ECRO Newsletter

European Chemoreception Research Organization

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Forthcoming ECRO Congress Granada 2006

Contributions to the ECRO Newsletter

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Acting Editor

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ECRO Board and Coopted Members

Board

- President: Dr. Bill Hansson, Swedish University for Agricultural Sciences, Sweden. E-mail: bill.hansson@vv.slu.se
- President Elect: Dr. Annick Faurion, Unité de Neurobiologie de l'Olfaction et de la Prise Alimentaire, INRA, Jouy en Josas CEDEX, France, Annick.Faurion@jouy.inra.fr
- General Secretary: Dr. Ottorino Belluzzi, University of Ferrara, Italy. E-mail: mk5 @dns.unife.it
- Executive Secretary and Treasurer: Dr. Krishna Persaud, SCEAS, The University of Manchester, United Kingdom. E-mail: Krishna.Persaud@manchester.ac.uk

Coopted Members

- Dr. Heinz Breer, University of Hohenheim, Germany, breer@unihohenheim.de
- Dr. Anna Maria Angioy, University of Cagliari, Italy, amheart@unica.it
- Dr. Milagros Gallo, University of Granada, Spain, mgallo@ugr.es

European Executive Editors for Chemical Senses

- Dr. Robyn Hudson, Institut für Medizinische Psychologie, Universität München, Germany. E-mail: robyn@imp.unimuenchen.de
- Dr. Rudolf Ali Steinbrecht, Max-Planck-Institut für Verhalthaltensphysiologie, Germany. E-mail: steinbrecht@mpiseewiesen. mpg.de

Comments from the ECRO President

Dear ECRO members,

The first thing I want to call your attention to (if anyone has missed it) is that this year's Nobel Prize was awarded to Richard Axel and Linda Buck for their original work elucidating the molecular structure of olfactory receptors. This event is highly significant to our area and calls general attention to the work of everyone working in the chemosensory sciences. We in ECRO congratulate them both to this well-deserved honor. I also hope that you can all benefit from this increased awareness of our research field.

Some months have passed since many of us met at the well-organised meeting in Dijon. The **ECRO** conferences are indeed the main meeting ground for many of us, and new information inspiration. I want to express my thanks to Benoist Schaal and his collaborators for making the conference pleasant and rewarding occasion. At the Dijon meeting the General Secretary, the Treasurer and the President were re-elected for a new term of service. We also elected a President-elect who will become the next president in 2006. Changes in the statutes were also agreed upon, allowing a more democratic, web based voting system for the ECRO leadership from 2006 an onwards. The board has constituted and now been three coopted members, representing different activities **ECRO** nationalities have been recruited to the

board. The coopted members are professor Anna Maria Angioy from University of Cagliari, Italy, Professor Heinz Breer from University Hohenheim, Germany and Professor Milagros Gallo from University of Granada, Spain. In these board members we add new and important competence in several areas. We also approach an even sex ratio in the board, which was one of my ambitions when starting as president.

As announced earlier, ECRO and AChemS have received a generous donation in form of "the Elsje-Werner-Polak Memorial Fund in memory of our niece gassed by the Nazis in 1944 at age 7" from Ernest and Ghislaine Polak. This donation of one million dollars will give a yearly revenue of approximately 50000 dollars to be divided between the organisations on the basis of member numbers. The funds will be used to support science education and more specifically a major part will be used to support student participation in conferences and travel between laboratories.

As is obvious from the above, it is now even more important that our register their members and pay membership dues. Only in this way can we receive a part of the yearly revenue of the donation, and thus increase our ongoing efforts to support student mobility and symposia within the ECRO realm. The student membership fee is now only 20 Euros, and this membership entitles ECRO students to apply for grants both from ECRO per se and from the Elsje-Werner Polak Memorial Fund.

With this I wish you all a Merry Christmas and a Happy 2005 with continued progress in our research on Olfaction and Taste.

Bill Hansson

Interim Editor...

Steven Nordin, having been editor of the ECRO Newsletter for the past two years has stepped down, and we thank him sincerely for his role in bringing a new look to the ECRO newsletter. This current newsletter is an *ad hoc* step in from Krishna Persaud until a new editor takes up the reins.

Editor

ECRO Awards

Many young ECRO members have benefited from grants and travel awards from ECRO.

In 2004 the following members benefited from ECRO.

Gilberto Busnelli (Italy)
Tristan Cenier (France)
Alice Couegnas (France)
Johannes Frasnelli (Germany)
Valeria Ghiarioni (Italy)
Jennifer Hammock (USA)
Kari Jørgensen (Norway)
Andreas Keller (Germany - USA)
Pål Kvello (Norway)
Daniela Pelz (Germany)
Jens Reden (Germany)
Mark Sergeant, UK
Agnès Savigner (France)
Marcus Sjoholm (Sweden)
Isabella Urru (Italy)

Aurélie Vandenbeuch (France) Maria Veldhiuzen (Holland) Anna Voznesenskaia (Russia)

Several meetings were supported by contributions from ECRO. These included the Bioresponse meeting, Dresden, Dec 2003, ISOT 2004, ECRO 2004, UK Semiochemical Network meeting, July 2004.

We are grateful to donating members Givaudan, Firmenich, Quest International, Robertet et Cie, Symrise for their support of ECRO.

Report on ECRO Travelling Fellowship

Mark J.T. Sergeant Nottingham Trent University, UK Mark.sergeant@ntu.ac.uk

Thanks to the generous support of an ECRO Travelling Fellowship, I was fortunate enough to undertake a brief research placement this summer. For given two months Ι was opportunity to work alongside Professor Charles Wysocki and his team at the Monell Chemical Senses Centre in Philadelphia. The goal of our to investigate research was relationship between sexual orientation the induction of enhanced and sensitivity to odours in humans. Previous research by Dalton, Doolittle, and Breslin (2002) has shown that, following repeated test exposures, individuals can become more sensitive several different odorants. to Interestingly these findings are both sex specific (the process has only been recorded in females) and dependent on female reproductive status (the process of induction only occurs in women of reproductive age, and may be linked to levels of female reproductive hormones). The goal of our research was to investigate this process among lesbian participants. The rationale behind this are the differences in prenatal and adult hormone levels reported between heterosexual women and lesbian women (for a review of this topic see Rahman & Wilson, 2003).

In addition to this research I was also able to take part in a variety of other activities. Immediately upon my arrival in the US I travelled up to the twins national convention Twinsburg, Ohio to help with the implementation of a variety of olfactory and gustatory tests. Though it was certainly an intensive introduction to my visit it was a fantastic opportunity to get to grips with a variety of unfamiliar research methodologies. I was also invited to give a presentation to the faculty of Monell on my own which examines research. the connection between male sexual orientation and olfactory abilities. I'm happy to say that the presentation went well and I received highly constructive feedback on my work.

Overall my experiences at Monell were excellent. I had the opportunity to work alongside some of the leading figures in my field, and benefited greatly from the experience. I would like to sincerely thank Professor Wysocki for his excellent supervision and support, the entire faculty at Monell for making me feel very welcome during my stay, and ECRO for making this visit possible.

References

Dalton, P., Doolittle, N., Breslin, P.A.S. (2002) Gender-specific induction of enhanced sensitivity to odors, Nature neuroscience, 5(3), 199-200.

Rahman, Q., & Wilson, G.D. (2003) Born gay? The psychobiology of human sexual orientation, Personality and Individual Differences, 34, 1337-82.

Report on ISOT 2004

Aurélie Vandenbeuch Laboratoire de Neurobiologie Sensorielle, INRA - Centre de Vilvert – Batiment 325, 78352 Jouy en josas cedex, France

The International Symposium on Olfaction and Taste was organized in Kyoto, Japan last July. An ECRO award enabled me to participate in this meeting. I attended many lectures presented by famous scientists and I could discuss current or recent works displayed by many international research teams, during the poster sessions. This meeting was also an opportunity to present my PhD's works on a poster. In contact with experienced researchers, I could promote my studies and find new inspiration. I particularly had the chance to discuss our recent work about the neuronal net which at the lingual level may shape out the taste message thanks to inhibition and the eventuality efferent information through which might subsurface cisternae modulate the cellular output.

Above a rich scientific environment, ISOT was the occasion to

discover Japan, its culture and inhabitants.

I would like to sincerely thank the ECRO board which encourages young European scientists to become members of the scientific community.

General Olfaction and Sensing on a European Level

GOSPEL is a Network of Excellence (NoE) established by funding of the European Commission in the 6th framework programme.

The aim of GOSPEL is to structure the European research in the field of Artificial Olfaction with the declared goal of establishing Europe as a world leader in this field. It expands into the technological development and commercial exploitation.

will GOSPEL bring together consortium of first class research groups, which are actually performing in an excellent but not co-ordinated manner, integrate them into centres of excellence able to execute its program of research activities, ensure the focus of the activity by building implementing a new type of organisation Research (European Interest Group-ERIG) that will ensure the needed co-ordination even beyond the duration of European funding. It will help build Integrated Projects based upon the results of the research activities, help build EEIGs devoted to the commercial exploitation of the technological developments. It will facilitate transfer of knowledge in the field of Artificial Olfaction within the

project consortium and also to industrial and academic researchers by offering different courses, workshops, schools and exchange programs.

Coordinator

Dr. Udo Weimar Organisation:

Institute of Physical Chemistry, University of Tübingen, Germany

Books of Interest

Vomeronasal Chemoreception in Vertebrates: A Study of the Second Nose
C. Evans & D.M. Stoddart. Imperial
College Press. 2003.

Chemoreception: From Cellular Signalling to Functional Plasticity
Edited by J.-M. Pequignot et al. Plenum
Pub Corp. 2003.

Handbook of Olfaction and Gustation (2nd edition)

Edited by R.L. Doty. Marcel Dekker. 2003.

Pheromones and Animal Behaviour: Communication by Smell and Taste T.D. Wyatt. Cambridge University Press. 2003.



Handbook of Machine
Olfaction
By Tim C. Pearce
Hardcover / John Wiley
& Sons Inc / February
2003 / 3527303588



Flavour Perception Eds. Andrew J. Taylor and Deborah D. Roberts Blackwell Pub / November 2004 / 1405116277

Physiologie sensorielle a l'usage des IAA 2004 Ed. A. Faurion, Pub. Lavoisier, France

Home Pages

ECRO www.ecro-online.info/

AChemS www.achems.org/

JASTS
www.epn.hal.kagoshima-u.ac.jp/
JASTSE/

About ECRO

ECRO seeks to promote and support research and to assist the exchange of information on all aspects of the chemical senses. It was inaugurated in 1970 at the International Summer Course on Odour Perception, in Utrecht, with the aim of promoting and coordinating research in chemoreception. It was officially registered in Paris in 1971 and although it began as a European venture, it now has members from outside Europe and sees its function as world-wide. It encourages multi-disciplinary approach research in chemoreception. Since 1978 has affiliated **ECRO** been UNESCO.

ECRO activities include (see www. ecro-online.org/ for further information):

- Congresses
- Mini-symposia
- Summer Schools
- Meetings for national groups
- Promotion of research in chemoreception through scholarships, fellowships and awards.

ECRO is financed by individual members' subscriptions and by donations from industry and research institutions. Its activities are administered by a Board of up to nine members responsible to the General Assembly, which is convened biennially. Currently, ECRO has over 400 members from 29 countries.

Honorary Members

Dr. M.G.J. Beets (Hilversum)

Dr. G. Birch (Reading)

Dr. D. Glaser (Zurich)

Dr. R. Harper (Reading)

Dr. A. Holley (Lyon)

Dr. K.-E. Kaissling (Seewiesen)

Dr. E.P. Köster (Utrecht)

Late Dr. J. Le Magnen (Paris)

Late Dr. D. Ottoson (Stockholm)

Dr. J. Solms (Zurich)

Late Dr. E. Sundt (Geneva)

Professor Patrick McLeod (Paris)

Forthcoming Meetings

SYMPOSIUM ANNOUNCEMENT

Those participating in the 9th European Congress of Psychology to be held in Granada next July (3-8, July, 2005) are invited to join us at the following symposium. The symposium bring together outstanding will researchers in the field. The main aim to cover the most recent developments in order to update the current knowledge on the brain mechanisms of taste-related learning and memory. Taste learning and memory is a broad and rapidly evolving field that will benefit from a survey of the research state and from new insights in a wide perspective on neural plasticity to guide future research.

BRAIN MECHANISMS OF TASTE RECOGNITION MEMORY AND NEURAL PLASTICITY

Chair: Milagros Gallo

Molecular mechanisms of taste-recognition memory. Federico Bermúdez-Rattoni. Institute of Cellular Physiology. UNAM. México.

Neural mediation of taste aversion learning. Ilene Bernstein. University of Washington. USA.

Brain regions responsible for the expression of conditioned taste aversion in rats. Takashi Yamamoto. Osaka University. Japan.

Hippocampus, aging and taste memories. Milagros Gallo. University of Granada. Spain.

Functional and molecular effects of environmental enrichment. Barbro

Johansson. Wallenberg Neuroscience Center. Sweden.

6th Pangborn Sensory Science Symposium, North Yorkshire, UK, August 7-11, 2005, www.pangborn2005.com

Chemical signals in vertebrates

The UK Semiochemistry Network,

July 2005 ,WITHERSDANE HALL,

Imperial College at Wye (Ashford,
Kent),UK.

http://www.semiochemica.org.uk/
workshops/

ISOEN 11th International Symposium of Olfaction and Electronic Noses, Barcelona, Spain 13-15 April, 2005 http://www.isoen2005.org/

ECRO Congress 2006 GRANADA (SPAIN)



The XVIIth ECRO Congress will be held at Granada (Spain) in 2006. The local organizing committee is starting to work for a fruitful and enjoyable meeting. The congress web including all the relevant information will be available as soon as possible. As it is the first time that ECRO organizes its congress in Spain several aims may be pursued. On one hand, we are sure that it will be an excellent opportunity Spanish scientists for the companies related with taste olfaction to gain a better knowledge of ECRO aims and activities. On the other hand, it is our objective that the meeting will bring together specialists and students interested in chemical senses from all over the world facilitating scientific exchange between different fields and approaches as well creating appropriate as the environment for food, beverages, cosmetics, perfume, pharmaceutical other related industries and contribution. After the Nobel Prize recently awarded to Richard Axel and Linda B. Buck for their discoveries on the olfactory system, it is foreseen that ECRO 2006 will be an active European forum for presenting and discussing new and exciting achievements in

chemoreception different research fields. We hope that you will find Granada to be the perfect framework for such exchange. Could you think about a better place to hold a meeting of experts in taste and olfaction than a city named as the bittersweet fruit of the pomegranate tree? Granada with its multicultural historic roots has a millenary tradition of bringing together different views and cultures. Even geographically Granada joins surprising contrasts creating beautiful mosaic. You can enjoy during the same day the fragrance of the aromatic plants in the highest mountains of the Iberian Peninsula and you can taste tropical fruits by the Mediterranean beaches. A scientific informal discussion during dinner including olive oil and wine-tasting in the Sacromonte caves while listening to the guitar and looking at the Alhambra palace may be an unforgettable sensory experience. We expect that the flavour of ECRO2006 in Granada will remain in your memory stimulating future work. We are looking forward to meet you all in ECRO2006.

