

# Disease Models & Mechanisms

The online version of Disease Models & Mechanisms is considered to be the version of record

## EDITOR-IN-CHIEF

**Monica J. Justice, PhD**  
The Hospital for Sick Children (SickKids), Canada

## SENIOR EDITOR

**Ross Cagan, PhD**  
Mount Sinai, USA

## MONITORING EDITORS

**Steven J. Clapcote, PhD**  
University of Leeds, UK  
**Pamela Hoodless, PhD**  
BC Cancer Agency, Canada  
**Tatsushi Igaki, PhD**  
Kyoto University, Japan  
**Elaine Mardis, PhD**  
Nationwide Children's Hospital, USA  
**E. Elizabeth Patton, PhD**  
MRC Institute of Genetics and Molecular Medicine, UK  
**Owen Sansom, PhD**  
Beatson Institute for Cancer Research, UK  
**David Tobin, PhD**  
Duke University School of Medicine, USA

## GUEST EDITOR

**Almut Schulze, PhD**  
University of Würzburg, Germany

## CONSULTING EDITOR

**George Tidmarsh, MD, PhD**  
La Jolla Pharmaceutical Company, USA

## SCIENTIFIC EDITORS

**Paraminder Dhillon, PhD**  
**Julija Hmeljak, PhD**

## MANAGING EDITOR

**Rachel Hackett**

## PRODUCTION EDITORS

**Jodie Houghton**  
**Melissa Ray, PhD**

## EDITORIAL ADMINISTRATORS

**Debbie Thorpe**  
**Hannah Wright**

## PUBLISHER

**O. Claire Moulton, PhD**

## FOUNDING EDITOR-IN-CHIEF

**Vivian Siegel, PhD**  
Vanderbilt University, USA  
MIT, USA

## EDITORIAL BOARD

**Tim Aitman, MD, PhD**  
The University of Edinburgh, UK  
**Frances Balkwill, PhD**  
Barts Cancer Institute, UK  
**Dirk Bohmann, PhD**  
University of Rochester Medical Center, USA  
**Nancy M. Bonini, PhD**  
University of Pennsylvania, USA  
**Guy Caldwell, PhD**  
University of Alabama, USA  
**Robert Cardiff, MD, PhD**  
University of California Davis, USA  
**Hans Clevers, MD, PhD**  
Hubrecht Laboratory, The Netherlands  
**Sabine P. Cordes, PhD**  
Lunenfeld-Tanenbaum Research Institute,  
Canada  
**Claude Desplan, PhD**  
New York University, USA  
**James Dowling, MD, PhD**  
The Hospital for Sick Children, Canada  
**Elaine Dzierzak, PhD**  
University of Edinburgh, UK  
**Jonathan A. Epstein, MD**  
Perelman School of Medicine, USA  
**Elizabeth Fisher, PhD**  
University College London, UK  
**Yasuyuki Fujita, MD, PhD**  
Hokkaido University, Japan  
**Aron M. Geurts, PhD**  
Medical College of Wisconsin, USA  
**Aaron D. Gitler, PhD**  
Stanford University School of  
Medicine, USA  
**David Hackam, MD, PhD**  
Johns Hopkins Children's Center, USA  
**Nick Hastie, PhD**  
Medical Research Council, UK  
**Antonis Hatzopoulos, PhD**  
Vanderbilt University, USA  
**Brigid Hogan, PhD**  
Duke University, USA  
**Deborah Hung, MD, PhD**  
Harvard Medical School, USA  
**Philip Ingham, PhD**  
University of Exeter, UK  
**Raghu Kalluri, MD, PhD**  
MD Anderson Cancer Center, USA

## FOUNDING EDITORS

**Gerard Evan, PhD**  
**Mark C. Fishman, MD**  
**Susan Lindquist, PhD**  
**Stephen O'Rahilly, MD**  
**Nadia Rosenthal, PhD**

## Disease Models & Mechanisms

The Company of Biologists Ltd, Bidder Building, Station Road, Histon, Cambridge, CB24 9LF, UK  
Tel: +44 (0)1223 632864 Fax: +44 (0)1223 632875 E-mail: dmm@biologists.com

## Matthew F. Krummel, PhD

University of California San Francisco, USA  
**Irene Leigh, MD**  
Cancer Research UK, University of Dundee, UK  
**Jeanne Magram, PhD**  
Northern Biologics, Canada  
**Kelly McNagny, PhD**  
The University of British Columbia, Canada  
**Annemarie H. Meijer, PhD**  
University of Leiden, The Netherlands  
**Marco Milán, PhD**  
IRB Barcelona, Spain  
**Jason Mills, MD, PhD**  
Washington University School of Medicine, USA  
**Richard I. Morimoto, PhD**  
Northwestern University, USA  
**Norbert Perrimon, PhD**  
Harvard Medical School, USA  
**Stefano Piccolo, PhD**  
University of Padua, Italy  
**Steve Pollard, PhD**  
Edinburgh Cancer Research Centre, UK  
**Susan Quaggin, MD**  
Northwestern University, USA  
**Lalita Ramakrishnan, MD, PhD**  
University of Cambridge, UK  
**Paul Riley, PhD**  
University of Oxford, UK  
**Kirsten Sadler Edepli, PhD**  
New York University, Abu Dhabi  
**Paul Schofield, PhD**  
University of Cambridge, UK  
**Chad A. Shaw, PhD**  
Baylor College of Medicine, USA  
**James Shorter, PhD**  
University of Pennsylvania, USA  
**Katalin Susztak, MD, PhD**  
University of Pennsylvania, USA  
**David Vaux, PhD**  
The Walter and Eliza Hall Institute of Medical  
Research, Australia  
**Leonard I. Zon, MD**  
Harvard Stem Cell Institute, USA  
**Randall T. Peterson, PhD**  
University of Utah, USA  
**Dawang Zhou, PhD**  
Xiamen University, China

**Janet Rossant, PhD**  
**Allan Spradling, PhD**  
**Tian Xu, PhD**  
**Magdi Yacoub, MD**  
**Huda Zoghbi, MD**

## About the Publisher

The Company of Biologists is a not-for-profit publishing organisation dedicated to supporting and inspiring the biological community. The Company publishes five specialist peer-reviewed journals: Development, Journal of Cell Science, Journal of Experimental Biology, Disease Models & Mechanisms and Biology Open. It offers further support to the biological community by facilitating scientific meetings, providing travel grants for researchers and supporting research societies.

www.biologists.com