

# JOURNAL OF THERMAL BIOLOGY

## Environment, Evolution and Medicine

---

### Editors

C. J. GORDON  
*5018 Butternut Road, Durham, 27707,  
USA*

H.-O. PÖRTNER  
*Marine Biology, Ecological and Evolutionary Physiology,  
Alfred Wegener Institute for Polar and Marine Research,  
Am Handelshafen 12; Postfach 120161, D-27570  
Bremerhaven, Germany*

### Founding Editors

K. BOWLER  
*Durham, UK*

J. E. HEATH  
*Buchanan Dam, TX, USA*

### Editorial Board Members

D. ATKINSON  
*University of Liverpool, Liverpool, UK*

G. S. BAKKEN  
*Indiana University School of Medicine,  
Terre Haute, IN, USA*

L. G. S. BRANCO  
*Universidade de São Paulo (USP),  
Ribeirão Preto, Brazil*

M. J. BUONO  
*San Diego State University, CA, USA*

M. CABANAC  
*Université Laval, Québec, QC, Canada*

M. CAPUTA  
*Nicolaus Copernicus University, Torun, Poland*

S. CLUSELLA-TRULLAS  
*University of Stellenbosch, Matieland,  
South Africa*

A. R. COSSINS  
*University of Liverpool, Liverpool, UK*

J. R. DAVID  
*Centre National de la Recherche Scientifique (CNRS), Gif-sur-Yvette,  
France*

R. B. HUEY  
*University of Washington, Seattle, WA, USA*

I. A. JOHNSTON  
*University of St. Andrews, St. Andrews, UK*

M. R. KEARNEY  
*University of Melbourne, Victoria, Australia*

L. R. LEON  
*US Army Research Institute of Environmental Medicine, Natick, MA, USA*

F. E. MARINO  
*Charles Sturt University, Bathurst, NSW, Australia*

D. J. McCAFFERTY  
*University of Glasgow, Glasgow, UK*

J. OVERGAARD  
*Aarhus Universitet, Aarhus, Denmark*

R. REFINETTI  
*University of South Carolina, Walterboro, SC, USA*

J. ROTH  
*Justus-Liebig-Universität Gießen, Giessen, Germany*

M. SAWKA  
*US Army Research Institute of Environmental Medicine, Natick,  
MA, USA*

F. SEEBACHER  
*University of Sydney, Sydney, NSW, Australia*

H. A. SHIELS  
*University of Manchester, Manchester, England, UK*

D. SHRIVASTAVA  
*University of Minnesota, Minneapolis, MN, USA*

B. SINCLAIR  
*University of Western Ontario, London, ON, Canada*

D. E. SPIERS  
*University of Missouri, Columbia, MO, USA*

G. J. TATTERSALL  
*Brock University, St. Catharines, ON, Canada*

N. A. S. TAYLOR  
*University of Wollongong, Wollongong, NSW, Australia*

J. S. TERBLANCHE  
*Stellenbosch University, Matieland, South Africa*

D. WANG  
*Chinese Academy of Sciences (CAS), Beijing, China*

F. WANG  
*The Hong Kong Polytechnic University, Hung Hom, Kowloon,  
Hong Kong*

G. WILLIAMS  
*The University of Hong Kong, Hong Kong SAR, PR China*

T. E. WILSON  
*Ohio University, Athens, OH, USA*