

The Microcirculatory Society, Inc. Newsletter

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Officers

President:	Tim Secomb
secomb@u.arizona.edu	
President elect:	Cynthia Meininger
cjm@tamu.edu	
Secretary:	Deborah H. Damon
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Treasurer:	Terrence Sweeney
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President's Message

I am honored to write to you as President of the Microcirculatory Society. Ever since I first attended a meeting of the MCS (in 1982), it has been the professional society where I feel most at home and from which I have learned the most. As an applied mathematician trying to get to grips with the complexities of biology, I found that I was not only tolerated but warmly welcomed. Combining physical, engineering and theoretical approaches with biological experimentation was a hallmark of MCS long before such interdisciplinary approaches became fashionable.

My goal as President is to maintain and enhance the Society's role as a forum for interactions among investigators studying microcirculatory phenomena at molecular, cellular, microscopic and systems levels, using the full range of experimental and theoretical techniques. The central theme of biology in the twenty-first century will be to understand how molecular and cellular level processes determine systemic functions. With regard to the cardiovascular system, the microcirculation represents a critical link in the chain of understanding from mole-

cule to organism, and I believe that this will be increasingly recognized in the scientific community in coming years.

How does our Society promote interactions among investigators with related interests? Our scientific meetings are central to this and I will discuss them in the next newsletter. Our journal, *Microcirculation*, is another forum. Not only does it provide an avenue for high-quality work, but it also helps to define and publicize the field of microcirculation. By submitting our work to the journal, we therefore serve not only ourselves as individual investigators but also our discipline.

How do we let the scientific community know about the importance of research on microcirculation? Of course, doing and publishing quality work is essential. We must persist in submitting grant proposals, even when the success rate (at NIH at least) is low, or else funding for microcirculation research as a whole will suffer. Many scientists doing closely related work do not identify with or even know about microcirculation as a field. We should look for such colleagues, listen

to what they have to say, tell them what we are doing, and offer to collaborate where appropriate. Such interactions will take us in exciting new directions and expand the scope of microcirculatory research.



Welcome to New MCS Members

Regular Members

Johan Brekke, Ph.D.
Department of Cellular and Molecular Physiology
Yale University
New Haven, Connecticut

Martin Sandig, Ph.D.
Department of Anatomy and Cell Biology
University of Western Ontario
London, Ontario, Canada

Student Members

Anila Anwar
Cardiovascular Division
King's College London
London, United Kingdom

Trevor Cardinal
Department of Physiological Sciences
University of Arizona
Tucson, Arizona

John Chappell
Department of Biomedical Engineering
University of Virginia
Charlottesville, Virginia

Aimalohi Esechie
Department of Neuroscience and Cell Biology
University of Texas Medical Branch Galveston
Galveston, Texas

Julie Freed
Department of Physiology
Medical College of Wisconsin
Milwaukee, Wisconsin

Nathalie Gaudreault
Department of Surgery
University of California Davis
Sacramento, California

Rachael Hannah
Department of Neurology
University of Vermont
Burlington, VT

Rachel Perrin
Department of Surgery
University of California Davis
Sacramento, California

Sarah Riley
Cardiovascular Division
King's College London
London, United Kingdom

Joel Wojciechowski
Department of Biochemistry and Biophysics
University of Rochester
Rochester, New York

*Minutes of the 2006 General Business Meeting
Saturday April 1, 2006
Moscone Convention Center
San Francisco, California*

This year the business meeting immediately followed the President's symposium and immediately preceded the Reception/Banquet. In addition, this year the 2005 travel awardee presentation was presented during the business meeting.

Robert Hester (President) called the meeting to order at 5L:15 P.M.

Report from the Secretary: none

Report from the Treasurer: Molly Frame presented a report on the financial status of the society. This report was included in the Spring 2006 newsletter.

Society Awards were presented: Awardees are listed in the Spring 2006 newsletter.

Outgoing councillors (Paul Kubes) and officers (Robert Hester and Molly Frame) were acknowledged for their outstanding service to the society.

2005 Travel Awardee Presentation: Brant Isakson

The meeting was adjourned at 6:30 P.M.

Respectfully submitted by Deborah H. Damon, Ph.D., Secretary

MCS Committees 06-07

Executive Council

Jeff Frisbee	2007	(304) 293-5495	jfrisbee@hsc.wvu.edu
Sarah Y. Yuan	2007	(916) 703-0422	sarahyuan@ucdavis.edu
Richard Price	2008	(434) 924-0020	rprice@virginia.edu
Tara Haas 2008	(416)	736-2100 x77313	thaas@yorku.ca
Richard J. Rivers	2009	(443) 502-1798	rrivers3@jhmi.edu
David Zawieja	2009	(979) 845-7465	dcz@tamu.edu

Awards Committee

Robert Brock	2007	(501) 686-8883	BrockRobertW@uams.edu
Roland Pittman	2007	(804) 828-9545	pittman@hsc.vcu.edu
Mike Eppihimer (chair)	2008	(814) 865-8088	mje106@psu.edu
Mary Pat Kunert	2008	(414) 456-4936	mkunert@mcw.edu
Norman Harris	2009	(318) 675-6028	NHarr6@lsuhsc.edu
Steven Miller	2009	(317) 274-2657	sjmiller@iupui.edu

Finance Committee

Mary (Molly) Frame	2007	(631) 444-2320	mframe@notes.cc.sunysb.edu
Don Buerk	2008	(215) 898-9097	buerk@seas.upenn.edu
Terrence Sweeney (chair)	2009	(570) 941-7623	sweeneyt1@scranton.edu

Development Committee

Steve Alexander (chair)	2008	(318) 675-4151	jalex@lsuhsc.edu
Steve Flaim	2008	(858) 792-6464	sflaim1@san.rr.com
Geert Schmid-Schonbein	2009	(858) 534-3852	gwss@bioeng.ucsd.edu

Membership Committee

David Zawieja (chair)	2007	(979) 845-7465	dcz@tamu.edu
Anatoliy Gashev	2007	(979) 845-7481	gashev@tamu.edu
J. Steven Alexander	2007	(318) 675-4151	jalex@lsuhsc.edu
Vladislav V. Glinskii	2008	(573) 814-6000 x3691	glinskiivl@missouri.edu
Edward Damiano	2009	(617) 353-9493	edamiano@bu.edu

Nominating Committee

Steve Segal (chair)	2007	(203) 562-9901 x253	sssegal@jbpierce.org
John Imig	2007	(706) 721-1901	jdimig@mail.mcg.edu
Chris Kevil	2008	(318) 675-4694	ckevil@lsuhsc.edu
Jena Steinle	2008	(618) 453-1579	jsteinle@siumed.edu
Christopher Ellis	2009	(519) 661-3100	chris.ellis@uwo.ca
Mary Ellsworth	2009	(314) 977-6418	ellsworthm@slu.edu

Publications Committee

Samina Kanwar	2007	(732) 594-2469	samina_kanwar@merck.com
Richard Price	2007	(434) 924-0020	rprice@virginia.edu
Matt Boegehold (chair)	2008	(304) 293-5240	mboegehold@hsc.wvu.edu
Neil Granger	2009	(318) 675-6011	dgrang@lsuhsc.edu
Roger Adamson	2009	(530) 752-2180	rhadamson@ucdavis.edu

Communications Committee

Debbie Damon	2007	(802) 656-2184	Deborah.Damon@uvm.edu
Mike Davis	2007	(979) 845-7819	mjd@tamu.edu
Robert Hester (chair)	2008	(601) 984-1816	rhester@physiology.umsmed.edu
Terrence Sweeney	2009	(570) 941-7623	sweeneyt1@scranton.edu
Robert W. Gore	2007	(520) 626-6569	gore@u.arizona.edu

Long-Range Planning Committee

Robert Hester (chair)	2016	(601) 984-1816	rhester@physiology.umsmed.edu
H. Glenn Bohlen	2015	(317) 274-8770	gbohlen@iupui.edu
Geert Schmid-Schonbein	2014	(858) 534-3852	gwss@bioeng.ucsd.edu
Paul F. McDonagh	2013	(520) 626-2329	pmcdonag@u.arizona.edu
Ingrid H. Sarelius	2012	(585) 275-7729	ingrid_sarelius@urmc.rochester.edu
Walter Duran	2011	(973) 972-4372	duran@umdnj.edu
Ronald Tuma	2010	(215) 707-3248	ronald.tuma@temple.edu
Bruce Klitzman	2009	(919) 684-6686	klitz@duke.edu
Julian Lombard	2008	(414) 456-8530	jlombard@mcw.edu
Virginia Huxley	2007	(573) 882-8069	HuxleyV@health.missouri.edu

Historical Committee

Robert McCuskey (chair)	2007	(520) 626-6084	mccuskey@u.arizona.edu
Robert W. Gore	2008	(520) 626-6569	gore@u.arizona.edu
Paul C. Johnson	2008	(858) 534-5686	pjohnson@bioeng.ucsd.edu
Ronald Tuma	2009	(215) 707-3248	ronald.tuma@temple.edu
Herbert Lipowsky	2009	(814) 865-1407	hhlbio@engr.psu.edu

Liaison Committee (including representatives to IUPS, ESM, Int. Liaison Comm.)

Julian Lombard	2007	(414) 456-8530	jlombard@mcw.edu
Ingrid H. Sarelius	2007	(585) 275-7729	ingrid_sarelius@urmc.rochester.edu
(ILC)(IUPS)			
Bruce Klitzman (ILC)	2007	(919) 684-6686	klitz@duke.edu
Debbie Damon	2008	(802) 656-2184	Deborah.Damon@uvm.edu
Terrence Sweeney (ILC)	2008	(570) 941-7623	sweeneyt1@scranton.edu
David Sims	2008	(902) 566-0812	sims@upe.ca
Ron Korthius (IUPS)	2009	(573) 882-8059	Korthisr@health.missouri.edu
Tim Secomb	2009	(520) 626-4513	secomb@u.arizona.edu
(chair)(ILC)(ESM)			

Program Committee

Mike Flessner	2007	(601) 984-5670	mflessner@medicine.umsmmed.edu
Robert Hester (APS representative)	2008	(601) 984-1816	rhester@physiology.umsmmed.edu
Judy Muller-Delp (chair)	2008	(304) 293-2485	jdelp@hsc.wvu.edu
Leslie Ritter	2009	(520) 626-3218	lritter@nursing.arizona.edu
Karel Tynl	2009	(519) 685-8300 x55076	Karel.Tynl@lhsc.on.ca

World Congress Update

Plans for the World Congress are progressing steadily. The Congress Web Site is officially open (<http://www.microcirccongress.org>) and the meeting program is continuing to develop. Dr. Judah Folkman will deliver the keynote lecture for the World Congress, and plenary lecturers include Drs. Rudi Busse, Brian Duling, Gerald Meininger; Jan Schnitzer, and William Sessa. The opening reception will be held in the beautiful Milwaukee Art Museum (pictured on the Web Site), and the banquet will be held on Friday evening. Further attractions on the social program will be announced closer to the meeting.

World Congress sessions will be held in the beautiful Midwest Airlines Center in downtown Milwaukee, which offers substantial space for symposia, oral and poster sessions, and exhibitors. The Midwest Airlines Center provides substantial flexibility in the arrangement of meeting rooms. As a result, we are able to accommodate a very large program, depending on registration numbers and sponsorship levels. With this in mind, please send us your ideas for symposia and featured topics sessions. Suggestions should be sent to Dr. Julian H. Lombard (jlombard@mcw.edu) at the Medical College of Wisconsin. We are also interested in expanding our sponsorship base, so please send us any suggestions for sponsors or exhibitors for the Congress. Finally, please spread the word about the Congress among your colleagues, particularly those who are interested in vascular biology, but are not currently members of the MCS.

Please consult the Congress web site for updates and announcements. We are looking forward to seeing you all in Milwaukee in 2007!

Workshop on Mathematical Modeling of Microcirculation

The Mathematical Biosciences Institute at Ohio State University will present a workshop on **Blood Flow in the Microcirculation: Function, Regulation and Adaptation**, January 22-26, 2007. The organizers are Timothy W. Secomb and Daniel A. Beard. The workshop will focus on three areas in which mathematical and computational approaches can make important contributions:

- blood flow and mass transport in the microcirculation;
- short-term regulation of blood flow, including vascular smooth muscle behavior;
- structural adaptation of blood vessels, including angiogenesis.

There is no registration fee. Applications for participation should be received by November 10, 2006. Accepted participants will be invited to present a poster and a 5-minute talk advertizing the poster.

The workshop is supported by the National Science Foundation. Limited funding is available for local expenses and/or for travel of participants. Applications requesting funding should be submitted in advance of the deadline stated above.

For more information, please visit <http://mbi.osu.edu/> or email secomb@u.arizona.edu. Applications should be made online at <http://www.mbi.osu.edu/applyworkshop.html>.

Obituary

Professor David L. Yudilevich, MD (1930-2006)
Emeritus Professor of Physiology, King's College London

(Submitted by Dr. Robert W. Gore, for Dr. Giovanni Mann, in memory of Dr. Yudilevich)



David Yudilevich in the mountains of Chile

The Microcirculatory Society, Inc., was privileged to have known Dr. David L. Yudilevich as one of its members. It was with deep sadness that we learned of his passing from Dr. Giovanni Mann. David was a wonderfully complex man. His character was the stuff for movies and novels. He was passionate about his science and about life. He engaged in life in four dimensions and savored it like one might consume a fresh melon at breakfast. There was only one Dr. Yudilevich. There will never be one quite like him and I, for one, will miss him very much. --- (Dr. R.W. Gore)

Reprinted below is the memorial obituary written in David's honor by Dr. Giovanni Mann, originally publication in "Physiology News, No. 6, Autumn, 2006" for The Physiological Society.

David L. Yudilevich, my close mentor and colleague, passed away in London on Sunday 28 May 2006 in the presence of his family and close friends. David's children, Jessica and Ivan, were at his bedside, and he was moved by his granddaughter reading to him. His funeral was held in Golder's Green and was attended by close family friends and academic colleagues from the UK and Chile.

David was born in Santiago, Chile 15 June 1930 and received his MD in 1957 from the Universidad de Chile. After three and half years postdoc in the USA, David returned to the Medical School until on 11th September 1973 the Chilean radio announced that a military coup was taking place. An unsigned letter from Hugh Davson enabled the family to sail from Valparaiso to Britain to begin collaborative research with Laurence Smaje at University College London, with the support of Doug Wilkie, the Jodrell Professor and Head of Physiology. In 1974 David was appointed as Professor and Head of the Department of Physiology at Queen Elizabeth College, University of London. As Head of Department (1974-1985), David always encouraged research-led teaching initiatives and appointed Simon Howell to a Readership in Physiology and Christopher Smith and Giovanni Mann to Lectureships in Physiology. Under his leadership, the Department of Physiology at Queen Elizabeth College prospered and hosted meetings of The Physiological Society. Following the merger of Queen Elizabeth and Chelsea Colleges with King's College London in 1985, David stepped down as Head of Department and Professor Peter Baker, FRS became Head of the merged Department of Physiology.

David was passionate about research and during his early career made seminal contributions to the field of capillary permeability, studying microvascular permeability in the isolated perfused gastric mucosa, heart and brain using the multiple indicator dilution technique. He was a respected and close friend of many colleagues in Chile (Francisco Sepulveda, Rosa Deves, Luis Sobreiva, Alejandro Goic and others), USA (John Pappenheimer, Eugene Renkin, Jim Bassingthwaite, Carl Goresky, Walter Duran, Halvor Christensen and many others), Denmark (Christian Crone), France (Andre Syrota), Spain (Salvador Peran), Israel (I. Cabanchik) and UK (Michael Bradbury, Laurence Smaje, Richard Boyd, David Eisner, Richard Naftalin, Jeremy Pearson, Crhistopher Smith, Ole Petersen, Peter Gahan, Stephen Hirsch and many others). Hugh Davson had invited David to the UK after the coup in Chile, and upon arrival with his family David immediately began investigating the permeability of fenestrated capillaries in the salivary gland together with Laurence Smaje and Giovanni Mann in the Department of Physiology at University College London.

At Queen Elizabeth College, David extended the indicator dilution technique to study carrier-mediated transport of nutrients (amino acids, glucose, vitamins, and calcium) across the maternal and fetal interfaces of the isolated perfused guinea-pig placenta (Bryan Eaton, Jacob Sweiry, Caroline-Wheeler-Jones), blood-brain barrier (David Barry), salivary epithelium (Giovanni Mann, Carlos Bustamante, Stuart Wilson) and lastly umbilical vein endothelial cells from normotensive and gestational diabetic pregnancies (Luis Sobreiva, Mauro Parra, Giovanni Mann). David was an invited speaker/organizer of numerous international conferences, and I recall memorable ones. David hosted an international meeting on 'Carrier-Mediated Transport of Solutes from Blood to Tissue', which led to the publication of a book in 1985 edited by DL Yudilevich and GE Mann. The second memorable occasion was an international meeting held in Lanjaron, Spain, which again resulted in the publication of a book in 1989 entitled 'New Methods in the Study of Transport Across the Cell Membrane', edited by DL Yudilevich, R. Deves, S. Peran and Z.I. Cabantchik.

David was committed to strengthening research links between Chile and Britain, culminating in his appointment as Honorary President of the Joint Meeting of The Physiological Society and Sociedad Chilena de Ciencias Fisiologicas in Pucon, Chile in November 1999. David remained research active throughout his academic career and well into retirement. He published more than 100 articles in peer-reviewed international journals, and during the last 10 years of his retirement enthusiastically researched the

travels of Darwin and Alexander von Humboldt in Chile and South America. His unabated quest for knowledge and enjoyment of science (both bench-based and historical) is evidenced by the series of books he published on Darwin (Darwin en Chile 1832-1835: Viaje de un naturaliste alrededor del mundo, published 1996,1997: <http://www.universitaria.cl/consulta.pl?q=pub&c=14&id=327> , and Chiloe por Charles Darwin, published in 1998) and Humboldt (Mi Viaje por el Camino de Inca 1801-1802, published 2004: <http://www.humboldt200.cl/inca.html> . In addition, David organised numerous stimulating symposia on Darwin and the Beagle and Humboldt's travels at venues in Chile, France, Germany, Spain and the UK. During his last visit to King's College London in May 2006, David was intending to deliver an invited key-note lecture at a symposium organised by the Cervantes Institute in Tel Aviv, Israel.

In retirement, David's contribution to Physiology was further acknowledged by awards of an Emeritus Professorship of Physiology at King's College London, Professor Titular in the Faculty of Medicine in the Universidad de Chile and Honorary Membership of Sociedad Chilena de Ciencias Fisiologicas.

David Yudilevich was a unique, lively and driven individual, always seeking to explore new horizons alone and also with his close friends and colleagues. I remember with affection our travels by car through Chile and there are too just many entertaining stories about David's travels to scientific meetings. His 76th birthday would have been 15 June 2006, and I just knew that he could never slow down. Colleagues in Santiago gathered for a special dinner to celebrate David's life on 15th June 2006. Perhaps David standing in the mountains in Chile, with his characteristic travelling bag(s), highlights his Wanderlust and appreciation of science, nature, life and above all his family and children Jessica and Ivan.

Giovanni E. Mann
June 27, 2006