

# The Microcirculatory Society, Inc.

## Newsletter

Volume 30, Number 1

Summer 2002

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### Officers

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<b>President-elect:</b>	Geert Schmid-Schonbein gwss@bioeng.ucsd.edu
<b>Secretary:</b>	Cynthia J. Meininger cjm@tamu.edu
<b>Treasurer:</b>	Ann Baldwin abaldwin@u.arizona.edu
<b>Web Site:</b>	<a href="http://microcirc.org">http://microcirc.org</a>

## *President's Message*

*Paul F. McDonagh*

**Thanks.** While driving to one of our many fine beaches here in Tucson, I was reminded that it's time for the Summer installment of the President's Message. First of all, I'd like to express my sincere thanks to the membership for electing me to serve as President of the Microcirculatory Society. I consider this position as an honor and privilege and I will do my best to follow in the footsteps of our many fine past presidents.

I'd also like to thank several members who recently completed their terms, namely Ingrid Sarelius for her excellent service as President. The President's Symposium was a huge success. Jeff Falcone and Bill Mayhan for serving on the Executive Council, Bill Chilian for Chairing the Awards Committee, Debbie Damon for Chairing the Membership Committee, Walter Duran for Chairing the Program Committee, Herb Lipowski for Chairing the Development Committee and Sarah Yuan for Chairing the Nominating Committee. In addition, I'd like to thank Michael Davis, Mary Gerritsen, Neil Granger,

Bill Joyner, Bruce Klitzman, Akos Koller and Harvey Mayrowitz for their service on MCS committees. As you can see, there will be many new chairs and new members of our various committees. We are in the process of making these appointments.

I'd also like to welcome Geert Schmid-Schonbein as our President-Elect, Glenn Bohlen and Ron Korthuis as the new members of MCS Council. Bill Jackson is now the able Chair of the Program Committee and Molly Frame is the new Chair of the Membership Committee.

Continued thanks to Cindy Meininger for her competent service as Secretary, Ann Baldwin for service as Treasurer and Bob Gore for Chairing the Publications Committee and for his excellent service running the MCS Website. Also, thanks to Holly Lopez for a super job in managing and coordinating MCS business.

**Annual Meeting.** We live in an ever-changing world and our society's life journey is no excep-

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tion. I'd like to touch on a few points that I believe deserve my attention as President and your attention as active, caring members of MCS. First, there is a concern that incorporating our annual meeting with Experimental Biology has caused a loss of our society's identity. One 'solution', mentioned to me by several members, is to hold our meeting separately from EB. I agree that we should maintain our 'identity' but I am not personally in favor of holding our meeting separately. I believe that there is a lot to gain from our association with APS and EB. For example, an effort is currently underway by Bill Chilian and APS to coordinate a Cardiovascular Theme format at EB. I believe that our MCS meeting would fit nicely into the theme concept and that the potential for interactions among CV scientists will be enhanced. Believe me, I appreciate the benefits and the more collegial nature of a 'smaller, closed knit' meeting and perhaps, in future years, we could hold our 'own' meeting again. For the upcoming meeting in San Diego, I will work with Bill Jackson, our new Program Committee Chair, to help maintain a sense of togetherness for our society's meeting. Toward that end, there are several scheduling ideas that Bill and I have in mind to avoid conflicts with other meetings and dinners at EB that tend to pull our members away to other venues. By the way, **EB 2003 starts on Friday April 11, 2003**, so please mark your calendars.

**Membership.** To remain alive and well, we must recruit new members into our society. I ask each of you to recruit one new member into M.C.S. this year. To make the process easier, Molly Frame, our new Membership Committee Chair, is working with Bob Gore to streamline the process to allow 'on-line' application. Keep an eye on the MCS website for further information regarding the online application process.

**Young Investigators.** Also, we must continue to attract young investigators into our society. I believe the Young Investigator's Symposium that Walter Duran initiated was well-attended in

New Orleans. This year Jeff Frisbee and David Stepp are organizing this symposium, which will be held on the second day of the meeting (Saturday 4/12/03). In addition, we are increasing the number of Zweifach Young Investigator Travel Awards from two to five, which will hopefully attract young scientists to present their work at our meeting.

**Financing.** First, I'd like to thank the society's leadership in their choice of conservative investments a few years back. Their prudence is paying off today and has helped to maintain our society's financial foundation. However, our annual expenses continue to exceed revenues and it is critical that we increase the percent of members who pay their dues in a timely manner. In the coming year, we plan to gently, but persistently, 'remind' our delinquent members to pay their dues.

**Journal.** We have an excellent journal, whose impact factor continues to improve. You can support your journal in two meaningful ways: first, by submitting manuscripts to Microcirculation and second, by paying your dues. In conversations with many of you, maintaining and growing our journal is high on your priority list. Please help make that happen. Also, this is Neil Granger's final year as Editor of Microcirculation. Neil has done a super job during his tenure and he will be a tough act to follow. The Publications Committee received two excellent nominations for the new editor and will be making a recommendation to the MCS Council in the near future. Stay tuned.

That's all for now. Please support your society and have a great summer.

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## Welcome to New MCS Members!

### Regular Members:

Keith Norman, Ph.D.  
University of Sheffield  
Northern General Hospital  
Sheffield, England

Robin Looft-Wilson  
John B. Pierce Lab  
New Haven, Connecticut

Geoffrey W. Payne  
John B. Pierce Lab  
New Haven, Connecticut

Shawn E. Bearden  
John B. Pierce Lab  
New Haven, Connecticut

Vladislav V. Glinskii  
Department of Biochemistry  
University of Missouri-Columbia  
Columbia, Missouri

Jena J. Steinle  
The Texas A&M University System  
Health Science Center  
Temple, Texas

### Student Members:

Vandana Sarin  
The Texas A&M University System  
Health Science Center  
College Station, Texas

Sara J. Haug  
John B. Pierce Lab  
New Haven, Connecticut

*Aspiring Author?*

*Budding Historian?*

## The Microcirculatory Society Wants You!



The MCS will be celebrating its 50th anniversary in 2004 and is in need of a volunteer to write a history of the last 25 years.

*Interested?*

Contact Paul Johnson  
[pjohnson@bioeng.ucsd.edu](mailto:pjohnson@bioeng.ucsd.edu)

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## REMINDER!

Please check your personal database on the website ([microcirc.org](http://microcirc.org)) and revise old or incorrect information.

And remember to support your Society by paying your dues!

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**General Business Meeting; April 20, 2002**  
**Ernest R. Morial Convention Center, Rooms 221-222**  
**New Orleans, Louisiana**

Ingrid Sarelius, MCS President, called the meeting to order at 5:35 p.m. in Rooms 221-222 of the Ernest R. Morial Convention Center, New Orleans, Louisiana. The minutes of the 2001 General Business Meeting were accepted as written.

**Report from the Secretary:**

No changes are expected from the current procedure. Electronic newsletter distribution is proceeding well.

**Report from the Treasurer:**

Ann Baldwin presented the Treasurer's Report. Total assets in 2001 were \$181,035 and \$196,132 in 2002. This increase in assets includes payments for past Editorial Office costs. Journal costs continue to be a large portion of the expenses for the year. Awards also accounted for some of the extra costs in 2001-2002 compared to 2000-2001. Of the 502 possible dues-paying members, 162 remained unpaid for 2001 and approximately 300 are still unpaid for 2002. Predicted income for 2003 is \$62,280 while predicted expenses are \$63,817. Ann urged members to help find sponsors for the Society awards. Ann also reminded members that they need to keep their dues current.

It was suggested by Bill Jackson that we set up a table at the meeting to accept dues payment while members are thinking about it.

It was suggested by Jeff Falcone that MCS membership applications be available at the President's Symposium to encourage people attending the symposium to join the MCS. Invitation letters could also be sent to individuals who submit abstracts to MCS sessions but who are not MCS members.

**Obituaries:**

Several MCS members who had passed away during the last year were remembered. Sid Sobin was remembered by Paul Johnson and Peter Chen. Peter Chen was mentored by Sid Sobin and worked with him until the day he died. He reviewed the many achievements of Sid Sobin, emphasizing that he was an enthusiastic organizer of scientific cooperation. Paul Johnson reminded the membership that by encouraging participation of diverse investigators Sid Sobin brought new dimensions to the Microcirculatory Society. He especially encouraged the participation of people interested in quantification. He was the President of MCS in 1966-67. During this time he worked to bring the MCS closer to FASEB—he began the cross-fertilization of interactions with other societies.

Robert Berne was remembered by Virginia Huxley. She reviewed his many awards, but stressed that he should be remembered for being a role model for students, postdocs, and faculty.

Masahuri Tsuchiya was remembered by Ingrid Sarelius. She reviewed his contributions, including those important to the founding of the Japanese Microcirculatory Society. He stressed the importance of understanding mechanisms from a microvascular viewpoint.

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Silvio Baez, the 1973 winner of the Landis Award, was remembered by Ingrid Sarelius. He collaborated with Ben Zweifach on the study of circulatory shock. In addition, he devised ingenious methods for measuring microvascular function, including image-shearing techniques.

Phyllis Gootman was remembered by Ingrid Sarelius. A moment of silence was observed by the membership in memory of all of these MCS members.

### **Committee Reports:**

#### **Publications Committee:**

Bob Gore provided the report for the Publications Committee. He stated that the major project of the committee was to implement the on-line journal access. This project was completed. Access to the journal requires that members pay their dues to get an ID number.

D. Neil Granger will be stepping down as Editor of Microcirculation in 2003. His replacement is currently being sought. Two candidates, William Jackson and Klaus Ley, have applied for this position and will be interviewed during the current meeting. Finding a replacement quickly will ensure a smooth transition between offices.

Two Journal awards were made this year: The Mary Gerritsen Award (for most cited review article) went to Rakesh Jain for "The Landis Award, 1996: Delivery of Molecular and Cellular Medicine to Solid Tumor" (Vol. 4(1): 3-23, March, 1997). The Curt Wiederhelm Award (for most cited research article) went to Stephen Van Eeden for "Polymorphonuclear Leukocytes Released from Bone Marrow Preferentially Sequester in Lung Microvessels" (Vol. 4(3): 369-380, Sept, 1997).

#### **Journal Report:**

Neil Granger provided the report for the Journal. Submissions to Microcirculation were up 50% from last year. The current acceptance rate is 42%. Neal urged the membership to submit their best work. The impact factor for the journal has risen from 2.25 to 2.67. The Hot Topics issues have been popular. The next issue will be edited by Julian Lombard and Bill Jackson (Vol. 9 (#4) and will focus on Adaptation of the Microcirculation to Hypertension. Three more are planned for the future: Angiogenesis: Chemokines and Tissue Engineering (Edited by Klaus Ley, August 2002), The Mechanism(s) of Vascular Lumen Formation and Arteriogenesis (edited by Mary Gerritsen, Sept, 2002), and Microcirculatory Abnormalities in Sickle Cell Disease (edited by Robert P. Hebbel, April 2003). Anyone with an idea for a new Hot Topics issue should contact the Editor

Paul McDonagh encouraged members to fill out an application for an institutional subscription to Microcirculation.

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**Awards Committee:**

Ingrid Sarelius provided the report for the Awards Committee. The following awards were made for 2002:

Eugene M. Landis Research Award – Robert W. Gore  
August Krogh Young Investigator Award – Zoltan Ungvari  
Christian Crone Travel Award for Outstanding Young Investigator – Cor de Wit  
MCS Travel Award for Outstanding Young Investigator - Samina Kanwar  
Zweifach Student Awards – Eli Groppo and Darcy Lidington  
Benjamin Zweifach Award – David Shepro

There were no applications for the Microcirculatory Society Award for Excellence in Lymphatic Research.

The Executive Council has voted to increase the number of Zweifach Student Awards to five to encourage student participation in the meeting.

**Development Committee:**

No report.

**Historical Committee:**

Paul Johnson provided the report for the Historical Committee. The Historical Committee is making arrangements to bring the archives of the Microcirculatory Society together and to house them at the Benjamin Zweifach Library at UCSD. This library is scheduled to open in the fall of 2002. It is mostly a virtual library so many of the materials in the archives will be digitized for distribution. The archives also include tapes and films. A librarian has been assigned to work with the Zweifach Library to set up storage for distribution of materials.

The Microcirculatory Society will be celebrating its 50<sup>th</sup> Anniversary in 2004. A history of the first 25 years of the society has already been written. Paul Johnson asked for a volunteer to write a history of the second 25 years of the society.

**Membership Committee:**

Debbie Damon provided the report for the Membership Committee. There were 14 new members admitted this year. It is hoped that an on-line membership process can be implemented in the near future.

**Long Range Planning Committee:**

Ingrid Sarelius provided the report for the Long Range Planning Committee. This was the first year as a full guest society of EB. Ingrid urged the membership to provide feedback on the Program for the meeting. Bill Jackson is the new member of the Joint Planning Committee (which has traditionally been the Chair of the MCS Programming Committee). He will work to keep the MCS Sessions in the EB Program.

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**Nominations Committee:**

Ingrid Sarelius provided the report for the Nominations Committee. She provided the results of the 2002 Election: President-Elect– Geert Schmid-Schonbein, Treasurer – Ann Baldwin, Council Members – Glenn Bohlen and Ron Korthuis. It is hoped that voting on-line will be possible for next year's election.

**Revisions to the By-Laws:**

Proposed revisions to the MCS By-Laws were previously published in the MCS newsletter. One change from this published version included Article II, Section 1: “The purposes of the Society are to actively encourage and promote all forms of innovative research and teaching leading to an increase in understanding of microcirculatory function in health and disease.” There was discussion of the changes approved by the Executive Council. Virginia Huxley made a motion to accept the revision to the bylaws. Motion seconded. Motion passed.

**State of the Society:**

Ingrid Sarelius provided some comments on the State of the Society. She also stated that the Society will be participating actively in the IUPS meeting in 2005. Solicitations will be forthcoming for programming ideas. Ingrid reminded members that the European Microcirculatory Society Meeting will be held August 28-30 in Exeter, England.

The meeting was adjourned at 6:45 p.m.

[Respectfully submitted, Cynthia Meininger, MCS Secretary]

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## 2002 Microcirculatory Society Treasurer's Report

Submitted by: Ann L. Baldwin, MCS Treasurer

### MCS Assets as of 2001 Meeting:

Bank One Checking Account	2/28/01	\$15,804.96
Vanguard Asset Allocation	4/07/01	\$86,607.46
Certificate of Deposit	4/07/01	\$78,623.05
	TOTAL	\$181,035.47

### MCS Assets as of 2002 Meeting:

Bank One Checking	2/28/02	\$25,266.89 (+9,461.93)
Vanguard	3/11/02	\$89,093.27 (+2,484.81)
Certificate of Deposit	3/11/02	\$81,771.48 (+3,148.43)
	TOTAL	\$196,131.64 (+15,096.17)

### MCS Income:

APS Contribution to MCS	\$10,000.00
Nature Publishing	\$21,000.00
Stockton Press	\$6,000.00
MCS Dues from 2/28/01 - 2/28/02 (includes both 2001 and 2002 dues payments)	\$29,175.00
Banquet Tickets 2001	\$6,100.00
Donation for Crone Award, 2001	\$2,000.00
Fine Science Tools 2001	\$2,000.00
Miscellaneous	\$1,003.95
TOTAL	\$77,278.95 (\$40,768.90*)

\*income for 2000-2001

### MCS Expenses

MCS Awards 2001	\$11,500.00
Journal, Associate Editor (1 from previous yr)	\$ 1,500.00
Nature Publishing	
Vol. 7 (4) 310 copies @ 7.67/copy	\$ 2,377.70
Vol. 7 (6) 386 copies@7.67/copy	\$ 2,960.62
Vol. 8 (1) 305 copies @ 7.67/copy	\$ 2,339.35
Vol. 8 (2) 370 copies @7.67/copy	\$ 2,454.40
Vol. 8 (3) 326 copies @8.33/copy	\$ 2,715.58
Vol. 8 (4) 326copies @8.33/copy	\$ 2,715.58
Vol. 8 (5) 333 copies @8.33/copy	\$ 2,773.89
Vol. 8 (6) 339 copies @8.33/copy	\$ 2,823.89
Increase in Journal Fee (305 copies .66 per copy)	\$ 201.30
Increase in Journal Fee (320 copies .66 per copy)	\$ 211.20
Conference Abstract Fees	\$ 2,500.00



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MCS Meeting 2001 Hotel Costs	\$ 3,519.83
MCS Poster Session - FASEB	\$ 1,504.00
Speaker Expenses for 2002	\$ 400.00
Direct Operations (Holly Lopez, University of Arizona)	\$ 2,475.38
Postage	\$ 1,216.85
Copying Directories	\$ 1,353.45
Credit Card Fees	\$ 1,056.88
Commonwealth of Mass.Non-Profit Organization Fee	\$ 35.00
Bank Charges	\$ 53.00
Returned Check	\$ 90.00
<b>TOTAL</b>	<b>\$67,817.02 (\$73,512.20)</b>

\*income for 2000-2001

**MCS Income Prediction for 2003**

MCS Income for 2002	\$77,280.00
No Stockton Press:	(-\$6,000.00)
Nature Publishing will only be \$12,000:	(-\$9,000.00)
<b>Predicted Income for 2003</b>	<b>\$62,280.00</b>

**Explanation for Reduction in Expenses 2001-2002 Compared to 2000 - 2001**

Extra Costs in 2001-2002:

MCS Awards	\$ 3,000.00
Journal Expenses	\$ 4,046.00
World Congress Travel Award	\$ 4,000.00
<b>TOTAL</b>	<b>\$11,046.00</b>

Reduced Costs in 2001-2002

No Journal Assistant Editor Costs	(\$ 4,500.00)
No World Congress Contribution	(\$10,000.00)
No AMS Management Fees	(\$ 2,100.00)
No set-up fee for credit card	(\$ 1,072.00)
<b>TOTAL</b>	<b>(\$17,672.00)</b>

Accounts for \$ 6,626.00 reduction in expenses for 2001-2002

**MCS Expense Prediction 2003**

MCS Expenses for 2002:	\$67,817.00
“Extra costs” will be reduced by \$4,000 (no world congress travel)	
The “Reduced Costs” for 2002 will continue for 2003	
<b>MCS Expenses for 2003:</b>	<b>\$63,817.00</b>

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## 2002 Microcirculatory Society Treasurer's Report, cont...

Submitted by: Ann L. Baldwin, MCS Treasurer

MCS Income for 2003: \$62,280.00

### MCS Award Sponsorship

Crone Award -

Funded for 2 more years

Krogh Young Investigator Award -

Funded for 2 more years

Microcirculation Travel Award -

No longer funded by Cytometrics

### Method of Dues Payment

(2/28/01 - 2/28/02)

	Credit Card	Check
Domestic (Includes Canada)	138	152
International	38	25
Total	176	177

### Membership Data

Names in Database	758
Inactive Members	176
Emeritus Members	53
Deceased	27
Possible Dues Paying Members	502
Paid Members for 2001	340
Unpaid Members for 2001	162



Update and call for proposals to host the

*8th World Congress  
for Microcirculation  
to be held in 2007*

Members who were in attendance at our 2002 Business Meeting in New Orleans will know that the Microcirculatory Society is hosting the 8th World Congress for Microcirculation, but that Council has agreed to move the date of this meeting to the year 2007. This move was negotiated to avoid conflicting with our obligation to support the IUPS Congress that will be held in San Diego in spring 2005, and also to avoid conflict with the biennial meeting of the European Society for Microcirculation that will be held in Amsterdam in summer 2006.

The Executive Council of the Microcirculatory Society now reopens the process for determining where the congress will be held, and invites submission of proposals to organize this congress in 2007 on behalf of the Society. The proposal should include information about the expected organizational structure (including the proposed Chair of the organizing committee), the meeting venue and proposed dates, hotel/dormitory accommodation, likely costs based on expected changes from current cost structures etc, and any other relevant information that will help the MCS executive make a timely decision.

Proposals should be submitted either to Paul F. McDonagh, President of the MCS, or to Ingrid H. Sarelius, Chair of the Liaison Committee. (If you require more information, please call or email either Paul or Ingrid). **Proposals should be submitted by September 1, 2002**, to enable Council to make a firm announcement of venue and dates at the spring 2003 Business Meeting.

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## *From the Chair of the MCS Program Committee*

The following information is provided for planning purposes in preparation for the MCS Annual Meeting to be held in San Diego, CA, April 11-15, 2003.

We will once again be meeting as a Guest Society of APS within the structure of Experimental Biology 2003. The meeting will officially start on the afternoon of Friday, April 11, 2003 with a Workshop sponsored by the APS entitled Frontiers of intravital Microscopy: Crossroads of Physiology and Pathology (1-3 p.m.), followed by the MCS Presidents symposium (3:15-5:15 p.m.) (see description below). The Landis Award Lecture will be presented from 2-3 and the MCS Young Investigators Symposium from 3:15-5:15 on Saturday, April 12, 2003 (see below for more information).

The deadline for Abstract submission for EB 2003 is November 13, 2002.

**PLEASE NOTE:** The MCS poster sessions will be listed as a guest society of APS. Members should carefully scroll the Category Codes to identify the session titles for The Microcirculatory Society.

The MCS Poster Session Titles or Categories to be offered in the “Call for Abstracts EB 2003” are:

1. Microvascular Cell and Molecular Biology
2. Atherosclerosis/Thrombosis and Clinical Microcirculation
3. Microvascular Pathophysiology
4. Flow regulation; Oxygen Delivery
5. Instrumentation in Microcirculatory Research
6. Microvascular Networks
7. Microvascular Mechanics & Hemodynamics
8. Microvascular Permeability / Exchange
9. Microvascular Pharmacology / Vascular Control
10. Angiogenesis / Microvascular Remodeling

Please find below the schedule and location for the MCS activities planned for EB 2003.

**MCS Presidents Symposium**  
Friday, April 11, 2003 3:15-5:15  
San Diego Convention Center Room 8

*Mechanisms of Microvascular Dysfunction in Diabetes*  
Organized by Paul F. McDonagh, Ph.D.

**Speakers:**

Leslie S. Ritter, Ph.D., University of Arizona, “Reperfusion Injury in the Diabetic Microcirculation”

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H. Glenn Bohlen, Ph.D., University of Indiana, "Obesity Predisposes Hyperglycemic Injury of In-Vivo Endothelial Cells"

George L. King, M.D., Joslin Diabetes Center, "Protein Kinase C and Other Kinases: Their Roles in Causing Microvascular Dysfunctions and Pathologies of Diabetes"

John E. Tooke, D.Sci., Peninsula Medical School, "Microvascular Function in Human Diabetes and Pre-Diabetes"

**Summary:**

Diabetes is increasing worldwide at an alarming rate. There are many serious complications associated with this disease. Many, including ischemic heart disease, stroke, peripheral vascular disease, renal failure, and retinopathy, are related to microvascular dysfunction. Despite the importance of gaining a clear understanding of the pathobiology underlying the microvascular changes that occur in diabetes, the mechanisms are not clear. The aims of this symposium are to present the functional alterations that occur in the diabetic microcirculation and what is known about the mechanisms underlying these dysfunctions. Molecular, cellular, integrative, and clinical perspectives of the diabetic microcirculation will be presented. Dr. Ritter will present an overview of microvascular failure in diabetes with attention to blood-blood vessel interactions under ischemic conditions in the coronary and cerebral microcirculations. Dr. Bohlen's presentation will emphasize the effects of hyperglycemia and diabetes on endothelial cell function and microvascular blood flow. Dr. King will present alterations that occur in kinase signaling pathways, particularly PKC, in diabetic microvessels. Dr. Tooke will discuss microvascular dysfunction in human diabetes and pre-diabetes, drawing on their more recent findings regarding microvascular hemodynamics in insulin resistant states. This comprehensive symposium will be of interest to experimental biologists, translational researchers, and clinicians with an interest in the cardiovascular complications of diabetes.

**MCS Landis Award Lecture**

Saturday, April 12, 2003 2:00-3:00

San Diego Convention Center, Room 5

**MCS Young Investigator Symposium**

Saturday, April 12, 2003 3:15-5:15

San Diego Convention Center, Room 10.

Organized by Jefferson C. Frisbee, Ph.D., Medical College of Wisconsin, and David W. Stepp, Ph.D. Medical College of Georgia.

**Speakers:**

Donald G. Welsh, Ph.D., University of Calgary. "Defining the nature of gap junctional communication in the resistance vasculature."

Daniel A. Beard, Ph.D., University of Washington. "Myocardial oxygenation in isolated hearts predicted by an anatomically reasonable microvascular transport model."

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Johnathan D. Tune, Ph.D., University of North Texas. “Mechanisms of coronary blood flow control in experimental diabetes mellitus.”

Cristine L. Heaps, Ph.D., University of Missouri. “Adenosine activation of voltage-dependent K<sup>+</sup> channels in coronary arterioles.”

Richard J. Price, Ph.D., University of Virginia. “Microvascular remodeling: network patterning and stimulation by contrast ultrasound.”

**Summary:**

The issues about which these invited presenters will be speaking encompass a wide range of sub-topics in microvascular research, including electrophysiology (Heaps), cell:cell communication (Welsh), vascular reactivity (Tune), angiogenesis/microvascular networks (Price) and quantitative modeling of transport/exchange phenomena (Beard). It is anticipated that providing this opportunity for these young investigators will increase their exposure as the next generation of leading investigators of the microcirculation, and we believe that the quality of speakers and the diversity of topics should allow for a highly stimulating scientific session.

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## Society Awards

**It is never too early to begin thinking about nominations for the Society Awards for 2003. To refresh your collective memories, the current Society awards are listed below:**

### **Eugene M. Landis Research Award**

This annual award was established in 1969 to recognize an outstanding investigator in the field of Microcirculation who is in residence in the United States or Canada. The awardee is expected to be an active investigator who has published and continues to provide meritorious research in the field of Microcirculation. The award consists of a certificate and \$2000 to be used at the discretion of the awardee. To nominate an individual for this award, a letter of nomination describing the nominee's most important work, a current CV, including a list of the nominee's 10 most significant publications from the last 10 years, should be forwarded to the Chairman of the Awards Committee prior to November 1st of the year preceding the award. The award will be presented at the annual meeting and the awardee will be invited to present a brief summary of his or her professional and research career activities.



**Eugene M.  
Landis  
(1901 - 1987)**

### **August Krogh, Young Investigator Award**

This annual award is intended for a graduate student, Ph.D. or M.D. in the early stages of a research career. The purpose of the award is to encourage excellence in microcirculatory research by new, young investigators. Eligibility for this award is limited to graduate students, recent graduates (less than 3 years after having received a Ph.D. or for M.Ds, 3 years following completion of a first residency). The award consists of a certificate and \$500 to be used at the discretion of the awardee. The requirements include submission of a brief manuscript which describes research to be presented at the annual MCS meeting and a letter of nomination from a member of the Society. These materials should be forwarded to the Chairman of the Awards Committee prior to November 1st of the year preceding the award.



**August Krogh  
(1874 - 1949)  
Nobel prize in  
Physiology and  
Medicine 1920**

### **Microcirculatory Society Travel Award for Outstanding Young Investigators**

This annual award is given to reward meritorious research in the field of microcirculation by supporting the recipient's visits to laboratories abroad. It is intended for a researcher who is a resident of the United States or Canada and has received a Ph.D. or completed a first M.D. residency within 12 years of the deadline. A letter of nomination describing how the award will benefit the nominee's career and advance knowledge of microcirculation, a brief tentative itinerary including the laboratories to be visited and a current CV should be submitted to the Chairman of the Awards committee prior to November 1st of the year prior to the presentation of the award. The award consists of a certificate and \$2000 to help defray travel costs associated with the trip. The recipient is expected to present a brief report of their trip to the MCS membership at the annual banquet.



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## Christian Crone Travel Award for Outstanding Young Investigators

This relatively new award is given to reward meritorious research in the field of microcirculation by an individual residing outside of the United States and Canada to supporting the recipient's visits to laboratories within North America. It is intended for a researcher who has received a Ph.D. or completed a first M.D. residency within 12 years of the deadline. A letter of nomination describing how the award will benefit the nominee's career and advance knowledge of microcirculation, a brief tentative itinerary including the laboratories to be visited and a current CV should be submitted to the Chairman of the Awards committee prior to November 1st of the year prior to the presentation of the award. The award consists of a certificate and \$2000 to help defray travel costs associated with the trip. The recipient is expected to present a brief report of their trip to the MCS membership at the annual banquet.



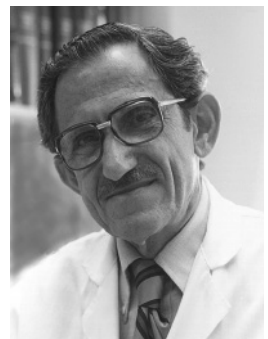
Christian Crone  
(1926 - 1990)

## Microcirculatory Society Award for Excellence in Lymphatic Research

This relatively new award was made possible by a generous contribution of the former North American Society of Lymphology. The award is designed to recognize meritorious research of the lymph, lymphatics or interstitium by a young investigator within 10 years of obtaining a Ph.D., M.D. or a *bona fide* equivalent degree. A letter of nomination describing their research efforts, a manuscript suitable for submission to *Microcirculation* and a current CV should be submitted to the Chairman of the Awards Committee prior to November 1st of the year prior to the presentation of the award. The manuscript of the awardee will need to be submitted to the Society journal *Microcirculation*. The award, to be given at the Annual Meeting of the Microcirculatory Society, consists of a certificate and \$500 to be used at the discretion of the awardee.

## Zweifach Student Award

Established in 1998, this award recognizes the outstanding mentoring efforts of Dr. Benjamin W. Zweifach and is designed to encourage meeting participation by young scientists in training. To qualify for this award, (a certificate and \$500) a student must be a first author on an abstract to be presented at the Annual Microcirculatory Society meeting. To apply for the award, the student should forward a copy of their abstract submitted for the meeting requesting that it be considered for this award and a letter of support from their mentor to the Chairman of the Awards Committee prior to November 1st of the year prior to the presentation of the award. The award will be presented at the Annual meeting of the Microcirculatory Society. Five awards will be given.



Benjamin W. Zweifach

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**The Microcirculatory Society, Inc.**  
**Society By-Laws**

Approved at the Microcirculatory Society Business Meeting, April 20, 2002.

**ARTICLE I. MICROCIRCULATORY SOCIETY**

**Section 1.** The name of this organization is The Microcirculatory Society, Inc. (hereinafter known as the Society). The official abbreviation for the name is MCS.

**ARTICLE II. PURPOSES**

**Section 1.** The purposes of the Society are to actively encourage and promote all forms of innovative research and teaching leading to an increase in understanding of microcirculatory function in health and disease. ~~microcirculation and associated phenomena of the blood and other extracellular fluids of the body, and the utilization of such knowledge. The interchange of knowledge, ideas and data can be realized through publication and interaction at national and international scientific meetings.~~

**ARTICLE III. MEMBERSHIP**

**Section 1.** The Society shall consist of regular members, student members, associate members, emeritus members, honorary members, supporting members, and sustaining members.

**Section 2. Regular Members.**

Any person who has contributed to the increase in knowledge of the microcirculation, and is presently engaged in such work, shall be eligible for election to regular membership in the Society. Except in unusual circumstances, a regular member shall hold a doctoral degree. A regular member may attend and participate in the business meetings of the Society and is entitled to one vote.

**Section 3. Student Members.**

Any person who is engaged as a full-time graduate student in a recognized University program, and is actively involved in research on the microcirculation or associated phenomena shall be eligible for election to student membership in the Society. Except in unusual circumstances, a student member shall not hold a doctoral degree. A student member may attend and participate in the business meetings of the Society, but shall not have the right to vote.

**Section 4. Associate members.**

Individuals who are interested in and engaged in work related to the microcirculation, but who do not meet the requirements for regular or student membership, shall be eligible for election to associate membership. Associate members may attend and participate in the business meetings of the Society but shall not have the right to vote.

**Section 5. Emeritus Members.**

On approval by the Council, a regular member, after 20 years of regular membership or on retirement from regular employment, may, upon his or her written request,

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become an emeritus member. Emeritus members may attend and participate in business meetings of the Society and shall have the right to vote.

**Section 6. Honorary members.**

Individuals who have distinguished themselves by outstanding contributions in the study of microcirculatory phenomena may be elected honorary members by a special act of commendation. Honorary members may attend and participate in the business meetings of the Society, but shall not have the right to vote.

**Section 7. Supporting members.**

Any regular member who voluntarily contributes ~~\$250~~ \$50.00 or more annually over and above the dues of regular members shall be denoted a supporting member.

**Section 8. Sustaining members.**

Individuals and organizations that have an interest in the purposes of the Society and wish to contribute to its support may be invited by the President, with the approval of the Council, to become sustaining members. Any such membership may be terminated by the President with the approval of the Council. Sustaining members may not attend or participate in business meetings of the Society and shall not have the right to vote.

**Section 9. Nomination and election of members.**

Two regular members of the Society shall join in ~~the written~~ proposal of the person for regular, student, or associate or honorary membership on appropriate forms provided by the Secretary ~~through the Society's web site or other available means of communication~~. The Membership Committee shall receive these proposals and refer them with its recommendations to the President for approval. Those persons whose proposals are approved by the President shall be nominated for election to membership by a mail ~~(including e-mail, fax)~~ ballot of the Council. A two-thirds (2/3) majority positive vote by Council shall be required for election. ~~Receipt of nominations and election to membership shall be carried out on a rolling basis throughout the year.~~

**ARTICLE IV. OFFICERS**

**Section 1. Council.**

The management of the Society shall be vested in its Council (all of whom must be regular members of the Society), with powers of direction, consisting of the President, President-Elect, immediate Past-President, Secretary, Treasurer, and six additional regular members elected by the members by vote of the membership ~~(through available means of communication)~~. The President and President-Elect shall not succeed themselves after having served a full term. The terms of President and President-Elect shall be for one year. The Secretary and Treasurer shall be elected to two-year terms and these officers may succeed themselves for one term. The Secretary and Treasurer shall be elected on an alternating year basis, and the terms of the six additional elected Councilors shall be three years, so elected that only two Councilors are elected each year. Councilors may not succeed themselves to serve consecutive terms. All terms of office shall begin at the close of the annual ~~regular~~ meeting of the Society. ~~which follows the written ballot for election~~. The Council, by majority vote of its remaining qualified members, shall fill any interim vacancy in the office of the President-Elect, the Secretary, the Treasurer, and the Clerk, and may fill a vacancy of

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a Councilor. The term of office of a person elected to fill an interim vacancy shall expire following the tally of a ~~written~~ **valid regular** ballot to elect his/her successor.

### **Section 2. Executive Committee.**

The Executive Committee of the Society shall be defined as the principal officers, namely the President, the President-Elect, the Past-President, the Secretary and the Treasurer. They shall attend to the ordinary running of the Society, making the decisions required for its smooth functioning. All major decisions shall be subject to the approval of Council or the full membership.

### **Section 3. President.**

The President shall preside at all meetings of the Council and business meetings of the Society, and shall be an ex-officio member of all standing committees, and shall have other duties as prescribed in the appendix of these bylaws. The President, after consultation with the Council, shall appoint members of the standing committees where called for in these bylaws.

### **Section 4. President-Elect.**

The President-Elect shall ~~plan the Annual Meeting of the Society, and~~ undertake ~~other such~~ duties as may be delegated by the President. The President-Elect shall become the next regular President of the Society after completion of the regular term as the President-Elect. In the absence or during the disability of the President, the President-Elect shall have all of the powers and perform all of the duties of the President. Any service as an interim president of the Society shall not reduce the term of the President-Elect as the next regular President of the Society.

### **Section 5. Past President.**

The immediate Past President shall chair the Long-range Planning Committee and shall review, and where needed, recommend revisions of the Society's Bylaws, as described in Article X, Section 2.

### **Section 6. Secretary.**

The Secretary shall give bond to the Society, if required by the Council, for the faithful performance of his/her duties. The Secretary shall have custody of all documents and papers belonging to the Society (except his/her own bond which shall be kept by the President) and shall safely keep the same, and disburse the orders and rules of the Council. **The Secretary shall have co-custody of a bank account to meet the day-to-day operational expenses of the Society.** The Secretary shall give notice of all meetings as required by the bylaws, send out the various customary mailings to the membership, and shall inform the membership whatever the President or Council desires. **The Secretary shall use the available means of communication to perform these duties.** The Secretary shall also keep **a directory with** the complete list of the name, title and address of each member of the Society. The Secretary shall keep the minutes of the Council and of Business Meetings of the Society and shall have other duties as prescribed in the Operations Manual. In the absence of the Secretary, the President shall appoint a temporary secretary to record the minutes.

### **Section 7. Treasurer.**

The Treasurer shall give bond to the Society, if required by the Council, for the

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faithful performance of his/her duties. The Treasurer shall have custody of all monies (except a bank account to meet the day-to-day operational expenses of the Society); debts, obligations, contracts, and other property belonging to the Society (except his/her own bond which shall be kept by the President) and shall safely keep the same, and shall collect all properties and all monies from time to time due and owing to the Society. [The Treasurer shall also keep a directory with the complete list of the name, title and address of each member of the Society and will verify at least annually the status of each member.](#) The Treasurer shall be chair of the Finance Committee to disburse the provision of Article VI, Section 4 of these bylaws.

### **Section 8. Clerk.**

The Clerk shall be a resident of the Commonwealth of Massachusetts, and need not be a member of the Society. (The office is required as a condition of incorporation by the Commonwealth of Massachusetts.) The duties of the Clerk of this Society shall be those required by the statutes of the Commonwealth of Massachusetts. Such duties, to the extent permitted by law, may be assigned to others by the Council. The Clerk shall be appointed annually by the President of the Society, and may serve in the Council and Business Meetings, without vote except as a member of the Society.

### **Section 9. Nomination and election of Officers and Councilors.**

Nomination for all Officers and Council members of the Society will be obtained by mail, fax, or e-mail on or before December 1 by requesting the membership to propose nominees. The request for nominations will be made in the Society Newsletter preceding the December 1 deadline. Nominations will be sent to the ~~Secretary or to the~~ Chair of the Nominating Committee. For each office, the two persons (who agree to stand for election) with the highest number of nominations will be included on the ballot. In years in which two members of the Council are to be elected, a total of not more than four nominees will be included on the ballot. Once the nominations are complete, each member will receive and return by mail, fax, or e-mail, the ballot of officers and Council members. The ballots will be returned ~~to the Secretary or to the~~ Chair of the Nominating Committee for tabulation and determination of outcome. In the event that a majority vote for a given office is not obtained by ~~written regular~~ [written regular](#) vote, [the Chair of the Nominating Committee will call immediately for a run-off election between the two candidates with the highest votes. The election will be conducted promptly by mail, fax, or e-mail.](#) ~~a secret ballot election will be held as part of the next annual business meeting.~~

## **ARTICLE V. COUNCIL**

### **Section 1. Management of the Society.**

The property and affairs of the Society shall be managed and conducted by the Council with powers of directors. The members of the Council shall serve without compensation and shall be called Councilors.

### **Section 2. Qualifications, Elections and Vacancies.**

Specified in Article IV, Section 1 and Section 9.

### **Section 3. Meetings.**

At least one regular meeting of the Council shall be held during each annual meeting of the Society members, and for this regular meeting no notices shall be required.

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Other meetings of the Council shall be held as often as the needs of the Society may require. They may be held at regular intervals determined by the Council, or they may be called by the President or any three members of the Council. The Secretary shall notify each Councilor of each meeting of the Council. Notice of any meeting may be dispensed with if each member of the Council, by writing filed with the records of the meeting, waives such notice. No notices shall be required to be given of any adjourned meeting of the Council.

**Section 4. Quorum.**

A majority of the Council shall constitute a quorum for the transaction of business, but a lesser number may adjourn any meeting from time to time, and a meeting may be held as adjourned without further notice. A majority vote of Councilors in attendance (unless otherwise specified elsewhere), with each entitled to one vote, shall decide any question brought before the Council, except that a majority of the qualified Councilors shall be required for temporarily filling a vacancy of an office. In the event of a tie vote, the President shall then be entitled to two votes.

**ARTICLE VI. Standing Committees**

**Section 1. Standing Committees.**

Standing committees and their Chairs shall be appointed by the President in consultation with the Council. The term of all standing committee members, except as otherwise provided elsewhere, shall be for three years. However, on adoption of these bylaws, the term shall be one, two, or three years for various committee members, as determined by the Council, so as to provide continuity of committee operation. Emeritus, Honorary, and Sustaining members may be appointed from time to time for terms up to one year. Sustaining members so appointed shall not have the right to vote. The President shall be an ex-officio member of all committees. Guidelines for committee operation shall be approved by Council. [The President, in consultation with Council and upon recommendation and evidence submitted by the Committee Chair or committee members, will be empowered to terminate at any time the term of committee members failing to discharge their duties.](#)

**Section 2. Membership Committee.**

A Membership Committee, composed of three or more regular members of the Society, shall receive and review proposals for nomination to membership, and shall recommend regular, associate, and student nominees for membership to the Society according to Article III, Section 9.

**Section 3. Finance Committee.**

A Finance Committee consisting of the Treasurer (who shall Chair the Committee) and two or more regular members appointed by the President shall receive and evaluate the impact of the various proposed budgets, shall determine the budgets and make recommendations and shall recommend a budget to the Council. This Committee shall supervise the capital investments of the Society, subject to the full authority of direction by the Council.

**Section 4. Nominating Committee.**

A Nominating Committee shall consist of three or more-regular members, none of



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whom shall simultaneously be an officer of the Society or the immediate Past-President. This Committee shall obtain nominations and conduct elections for officers and councilors as prescribed in Article IV, Section 9.

**Section 5. Liaison Committee.**

The Liaison Committee shall consist of the President (who shall serve as Committee Chair), the MCS representative to the US National Committee for the International Union of Physiological Sciences (USNC for IUPS), the MCS member appointed liaison to the European Societies of Microcirculation, the MCS members appointed to the International Liaison committee, and the Secretary of the Society, and may include any other members at the pleasure of the President. This Committee shall maintain communication with scientific organizations that have interests in common with the Society, and shall officially represent the Society in the international community.

**Section 6. Long-range Planning Committee.** The Long-range Planning Committee shall consist of the ten (10) most recent Past-Presidents and shall be chaired by the immediate Past-President of the Society. This committee shall consider all aspects of society affairs to identify major issues of importance to the Society and to recommend future strategies, plan meetings for the Society for a minimum of 3 5 years in advance of the next annual meeting, and new policy directions for society function.

**Section 7. Development Committee.**

The Development Committee shall consist of three or more regular members of the Society. This committee shall seek new supporting and sustaining members of the Society, and shall consider and recommend fund-raising activities for Council consideration. Upon request of the President, this committee shall implement Council-approved fund-raising activities on behalf of the Society.

**Section 8. Historical Committee.**

The Historical Committee shall consist of three or more regular members of the Society. This committee shall seek, identify, and obtain information, documents, films, and other items which have historical significance to the Society. This committee shall maintain updated lists of past officers and recipients of Society Awards.

**Section 9. Awards Committee.**

An Awards Committee, composed of six regular members, shall solicit from the voting membership the names of candidates for any awards that the Council has authorized. After selection of the candidates is made by the Awards Committee, the names of the candidates shall be approved by the President and the Council prior to any announcement of the awardees. Announcements of the winners of awardees should be made known to voting members of the Society prior to the Annual Society scientific meeting.

**Section 10. Programs and Meetings Committee.**

[The Program Committee shall be chaired by an officer appointed by the President of the Society, and will serve a three year term.](#) Members of the Committee shall be appointed for 3 years, by the President. The Committee shall: a) follow up on the recommendations to Council and the membership from the Long Range Planning

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Committee for the meeting(s) proposed for at least three years in advance. b) Serve as the liaison to the program committees of other societies or associations with whom the MCS may meet, [with the Program Committee Chair as the official representative](#). c) Make recommendations, to be approved by the Executive Committee of the MCS, with respect to: program style and format, commitments to other societies, local arrangements, appointments to the program committees of umbrella associations.

### **Section 11. Publications Committee.**

The Publications Committee shall consist of a Chair and at least two other members of the Society, appointed by [the President](#) and responsible to the Council of the Society. The Chair of the Committee is an ex-officio member of Council, without vote. The President, Treasurer, and Secretary of the Society are ex-officio members of the Committee, without vote. The duties are to oversee the journals and other publications of the Society, particularly with respect to the scientific quality of the journals and the fiscal interests of the Society. They shall appoint Editors and editorial boards, prepare an annual summary report and an annual financial report, and in general, manage the publications of the Society under the policies determined by Council. The ownership of the title "Microcirculation" and the copyright of material published in the journal shall be held by MCS. The term of the Publications Chair will be set to provide continuity during the time that contracts with publishers are negotiated or Editors of the Journal are chosen. When these decisions are being made, the term will likely be for two consecutive years.

The Editor of the journal will be appointed by Council for a five year term and no individual will serve more than two consecutive five year terms.

The appointment of Editor will be at the recommendation to Council by a committee which will consist of the Publications Committee plus the President of the Society. The Chair of the Publications Committee will chair this committee.

The Editor will nominate the Associate Editors and the Editorial Board. These appointments will be submitted to Council for approval. The Editorial Board members will be appointed for a two year term with one-third of the Editorial Board being ineligible for reappointment to a consecutive term. All members of the Editorial Board must be members of MCS.

### **Section 12. Representative of the MCS to the US National Committee of the International Union of Physiological Sciences.**

This position is to be filled by an appointee of the President of the MCS. The appointment is for three years, or four, designed to fit with the time interval between IUPS Congresses. The appointee should be a senior member of the Society, suitable to represent the Society's interests in international planning not only of scientific meetings but in providing international leadership in science and education. Reappointment for a second term is allowable, in accord with IUPS committee rules.

### **Section 13. Representative of the MCS to the European Societies for Microcirculation (ESM).**

This position is to be filled by an appointee of the President of the MCS. The appointment is for three years, or four, designed to fit with the requirement of ESM. The



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appointee should be a senior member of the Society, who participates in the European Microcirculatory Society meeting, suitable to represent the MCS's interests in international planning not only of scientific meetings but in providing international leadership in science and education. Reappointment for a second term is allowable, in accord with ESM rules.

**Section 14. Representatives of the MCS to the International Liaison Committee.**

These three positions are to be filled by appointees of the President of the MCS. The appointment is for three years, or four, designed to fit with the time interval between World Congresses. The appointees should be senior members of the Society, suitable to represent the Society's interests in international planning not only of scientific meetings but in providing international leadership in science and education.

**Section 15. Communications Committee.**

The Communications Committee shall consist of a Chair and at least three other members of the Society, appointed by the President of the Society for up to three year terms. This committee shall be responsible for the oversight of the Society's web page. The Society website address, [microcirc.org](http://microcirc.org), is the property of MCS. The committee's other primary function is to coordinate with the Program and Meetings committee, the Liaison Committee, the Publications Committee, as well as the parties who collect directory, dues, and newsletter information, to keep the membership informed of MCS activities. The Communications committee will develop an annual report and budget for review by Council.

**Section 16. Other Committees.**

The President may appoint temporary (ad hoc) committees as desired. The term of office of these temporary committees shall end with the next annual business meeting of the Society following such appointment, or earlier as the President desires.

**ARTICLE VII. Dues**

**Section 1. Annual Dues.**

Dues for members, in accordance with Article III, shall be proposed by the Council but shall be determined by majority vote of those voting at the annual business meeting of the Society. Dues shall be paid [January 1](#) for the current fiscal year and shall be in arrears on [April 1](#). Special assessments may be proposed by the Council but shall be determined by majority vote of those voting at the annual business meeting of the Society.

**Section 2. Nonpayment of Dues.**

Any member whose dues are one year in arrears shall become an inactive member of the Society, and will be notified by the Treasurer. An inactive member will not receive the journal, will be ineligible to vote, [and may not serve on committees](#). If an inactive member is in arrears for an additional year, he/she may reactivate membership in the Society by payment of all outstanding dues. The Treasurer shall notify the delinquent

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of the right to request reinstatement of membership at least one time after dues are two years in arrears before they cease to be a member of the Society.

**Section 3. Emeritus Members.**

A regular member who has been granted emeritus membership will be relieved from dues payment for the current and subsequent fiscal years.

**ARTICLE VIII. Meetings of Society Members**

**Section 1. Annual Meeting of Members.**

The Society shall hold an annual meeting of members, for the transaction of business, and for presentation of scientific communications and related activities. Such annual meetings shall be held each year at a time and place designated by the Council and approved by the membership. The time and place for the annual meeting shall be chosen at least eleven months in advance at an annual business meeting. The place, day, and hour shall be specified in the notice of any meeting of the Society.

**Section 2. Special Meetings of Members.**

Special meetings of members shall be called by the Secretary or any other officer upon the request of the President or the Council or on the written request of one-quarter of the members entitled to vote. The current list of members with their addresses shall promptly be made available to any member entitled to vote, on request, but shall not be utilized by anyone for purposes not directly pertaining to the business of the Society without the written permission of the President.

**Section 3. Notice to Members.**

Notice of all a meetings of the members shall be made known to each member not less than 30 nor more than 180 days before the meeting, but no notice shall be required if every member entitled thereto, or his/her attorney thereunto, authorizes, by a writing which is filed with the records of such a meeting, a waiver of such notice.

**Section 4. Quorum for Annual and Special Meetings.**

At all meetings of members of the Society, 40 regular members, present in person and entitled to vote, shall constitute a quorum, but less than a quorum shall have power to adjourn from time to time until a quorum be present. No member shall cast a ballot by proxy at any meeting of the Society.

**Section 5. Parliamentary Authority.**

The rules contained in Robert's Rules of Order, Revised, shall govern the conduct of the business meetings of the Society in all cases to which they are applicable and in

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which they are not inconsistent with the bylaws or special rules of order of the Society.

## **ARTICLE IX. Miscellaneous**

### **Section 1. Prohibitions.**

Notwithstanding any provision of these by laws which might be susceptible to contrary interpretation:

- a.** The Society is organized and operated exclusively for scientific and educational purposes.
- b.** No part of the net earnings of the Society shall accrue to the personal benefit of any member except as provided by the Society awards (Article VI, section 9).
- c.** No substantial part of the activities of the Society shall consist of carrying on propaganda, or otherwise attempting to influence local, state, or national legislation, except with respect to science policy or to other special issues such as the obligations to perform biological experimental studies. The Society shall not participate in or intervene in any campaign of any candidate for government public office.
- d.** No substantial part of the activities of the Society shall consist of carrying on propaganda, or otherwise attempting to influence local, state or national legislation. The Society shall not participate in or intervene (including publishing or distribution of statements) in any campaign of any candidate for governmental public office.
- e.** The Society is not organized for, nor is it to be operated for profit.
- f.** The membership list of the Society shall not be supplied to anyone for any purpose except as provided under Article VIII, Section 2, or except as specifically provided by Council.

### **Section 2. Fiscal Year.**

The fiscal year of the Society shall end with the 31<sup>st</sup> day of **March** of each year.

### **Section 3. Audit.**

All statements of net assets and related statements of income, expenditures, fund capital, and liabilities shall be audited annually in accord with the statutes of the

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Commonwealth of Massachusetts. The audit will be made annually by the Finance Committee and every third year by an independent auditing firm.

**Section 4. Term of Office.**

Where a term of office is stated in years, a year is to be considered as extending from the end of one annual business meeting to the end of the following one.

**Section 5. Operations Manual.**

The Secretary of the Society shall maintain an operations manual providing outlines of procedures found useful by the Executive Council and Committees of the Society.

**ARTICLE X. Amendments.**

**Section 1. Amendments.**

These bylaws may be amended, altered or repealed at any business meeting of the Society members by a vote of two-thirds (2/3) of the regular members in attendance or by mail (e-mail, fax) ballot of the Society members by a vote of three-quarters (3/4) of the regular members and entitled to vote, provided notice of the proposed repeal, alteration or amendment, with a statement of the substance thereof and of the Articles to be affected thereby, is given in the call for the meeting. Approved bylaw changes will be added to the published bylaws by the immediate Past-President as stipulated in Article IV, Section 5.

**Section 2. The Past-President shall review the Society Bylaws**, incorporate approved changes following the annual business meeting of the Society, and submit a complete copy of the Bylaws to the President at least 3 months prior to the next annual meeting. Any proposed changes that require Council and membership approval shall be presented in a complete copy of the Bylaws, labeled with proposed revisions. All words and phrases deleted from existing approved Bylaws shall be indicated by a horizontal line through them. **Continuous underlining, italics or a different color** shall indicate all new words and phrases.