
CLINICAL LABORATORY SCIENCE

Spring 2010

Volume 23/Number 2

Focus: Nanotechnology



JOURNAL OF THE AMERICAN SOCIETY FOR CLINICAL LABORATORY SCIENCE

ASCLS Mission/Vision Statement

The American Society for Clinical Laboratory Science serves as the voice of all clinical laboratory professionals, creating a vision for the advancement of the clinical laboratory practice field, and advocating the value and role of the profession ensuring safe, effective, efficient, equitable, and patient centered healthcare.



AMERICAN SOCIETY FOR CLINICAL LABORATORY SCIENCE

6701 Democracy Blvd, Suite 300
Bethesda, Maryland 20817
(301) 657-2768, (301) 657-2909 (fax)
www.ascls.org

ASCLS Core Values

Core Values include enhancing quality standards and patient safety; providing professional development opportunities; promoting expanded roles and contributions of clinical laboratory professionals to the healthcare team; increasing the diversity in the profession; and expanding the voice and role of under-represented individuals and groups.

ASCLS MEMBER EDITORS

Editor-in-Chief

Bernadette Rodak MS CLSpH(NCA)
Clinical Laboratory Science Program
Indiana University
Clarian Pathology Laboratory
350 West 11th Street, 6002F
Indianapolis IN 46202
317-491-6218, fax 317-491-6163
brodak@iupui.edu

Continuing Education Editor

George A Fritsma MS MT(ASCP)
The Fritsma Factor
http://www.fritsmafactor.com
153 Redwood Drive
Trussville AL 35173
205-821-5641, fax 205-975-7302
george@fritsmafactor.com

Clinical Practice Editor

Libby Spence PhD CLS(NCA)
University of Mississippi Medical Center
School of Graduate Studies in the
Health Sciences
2500 North State Street
Jackson, MS 39216
601-984-1204, fax 601-815-9440
lspence@gme.umsmed.edu

Research and Reports

David L McGlasson MS CLS(NCA)
59th Clinical Research Division/SGRL
2200 Berquist Dr., Bldg. 4430
Lackland AFB TX 78236-9908
210-292-6555, fax 210-292-6053
david.mcglasson@lackland.af.mil

Contributing Editors

Eileen Carreiro-Lewandowski/N Dartmouth MA
Deborah Josko/Newark NJ
Elaine Keohane/Newark NJ
Rebecca Laudicina/Chapel Hill NC
Connie Mahon/Rockville MD
Linda Smith/San Antonio TX
Michelle Wright-Kanuth/Galveston TX

REVIEW BOARD

Richard Bamberg/Greenville NC
Suzanne Campbell/ Liberal KS
Eileen Carreiro-Lewandowski/N Dartmouth MA
Dianne Cearlock/DeKalb IL
Peter Colaninno/Jamaica NY
Maria Delost/Youngstown OH
Jo Ann Fenn/Salt Lake City UT
Maribeth Flaws/Chicago IL
Ellis Frohman/St Louis MO
Mildred Fuller/Norfolk VA
Abraham Furman/Portland OR
Richard Gregory/Indianapolis IN
Jesse Guiles/Newark NJ
Cindy Handley/Liberal KS
Lester Hardegree/Bluffton SC
Denise Harmening/Baltimore MD
Rita Heuetz/St Louis MO
Daniel Hoefner/Elon, NC
Linda Hogan/Wichita KS
Virginia Hughes/Montgomery AL
Deborah Josko/Newark NJ
Kelly Joyner/Durham NC
Linda Kasper/Indianapolis IN
Elaine Keohane/Newark NJ
Nancy Konopka/Gettysburg PA
Robin Krefetz/Cherry Hill NJ
Linda Laatsch/Milwaukee WI
Hal Larsen/Lubbock TX
Donna Larson/Gresham OR
Rebecca Laudicina/Chapel Hill NC
Louann Lawrence/New Orleans LA
Susan Leclair/Marcia Lee/Oxford OH
Craig Lehmann/Stony Brook NY
Elizabeth Kenimer Leibach/Augusta GA
Lynn Little/Dallas TX
Karen McClure/Houston TX
Carol McCoy/Minneapolis MN
Sharon Miller/St Charles IL
Isaac Montoya/Houston TX
Lillian Mundt/North Chicago IL
Harriette Nadler/King of Prussia PA
Joan Prince/Milwaukee WI
Margaret Reinhart/Philadelphia PA
Perry Scanlan/Clarksville TN

Masih Shokrani/Dekalb IL
Stephen Sodeke/Tuskegee AL
James Vossler/Syracuse NY
Kathy Waller/Columbus OH
Lori Woeste/Normal IL
Michele Wright-Kanuth/Galveston TX

P.A.C.E.* Liaison

Diane Kumashiro/Kaneohe HI

ASCLS BOARD OF DIRECTORS 2009-2010

Mary Ann McLane, President
Marcia Armstrong, President-elect
Scott Aikey, Past President
Gilma Roncancio-Weemer, Secretary/Treasurer
Carol Golyski, Region I
Barbara Snyderman, Region II
Hassan Aziz, Region III
Linda S. Gorman, Region IV
Debra Rodahl, Region V
Tim Randolph, Region VI
Linda Smith, Region VII
J.R. Constance, Region VIII
Mary Lashinski, Region IX
Sheri Gon, Region X
Michele Yost, First Year Professional Chair
Lisa Martini, Student Forum Chair

ASCLS Headquarters Executive Staff

Elissa Passiment, Executive Vice President

EDITORIAL OFFICE AND PRODUCTION

Westminster Publishers
315 Westminster Court
Brandon, MS 39047
(601) 214-5028; (202) 315-5843 (fax)
westminsterpublishers@comcast.net
www.ascls.org/leadership/cls/index.htm

Executive Editor

David Fowler PhD CLS(NCA)

Managing Editor

Myra Fowler CLS(NCA)

Inclusion in the journal of product names or author opinions does not constitute endorsement by either *Clinical Laboratory Science* or ASCLS.

Clinical Laboratory Science (ISSN 0894-959X) is published quarterly by the American Society for Clinical Laboratory Science, 6701 Democracy Blvd., Suite 300, Bethesda MD 20817; (301) 657-2768; (301) 657-2909 (fax).

Annual Subscription Rates:

	USA	Canada	Non-USA
Individuals	\$65	\$75	\$130
Institutions	\$80	\$80	\$130

Questions related to subscriptions should be addressed to: SherryM@ASCLS.org. The cost of single copies is \$15. Requests to replace missing issues free of charge are honored up to six months after the date of issue. Send requests to ASCLS headquarters. Annual membership dues of ASCLS are \$95, \$40 of which is allocated to a subscription of CLS. Periodical postage paid at Bethesda, MD and other additional mailing offices.

Advertising for CLS is accepted in accordance with the advertising policy of the ASCLS. Contact the CLS advertising representative at (301) 657-2768.

Manuscript Submissions: To encourage consistency in style, refer to guidelines in Scientific Style and Format - The Council of Science Editors Manual for Authors, Editors, and Publishers, 2006.

Detailed instructions for authors are available on the ASCLS web-site. Contact the CLS Editorial Office for more information.

All articles published represent the opinions of the authors and do not reflect the official policy of ASCLS or the authors' institutions unless specified.

Microfilm and microfiche editions of CLS are available from Proquest, 300 N Zeeb Road, Ann Arbor MI 48106.

Correspondence related to editorial content should be mailed to: Westminster Publishers, 315 Westminster Court, Brandon MS 39047; (601) 214-5028; (202) 315-5843 (fax). Email: westminsterpublishers@comcast.net

©Copyright 2009 American Society for Clinical Laboratory Science Inc. All rights reserved.

ADDRESS CHANGES

Postmaster: Send address changes to
Clinical Laboratory Science
6701 Democracy Blvd, Suite 300
Bethesda MD 20817