



# Life Sciences Education

Published by



Editorial Partner



## Editor-in-Chief

**Erin Dolan**

*University of Texas at Austin  
edolan@austin.utexas.edu*

## Senior Editors

**A. Malcolm Campbell**

*Davidson College  
macampbell@davidson.edu*

**Sarah Elgin**

*Washington University in  
St. Louis  
selgin@biology.wustl.edu*

**Jose Herrera**

*Western New Mexico  
University  
jose.herrera@wnmu.edu*

## Editors

**Bruce Alberts**

*University of California, San Francisco  
balberts@ucsf.edu*

**Deborah Allen**

*University of Delaware  
deallen@udel.edu*

**Elizabeth Ambos**

*Council on Undergraduate Research  
eambos@cur.org*

**Daron Barnard**

*Worcester State College  
daron.barnard@worcester.edu*

**Janet Batzli**

*University of Wisconsin-Madison  
jcbatzli@wisc.edu*

**Katayoun Chamany**

*Eugene Lang College  
The New School for Liberal Arts  
chamanyk@newschool.edu*

**Eric Chudler**

*University of Washington  
chudler@u.washington.edu*

**James Collins**

*Arizona State University  
jcollins@asu.edu*

**Clarissa Dirks**

*Evergreen State College  
dirksc@evergreen.edu*

**Graham F. Hatfull**

*University of Pittsburgh  
gfh@pitt.edu*

**James Hewlett**

*Finger Lakes Community College  
hewletja@ficc.edu*

**Jennifer Knight**

*University of Colorado, Boulder  
jennifer.knight@colorado.edu*

**Jay Labov**

*National Research Council  
jlabov@nas.edu*

**Mary Lee Ledbetter**

*College of the Holy Cross  
mledbett@holycross.edu*

**Kelly Mack**

*Association of American Colleges and  
Universities  
mack@aacu.org*

**David Marcey**

*California Lutheran University  
marcey@clunet.edu*

**Kenneth Miller**

*Brown University  
kenneth\_miller@brown.edu*

**Jennifer Momsen**

*North Dakota State University  
Jennifer.Momsen@ndsu.edu*

**Ross Nehm**

*Stony Brook University  
ross.nehm@stonybrook.edu*

**Diane K. O'Dowd**

*University of California, Irvine  
dkodowd@uci.edu*

**Nancy Pelaez**

*Purdue University  
npelaez@purdue.edu*

**Jeff Schinske**

*De Anza College  
schinskejeff@fida.edu*

**Hannah Sevia**

*University of Massachusetts Boston  
Hannah.Sevia@umb.edu*

**Michèle Shuster**

*New Mexico State University  
mshuster@nmsu.edu*

**Michelle Smith**

*University of Maine  
michelle.k.smith@maine.edu*

**Marilyne Stains**

*University of Nebraska, Lincoln  
mstains2@unl.edu*

**Elisa Stone**

*University of California, Berkeley  
emstone@berkeley.edu*

**Marshall Sundberg**

*Emporia State University  
sundberm@esumail.emporia.edu*

**Kimberly Tanner**

*San Francisco State University  
kdtanner@sfsu.edu*

**Debra Tomanek**

*University of Arizona  
dtomanek@u.arizona.edu*

**Mary Pat Wenderoth**

*University of Washington  
mpw@u.washington.edu*

## Publisher

**Stefano Bertuzzi**

*ASCB Executive Director*

**W. Mark Leader**

*ASCB Publications Director*

**Thea Clarke**

*ASCB Director of Communications  
and Education*

CBE—*Life Sciences Education* (ISSN 1931-7913) is published online quarterly (one volume per year) by The American Society for Cell Biology, 8120 Woodmont Avenue, Suite 750, Bethesda, MD 20814-2762, USA; [www.ascb.org](http://www.ascb.org). The journal, which is accessible at [www.lifescied.org](http://www.lifescied.org) and [www.pubmedcentral.nih.gov](http://www.pubmedcentral.nih.gov), is supported in part by a grant from the Howard Hughes Medical Institute. "ASCB," "The American Society for Cell Biology," "iBioSeminars," and "Molecular Biology of the Cell" are registered trademarks of The American Society for Cell Biology. "The Cell: An Image Library" is a common law trademark of The American Society for Cell Biology.