# MedChemWatch

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## Editorial



Dear Colleague,

The new year 2009 has begun with the change in the presidency of EFMC. Roberto Pellicciari changed over Gerhard Ecker. In the next pages you will find an Interview in which Gerhard presents his vision and his commitments for the upcoming years along with some anticipations on future activities of EFMC. Gerhard has served as Editor of MedChemWatch since the very beginning, and now he passed me the responsibility of consolidating the success of the newsletter, a task that I have accepted with enthusiasm and that I will share with an excellent editorial board and technical assistants.

In this issue, you will also find a conference report on the XXth ISMC, held in Vienna last September, and a presentation of the EUROPIN project, a LLP-founded initiative for the implementation of an Europen Doctorate program in Pharmacoinformatics, which is now approaching the phase of student recruitment.

Finally, I strongly invite you to contact me or the members of the Editorial Board for suggestions and, particularly welcome, active contributions. In the next issues, we will implement new columns, such as a new format for lab presentations, which will also be extended to SMEs and biotechs. Moreover, we will experiment new features for interactive commenting of articles, with the aim of promoting this newsletter as a factual meeting point of opinions and ideas among European medicinal chemists

> Gabriele Costantino *Editor*



## Perspective

An interview with Gerhard Ecker, the new President of EFMC

## A vision for the next years of Medicinal Chemistry in Europe

BY GABRIELE COSTANTINO

**Gabriele Costantino:** Gerhard, the starting of a new presidency is a good occasion to take stock of the state of EFMC and of medicinal chemistry in general in Europe. What's your vision for the next years?

Gerhard Ecker: Gabriele, let me first of all emphasize that I feel very honoured that the Council of EFMC elected me as President at its meeting in 2007 in Portoroz. Medicinal Chemistry in Europe is facing tough times with decreasing numbers of NCEs, several big mergers and permanently increasing costs for R&D. I will do my best to serve the Medicinal Chemistry Community in these challenging times. Within the past few years EFMC progressed a lot and now is the key learned society in Europe for all aspects related to Medicinal Chemistry. When I joined the EFMC Council in 2000, the situation was very different to what I experience now. The only real activities of EFMC were the International Symposium on Medicinal Chemistry, the Nauta award and the exchange of a session with ACS each second year. This changed dramatically the past few years. The impressive improvement is due to the enthusiasm, scientific reputation and visionary power of the past presidents Henk Timmermann, Ferran Sanz and Roberto Pellicciari. Especially Roberto gave EFMC a major boost in initiating a lot of activities. It is hard to keep this level of innovation, and as I stated in Portoroz one of my main aims will be to establish an infrastructure to guarantee sustainability of all these achievements. With respect to my vision, I see EFMC as the main driving

force in promoting the discipline of Medicinal Chemistry throughout Europe utilising the large network we have already. This should lead to a stronger presence of Medicinal Chemistry in calls of the FP7, the upcoming FP8 and the Innovative Medicines Initiative. Our activities and promotion should strengthen our member societies and help them to recruit more individual members and to pursue their activities. Finally I would like to see EFMC actively participating in EU-projects.

**GC**: Can you anticipate your main commitments as President of the EFMC? What will be the continuities with the former presidencies, and what the innovation you intend to bring up? GE: As already expressed, one of my main commitments is to create an infrastructure which guarantees that the activities started by the former presidents can keep the high quality they have been started with. This includes the committees, meetings, the newsletter, the short course and obviously a permanent improvement of the Webpage. Up to now all the work was done on a voluntary basis by the EC-members, which are academic and industrial scientists. A first step towards a more professional administrative structure was the employment of Nele Coulier as EFMC administrative secretary. Ms. Coulier did a master in philology and now works part time in the office of Ly Differding to assist in all the daily



Gerhard Ecker

routine tasks and the management of the web-page. In the first EC-meeting I chaired the EC also approved my proposal to establish an advisory board. This board, composed of leading and highly visible Medicinal Chemists, should act as a sort of think tank for future directions, hot topics and also help to further strengthen our network in Europe and abroad. Under my chairmanship of the Information and Communication Committee we already started to establish a job portal and we proposed to establish individual membership for non-Europeans. Covering already almost whole Europe with our member societies I deem it important that we increase our visibility also outside of Europe.

One of our main tasks will also be to start a corporate membership campaign. EFMC should become highly attractive for pharmaceutical companies so that we can strengthen the links to the scientists from Industry. This includes also the Innovative Medicines Initative, which is a public private partnership, spending 2 billion euro for the next 6 years on pharmaceutical R&D. On my feeling EFMC is more than ready not only to make lobbying for Medicinal Chemistry, but also to start actively participating in EU calls as a legal partner. Obviously all this requires a lot of individual input, but I have a highly motivated executive committee on my side. So I am looking forward to exciting and challenging years!

**GC:** EFMC gathers together more than 6,000 medicinal chemists from both academia and industry. European medicinal chemistry has the potential for being one of the world-leading drivers of the research in biochemical and health sciences. What are your personal and the EFMC's commitments to create a real community of medicinal chemists in Europe, from both a cultural, political and economical point of view?

**GE:** First of all I would like to state that European medicinal chemistry is already one of the world-leading drivers for innovation in pharmaceutical sciences. The EFMC-ISMC is the World's largest medicinal chemistry meeting, bringing together more than 1.400 scientists each even year for exchange of ideas and discussion of recent developments. Also our other events mentioned below are highly appreciated by the community and the schools are always fully booked, as was also our first short course. This shows that we have already a very lively community. Our membership in the European Pharma Leadership Forum will provide us with the possibility to discuss our visions and to share our opinions with other leading learned societies in Europe and to communicate this to the politicians in Brussels. Furthermore, no one should forget that each drug and each protein is a chemical entity, so medicinal chemistry always will play a central role in the drug discovery and development process. We will not stop communicating this to the Innovative Medicines Initiative, where medicinal chemistry was a bit underrepresented in the last call.

What definitely can be improved is our reach out to the individual scientists in Europe. Several of our member societies do not provide us with the addresses of their members, so we need to rely on them in forwarding our messages. As I am personally a member of three of our member societies I know quite well that this does not always happen. So I sincerely hope that MedChem-Watch will contribute to distributing the information on all our activities and to stimulating discussions and to exchanging thoughts and opinions.

GC: One of the missions of EFMC is to promote aggregation and cultural exchange between the members. Can you briefly summarize what are the main activities of EFMC, and which instruments can an European medicinal chemist use to get information about EFMC and its activities (besides this newsletter, of course) ?

**GE:** As already outlined, our flagship event is the EFMC-ISMC, which takes

place every even year. Additionally to the ISMC we have the ASMC together with Chembridge and the Frontiers in Medicinal Chemistry series as major events, which we organise each odd year. Furthermore, we also sponsor around 10 scientific events per year. Just two weeks ago I had the pleasure to open the first EFMC short course, which focused on Improving Compound Quality. With respect to education and training, we have one accredited medicinal chemistry school (ESMEC in Urbino) and we sponsor additional 4 schools. Our web-page is steadily improving, we publish each year our yearbook Medicinal Chemistry in Europe, and finally we have MedChemWatch, the e-newsletter of EFMC. Last but not least we convene three awards each second year and we have session exchange agreements with three major international learned societies. Looking to the future, we are thinking on several concrete projects, such as RSS feeds and the creation of an expert network like linkedIn. If you would like to be constantly updated on our activities, please register at on our web-page www.efmc.info.

## **GC:** Thank you very much and good luck for your presidency ! Would you like to conclude by addressing a short message to all the readers of this newsletter?

**GE:** Yes, of course! On my personal point of view Medicinal Chemistry in Europe is different to many other scientific communities. When attending one of the EFMC events I always fee like belonging to a big family. So please take actively part in our "family live" and do not hesitate to contact me with any complaints, comments, wishes, and ideas you have!



## HISTORY OF EFMC

Medicinal Chemistry in Europe; annotations on the history of the European Federation for Medicinal Chemistry

## Part II: the founding and the early years of the European Federation for Medicinal Chemistry (EFMC)

BY HENK TIMMERMAN

The symposia in Firenze and Münster - see part 1 of this series of annotations are considered as the numbers 1 and 2 of the series of symposia which were later named as the International Symposium on Medicinal Chemistry (ISMC) organized by national societies belonging to the European Federation for Medicinal Chemistry (EFMC). The third symposium in this series took place again in Milan, Italy in 1972. In the opening remarks to the symposium, Pietro Pratesi, who became one of the founders of the EFMC, gave a first definition of the field: "Medicinal chemistry has been defined as a basic science of health; and indeed it has many facets, since it uses the theoretical and experimental means of all branches of chemistry, especially organic chemistry, physical chemistry and biological chemistry." Pratesi also preluded some expected developments: the interpretation of the mechanism of action of drugs and the prediction of the biological activity of substances. It would take a long time, however, before the discipline became broadly accepted as a basic science in the field of chemistry.

The success of the ACS Division of Medicinal Chemistry drew the attention of European scientists, and in a number of countries new societies were started. In Italy the *Società Italiana di Science Farmaceutiche (SISF,1954)* was founded, and later, in 1980, the Italian group became a division of the Societá Chimica Italiana; in the United Kingdom *the Society for Drug Research* (1966) was formed, later renamed into *The Society for Medicines Research*; in France the *Société de Chimie Thérapeutique* was established (1966). In other countries new organizations were started as sections or divisions of existing learned societies: Belgium-Wallonia (Chemical Society, 1973), Germany (Chemical Society, 1971), Sweden (Pharmaceutical Society, 1972), the Netherlands (Chemical Society, 1970).

Around 1970 about 5-10 different societies or divisions and sections were active, all more or less independently from each other. The IUPAC had noticed the new developments, but attempts during the early sixties to start a Division of Medicinal Chemistry within the IUPAC framework had failed; the field was considered to be just a special branch of synthetic organic chemistry, organic chemistry being a strong field within this important international body. In 1968 the Division of Organic Chemistry of the IUPAC organized together with the Division of Applied Chemistry, the 2nd International Symposium "Pharmaceutical Chemistry". This meeting, which took place in Münster (Germany) and is also known as the 2nd ISMC, was a significant success. It is quite remarkable that the term medicinal chemistry was not chosen, willingly neglecting the developments in both the USA and Europe, whereas instead the "old" wording of pharmaceutical chemistry was used. In general pharmaceutical chemistry is today not to be considered as an equivalent of medicinal chemistry, since the first deals with several, especially analytical, aspects of finished medicines, whereas medicinal chemistry focuses on the design, synthesis and (biological) characterization of the active ingredients of medicines.

A first international medicinal chemistry meeting, organized by the Soc. Chim. Therap. (France) together with their Belgian-Wallonian colleagues and in cooperation with organizations from Belgium- Flandres, Germany, Italy, the Netherlands and the UK (some of them at that time still in *status nascendi*), took place in September 1969 in Brussels. The chairman of the symposium was F. Martin. It is not known why this meeting in Brussels was not designated as the third ISMC, but clearly a new European organization was close to birth.

After the success of the Brussels meeting an ad hoc committee called "The European Committee on Medicinal Chemistry" was formed. Included as members were Drs E.J.Ariëns from the Netherlands, F.Martin (Belgium), P. Pratesi (Italy), K.E Schulte (Germany), and J Thuillier (France).This committee arranged a first business meeting in Paris in March 1969 and a subsequent meeting on 18th December 1969, also in Paris. In the meantime the IUPAC had founded (1969) a section on medicinal (!) chemistry as part of its Division of Organic Chemistry.

Participants of the December 1969 meeting were Drs Eloy (Belgium), Gautier (France), Jones (UK), Pratesi (Italy), Schulte (Germany), Thuillier (France) and Timmerman (the Netherlands, representing Nauta). It was decided that

there were no obstacles to start a European organization besides the IUPAC section ,which was felt to be too much dominated by American influence and had, more importantly, typical IUPAC objectives, which were not specifically directed to the advancement of primary science. The participants discussed intensively the format of the new organization and its formal name. As all participants had the opinion that national societies would be continued it was decided that a federation was the best format. Also, because of differences between countries regarding the name of the discipline (drug research, chimie thérapeutique. farmacochemie, Arzneimittelforschung etc.) the internationally best accepted term medicinal chemistry was selected .

Subsequently the participants agreed on the foundation of "The European Federation for Medicinal Chemistry" (the official decision to found the federation being taken on 19th December 1969), thereby dissolving the European Committee on Medicinal Chemistry, and the IUPAC was informed accordingly. Thuillier was appointed as chairman with Mrs Simmonds as secretary (also secretary of the British Society for Drug Research). It was also decided to accept personal membership, but this decision has never been enacted. A very meaningful decision, which later on however caused certain conflicts with the rather traditional chemistry-oriented IUPAC, was that the federation should aim for intensive contacts with biochemistry, pharmacology and other neighboring disciplines.

From the beginning the EFMC had a rather loose structure. The founding fathers were a group of friends in science who worked hard for the benefit of their common interest. It seems they had forgotten that for a productive cooperation a solid structure and a guaranteed financial situation are much needed. There were no statutes or rules, no fees for membership, and everything was very loose indeed. More formal structures were established only much later. This oversight of the founders has led to problems in later years; these problems and the way in which they have been solved will receive attention in subsequent parts of these annotations



Pietro Pratesi, one of the founders of the European medicinal chemistry community

In 1972 the third ISMC was organized, now under the sponsorship of the EFMC, Milan being the venue and Pratesi the main organizer. From the programme it became clear that medicinal chemistry was becoming recognized as a distinct discipline. In the concluding remarks as published in the official proceedings of the symposium, the famous medicinal chemist Adrien Albert stated:" The present Symposium represents a tremendous change in content from most of the earlier medicinal chemistry meetings. It was custom for the latter to be almost entirely chemical in nature, with only dark hints that the substances described had biological action" Albert even warned not to forget the chemistry as the major contributor to the field. He referred in his remarks to the magical moment at which the meeting took place: the isolation of the first agonist - receptor, the nicotinic acetylcholine receptor by Changeux.

From the meeting in Milan it became clear that the field was opening into new directions; the EFMC came at the right moment to guide the developments, to foster international cooperation, to advance science for



the benefit of mankind. The relationships between the EFMC and the IUPAC; the **International Committee on Medicinal** Chemistry (ICMC) The interactions between the IUPAC section (the first chairman being E Campaign from the USA) and the EFMC were from the beginning very constructive and friendly; there was much understanding for the obvious differences in the objectives of both groups. Members of the Executive Committee (EC) were elected as member of the IUPAC section. The business meetings of both groups were organized at the occasion of scientific symposia, and the interactions became very productive.Early in the 1980s IUPAC decided, for reasons which never became entirely clear, to suspend the activities of the section for medicinal chemistry, stating that the activities should be embedded within the Division of Organic Chemistry. The decision came as a surprise and was considered as a denial of the position of medicinal chemistry as a discipline in its own right. All members of the section decided to vacate their seats and, at a meeting in Toronto (1982), they started " the International Committee on Medicinal Chemistry" (ICMC) as an independent structure to continue the activities which had been undertaken by the IUPAC section; Wijbe Nauta was appointed as chairman, with Henk Timmerman as secretary. Not long thereafter one of the members of the IUPAC section (Camille Wermuth) decided to restart working with the IUPAC. From this new initiative a committee for medicinal chemistry was started within the Division of Chemistry and Human Health. Gradually the friendly contacts between IUPAC and EFMC were restored and a discontinuation of the ICMC was the logical consequence. An unfortunate episode in the "history" of the young discipline came to an end.

## The Portuguese Chemical Society. One century of history, on the way to the future

BY RUI MOREIRA

The Portuguese Chemical Society (SPQ) was created on the 28th December 1911, and thus is now approaching its 100<sup>th</sup> anniversary. It is one of the major and more active Portuguese scientific societies, currently with more than 2000 members. Its mission is to promote and develop research and education in Chemistry and related sciences. Historically, the role of SPQ in Portuguese science goes behind Chemistry, as it also embraced Physics until 1974, when the Portuguese Physics Society became completely autonomous. SPQ is organized in eight Divisions (Organic Chemistry, Physical Chemistry, Analytical Chemistry, Catalysis and Porous Materials, Food Chemistry, Life Sciences and Chemical Education) and ten Groups (Free Radicals, Glucids, Photochemistry, History of Chemistry, Industrial Chemistry, Magnetic Resonance, Chromatography, Colloids, Polymers and Interfaces, Medicinal Chemistry and Young Chemists). The Medicinal Chemistry Group was created in 2006 and presently includes 128 members, mostly from academia.

The range of activities developed by SPQ is very broad, covering both science and education. For example, SPQ offers two major scientific prizes. The first one, the "Ferreira da Silva Prize", named in honour of the first President of the society, awards a Portuguese chemist with outstanding scientific activity or who gave a decisive contribution to the development of Chemistry in Portugal. Since 2002, SPQ has also awarded the "Vicente de Seabra Medal" to innovative and high-quality scientists aged under 40 developing their research in Chemistry in Portugal. The major scientific event promoted by SPQ is the biannual National Meeting that usually gathers more than 500 attendants and which attracts chemists from other European countries. These National Meetings cover all activities related to Chemistry, ranging from research in universities and industry to



education in Basic and High Schools. In alternate years, each Division and Group organize their specialised meetings, which all together joined 1200 participants in 2007. The Medicinal Chemistry Meeting held the first Meeting in November 2008 gathering 230 participants. SPQ actively participates in several international organizations, including the International Union of Pure and Applied Chemistry (IUPAC), where it represents Portugal, International Chemistry Olympiads, European Association for Chemistry and Molecular Sciences (EuCheMS) and more recently, the European Federation for Medicinal Chemistry (EFMC).

In 1997, SPQ terminated the publication of the Portuguese Chemistry Journal (Rev. Port. Chem.) and joined other major European scientific societies in publishing new high-quality and high-impact journals which include Chemistry – A European Journal, European Journal of Inorganic Chemistry, European Journal of Organic Chemistry, ChemPhysChem; ChemBioChem, ChemMedChem and ChemSusChem. The Society publishes four numbers a year of *Química* a bulletin that includes general purpose papers and information useful to the members.



SPQ is particularly focused on attracting young students to Chemistry, for example at the high-school level, and in the organization of the Chemistry Olympiads which usually involve ca. 3000 students from 250 public schools. The winners are then selected to the Iberoamerican Chemistry Olympiads. In addition, SPQ is also a partner of the Ministry of Education in the planning of national exams of Chemistry and in the supervision of the Chemistry program for high-school.

## **CONFERENCE REPORT**

## EFMC - ISMC 2008 International Symposium on Medicinal Chemistry (ISMM)

Vienna, August 31–September 4, 2008

#### BY ANTONIO MACCHIARULO

The publication of the report of the XXth International Symposium on Medicinal Chemistry within little more than five months after the close of the meeting reflects credit on all the scientist and organizational staff concerned. Organized by the Austrian Chemical Society on behalf of the European Federation of Medicinal Chemistry, the meeting was held in the imperial city of Vienna, Austria, from August 31 to September 4, 2008.

This Symposium is recognized worldwide as one of the leading Medicinal Chemistry meetings and the XXth edition was a resounding success with more than 1390 delegates from all over Europe, United States and Asia.

The program of the Symposium covered important new scientific and technological developments in drug discovery focusing on those relevant to medicinal chemistry.

Key sessions of the XXth edition were Chemistry Strategies to Reduce Attrition, Predictive ADME/Tox Methods, Neurodegenerative Diseases, Oncology, Pain, Exploring the Chemical Space, Systems Biology & Medicinal Chemistry, Imaging Ligands and Biomarkers, this latter sponsored by EUFEPS. Full audio recording with synchronized slides of selected presentations delivered in some of the above sessions are available via the official webcasts of the Symposium (http://webcast. prous.com/ISMC2008).

Inaugurated by the chairman of the organizing committee, Dr. Peter Ettmayer (Boehringer Ingelheim, Vienna, Austria), and Prof. Roberto Pellicciari (University of Perugia, Italy), president of the EFMC, the opening day of the Symposium saw the ceremony of the EFMC awards and GSK prize, with Prof. Hugo Kubinyi being awarded with the Nauta Prize for Pharmacochemistry, Prof. Peter H. Seeberger with the UCB – Ehrlich Prize for Excellence in Medicinal Chemistry, Prof. Steven V. Ley with Prous Institute – Overton and Meyer Prize for New Technologies in Drug Discovery, and Prof. Michael Famulok being awarded with the GlaxoSmith-Kline Prize for Outstanding Achievement in the Field of Chemical Biology.

The opening day was concluded with the award lecture of Prof. Kubinyi and an interesting plenary lecture given by Prof. Chris Dobson (University of Cambridge, UK) on protein misfolding diseases. In the following days, professors, lecturers, students, representatives from the pharma industry and exhibitors attended a profitable programme of 6 plenary lectures, 27 parallel sessions including more than 80 lectures, one forum discussion, two workshops and three poster sessions including 591 posters, all held in the halls of the stately building Austria Center Vienna (ACV).

Among the posters presented, three were awarded with prizes offered by the ChemMedChem journal and ten were awarded with travel grants offered to young researchers by the Bentham Science Publishers.







Opening ceremony chaired by Dr. Peter Ettmayer (Boehringer Ingelheim, Vienna, Austria)



The winners of the EFMC awards and GSK prize in the centre with members of the Award Committee



Standing by the posters. 591 Posters were presented in three sessions with an excellent attendance

Of particular interest in the field of education, Prof. Peter Matyus (Semmelweis University, Budapest, Hungary) moderated over a discussion forum about "How to close the gap between academic training in medicinal chemistry and industrial reality". Invited participants of the forum were Dr. Javier Fernandez, Prof. Robin Ganellin, Dr. Gloria Serra, Prof. Noel de Souza. Prof. Henk Timmerman and Prof. Hugo Kubinyi. The Symposium had the impact it sought to have and has carried the message that medicinal chemistry is the golden key in the drug discovery process and has a pivotal role in linking

and exploiting the associated biological sciences.

The XXIst edition of the ISMC-EFMC Symposium, which will continue the tradition of the ISMC-EFMC Symposia to create a forum for all scientists interested in medicinal chemistry and related fields, is planned on August 2010 in Brussels, Belgium, and will be organized by the Medicinal and Bioorganic Chemistry Division of Royal Flemish Chemical Society (KVCV) and by the Société Royale de Chimie (SRC), Medicinal Chemistry Division (Belgium). The first details will appear on the EFMC website.



Gala Dinner in the beautiful setting of the Town Hall of Vienna.

## The first EFMC Short-Course on Medicinal Chemistry was very successful

Castle "Oud Poelgest" (Leiden), March 22-25, 2009

BY HENK TIMMERMAN

EFMC has recently launched the series of Short-Course on Medicinal Chemistry as a new initiative organized by the Education and Training Committee. The new series intends to cover at an advanced level well defined subjects within the broad area of drug discovery.

A feature of the courses is the a relatively low fee, which should allow for a broad participation of the academic community.

The EFMC started the new initiative as a service to the international community of medicinal chemists, with the aim to contribute to fill the gaps among scientists coming from different scientific environments and specialisations. The topic for the first course was "Improving Compound Quality" and Han van de Waterbeemd, a leading scientist in the field, haccepted to act as chairman and, together with Henk Timmerman, as director of the course. The organization was in the hands of the EFMC secretariat, Mrs Ly Differding.



Castle "Oud Poelgest"

The meeting took place from 22-25 March at Castle "Oud Poelgest" near Leiden in The Netherlands.

The course was overbooked; 37 participants were admitted, 9 of the total came from universities. EFMC Short Course

The teaching staff counted six members, of which five had an industrial background. The curse was very well received by participants. The very friendly, informal atmosphere was much appreciated and the presence of the lecturers throughout the entire course was very productive for the participants, having this allowed and promoted broad and informal discussion. The venue was considered to be excellent.

EFMC is considering the next events in the series, with the same format, at affordable fees, each on well selected subjects (proposal are welcome!) and cordially thanks the teaching staff, especially Han van de Waterbeemd for their enthusiastic and very professional contributions!

## EUROPIN – A European Pharmacoinformatics Initative

BY GERHARD ECKER project coordinator

Within the next decade, pharmacogenomics, pharmacoepigenetics and individualised medicines will be amongst the most challenging topics. International competitive research activities in these fields need optimised computational tools for data mining, data management and transformation of data to knowledge. These needs are clearly expressed in the Strategic Research Agenda of the Innovative Medicines Initiative. EURO-PIN links 6 Universities from 5 European Countries to develop a structured, highly interconnected training through research PhD program on the efficient and innovative use of information technologies and computational approaches in the drug discovery, design and development processes. Partners contributing are the University of Vienna, the Pompeu Fabra University (Barcelona), the Gdansk University of Technology, the Martin-Luther-University Halle-Wittenberg, the University of Parma, and the University of Perugia.

At the Parma consortium meeting in May also the Vrije Universiteit Amsterdam expressed its interest to join the network once the program is in place. This was highly appreciated by the consortium as it shows that not only the program developed is of high interest and the implementation is of high quality, but also might be seen as the first sign of a successful dissemination strategy.

The network will accept at maximum to students per year. Each PhD-student will have a local supervisor and one co-supervisors from the partner institutions. Additionally, a member from the Scientific Advisory Board, which is composed of 5 leading experts in the field coming from Industry or SMEs, will also contribute to the PhD-training program. The five scientists will act as core mentoring group setting up a personal career and development plan together with the student. Furthermore, also the research topic is designed in a way to fit into the research priorities of the two supervisors from Academia. Special attention will be given to a complementarity of methods and technologies. Each PhD-student spends at least 3 months of his/her 3 years period at the research groups of his/her co-supervisor. This ensures that the students gain broad technical experience without leaving the concrete research topic of his/ her thesis.

An innovative aspect of the proposed training program will be the extensive use of internet technology for documentation, supervision, and scientific discussions. Thus, the PhD-students will use web-based e-notebooks, which will be hosted on a secure web site accessible only to the supervisors, researchers and members of the Scientific Advisory Board. At least once a month a video session will be held, where the students have to report their progress. These meetings will constitute an integral part of the training and provide both students and supervisors with the overall expertise of the scientists involved. This will ensure broadest use of the experience of all scientists involved in the network and thus guarantee a maximum of benefit for the students.

Big efforts will be made to give the participating students a broad range of enabling skills. Besides local activities implemented on the respective host institutions (language courses, application procedures to national grant agencies, local career tracks, gender main-



streaming) each of the three scientific retreats held during the training period will devote one full day to training of complementary skills. These will include scientific writing and presentation techniques, European funding possibilities for research projects, successful grant applications, successful job applications, establishment and management of a research lab and entrepreneurial spirit. Special attention will be drawn to gender issues to promote women for scientific careers.

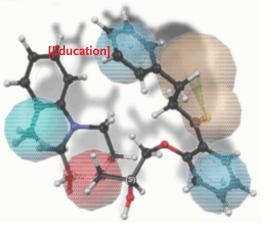
## The following joint training events will be organized:

#### **EUROPIN Summer School**

(Sept. 13-18, 2009, Vienna)

Each second year the Vienna School on Drug Design, which currently is an EFMC sponsored School organised jointly by the Austrian Pharmaceutical Society and the Austrian Chemical Society, will act as the official EUROPIN Summer School. The Summer School starts on Sunday evening with an inaugural lecture. During the following week there will be 4-5 lectures in the morning, a joint lunch, a lecture given by a representative of a software company and hands on sessions. On Friday afternoon the 5-10 PhD students accepted for the EUROPIN programme will have to present their master thesis and PhD concept. The hands on sessions are limited to 50 people. Preference will be given to students and to scientists from EFMC Members.

For the 2009 edition the hot topic covered was decided to be *multitarget profiling and Pharmacoinformatics* Registration is open, please visit: http://summerschool.europin.at



## Annual Scientific Retreat

Each spring the PhD-students, their supervisors and the SAB will spend 2-3 days in a small resort for a scientific retreat.

On days one and two the students will present and discuss the actual status of their work. During the retreat also the plan for the next will be agreed between the student and his/ her supervisors.

Day three will be devoted to training

in enabling skills. After the retreat a short written report is provided to the PhD-student and discussed with the primary supervisor.

#### Pharmacoinformatics Challenge

The challenge will be organised at the end of the training period (year 3) in analogy to the very successful InfoBio-Med Challenge. The PhD-students will be split into two groups and work as a research team on a problem which is defined by the scientific advisory board. The Scientific Advisory Board (SAB) consists of 5 industrial scientists, which guarantees that the problem given is of industrial relevance and close to a real case study. At the end of the week the two teams will present their possible solution to the SAB and the supervisors. The proposed outcomes will be thoroughly discussed and the SAB members will give clear feedback on the approaches and methods used. In individual personal meetings the SAB members will also discuss with the respective students their strengths and weaknesses with respect to employability in a pharmaceutical company

For successfully completing the program, students need to provide a thesis written in English, will have at least 3 publications (one as first author) in international, peer reviewed journals, and will have a thesis defense with at participation of at least one international referee.

## **EFMC NEWS**

The Council Meeting in Vienna unanimously approved the application for membership of the **Division of Medicinal Chemistry Section of the Serbian Chemical Society**. The Society will be represented by Dr. Miroslav Gasic. We warmly welcome our new member!

With Jan 1<sup>st</sup> 2009 the **new Executive Committee** became operative. We welcome the new members Koen Augustyns, Mark Bunnage and Javier Fernandez. EFMC is also very grateful to Dave Alker and Brigitte Lesur for all their input.

On March 1<sup>st</sup> **Nele Coulier** started her work in the administrative office of EFMC. Ms. Coulier has a master degree in philology (Dutch and Italian) and will assist EFMC in all the daily routine tasks and the management of the web-page.

**Giovanni Gaviraghi** and **Ferran Sanz** have been elected to the Advisory board of the Innovative Medicines Initiative. Chair of the board will be **Christian Noe**, Head of the Department of Medicinal Chemistry, University of Vienna and Past President of Eufeps.

The **next Council Meeting** is scheduled for Sunday, June 28, in Budapest. This is right at the end of the JMMC 2009, which is held in Budapest from June 24-27.

## **EFMC EVENTS**

#### BY GABRIELE COSTANTINO AND AGOSTINO BRUNO

## The 3<sup>rd</sup> Edition of International Meeting on Advances in Synthetic and Medicinal Chemistry (ASMCo9)

Kiev (Ukraine), August 23-27, 2009

EFMC and Chembridge Corporation agreed to continue the series of meeting on Advances in Synthetic and Medicinal Chemistry which was successfully initiated by the meeting of Moscow 2004 and St. Petersburg 2007. The 3<sup>rd</sup> edition of the International Symposium on Advances in Synthetic and Medicinal Chemistry (ASMC09) will be held in Kiev (Ukraine), August 23-27, 2009, chaired by Prof. Erick Carreira, ETH Zurich, Switzerland and Dr Scott Biller, Novartis Institutes for BioMedical Research, Cambridge, USA. Topics of the 3<sup>rd</sup> edition includes New Synthetic Methodologies, Total Synthesis of Natural Products and Heterocyclic Chemistry; Diversity- and Target-Oriented Synthesis and Chemical Biology; Medicinal Chemistry and Drug Discovery & Development. Commercial exhibition will also be organized along with a half-day Business Mini-Symposium "Small Molecule Libraries from Russia and Ukraine and Screening-Based Drug Discovery".

#### The second event of the Frontiers in Medicinal Chemistry series

Barcelona, October 4-6, 2009

EFMC and the Spanish Society of Medicinal Chemistry (SEQT) organises in Barcelona, October 4-6, 2009, the Frontiers in Medicinal Chemistry - Emerging Targets, Novel Candidates and Innovative Strategies.

This event is the second on the series initiated in Siena (Italy), in 2007. This three-day international meeting will bring together medicinal chemists and related scientists in order to share exciting new results and first-time disclosures in various areas of drug discovery and development, including cancer, infectious diseases, CNS, inflammation, pain and metabolic disease. Twenty-three internationally recognized plenary speakers will present lectures with a focus on emerging targets, novel drug candidates and new strategies and technologies.

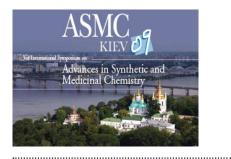
#### The 29th Edition of ESMEC, an EFMC Accredited School

Urbino (Italy) in September, 13-18, 2009

The Division of Medicinal Chemistry of the Italian Chemical Society is organizing, in Urbino (Italy), the XXIXth edition of the European School of Medicinal Chemistry (ESMEC), an EFMC-Accredited School.

This year the School will take place exceptionally in September, 13-18, 2009, and will cover the following topics: (i) Neuromuscular Diseases: Focus on Multiple Sclerosis, Amyotrophic Lateral Sclerosis, and Muscular Dystrophy; (ii) Carbohydrate Chemistry; (iii) Toxicity and Drug Discovery; (iv) Hot Topics.

The School, characterized by a truly interdisciplinary approach which nicely mixes up advanced seminars with more didactic and interactive workshops, is directed to European PhD students, and to junior researchers from both academia and industry. Registration fees, including full lodging for five days are as low as 450 Euro. Free fellowships are also available.



More information, the detailed program and the list of invited speakers are available at www.asmco9.org



The detailed scientific program and further information are available on line at www.fmc2009.org



For further information and for the detailed program go at: www.esmec.eu, or contact the Director of the school, Gloria Cristalli, at: gloria.cristalli@unicam.it

## 27th Noordwijkerhout – Camerino – Cyprus Symposium Trends in Drug Research

May 3–7, 2009 Noordwijkerhout, the Netherlands Web: www.noordwijkerhoutmedchem.org

#### 11th Conference in Advanced Medicinal Chemistry Approaches to Rational Drug Design

May 23–24, 2009 Aristotelian University of Thessaloniki, Greece Web: http://web.auth.gr/camc/

## 6th Joint Meeting on Medicinal Chemistry

June 24–27, 2009 Congress Centre of Eötvös Loránd University, Budapest, Hungary Web: http://www.jmmc2009.mke.org.hu

## Residential School: Medicinal Chemistry

June 29 – July 2, 2009 University of Nottingham, United Kingdom Web: http://www.rsc.org/medchem

### 3rd International Symposium on Advances in Synthetic and Medicinal Chemistry

August, 23–27, 2009 Kiev, Ukraine Web: http://www.asmc09.org

## AIMECS 09

August, 23–27, 2009 Cairns, Queensland, Australia Web: http://www.aimecso9.org

## 29th Edition of the European School of Medicinal Chemistry

September 13–18,2009 Urbino, Italy Web: *http://esmec.eu* 

### 5th Summer School on Drug Design

September 13–18,2009 Vienna, Austria Web: www.summerschool.europin.at

## Frontiers in Medicinal Chemistry: Emerging Targets, Novel Candidates and Innovative Strategies October, 4–6, 2009

Barcelona, Spain Web: http://www.fmc2009.org

## 18th LACDR School on Medicinal Chemistry

October, 27–30, 2009 Noordwijkerhout, the Netherlands E-mail: *bdekker@lacdr.leidenuniv.nl* 

## Annual One-Day Meeting on Medicinal Chemistry of SRC & KVCV: does size matter? Beyond small molecule therapeutics: challenges and success stories November 6, 2009 ULB Brussels, Belgium Web: http://www.ldorganisation.com

## MedChemWatch

## MedChemWatch no.6 April 2009

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