

J. Michael Wiater, MD  
*Beverly Hills, MI, USA*

W. Jaap W. Willems,  
MD, PhD  
*Amsterdam,  
The Netherlands*

### Basic Science Assistant Editors

Richard E. Debski, PhD  
*Pittsburgh, PA, USA*

James A. Johnson, PhD  
*London, ON, Canada*

Helmut Lill, PhD  
*Hannover, Germany*

### Statistical Editor

Gregory D. Ayers, MS  
*Nashville, TN, USA*

### Managing Editor

Jill Shepherd  
*Eustis, FL, USA*