

Complex Heterogeneous

THE ORGAN

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This Issue:

Election 2003

Brain'03 & BrainPET'03 Program at a Glance

Agenda for the General Assembly

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The **Complex Heterogeneous Organ** is the Newsletter of the International Society for Cerebral Blood Flow and Metabolism. The Newsletter takes its name from the opening line of a paper by the first president of the Society (see J. Neurochem. **28**:897-916, 1977). The title emphasizes the intricacy of our research area and the diversity in background of the members of our Society. The short title of the Newsletter, (The Organ), is defined by the Oxford dictionary as a medium of communication.

Officers and Directors (2001-2003)

President: Michael A. Moskowitz **Directors:**

Past president:Olaf B. PaulsonFrank WelshDennis W. Choi*President elect:Iwao KannoPak ChanStephen J. Warach*Secretary:Gitte Moos KnudsenAdriaan LammertsmaToshiki Yoshimine*

Treasurer: Wolfgang Kuschinsky Wulf Paschen Peter T. Fox*

Chair, Program Committee: Martin Lauritzen Pierre Magistretti*

Joel H. Greenberg I. Mhairi Macrae Hiroyuki Kato*

Editor: James McCulloch

Election 2003

All ordinary members will receive a ballot paper in the beginning of May by ordinary post. Please contact us (dorthe@nru.dk) if you as an ordinary member do not receive the ballot paper. Junior and emeritus members are not entitled to vote.

Deadline for return of the completed ballot paper is June 11, 2003.

Candidates for President-Elect (to assume presidency in 2003)

Costantino Iadecola

Costantino Iadecola is 50 years of age. He received an M.D. from the University of Rome in 1977. He is currently Distinguished Cotzias Professor of Neurology and Neuroscience and Head, Division of Neurobiology, Weill Cornell Medical College, New York, USA. He became a member of the Society in 1981. He has served on the Board of Directors (1997-2001), and on the membership committee (1999-present), which he currently chairs. His research focuses on the cellular and molecular mechanisms of cerebrovascular regulation and ischemic brain injury.

James McCulloch

James McCulloch is 52 years of age and Professor of Neuropharmacology in the University of Edinburgh, Scotland. He is currently Editor in Chief of the Journal of Cerebral Blood Flow and Metabolism and completes his 6 year term of office at the end of 2003. He has served the International Society previously as Secretary and as a Director. His research interests include mechanisms of ischaemic damage, functional mapping of drug action and cerebrovascular regulation.

^{*}Denotes Directors who will complete their present term on the Board in June 2003.

Candidates for the Board of Directors (to serve 2003-2007)

Roland Auer

Roland Auer is 53 years old and is Professor of neuropathology at the University of Calgary, Alberta, Canada. He has been a member of the Society for 13 years, and in addition to research, he currently works as a practicing neuropathologist for 25% of his time. He has contributed by his research into the use of insulin in brain ischemia, drug therapy of brain ischemia and more recently the use of hyperoxema at normobaric pressure in treating stroke, and the effects of caloric intake on brain and bodily parameters. He has also studied the side effects of NMDA antagonists in causing neuronal damage. More general contributions have been towards our understanding of the morphology and the significance of dark neurons, and the structural features of apoptotic and necrotic neurons in various paradigms.

Matthias Endres

Matthias Endres is 33 years old and is currently Heisenberg-Scholar of the DFG (German Research Council) at the Dept. of Neurology, Humboldt-University of Berlin, Germany. He has been a member of the Society for 7 years, received the 'ISCBFM Niels Lassen Award' in 1999, and is currently the chairman of the Young Investigators Committee. His major research interests include cellular and molecular mechanisms of cell death and repair after cerebral ischemia, with a focus on apoptotic mechanisms, DNA damage, actin remodeling, as well as CBF, angiogenesis and the role of nitric oxide.

Rolf Gruetter

Dr. Rolf Gruetter is an Associate Professor in the Departments of Radiology and Neuroscience, directs the MR Core in the General Clinical Research Center and is a core faculty member of the Center for Neurobehavioral Development. He has been a member of the Center for MR Research and of the University of Minnesota Faculty since 1994. Aside from the ISCBFM, he is also a member of the International Society for Neurochemistry, the American Society for Neurochemistry and the Society for Neuroscience. His main research interests are focused on studying in vivo neurochemistry and biochemistry using non-invasive techniques, focussing mainly on using NMR spectroscopy to measure energy metabolism of carbohydrates.

Sylvain Houle

Dr. Sylvain Houle is the Director of the P.E.T. Centre at the Centre for Addiction and Mental Health and the University of Toronto, Toronto, Canada. He is currently the program chair for the BrainPET'03 meeting. Over the last ten years he has built a multidisciplinary research team to apply PET methodology to basic neuroscience and clinical psychiatry. He has a particular interest in the development of new PET radiotracers to study neuroreceptors. Dr. Houle has degrees in physics, electrical engineering and medicine with a specialty in nuclear medicine. He has been involved in nuclear medicine research for more than thirty years and he has devoted the last ten years exclusively to brain research with PET.

Chung Y. Hsu

Chung Y. Hsu, MD, PhD, is 58 years of age and is a Professor in the Department of Neurology at Washington University School of Medicine in St. Louis, Missouri, USA. He is currently on leave and serves as President of Taipei Medical University in Taipei, Taiwan. Dr. Hsu has been a member of ISCBFM since early 1993 and he has contributed to the Society as a member of the Editorial Board of the Journal of Cerebral Blood Flow & Metabolism since 1996. He serves on numerous

governmental and pharmaceutical advisory committees. His research interests include molecular and cellular mechanisms of neuronal and endothelial cell death and angiogenesis after stroke and spinal cord injury. He also employed MRI in studies of experimental and clinical stroke.

Yasuo Katayama

Dr. Yasuo Katayama is 53 years old, and the Professor and Chairman of the Department of Neurology of Nippon Medical School at Tokyo. From 1979 at the 9th International Symposium of Cerebral Blood Flow and Metabolism, Professor Katayama actively and greatly contributed to the Society with his many coworkers by presentations at the meeting and publishing many papers on JCBFM related to ischemic cell damage and its protection. He is the most leading scientist of this field, and a most active member of the ISCBFM in Japan.

Hiroyuki Kinouchi

Hiroyuki Kinouchi, M.D., Ph.D. is 44 years of age and is currently Associate Professor of Department of Neurosurgery, Akita University School of Medicine in Japan. He has been a member of ISCBFM for some 10 years and is currently a member of the Publication Committee of the Society. He contributed to the Society on the local Organizing Committee at the 16th Symposium in Sendai 1993. His major research interests include cellular and molecular mechanisms of cell death, repair, and neurogenesis following CNS injury, especially cerebral ischemia.

Eng H. Lo

Eng H. Lo is 40 years old and is currently Associate Professor in the Program in Neuroscience, Harvard Medical School, and Head of the Neuroprotection Research Laboratory in the Massachusetts General Hospital. He has been a member of the Society for 11 years, and received the Society's Young Investigator Bursary award in 1993. He is a member of the Brain Disorders and Clinical Neuroscience study section at NIH, is co-chair of the Brain review committee for the American Heart Association, and serves on the advisory panel for the Marburg Symposium. His research interests include molecular mechanisms of neurodegeneration, signalling pathways that link extracellular to intracellular proteolysis, and MRI methods to map reactions to stroke and trauma.

Dale A. Pelligrino

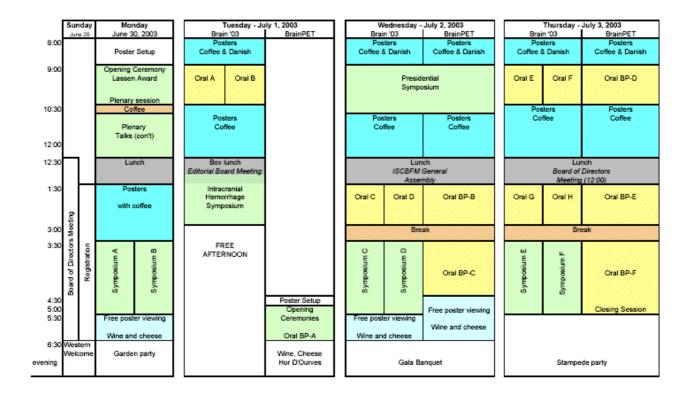
Dale A. Pelligrino, PhD, is 54 years of age and is a Professor in the Department of Anesthesiology, at the University of Illinois at Chicago, and Director of the Neuroanesthesia Research Laboratory. He has been a member of ISCBFM since its inception and is currently a member of the Editorial Board of the Journal of Cerebral Blood Flow and Metabolism. He also serves on the Editorial Boards of Stroke and The American Journal of Physiology. His major research interests include mechanisms of cerebrovascular regulation, pathomechanisms in cerebral ischemia, and the modulatory effects of sex steroids.

Norihiro Suzuki

Norihiro Suzuki is 50 years of age, and is currently Associate Professor of Neurology in Kitasato University, Japan. He has been a member of the Society since 1989 and a member of the Membership Committee of ISCBFM since 2001. His major research interests include molecular neuroeffector mechanisms of the cerebral blood vessels, particularly of coupling of CBF and neural activity in parasympathetic and trigeminal systems, and the nociception associated neural activation mechanism of the neurovascular headache.

Brain'03 and BrainPET'03

Program at a Glance



For further information, please visit www.brain03.org

Agenda for the General Assembly of Members of The International Society for Cerebral Blood Flow and Metabolism

Telus Convention Centre, Calgary, Canada Wednesday, July 2, 2003 at 12:30-13:30

Agenda

- 1. Minutes of the General Meeting held in Taipei on June 12, 2001
- 2. Matters arising from the minutes
- 3. Report of the Secretary including election results (Gitte Moos Knudsen)
- 4. Report for the Treasurer (Wolfgang Kuschinsky)
- 5. Report of the Chairman of the Program Committee (Joel H. Greenberg)
- 6. Report of the Chairman of the Publication Committee (Anthony Strong)
- 7. Report of the Editor of the Journal of Cerebral Blood Flow and Metabolism (James McCulloch) and presentation of the new editor Richard Traystman
- 8. Report of the Chairman of the Membership Committee (Costantino Iadecola)
- 9. Report of the Chairman of the Young Investigator Committee (Matthias Endres)
- 10. Report of the Chairman of the Liaison Initiative Committee (Martin Lauritzen)
- 11. Presidential address (Michael A. Moskowitz)
- 12. New business
- 13. Concluding comments by the new President (Iwao Kanno)
- 14. Vote to hold next General Meeting in 2005
- 15. Adjournment

Report of the Treasurer

International Society for Cerebral Blood Flow and Metabolism Treasurer's Report for 2002

per 16. April 2003

Balance brought forware 2002)	rd (01. January	<u>US\$</u>
BANK BALANCES Marketable securities	Societe Generale FF account Societe Generale US\$ account Societe Generale GBP Sterling account LBBW \$ account LBBW € account Sogesector Sogelux	313,41 86.540,75 0,00 0,00 0,00 117.788,39 <u>986.469,96</u> 1.191.112,51
Loan to Brain03 Advance to Editor 2001 TOTAL Still open cash transit TOTAL - correctly	Societe Generale US\$ account (Diff.Bank account)	30.000,00 <u>8.483,92</u> <u>1.229.596,43</u> <u>-30.023,22</u> <u>1.199.573,21</u>

	US\$	US\$	US\$
INCOME			
Membership dues		2.430,00	
Advance Journal profit 2002		116.225,00	
Journal profit 2001 (rest payment)		43.682,00	
LWW Editorial office support deposits		40.460,00	
Loan to Brain01 (repaid in 2002)		30.000,00	
Interest Income Bank accounts		1.431,04	
Interest Income			
Marketable Securities (Germany)		-5.706,58	
Marketable Securities (from abroad)		118.411,13	
Sale of Marketable Securities			
- book value per 01. January 2002	1.104.258,35		
- selling value	<u>-928.451,24</u>	<u>-175.807,11</u>	171.125,48
EXPENSES			
Editorial office costs		57.740,40	
Travel expenses Goals & Planning Committee	2002	2.951,34	
BrainPET01 Proceedings publication		10.000,00	
Travel expenses Program Committee		10.383,08	
Brain03			
Support Summer School Okayama 2002		30.000,00	
Honorarium payment for invited reviews JCBFN		18.225,00	
Legal and Consultancy fees (Regain of tax exer	mpt status)	30.256,24	
Legal and Consultancy fees (1998-2001)		9.267,75	
Accounting fees		626,64	
Accounting fees (2001)		11.532,36	
Secretary's fees		3.539,14	
Secretary's fees (1996-2001)		3.449,44	
Promotion/Webside expenses		240,00	
Bank fees		1.076,12	
Interest expense		157,54	
Expenses Sales Marketable Securities		5.321,89	
Additional page charges 2001 (paid in 2002)		38.421,90	
Currency differences		2.099,00	235.287,84
LOSS			-64.162,36

Balance carried forward	<u>US\$</u>				
BANK BALANCES	LBBW \$ account LBBW € account (12.224,90 €)	7.040,38 12.812,92			
Fixed term deposit accounts					
	LBBW \$ account	52.250,04			
Marketable securities	(market value 31. December 2002)	1.024.823,59			
	,	1.096.926,93			
Loan to Brain03		30.000,00			
Advance to Editor 2001		8.483,92			
TOTAL ASSETS		<u>1.135.410,85</u>			

Reports from the Committees

Membership Committee

Since June 01, the Membership Committee has consisted of Drs. Ute Lindauer, University Hospital Charité, Neurology-Experimental Neurology, Berlin, Germany, Norihiro Suzuki, Department of Neurology, Kitasato University, Sagamihara City, Japan, and Costantino Iadecola, Division of Neurobiology, Department of Neurology and Neuroscience, Weill Medical College of Cornell University, New York, USA. Ms. Dorthe Givard, Rigshospitalet, Copenhagen University Hospital, Copenhagen, Denmark, served as Secretary to the Committee. Virtually all the applications were processed electronically through a membership application form available at http://www.cbfm.org/membership.html. The electronic submission and evaluation of the applications has greatly facilitated the activities of the committee, and has increased the efficiency of the process.

From July 2001 to early April 2003, 177 new applications were received, compared to 119 for the similar period for 1999-01 and 140 for 1997-1999. The average time interval between arrival of an application and the final decision was 8.6 days (range 1-62). There were 73 applications for ordinary membership, 5 of which were rejected. The 68 new ordinary members of the Society have a wide geographic distribution: Canada 7, China 1, Denmark 3, France 4, Germany 1, Japan 11, Korea 3, The Netherlands 1, Spain 1, Sweden 1, Taiwan 1, UK 5, and USA 29. The 104 applications for Junior Membership were all accepted. The geographic distribution of our new junior members is: Armenia 1, Australia 1, Canada 4, Colombia 1, Denmark 2, Finland 1, France 8, Germany 12, Hungary 2, India 1, Israel 1, Italy 1, Japan 8, Korea 1, New Zealand 1, Spain 1, Sweden 1, Switzerland 3, The Netherlands 3, United Kingdom 12, and USA 39.

There was surge of applications for junior membership, especially in the past few months, stimulated by the availability of bursaries and reduced registration fees for Brain'03/BrainPET'03. The Membership Committee coordinated its activities with the meeting organizers to facilitate processing applications for junior membership and requests for information about membership. The 61 members that have expired their four-year term as junior members have in February 2003 been invited to apply for ordinary membership, so far, 4 of these have become ordinary members.

Instructions for member applicants and an application form appeared in the February issue of the Journal of Cerebral Blood Flow and Metabolism.

Costantino Iadecola, MD, Chair of the Membership Committee

Education Committee

The Education Committee of the International Society for Cerebral Blood Flow and Metabolism (ISCBFM) sponsored one Summer School Program this past year.

This Summer School concerning "Molecular Mechanisms and Epochal Therapeutics for Ischemic Stroke and Dementia", was held Oct. 18-20, 2002, in Okayama, Japan and was organized by Professor Koji Abe. Dr. Abe organized an outstanding Summer School with an excellent mix of senior and junior participants as well as many students and fellows. There were 48 invited papers and 33 poster presentations. The total attendance was slightly more than 100 persons and included mostly participants from Japan, but from other parts of the world, as well (North America and Europe). There were presentations from senior and junior individuals, as well as from fellows and students. Mostly the younger individuals, fellows and students presented posters. There was an excellent interaction (questions, comments, discussion) between all individuals.

There were seven areas of discussion: 1) role of intracellular signaling in cerebral ischemia; 2) molecular mechanisms and therapy for ischemic brain damage; 3) neurotropic factors and gene therapy for stroke; 4) imaging of brain function; 5) molecular mechanisms of Alzheimer's disease and therapeutic potentials; 6) activation of stem cells in ischemic brain; and 7) cell therapy for

ischemic brain. All of these areas are important and timely for discussion concerning brain research. The presentations were excellent, and there was appropriate time for discussions and questions.

The social aspects of the meeting were also excellent. Breakfast, lunch, and dinner were provided, and there was much interchange between the participants at these events. The meeting was excellently paced, and I believe all participants enjoyed the meeting and that the intent of the Summer School concept was fulfilled. Professor Abe and the Organizing Committee should be complimented for their efforts in organizing an outstanding Summer School program. All aspects of the Summer School ran smoothly and efficiently thanks to Professor Abe's diligence and hard work during the Summer School. A book will result from this Summer School program, and all manuscripts were collected at the time of the meeting.

The Education Committee would like to solicit more Summer School proposals for these next and subsequent years. Our committee will soon be meeting to discuss and implement guidelines for Summer School proposals. While we do not want to constrain applications for Summer School proposals, we would like to put into place a common application procedure dealing specifically with: amount of financial support available, number of participants, what to write and how to write it, and follow-up once the Summer School is completed.

Hopefully, these guidelines can be drafted at the time of Brain '03 in Calgary.

Richard J. Traystman, Chair of the Education Committee

Young Investigators Committee

The Committee proposed a list of young investigators as possible chairpersons for the Brain'03 Symposia. Three young investigators were selected and will act as chairpersons at the Conference. A symposium about the future of the field and the society was proposed for Brain'03 (however, could not be considered by the Program Committee due to time limitations). There will be an informal Young Investigator lunch during the Conference. Everybody interested is cordially invited to join. Information about day and place is pending and will be announced at the Brain 03 website.

Matthias Endres for the Young Investigator Committee (Rick Dijkhuizen, Sylvain Doré, Matthias Endres, Hiroshi Watabe)

Liaison Initiative Committee

As Chairman of the Liaison Initiative Committee I have been working with Ulrich Dirnagl and Mike Moskowitz to initiate a Gordon Conference Series on 'Brain Energy Metabolism and Blood Flow'. The proposal has been submitted and we hope for approval this summer. If approved, the first meeting will be held in 2004, and hereafter alternating with the Brain meetings. The series will focus on basic aspects of metabolism and flow, and on aspects that are relevant to understand and improve functional imaging of the brain. Important questions that will be addressed in the first proposed symposium include: What is the energetic cost of neuronal signalling? What is the morphological basis of flow coupling, and what are its mediators? What are the implications for functional neuroimaging in neurological disease? It is the goal of this symposium series to define our current understanding of brain energy metabolism and blood flow, and to set the stage for qualified discussions of functional brain imaging signals. The topics of the first meeting have been so selected to attract scientists from both the ISCBFM and the Organization for Human Brain Mapping. In that sense the Liaison Committee hope to have full-filled the expectations of the society. In the view of this chairman the Gordon format of conferences may be more appropriate for knowledge exchange between members of the two societies than the big society meetings, which are less focussed on topics of mutual interest for members of the two societies.

Martin Lauritzen, Chair of the Liaison Initiative Committee

Publication Committee

The current tasks of the Publication Committee are to identify a new Editor of the Journal to succeed Professor McCulloch, and to establish a new contract for publication of the Journal with Lippincott Williams and Wilkins, or other publisher, to run from January 2006.

A shortlist of 5 distinguished contributors and reviewers for the Journal was drawn up and considered by members of the Committee. During consultation with these 5 members and with the Society's Officers, a unanimous view emerged that Dr. Dick Traystman should be invited to take on the Editorship, and the Society is most fortunate indeed that he is willing to do so, and to couple this with his move (now completed) to the University of Oregon. He will take up the post of Editor-Designate on 1 July, and will succeed Professor McCulloch on January 1st 2004. Dr Traystman will handle new manuscripts from 1 July, and it is hoped that it will be possible to implement arrangements for full electronic manuscript submission and review by that date. Details will be published on the Society and Journal websites as soon as possible.

The entire outgoing Editorial Team have provided outstanding service and support for the Journal over the past 6 years, for which the Publications Committee and the Society are deeply grateful.

A subcommittee will shortly be formed to negotiate a new contract, and will take advice from Dr Graham Lees, PhD, who has extensive experience of neuroscience journal publishing from within the industry.

Anthony Strong, Chair of the Publication Committee

Reports from Summer Schools

Short meeting report from the 9th International Symposium on Pharmacology of Cerebral Ischemia, 21-24 July, Marburg, Germany

The 9th International Symposium on Pharmacology of Cerebral Ischemia was a gathering of more than 200 scientists from all over the world at the Philipps-University Marburg, Germany. Organized by Josef Krieglstein with the support of an international advisory board the meeting was again a great success combining international contributions of outstanding scientists and clinicians in the field of ischemia and neuroscience research. In the conference basic research on mechanisms of neuron death and therapeutic strategies explored in experimental models of cerebral ischemia, as well as clinical trials of known drugs and novel agents under development were presented in 84 poster presentations and 57 oral presentations divided in 11 sessions and 2 plenary lectures. Prominent areas discussed were newly discovered mechanisms of cell death involving matrix-metalloproteinases and death signals from the nucleus to the mitochondria, neuroprotective drugs including PAF antagonist, bradykinin inhibitors, PARP-inhibitors and p53-inhibitors as well as new strategies to enhance brain recovery by Nogo-A antibodies, and stem cell or bone marrow stromal cell transplants. Moreover, a formerly unknown protein histidine phosphatase which is expressed at high levels in brain tissue was presented on the conference. Another highlight was the presentation of a clinical safety study on erythropoietin which revealed a pronounced benefit of erythropoietin in stroke patients.

Announcement of Summer Schools

The XVth annual PET Pharmacokinetic course, June 26-28, 2003 Montreal Neurological Institute

The XVth annual PET Pharmacokinetic course will be held at the Montreal Neurological Institute prior to the Brain03 Conference in Calgary.

Previous courses have been held at the Paul Scherrer Institute, Villigen, Switzerland, at Rigshospitalet Copenhagen, Denmark (as part of the Brain '99 conference), Groningen University Hospital, The Netherlands and most recently in 2002 at the VU University, Amsterdam.

Three measurements fields are addressed: regional cerebral blood flow, glucose utilization and neuro-receptor binding. For each topic, theoretical models for analyzing the PET signal will be explained. Computer exercises, designed to complement the theoretical parts and to encourage interaction between participants and tutors, together with computer simulations shown in some of the presentations, help to merge theory with practice. The course is open to everyone, and has previously enjoyed a good interaction between physicists, neurologists, pharmacologists, imaging science specialists, nuclear medicine physicians, chemists and students in all these fields. The number of participants is limited and preference will be given to members of the Society of Cerebral Blood Flow and Metabolism.

For further information regarding program, registration etc. please visit

http://www.bic.mni.mcgill.ca/kinetics2003

Brain'05 and BrainPET'05

Vrije Universiteit Amsterdam
The Netherlands
June 6-11, 2005

For future mailings please provide name and address to:

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