



NEWS

Letter

European Federation for Pharmaceutical Sciences December 1999 Vol 8 No 4

Executive Committee

- M. Rowland, UK
President
- A. Grahnen, SE
Vice-President
- B. Lindeke, SE
Secretary-General & Treasurer
- O.J. Bjerrum, DK
- B. Clement, DE
- D. Duchêne, FR
- A.F. Fell, UK
- A.A. Hincal, TR
- M. Veillard, FR

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- Austria
- Belgium
- Croatia
- Czech Republic
- Denmark
- Finland
- France
- Germany
- Greece
- Hungary
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Lay-out

Liza Peterzon

Accomplishments and Plans

Prof. Malcolm Rowland
EUFEPS President

Perhaps, I should first explain why I am writing this autumnal editorial. It is always reserved for the President, to report on the past year's achievements and on future developments, following the annual meeting of Council. Normally, the term of office of the President is two years, and here I am in my fourth year. But these are not normal times for EUFEPS, particularly at the level of the Executive Committee, which I chair.

Executive Committee

The past few months have seen the most profound changes occur to the composition of the Executive Committee since the establishment of EUFEPS in 1991. One change has been the removal of the position of Secretary General/Treasurer as an elected member to one of an *ex-officio* member, appointed by the Executive Committee. This move was taken to ensure stability at the top of the Secretariat.

The other change, and one of the recommendations of the Working Party on Council, set up during the past year to review all aspects of Council itself, was to expand the membership of the Executive Committee by two, to enable it to deal more effectively with the increasing range and level of activities of our organisation. The effect has been the creation of three new positions on the Executive Committee, boosting it to a total of eight elected officers, plus the Immediate Past-President. These vacant positions were filled at the recent elections at Council, which took place in Portoroz, Slovenia, this past September, by three able individuals (see profiles on page 3). In addition, the Immediate Past-President, Prof. D.D. Breimer (also profiled in this issue, on page 4), who has served EUFEPS so well since its inception, stepped down.

Because of all these changes the newly constituted Executive Committee decided that, in the best interests of EUFEPS, I should continue for one

more year, to ensure stability and a smooth transition at the top of our organisation. I appreciate their confidence in me. An immediate action has been to assign members of the Executive Committee specific tasks and responsibilities, outlined on page 3. So, please contact them via the Secretariat if you have any specific questions or suggestions as to how we can better serve you, the membership.

So what have we accomplished, and what shall we be doing during the coming year?

Council and membership

The Working Party on Council presented to Council various ideas, which would have profound implications on the way in which EUFEPS operates, with respect to such matters as representation, fee structure, and voting rights, which may well necessitate changes to some of our statutes. These recommendations are currently being considered further by the various members of Council, through a consultative process, with the object of bringing forward specific recommendations to the next Council meeting.

On membership issues, we are sorry to see the departure of one of the French Member Societies, l'academie Nationale de Pharmacie, which was at the launch of EUFEPS, and the Technical Industrial Pharmacists and Pharmaceutical Scientists Association of Ireland (TIPPSA), but we welcome APV (Arbeitsgemeinschaft für Pharmazeutische Verfahrenstechnik), Germany, and societies from Switzerland, Greece, and Spain as full members, where we did not have membership before. Now, we have Member Societies in the vast majority of countries within Europe. It has also been gratifying to see a marked increase in Individual Membership, which we shall strive to increase further during the coming years.

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Optimising drug development

Through initiatives taken by the Committee on Industrial Relations (CIR) we have been extremely active, moving forward on a number of important fronts. One was identifying the theme of Fast Tracking in Drug Development, which resulted in the highly successful meeting in Wiesbaden, Germany, late last year, and which will be followed up this year with the forthcoming meeting in Basel on Streamlining Proof of Concept in Drug Development (Conference Website: www.pharmweb.net/conference/eufeps6.html).

A feature of these meetings is the support we receive from both the FDA and EMEA, with the intention that such meetings will not only facilitate improvements in drug development within industry but also help provide the scientific basis in the formulation of guidance notes by the regulatory agencies. Indeed, we are now among the recognised list of scientific societies that the EMEA seeks for views on developing Notes for Guidance. In addition, steps towards a European consensus on Regulatory Guidelines for Validation of Bioanalytical Procedures were taken at the BIOVAL '99 in June this year.

Developments on training

The other initiative taken by CIR is the matter of training in the pharmaceutical sciences to address the industrial need within Europe. Next May, EUFEPS will be organising a workshop dealing with this important issue of training needs, in collaboration with the Centre for Medicines Research (CMR), London, UK, acclaimed for its important contributions to many areas of industrial drug development. This is fuelled by actions presented in a position paper, with the provocative title: *NEW SAFE MEDICINES FASTER*, also initiated by CIR, for consideration as a key action of the forthcoming EU 6th RTD Framework Programme (see e.g. the September 1999 issue of this Newsletter).

And whilst on the topic of training, can I encourage all postgraduate students, and individuals or organisations that support them, to actively participate in the EUFEPS sponsored 2nd European Graduate Student Meeting, organised by the German Phar-

maceutical Society (DPhG), next March in Frankfurt (Website: www.biozentrum.uni-frankfurt.de/DPhG/doktorandentagung.html).

Indeed, we shall be turning increasingly in the coming years to the development of training courses to meet the needs of our members. Here, a useful start has been made by us offering short-courses, one on PK/PD and another on new techniques to study drug absorption, at the forthcoming Millennial World Congress of Pharmaceutical Sciences,



next April, in San Francisco, CA USA, run under the auspices of FIP (Congress Website: www.mwc2000.org), and at our EUFEPS 2000 Congress, next September, in Budapest, Hungary, which I hope that you will all attend (see update on page 3).

Developing communications

I am pleased to report that we are now well on the way to creating the EUFEPS website, the first phase of which will be ready early in 2000. It is also intended that our website will provide a useful vehicle for keeping you informed as well as facilitating discussion fora among members within planned special interest groups and related activities. Of course, we shall continue to also keep you informed of activities and developments through the EUFEPS Newsletter.



Delegates of the ECBP and EUFEPS Congress on Mechanistically-based Drug Discovery and Development in Jerusalem, Israel (top), and Council Members participating in the 1999 Council Meeting in Portoroz, Slovenia (middle and bottom).

On another positive front, our flagship scientific journal, the European Journal of Pharmaceutical Sciences, under its new editorial leadership and structure, has an Impact Factor of 1.481 (placing it well up among the top of the journals in the pharmaceutical sciences). It also continues to grow and will go monthly from 2000 onwards (see also Website: www.elsevier.nl/locate/ejps). Please support EPJS by submitting your best work for publication.

To improve communications between the Executive Committee and sub-committees their chairman will be invited to the meetings with the Executive Committee on a regular basis.

Links with other organisations

As part of our Strategic Plan 1998–2002 we are also increasing and strengthening our links with other organisations. Within Europe, we had a very successful scientific conference in Jerusalem, Israel, centred around mechanistically-based drug discovery and development, in collaboration with the European Congress of Biopharmaceutics and Pharmacokinetics (ECBP), and we are planning a session with the European Association of Clinical Pharmacology and Therapeutics (EACPT), at their congress in 2001.

In that year, we shall also be organising an international conference on Advances in Drug Absorption, in conjunction with our USA and Japanese colleagues. This follows on from the successful international meeting on oral drug absorption that we helped to organise in Edinburgh, UK, in 1997, whilst we continue to improve links with AAPS, our sister organisation in North America.

Get involved

I am confident that EUFEPS will continue to grow from strength to strength, but how rapidly we will achieve progress depends on the active support and participation of you, the membership. So please get involved. If you are not sure how to do this, contact the Secretariat and become an individual member, as well as visit our website. Remember EUFEPS is your organisation. ■

Executive Committee Expanded

As commented on in the President's Address, at the recent meeting with Council, the EUFEPS Executive Committee was expanded by the addition of three new members. In addition, the decision by the 1998 Council that the Secretary-General/Treasurer should become an ex-officio member of, and be appointed by, the Executive Committee came into effect. Also, the Executive Committee agreed that each member should be assigned a contact role and function responsibility, within the Committee. After this, the current leadership of EUFEPS comprises nine persons. They are presented below, including title, name, term of office, responsibility, and current affiliation, respectively.



Prof. Malcolm Rowland (1998-2000)

President; Chair Committee on Awards and Prizes. Professor of Pharmacy and Director of the Centre of Applied Pharmacokinetic Research, University of Manchester, UK.

Dr Anders Grahnén (1998-2000)

Vice-President; Liaison Organisations. Vice-President and Director R&D, Quintiles, Uppsala, Sweden. Associate Professor in Pharmacokinetics and Biopharmaceutics, University of Uppsala, Sweden.



Prof. Björn Lindeke (ex-officio member)

Finance and Secretariat. Executive Director of the Swedish Pharmaceutical Society and Academy of Pharmaceutical Sciences, Stockholm, Sweden.

Prof. Ole J. Bjerrum (1999-2001)

Industrial Relations. Research Counsellor at Corporate Research Affairs, Health Care, Novo Nordisk, Bagsvaerd, Denmark. Adjunct Professor in Industrial Biomedicine, University of Southern Denmark.



Prof. Bernd Clement (1999-2001)

Education and Training. Professor of Pharmaceutical (Medicinal) Chemistry and Director of the Pharmaceutical Institute, University of Kiel, Germany.

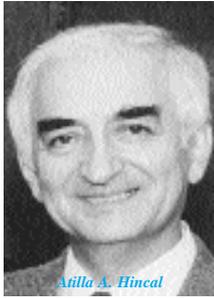
Prof. Dominique Duchêne (1999-2001)

Publications and Information. Professor of Pharmaceutical Technology, founder of the research group on Improvement of therapeutic efficiency of active molecules by means of cyclodextrins and bioadhesion of UMR CNRS 8612, University of Paris-Sud, France.



Prof. A.F. "Tony" Fell (1998-2000)

Congresses and Conferences. Professor of Pharmaceutical Chemistry and Director of the Pharmaceutical Analysis Research Unit, University of Bradford, UK.



Prof. Atilla A. Hincal (1998-2000)

Pharmaceutical Policies. Professor and Head of the Pharmaceutical Technology Department, Faculty of Pharmacy, Hacettepe University, Ankara, Turkey.

Dr Michel Veillard (1999-2001)

Membership. World-wide Director of Pharmaceutical Sciences/Preformulation, Rhone-Poulenc Rorer, Vitry sur Seine, France. ■

EUFEPS 2000

As previously reported, the next European Congress of Pharmaceutical Sciences will be held on September 16-19, 2000, in Budapest Convention Center, Hungary. The Programme and Organising Committees of this Congress are developing an exciting programme, the overall theme of which is: *Towards Better Drug Therapy in the New Millennium.* Many will attend this truly European scientific event, and you are cordially invited to join them.

Plenary Lectures

Optimisation of lead compounds: The Pharmacokinetic Challenge • Polymer therapeutics: Targeting drugs and genes to tumours • HTPS and molecular diversity: New paradigms in drug discovery • Glycine receptor antagonists: Synthesis, structure-activity relationships and therapeutic applications

Mini Symposia

New perspectives in natural product chemistry • Modelling in drug development: *In vitro/in vivo* modelling of absorption, metabolism and receptor binding • Material science and drug design • Genome based drug discovery

Parallel Sessions

Regulatory and validation issues • Strategies for drug design and development • Key issues in drug analysis • Physicochemical aspects of drug action • New trends in PK/PD and drug absorption • Issues in ADME and drug toxicology • Novel concepts in dosage form design • Challenges in natural product chemistry and phytotherapy

Current Hot Topic Discussions

New Safe Medicines Faster • New developments in Alzheimer's disease: Focus on inflammation

Symposia and Exhibition

IPEC Symposium • BIOVAL 2000 Symposium • Congress Exhibition featuring technical instruments, products, and scientific books

Several Short-Courses

PK/PD Modelling • Convolution, deconvolution and linear systems • The assessment of oral drug absorption • European Strategies for the harmonisation of drug registration • Chiral solutions in pharmaceutical research • Strategies for drug particle design • Pharmaceutical applications of CE in research and development

Call for abstracts

Abstracts (in English) should be submitted by March 31, 2000. If sent by fax and email, a hard copy has also to be provided. Late submission of abstracts may be considered as posters, subject to availability of space.

Social Programme

The full programme of social events, covered by Registration Package and free for all participants, includes a Boat Excursion on the Danube, a Banquet in the National Art Gallery and all lunches and coffee break refreshments etc. An attractive package of social activities for all registered accompanying persons is also planned.

Second Circular

For a personal copy of the Second Circular, including the complete programme, information on registration and accommodation etc., contact EUFEPS 2000 Congress Secretariat, P.O. Box 11, H-2011 Budakalász, Hungary. Phone: +36 26 340203 or 343166. Fax +36 26 343195 or 340426. Email eufeps2000@mail.mata.vu or rimp@mail.mata.vu Website www.pharmweb.net/conference/eufeps

Prominent EUFEPS Figure Steps down after Nine Years

In Portoroz, Slovenia, where the EUFEPS Executive Committee and Council met on September 24-26, 1999, Prof. Douwe D. Breimer retired from the Executive Committee of EUFEPS. He has served the organisation continuously since its inception nine years ago – as a co-founder (1990), Vice-President (1991-1994), President (1994-1996, and as Immediate Past-President (1996-1999). Also, Prof. Breimer was, recently, elected Foreign Associate Member of the Institute of Medicine of the National Academy of Sciences, USA (see page 7). He is the first foreign pharmaceutical scientist so elected to this prestigious institution. What follows below is Prof. Breimer's answers to questions raised by the Editor of this Newsletter.

Prof. Breimer, you are one of the “founding fathers” of EUFEPS; are you satisfied with the way it has developed?

– Yes, no doubt. Much has been achieved since its start in 1990, in terms of reaching objectives as laid down in its strategic plans. You should realise that we have very much been dependent on the efforts of individual volunteer scientists to move this organisation forward. And I am extremely grateful to all those individuals that have served and are serving on the Executive Committee, as well as on other EUFEPS committees, providing their time, brains and commitment (mostly at their own expense) to advance the pharmaceutical sciences in Europe. Thanks to the major support of the Swedish Pharmaceutical Society, we now also have a strong permanent secretariat in Stockholm to deliver in accordance with EUFEPS objectives.

What, in your view, are the major achievements of EUFEPS so far?

– First of all, we can claim representation of pharmaceutical scientists from all over Europe, because in almost any European country there are now organisations aiming at the advancement of the pharmaceutical sciences which are members of EUFEPS. There is also a steady growth of the Individual Membership of EUFEPS, in spite of initial resistance among the Council. This category of membership is essential in order to build direct interactive links with individual scientists, in academia, industry and regulatory agencies. EUFEPS has become suc-

cessful in organising a biennial congress of European pharmaceutical sciences, which should become the platform par excellence for pharmaceutical scientists in Europe to meet. So far there still exists too much “provincialism” among the pharmaceutical sciences on our continent.

– Also the more specialised annual meetings (initially called “Nuremberg Meetings”) have developed very successfully, in particular focussing on topics which are of prime importance for industrial pharmaceutical scientists, i.e. innovation in drug discovery and development.

– In addition, EUFEPS is participating in numerous other international meetings, illustrating that it is seen as an important scientific organisation. Recognition of EUFEPS as a “learned society” by the major regulatory agencies EMEA and FDA, as well as the EU, will further enhance its neutral advisory and platform role.

– At the time of the establishment of EUFEPS, we also founded the European Journal of Pharmaceutical Sciences. Not just to create another new journal, but to integrate a number of existing national or regional scientific journals into this new one. The Journal has been growing somewhat slowly over the years, but is now taking a leap towards a substantial increase of volumes per year. It is then expected to become a sound competitor to the current flagship journal in the pharmaceutical sciences, i.e. the *Pharmaceutical Research*.

What type of activities would you like to be developed further by EUFEPS?

– In principle those that have been laid down in the current Strategic Plan (1998-2002). It is important to adhere to that plan as much as possible, because it is, in my view, strong in its vision, objectives and actions. This is what the leadership of the organisation can be held to. With the current, recently expanded, Executive Committee, and with a very active Committee on Industrial Relations (CIR), I am very optimistic that much can be achieved, even in the short term.

– But you asked, which activities should be given future priorities. One that we have been talking about for quite a while is that on advanced research training and education in the pharmaceutical sciences, also called the development of a “European School of Pharmaceutical Excellence”. Not a School



– We thank you for many years of excellent contributions to EUFEPS, says Prof. M. Rowland, EUFEPS President (right), to Prof. D.D. Breimer, retiring Immediate Past-President (left).

in the physical sense, but rather the organisation of co-ordinated training courses at different locations with the best experts in specific fields. Associated with this is the EUFEPS proposal on *NEW SAFE MEDICINES FASTER* for a Key Action within the EU 6th RTD Framework Programme (see the September 1999 issue of the EUFEPS Newsletter), as currently prepared by Prof. Ole Bjerrum, who is a member of both the Executive Committee and CIR.

You seem to be very pleased with the achievements to date, but do you have specific concerns with respect to the further development of EUFEPS?

– Yes, I do, and they are inter-related. My primary concern, in spite of what has been achieved, is the still existing relative lack of commitment by numerous excellent pharmaceutical scientists around Europe to EUFEPS. It seems that in Europe, more so than in the USA, scientists primarily tend to adhere to a specific discipline (pharmaceutical technology, medicinal chemistry etc.) rather than to the umbrella organisation that covers them altogether in a multi-disciplinary fashion. In my view, it is in trans-disciplinary approaches (concepts, technologies, processes etc.) that the future strength of the pharmaceutical sciences lies. That's what EUFEPS stands for and is in the meantime recognised for. But for further future development it does require strong commitment by all pharmaceutical scientists in Europe, both in academia and in the industry.

– The other concern is financial. In order to be able to be pro-active an organisation has to have a sound financial basis, and, currently, EUFEPS is not strong enough. In order to achieve that, further income from increased individual membership, from scientific meetings, and from other sources has to be generated. EUFEPS could do much more if the financial resources were available.

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EXECUTIVE SUMMARY

November 1999

It has become the tradition, following the Council Meeting, for the Executive Summary to be kept purposefully short in light of the Editorial by the President on the Progress of EUFEPS in this issue of the Newsletter. Hence, I shall, in this report, concentrate on recent meetings with the Executive Committee and Council.

Meetings

The "old" Executive Committee met on August 28, 1999, in Leiden, the Netherlands. The meeting was held at Oud Poelgeest, where once Herman Boerhaave, chemist, physicist, theologian, physician and botanist resided. Also invited to participate in this meeting was Dr Leo de Leede, representing the Committee on Industrial Relations (CIR).

The next meeting occurred on September 24, 1999, i.e. the day before the meeting with Council where elections for new officers took place. The newly elected Executive Committee then met on the day immediately after Council. All

these meetings were held in Portoroz, Slovenia, in conjunction with the EUFEPS co-sponsored 3rd Central European Symposium on Pharmaceutical Technology.

Organisation

In view of the Council Meeting, and of the elections to the Executive Committee, major issues dealt with at the Executive Committee meetings concerned the future structure and



The Committee on Industrial Relations (CIR), recently meeting in Brussels. Front row, from the left: Prof. J. Vessman (retiring Chair), Dr M-I. Nilsson, Dr L. de Leede (new Chair) and Prof. H. de Jong (Vice-Chair). Middle row, from the left: Dr A. Grahnen and Dr G. Gaviraghi. Back row, from the left: Mr H.H. Lindén, Dr H. Sterz, Dr M. van der Waart, Dr S. Wicks, Dr O.J. Bjerrum and Prof. S. Görög.



Claus-Michael Lehr

functions of the organisation, including the Secretariat. The newly elected Executive Committee unanimously re-elected Prof. Malcolm Rowland President of EUFEPS for one additional year.

Also, operational functions and responsibilities of the members of the Committee were discussed and agreed on, as well as how to apply a "process approach" for the establishment of EUFEPS scientific sections or fora. The Executive Committee will next move ahead on a number of issues highlighted by the Working Party on Council (see President's Address on pages 1-2).

After the changes on membership, also reported in the President's Address, EUFEPS now comprises 24 Member Societies in 21 European Countries. By the end of the year, the organisation will have enrolled well above 500 Individual Members, and it continues to receive support from about 25 industrial affiliations.

Membership Representative

At the 1999 Council, Prof. Claus-Michael Lehr was elected new Individual Membership Representative to Council. Prof. Lehr is Head of the Department of Biopharmaceutics and Pharmaceutical Technology at Saarland University, Saarbrücken, Germany, and in 1998, he co-founded ACROSS BARRIERS GmbH, which is a company dedicated to new technologies for drug absorption and delivery.

NEW SAFE MEDICINES FASTER

Several key actions have been taken to progress the project on *NEW SAFE MEDICINES FASTER* (see the September 1999 issue of this Newsletter, or the October 1999 issue of the European Journal of Pharmaceutical Sciences). One of these has involved a number of contractors, EUFEPS being one of them, applying for EU money to develop this initiative further by organising, with the help of our Secretariat, a one and a half-day EUFEPS/CIR workshop in March 2000 in Brussels. The purpose of this workshop is to identify and solidify ideas presented in the Position Paper on *NEW SAFE MEDICINES FASTER* produced by CIR, ultimately to be moved forward within the 6th Framework Programme.

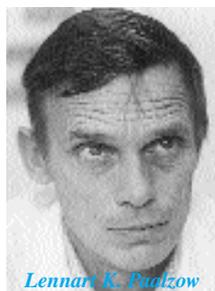
*Prof. Björn Lindeke
Secretary-General and Treasurer*

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Finally, in spite of all the hard work, have you enjoyed your many years of service to EUFEPS?

– As you said, there has been a lot of work to do, most often during the weekends at various locations in Europe. But it has from a personal view also been very rewarding to see that the efforts have been worthwhile. The teams of colleagues that I have been working with have been most co-operative and inspiring. It has brought me several personal friendships for which I am very grateful. – There are three persons that I should like to mention in particular that have, in my view, contributed tremendously to the good start and the current position of EUFEPS. Two of them are the co-founders, Prof. Stig Agurell and Prof. Ernst Mutscher, with whom I wrote the statutes and the first strategic plan, and together established the Secretariat in Stockholm. The third one is Prof. Malcolm Rowland whose dedication, motivation and leadership have really moved EUFEPS forward during its second five years of existence.

FIP Lifetime Achievement Award



Lennart K. Paalzow

At the recent FIP Congress in Barcelona, Spain, Prof. Lennart K. Paalzow of Sweden was presented with the 1999 Lifetime Achievement in the Pharmaceutical Sciences Award. This award

is given each year to a pharmaceutical scientist who has, over many years, contributed to the development of the pharmaceutical sciences.

Prof. Paalzow received his training at the Royal Institute of Pharmacy in Stockholm, Sweden. He has published about 300 publications within the scientific area of pharmacology, pharmacokinetics and biopharmaceutics with special emphasis on the relationship between drug concentrations and pharmacodynamic effects.

The Helsinki University Congress of Drug Research



From the left: Prof. H. Betz, Prof. S. Wonnacott, Prof. D. Lodge with his wife, Prof. L. Ahtee, Dr M. Pasternack, Prof. J. Bormann, Dr P. Piepponen and Prof. R. Tuominen in the Sibelius Park, Helsinki, Finland.

The XV Helsinki University Congress of Drug Research was held on June 10-11, 1999 at the Unitas Congress Center, about 15 kilometers east from the City of Helsinki, Finland. This year, more than 300 participants from various fields of pharmaceutical sciences attended the meeting. The Congress was organised by the Department of Pharmacy, University of Helsinki, the Finnish Pharmaceutical Society, and the Finnish Centre for Continuing Pharmaceutical Education under the auspices of the EUFEPS.

Structure of programme

The Helsinki University Congress of Drug Research consisted of three parallel symposia (1) Drug Analysis – Today and Tomorrow, (2) Formulative Aspects in Oral Drug Delivery, and (3) Neuronal Ligand-Gated Ion Channels as Drug Targets. The scientific program of the Congress was up-to-date and versatile consisting of invited lectures, invited and contributed oral presentations, a poster session, and discussions. The plenary lectures were presented by Prof. P. Kroogsgaard-Larsen, Denmark and Dr. Ramada Uppoor, U.S.A. The first-day plenary lecture given by Prof. Kroogsgaard-Larsen, was entitled: "Inhibitory and excitatory amino acid receptor ligands: structure, pharmacology and therapeutic prospects". In the second-day plenary lecture, Dr. Uppoor from the FDA described: "Regulatory perspectives on *in vitro/in vivo* correlation".

Symposia contents

In the symposium on "Drug Analysis - Today and Tomorrow", current trends in capillary electrophoresis, mass spectrometry, and

LC/NMR and nano scale HPLC in drug analysis, were discussed. The presentations covered chemical analysis of macromolecular drugs, drug conjugates, natural products, and dietary flavonoids. The symposium on "Formulative Aspects in Oral Drug Delivery" dealt with pharmaceutical technology and biopharmaceutical aspects of oral controlled drug release. There were presentations on gastrointestinal transit and drug absorption including *in vitro* models, dissolution of low solubility drugs, development of oral vaccines, *in vitro/in vivo* correlation, and recent expert systems for product formulation. In the third symposium, on "Neuronal Ligand-Gated Ion Channels as Drug Targets", the function and therapeutic potential of GABAA, AMPA and nicotinic acetylcholine receptors in the CNS, were discussed. Furthermore, treatment of neurodegenerative diseases with glutamate receptor antagonists and gene-targeted approach to anxiety disorders, were described.

Many poster presentations

Over 85 poster presentations provided an excellent forum where post-graduate students and established researchers could exchange opinions and ideas. The quality of the oral and poster contributions was widely acknowledged. Abstracts for all invited and contributed papers were published in a Supplement to the European Journal of Pharmaceutical Sciences.

Development of a research school

One of the main goals of the meeting was to serve as an international research course for post-graduate students. On Friday, June 11th,

there was the Open Graduate School Meeting where the current status and further development of the Finnish Graduate School in Pharmaceutical Research were discussed. The concerned meeting was of great interest to the Congress participants.

Equipment exhibition

For the first time, the Congress included an exhibition displaying the newest equipment and technical developments in different fields of pharmaceutical sciences. This Exhibition provided a fine opportunity for the Congress participants to discuss their specific requirements directly with the product suppliers.

Social gathering

There was also a stimulating social programme available at the Congress. All participants were invited to visit to the new building of the Department of Pharmacy, University of Helsinki, where the get-together party took place. The Congress dinner was served in a pleasant atmosphere of the summer evening at the Unitas Congress Center. On Friday evening, there was a fine performance of the opera: "The Marriage of Figaro" at the new Finnish National Opera. These events hopefully provided an enjoyable and inspiring experience to the participants and gave an opportunity for personal contacts.

Next in 2001

The XVI Helsinki University Congress of Drug Research will be arranged in 2001. ■

Dr Jyrki Heinämäki
Chair Organising Committee

Workshop Report

6th Intermediate Level Workshop on PK/PD

The 6th Intermediate Level Workshop on Pharmacokinetic/Pharmacodynamic Data Analysis was held at Madingley Hall, Cambridge on June 6–10, 1999. The Workshop is a “hands-on” course using WinNonlin and is organised jointly by the Royal Pharmaceutical Society of Great Britain (RPSGB) and the Swedish Pharmaceutical Society, in association with EUFEPS.

Base and directors

The course was originally started in 1991 and is based on the concept and applications of pharmacodynamics and pharmacokinetic data analysis. This is a PK/PD modelling course where each day commences with lectures followed by “hands-on” computer sessions. The course directors are Dr Johan Gabrielsson (AstraZeneca, Sweden) and Dr Dan Weiner (Pharsight Inc., USA), and the course was attended by twenty four delegates from Denmark, France, Germany, Sweden, Switzerland and the UK.

Structure and contents

The first day served as an introduction to nonlinear regression and WinNonlin, a focus on classical methods, and an introduction to “hands-on” examples (e.g. Data-Models results, IV Bolus data, Extravascular data, Single and Multiexponential models, Fitting Multi dose data and two-compartment models).

The second day concentrated on “assessment of goodness of fit”. The morning sessions included presentations on choice of

weights, properties of parameter estimates, assessment of goodness of fit followed by “hands-on” computer sessions. In the evening Dr Dan Weiner gave a presentation on the new version of WinNonlin and WinNonmex.

The third day focused on the pharmacodynamic issues. The session started with an introduction to pharmacodynamic models and addressed the issues of time delays, time variant models followed by a hands-on session. The social event for the final evening consisted of a guided tour around some of Cambridges famous colleges.

The final day introduced some of the ideas behind design of experiments and comparison of models, and the problems were illustrated with a hands-on computer session.

More to follow

The Advanced Level Workshop will take place in Cambridge on May 21–25, 2000, and the Intermediate Level Workshop will be repeated again on November 5–9, 2000. Anyone who requires information about these courses or wishing to attend should contact: Dr Carlos Horkan, Residential Course Development Officer, The Royal Pharmaceutical Society of Great Britain, 1 Lambeth High Street, London SE1 7JN, UK. Tel +44 171 735 9141. Fax +44 171 582 0397. Email chorkan@rpsgb.org.uk

*Dr Carlos Horkan,
Course Development Officer*

European pharmaceutical scientist elected to the US National Academy of Sciences

Prof. Douwe D. Breimer was elected Foreign Associate Member of the Institute of Medicine of the National Academy of Sciences, recently. He is the first foreign pharmaceutical scientist to be elected as a foreign member of this prestigious institution in the USA.

Prof. Breimer is both Professor of Pharmacology at the Leiden University, The Netherlands, a post held since 1975, and Director of Research of the Leiden/Amsterdam Center for Drug Research (LACDR) since 1989. He is also a member of the Royal Netherlands Academy of Arts and Sciences and was until recently the chairman of its section of medicine. Furthermore, he is a corresponding member of the Royal Medical Academy of Belgium, *correspondant étranger de l'Académie Nationale de Pharmacie* in Paris and member of the *Academia Europaea*. He is a Fellow of the American Association of Pharmaceutical Scientists (AAPS) and a Honorary Fellow of the American College of Clinical Pharmacology (ACCP). He also holds honorary doctorates from the Universities of Semmelweis (Budapest), Gent, Uppsala and of Navarra (Pamplona).

Prof. Breimer is the (co)-author of more than 500 research articles, reviews and book chapters in the areas of pharmacokinetics, drug metabolism, biopharmaceutics and clinical pharmacology. He is on the editorial board of several scientific journals, including *Journal of Pharmacokinetics and Biopharmaceutics*, *Clinical Pharmacokinetics*, *Clinical Pharmacology and Therapeutics*, *Pharmacogenetics*, *Xenobiotica*, *Biopharmaceutics and Drug Disposition*, *Journal of Controlled Release*, *Therapeutic Drug Monitoring*, *Journal of Pharmacy and Pharmacology*, *Die Pharmazie*, *Journal of Drug Targeting*, and *Acta Pharmacologica Sinica*.



Delegates and speakers attending the 6th Intermediate Level Workshop on PK/PD Data Analysis in Cambridge, UK.

**Screening for Oral Bioavailability**

January 25-26, 2000, Bålsta, Sweden

Contact: Märit Johansson, Swedish Academy of
Pharmaceutical Sciences,
P.O. Box 1136, SE-111 81 Stockholm, Sweden
Fax - 46 8 205511
Email marit.johansson@swepharm.se

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**Workshop on Pharmakognosie/
Pharmazeutische Biologie – Anforderungen an
Forschung und Lehre in der Zukunft**

February 18, 2000, Vienna, Austria

Contact: A. Kaminski, Institut für
Pharmakognosie, Pharmaziezentrum,
Althanstrasse 14, AT-1090 Vienna, Austria,
Fax +43 1 31336772
Email nanikaminski@hotmail.com

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2nd European Graduate Student Meeting

March 3-5, 2000, Frankfurt/Main, Germany

Contact: Prof. Theo Dingermann, Institute for
Pharmaceutical Biology, Biozentrum, Marie-
Curie-Strasse 9, DE-60439 Frankfurt/Main,
Germany, Fax +49 69 79829662
Email dingermann@em.uni-frankfurt.de

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Symposium on Tissue Hypoxia

March 23, 2000, London, UK

Contact: J.A. Clements, Room 403, Royal
Pharmaceutical Society of Great Britain
1 Lambeth High Street, London SE1 7JN, UK
Fax +44 171 5820397
Email jholmes@rpsgb.org.uk

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**Chemical Kinetics in Prodrug Design
and Drug Stability**

March 27-30, 2000, Copenhagen, Denmark

Contact: Prof Claus Selch Larsen, Royal Danish
School of Pharmacy, Universitetsparken 2
DK-2100 Copenhagen Ø, Denmark
Fax +45 35306001

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**1st Module of Training Course on Quality
Assurance and Total Quality Management**

April 2000, The Netherlands

Contact: Dr L.A. van der Meer-Lerk,
Biotechnology Studies Delft-Leiden (BODL),
Kluyver Laboratory, Julianalaan 67, 2628 BC
Delft, The Netherlands, Fax: +31 15 2782355,
Website www.kluyver.stm.tudelft.nl/bodlf.html

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**Advanced Methods in Pharmacokinetics and
Pharmacodynamics: A one week workshop**

April 2-7, 2000, Sils Maria, Switzerland

Contact: Mrs Irene Sung, School of Pharmacy and
Pharmaceutical Sciences, The University of
Manchester, Oxford Road, Manchester M13 9PL, UK
Fax +44 61 2738196, Email irene.sung@man.ac.uk

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**Sample Preparation and Separation
Techniques in Bio-Analytical Chemistry**

April 3-14, 2000, Copenhagen, Denmark

Contact: Prof Steen Honoré Hansen
Royal Danish School of Pharmacy
Universitetsparken 2, DK-2100 Copenhagen Ø
Denmark, Fax +45 35306001

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**Quantitative Approaches to the Evaluation
of Health Care Inputs**

April 3-14, 2000, Copenhagen, Denmark

Contact: Prof. Anna Birna Almarsdottir
Royal Danish School of Pharmacy
Universitetsparken 2, DK-2100 Copenhagen Ø
Denmark, Fax +45 35306001

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**Symposium on Pharmacognosy
in the 21st Century**

April 5-6, 2000, Bradford, UK

Contact: J.A. Clements, Room 403, Royal
Pharmaceutical Society of Great Britain,
1 Lambeth High Street, London SE1 7JN, UK
Fax +44 171 5820397
Email jholmes@rpsgb.org.uk

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**19th Pharmaceutical Technology
Conference and Exhibition**

April 11-13, 2000, Baveno-Stresa, Italy

Contact: Prof Mike Rubinstein, 19th
Pharmaceutical Technology Conference, 24
Menlove Gardens North, Liverpool L18 2EJ
UK, Fax +44 151 7371070
Email ecceclivpl@aol.com

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**6th European Symposium on
Controlled Drug Delivery**April 12-14, 2000, Noordwijk aan Zee,
The Netherlands

Contact: Miranda Wiehink or our Internet home-
page: <http://come.to/cdd>

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**Millennial World Congress
of Pharmaceutical Sciences and
Satellite Short-Courses**

April 16-20, 2000, San Francisco, CA USA

Contact: Millennial World Congress Secretariat,
2215-R Market Street, Suite 291, San Francisco,
Fax +1 415 7018769,
Email current.events@mind.spring.com
Website www.mwc2000.org

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Stability Testing

April 17-19, 2000, Cambridge, UK

Contact: J.A. Clements, Room 403, Royal
Pharmaceutical Society of Great Britain
1 Lambeth High Street, London SE1 7JN, UK
Fax +44 171 5820397
Email jholmes@rpsgb.org.uk

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Receptor Structure and Function

May 1-5, 2000, Copenhagen, Denmark

Contact: Prof. Jette Sandholm Kastrup
Royal Danish School of Pharmacy
Universitetsparken 2, DK-2100 Copenhagen Ø
Denmark, Fax +45 35306001

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Rapid Methods in Microbiology

May 3-5, 2000, Cardiff, UK

Contact: J.A. Clements, Room 403, Royal
Pharmaceutical Society of Great Britain
1 Lambeth High Street, London SE1 7JN, UK
Fax +44 171 5820397
Email jholmes@rpsgb.org.uk

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Drug Delivery

May 8-12, 2000, Copenhagen, Denmark

Contact: Prof. Sven Frøkjær, Royal Danish
School of Pharmacy, Universitetsparken 2
DK-2100 Copenhagen Ø, Denmark
Fax +45 35306001

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**ESCP Spring Conference on
Clinical Pharmacy**

May 11-13, 2000, Reykjavik, Iceland

Contact: Iceland Incentives Ltd. Hamraborg 1-3,
IS-200 Kopavogur, Iceland
Fax +354 554 1472 Website www.escp.nl

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**11th International Symposium on
Pharmaceutical and Biomedical Analysis**

May 14-18, 2000, Basel, Switzerland

Contact: PBA 2000, Convention Center Basel
PO Box, CH-4021 Basel, Switzerland
Fax +41 61 6862185

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**Advanced Level Workshop on
Pharmacokinetic/Pharmacodynamic
Data Analysis: A 4-day hands-on
Course Using WinNonlin**

May 21-25, 2000, Cambridge, UK

Contact: J.A. Clements, Room 403, Royal
Pharmaceutical Society of Great Britain
1 Lambeth High Street, London SE1 7JN, UK
Fax +44 171 5820397
Email jholmes@rpsgb.org.uk

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**2nd International Symposium on Microdialysis
in Drug Research and Development,
preceded by Course on Basic
and Advanced Aspects of *in vivo* Microdialysis**June 14-17, 2000 and June 13-4, respectively,
Stockholm, Sweden

Contact: Märit Johansson, Swedish Academy of
Pharmaceutical Sciences, P.O. Box 1136,
SE-111 81 Stockholm, Sweden,
Fax +46 8 205511,
Email marit.johansson@swepharm.se

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**Basic Pharmacokinetics:
A one week workshop**

July 9-14, 2000

Contact: Mrs Irene Sung, School of Pharmacy and
Pharmaceutical Sciences, The University of
Manchester, Oxford Road, Manchester M13 9PL, UK
Fax +44 61 2738196
Email irene.sung@man.ac.uk

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**13th International Symposium on
Microsomes and Drug Oxidations**

July 10-14, 2000, Stresa, Italy

Contact: M.A.F. Servizi – Congress Division
Via G.B. Vico 7, IT-10128 Torino
Fax +39 011 505976
Email mido2000@mafservizi.it

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FIP World Congress of Pharmacy 2000

August 27-September 1, 2000, Vienna, Austria

Contact: FIP Congresses & Conferences,
P.O. Box 84200, NL-2508 AE The Hague
The Netherlands, Fax +31 70 3021998
Email mireille@fip.nl

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**logP2000 Lipophilicity in Drug Disposition –
Practical and Computational Approaches to
Molecular Properties Related to drug
Permeation, Disposition and Metabolism**

March 5-9, 2000, Lausanne, Switzerland

Contact: Bernard Testa, University of Lausanne
CH-1015 Lausanne-Dorigny, Switzerland
Fax +41 21 6924525
Email bernard.testa@ict.unil.ch

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**EUFEPS 2000 – 6th European Congress
of Pharmaceutical Sciences**

September 16-19, 2000, Budapest, Hungary

Contact: EUFEPS 2000, c/o Research Institute for
Medicinal Plants, H-2011 Budakalász, PO
Box 11, Hungary, Fax + 36 26 343195 or 340426
Email eufeps2000@mail.matav.hu
Website

www.pharmweb.net/conference/eufeps2000.html

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