



# Serotonin Club Newsletter



*Faculty of Medicine*

**Symposia Set for the  
Serotonin Club Meeting  
Montpellier France,  
Faculty of Medicine,  
July 10-12, 2012  
Official satellite of EPHAR  
meeting in Granada Spain  
July 17-22, 2012**

**“Molecular genetics of serotonin neuron development, physiology, and pharmacology.”**

Chair: Evan Deneris

**“Recent advances in understanding the interaction between the glutamatergic and serotonergic systems.”**

Chair: Mark A. Geyer

Co- Chair: Adam Halberstadt

**“New roles of 5-HT<sub>6</sub> receptor in neuro-developmental and cognitive processes.”**

Chair: Joel Bockaert

Co- Chair: Mark Millan

**“New serotonin transporter redux 2012.”**

Chair: Kathryn A. Cunningham

**“Putting the pieces together: Integrating Dopamine, serotonin, reward, and aversion.”**

Chair: John Neumaier

**“Ovarian sex steroids and serotonin function.”**

Chair: Alan Frazer

**“Multiple facets of serotonin: placenta, blood, bone connection.”**

Chair: Francine Côté

**“The 5-HT<sub>3</sub> receptor system: therapeutic potential and advantages from novel ligands.”**

Chair: Nicholas Barnes

Co- Chair: Beate Niesler

**“From ligand functional selectivity to brain region selectivity: Differential pharmacological targeting of serotonin system.”**

Chair: Kelly A. Berg

Co- Chair: Adrian Newman-Tancredi

**“Serotonergic neurons and adaptive responses to emergency situations: a focus on autonomic and nociceptive systems.”**

Chair: Véronica Fabre

**“Serotonin in the cardiovascular system: New findings on an old transmitter.”**

Chair: Luc Maroteaux  
Co- Chair: Stephanie Watts

**“Regulation of 5-HT neurochemistry and behavior by unsuspected “villains”: Implications for psychiatric disorders and drug abuse.”**

Chair: Lynette C. Daws

Arrangements are well underway for the next Serotonin Club meeting to be held in Montpellier France at the Faculty of Medicine. Please see the outlined schedule below. This meeting will have primarily separate, non-concurrent sessions; the exception is the last day, when there will be six concurrent sessions. Each symposia will be comprised of four speakers (one of which is a travel awardee), and will last two hours. **Dr. Elaine Sanders Bush will be giving the Page Lecture and Dr. Ewan Mylecharane the Rapport Lecture.** Lunch will be provided every day of the meeting and the banquet will be held the night of July 11<sup>th</sup> in a Chateau that is nearby. Hotel information will be made available on the meeting website.

The local organizing committee, composed of Joel Bockaert, Michel Hamon and Philippe Marin, are doing a wonderful job. *Please let us know of any industry contacts you may have in any part of the world that would be interested in exhibiting or helping finance the meeting.*



*Salle des Actes – one of the symposia rooms*

Here is the schedule for the meeting: The symposia have NOT been assigned time slots as yet.

**JULY 10**

9:00-9:15 am Opening  
9:15-10:15 am PAGE LECTURE  
10:15-10:45 am Coffee break  
10:45 am-12:45 pm SYMPOSIUM 1  
12:45-2:00 pm LUNCH  
2:00-4:00 pm SYMPOSIUM 2  
4:00-4:30 pm Coffee break  
4:30- 6:30 pm POSTER SESSION  
6:30 -8:30 pm Continuing poster session with wine and cheese

**JULY 11**

8:00-9:00 am RAPPORT LECTURE  
9:00- 9:30 am Coffee break  
9:30-11:30 SYMPOSIUM 3  
11:30 am-1:00 pm LUNCH  
1:00 -3:00 pm SYMPOSIUM 4  
3:00-5:00 pm SYMPOSIUM 5  
5:00-5:30 pm Coffee break  
5:30-7:30 SYMPOSIUM 6  
7:45 Departure for Banquet

**JULY 12**

9:00-11:00 am SYMPOSIUM 7, 8  
11:00-11:30 am Coffee break  
11:30 am-1:30pm SYMPOSIUM 9, 10  
1:30-2:30 pm LUNCH  
2:30-4:30 pm SYMPOSIUM 11, 12  
Departure



*Room where posters will be held*

## Young Investigator Travel Awards

**Submissions must be received by  
November 30<sup>th</sup> 2011.**

**Successful applicants will be informed  
shortly thereafter**

The Serotonin Club will make a limited number of travel awards available to *pre- and post-doctoral students and junior researchers, not more than three years past their post-doctoral training, who are authoring communications to the Montpellier meeting.*

The size of the award is not yet finalized but will, as always, cover the cost of registration and will, subject to funds available, also try to assist with travel and accommodation costs. A grant application to support travel fellows has been submitted to NIH by Dr. Lynette Daws to support at least 10 awardees. Awardees will be provided a mentor to meet with them during the meeting.

The awards will be decided by the organizing committee and symposia chairs, whose decision will be final. **The applications should be related to one of the accepted symposia, as the travel awardee will be the fourth speaker in the symposia (as well as a poster presenter).**

Please submit all applications to Shatich Livingstone ([livingstonesa@email.chop.edu](mailto:livingstonesa@email.chop.edu)). Applications are composed of a 1) a copy of the abstract submitted or to be submitted, 2) the symposia that the abstract is related to and 3) a cover letter from the applicant's Head of Department who should confirm the applicant's academic status and the fact that sufficient funding is not available from any other source to support the applicant's travel to the meeting. Incomplete applications will not be considered and will be returned. *Applicants must be members of the Serotonin Club. Instructions for joining the Serotonin Club are below and on the website at [www.serotoninclub.org](http://www.serotoninclub.org)*

## Monday evening at SfN

November 14<sup>th</sup>, 2011

5:30 – 7:30 pm

## FADÓ IRISH PUB AND RESTAURANT

808 7<sup>th</sup> Street NW, Washington DC

Ay... 'tis the luck of the Irish to be sure! Come and join us for good food, a wonderful selection of beverages and plenty of friendly banter in the relaxing ambiance of a traditional Irish Pub. The Pub is very close to the convention center. A brief presentation by Ireland's very own Dr. John Cryan will highlight the evening. John will be journeying from the University College Cork to attend SfN and will no doubt deliver an entertaining and informative presentation at our reception. In addition, information will be given



about the Club's upcoming meeting in Montpellier, France, July 2012.

Mark your calendars! The cost is \$20/head, no student price, and will include an appetizer buffet and two drink tickets. A cash bar will be available after you use your two tickets. You may pay by sending a check for \$20 USD made out to the Serotonin Club to Dr. Sheryl Beck's attention to the address at the end of the newsletter or by PayPal. Go to [serotoninclub.org](http://serotoninclub.org) website and click on the membership link for instructions. Pay through PayPal as you would for paying dues.

**Please send in your payments NOW for the Reception; urge your students and colleagues to attend and join the Serotonin Club.**



## Obituaries

Unfortunately we have lost three dear members of the Serotonin community, Dr. Maurice Rapport, Dr. John Harvey, and Dr. David Grahame-Smith.



### **Maurice M. Rapport, PhD**

We are sorry to report the death of Maurice M. Rapport, PhD, 91, a long-time member of the New York State Psychiatric Institute and Chief (Ret.) Division of Neuroscience, New York State

Psychiatric Institute; Emeritus Professor of Biochemistry, Columbia University; and American Cancer Society Professor. He received a B.S. in chemistry from C.C.N.Y. in 1940 and Ph.D. in organic chemistry from California Institute of Technology in 1946. He attended the Istituto Superiore di Sanita in Rome as a Fulbright Scholar in the department of Dr. Daniel Bovet in 1952. In his first postdoctoral position, he partially solved an 80 year old problem in the literature concerning a vasoconstrictor substance released into blood when it clots. The pure crystals had a complex composition that was not readily subject to structural analysis. During his subsequent appointment at Columbia University, he was able to demonstrate that the active principle was 5-hydroxytryptamine, now known as serotonin. This led to chemical synthesis by several drug companies and made possible extensive physiological, pharmacological and biochemical studies throughout the world that established serotonin as a major neurotransmitter.

Dr. Rapport's work in biochemistry also involved areas of connective tissue and cancer. His studies in cancer showed that the interactions of lipids with proteins were dependent on the addition of common lipids such as cholesterol and lecithin. Another longstanding problem based on differences

between normal human tissue and cancer tissue detectable by complement fixation was resolved by the isolation of a complex lipid now called lactosyl ceramid. In addition, he elucidated the structure of aldehydogenic phospholipids to contain the unique alpha, beta unsaturated ether attachment of one of the hydrocarbon chains.

In 1968, he accepted a position at the New York State Psychiatric Institute and persuaded the director to combine three departments: pharmacology, biochemistry and bacteriology, into the Division of Neuroscience, one of the first departments to have this comprehensive title. Dr. Rapport became chief of the Neuroscience division in 1969.

Dr. Rapport remained at NYSPI until 1985, when he moved to the Albert Einstein College of Medicine. He retired in 1986 and served as a Visiting Professor of Neurology at the Albert Einstein College of Medicine until his death.

A recent award to Dr. Rapport from the Serotonin Club acknowledged his

“tremendous contribution to the field of serotonin research. As one of the original investigators who discovered the vasoconstrictor substance that became known as serotonin, your many scientific contributions have left an overwhelming imprint on the field. Your name and your work will always be a historical part of the field of serotonin investigation.”

Dr. Rapport died peacefully at the home of his daughter on August 18, 2011, having lived long enough to enjoy the arrival of his first great-granddaughter. A memorial service is being planned. Our deepest sympathy goes out to the family and friends of this remarkable scientist and individual.

*Contributed by Maurice Rapport and Hadassah Tamir*



**Dr. John Harvey**  
John graduated from the unique Biopsychology program at the University of Chicago in 1959 and was a distinguished faculty member in the Departments of Pharmacology and Psychology there until 1968. At the University of Iowa from 1968 to

1988, he was Director of a NIH-supported Integrative Training program in Neuroscience and Director of the Biopsychology Program in the Department of Psychology. He moved to Drexel University School of Medicine in 1988 where he served as Chair of the Department of Pharmacology and received many research and teaching awards.

He launched his career in the 1960s by establishing that monoamine neurotransmitters were organized into fiber tracts that could be identified and selectively destroyed to determine their behavioral functions. Once the brain was damaged, John showed that impaired behavioral function could be recovered by restoring depleted neurotransmitters or stimulated denervated receptors. He established that increased pain sensitivity was associated with serotonin depletion and repletion of 5-HT using the precursor 5-HTP reversed that deficit. This remained a model for the treatment of neurological damage for years, much like Parkinson's disease. He was the first to establish that the neurotoxic effects of fenfluramine and amphetamines were associated with the depletion of 5-HT in the brain, an area of continuing investigation in the field of substance abuse. He was among the first to establish a relationship between brain lesions that destroy dopamine fibers and deficits in feeding and motivational behaviors. For the past 25 years, he has focused on understanding how drugs influence learning by studying Pavlovian conditioning of the rabbit

nictitating membrane response. John made key contributions in identifying the underlying neural circuitry required for learning and established how drug effects on different component of Pavlovian condition can be systematically examined. Exploiting advantages of this paradigm, John established that hallucinogenic drugs enhance learning and eliminated performance variables as alternative explanations. He showed that the behavioral effects of hallucinogens in rabbits, as well as rodents, are like produced by activating 5-HT<sub>2</sub> receptors. His recent research has shown how drugs interacting with 5-HT<sub>2A</sub> and 5-HT<sub>2C</sub> receptors with constitutive activity (as agonists, antagonists or inverse agonists) produce predictable behavioral consequences supporting their key roles in learning and cognition.

His career contributions to the field of serotonin research were honored in 2006 by the Serotonin Club with the Irvine Page award. He died on Saturday June 25, 2011.

*Contributed by Dr. Irwin Lucki*



**Professor David G Grahame-Smith**

David Grahame-Smith was one of the UK's leading clinical pharmacologists. His work on the pharmacology of serotonin began with the identification and

characterization of tryptophan hydroxylase and extended over the next 35 years through a series of innovative and elegant experiments on its functions and its role in depression and the tumour that causes the carcinoid syndrome.

He was born in Leicester in 1933. He studied medicine at St Mary's Hospital in London from 1951 and after service in the Royal Army Medical Corps, returned to St Mary's to work with Albert Neuberger, the founder of glycoprotein research. For his PhD he identified tryptophan hydroxylase. A MRC Travelling Fellowship then took him to Vanderbilt University where he worked with

Grant Liddell, Bill Butcher, and Earl Sutherland (Nobel prize, 1971). He returned to St Mary's, as Senior Lecturer in Clinical Pharmacology and Therapeutics and then became the Director of the new MRC Unit of Clinical Pharmacology in Oxford in 1971. This unit flourished under his direction, and attracted a wide range of both highly skilled pharmacologists and clinicians. The Unit's large output of scientific papers dealt not only with serotonin and psychopharmacology, but a wide range of other topics, including the pharmacology and clinical pharmacology of antipsychotic, cardioactive, and anticancer drugs and the physiology and pharmacology of transmembrane ion transport. He also mentored many young scientists who delighted in his skilled direction and later achieved eminence elsewhere. This is indicated by the fact that 2 presidents of the British Pharmacological Society and 2 presidents of the British Association of Psychopharmacology all spent a significant part of their early careers in his department. When in 1993 he reached the MRC's age of retirement, the Unit closed, but the Department continued until his retirement in 1999, part funded by SmithKline Beecham.

He was a loyal supporter of the British Pharmacological Society, and skilfully steered the British Journal of Clinical Pharmacology. He served on the Committee on Safety of Medicines (now the Commission on Human Medicines) from 1975 to 1986, and chaired its Safety, Efficacy, and Adverse Reactions subcommittee and was the founding Chairman of the Government's Advisory Council on the Misuse of Drugs. His visiting professorships included a trip to Beijing in 1985. His awards included an Anna Monika Stiftung Prize for Studies in Depression (with A R Green, 1977), the 1980 Paul Martini prize in Clinical Pharmacology (with J K Aronson and A R Ford), the Lilly Prize of the British Pharmacological Society in 1995, and the British Association of Psychopharmacology's Lifetime Achievement award in 2002. He was

appointed CBE in 1993. He died on 17 June 2011, aged 78.

*Contributed by Dr. Richard Green*

## Neuropharmacology Journal Items

The journal containing articles from the Montreal meeting was published in September 2011, Volume 61(3). In addition we have been asked to notify our members of a satellite meeting to the SfN meeting that the Elsevier/Neuropharmacology journal is sponsoring. The website is [www.neuropharmacology-conference.elsevier.com](http://www.neuropharmacology-conference.elsevier.com).

## Facebook page

Remember we now have a Facebook page as well. Make sure you visit the site at [www.facebook.com/pages/Serotonin-Club/170600399644105](http://www.facebook.com/pages/Serotonin-Club/170600399644105) and "like" the Club to join. Information about meetings, publications and pictures from previous meetings and the SfN dinners/receptions are posted. Any questions should be addressed to Adam Halberstadt at [ahalberstadt@ucsd.edu](mailto:ahalberstadt@ucsd.edu).

## Other Meetings of Interest:

34<sup>th</sup> Annual Meeting of the Japan Neuroscience Society  
September 14-17, 2011  
Yokohama, Japan  
[www.neuroscience2011.jp](http://www.neuroscience2011.jp)

Society for Neuroscience  
Washington, DC  
November 12-16, 2011  
[www.sfn.org/AM2011](http://www.sfn.org/AM2011)

ACNP  
Hilton Waikoloa Village, Waikoloa, Hawaii  
December 4-8, 2011  
[www.acnp.org](http://www.acnp.org)

British Pharmacological Society Winter Meeting

London 2011  
December 13-15, 2011  
[www.bps.ac.uk/meetings](http://www.bps.ac.uk/meetings)

Australasian Society of Clinical and  
Experimental Pharmacologists and  
Toxicologists  
45<sup>th</sup> ASCEPT meeting  
Perth Convention Center, Australia  
December 4-9, 2011  
[www.ascept.org/Annual-Scientific-Meetings.aspx](http://www.ascept.org/Annual-Scientific-Meetings.aspx)

Australian Neuroscience Society  
Annual Meeting  
29<sup>th</sup> January to 1<sup>st</sup> February, 2012  
Gold Coast, QLD  
[www.ans.org.au/ans-annual-conference/](http://www.ans.org.au/ans-annual-conference/)

CINP World Congress  
June 3rd – 7th, 2012  
Stockholm, Sweden  
[www.cinp2012.com](http://www.cinp2012.com)

Serotonin Club Meeting  
Montpellier France  
July 10-12, 2012  
[www.serotoninclub.org](http://www.serotoninclub.org)

EPHAR 2012  
Granada, Spain  
July 17-22, 2012  
<http://www.ephar2012.org/>

FENS Forum of Neuroscience  
July 14-18, 2012  
Barcelona, Spain  
[www.fens2012.neurosciences.asso.fr](http://www.fens2012.neurosciences.asso.fr)

World Congress of Basic and Clinical  
Pharmacology 2014  
July 13-18, 2014  
Cape Town, South Africa  
[www.iuphar2014.org](http://www.iuphar2014.org)

**Pay your dues**

Students who can document that they are still in their pre-doctoral training or in their first three years of postdoctoral training may pay only \$30/3 years in dues. Please have your current mentor send a letter documenting your current student status. Regular members pay \$60/3 years.

**You can pay for your dues using a credit card at**



Go to [www.serotoninclub.org](http://www.serotoninclub.org) website and click on the link for Pay dues for instructions. If you are receiving this newsletter then you are already a member. We will contact you when it is time to renew. **PLEASE URGE YOUR COLLEAGUES AND STUDENTS TO JOIN!!!!** Those members whose membership is due for renewal in 2011/2012 will be contacted by Shatich Livingstone. You may also send a check for \$30 or \$60 USD payable to the Serotonin Club directly to Sheryl Beck (address at end of newsletter).

### Address change?

If you have changed your address send it now while you are thinking about it to: [livingstonesa@email.chop.edu](mailto:livingstonesa@email.chop.edu)

**All communications with members are now carried out via the internet so if we do not have your current e-mail address you risk losing all contact with the Club**

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