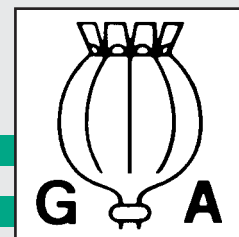


Society for Medicinal Plant Research Gesellschaft für Arzneipflanzenforschung e.V.



Message from the President



Dear members,

the 56th annual congress of GA, held in Athens, Greece, from August 3 – 8, 2008 within the 7th Joint Meeting with AFERP, ASP, PSE and the Italian Society for Phytochemistry (SIF), has been very successful. We are deeply grateful to the organizers, Profs. Leandros Skaltsounis and Joel Boustie. They have put together a very attractive scientific and social programme, and have set up a perfect organization, so that everybody felt very pleased. On behalf of GA, I want to thank them and their supporting team very much for organizing this meeting so successfully; they did an excellent job and we will keep this meeting in best remembrance.

More than 1200 scientists from all over the world attended the congress, and the plenary and keynote lecturers, as well as the presenters in workshops, short lecture and poster sessions contributed to the success of the congress.

More than 1300 abstracts of the presentations have again been published in *Planta Medica*, the official organ of our Society (see *Planta Medica* 74 (9), 2008). I want to thank the publisher, Thieme Verlag Stuttgart, Dr. Kuhlmann, the issue editors Leandros Skaltsounis and Prokopios Magiatis, and the issue co-editor Nikolas Fokialakis very much for all their efforts and for the good collaboration.

During the congress, the Egon-Stahl-Award in Gold, which is the highest scientific honour of GA and acknowledges the outstanding scientific lifetime work of a research scientist, was given to the Honorary Member of GA, Prof. Dr. Max Wichtl. The newly established Dr. Willmar Schwabe-Award of GA was awarded for the second time; winner of the 2008 award is Prof. Dr. Oliver Werz, Tübingen (Germany). Dr. Birgit Benedek, Department of Pharmacognosy, University of Vienna (Austria) has been announced as the winner of the Egon Stahl award in Bronze 2008. Prof. Dr. J.C. Scheffer (Netherlands) was awarded the Honorary Membership of the GA.

As in previous years, GA has also supported 15 young scientists from 11 countries with travel grants.

You can find a comprehensive report on the 56th annual congress in this Newsletter.

The next joint meeting will be organized 2012 by ASP in New York, together with AFERP, GA and PSE. I am convinced that this meeting in New York will be another milestone in the history of our Societies. Due to the international importance of medicinal plant research, such global networking is extremely necessary and fruitful.

The BoD of GA has decided to award an increased number of travel grants in 2009. In total 20.000 € will be spent for PhD students and post docs in order to support them to be able to attend the next annual congress.

The board of GA has also decided to establish a 5th *Permanent Committee for Young Researchers* with the aim to support and interest PhD students in research on medicinal plants and natural compounds. An international group of scientists of GA with rotating chairs will be responsible for this PC which will start with its work at the next congress in Geneva.

I am very happy that we can announce a further award of GA in 2009: the Bionorica Phytoneering Award of the Society for Medicinal Plant Research. This biannual award is sponsored by Bionorica AG with 10.000 € and is dedicated to acknowledge outstanding research in the field of herbal medicinal products and their active principles. On behalf of GA, I want to thank Prof. M. Popp very much for this sponsorship.

As you have been informed, a low rate online access to *Planta Medica* for members of GA is available; I hope that this service will intensively be used and that more members will consider *Planta Medica* for the publication of their valuable results.

As already announced in the last members meeting in Graz 2007, the name of our "Society" should be modernized to cover all scientific fields and new trends in research. The abbreviation GA should be definitely maintained, as it is well known and protected. Two proposals were discussed, in the last GA members meeting in Athens. It was decided to change the name to: **GA** – Society for Medicinal Plant and Natural Product Research (German: **GA** – Gesellschaft für Arzneipflanzen- und Naturstoff-Forschung). The name of our "Society" and the corporate identity of GA will be changed in January 2009.

In addition to our annual congress, GA is again co-organizing several other symposia on medicinal plant research during the year 2009, and I hope that you can attend some of these meetings as well. You can find the corresponding information in this newsletter and on our web site (www.ga-online.org).

The next and 57th annual congress of GA will be held in Geneva and will be organized by Prof.

NEWSLETTER

Hostettmann and his team. Detailed information is available in this newsletter, from our homepage and from the second circular. I hope that many of you will attend and old and new members meet again at this very attractive event. Please visit the GA homepage regularly for updated information on this congress.

Since last year, also a high number of colleagues have joined our Society, who I want to welcome as new and active members of the GA family. Finally I wish you a healthy, lucky and successful year 2009 and I am looking forward to seeing many of you in Geneva.

Cordially



Brigitte Kopp, GA president

Notes from the Society

Announcement for Egon Stahl-Award in Silver 2009

On the occasion of his 60th birthday, Professor Dr. Dr. h.c. mult. Egon Stahl donated a medal, a document and a monetary prize in order to recognize and promote young scientists working in the field of Pharmacognosy (Pharmaceutical Biology) and Analytical Phytochemistry.

As a rule, the silver medal and an award of € 3000 should be awarded to scientists up to the age of about forty, who have published outstanding scientific work during the years following their graduation. The bronze medal and an award of € 1500 will be given to young scholars up to the age of about thirty whose theses are of outstand-

ing quality (see also www.ga-online.org, awards).

In 2009 the ESA Silver will be given during the 57th International congress and annual meeting of GA in Geneva on August 16–20, 2009 (www.ga2009.org).

Members of the Society for Medicinal Plant Research (GA) are invited to submit nominations for candidates together with supporting data to the president of GA, Prof. Dr. Brigitte Kopp, Vienna.

A nomination for the prize has to include a curriculum vitae incorporating the candidate's scientific career, an index on her/his publications, and reprints of several of his/

her more recent publications. All publications can be taken into consideration.

All documents have to be submitted in **electronic form** (as CD in 3 copies) to Prof. Dr. Brigitte Kopp, GA president, Department of Pharmacognosy, University of Vienna, Centre of Pharmacy, Althanstr. 14, A-1090 Vienna, Austria, brigitte.kopp@univie.ac.at.

Deadline for submissions is **March 15, 2009**.

December 2008

Prof. Dr. Brigitte Kopp

Bionorica Phytoneering Award 2009 of GA

The *Bionorica Phytoneering Award* (BPA) acknowledges outstanding research in the field of development and application of phytopharmaceutical products. The award is endowed with 10000 € by the endowing sponsor Bionorica AG, Neumarkt (Germany).

The aim of the award is to motivate preferentially young scientists (normally younger than 45) to perform research in the following areas: pharmacodynamics and pharmacokinetics of herbal medicinal products and their active principles; clinical research

in the areas of respiratory tract infections, inflammation, women's health, and metabolic syndrome; safety and pharmacovigilance studies.

Scientists or research groups of universities and other non-commercial scientific institutions are entitled to apply.

Scientific publications on a specific topic which have been published during the last three years can be considered. They must be submitted together with a CV and a list of publications to the president of GA, Prof. Dr. Brigitte Kopp, Vienna, in electronic form


(as CD in 5 copies) until **April 15, 2009**.

The *Bionorica Phytoneering Award* will be bestowed during the annual 57th GA congress in Geneva, 16 to 20 Aug, 2009, (www.ga2009.org), the awarded scientific results shall be presented during the annual congress in a lecture of half an hour (detailed information under www.ga-online.org awards).

December 2008

Prof. Dr. Brigitte Kopp

Notes to all GA members




Note to all GA members

Please inform the secretary by phone, fax or mail of any change in your coordinates, especially in case of changes in E-mail addresses.

Fax / phone: ++49 8141 613 749

e-mail:
Ga-secretary@ga-online.org

The GA-homepage (www.ga-online.org) contains a special members area for which an access code is needed: username "gmember", password "morphine".



Editorial remark

All contributions for the GA-Newsletter are welcome.

Deadline for submission is fixed to May 20th 2009.

Please send all contributions by e-mail to the editor
Andreas Hensel
(ahensel@uni-muenster.de)

Some Data from the Membership Data Base: 44 New GA members since June 2008

The Society welcomes you all warmly and wishes that GA may get a platform for many scientific and personal contacts. All the best for you and GA is looking forward to your active participation in GA events!

Mr. and Ms. **Oluseyi** and **Olubanke Ogunlana**, Nigeria; **Corine Awonja Ngufor**, Cameroon; **Courtney Starks**, USA; **Dietmar Wolz**, Germany; **Joseph Abayomi Olagunju**, Nigeria; **Peyman Salehi**, Iran; **Douglas Lynch**, Belgium; **Ms. Mawugbe Gbededo**, Nigeria; **Lenka Nedorostova**, Czech

Republic; **Mr. and Ms. Mahmood Reza** and **Soheila Moein**, Iran; **Sehan El Batran**, Egypt; **Anna Karolina Kiss**, Poland; **Wafka Abdel Manhaam Tawfek**, Egypt; **Lobna Abo Seetta**, Egypt; **Ataa Said**, Egypt; **Rasmia Aly Hasan**, Egypt; **Khalid Ahmed Shams**, Egypt; **Salma Elsawi**, Egypt; **Maged Abdel-Kader**, Egypt; **Maria Rosario Garcia-Mateos**, Mexico; **Shadab Dehshahri**, Iran; **Wan Mohamud Wan Nazaimoon**, Malaysia; **Keyvan Dastmalchi**, Finland; **Caroline Stevigny**, Belgium; **Francois Ngويمatsia**, Cameroon; **Ahmed Abuba-**

kar, Nigeria; **Jihan Saed Husein**, Egypt; **Raafat Hanna**, Egypt; **Edward J. Kennelly**, USA; **Abdel Razik Farrag**, Egypt; **Alina Oana Danila**, Romania; **Zakaria El-Khayat**, Egypt; **Paschalina Chatzopoulou**, Greece; **Mohd Fadzelly Abu Bakar**, U.K.; **Nikolas Fokialakis**, Greece; **Thillaigovindan Parivallal**, India; **Günther Stecher**, Austria; **Ulf Simoneit**, Germany; **Azijada Ibrulj**, Bosnia & Herzegovina; **Hansjörg Hagels**, Germany; **Varnat Z. Seropian**, Lebanon; **Huiying Zhao**, UK.

Laudatio for a new honorary member: Professor J. J. C. (Hans) Scheffer

As rule of the GA Honorary members shall consist of individuals who have rendered special service either to medicinal plant research or to the Society. Their nomination follows proposals by at least five members and approval by a two-thirds majority of the Board of Directors of the Society. A document shall be issued, signed by the President, certifying the appointment as an Honorary Member.

As President of the GA it is my pleasure to announce that the Board of Directors decided to give the Honorary Membership to **Prof. Hans Scheffer**.

Dr Scheffer, born 1947, studied pharmacy at Leiden University and qualified as a pharmacist in 1973, following his graduation, with a specialization in pharmacognosy in 1972. He obtained his Ph.D. at the same university in 1978. His promotor was Prof. Dr Anders Baerheim Svendsen.

He was appointed faculty member at the Institute of Pharmacy of Leiden University in September 1973, and senior faculty member in January 1981. He worked as a post-doc at the University of Helsinki, in the Division of Pharmacognosy (head Prof. Dr. Max von Schantz), from September 1982 until March 1983.

Dr. Scheffer was associate professor at the Center for Bio-Pharmaceutical Sciences (BPS) of Leiden University, from its start in September 1984; the center is part of the research institute LACDR (Leiden/Amsterdam Center for Drug Research).

In addition, he was active as professor of Medicinal and Aromatic Plant Science (part-time) at the Agricultural University of Wageningen, from September 1985 until

September 2003. He supervised Ph.D. students, some of which came to Leiden from Ruanda, Nigeria, Brazil, Thailand and Indonesia, respectively. From April 2002 until July 2007, he acted as Director of Education of the undergraduate programme of the Center for BPS, too.

Dr. Scheffer is author and co-author of about 175 publications in refereed journals. These papers mainly deal with the analysis of essential oils, the screening of such oils for antimicrobial activities, the analysis of phthalides, steroidal alkaloids, the volatile compounds and bitter acids from hops as well as that of volatiles from cell cultures. He has also been editor, together with A. Baerheim Svendsen, of the book "Essential Oils and Aromatic Plants".

Dr. Scheffer was member of the editorial boards of the Dutch pharmaceutical weekly journal "Pharmaceutisch Weekblad" and of "Acta Pharmaceutica Fennica". In addition, he was acting as associate editor of "Flavour and Fragrance Journal", from January 1989 until January 2002. Thereafter he was member of the Editorial Advisory Board of this journal until January 2008.

He is member of the board of the Dutch Society for Medicinal Plant Research, since 1978, and its president since 1990. Dr. Scheffer has been member of expert group 13A (Phytochemistry) of the European Pharmacopoeia Commission from November 1998 until June 2007.

Dr. Scheffer became member of the "Gesellschaft für Arzneipflanzenforschung" (Society for Medicinal Plant Research) in 1976, and member of its Board of Directors (BoD) in 1988, acted as Vice-President of the GA (from January 1990 through De-



ember 1997) and as its President (from January 1998 through December 2001), and thereafter he was again member of its BoD (2002–2006). During four years (1984–1987) he was editor of the GA Newsletter. Dr. Scheffer was involved in the organization of several scientific meetings, among which are the 35th annual GA Congress in 1987, the 5th Joint Meeting in Amsterdam in 1999, some of the International Symposia on Essential Oils (ISEO).

GA is awarding Hans Scheffer the Honorary Membership in recognition of his long and intense engagement for the aims of the Society for Medicinal Plant Research (GA).

Brigitte Kopp (President)

Dr. Willmar Schwabe-Award 2008 to Oliver Werz

The Dr. Willmar Schwabe-Award acknowledges outstanding results of pharmacological and/or clinical research in the field of medicinal plants and natural products. The prize is endowed with 10.000 Euro, a donation from Dr. Willmar Schwabe, Karlsruhe (Germany).

The aim of the award is to motivate preferentially young scientists (about 40 years or younger) to resolve phytotherapeutic and phytopharmaceutical problems in an interdisciplinary approach, in order to support the evidence-based use of natural products.

This year the WSA is bestowed on **Dr. Oliver Werz**, University of Tübingen, Germany. Dr. Werz, a pharmacist, started his biochemical and pharmacological research in the field of inflammation in 1992 as PhD student in the group of Professor Steinhilber at the University of Tübingen. Until 2000 he was most interested in the biochemistry and molecular pharmacology of 5-lipoxygenase, the key enzyme in the biosynthesis of the proinflammatory leukotrienes. This period was filled with many discoveries in the cellular regulation of 5-lipoxygenase in collaboration with the group of the Nobel laureate Professor Bengt Samuelsson at the Karolinska Institute where Dr. Werz spent a two-years stay as a postdoctoral fellow.

In the search of pharmacological inhibitors interfering with leukotriene biosynthesis and 5-lipoxygenase, Dr. Werz finally also approached natural products (NPs). As senior scientist at the Institute of Pharmaceutical Chemistry at the University of Frankfurt, Dr. Werz started around year 2000 to investigate selected anti-inflammatory NPs in general, addressing the elucidation of their underlying molecular mechanisms in cellular systems.

As we all know, many compounds that are well recognized as effective inhibitors of inflammatory disorders, the molecular targets and the precise modes of action are often unknown. Knowledge of the molecular targets and modes of actions may also lead to new principles for pharmacological intervention with inflammatory processes and may reveal novel concepts for the de-

velopment of anti-inflammatory drugs. Currently, the pentacyclic triterpenes boswellic acids from frankincense and the acylphloroglucinols hyperforin from St. John's wort and myrtucommulone from myrtle are under investigation in the group of Dr. Werz.

One of his major scientific interest related to NPs are the boswellic acids, the active principle of frankincense. Frankincense, derived from *Boswellia* species, is frequently used in folk medicine to cure inflammatory diseases with an extremely long tradition especially in Ayurvedic Medicine (since about 400 years!). Scientific data from different animal models of inflammation and from clinical trials with pilot character indicate a therapeutic value of frankincense in the treatment of chronic inflammatory and allergic disorders. However, until today frankincense preparations are not registered as medicinal product and only dietary supplements or cosmetic preparations are available with undefined pharmaceutical quality. Nevertheless, there are strong efforts of pharmacists and biomedical researchers to push the approval of frankincense as medicinal product in the Western World.

Boswellic acids exhibit numerous biological activities *in vitro*. In particular, AKBA among the BAs is thought to be mainly responsible for the pharmacological actions of frankincense. In search for a molecular basis of the anti-inflammatory effectiveness, selective inhibition of 5-lipoxygenase has long been proposed as mode of action. However, the pharmacological relevance of the proposed mechanisms is unclear.

Supported by grants by the Deutsche Forschungsgemeinschaft (DFG), Dr. Werz carried out detailed investigations regarding the molecular pharmacology of boswellic acids, thus, providing a biochemical basis for the effectiveness of frankincense preparations *in vivo* and in therapy. He found that besides 5-lipoxygenase also several other enzymes within the arachidonic acid cascade including cyclooxygenase-1, the platelet-type 12-lipoxygenase and phospholipase A2 are modulated by boswellic acids. Construction of an affinity



resin using immobilized boswellic acids, he demonstrated a direct interference of boswellic acids with cyclooxygenase-1 and 12-lipoxygenase and he identified novel high-affinity targets with pharmacological relevance. Moreover, Dr. Werz showed that boswellic acids affect central signalling pathways in inflammatory cells for example Ca^{2+} , MAP kinases and Akt/PKB. These findings have been published in 9 peer-reviewed papers by well-recognized international Journals including *Molecular Pharmacology*, *FASEB Journal*, *Journal of Pharmacology and Experimental Therapeutics*, or *British Journal Pharmacology*. Altogether, the work of Dr. Werz provides a strong scientific basis and significantly substantiates the long-proposed efficacy of frankincense as remedy for the treatment of several diseases, and finally strongly supports the evidence-based use of frankincense preparations as natural products. His contributions impressively show that natural compounds still play an important role in drug discovery and that it is possible to get interesting results with long-known natural products.

Brigitte Kopp (President)

Egon Stahl Award in Gold to Professor Dr. Max Wichtl

The Egon Stahl-Award in Gold is the highest scientific honour of the Society for Medicinal Plant Research (GA). It can be awarded every third year. The Egon Stahl-Award in Gold acknowledges the outstanding scientific lifetime work of a research scientist who has been closely attached to Pharmaceutical Biology (Pharmacognosy, Chemistry of Natural Products), in its whole range, through his scientific work.

The Egon Stahl-Prize in Gold is endowed with EURO 5.000, a donation from GA. The donation was made with the intention of furthering scientific aims deserving aid.

It is a pleasure and honor for me to announce the laureate of the ESA Gold: this outstanding personality with exceptional scientific achievements in the field of medicinal plants as well as of his national and international importance in the field of Pharmacognosy, Pharmaceutical Biology and Pharmacy is **Prof. Dr. Max Wichtl!**

After his graduation (studies of chemistry and botany) he started his career with the Austrian Commission on Pharmacopeia, later after finishing his studies of Pharmacy he joined the Institute of Pharmacognosy at the University of Vienna as an assistant



professor. In this function he motivated many students for thinking, reflecting and summarizing ('Studying means looking critically at a topic'). His habilitation in pharmacognosy took place in 1965, in 1973 he was appointed associate professor. Apart

from scientific publications (focused on cardiac glycosides) he gained international fame through his book 'Pharmacognostic Chemical Analysis' (1971).

Being appointed full professor of Pharmaceutical Biology in Marburg/Lahn in 1973 Wichtl had the opportunity to realise his own ideas of lecture and research as head of institute. A great number of his publications were written during his time in Marburg. In scientific literature on medicinal plants his name is closely connected with results not only in the field of cardiac glycosides, but of the analysis of Gelsemium alkaloids, of iridoids in the genus *Penstemon*, of Galbanum and Curcuma. He pioneered new developments in the chromatographic separations of cardiac glycosides as well as in the methods for their biological quantification within the drugs, many papers document his extensive success in the isolation and structure elucidation of new cardiac glycosides. In recognition of his scientific achievements in the field of cardiac glycosides he was honoured with the Dr. Willmar Schwabe Award in 1971.

His comprehensive book entitled "Digitalis" attests to his extraordinary knowledge in the field of Digitalis (2000) – the book preserves the complete scientific knowledge on Digitalis for the future generations.

His qualities as an academic teacher are reflected in more than 40 PhD theses which came out under his headship. In addition he is also well-known as a lecturer at further education courses. His excellent professional reputation together with an obliging, if necessary decisive personality led him into a great number of functions where he did not only represent his own field with absolute competence but also kept an eye on the entire field of pharmacy and its scientific and practical aspects. To give you a few examples, let me mention: twice dean of the School of Pharmacy and

Food Chemistry in Marburg/Lahn, head of the section "Pharmacobotany-Pharmaceutical Biology" in the APV (1982–1988), author and editor of the commentaries of the Herbal drug monographs in the German and European Pharmacopoeia. His commentaries have always been well realized and are still a reliable source for botanical, structural and analytical details of all herbal drugs and herbal preparations relevant in Europe. Furthermore he strengthened phytotherapy as co-editor of the journal "Planta Medica", as a member of the pharmacopoeial committee and as a long-standing member of the scientific committee of the Bundesgesundheitsamt (BGA). The output of the latter are the "Standardzulassungen" for herbal teas (including their commentaries) which finally made possible the status of herbal drugs as accepted phytotherapeutics in pharmacy.

His commitment to the Society for Medicinal Plant Research is documented as the president of the GA (1990–1993), as the vice president (1988–1989; 1994–1997) and as a member of the advisory board (1984–1987) as well as the organizer of the GA annual meeting in 1981 in Marburg/Germany. The GA honoured his commitment by awarding Academic lecturer, researcher and functionary Max Wichtl owes his international fame not least to his book 'Herbal Drugs and Herbal Medicinal Products'. This work has been translated into various languages and has become a valuable helper in pharmaceutical practice even beyond the borders of Central Europe. The 1st edition appeared in 1984, a second edition followed



in 1989, the 3rd edition also including phytopharmaceuticals, followed, the 4th edition (2002) is now on the market. At present Max Wichtl is busy with the 5th edition, which has just appeared (see also this newsletter). The "Teedrogen" is a document of Max Wichtl's outstanding competence in and life-long dedication to medicinal plant research concerning both aspects, phytochemistry and Phytotherapy. The book has been translated into English, French, Italian, Spanish and Japanese.



With honoring Prof. Wichtl with the ESA in Gold GA express the high esteem for him personally and for the outstanding scientific personality as well as our sincere thanks for his commitment of the GA.

Brigitte Kopp (President)

Egon Stahl Award in Bronze to Mag. Dr. Birgit Benedek, University of Vienna, Austria

On the occasion of his 60th birthday, our honorary member, late Professor Dr. Dr. h.c. mult. Egon Stahl donated a medal, a document and a monetary prize in order to recognize and promote young scientists working in the field of Pharmacognosy, Pharmaceutical Biology, and Analytical Phytochemistry.

The Egon Stahl-Award with a bronze medal should be awarded to young scholars up to the age of about thirty, whose thesis is of outstanding quality. After a careful evaluation by the panel of judges it was decided unanimously that the Egon Stahl Award 2008 with a bronze medal should be given to Mag. pharm. **Dr. Birgit Benedek**, University of Vienna, Austria. The awarding ceremony took place during the opening ceremony of the 56th Annual Meeting of our Society held in Athens, Greece, as a joint meeting with AFERP, ASP, PSE and SIF on August 4th 2008.

Mrs *Benedek* was born in 1978 in Oberwart, Austria. She studied pharmacy at the

University of Vienna from 1996 until 2003, with a specialization in pharmacognosy. For the experiments of her diploma thesis she obtained an Erasmus fellowship at the University of Strasbourg. Subsequently she became a doctoral student of Prof. Kopp at the University of Vienna, where she obtained her PhD degree in 2007 with a thesis entitled „*Achillea millefolium* L. s.l. – Analysis of Phenolic Compounds and Biological Testing”. The thesis resulted in five publications.

Dr. Benedek investigated the composition of flavonoids and caffeic acid derivatives in some *European* taxa of yarrow. She developed a new combination of SPE (solid phase extraction) and HPLC for the quantification of these compounds in self-collected and commercial samples. Apart from the phytochemical studies, she also performed investigations on the spasmolytic, choleric, anti-inflammatory (COX-1, COX-2) and radical scavenging activity of yarrow and its constituents, and she examined the



inhibitory effect on metalloproteinases and human neutrophil elastase.

In summary, the jury concluded, that by her PhD thesis Dr. *Benedek* has made a highly valuable contribution on the chemical and

pharmacological aspects of *Achillea millefolium* with detailed analytical studies, biological investigations of characterised extracts and isolated constituents as well as *in-vivo* work.

Prof. Bauer, vice-president of GA and chairman of the jury, congratulated Dr. Benedek and presented her the bronze

medal, the document and the monetary prize. The document reads as follows: "The Society for Medicinal Plant Research (Gesellschaft für Arzneipflanzenforschung) presents the Egon Stahl-Award 2008 with the bronze medal to Dr. Birgit Benedek in recognition of her valuable contributions to pharmacognosy, pharmaceutical biology

and analytical phytochemistry, in particular by her detailed analytical work and biological investigations on *Achillea millefolium*". Dr. Benedek presented the award lecture on Thursday 7th of August 2008, just before the closing session.

Rudi Bauer, Graz

Professor Franco Francesco Vincieri, Florence, 70 years

Professor Franco Francesco Vincieri has celebrated his 70th birthday on October 12th 2008. Prof. Vincieri gained his degree in Pharmacy in 1963, at the University of Florence. He passed from being professor in charge of the "Laboratory of Extractive and Synthetic Drug Preparation" to being an associate, then supernumerary professor of "Phytopharmacy". Now he is full professor of Pharmaceutical Technology, Socio-economics and Legislation. Over the last 45 years his teaching skills have been very much appreciated by generations of students. He is quite active in the University of Florence, taking on various institutional roles such as Vice Dean of the Faculty of Pharmacy since 2001, Director of the graduate school of "Herbal Technology" from 2000 to 2006, Director of the Professional Specialization Course "Expert Technician in Official Herbs" (collaboration between the University of Florence and Tuscan Region) from 2005 to 2006, Director of the post-graduate course "Herbal Medicinal Products of Traditional Chinese Medicine" since 2005 and Director of the post-graduate school of "Hospital Pharmacy" from 1994 to 2007.

His research has been based on numerous aspects of modern pharmacognosy, giving valuable contributions to pharmacognosy (pharmaceutical biology) and analytical phytochemistry. He is author or coauthor of more than 180 publications in international scientific journals, several books and chapters of books and a great number of contributions in congress proceedings. Starting in 1990 he became increasingly interested in quality aspects of herbal medicinal products and was first involved in

the Italian Pharmacopoeia as a member of the Permanent Commission (since 1993) where, since January 2004, he is President of the Working Group "Herbal Drugs". He is an expert member of "Consiglio Superiore di Sanità" for the three-year period 2006–2009.

Prof. Vincieri was the Italian Delegate first at HMPWG (Herbal Medicinal Products Working Group) and then at HMPWP (Herbal Medicinal Products Working Party) from 1997 to 2004 at the EMEA.

He was assessor of the "Certification procedure for Chemical quality and microbiological purity evaluation" of EDQM (European Directorate for the Quality of Medicines) from 1998 to 2004 and assessor of the "Certification procedure for Herbal Drugs and Herbal Drug Preparations evaluation" of EDQM since 2004. Beginning this year (2008), he is a member of the European Pharmacopoeia Commission of the Traditional Chinese Medicine working Party.

He has served as President of the SIF (Italian Society of Phytochemistry) and in the ESCOP (European Scientific Cooperative on Phytotherapy) Scientific Committee as Italian delegate from 1990 to 2000 and was member of the ESCOP Board from 1995 to 1997. He has been Supervising Editor since 2000 and member of the ESCOP Research Committee since 2004.

Prof. Vincieri's efforts to promote quality and modernization, including the technological aspects, of herbal medicinal products have been acknowledged by the Italian Government through the financing of projects related to optimization of the technological and biopharmaceutical aspects of



Herbal Medicinal Products and Botanical Health Products to improve their quality and safety of use, as well as awards from national and international scientific societies including ESCOP (European Scientific Cooperative on Phytotherapy) and APV (Arbeitsgemeinschaft für Pharmazeutische Verfahrenstechnik E.V.).

The GA congratulates him on his birthday and wishes him and his wife vigour and health for the next years to continue his work and to be able to cultivate new activities as well as find time for those from the past.

Prof. Dr. A.R. Bilia and
Prof. Dr. B. Kopp (president)

GA Travel Grants 2008

Also for 2008 GA sponsored several travel grants for graduate students to attend the annual (joint) meeting in Athens in August. No post-doc grants were available this year. The GA travel grant committee 2008 consisted of Anna Rita Bilia, Veronika Butterweck and Luc Pieters. The committee has received 30 applications before the deadline of April 1, 2008. All applications

were ranked independently by the members of the committee on a scale from 1 (low) to 5 (high) based on their scientific merits. Finally 13 grants could be awarded. The travel grant committee and GA congratulate the following researchers: **Adeneye Adejuwon** (Nigeria); **Baykan Sura** (Turkey); **Foubert Kenne** (Belgium); **Lechner Doris** (Austria), **Noysang Chanai**

(Thailand, working in Austria); **Nyongbela Kennedy** (Cameroon); **Okoye Festus** (Nigeria); **Pedersen Mikael** (Denmark); **Phipps Stephen** (Florida U.S.A.), **Pieri Valerio** (Austria), **Skrzypczak Anita** (Poland); **Sodaezadhed Hamid** (Iran, working in Belgium); **Toselli Francesca** (Italy, working in Australia).

Minutes of the Members' Meeting 2008 held in Athens, Greece

The annual Member's Meeting was held on 5 Aug 2008 from 6.45–8.15 at the congress venue Athenaeum Intercontinental Hotel. 81 persons attended the meeting. President Prof. Kopp welcomed all participants.

1. Passing of the agenda

The agenda which had been sent out to all members with the invitation in GA NL 1-2008 in June 08 was approved unanimously.

2. Approval of the minutes of the annual Members' Meeting 2007 in Graz, Austria

The minutes of the Members' Meeting in Graz, Austria, on 4 Sept. 2007 were published in the GA NL-2/Dec 2007. They were accepted from the assembly unanimously with no remarks.

3. Annual reports

3.1 Report of the president

Prof. Dr. Brigitte Kopp

- On April 29th 2008 GA HM Dr. Albert Hofmann ("father of LSD") passed away in the age of 102 years. Prof. Sticher wrote the obituary in the NL and together with Prof. Hamburger an editorial in *Planta medica*. The assembly stood up in a minute of commemoration.
- Longtime BoD member Prof. Peter Houghton will retire end of December 2008, the president wished him all the best.
- The Executive Council of GA had meetings on Dec 20, 2007 in Graz and on June 23, 2008 in Vienna, the BoD meetings were held on 13 March 2008 in Berlin and on 2 Aug. 2008 in Athens.
- GA participated in a series of Workshops and Symposia:
 - As president of GA Prof. Kopp attended the successful Phytotherapy Conference in Berlin on Febr. 14–16, 2008 and gave a welcome address.
 - The meeting in Bernburg "Plant breeding" organized by Dr. Pank and C. Franz (for GA) followed on 18–21 February 2008 (report in NL 1-2008);
 - Pres. Kopp gave a welcome address and plenary lecture at the 7th Oxford meeting at the University of Mississippi, on 12–16 Apr. 2008 (report in NL 1-08).
 - At the Leiden Symposium "Systems Biology and Medicinal Plants" on 24–26 Apr. 2008, on occasion of Prof. Scheffer's retirement (organized by Verpoorte, Scheffer and Kopp) she gave a welcome address and announced the honorary membership for Prof. JJC Scheffer (report in NL 1-08) and pre-

sented him a photo album (copy in the GA archives).

- At the 12th International Congress PHYTOPHARM 2008, 2–4 July 2008, in St. Petersburg, Russia, she gave a welcome address and a plenary lecture; most of the members of the ExC and some BoD members gave lectures as well; GA will again support Phytopharm 2009 in Bonn;
- Further meetings with collaboration of GA in 2007 were the joint meeting of DPhG, ÖPhG and GA in Erlangen, Germany on Oct. 10–13, 2007 with a postsymposium" of the section "Pharmaceutical Biology" (chair: Prof. Dr. S: Alban) and the mistletoe symposium in Nonnweiler, Germany, on Nov. 8–10, 07.
- Kopp chaired the ESA Gold and WillmarSchwabeAward 2008 juries and informed and invited the winners Prof. Dr. Max Wichtl, Vienna-Austria for ESA Gold and Prof. Oliver Werz, Tübingen-Germany for the Willmar Schwabe Award. The ESA bronze winner 2008 was Dr. Birgit Benedek, Vienna (jury chair Prof. R. Bauer).
- All honorary members were invited to Athens. HMs G. Franz, Nahrstedt, Sticher, Wichtl and Scheffer participated at the congress, HMs Friedrich, Hänsel, Menssen, Schilcher and Sprecher could not attend.
- She supervises and coordinates the GA homepage updating;
- The online subscription of *Planta Medica* for GA members was well accepted in the first year (100 € for back access to 1981 / 60 € for back access to 1998). The next action will be in Oct. 2008 for the subscription for 2009, deadline for payment will be 15 Nov. 2008 (subscription only beginning in Jan.). Members are invited to use this special offer!
- NL 2-07 and 1-08 were sent out per email in Jan. and Jun 2008 (hard copies were sent only to paying members without e-mail address). The NL is the most important link to our members and has tremendously improved, thanks to Prof. Hensel! Deadline for contribution for the next NL 2008-2 is November 20th.

3.2 Reports of the Vice-Presidents

Prof. Dr. Rudolf Bauer:

- Prof. Bauer gave a resumé of the past 6 years of his presidency

and the achievements: protection of the GA logo and brand name of *Planta Medica*, agreement with Thieme (Dec 2007) and PM online (Oct 2007); Willmar Schwabe- and Bionorica Phytoneering-Award, Corporate Identity of GA and a new info flyer, new name of the society, important statements, etc. GA has developed into a worldwide leading and attractive society with an increase of members and nationalities of appr. 25% (Jan. 02: 958 members from 67 countries, Dec. 07: 1258 members from 86 countries), with attractive annual congresses and a lot of invitations to joint meetings.

- In his last ExC meeting as president in Graz on Dec. 20, 2007, he had handed over the GA hammer to new president Brigitte Kopp with very best wishes for a successful presidency.
- He had attended many GA and other meetings in the past year mostly as invited speaker such as Phytopharm 2008, etc. Due to bad flight conditions he had missed his part at the Erlangen congress opening in Oct., so Prof. Alban gave a welcome address.
- He was invited by ASP to write a chapter on German and Austrian Pharmacognosy for the jubilee edition of ASP's 50th anniversary in 2009.

Prof. Dr. Wolfgang Blaschek:

- With Dec. 2007 his interim double function of being vice president and treasurer had ended.
- He had negotiated and signed the contract with the new Gruen data base for the members management in Dec. 2007.
- He had attended several conferences as GA delegate: Stakeholder meeting in Sept in London, Furocoumarin symposium on 29 Nov. in Kaiserslautern, various "KFN and all interested parties meetings" in Berlin and Frankfurt, the Mistletoe symposium in Nov. in Nonnweiler and the "1er. Fiesta de la Planta" in Rayones, Mexico, in April 2008 as invited speaker;
- Together with Prof. Alban he had organized a post symposium workshop in Erlangen at the DPhG congress in Oct 2007;
- He was the main GA organizer of the Phytopharm 2008 meeting in St. Petersburg in July 2008 and gave a plenary lecture.

3.3 Report of the Secretary

Dr. Renate Seitz

- R. Seitz presented the latest statistics: On 1 Aug 2008 GA had in total 1344 members (in 2007 1212) from 86 countries with 11 honorary members, 161 new members since last year (compared to 134 in 2007); 17 members cancelled their membership, 11 members with long time open fees were excluded; at the moment GA has 33 company members. 485 members have to pay reduced fees (students and members from reduced countries).
- In Febr. 2008 a new data base system for the members management was installed that is synchronised for the secretariat and treasurer's office with many new functions. It took some time before it run properly.
- Due to the new system a stricter control for non paying members is possible, every end of the year members having not paid for 3 years will be automatically excluded.
- A new actualized membership list is published in the members' area of our homepage, members are requested to send necessary corrections!
- The collaboration with the organizers of the Athens congress was perfect, many thanks to them!

3.4 Report of the Treasurer

Dr. Bernd Roether and report of the auditors

- Dr. Roether presented the detailed budget of 2007 and reported of the momentary financial situation of GA: The total expenses in 2007 were 63.050 €, the total revenues 63.260 €, balancing in a surplus of 210 €. The situation for 2008 shows a similar development. He admonished the poor paying moral (up to July only half of the expected fees were paid) and reminded all members to take the payment of fees more serious!
- Since the last year's replenishing of the Egon Stahl funds to 51.000 €, the total asset is now again 54.100 €.
- Travel grant budget for 2008 was 10.000 € (TG committee: L. Pieters, chair, AR. Bilia, V. Butterweck)
- As both auditors Profs. H. Schilcher and E. Stahl-Biskup were absent, Dr. Roether gave a short English overview on the main points of their German report (available as copies to take). Both will act as auditors again in 2009.
- He gave a short report on the members management with the new database: After the input of all members' data the annual account has already been per-

formed with the GRUEN Software VEWA; in future annual closures as well as the whole members management will be more easy.

3.5 Discharge of the ExC

By proxy of the absent auditors HM Prof. Nahrstedt asked for the discharge of the treasurer and the whole ExC, that was accepted unanimously by the assembly.

4. Report of the Editor-in-Chief of *Planta Medica* Prof. L. Pieters

The submission of papers is steadily increasing, in 2007 1055 papers were submitted, 232 could be accepted; most papers came from China (48) followed by Germany (24), US (23), Taiwan (20), Korea (19), Brazil (11), Italy (10), Japan (9) and India (8).

Leading topic is again Pharmacology/ Toxicology (109 papers) followed by Nat. Prod. chemistry (37). Citations are also increasing (in 2007 8058), the IF is now at 1.848.

The visibility and availability of PM was improved by special offers for GA members, more mailings and a more active policy of acquiring review papers for special issues.

5. Reports of the Permanent Committees

a) Biological and Pharmacological Activity of Natural Products (Report Prof. Butterweck)

In Athens no workshop was organized, the first workshop of the new chair Prof. V. Butterweck will be held during the Geneva meeting 2009 with the topic "Phytoestrogens – risks and benefits". Panelists were not yet decided.

b) Breeding and Cultivation of Medicinal Plants (Written report Prof. Ch. Franz)

At the 55th GA Congress, Graz 2007 a workshop with the title "Identification and Authentication of plant starting materials" was organized. The ppt-presentations of the three panellists (B. Klier, E. Reich and J. Novak) are available as pdf-format on the GA-homepage. The next workshop of the PC is planned for the 57th Annual congress, Geneva 2009. Thematic not yet decided.

As ICMAP president (International Council of MAPs) he invited to the next World conference on MAPs (WOCMAP 4) in Capetown, SA, on Nov. 9–14, 2008 (organized by ICMAP).

c) Manufacturing and Quality Control of HMPs (Written report Prof. Meier)

A workshop at the GA congress in Graz in 2007 was organized with the topic "Pharmacokinetics of Herbal Medicinal Products: Useful or not?" All presentations are docu-

mented at the GA homepage under "publications". In Geneva, a workshop about "Extract profiles – focussed especially onto pharmacopoeial extracts" is planned.

d) Regulatory Affairs on HMPs (Report Prof. Vlietinck)

Again Prof. Vlietinck had organized a successful half day workshop (95 participants) together with Prof. Alban as chair with the title "Medicinal Herbs: drugs or dietary supplements? What are the legal consequences in terms of quality, safety and efficacy of each option". The panelists respectively presented the standpoints of the European authorities (A. Vlietinck), the authorities of the European Member States (W. Knoess), the European industry (H. Sievers), the US authorities (V. Frankos) and the US industry (M. McGuffin). In the panel discussion, advantages and disadvantages of both the European and US concepts were high-lighted taking into account not only quality, safety and efficacy, but also aspects such as access to the market, cost prize and prospects for innovation of herbal products. The workshop on regulatory affairs of HMPs for next year could be organized on the current regulatory status of herbal preparations such as extracts and tinctures. Eventually Profs. Meier's and Vlietinck's workshops will be organized in a parallel session simultaneously.

e) PC for Young Researchers Workshop (YWR)

In the last BoD Meeting the board decided to establish a 5th PC for YRW. Responsible for that will be an international group of scientists of GA with rotating chairs; this PC will start with its work at the next congress in Geneva (chairs 2009: AR Bilia and A. Hensel). The aim should be to support and interest PhD students in Research on Medicinal Plant and Natural compounds.

6. New name of the Society

Outcome of the opinion poll among all members regarding the new name

Prof. Bauer reported, that in March 2008 1082 members with e-mail addresses were asked for their vote for 1 of 2 proposals of a new name for GA:

Proposal 1:

Society for Medicinal Plant and Natural Product Research – Gesellschaft für Arzneipflanzen- und Naturstoff-Forschung (GA)

Proposal 2:

Society for Natural Product and Medicinal Plant Research – Gesellschaft für Naturstoff- und Arzneipflanzenforschung (GA).

Till May 15 475 answers were returned, 327 members as majority voted for proposal 1, 144 members voted for proposal 2, 4 members voted for no change of the name at all (not requested).

Final voting for the elected version:

GA – Society for Medicinal Plant and Natural Product Research

GA – Gesellschaft für Arzneipflanzen- und Naturstoff-Forschung (e.V.)

Profs. Nahrstedt and Butterweck run the written voting, 77 votes were handed in: 3 votes were not valid, 9 persons voted for no, 65 for yes. So the 2/3 majority (54) demanded by the bylaws was given and the new name will be introduced after accomplishing all formalities (in January 2009).

7. Future GA annual congresses (information: www.ga-online.org)

2009 Geneva, 16–20 August, (organized by Prof. Hostettmann) 1st announcement distributed

2010 Berlin, 29 Aug–2 Sept., organized by Profs. Kolodziej and Melzig

2011 Antalya, Turkey, 4–9 Sept., organizer Prof. H. Baser, Eskisehir, Turkey

2012 Joint meeting, organized by ASP in New York, together with AFERP, GA and PSE;

2013 Münster, Germany, 1 Sept – 6 Sept, organized by Prof. Andreas Hensel.

8. Future symposia and workshops

(information: www.ga-online.org)

2008, 10–12 October Shanghai: International Conference on Traditional Chinese Medicine and Natural Medicine (S-TCM 2008 Shanghai) (organized by Prof. Dean Guo)

2008, 9–14 Nov., WOCMAP 4, in Capetown, SA (organizer Prof. K. Eloff, Pretoria)

2009, 6 March, London workshop on traditional HMPs (organized by M. Heinrich) with GA.

2009, April 6–9: 8th Oxford meeting (organized by Prof. I Khan), again coorganized with GA

2009, May (2 days), TCM workshop Graz (organized by Prof. R. Bauer) with GA support

2009, 8–12 June, EUFEPS, Nice (initiated by Prof. P. Vuorela, organized by Pharm. Sci. Fair). GA will organize a session (on Fri, 12 Jun) “Medicinal Plant

and Natural Product Research”. Lectures: Discovery of new pharmaceutical leads from TCM drugs; Systems biology: A new tool for understanding the pharmacology of Herbal Medicinal Products? Well known European Herbal Medicinal Products – still a pharmaceutical treasure trove?

2009, 17–19 June 2009 Plant Breeding Ljubljana (Prof. J. Novak, Vienna, as GA representative) in collaboration and with support of GA;

2009, 10–12 Sept.: Phytotherapy congress in Berlin (organizer Prof. V. Schulz); GA is invited to cooperate, no costs for GA.

2011, Nov. Mistletoe symposium (organizer Dr. Scheer)

9. Miscellaneous

GA homepage : The homepage is well accepted with regular and frequent hits.

Vienna, Oct., 2008

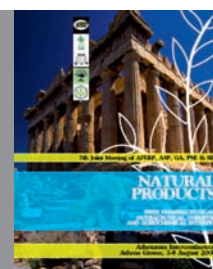
B. Kopp, GA president

Emmering, Oct., 2008

R. Seitz, GA secretary

Meeting Reports

56th International Congress and annual GA meeting 2007 in Athens, Greece



In 1980 for the first time a joint meeting of the related societies AFERP, ASP, GA, PSE was initiated and organized by AFERP in Strasbourg to be repeated every 5 years under rotating organizing hosts. 28 years later it was again AFERP's turn to invite to the 7th Joint meeting together and with the support of ASP, GA, PSE, and for the first time with the Italian Phytochemical Society (SIF). Chairman of the congress was Prof. Leandros Skaltsounis of the University of Athens in Greece (which has a long lasting, already historic relationship to the French natural product's scientific community), co-chairman was the president of the AFERP, Prof. J. Boustie of the University of Rennes, France. Beside the interesting scientific program the city of Athens considered as the basis of occidental civilization and cradle of modern Medicine was surely one of many reasons to attract about 1200 scientists from 90 countries to attend this “summit conference” of Medicinal plant and Natural product research.

The congress was held from August 3 to 8, 2008, at the Athenaeum International Hotel

downtown Athens, an ideal venue to host such a big meeting with huge plenary sessions, many parallel sessions, an exhibition with 25 companies and space for about 1150 posters in 2 sessions. In an unforgettable ambience on a roof terrace in front of the illuminated Akropolis the get-together-party on Sunday evening was the social opening of the congress. The 4-day Scientific Programme started on Monday with welcome addresses of the presidents of all involved societies followed by award sessions with lectures of the awardees of the resp. societies. In the GA award session President Brigitte Kopp announced the honorary membership of former GA president Prof. Dr. J.J.C. Scheffer, awarded honorary member Prof. Max Wichtl with the Egon Stahl award in Gold and Dr. Birgit Benedek with the Egon Stahl award in bronze. Together with Dr. G. Meng of Schwabe, she presented the winner of the Dr. Willmar Schwabe Award of GA in 2008, Prof. Dr. Oliver Werz, Tuebingen who introduced his research in the award lecture “Identification of molecular mechanisms

and targets of boswellic acids from frankincense” (see the resp. laudations in this NL). Prof. Luc Pieters, chair of the 2008 TG committee announced the names of the 15 happy winners of a travel grant (see report of the TG committee). It should be also mentioned that well known and very active GA BoD member Prof. Arnold Vlietinck, Antwerp-Belgium, received the PSE Award silver medal and presented an award lecture with the title “New frontiers in the quality of herbal medicinal products”.

In the dense scientific program 28 plenary and keynote lectures (15 from Europe, 9 from USA and 4 from Asia) introduced the 9 main topics of the conference:

- Drug discovery from natural sources,
- New sources of bioactive natural products: from biodiversity to chemodiversity,
- Cell cycle regulation and natural products,
- Biosynthesis and biomimetic synthesis of natural products,
- Natural products with cosmetic, agrochemical and veterinary interest,



Opening ceremony in Athens

- Bioavailability and quality of herbal drugs,
- Health improvement through dietary phytochemicals,
- Modern approaches to traditional medicines,
- New trends in extraction, separation processes and structure elucidation.

Beside the huge two poster sessions 120 short lectures were presented in 3 parallel sessions (scientific program and abstract books available under www.ga-online.org “previous events” or www.jointmeeting.2008athens.gr).

All plenary speakers were proposed and invited by the involved societies. GA had invited Prof. M. Hamburger, Univ. of Basel-Switzerland, talking on “HPLC-based profiling for natural products leads – GABA₂ receptor modulators and PI3 kinase inhibitors”, Prof. Dr. P. Imming, Univ. of Marburg-Germany, lecturing on “Molecular targets of natural drug substances” and Prof. Dr. H. Stuppner, Univ. of Innsbruck-Austria, speaking about “Innovative strategies for the discovery of lead structures from nature”. As remarkable contributions also should be mentioned: Phytochemicals in hormone physiology (G. Vollmer et al.; Dresden, Germany); Vitamin E isomers and tocotrienols acting on breast and prostate cancer cells (F. Virgili et al., Rome, Italy); C. Constantinou et al., Lefkosia, Cyprus); Active compounds from marine microalgae and macroorganisms (G. Cimino et al., Napoli, Italy; J. Kobayashi, Sapporo, Japan); Antibacterials from plants (S. Gibbons, London, UK); Chemical diversity from the rain forest (D.G. Kingston et al., Blacksburg, Virginia) and several others. Abstracts of all plenary lectures, short lectures and posters are available in the Abstract book that appeared as issue 9, 2008 (volume 74, pages 895–1228) of *Planta Medica*.

Also well accepted were the 2 half day pre-symposia on Sunday afternoon offered by GA: The already traditional young researcher workshop was organized by Anna Rita Bilia (as chair) and Anastasia Karioti,

both from University of Florence together with Th. Efferth, Heidelberg and G. Juergenliemk, Regensburg (see report in this NL). The workshop on Regulatory Affairs on HMPs with the title “Medicinal drugs or dietary supplements? What are the legal consequences in terms of quality, safety and efficacy of each option?” was organized by Profs Susanne Alban, Kiel, and Arnold Vlietinck, Antwerp, and attracted 95 participants.

As usual, the annual members meeting of the Society for Medicinal Plant Research was held during the congress on Tuesday evening (see also report of the members’ meeting). A special GA booth for personal inquiries and the possibility to pay open membership fees in cash was very well accepted by the members. 43 congress participants applied in Athens for GA membership (see welcome address to our new members in this NL). Many thanks to the treasurer’s assistant, Ms. A. Lahse!

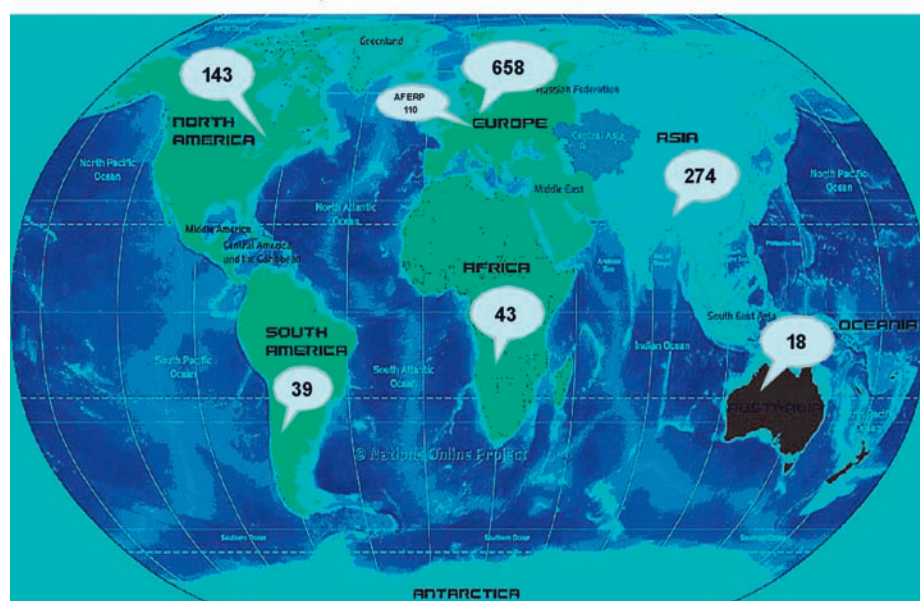
Beside the get-together-party further well accepted highlights were offered for the social program: On Monday evening all congress participants were invited (free!) to the Dora Striatou Amphitheatron on Filopappou hill opposite of the Akropolis in an open air Greek dancing show with Greek food (a hard logistic task for the organizers with almost 1000 show-visitors). The congress dinner was arranged at a sea-side club South of Athens with a magnificent view on the Saronic gulf and islands in the full moon light. The traditional excursion on the last day of the congress offered a cruise to the famous islands of Hydra, Poros and Aegina with botanical and historical insights. Well booked especially by participants from overseas was the great variety of pre- and post-congress tours to antique Greece.

Resumé: The 7th joint meeting was a real unique scientific event. In her closing address GA president Brigitte Kopp called it “the Olympic games of Medicinal Plant and Natural Product Research in Athens 2008” (the Olympic games of Peking had started the same day). In the name of all participants she thanked the organizers and their numerous helpers on and behind the stage and awarded congress chair Prof. Skaltsounis with a “gold medal” in form of a precious old plant picture.

Thanks to our supporting members and sponsors!

Besides the supporting members who sponsored the Joint meeting directly to the Athens organizers (and are named in the final program), we also want to express our special thanks to the sponsors who in particular supported GA for the high expenses of such a Joint Meeting: Dr. Willmar Schwabe GmbH, Karlsruhe, Germany; Swedish Herbal Institute, Valberga, Sweden; Schaper & Brümmer, Salzgitter, Germany; Cognis GmbH, Monheim, Germany. The support was used for the travelling costs of the GA plenary speakers.

Participants from around the world



Dr. Seitz, Prof. Nahrstedt

4th Young Researcher Workshop in Athens

Following the tradition of the last international GA conferences GA organised the 4th Young Researchers Workshop. The workshop took place on Sunday 3rd of August 2008, on the occasion of the 7th Joint Meeting of GA, AFERP, PSI, ASP and SIF in Athens, Greece. It was organised by Prof. Dr. A.R. Bilia and Dr. Anastasia Karioti from University of Florence, Italy, together with Dr. Thomas Efferth (German Cancer Research Center, Heidelberg, Germany) and Dr. Guido Jürgenlierk (University of Regensburg, Germany) as co-chairs. About 75 participants attended the workshop. Overall, 70 abstracts were submitted from young researchers from 26 countries worldwide. The scientific program included 12 lectures of selected young scientists working in the field of Pharmacognosy and Analytical Phytochemistry and covering diverse fields including isolation and structure elucidation of novel compounds, phytochemical analysis on herbal medicinal plants and marine organisms, molecular target biochemical research, analytical innovations in food, medicinal plants and cosmetics, ethnopharmacology and synthesis of natural products.

The names of the candidates who finally presented their work are in alphabetical order:

Abdel-Mageed Wael (University of Aberdeen, UK), Argyropoulou Aikaterini (University of Athens, Greece), Benavides Angelyne (University of Salerno, Italy), Fatmawati Sri (University of Kyushu, Japan), Lategan Carmen (University of Cape Town, South Africa), Lechner Doris (University of Graz, Austria), Papastamoulis Yorgos (University Victor Segalen), Bordeaux, France, Rhourri-Frih Boutanya (University of Orleans, France), Strüh Christian (University of Freiburg, Germany), Vanachayangkul Pattaraporn (University of Florida, USA), Yan Lok Han (University of Paris-Sud 11, France).



Young Researcher Workshop 2008: winner of the best presentations awards, the chairs of the symposium and the GA president

The presentations were of high scientific level and nearly all were of high rhetoric quality. The participation of the audience was intense and enthusiastic. In most cases the panellists were limited solely to the coordination of the discussion between the students making of this workshop a unique opportunity for the participants to expand their own studies by acquiring new ideas, knowledge in a most constructive, friendly and international atmosphere.

Three presentations have been selected and awarded (in alphabetical order):

Ms. Argyropoulou Aikaterini – “Secondary metabolites of the genus *Marrubium*: Strategies of isolation and structure elucidation”

Ms. Fatmawati Sri – “Aldose reductase inhibitors from *Ganoderma lucidum*”

Ms. Rhourri-Frih Boutanya – “Classification of resinous plants based on the LC-MS and the LC-UV finger-prints: Similarities and differences between the plants chemical compositions using ACP and CAH”

From the audience a young researcher, *Mr. Keyvan Dastmalchi*, was also awarded as a token of grateful appreciation for his vivid and most valuable involvement in the discussion.

All awards have been sponsored by Bionorica AG. The donation of the awards was held on Monday August 4.

PHYTOPHARM 2008

12th International Congress Phytopharm 2008 on 2–4 July in St. Petersburg, Russia

Since the opening of the borders, there is an increasing tendency of “East meets West” and vice versa. The annual conference Phytopharm, originally organized by the Interregional Center Adaptogen in St Petersburg, is such a successful endeavour. For the first time GA was invited to participate as co-organizer and co-sponsor in the 12th International Congress Phytopharm 2008. The previous meetings were held either in St. Petersburg and vicinity, but also in Leiden, Netherlands (a city with a spe-

cially close relation to St. Petersburg). Phytopharm 2008 took place in the historic Mendeleev Centre of St-Petersburg State University and St-Petersburg Division of Mendeleev Russian Chemical Society, where in 1869 Dmitri Mendeleev had introduced his periodic table to the scientific community (lecturers spoke under the eyes of a Mendeleev statue and his first still incomplete periodic table). Main organizers were Prof. V. Makarov and Prof. A. Shikov of St. Petersburg and Prof. W. Blaschek, Kiel,

of GA. The general sponsor was Bionorica AG besides many other sponsors.

The comprehensive scientific program attracted almost 200 scientists from Russia, Europe and Asia, an informative international industry exhibition was organized simultaneously. The program covered many important and current aspects of the pharmaceutical sciences and pharmaceutical industry. Invited lecturers, this year Russian and in particular leading GA scientists from Universities, industry and regulatory au-

thorities, along with the submitted oral and poster presentations covered the 8 main topics of the conference:

- Cultivation of medicinal plants according to GAP,
- Novel formulations for herbal medicinal products,
- Ethnopharmacology,
- Quality control for herbal medicinal products,
- Efficacy of herbal medicinal products,
- Antioxidants: proven effects and in vitro versus in vivo correlation,
- Food supplements and herbal medicinal products: comparison and interactions,
- Regulatory affairs for herbal medicinal products in Russia and EU.

GA president Prof. Dr. Brigitte Kopp emphasized in her welcome address, that the search for bioactive Natural Products still is a complex and interdisciplinary pursuit. The engagement with drugs originating from natural sources requires knowledge and expertise in a multitude of scientific areas, such as pharmacology, ethnopharmacology, analytics, computational, analytical, and NP chemistry, *in vitro* screening, cellular signalling, pharmacology, biotechnology and plant conservation as well as cultivation.

She appreciated that in the comprehensive scientific program of Phytopharm 2008 many of these important topics could be introduced by internationally famous experts. Plenary lectures were given by H. Wagner, Munich (“Synergy research: A New Approach to evaluating and rationalizing the efficacy of multi Herbal Drug combinations in Phytotherapy”), V. Tutelyan, Moscow (“Adaptation potential: endogenous and exogenous regulation”), B. Kopp, Vienna (“Herbal medicinal products: From traditional use to proven efficacy”), R. Bauer, Graz-Austria (“Evidence based herbal medicine: Recent progress in Echinacea research”), Y. Vladimirov, Moscow (“Free-radical producing protein structures as a target for antioxidants”), A. Budantsev, St-Petersburg (“Taxonomic biodiversity of medicinal flora of Russia”), R. Verpoorte, Leiden-Netherlands (“Metabolomics, back to basics”), A. Shikov, St-Petersburg (“Medications with nanoparticles for improvement of bioavailability of natural biologically ac-



Phytopharm 2008: GA-Speakers Profs. Verpoorte, Bauer, Makarov and Shikov (the organizers), GA president Kopp, Blaschek, Alban and Wagner

tive substances”), V. Dadali, Saint-Petersburg (“Structure and biological activity of carotenoids, their oxidative derivatives and supramolecular complexes”), W. Blaschek, Kiel-Germany (“Anti-oxidant supplements: preventive agents or risks?”), I. Samylna, Moscow (“Improving and unification of common Pharmacopoeial methods of analysis of raw plant material”), A. Panossian, Göteborg-Sweden (“Pharmacology of adaptogens – from traditional use to the future”) and R. Hiltunen, Helsinki-Finland (“Effect of plant phenolics on gene expression of *P53*”).

PD Dr. Gudrun Abel, Neumarkt, spoke about “Quality of Herbal Medicinal Products – Particularities and Challenges”, Dr. B. Roether, Neumarkt, about “Analysis of the European regulatory environment” and Prof. S. Alban, Kiel about “The Various Monographs on Herbal Medicinal Products in Europe, Development, Relevance, Chances and Problems”.

The 45 short lectures were assigned to 8 seminars of the main topics (simultaneous translation was provided), approx. 80 poster presentations completed the interesting and stimulating program.

A special attraction of the congress were the famous white nights of St. Petersburg to be experienced daily and as an organized event on a night boat trip on the Neva river. Additional social highlights were the Russian banquet (with a lot of Vodka) and the post congress tour to Peterhof, the retreat of czar Peter the Great, called city of fountains. Many thanks to the organizers!

For more information see: www.adaptogen.ru/phyto2008.html or www.ga-online.org > previous events).

Phytopharm 2009 will be held in Bonn, Germany.

Renate Seitz

57th International Congress and Annual Meeting of the Society for Medicinal Plant Research Gesellschaft für Arzneipflanzenforschung – GA



Geneva, Switzerland
August 16–18th, 2009

Welcome to Geneva!

It is a great pleasure to invite you to the 57. International Congress and Annual Meeting of GA.

The 57th Annual Meeting will address classical themes, such as the isolation, structure determination, analysis and bioactivity of natural products.

In addition, there will be sessions such as plants relevant to the problems of aging of the population, natural products and neglected diseases, and anti-cancer agents. Scientific contributions in other topics related to medicinal plant research will also be welcomed.

There will be poster sessions and a special workshop for young scientists and a workshop on regulatory affairs.

Beside the scientific programme, a full social programme will be offered, which will leave you with unforgettable memories of Geneva and its majestic mountains and lake.

*Professor Kurt Hostettmann,
President of the Organizing Committee*

Topics

- Lead finding from Nature
- Conservation and biodiversity issues
- Plants and aging of the population
- Natural products and neglected diseases
- Anti-cancer agents
- HIV and viral diseases
- Quality control and safety assessments of phytomedicines
- Prevention of metabolic diseases by medicinal plants and nutraceuticals
- Cosmetics, flavours and aromas

Workshops

- Young Scientists Workshop (2 parallel sessions on cell culture and analytical methods)
- Regulatory Affairs of Herbal Medicinal Products
- Manufacturing and Quality Control of Herbal Remedies

Biological and Pharmacological Activity of Natural Products
Breeding and Cultivation of Medicinal Plants

Invited Speakers: HRH Prof. Dr. Chulabhorn Mahidol (Thailand)

Call for papers

Short lectures and posters related to the above-mentioned scientific topics or other fields of natural products are more than

welcome. Online abstract submission will soon be available. Abstracts of all accepted contributions will be printed in a special issue of *Planta Medica*.

Everyone who is interested in presenting an abstract is kindly requested to submit it online not later than April 3rd 2009.

All authors should follow the guidelines for the preparation of abstracts. Please note that abstracts sent by fax or regular mail will not be accepted. All abstracts will be reviewed by the Scientific Committee and relevant notifications about acceptance or re-

Preliminary Program

	Sun. Aug. 16	Mon. Aug. 17	Tue Aug. 18	Wed. Aug. 19	Thu. Aug. 20
8H00		Registration			
8h30			Plenary lecture	Plenary lecture	
9h00		Opening Ceremony			
9h30		Opening lecture	Keynote Lecture & short lectures	Keynote Lecture & short lectures	
10h15-10h45		Coffee break	Coffee break	Coffee break	
10h45-12H00	Registration	Award lectures	Plenary lecture	short lectures	
			short lectures		
12h00-14h00		Workshops	Workshops	Workshops	Excursion
14h00-1800		Plenary lecture	Plenary lecture	Plenary lecture	
		Keynote & short lectures	Keynote & short lectures	Keynote & short lectures	
		coffe beak	coffe beak	coffe beak	
15H45-16H15	Workshop Young scientists & regulatory affairs workshops	short lectures	Plenary lecture	short lectures	
16H15-17h15			short lectures		
			Poster session	Plenary lecture	
17h15-19h00				Closing Ceremony & Poster awards	18h00-19H30
18h00-19H30	Get together	Poster session		Symposium diner	18h00-22h00

jection will be sent out to the presenting author by May 8th 2009. The presenting authors must register for the GA 2009 congress before or at the same time as submitting the abstract.

Accepted abstracts will only be printed in the special issue of *Planta Medica* if the registration fee is received before May 30th 2009.

Contact and Information:
ga2009@ch.kuoni.com

Local Organizing Committee:
President: Prof. Kurt Hostettmann,
kurt.hostettmann@pharm.unige.ch,
Ms Karin Megzari:
Karin.Megzari@pharm.unige.ch

Secretariat:

Kuoni Destination Management, Geneva Business Center, Avenue des Morgines 12, CH-1213 Petit-Lancy, Switzerland,
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Fax: +41 22 908 18 35

Other Meetings

Münster, Germany

March 13–14 2009; Young Researcher Workshop. Science on medicinal plants and medicinal plant research: clinical research, pharmacology, phytochemistry and analytical research from graduate students and young researchers for young researchers. Oral presentations, open discussions and posters.

Organized by University of Münster (Profs. T. Schmidt and A. Hensel), University Clinic of Münster (Prof. H. Winterhoff) and Klinik Blankenstein (Prof. A. Beer).

Contact: ahensel@uni-muenster.de;
www.uni-muenster.de/Chemie.pb/.

Münster, Germany

March 16–17 2009; Workshop: The Future of Plant-derived Preparations: Chances and Risks for Product Development and Marketing.

Organized by University of Münster (A. Hensel) and Bundesverband der Arzneimittel-Hersteller, Germany.
Contact: ahensel@uni-muenster.de.

Oxford, USA

April 6–9, 2009; 8th Annual Oxford International Conference on The Science of Botanicals. www.oxfordicbs.org/.

Ljubljana, Slovenia

June 17–21, 2009; 4th International Symposium Breeding Research on Medicinal and Aromatic Plants (ISBMAP2009).
www.isbmap2009.sv.

New Books

Solanaceae and Convolvulaceae: Secondary Metabolites



This comprehensive and interdisciplinary handbook provides a bird's-eye view of two centuries of research on secondary metabolites of the two large Solanales families, Solanaceae and Convolvulaceae. Arranged according to their biosynthetic principles, the occurrence and chemical structures of almost all known individual secondary metabolites are covered, which are found in hundreds of wild as well as cultivated solanaceous ecological, ethnobotanical, ecological, and economic significance of the metabolites is treated. A major aim of this book is the individual phytochemical characterization of the Solanales taxa on the species level. Species are integrated into frameworks of traditional and molecular phylogeny-based classifications. This allows a detailed discussion of chemotaxonomic relationships with regard to all taxon levels up to the order. The text is supplemented by 83 superb color photos of Solanales plants.

A short outline from contents: Classification and system in Solanales, Ornithine-derived alkaloids, Tryptophane-derived alkaloids, Miscellaneous alkaloids, Phenylalanine-derived metabolites, Terpenoids, Metabolites from fatty acids and carbohydrates.

With dozens of beautiful color plates showing Solanales plants. The author, Prof. Eckart Eich, has more than 20 years experience in research of secondary metabolites of Solanales. A comprehensive handbook which for the first time covers all aspects of these plant families, which include many species of great pharmacological and economic importance.

Solanaceae and Convolvulaceae: Secondary Metabolites. E. Eich. Springer Publishers, 2008, 639 pages, 190 illustrations with 83 in color, hardcover, language English; ISBN 978-3-540-74540-2; 199,95 €, 269,-.

Handbook of toxic and psychotropic plants



The book gives a clear and very detailed overview on the most relevant toxic and psychoactive plants. The combined discussion of toxicity and psychoactivity is interesting for readers and opens a highly interesting background on why and how toxicity can be related to psychotropic effects. The book covers more than 1200 plants with about 1000 toxic plants and 200 psychoactive species. Presentation is made within structured monographs with good colour pictures. The toxic and psychotropic effects are clearly related to the

respective secondary metabolites. The phytochemical aspects are on the newest status and many formulas and flowcharts on biosynthetic pathways are in that way that the reader will get all quick and relevant information.

Wink, Michael / Wyk, Ben-Erik van / Wink, Coralie, Handbuch der giftigen und psychoaktiven Pflanzen, ISBN 978-3-8047-2425-9, Wissenschaftliche Verlagsgesellschaft Stuttgart, Germany, 2008, hardcover, 450 pages, German language, 565 colour images, 39 €.

TCM-Drogen und Rezepturen



"Pao Zhi, Zhi Qiao, Zuo" – TCM is sometimes very difficult for European people and especially the nomenclature and the legal properties can make problems. The book presents a synonym system for about 700 TCM herbs with synonyms in German, Latin, and Pinyin. Additionally information for regulations on import, quality assurance



and manufacture of extracts, but not going very into detail. Information on the potential use of the respective TCM material in self-medication and for potential use within pregnancy.

Also a short introduction into the principle of TCM therapy and diagnostics. A nice book for a quick information and for beginners in TCM.

Langner Elke, TCM-Drogen und Rezepturen, ISBN 978-3-7692-4606-3, Deutscher Apotheker Verlag, Stuttgart, Germany, 2008, 135 pages, 18 black-white illustrations, 15 colour images, 11 tables, German language, 19.80 €.

Teedrogen und Phytopharmaka "The Wichtl"

The 5th edition of the great standard book for academics, industry and practical pharmacy at all levels written and edited by the GA honorary member Max Wichtl, awarded 2008 with the "Egon-Stahl-Price in Gold". The newest edition was designed completely new for



getting a modern lay-out. More and actual herbal materials are integrated, the secondary compounds of the different plants were completely revised towards the state of the current science, and the review of the clinical and pharmacological effects is getting related to the active compounds. Rational prove of efficacy is clearly separated from the traditional use of the herbal materials.

A must for every scientist interesting in medicinal plant research, and a standard book for phytotherapy.

Wichtl Max, Teedrogen und Phytopharmaka, ISBN 978-3-8047-2369-6, Wissenschaftliche Verlagsgesellschaft Stuttgart, Germany, 2008, 5 ed. 780 pages, 585 colour images, 307 black.white figures, 450 formulas, German language, 89,90 €.

TCM – Medical Plants and Phytotherapy

On more than 700 pages the relevant TCM herbs are monographed according the chineses pharmacopoeia. The respective monographs are exactly structured with wonderful coloured pictures on the fresh plant and the dried herbal material, enabling to detect in most cases typical macroscopic details for a quick identification. Details are given on the origin of the plants, the harvesting and the post-harvesting treatment. Pao Zhi is given in quantitative details. The sensoric properties, the sorting within the temperature scale and the respective meridians are described. Short details on usual doses, ingredients, pharmacology and use within TCM can help for an effective and sometimes detailed information. A perfect book also for scientists working with TCM!



Köfers Angela and Sun Yutian, Traditionelle Chinesische Medizin, ISBN 978-3-8047-2274-3, Wissenschaftliche Verlagsgesellschaft Stuttgart, Germany, 2009, 730 pages, 690 colour images, 70 tables, German language, 198 €.

GA worldwide

and their Institutes of Pharmacognosy: International, Interesting and Cooperative

We introduce and present two research groups working in the field of medicinal plants and natural products with their special characteristics. In this Newsletter: **Italy.**

Italy holds numerous academic places and we now present two groups which have organized GA conferences in the past: the team of Prof. Vincieri from University of Florence and the team of Prof. Della Loggia from University of Trieste.

University of Florence (Italy) Department of Pharmaceutical Sciences

Address: Via Ugo Schiff 6, I-50019 Sesto Fiorentino, Florence, Italy

Homepage: <http://www.scifarm.unifi.it/CMpro-v-p-40.html>



Prof. Franco Francesco Vincieri (vincieri@unifi.it)

Expertise: scientific background as phytochemist and/or pharmaceutical biologist of more than 40 years. Outstanding expertise in the pharmaceutical technology and legislation of herbal drugs, herbal drug preparations and herbal medicinal products.





Prof. Maria Camilla Bergonzi (mc.bergonzi@unifi.it)

Expertise: LC-MS analysis of natural products, method development and validation for scientific and commercial applications. Stability, improvement of bioavailability and technological features of extracts and herbal medicinal products.



Prof. Anna Rita Bilia (ar.bilia@unifi.it)

Expertise: Isolation and structural elucidation of plant constituents. NMR studies on the quality control and stability testing of extracts and herbal medicinal products. Development of innovative formulations of botanical cosmetics and food supplements, HDPs and HMPs.



Dr. Ieri Francesca (francesca.ieri@unifi.it)

Expertise: HPTLC and HPLC/DAD/MS analysis of secondary metabolites (anthocyanins, secoiridoids, flavonoids and hydroxycinnamic acids) from food and waste matrices.



Dr. Innocenti Marzia (marzia.innocenti@unifi.it)

Expertise: HPLC/DAD and HPLC/MS/MS analysis of extracts from species of agro-alimentary interest and from medicinal plants of traditional medicines.



Benedetta Isacchi (benedetta.isacchi@unifi.it)

Expertise: Development, characterization and evaluation of innovative formulations of vegetal constituents and herbal extracts based on colloidal systems.



Dr. Anastasia Karioti (akarioti@gmail.com)

Expertise: Isolation and structural elucidation (MS, NMR) of natural products. LC-DAD-MS analyses of herbal drugs from traditional medicines. Research interests include also chemosystematics and chemical ecology studies.



Prof. Giovanni Mazzi (giovanni.mazzi@unifi.it)

Expertise: Technological aspects of herbal extracts and natural compounds including calorimetric studies and dissolution tests. Formulation of semisolid preparations.



Prof. Nadia Mulinacci (nadia.mulinacci@unifi.it)

Expertise: Development of methods for qualitative and quantitative analysis of several bioactive metabolites (flavonoids, anthocyanins, secoiridoids, carotenoids, saponins), mainly from plants of alimentary interest, medicinal plants and herbal food supplements.



Prof. Patrizia Pinelli (patrizia.pinelli@unifi.it)

Expertise: Natural phenolic antioxidants, with analytical main focus, recovery of phenolic antioxidants from waste materials of food industry.



Prof. Annalisa Romani (annalisa.romani@unifi.it)

Expertise: Development of methods of qualitative and quantitative analysis of active constituents or for characterizing plant matrices and waste matrices of the agro-alimentary sector having biological interest.



Dr. Pamela Vignolini (pamela.vignolini@unifi.it)

Expertise: Research on bioactive metabolites from plants and analysis of secondary metabolites with special interest in traditional and typical plants (e.g. phaseolus, cabbage and lettuce).

Working areas:

Vincieri research team carrying out diverse investigations directed toward the study of bioactive molecules found in herbal products and vegetal matrices which are of interest in biological and/or alimentary fields aiming to the development of specific methods of extraction, fractionation, isolation and characterization of potentially interesting secondary metabolites for pharmaceutical, alimentary and cosmetic fields.

Studies including plants used in European, American, African and Asian traditional medicine and typical plants of the Mediterranean basin are directed toward the optimization of stability and technological and biopharmaceutical characteristics of herbal products, their extracts and commercial preparations.

Conventional analytical methods such as HPLC and TLC and innovative approaches such as NMR techniques are applied.

Research targeted at optimizing the stability and technological and biopharmaceutical characteristics of herbal products, their extracts and commercial preparations are also carried out. The effects of some excipients and primary and secondary containers of finished products are being evaluated together with the behavior of the bioactive molecules. Some studies are focused on the optimization of technological and biopharmaceutical characteristics through the formation of supramolecular complexes with cyclodextrins, ethosomes, liposomes and micelles. One aim is to evaluate the inclusion complex with cyclodextrine and the formation of micelles using common surfactants and new derivatives of ascorbic acid. In addition, evaluation of solubility and dissolution rate of these complexes are undertaken.

Waste matrices in the agro-alimentary sector, such as olive residues and waste waters from extra virgin olive oil pressing, musts from the wine-making process, remnants from pruning of Mediterranean area, wastes from artichoke processing were also included in the studies. Analytical tests are carried out in order to obtain standardized extracts with elevated biological value to be used as food supplements and/or in the pharmaceutical or cosmetic fields.

Three recent publications, representing the working group:

A. Romani et al. (2007) Evolution of minor polar compounds and antioxidant capacity during storage of bottled extra virgin olive oil. *J. Agric. Food Chem.* **55**, 1315–1320.

MJ Oliveras-Lopez et al. (2007) Study of the phenolic composition of spanish and italian monocultivar extra virgin olive oils: distribution of lignans, secoiridoidic, simple phenols and flavonoids. *Talanta* **73**, 726–732.

R. Coniu et al. (2007) Dose–Effect study on the antioxidant properties of leaves and outer bracts of extracts obtained from Violetto di Toscana artichoke. *Food Chem.* **101**, 524–531.

**The “speciality”
or the unique
selling proposition:**

The research is diversified into different fields, analytical phytochemistry, quality control and pharmaceutical technology applied to herbal drugs, herbal drug preparations, herbal medicinal products, botanical food supplements and some “special foods” such as grapes, wines, olive and olive oil. Specific methods of extraction, fractionation, isolation and characterization of potentially interesting secondary metabolites are applied both to herbal drugs and vegetal matrices including agro-chemical wastes. One of the main fields of research is represented by the optimization of stability, the improvement of bioavailability and technological features of herbal drug preparations and herbal medicinal products by the development of innovative formulations including micro- and nanocarriers. Most of the basic research is focused to an industrial application. The variety of research interests in our group led to an interdisciplinary collaboration with various international and national co-operations.

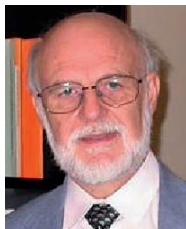
Running projects:

Toscana Life Sciences foundation: project “ORPHAN 0108- Developing of innovative formulations of natural antimalarial drugs and combination therapies to enhance activity”
Cassa di Risparmio di Firenze: “Synergism of artemisinin and derivatives with natural constituents for the antimalarial chemotherapy”
Aboca s.p.a. “Stability of phytocomplexes”
Officina Profumo-Farmaceutico di Santa Maria Novella: “Chemical characterisation of complex matrices based on essential oil, optimization of their stability and technological behaviours”
Sigma Tau s.p.a.: “Malaria” Project RS_S055000- Optimization of extraction and isolation of active constituents from *Artemisia annua* L.”
University of Florence: “HMPs and Botanical Food Supplements: screening of new matrices and formulations to optimise their quality and safety”.
Regione Toscana: “Project for the protection of biodiversity-Characterisation of the antioxidant constituents of waste materials of artichoke cultivar violet of Tuscany to be used for pharmaceutical and cosmetic applications”
MIUR-Regione Toscana: “Sustainable utilisation of tissues of nettle and broom for the alimentary, textile and pharmaceutical sectors”.
RACE-CleanEnergy: “Sustainable utilisation of vegetal biomasses to obtain tannins for the textile and pharmaceutical sectors”.

**University of Trieste
Department of Materials and Natural Resources**

Address:

Department of Materials and Natural Resources, Via A. Valerio 6, 34127 Trieste, Italy



Prof. Roberto Della Loggia (roberto.della.loggia@econ.units.it)

Expertise: Research in medicinal plants and other natural products. *In vivo* pharmacological screening of plant extracts and fractions with anti-inflammatory, analgesic and central nervous system activities. Bioassay-oriented fractionation to individuate the active principles.



Prof. Aurelia Tubaro (tubaro@units.it)

Expertise: Pharmacological and toxicological studies of natural products. Bioassay-guided fractionation of plant materials to identify the relevant active/toxic principles. *In vivo* and *in vitro* toxicological studies on algal toxins. Characterization of the toxicological risk due to marine biotoxins in seafood and recreational waters. Development of new methods to detect algal toxins.



Dr. Silvio Sosa (silvio.sosa@econ.units.it)

Expertise: *In vivo* and *in vitro* studies on the pharmacological and toxicological properties of natural substances. *In vivo* studies to evaluate the anti-inflammatory, analgesic and central nervous system activities. Bioassay-oriented fractionation to focus the active principles.

Working areas:

Drug discovery from medicinal plants: Pharmacological studies on medicinal plants, identification of the active principles and of their mechanism of action (anti-inflammatory, antimicrobial, analgesic and central nervous system activities, mainly by *in vivo* methods).

Risk characterization of herbal drugs: Acute and short-term toxicological studies on medicinal plants.
Toxicology and risk characterization of algal biotoxins: *In vivo* and *in vitro* studies on the toxic effects and the mechanisms of action of algal biotoxins.
Set up of new methods and biosensors for the quantification of algal biotoxins: Set up of structural assays to detect microalgal toxins in seafood, phytoplankton and seawater, and functional assays, based on their mechanism(s) of action. Set up of biosensors to improve the sensitivity of these assays.

Three 2008 publications representing the working group:

Tubaro A et al. (2008) Ultrastructural damage to heart from repeated oral exposure to yessotoxin. *Toxicol* 51: 1225–35.
 Tubaro A et al. (2008) Effects of yessotoxin (YTX) on the skeletal muscle: an update. *Food Addit Contam* 25: 1095–100.
 Dell'Ovo V et al. (2008) *In vitro* effects of yessotoxin on a primary culture of rat cardiomyocytes. *Toxicol Sci*, in press.

The “speciality” or unique selling proposition:

The research is dedicated to the bioactivity and safety of natural products for their use in health care and for their potential as new drugs. The unique selling proposition is the expertise in the *in vivo* pharmacological/toxicological studies on medicinal plants and their active/toxic principles.
 The research combines the expertise in the toxicological risk assessment of algal biotoxins as well as in the setting up of new sensitive, specific and rapid methods for their detection and quantification in the producing organisms, water or food.

Running projects:

“PhytoVet” (funded by Friuli-Venezia Giulia Region, aimed to develop new phytotherapeutic agents useful in veterinary medicine); “Senstox” (funded by Friuli Venezia Giulia Region, aimed to develop an immunoassay and a biosensor of high sensitivity to detect palytoxin(s) in seafood, phytoplankton and/or seawater); “Marine biotoxins in Italian coastal waters: characteristics, origin, actions” (funded by the Italian Ministry of Instruction, University and Research).

The next GA newsletter issue: GA in India

Recent thesis on Medicinal Plant Research



(Notices of Ph.D. and diploma theses to the editor are welcome any time!)

Ph.D. thesis (2008) Polysaccharides from *Ribes nigrum* L., *Jatropha curcas* L. and *Mimosa tenuiflora* (Willd.) Poir.: Isolation, characterization and influence on cell physiology of human keratinocytes and fibroblasts. By: Dipl. Biol. Janina Zippel; Promotor: Prof. Dr. Andreas Hensel, Institute for Pharmaceutical Biology and Phytochemistry, University of Münster, Germany.

Ph.D. thesis (2008) Establishment of NF- κ B1 and COX-2 Gene Expression Assays in THP-1 cells for Bioassay-Guided Isolation of Anti-inflammatory Compounds from TCM Drugs and Identification of Active Compounds from *Cinnamomum cassia*. By Sandra Gusenleitner; Promotor: Prof. Dr. R. Bauer; Inst. Pharm. Sci., University of Graz, Austria.

Ph.D. thesis (2008) Pharmacological and phytochemical investigations of Thai medicinal plants. By Chanai Noysang; Promotor: Prof. Dr. R. Bauer; Inst. Pharm. Sci., University of Graz, Austria.

Ph.D. thesis (2008) Phytochemical screening of the flowers from *Aloe vera* (L.) Burm.f. (*Aloe barbadensis* Mill.) and deter-

mination of their antioxidative capacity. By: Shirin Keyhanian; Promotor: Prof. Dr. E. Stahl

Ph.D. thesis (2008) Establishment of functional cannabinoid receptor test systems and evaluation of ligands derived from *Echinacea pallida*. By Kathrin Nickl; Promotor: Prof. Dr. J. Heilmann and Prof. Dr. R. Seifert, University of Regensburg.

Ph.D. thesis (2008) Synthesis of prenylated chalcones from hops and determination of their cytotoxic and anti-oxidative activity. By Susanne Vogel; Promotor: Prof. Dr. J. Heilmann, University of Regensburg.

Ph.D. thesis (2008) Ethnobotanical survey and biological screening of medicinal plants from Vanuatu. By Gesine Bradacs; Promotor: Prof. Dr. J. Heilmann, University of Regensburg.

Ph.D. thesis (2008) Redox potential and metabolic stability; development of high-throughput assays for early compound profiling. By: Anabel Felix; Promotor: Prof. M. Hamburger, Department of Pharmaceutical Sciences, University of Basel, Switzerland.

Ph.D. thesis (2008) Selected natural products and their influence on the endothelial nitric oxide synthase system. By: Christoph Alexander Schmitt; Promotor: Prof. V. Dirsch, Department of Pharmacognosy, University of Vienna, Austria.

Ph.D. thesis (2007) Studies on influence of plant extracts and polyphenolic natural products on alpha-amylase activity. Focused on *Cynara cardunculus* L. ssp. *flavescens* Winkl and its components. By: Ines Funke; Promotor: Prof. Dr. Matthias F. Melzig, Free University Berlin, Germany.

Ph.D. thesis (2007) 3 β -Hydroxysteroid-dehydrogenasen aus *Digitalis lanata* und *Erysimum crepidifolium*. By: Jödis Franckenstein; Promotor: Prof. Dr. W. Kreis, Pharmazeutische Biologie, University of Erlangen-Nuernberg, Germany.

Master Thesis (2008) Trennung von PIP2 Isomeren mit LC-MS. By: Johannes Rogger; Promotor: Prof. M. Hamburger, Department of Pharmaceutical Sciences, University of Basel, Switzerland.

Master Thesis (2008) Arzneipflanzen bei Erkrankungen des rheumatischen Formenkreises-Eine Analyse der Europäischen Kräuterbücher des 16. und 17. Jahrhunderts. By: Caroline Berset; Promotor: Prof. M. Hamburger, Department of Pharmaceutical Sciences, University of Basel, Switzerland.

Master Thesis (2008) Identifizierung von GABA-A Rezeptor Liganden mittels HPLS-profiling. By: Caroline Sager; Promotor: Prof. M. Hamburger, Department of Pharmaceutical Sciences, University of Basel, Switzerland.

Master Thesis (2008) Chemisches Profiling von Goji Früchten. By: Florian Sarkar; Promotor: Prof. M. Hamburger, Department of Pharmaceutical Sciences, University of Basel, Switzerland.

Master Thesis (2008) Identification of TACE (ADAM17) binding protein by MS. By: Denise Meoli; Promotor: Prof. M. Hamburger, Department of Pharmaceutical Sciences, University of Basel, Switzerland.

Master Thesis (2008) Zusammensetzung von Indigo naturalis. By: Nathalie Sedlacek; Promotor: Prof. M. Hamburger, Department of Pharmaceutical Sciences, University of Basel, Switzerland.

Master-thesis (2007) Structure and function of the enzyme progesterone 5 β -reductase from *Digitalis lanata*. By: Thorn Andrea; Promotor: Prof. Dr. W. Kreis, Pharmazeutische Biologie, University of Erlangen-Nuernberg, Germany. Diploma-thesis (2008) Steroidmodifizierende Gene in *Erysimum ssp.* (Brassicaceae). By: Irmischer Stefanie; Promotor: Prof. Dr. W. Kreis, Pharmazeutische Biologie, University of Erlangen-Nuernberg, Germany.

Diploma-thesis (2008) Reinigung und Charakterisierung der 21-0-Malonyl-esterase aus *Digitalis purpurea*. By: Schneider Stefanie; Promotor: Prof. Dr. W. Kreis, Pharmazeutische Biologie, University of Erlangen-Nuernberg, Germany.

Diploma thesis (2008) Chemische Untersuchung von *Passiflora incarnata* hinsichtlich Inhaltsstoffen mit Benzoflavonstruktur. By: Walter Amberger; Promotor: a.o.Prof. L. Krenn, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2008) Untersuchungen zur Optimierung der in vitro-Vermehrung von *Drosera rotundifolia* in Temporärrimmersions-System. By: Hannes Einfalt; Promotor: Prof. B. Kopp, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2008) Evaluation of the traditional and well-established use of *Hyperici herba*. By: Dagmar Gruber; Promotor: Doz. R. Länger, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2008) Phenolische Inhaltsstoffe in *Achillea millefolium* L. s.l. – Phytochemische Charakterisierung und pharmakologische Testung. By: Nora Geisz; Promotor: Prof. B. Kopp, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2008) Versuche zur Isolierung und Charakterisierung von Alkaloiden aus *Chiazospermum erectum* Bernh.. By: Cornelia Rammer; Promotor: a.o.Prof. S. Glasl, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2008) Valepotriate und Lignane in *Valeriana radix* – Untersuchungen zu den am Adenosin-Rezeptor wirksamen Substanzklassen. By: Martina Hintner; Promotor: Prof. B. Kopp, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2008) Isolation, characterisation and structure analysis of bioactive natural products from rainforests flora. By: Andreas Vallant; Promotor: Prof. B. Kopp, Department of Pharmacognosy, University of Vienna, Austria; Prof. G. Tamayo-Castillo, INBio, Costa Rica.

Diploma thesis (2008) Improvement of solubility and stability of *Hypericum phloroglucinols* by cyclodextrins. By: Petrina Visnja; Promotor: Prof. B. Kopp, Department of Pharmacognosy, University of Vienna, Austria; Prof. A. R. Bilia, Dipartimento di Scienze Farmaceutiche, University of Florence, Italy.

Diploma thesis (2008) Untersuchung der Radikalfängerwirkung Österreichischer Rotweine. By: Anna Waldmann; Promotor: a.o.Prof. L. Krenn, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2008) In vitro-Vermehrung von *Dendrobium huoshanense* im Temporärrimmersions-System. By: Christine Traxler; Promotor: Prof. B. Kopp, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2008) Untersuchungen zur antiproliferativen Wirkung eines arylierten Nitroimidazoles (IL75) auf vaskuläre glatte Gefäßmuskelzellen. By: Shabnam Jooya; Promotor: Prof. V. Dirsch, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2008) Isolierung von Wirkstoffen aus *Dryopteris filix mas*. By: Nicole Ritter; Promotor: a.o.Prof. G. Reznicek, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2008) Isolierung polarer Flavonoide aus der mongolischen Arzneipflanze *Dianthus versicolor* Fisch.. By: Tina Radovic; Promotor: a.o.Prof. S. Glasl, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2008) Abschätzung des allergenen Potentials in Asteraceen mittels DC. By: Tamara Pils; Promotor: a.o.Prof. G. Reznicek, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2008) Charakterisierung und Wirkung phenolischer Inhaltsstoffe ausgewählter österreichischer Rotweine. By: Marina Neckam; Promotor: a.o.Prof. G. Reznicek, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2008) Untersuchungen zur in vitro-Kultivierung von *Stemosa tuberosa* Lour.. By: Roman Leszkovits; Promotor: Prof. B. Kopp, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2008) Phytochemical and pharmacological investigations of *Cinnamomi cortex* und *Cinnamomi ramulus* (in German). By: Christina Hochfellner; Promotor: Prof. Dr. R. Bauer; Inst. Pharm. Sci., University of Graz, Austria.

Diploma thesis (2008) Phytochemical Investigations of *Drimys winteri* (Winteraceae) and *Talauma gloriensis* (Magnoliaceae), as well as of *Tilletia* spp. (in German). By: Barbara Gröblacher; Promotor: Prof. Dr. R. Bauer; Inst. Pharm. Sci., University of Graz, Austria.

Diploma thesis (2008) Screening of anti-inflammatory and analgesic active Chinese herbs on inhibition of NF- κ B1 expression in THP-1 cells. (in German). By: Birgit Kopeinig; Promotor: Prof. Dr. R. Bauer; Inst. Pharm. Sci., University of Graz, Austria.

Diploma thesis (2008) Establishment of monographs of the Chinese herbs *Radix Angelicae dahuricae* (Baizhi), *Radix Angelicae sinensis* (Danggui) and *Radix Angelicae pubescentis* (Duhuo) for the European Pharmacopoeia. (in German). By: Marion Feiel; Promotor: Prof. Dr. R. Bauer; Inst. Pharm. Sci., University of Graz, Austria.

Diploma thesis (2008) Investigations on the falcarinol content of carrots (*Daucus carota* L.) by LC-MS. (in German). By: Verena Getzinger; Promotor: Prof. Dr. R. Bauer; Inst. Pharm. Sci., University of Graz, Austria.

Diploma thesis (2008) Investigation of Chinese Medicinal Plants for Inhibition of COX-2 Gene Expression in THP-1 cells. By: Nadine Otto; Promotor: Prof. Dr. M. Müller, Inst. Pharm. Biol. University of Würzburg, Germany and Prof. Dr. R. Bauer; Inst. Pharm. Sci., University of Graz, Austria.

Editorial remark

All contributions for the GA-Newsletter are welcome. Deadline for submission for the next edition is fixed to May 20th 2008. Please send all contributions to: Prof. Dr. A. Hensel, ahensel@uni-muenster.de.