Society for Medicinal Plant and Natural Product Research Gesellschaft für Arzneipflanzen- und Naturstoff-Forschung e.V.



Message from the President



Dear members,

the last annual congress of GA, held in Berlin, Germany (together with the 7th Tannin Conference as Presymposium), was again very well attended and successful. You will find a special report in this Newsletter. We could attract especially many young scientists from all parts of the world. So the GA meeting became again a platform for an exchange of knowledge and ideas between scientists from different regions. On behalf of GA, I want to thank the organizers of the congress, Profs. Matthias Melzig and Herbert Kolodziej and their supporting team. They have put together a very attractive scientific and social programme, and have set up a perfect organization, so that everybody felt very pleased. They did an excellent job and we will keep the Berlin meeting in best remembrance. I am also very grateful to the sponsors who allowed to keep the fees relatively small.

More than 650 abstracts of the presentations have again been published in Planta Medica, the official organ of our Society (see Planta Medica 76 (12), 2010 and GA homepage). I want to thank the publisher, Thieme Verlag Stuttgart, Dr. Regina Wenzel, the issue editors Profs. Matthias Melzig and Herbert Kolodziej very much for all their efforts and for the good collaboration.

During the congress, the Dr. Willmar Schwabe-Award of GA was awarded for the third time, winner of the 2010 award is Prof. Dr. Jürg Gertsch (Switzerland). Dr. Melanie Laszczyk (Germany) has been announced as the winner of the Egon Stahl award in Bronze 2010. Prof. Dr. Arnold Vlietinck (Belgium) was awarded the Honorary Membership of the GA in recognition of his extraordinary contributions to medicinal plant research and his long and intense engagement for the aims of our society. As in previous years, GA has also supported young scientists with travel grants.

The attractiveness of medicinal plant research can be seen in the number of scientists attending our meetings/workshops in 2010 (exemplary 9th Annual Oxford International Conference on the Science of Botanicals, April 2010, Mississippi, U.S.A.; 14th International Congress "Phytopharm 2010", July 2010, St. Petersburg, Russia; 3rd Shanghai International Conference on Traditional Chinese Medicine and Natural Medicine, October 2010, Hangzhou, China). Due to the international importance of medicinal plant research, such global networking is extremely necessary and fruitful.

The next and 59th annual congress of GA will be held in Antalya (Turkey) and will be organized by Prof. Baser and his team. 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 (http://www.ga2011.org/).

The BoD of GA has decided to award an increased number of travel grants in 2011. In total 15.000 € will be spent for PhD students and post docs in order to support them to be able to attend the next annual congress.

Besides our annual congress, GA is again coorganizing several other symposia on medicinal plant and natural product research during the year 2011, and I hope that you can attend some of these meetings as well. You can find the corresponding information on our website (www.gaonline.org).

I am very happy that we can announce a further award of GA in 2010/11: the Dr. Willmar Schwabe Research Scholarship for Young Scientists of the Society for Medicinal Plant and Natural Product Research. This scholarship is sponsored with 10.000 € and will support research of young scientists, especially from developing countries in leading research institutions. On behalf of GA, I want to thank Dr. Willmar Schwabe GmbH & Co. KG very much for this scholarship. The promotion of young scientists is a major mission of GA, we have thus added a new menu item "Young Researchers" to the left menu bar of the homepage. This provides a direct link to a number of relevant topics for our young members.

We are observing an increasing international interest in a membership in GA and have recently achieved about 1500 members from more than 80 nations; I want to welcome all colleagues who have joined our Society in the last year as new and active members of the GA family.

Finally I wish you a healthy, lucky and successful year 2011 and I am looking forward to seeing many of you in Antalya.

Cordially

3 rigita 4

Brigitte Kopp, GA president



Notes to all GA members

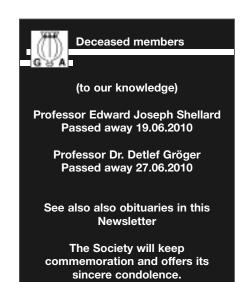


Editorial remark

All contributions for the GA-Newsletter are welcome.

Deadline for submission is fixed to Mai 20th 2011.

Please send all contributions by e-mail to: Prof. Dr. A. Hensel University of Münster, Institute for Pharmaceutical Biology and Phytochemistry, Hittorfstrasse 56, D-48149 Münster, Germany ahensel@uni-muenster.de



A new profile for Planta Medica

Science keeps on moving very fast and so is Planta Medica. Due to the growing impact worldwide of the field of medicinal plant and natural product research, and the appeal of Planta Medica as a scientific forum, the number of submitted manuscripts is increasing year by year, and is well over 1,100 now on an annual basis. Whereas the 1000th manuscript was received in 2009 on 14 November, this number has already been reached in 2010 on 19 October. Anticipating this tendency, the Publisher and the Editorial Board had already decided to increase the number of issues of Planta Medica to 17 in 2010, and from 2011 on 18 issues will be published. Since Planta Medica is the official organ of GA - the Society for Medicinal Plant and Natural Product Research - one of these issues is devoted each year to the annual congress of GA, and is the official book of abstracts of the congress. In 2010, this meeting was organised by Matthias Melzig and Herbert Kolodziej in Berlin from 29 August till 2 September 2010 (Planta Medica 2010; 76: 1163-1374). Next year's meeting will be organised in Antalya by Hüsnü Baser from 4 till 9 September 2011, another indication of the continuously growing globalisation of GA. Again one of the Planta Medica issues of 2011 will contain all abstracts of the presentations at this

In addition to these congress issues, the *Planta Medica* policy of publishing two special issues each year will be continued. In 2010, issue 11 was a Special Issue on Cancer Therapy with Natural Products, with Thomas Efferth as guest editor, and issue 17 a Special Issue on Traditional Chi-

nese Medicine, with Rudolf Bauer and Kelvin Chan as guest editors. In 2011, again two special issues are scheduled, one dealing with Tropical Diseases, and a second one containing selected contributions from the Annual Congress in Berlin, 2010. In the light of the steadily growing number of manuscript submissions from continuously diverting fields of interest, the Editorial Board has also decided to reprofile the journal and to focus the journal on its core competencies. From 2011 on, *Planta Medica* will have the following 4 sections:

- 1. Biological and pharmacological activity (including biological screening studies);
- Pharmacokinetic investigations and clinical studies (pharmacokinetic investigations examining the kinetics of drug disposition and bioavailability including the use of in vitro, in vivo and human studies);
- 3. Natural Product Chemistry;
- 4. Analytical Studies.

This implies that articles on the former sections of plant biochemistry, plant molecular biology and plant biotechnology will no longer be published. This field is covered by many more specialised journals. By narrowing the scope of the journal, more space will be created for submissions in the core fields of *Planta Medica*.

I would like to invite all GA members to submit their research papers that fit into this profile to "our" journal *Planta Medica*, the official organ of GA – the Society for Medicinal Plant and Natural Product Research!

In addition, in order to further increase the scientific quality of manuscripts published



in *Planta Medica*, even higher standards will be imposed at the incoming level. *Planta Medica* will only accept the most interesting pharmacological investigations of well-characterised extracts and pure natural compounds, as well as ground-breaking pharmacokinetic and clinical studies. It will further focus on the isolation and structure elucidation of interesting new compounds, and on innovative analytical studies reporting new approaches or techniques.

For the fourth consecutive year the impact factor of Planta Medica has increased and is 2.037 now; this is accompanied by a growing total number of citations to Planta Medica. The Editorial Board of the journal is confident that reprofiling the journal and the new policy that has been set will continue to support its further development as a high quality journal in the field of medicinal plant and natural product research. To achieve this, the Editors need the continuing support of many scientists who review and comment on the submitted manuscripts. The Editorial Board and the Publisher of Planta Medica gratefully acknowledge the time-consuming but highly valuable efforts provided by the reviewers on a voluntary basis.

I wish you all a successful and stimulating 2011!

Prof. Dr. Luc Pieters, Editor-in-Chief



Message from our Webmaster

With the aim of improving our homepage, two new features have been implemented. Starting August 2010 visitors have an option to quickly get basic informations about GA in 20 different languages, right from the starting home page (http://www.ga-online.org). This feature will also help to spread information about GA through internet search engines, and the like.

The promotion of young scientists is a major mission of GA. Thus, by December

2010 we have added a new menu item "Young Researchers" which links to numerous relevant topics. Apart from the benefit for GA members, this new content will also surely attract putative new GA members.

Any comments and suggestions concerning the homepage are always welcome!

Prof. Dr. Christoph Wawrosch, GA Webmaster





Society for Medicinal Plant and Natural Product Research Gesellschaft für Arzneipflanzen- und Naturstoff-Forschung e.V.



About

Membership

Awards

Young Researchers

Events

Members Area

Contact

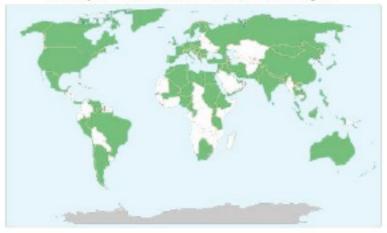
Links



Welcome to GA!

Welcome on the website of the Society for Medicinal Plant and Natural Product Research (GA). We are an international scientific society with members from all over the world. For basic information on our society please click on one of the languages on the right.

As of May 2010. GA members come from countries marked green:



PLANTA MEDICA online only subscription at reduced rates exclusively for GA members Basic Information

Bulgarian Estregoni Norwegian

Chinese 中文 Polish Polski

Dutch Nederlands Portuguese Português

English English Romanian Români

Finnish

Russian Pytoxik suux

French

Slovak Slovečina

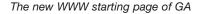
German

Spanish Español

Greek Monwai Swedish

Hungarian Magyar Svenska Thai

Italian Instiguo Turkish Tukke





The GA board (executive and advisory board, secretary and newsletter and Planta Medica editors) at work: many discussions and plannings before the Berlin GA conference in August 2010.

Notes from the Society

Anouncement for Egon-Stahl-Award in Gold 2011





The Egon-Stahl-Award in Gold is the highest scientific honour of the Society for Medicinal Plant and Natural Product 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 prize will be awarded

during the annual congress of the Society for Medicinal Plant and Natural Product Research. The candidate will have the opportunity to present a scientific contribution. Nominations can be made by all regular members of the Society for Medicinal Plant and Natural Product Research. Nominations of oneself can not be considered. Nominations must be submitted to the President of the Society for Medicinal Plant and Natural Product Research until 1st. of March 2011.

The following must be enclosed with the nomination

- a detailed acknowledgment of the scientific works
- names of further experts who could be consulted.

The President, the Vice-Presidents, the Treasurer and the Secretary of the Society

for Medicinal Plant and Natural Product Research will give expert advice about the nominations submitted and make a selection. The President is free to consult further experts.

The Egon-Stahl-Award in Gold is endowed with € 5.000.

All documents have to be submitted in **electronic form** (as CD in 5 copies). Deadline for submissions is **March 1, 2011.**

Prof. Dr. Brigitte Kopp, GA president

Documents to be sent to:

Prof. Dr. Brigitte Kopp, Department of Pharmacognosy, University of Vienna, Centre of Pharmacy, Althanstr. 14, A-1090 Vienna, Austria



Anouncement for Egon Stahl-Award in Silver 2011



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 € 3.000 should be awarded to scientists up to the age of about forty, who have published outstanding scientific work during the years following their graduation. In 2011 the ESA Silver will be given during the 59th International congress and annual meeting of GA in Antalya on Sep 4-9, 2011 (www.ga2011. org). Members of the Society for Medicinal Plant and Natural Product Research (GA) are invited to submit nominations for candidates together with supporting data to the president of GA. 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 5 copies). Deadline for submissions is **March 15, 2011.**

Prof. Dr. Brigitte Kopp, GA president

Documents to be sent to:

Prof. Dr. Brigitte Kopp, Department of Pharmacognosy, University of Vienna, Centre of Pharmacy, Althanstr. 14, A-1090 Vienna, Austria

Anouncement for the Bionorica Phytoneering Award 2011 of GA – Society for Medicinal Plant and Natural Product Research

The Bionorica Phytoneering Award (BPA) acknowledges outstanding research in the field of development and application of phytopharmaceutical products. The award is endowed with 10,000 € by the endowing sponsor Bionorica SE, 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, in **electronic form** (as CD in 5 copies) until **April** 15, 2011.

The Bionorica Phytoneering Award will be bestowed during the annual 59th GA congress in Antalya, Sep 4–9, 2011, (www. ga2011.org), the awarded scientific results shall be presented during the annual congress in a lecture of half an hour (detailed information here).

Prof. Dr. Brigitte Kopp, GA president

Documents to be sent to:

Prof. Dr. Brigitte Kopp, Department of Pharmacognosy, University of Vienna, Centre of Pharmacy, Althanstr. 14, A-1090 Vienna, Austria



The symbol of the Bionorica Pytoneering Award "Key to Science"

Announcement for the Dr. Willmar Schwabe Research Scholarship for Young Scientists

Awarding Institution: Society for Medicinal Plant and Natural Product Research (GA) Endowing Sponsor: Dr. Willmar Schwabe GmbH & Co. KG, Karlsruhe (Germany) Objective: The aim of the Dr. Willmar Schwabe Research Scholarship for Young Scientists is to support research of young scientists, especially from developing countries in leading research institutions. Projects focusing on pharmacological or clinical research of phytopharmaceuticals and their active substances are particularly welcome. The award is exclusively used for travelling and living costs of the awardee and not for consumables. A duration of at least 6 months is manda-

Endowment: 10.000 EURO

Criteria for Application:

- Advanced (year 2 onwards) PhD students and postdocs.
- In case of similar scientific quality of applications applicants from developing countries shall have priority.
- GA membership for at least one year prior to the application.
- Age: preferably 30 years of age (postdocs) or younger (PhD students).
- The hosting institution states in the Letter of Acceptance that it is prepared to cover the cost for the consumables used for the research project, that the student will have an adequate laboratory infrastructure and that a tutor is assigned, who supervises the applicant during his/her working period.

- Documents for Application:
- Letter of Motivation (applicant)
- Letter of Support (supervisor)
- CV and list of publications
- Project description including experimental design, time schedule and justification why the research shall be performed in the respective institution
- Letter of Acceptance (hosting institution)
- Confirmation of the host institution to cover the laboratory costs (consumables)
- Specification of costs for travelling and living

All documents have to be submitted to the president of the Society for Medicinal Plant and Natural Product Research in electronic form (as CD-Rs in 5 copies) until a fixed deadline.



Jury: The president of the Society for Medicinal Plant and Natural Product Research appoints at least 2 independent experts to evaluate and compare the submitted applications.

The jury will decide on the basis of the expertises and select the winner.

The jury consists of the president and the vice-presidents of the Society for Medicinal Plant and Natural Product Research, the editor-in chief of Planta Medica and a representative of Dr. Willmar Schwabe GmbH & Co. KG.

Further details: The Dr. Willmar Schwabe Research Scholarship for Young Scientists

will be bestowed in a ceremony during the Annual Congress of the Society for Medicinal Plant and Natural Product Research. The scientific results of the project shall be presented during the next annual congress preferably in a short lecture (or at least as a poster).

The awardee has to prepare a final report on the research supported by this grant and its outcome. This report has to be signed by the head of the research institution. A copy of the signed report has to be sent to the GA president and to Dr. Willmar Schwabe GmbH & Co. KG. In case of publication of the results the award has to be mentioned in the Acknowledgement.

The award is announced via the website of GA, a circular email to all GA members, in the GA newsletter and during the Annual Congress of the Society for Medicinal Plant and Natural Product Research via an info flyer.

The deadline for submissions for the **2010** announcement is **December 31, 2010.**

Documents to be sent to:

Prof. Dr. Brigitte Kopp, Department of Pharmacognosy, University of Vienna, Centre of Pharmacy, Althanstr. 14, A-1090 Vienna, Austria. mail: brigitte.kopp@univie. ac.at

Obituary - Professor Edward Joseph Dr. Shellard

The distinguished British Professor "Joe" Shellard died on June 19th 2010 aged 96 years. Prof Shellard moved to the Pharmacy Department at Chelsea College in 1957 and soon afterwards he was awarded his PhD for studies on Ipomoea and Jalap resins. The Pharmacy Department at Chelsea was becoming known worldwide in the late 1950s and the 1960s for the quality and amount of research being carried out, and Prof Shellard played a major part in building this reputation by establishing a pharmacognosy research group that was the leader in the UK. It was due to his efforts that the technique of thin-layer chromatography was introduced to pharmaceutical science in the UK. It is difficult to exaggerate the huge difference that this made at the time to the rapid isolation of compounds from plant extracts and its value in evaluating of crude drugs, since it added a completely novel dimension to the "classical" macroscopical, microscopical and "wet test" techniques which had been used until then.

In the 1960s Prof Shellard became known throughout the world for his research on the alkaloids found in the genus Mitragyna and published over 40 research papers on this topic. These alkaloids are still the subiect of interest and research in various countries because of their effects on the central nervous system (the research began because of the opium-like effects of the leaves of M. speciosa, a drug of abuse from Malaysia and Thailand), on the cardiovascular system (as ingredients of the hooks of Uncaria rhynchophylla used in Chinese medicine) as a hypotensive, and as immunostimulant compounds in the herbal drug Cat's Claw. There is little doubt that this corpus of research made a large contribution to well-deserved appointment to a Chair in Pharmacognosy at Chelsea in 1969.

He was a great encourager of young scientists and his research lab became the incubator for those who became prominent pharmacognosists in several countries

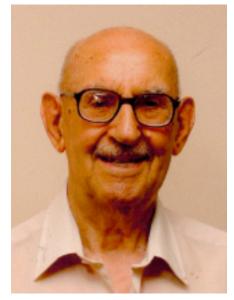
overseas, notably Ghana and Thailand. However, in his later years he was always very proud that his research group had also produced four British professors in pharmacognosy (Prof. Dave Phillipson, Prof. Norman Bisset, Prof. Peter Hylands and myself).

This was a notable because the strength of pharmacognosy at Chelsea was in contrast to the fate of the subject in most other British Schools of Pharmacy in the 1960s and 1970s. Its survival in the UK was largely due to the heroic efforts of Prof Shellard, in the teeth of considerable hostility from some quarters. He championed the subject in discussions with the Royal Pharmaceutical Society, and by his persuasive oratory at its biennial conferences of teachers of pharmacy, at the British Pharmaceutical Conference and in international pharmacy.

Joe Shellard became known throughout the world through his leadership and active involvement in the Medicinal and Aromatic Plants Section of FIP (the International Pharmaceutical Federation). In the 1950s this was the only international forum for pharmacognosists, and Prof. Shellard was a popular and very active leader in the group, as he was in the GA for many years. He established contacts with many different countries and there was always at least one visiting researcher in his labs at Chelsea, which laid a pattern for over 30 years for the group there and later as part of Kings College London.

Prof Shellard pioneered the teaching of pharmacognosy in the UK from a chemical, as well as a botanical aspect. He introduced the use of small projects in teaching undergraduates at Chelsea in the late 1960s, when this approach was still very novel in UK universities.

Special mention should be made of the part played by Prof. Shellard in the early 1970s in setting up a dialogue with British herbalists and introducing them to scientific aspects of their field of interest. A



Prof. Schellard at the occasion of his 90th birthday

weeklong summer school for herbalists and herbal product manufacturers on scientific evaluation techniques was organised in 1974 and was a key factor in the development of the British Herbal Phramacopeia, in which Joe took a key interest. Prof Shellard was not someone who could be forgotten easily because of his strength of character, his enthusiasm, his political and administrative skills but most of all because of his warmth of heart towards his staff and students, and their families. He lived for over 30 years after his retirement, and had the satisfaction of seeing pharmacognosy at Chelsea, later King's, not only survive but flourish, and maintain the subject being taught and research progressing in several other UK schools of pharmacy. His valiant efforts in preserving the principles and practices of pharmacognosy have borne fruit in their now being much more accepted as necessary for the scientific evaluation of herbal and other complementary medicine products.

Prof. Peter Houghton, London, U.K.



Obituary - Professor Dr. Detlef Gröger

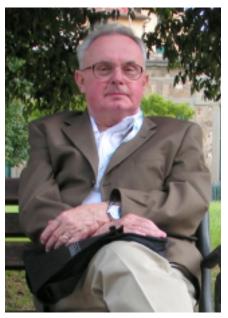
Professor Dr. Detlef Gröger, a grandseigneur of pharmacognosy and natural products research passed away on Sunday June 27th 2010 in Halle/Saale. He was an outstanding personality, an eminent scientist and the recipient of international honours.

Detlef Gröger was born on March 28th, 1929 in Zschortau near Delitzsch, Saxony, and attended elementary school there from 1935 to 1939. In 1939 he joined the König-Albert Gymnasium in Leipzig, from which he graduated in 1947. After a transition period as a laborer in the film factory Wolfen he joined the "Löwen Apotheke" in Delitzsch from 1948 to 1950 for practical training in pharmacy. This was followed by the study of pharmacy at the Martin-Luther University Halle-Wittenberg, and he subsequently joined the group of the late Professor Kurth Mothes at the Institute of Genetics and Plant Cultivation in Gatersleben. This step was decisive in Detlef Gröger's development, setting him on the course towards a career in research. He also met there his future wife, Lisa Bruhn. He earned his PhD degree in 1957 with a thesis on ergot alkaloids. In 1958 he moved with the research group of Professor Mothes to the Institute of Biochemistry of Plants in Halle/Saale, where subsequently he established his own research group. In short order, this Institute, and with it Detlef Gröger, became known worldwide for research on natural products, chemical plant physiology and pharmaceutical sciences. Detlef Grögers recognition continued to grow with his academic accomplishments. Having completed his habilitation in 1963 he became a docent at the Martin-Luther University Halle-Wittenberg, where he taught Pharmaceutical Biology. In 1971 he was recognised by appointment as a Professor by the Academy of Sciences and at the University. In 1979 he served as a Visiting Professor at Purdue University, West Lafayette, USA and in 1993 was named an Affiliate Professor of Medicinal Chemistry at the University of Washington in Seattle.

By far the most prominent topic of his scientific work were the ergot alkaloids. He investigated biotechnological aspects of the production of these pharmaceutically important compounds by traditional field cultivation and by newly developed methods for submerged fermentation of Claviceps strains. The second focus of his ergot work became the biosynthetic pathway by which these alkaloids are synthesised in the fungus. Beyond just demonstrating the incorporation of potential precursors he pioneered the isolation and characterisation of enzymes catalysing some of the steps in this complicated pathway, at a time when few enzymes of natural product biosynthesis had been detected.

Although the ergot alkaloids were his favorites they were by no means Detlef Gröger's only scientific interest. From early on he tackled new problems in biosynthesis. Many of the compounds studied were higher plant alkaloids but also non-alkaloidal compounds like ergochromes and their origin from anthraquinones. The techniques he employed spanned a wide range from isotope studies to molecular biological investigations. His scientific and professional accomplishments were recognized by the award of the Hufeland Medal in Gold, the Nationalpreis of the DDR, and most recently, of the Egon Stahl Medal in Gold.

His life and work were very much influenced by the political situation in the German Democratic Republic (DDR). In 1960/61, thanks to the efforts of Prof. Mothes, whom he promised to return, Detlef Gröger and his wife Lisa were able to spend a postdoctoral year in the laboratory of Professor V.E. Tyler in Seattle, USA. During this time the Berlin wall was erected. Being a man of his word, Detlef Gröger resisted the temptation to stay in the West and the Grögers returned to the institute in Halle. He was an early member of the "Gesellschaft für Arzneipflanzenforschung", but the communist authorities later forced him to wihdraw his member-



Prof. Gröger at the occasion of the 2005 GA conference in Florence

ship. Despite the intense pressure by the DDR to isolate its scientists from the West by restricting scientific communications and contacts, Prof. Gröger courageously kept up international interactions, which helped him maintain a very high scientific standard in his research.

Detlef Gröger was an accomplished scientist of high personal integrity. He was also a very friendly person who had a good sense of humor – just take a look at his picture. Appropriately, his remains were buried on the St. Laurentius cemetery in Halle/Saale, right next to the Botanical Institute were he used to lecture and the Botanical Garden where he grew his plants. Our thoughts are with his wife Lisa and their children and grandchildren.

Prof. Dr. E. Leistner (University of Bonn, Germany)

Prof. Dr. H. G. Floss (University of Washington, Seattle)

Honorary Membership of the Society to Arnold J. Vlietinck

Arnold Vlietinck obtained his pharmacist's degree in 1964 at the University of Leuven, and his Ph.D. in Pharmaceutical Sciences at the same university in 1968.

He obtained the position of research assistant as a Fulbright-Hays, NATO- and WHO-fellow at the School of Pharmacy, University of Wisconsin-Madison, USA (1973–1974).

In 1974 he became professor of pharmacognosy and phytochemistry at the newly founded University of Antwerp. He started the different research lines that have turned the laboratory into a highly performing research unit on national and international level – his research profile is broad covering the topics of plant extracts, flavonoids, antivirals, some alkaloids, complement inactivator proteins, saponins, antimalarials and antidiabetic and anti-tumoral substances. In summary, he was very successful in the areas of structure elucidation, biological activity, quality of herbal medicinal products, and their regulation. A lot of his valuable papers together with his group he has published in our journal Planta Medica. – Prof. Vlietinck is author or co-author of more than 230

scientific publications in international scientific journals, and of an important number of chapters in books, and he is member of the Editorial Board of important journals in the field of pharmacognosy and natural products.

The multitudinous lists of all his awards, memberships in Professional Societies, his activities in teaching, his editorial and advisory activities and scientific and organisational activities reflect his wide and excellent experience in pharmacognosy and phytochemistry. Besides his daily academic work, he held executive positions in





the national and European Pharmacopoeia committees and other official commissions on European level where regulations and legislation on herbal medicinal products have been and still are being discussed and prepared, which he strongly influenced by his broad and well-founded knowledge.

More than for any other reason, the important role Prof. Vlietinck has played in the field of quality, safety and efficacy of herbal medicinal products on European and even global level make him a valuable candidate for the honorary membership of GA, for which he was highly engaged in the agendas not only as a common member but also within the BoD and by arranging "his" Permanent Committee. He also organized the 1984 GA meeting in Antwerp, which is in best commemoration of all who had at-

tended it. As far as I know Arnold, he was always a constructive speaker in many discussions about the daily task and the future of GA, its journal Planta Medica as well as the organization of annual meetings

The Society for Medicinal Plant and Natural Product Research (GA) is awarding the Honorary Membership to Prof. Dr. Arnold J. Vlietinck in recognition of his extraordinary contributions to medicinal plant research, especially in the areas of structure elucidation, biological activity, quality of herbal medicinal products and their regulation, and his long and intense engagement for the aims of our society.

Prof. Brigitte Kopp, President of GA

Dr. Willmar Schwabe-Award to Prof. Jürg Gertsch

Professor Gertsch, a biochemist, started his transdiciplinary research on bioactive natural products in the field of ethnopharmacology in 1997 as a PhD student in the group of Professor Otto Sticher at the ETH Zürich. During this time he carried out ethnobotanical and ethnopharmacological fieldwork among the Yanomami Amerindians in the Amazon of Venezuela. He then worked on the phytochemistry of selected plants and the setup of new high-content cellular assays in the area of inflammation and anti-cancer screening. As a consequence, he became interested in highly bioactive NPs and in 2003 he started postdoctoral work in the laboratory of Professor Karl-Heinz Altmann at the Department of Chemistry and Applied Biosciences of the ETH Zurich, working on microtubuletargeting anticancer agents, including epothilones and other macrocyclic compounds. He then established his own group and became a senior scientist and lecturer at the ETH Zürich. During the same time he started to work on the molecular mechanisms of action of the bioactive lipids from Echinacea. After having discovered a link between the immunomodulatory effects of N-alkylamides and the cannabinoid CB2 receptor he became interested in immunopharmacology and the endocannabinoid system. The majority of his ongoing projects are now related to the biochemistry of the endocannabinoid system. Prof. Gertsch and collaborators described several natural products that interfere with the endocannabinoid system. Among them, the sesquiterpene betacaryophyllene, one of the most widespread essential oil components, potently activates the CB2 receptor, leading to profound antiinflammatory and analgesic effects. Beta-caryophyllene was thoroughly studied both in vitro and in animal experiments using knockout mice. Currently, this dietary and FDA approved food additive is being studied in different laboratories and might potentially be a novel essential dietary factor able to prevent inflammatory lifestyle diseases in addition to vitamins



The price winner together with Dr. Meng (Dr. Wilmar Schwabe GmbH & Co. KG) and GA president Prof. B. Kopp.



and fatty acids. Pilot clinical trials will be the next step to evaluate efficacy in humans. Inspired by the organic synthesis environment at the ETH, Prof. Gertsch synthetically explored the bioactive dodecadiene isobutylamide scaffold in the search of blockers of endocannabinoid cellular reuptake and novel anti-inflammatory agents. Highly potent leads were found and the project is now continued at industry.

Since 2009 Prof. Gertsch is at the University of Bern, at the Institute of Biochemistry and Molecular Medicine, where he now holds a chair in membrane biochemistry. Since 2010 he is also an IP in the Swiss funded NCCR program TransCure where membrane transporters will be studied as potential targets for drug discovery. The transition from molecular pharmacology to in vivo pharmacology is a major concern in his new group, but he is also interested in issues related to reverse pharmacology starting from traditional medicinal plants or agents to the elucidation of molecular mechanisms of action.

His contributions impressively show that natural compounds still play an important role in drug discovery and development.



Egon Stahl Award in bronze to Melanie Laszyzyk

Dr. Melanie Laszczyk studied biotechnology at Mannheim Technical College.

During a term of work-experience as part of her diploma course, Melanie Laszczyk gained her first experience of triterpene extracts from birch and mistletoe at the Carl Gustav Carus-Institute, In 2004, she started research for her doctorate on the triterpenes from birch bark at the Faculty of Biology of the University of Freiburg, Germany, under the supervision of Dr. Martin. This involved interdisciplinary work at the company Birken GmbH, the Carl Gustav Carus-Institute and Freiburg University Skin Clinic. Because of the outstanding quality of her thesis, Melanie Laszczyk received her doctorate in 2007 with the prestigious award summa cum laude.

Besides heading quality control of cosmetics in Birken GmbH, in 2008 she took on the direction of the Research & Development department there. In addition to the company's internal galenic development, this involved galenic, preclinical and clinical collaboration with partners in universities and medical centres.

Since 2009 she has led a project with three co-operating university partners that was supported by a central innovation programme (ZIM) of the German Ministry of Economy and Technology.

A feature of Melanie Laszczyk's work is that it involves different fields and draws on various scientific disciplines. In 2006 she published a paper on the characterisation of dry extracts of triterpenes and their potential galenic applications. Through cell culture studies she was able to confirm clinical findings with the extracts in actinic keratosis and helped prepare the clinical trials of the extract. She has co-authored several papers dealing with the preparation of pentacyclic triterpenes of plant origin, their extraction and galenic preparation as well as their use preclinically and clinically. Her focus is the application of triterpenes to the skin in the form of betulin emulsions. Preclinically this mainly involves anti-inflammatory, antioxidative, differentiation promoting and antiviral effects of the triterpenes. In clinical research the range of investigations extends from cosmetic applications for dry skin to the treatment of skin that has been damaged, for example by radiotherapy, wounds or diseases such as neurodermatitis.

Melanie Laszczyk's literature research and her own findings on the potential for triterpenoids in tumour therapy is summarised in a review article which appeared in Planta Medica in 2009.



GA awarded the Egon Stahl Award in bronze to Dr. Melanie Laszczykin recognition of her highly valuable contributions to pharmacognosy and analytical phytochemistry, in particular of her outstanding contributions to preclinical cell culture research, new galenic formulations and scientific steering of clinical studies.

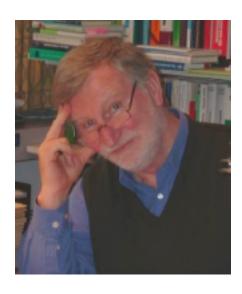
Prof. Brigitte Kopp, GA president

70th Birthday of Prof. Dr. rer. nat. Dr. h.c. Adolf Nahrstedt

Prof. Dr. rer. nat. Dr. h.c. Adolf Nahrstedt, Editor in Chief of Planta Medica from 1993-2004, celebrated his 70th birthday on August 9th this year. Professor Nahrstedt studied Pharmacy and Food Chemistry at the University of Freiburg, Germany and received his PhD degree in 1971 from the same University. After the habilitation in 1976, he was appointed at the Technical University of Braunschweig as an Associate Professor. Since 1986 he has been a Full Professor at the University of Muenster, Germany, and Emeritus since 2005. As Full Professor he served in various capacities, including as Vice-Dean and elected Dean of the College of Chemistry and Pharmacy, as Vice-Dean of the Faculty of Natural Sciences, and as a member of the Founding Commission for the Institute of Pharmacy at the University of Leipzig. Upon his retirement in 2004 Professor Nahrstedt has been appointed as Guest Professor at the University of Mahasarakham in Thailand, the Sinai University in El Arish, Egypt and the University of Florida in Gainesville, USA. His research covers the biochemistry and physiology of secondary metabolites, particularly cyanogenic glycosides in plants and insects, as well as the phytochemistry of traditional herbal drugs. He is well known for his major contributions on St. John's wort,

its active constituents and coeffectors. He has published over 200 papers and chapters, and delivered some 200 lectures worldwide. His honors include Honorary Memberships of the Society for Medicinal Plant and Natural Product Research (GA) and of the European Academy of Natural Medicine. He was recipient of the Rudolf Fritz Weiss Award of the German Society of Phytotherapy, the Varro Tyler Award of the American Society of Pharmacognosy (ASP), and of an honorary doctorate from the Ovidius University of Constanta, Romania. He is a member of many societies and has served on various boards and commissions, including the German Commission E. where he made significant contributions to the standardization and control of herbal medicines.

Professor Nahrstedt is an eminent member of GA. He served for many years on the Advisory Board where he continuously gave valuable input to the Society. His most important service to GA, however, has undeniably been his editorial activity for the official journal of GA, Planta Medica. Professor Nahrstedt has been associated with the journal for more than 25 years, first as Co-Editor (1983–1992), later as Editor in Chief (EiC) (1993–2004), and currently as Senior Editor (2005–present). During Professor Nahrstedt's tenure as EiC



the journal underwent a profound change, from an Europe-centered specialist journal, to a truly international, highly regarded interdisciplinary forum for Pharmaceutical Biologists and other scientists interested in the multifaceted field of natural products. The steady increase of the Impact Factor from 0.9 (1993) to 2.28 (2002), and of Total Cites per year from less than 2000 to 4733 are a testimony of this development. No wonder that the rising profile of Planta



Medica has attracted, and still attracts, a growing number of manuscript submissions. Without Professor Nahrstedt's personal dedication to the journal, and an enormous amount of hard work and time spent, such a success story would not have been possible.

At 70 years of age Adolf Nahrstedt remains a superior, quiet personality, and a sharp

and critical observer of the medicinal plant scene. He expresses his views and opinions in a carefully balanced way, occasionally with a touch of self-irony. For those who have had the privilege to know him more personally he remains the very much appreciated, sensitive and interested listener who exudes natural human warmth and cherishes faithful and enduring friend-

ship. On behalf of GA, we thank Adolf Nahrstedt for his outstanding contribution to furthering our discipline in Europe and in the world, and we wish him all the best on the occasion of his 70th birthday.

Prof. Veronika Butterweck and Prof. Matthias Hamburger

Some Data from the Membership Data Base: New GA members

The society can announce 54 new members since June 2010. The Society welcomes you all warmly and wishes that GA may get a platform for many scientific and personal contacts. We are looking forward to your active participation in many GA events! All the best for you all!

Abeer, Ibrahim Nema, Egypt; Adeyoyin Omlara, Adeniji, Nigeria; Slater, Adrian, United Kingdom; Alembert, Tchinda tiabou, Cameroon; Rodrigues, Alice, French Guiana; Amin, Chaanin, Switzerland; Habib, Amira, Egypt; Alefirov, Andrey, Russia; Bhaumik, Anindita, India; Galkin, Anna, Finland; Murray, Belinda, United Kingdom; Stefanache, Camelia,

Romania; Munari, Caroline, Switzerland; Vonthron, Catherine, France; Chioma, Anosike, Nigeria; Lubrano, Christian, France; Antal, Diana Simona, Romania; Stien. Didier. French Guiana: Tavakoli Dinani, Elham, Iran; Giacomeli, Emanuela, Italy; Houel, Emeline, French Guiana; Ariburnu, Etil, Turkey; Conforti, Filomena, Italy; Agbor, Gabriel, Cameroon; Wada, Gloria, United States of America; Da Silva, Gustavo, Portugal; Abd-Alla, Howaida, Egypt; Fajemiroye, James, Brazil; Wang, Jian Wen, China; Vetschera, Karin, Austria; Abou El-Kassem, Lamia Taha, Egypt; Lee, Marcia, United States of America; Mayank, Thakur, India; Abdelmohsen, Mona, Egypt; Mu, Naeem, India; Sadati,

Nargess, Iran; Okoye, Nkeoma N., Nigeria; Yalcin, Nuray, Turkey; Olubukola, Adenubi, Nigeria; Permeh, Parisa, Iran; Nnamani, Petra Obioma, Nigeria; Raharivelomanana, Phila, French Polynesia; Arrey Tarkang, Protus Cameroon; Hendawy, Saber, Egypt; Chaturvedula, Sai Prakash, United States of America; Ezea, Samson, Nigeria; Li, Shaoping, China; Kouam Fogue, Simeon, Cameroon; Sasmakov, Sobirdjan, Uzbekistan; Ukwueze, Stanley Ejike, Nigeria; Tahira, Sultana, Pakistan; Sponsel, Valerie, United States of America; Vikas, Sharma, India; Zinaw Dilnesaw, Ayele, Ethopia.

Minutes of the GA Members' meeting 2010 in Berlin, Germany

The Members Meeting took place during the annual congress in Berlin on 31. August 2010, 6.30 to 7.55 p.m. 80 GA members attended the meeting.

1. Approval of the Agenda

President Prof. B. Kopp welcomed all participants. The agenda, published in the GA Newsletter 1-2010, was unanimously approved.

2. Approval of the Minutes of the Members Meeting

The minutes of the previous Members Meeting on 18. Aug. 2009 in Geneva, published in the GA Newsletter 2-2009, were unanimously approved.

3. Annual reports

3.1 Report of the President Prof. B. Kopp

 Prof. Dr. Hilke Wintherhoff passed away on 9 May 2010, ESA gold winner Prof. Dr. Detlev Gröger on 27 June 2010. Prof. Kopp asked the participants to stand up for one minute of silent

- commemoration for Profs. Gröger and Winterhoff.
- Prof. Kopp has sent a condolence letter to Prof. Winterhoff's relatives. An obituary by Prof. Butterweck has been published in the recent GA Newsletter.
- An obituary for Prof. Gröger has been written by Prof. Leistner which will be published in Planta Medica and in the next GA Newsletter.
- Prof. Kopp sent personal congratulations to the following Honorary Members on the occasion of their birthdays: Prof. Nahrstedt (70), Prof. Hänsel (90), Prof. Schilcher (80). A laudation for Prof. Nahrstedt has been written by Prof. Butterweck and Prof. Hamburger which will be published in Planta Medica.
- She organised the new design of the starting page of the GA homepage together with the secretary and webmaster.
- She participated as representa-

- tive of GA in the EDQM Workshop in Vienna, Austria (co-organised by GA), in Sept. 2009, in the Shanghai Meeting in October 2009 and gave a lecture, in the PharmSciFair Meeting in April 2010 in Vienna and in the International Symposium "Drug discovery from Nature" in April 2010 in Innsbruck, Austria.
- She reported that Dr. B. Roether was nominated as GA's official contact person to EMA. GA regularly comments on the drafts of the HMPC monographs.
- She chaired the jury of ESA bronze and WSA and informed and invited the winners, Dr. M. Laszczyk (ESA bronze) and Prof. J. Gertsch (WSA).
- All Honorary Members have been invited to the annual congress in Berlin. Profs. Franz, Scheffer, Schilcher, Sticher and Wichtl came to Berlin.
- The new Dr. Willmar Schwabe Research Scholarship for Young



Scientists will be announced on the GA homepage soon.

3.2 Reports of the Vice-Presidents 3.2.1 Report of Vice-President Prof. W. Blaschek

- He attended the "7. Berliner Kongress Phytotherapie 2009" in Sept. 2009 where he gave a welcome address from GA, the meeting "Verbände-übergreifende Gespräche" in Frankfurt, Germany, in Jan. 2009, the DPhGcongress in Jena, Germany, in Sept. 2009, the EUFEPS/ PharmSciFair meeting in Würzburg, Germany, in Jan. 2010 and congress "Phytopharm 2010" in St. Petersburg, Russia, in July 2010. The latter was coorganised by GA; Prof. Blaschek gave a welcome address from GA and a plenary lecture.
- He was involved in the development of the questionnaire on Planta Medica which was sent to all GA members.
- He commented the HMPC draft monograph on Cimicifuga racemosa.
- He will prepare GA's comment to the draft of the "Stoffliste des Bundes und der Länder" from BfArM.
- He will participate in the Symposium "Phytopharmaka Erfüllbare Erwartungen" in Münster, Germany, on 7 October 2010 which is dedicated to Prof. H. Winterhoff.

3.2.2 Report of Vice-President Prof. M. Hamburger

- He was also involved in the development of the questionnaire on Planta Medica.
- He is the chairperson of the new working group on the future orientation of GA.
- He attended the 9th Annual Oxford International Conference on the Science of Botanicals in April 2010 in Mississippi, USA, where he gave a lecture.
- He was a member of the jury for the WSA.
- He wrote a laudation on the occasion of Prof. Nahrstedt's 70th birthday which will be published in Planta Medica and in the GA Newsletter.

3.3 Report of the Secretary Dr. B. Benedek

Dr. Benedek presented the members' statistics:

- GA currently has 1418 active members from 82 countries compared to 1371 in 2009. During the congress in Berlin there were about 30 new applications.
- The number of members paying regular fees is 844, the number of members paying reduced fees 520.

- GA currently has 12 Honorary Members including the new Honorary Member Prof. A. Vlietinck.
- At the moment there are 36 corporate members with 3 new members since Jan. 2010: Engelhard Arzneimittel, Vital Solutions and Vivacell Biotechnology, all from Germany, and one cancellation (Dreluso, Germany).
- 140 new members have applied since 1 Sept. 2009.

3.4 Report of the Treasurer Dr. B. Roether and the Auditors Prof. E. Stahl-Biskup and Prof. H. Schil-

Dr. Roether presented the current financial situation of GA:

- The credits of GA currently amount to 133,994 EUR (funds value: 56,530 EUR, cash: 77,464 EUR).
- The credits of the Egon-Stahl-Fund currently amount to 52,468 EUR (funds value: 50,000 EUR, cash: 2,468 EUR).
- The total revenues in 2010 were 81,564 EUR (status 07/2010), the total expenses 46,014 EUR. Thus, the balance for 2010 (total revenues minus total expenses) is 35,550 EUR (07/2010).
- In 2010 there were 34 subscriptions to PM online with access back to 1998 and 42 subscriptions with access back to 1953.

Prof. Schilcher presented the report of the auditors:

- The audit of the Treasurer's Report was very positive without any comments or complaints.
- He thanks the Treasurer Dr. Roether and his assistant Ms. Lahse for their work.

3.5 Discharge of the Executive Council

The Auditor Prof. Schilcher asked for the discharge of the Treasurer and the whole ExC which was accepted unanimously by the whole assembly.

4. Modification of the GA Bylaws

The GA bylaws have to be modified due to contradictoriness. The sentence "The election is directly valid" in §9/5 shall be deleted:

"The members of the Executive Council and the Advisory Board are each elected by the Members' Meeting for a period of two complete calendar years. The election is directly valid. Re-election is permissible. The period of office starts with the first day of the calendar year following the election."

The modification of the bylaws was unanimously approved by the assembly.

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

- The rejection rate (published versus submitted manuscripts) in 2009 was 78%.
- With respect to the number of submitted manuscripts the leading country is China.
- The impact factor in 2009 was 2.037 compared to 1.960 in the year before. The impact factor of Planta Medica is slightly lower than that of Journal of Ethnopharmacology (2.322) and Phytomedicine (2.174), but higher than that of Phytotherapy Research (1.746) and Phytochemical Analysis (1.744).
- Three special issues will be published in 2010: "Cancer Therapy with Natural Products", the GA abstract volume and a special issue on TCM.
- Due to a printing delay Thieme agreed to print 200 additional pages without additional charges.
- Regarding the new profile of PM articles in the following sections will be published: "Biological and Pharmacological Activity", "Pharmacokinetic and Clinical Studies", "Natural Product Chemistry and Analytical Studies. Biochemistry". The section "Molecular Biology and Biotechnology" will not be included in the editorial scope anymore.
- In 2011 15 regular issues, two special issues and one GA abstract volume will be published.
- Thieme will improve the electronic access. Regarding institutional subscriptions no print-only subscriptions will be availabe any more.

6. Reports of the Permanent Committees

6.1 Report of the PC "Biological and Pharmacological Activity of Natural Products" by Prof V. Butterweck

- This year's workshop about "Use of Polyphenols Against Cardiovascular Diseases" was very well attended and the discussion was good.
- In 2011 the workshop will focus on natural products for metabolic diseases.

6.2 Report of the PC "Breeding and Cultivation of Medicinal Plants" by Prof J. Nowak

- Prof. J. Nowak from Vienna, Austria, will be the successor of Prof. C. Franz for this PC.
- This year's workshop called "Biotechnology in Starting Material Production" was successful. The chairperson was Prof. Nowak, the co-chair Prof. O. Kayser, Netherlands.
- In 2011 there will be a joint workshop with the PC "Manufacturing and Quality Control of HMPs" dealing with contaminants in starting materials (duration: 3 hours, 5 to 6 speakers).



6.2 Report of the PC "Manufacturing and Quality Control of HMPs" by Dr. C. Erdelmeier

 The title of this year's workshop was "Use of Hyphenated Techniques in the Quality Control of HMPs". Two speakers (Prof. J. Jaroszewski, Dr. M. Wierer) were excused and were replaced by Prof. M. Hamburger and Ms. M. Bald (EDQM, Strasbourg, France). The workshop was successful.

6.4 Report of the PC "Regulatory Affairs of HMPs" by Prof. A. Vlietinck

- This year's workshop about "The importance of a risk-benefit analysis for the marketing authorization" was successful.
- In 2011 the workshop will focus on GCP and clinical trials with herbal drugs and food supplements.

6.5 Report of the Young Researchers Workshop by Prof. T. Efferth

 This year there were two parallel sessions ("Cellular and Molecular Mechanisms of Action of Natural Products and Medicinal Plants" and "Lead Finding from Nature – Pitfalls and Challenges of Classical, Comput. and Hyphenated Approaches"). There were about 240 applications, but in the end only 140 participants attended the workshop. In addition, three speakers in one session did not come. The workshop was successful with interesting discussions.

 In 2011 the workshop will be carried out in two parallel sessions again.

7. Future Congresses, Symposia and Workshops

7.1 Annual GA Congresses

- 2011: Antalya, Turkey, 4–9 Sept.
- 2012: New York, USA, 28 July– 1 Aug. (Joint Meeting of ASP, AFERP, GA, PSE and SIF)
- 2013: Münster, Germany, 1–6 Sept. (organisers: Profs. A. Hensel, Th. Schmidt)
- 2014: Minho-Braga, Portugal, 31 Aug.-5 Sept. (organiser: Prof. A. Diaz, Joint Meeting with AFERP)
- 2015: not yet fixed, possibly Uppsala, Sweden
- 2016: Joint Meeting

7.2 Future Congresses and Workshops

- "11th Congress of the International Society for Ethnopharmacology" (ISE 2010), 20–25 Sept. 2010, Castilla la Mancha, Spain; co-organised by GA
- "Phytopharmaka erfüllbare Erwartungen" (Honorary Sympo-

- sium for Prof. Winterhoff), 7 Oct. 2010, Münster, Germany
- "Shanghai International Conference on Traditional Chinese Medicine and Natural Medicines

 New Idea, New Technique, New Method" (S-TCM 2010);
 15–17 Oct. 2010, Hangzhou, Zhejiang Province, China, coorganised by GA
- "New Biotrends in green chemistry exploring the potential of synthetic biology for natural product discovery and production", 1–2 Dec. 2010, Dortmund, Germany; co-organised by GA
- "PharmSciFair 2011", 13–17 June 2011, Prague, Czech Republic; co-organised by GA
- "International Symposium for Thin-Layer Chromatography", 6– 8 July 2011, Basel, Switzerland
- "6. Fachtagung Arznei- und Gewürzpflanzen", 19–22 Sept. 2011, Berlin, Germany

8. Miscellaneous

The congress organiser Prof. H. Baser gave a presentation of the GA annual meeting 2011 in Antalya. The congress will be an official activity within the framework of the "International Year of Chemistry 2011".

GA president Prof. B. Kopp GA secretary Dr. B. Benedek

Meeting Reports

58th International Congress and Annual Meeting

of the Society for Medicinal Plant and Natural Product Research



Gesellschaft für Arzneipflanzen und Naturstoff-Forschung e. V. | 7th Tannin Conference (Presymposium)



A great conference in a great city with great science: the annual conference of 2010 in Berlin

The 2010 GA meeting was organized by Herbert Kolodziej and Matthias F. Melzig and their co-workers in Berlin, hosted by the Freie Universität Berlin, a Center of International Cooperation. The Presidents sincerely appreciated the participation of approximately 900 scientists from more than 70 countries. The scientific pro-

gramme included 70 oral presentations in 12 sessions and more than 700 posters on current research topics. Dynamic discussions between the sessions and informally



during the coffee breaks mediated many new contacts and co-operations between academic institutions and industrial partners.

The topics of the conference showed the broad spectrum of modern natural product research, ranging from molecular systematics or "genomic mining" for the "discovery" of novel lead compounds from natural sources to sophisticated analytical methods for the characterization of herbal products. A high percentage of short lectures and poster contributions were concerned with traditional herbal medicines, their therapeutic utilization, quality management and pharmacological principles to prove efficacy and safety.

In the opening lecture "Sustainable drugs and global health care" G. Cordell, Chicago, emphasized awareness of the need to maintain and monitor Earth's resources. For most of the world's population, plants represent the foundation of primary health care for the foreseeable future. In his presentation, several approaches to enhancing and sustaining the availability of drugs were demonstrated.

The session "Opportunities and challenges in the exploitation of biodiversity" was devoted to the year of biodiversity 2010. Equitable sharing of the benefits of biodiversity is one of the main objectives of the Convention on Biological Diversity. Yet lack of clarity about some of the basic concepts and approaches in access and benefit sharing have meant limited practical implementation.

More than 300 participants attended the six workshops dealing with relevant topics on regulatory affairs of herbal medicinal products, the use of polyphenols in cardiovascular diseases, breeding and cultivation of medicinal plants, application of hyphenated analytical methods and quality control of herbal remedies.

Professor Dr. Arnold Vlietinck, Antwerp (Belgium), was awarded by the President of GA, Prof. Dr. Brigitte Kopp, Vienna (Aus-

tria), with the honorary membership of the Society in appreciation of his untiring commitment to serving on the board of the GA and as chairperson of the permanent committee on Regulatory Affairs of Herbal Medicinal Products for more than 25 years.

Dr. Melanie Laszczyk, Freiburg (Germany) received the Egon Stahl-Award in Bronze for her excellent PhD thesis on triterpenes from the bark of birch and their pharmacological activities. Prof. Dr. Jürg Gertsch, University of Bern (Switzerland), was awarded with the "Dr. Willmar Schwabe-Preis". His talk "Playing with bioactive natural products: Looking for molecular dei ex machina" reported on natural products interacting with the signal transduction pathway of the endocannabinoid system.

In the closing ceremony, seven young scientists were honored with travel grants for outstanding contributions and five poster awards were granted for excellence in design and science.

Prof. Dr. Matthias F. Melzig





6th Young Researcher Workshop of GA, Berlin

The 6th Young Researchers Workshop (YRW) of the Society for Medicinal Plant and Natural Product Research took place at the conference site of the 58th International Congress of the society in Berlin, 29th August 2010.

Some 200 young researchers announced their interest and attended the two parallel sessions of the workshops.

Session I entitled "Cellular and Molecular Mechanisms of Action of Natural Products and Medicinal Plants" was headed by Prof. Thomas Efferth with the help of Prof. Veronika Butterweck.

Session II dealing with "Lead Finding from Nature – Pitfalls and Challenges of Classical, Computational and Hyphenated Approaches" was headed by Prof. Judith M. Rollinger in cooperation with Prof. Anna-Rita Bilia and Prof. Jean-Luc Wolfender.



YRW Awarding ceremony: (from left to right) Prof. J.M. Rollinger (YRW committee), awarded young scientists: S. Zimmermann, B. Waltenberger, K. Vougogiannopoulou, J. Singhuber, E. Rozema, I Shaukat; Prof. B. Kopp, GA president.



After giving an impulse to the young auditorium by initial lectures of Prof. Oliver Werz in session I and Prof. Jürg Gertsch in session II, the floor was open for presentations and lively discussions of young researchers. In a round table discussion at the end of each session, there was time to discuss scientific problems and current challenges of young scientists in their daily

work and academic career. From the number of highly qualified oral presentations provided at the YRW, six candidates were awarded for their outstanding contribution (see Foto) thanks to a donation given by the company Bionorica.

The enthusiastic feedback of this workshop together with the continuously growing number of participants registered over the last years encourages the current YRW committee (T. Efferth, D. Tasdemir, A. Hensel, J.M. Rollinger, A.R. Bilia, J.-L. Wolfender) to proceed with this event and, thus, to provide a lively platform for young scientists from all over the world dealing with natural product research.

Ao. Univ.-Prof. Dr. Judith M. Rollinger

7th Tannin Conference, Berlin 2010: presymposium for the annual GA conference

The 7th Tannin Conference was organized as presymposium of the 58th Int. Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research in Berlin, Germany, hosted by the Freie Universität Berlin.

Tannins have been the subject of extensive research for many decades. Significant advances in the elucidation of their constitutions and conformations, as well as from the broad recognition of their fascinating biological, pharmacological and physiological activities have led to increasing attention to these metabolites. In the continuation of a successful series of conferences in the United States, the Tannin Conference 2010 was unique in that it was the first outside the North American continent with approximately 350 participants indeed, a privilege! The objective of all the Tannin Conferences has been and still is to bring together people with a common interest in plant polyphenols and to promote interdisciplinary interactions that will lead to a better understanding of these important metabolites. A special objective of the 7th Tannin Conference was to encourage participation by scientists from all over the world in future meetings and to promote further collaboration between chemists, biologists, and human health related disciplines and to focus on expanded possibilities of polyphenols for their application in human health, nutrition and the food industry.

Since all tannin actions very probably derive from some of their chemical features and molecular recognition is a key step in many underlying principles, conformational analysis and studies on the interaction with biological macromolecules attract the interests of scientists from many disciplines. Some respective contributions included the stereochemical structure determination of polyphenol complexes with caffeine (T. Ishizu), a molecular interpretation of astringency (I. Pianet) and a review on tannin conformation in solution (C. Poncet-Legrand). Other notable presentations in the field of biological activities described the antioxidant activity of metabolites of ellagitannins (H. Ito), wound-healing properties (C. Schmidt, C. Agyare), antiadhesive capabilities (A. Hensel), and discussed the bioavailability of hawthorn procyanidins (S. Zumdick). Besides, contributions focused on interesting analytical aspects (I. Mueller-Harvey, A. Hagerman) and the synthesis of tannins in their free phenolic forms crucial for activity studies.

The Polyphenol Community of Scientists proudly honoured Prof. Daneel Ferreira at the meeting through the presentation of the 2010 Tannin Conference Award, sponsored by the Freie Universität Berlin. This appreciation was in recognition of his lifelong seminal contributions and persistent advocacy to the Tannin Conference.

The 7th Tannin Conference was organized as presymposium of the 58th Int. Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research in Berlin, Germany, hosted by the Freie Universität Berlin.

Tannins have been the subject of extensive research for many decades. Significant advances in the elucidation of their constitutions and conformations, as well as from

POLYPHENOTCOWN

the broad recognition of their fascinating biological, pharmacological and physiological activities have led to increasing attention to these metabolites. In the continuation of a successful series of conferences in the United States, the Tannin Conference 2010 was unique in that it was the first outside the North American continent with approximately 350 participants indeed, a privilege! The objective of all the Tannin Conferences has been and still is to bring together people with a common interest in plant polyphenols and to promote interdisciplinary interactions that will lead to a better understanding of these important metabolites. A special objective of the 7th Tannin Conference was to encourage participation by scientists from all over the world in future meetings and to promote





further collaboration between chemists, biologists, and human health related disciplines and to focus on expanded possibilities of polyphenols for their application in human health, nutrition and the food industry.

The Polyphenol Community of Scientists proudly honoured Prof. Daneel Ferreira at the meeting through the presentation of the 2010 Tannin Conference Award, sponsored by the Freie Universität Berlin. This appreciation was in recognition of his life-

long seminal contributions and persistent advocacy to the Tannin Conference.

Prof. Herbert Kolodziej

The Medicinal Plant Garden of the Gentiana Foundation, Leysin, Switzerland – Supported by GA

Leysin is a tourist resort located in the Western part of the Swiss Alps. In winter, it is famous for skiing and snowboard competitions. In summer, it has not many attractions to offer. Thus, the idea came to create an alpine botanical garden in order to attract more tourists during the summer period. Thus, the undersigned, at that time Professor of pharmacognosy at the University of Lausanne, was approached by local people and authorities to assist them to accomplish this goal. But he suggested to establish a medicinal plant garden and not just another alpine botanical garden.

A foundation was formed and named "Gentiana Foundation for the knowledge of medicinal plants". The aims are to provide information on medicinal plants, on how to use them and on cautions to be taken, in the form of public lectures for the general audience and courses of continuous education for pharmacists and medical doctors. The didactic tool of the Foundation is the Garden. The Municipality of Leysin provided about 30,000 square meters of land and a small chalet to the Foundation.

dation. The Garden is open to public since 2004. It contains about 3,000 plants which are grouped in various sectors according to their therapeutic indications, e.g. plants for the digestion, plants for the liver, plants against pain, plants for the prostate, plants for the women, plants for external use, etc... Some sectors are also devoted to poisonous plants and to those which should not be confused in a very didactic presentation. It is noteworthy to mention, that the Garden possesses also a nice collection of Gentian species from all over the world (around 50 different gentians).

A botanical garden is an alive museum. A visitor wishes to see a specific plant but at the time of his visit, this plant is not flowering. Thus, the Foundation is selling guides for each sector with useful information and color pictures of the plants. Some of these sector guides could be printed thanks to a sponsoring of the GA which is acknowledged here.

Prof. Kurt Hostettmann, President of the Gentiana Foundation



Next Annual GA Meeting

59th International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research

Welcome to Antalya!

It is my great pleasure and honour to announce the 59th International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research to be held between 4–9 September 2011 in Antalya, Turkey. This congress series has been organized annually in Europe since 1953 in order to stimulate cooperation among scientists of the world for the advancement of research and development

into the science of phytomedicine, medicinal and aromatic plants and their products. The importance of the 59th GA Congress is that it is organized for the first time in Turkey where one of the first herbals, "De Materia Medica" was written in the 1st century AD by an Anatolian doctor Pedanius Dioscorides of Anavarza who had served in the Roman Army as a physician. Anavarza, the birthplace of Dioscorides is

not far from Antalya. It is in Kozan – Adana, southern Turkey.

The congress is expected to attract global attention in the International Year of Chemistry of the United Nations proceeded by the 42nd International Symposium of Essential Oils (ISEO 2011) in the following week in the same venue. This will give most of the participants a feast of natural

products chemistry for two weeks in early September, 2011 at an excellent venue where business and leisure can be combined for pleasure and satisfaction.

Antalya is an attractive spot blending history and culture and a favorite holiday resort with numerous five-star hotels and holiday villages. It is easily reachable by direct flights from many European metro-

pols. September is a fine time for Antalya with a favourable and pleasant climate. Maritim Pine Beach Resort Hotel hosting the congress offers excellent conference facilities.

We shall be glad to welcome pharmacognosists, phytochemists, phytotherapists, aromatherapists, pharmacists, biologists, microbiologists, biotechnologists, che-

mists, physicians, regulatory agents, industrialists, etc. dealing with various aspects of medicinal plant and natural product science in September, 2011 in Antalya to enjoy a rich, varied and attractive scientific and cultural programme.

Prof. K. Hüsnü Can Başer, President of the Organizing Committee

New Books

Drugs of Natural Origin: A Treatise of Pharmacognosy

By Prof. em Gunnar Samuelson and Prof. Lars Bohlin, Division of Pharmacognosy, Department of Medicinal Chemistry, Uppsala University, Sweden.

Drugs of Natural Origin, meanwhile in the 6th revised edition is a unique multidisciplinary book suitable for undergraduate and graduate students and teachers in the area

of natural product research, but also as a complementary book for disciplines like medicinal chemistry, biochemistry and pharmacology. The book can also serve society as a scientific source for the understanding of a sustainable use of natural products in the



development of new drugs, scientifically based herbal remedies, and environmentally adapted biomolecules.

776 pages, illustrated in colour. ISBN 978-91-976510-5-9. Swedish Academy of Pharmaceutical Sciences. Order under www.swepharm.se

GA worldwide

and their Institutes of Pharmacognosy: International, Interesting and Cooperative

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

GA has about 10 regular members from "down under". 4 working group have prepared a short presentation of the group and the activities.



Southern Cross University Centre for Phytochemistry and Pharmacology PO Box 157, Lismore NSW 2480

Email: cpp@scu.edu.au

Homepage: http://www.scu.edu.au/research/cpp/index.php

Head of institution: Professor Michael Heinrich (from 2011 onwards)

Working area (max. 3 sentences):

The Centre for Phytochemistry and Pharmacology undertakes fundamental and applied research to produce value added products based on bioactive natural extracts. The Centre's main areas of expertise are quality control and assurance of essential oils and herbal raw materials, extracts and medicines, extraction of plant materials, chemical profiling, isolation and purification of compounds, structural elucidation, bioactivity-guided fractionation and pharmacological *in vitro* screening. The Centre is part of Southern Cross Plant Science which also has considerable expertise in plant genomics and has been involved in genomic projects on wheat, sugar-

cane, tea tree and other useful plants.

3 publications, representing the institution:

Wohlmuth H, Deseo M, Brushett D, Thompson D, MacFarlane G, Stevenson L, Leach D. Diarylheptanoid from *Pleuranthodium racemigerum* with *in vitro* prostaglandin E₂ inhibitory and cytotoxic activity.

Journal of Natural Products 2010;73:743–746.

Wohlmuth H, Penman KG, Pearson T, Lehmann RP. Pharmacognostic studies of passionflower (*Passiflora incarnata* L.): chemotypes and quality control. *Biological & Pharmaceutical Bulletin* 2010;33:1015–1018.



Matthias A, Banbury L, Bone KM, Leach DN, Lehmann RP. Echinacea alkylamides modulate induced immune responses in T cells. *Fitoterapia* 2008,79:53–58.

Coworkers: PhD: 4, Postdocs: 3, Technical staff and other: 14

The "speciality" or the unique selling proposition of institution:

The Centre has very strong commercial links and is the prime address in Australia for the quality control and authentication of herbal medical products. Southern Cross University's newly formed Southern Cross Plant Science (60+ staff) applies genomic, metabolomic and other approaches to the provision of innovative, science-based solutions to the exploration and commercialisation of economically important food and medicinal plants and natural products. It also has strong links with health science researchers at SCU, which includes a clinical trials unit specialising in herbal medicines and food supplements.

Running projects with industrial partners?

Extensive industry linkages through collaborate grants, contract research and fee-for-service analytical work. Plant compounds for wound healing, bioactives from waste-streams, plant-based insecticides, anti-inflammatory agents from native Australian plants.

Photograph



Griffith University, School of Pharmacy & Griffith Health Institute, Gold Coast, 4222, QLD

Griffith University: Dr. Evelin Tiralongo



Email: e.tiralongo@griffith.edu.au

Homepage: http://www.griffith.edu.au/health/school pharmacy/staff/dr-evelin-tiralongo

Head of institution: Prof Michael Rathbone (Pharmacy)

Prof. Lyn Griffiths (GHI)

1. Pharmacological evaluation and structural elucidation of constituents from Australian mushrooms and medicinal plants.

- 2. Pharmacological evaluation of herbal medicines.3. Efficacy and safety of complementary medicines.
- 4. Integration of complementary medicine into clinical practice.

3 publications, representing the institution:

Working areas

Beattie, KD, Rouf, R, Gander, L, May, TW, Ratkowsky, D, Donner, CD, Gill G, Grice, ID, Tiralongo, E. Antibacterial metabolites from Australian macrofungi from the genus *Cortinarius*. *Phytochemistry*. 2010, 71:948–955.

Bensch K, Tiralongo J, Matthias A, Bone KM, Lehmann R, Tiralongo, E.

Investigations into the anti-adhesive activity of herbal extracts against *Campylobacter jejuni*, *Phytotherapy Research*. 2010, in press.

Beattie, KD, Ulrich, R. Grice ID, Uddin, SJ, Blake, TB, Wood, KA, Steele, J., lu, F May, TW, Tiralongo, E. Ethanolic and aqueous extracts derived from Australian fungi inhibit cancer cell growth *in vitro*.

Mycologia, 2010, in press

Coworkers: PhD 2 and 1 Postdocs

The "speciality" or the

unique selling

Pharmacological evaluation and structural elucidation of constituents from Australian mushrooms

proposition of institution:

Running projects with industrial partners?

Investigations into the anti-adhesion activity of herbal medicines against Helicobacter pylori and

Campylobacter jejuni.

Randomised, double blind, placebo-controlled trial of Echinacea supplementation in air-travellers

Integria Healthcare: Prof. Reg. Lehman

Reg.lehmann@integria.com

Homepage: www.integria.com

Head of institution: A/Prof Dr Reg Lehmann – General Manager of Research and Development

Working area (max. 3 sentences):

Integria Healthcare researches across the entire range of medicinal plant and complementary health as exemplified by its publications in Echinacea research. As an industry partner Integria has led research into agronomy of herbs, phytochemical characterization, predictive bioavailability, pharmacology, pharmacokinetics and Phase 2 and 3 clinical trials. These projects have linked together many experts in their fields including inter-

nationally who would normally not have been involved in herbal medicine research.

2 publications, representing the institution:

KG Penman, CW Halstead, A Matthias, JJ De Voss, JMU Stuthe, KM Bone, RP Lehmann.

Bilberry adulteration using the food dye amaranth,

Journal of Agricultural and Food Chemistry 2006; 54: 7378–7382

J Sarris, DJ Kavanagh, G Byrne, KM Bone, J Adams, G Deed. The Kava Anxiety Depression Spectrum Study (KADSS): a randomized, placebo-controlled crossover trial using an aqueous extract of *Piper methysticum*,

Psychopharmacology 2009; 205(3): 399-407

Coworkers: Prof. Kerry Bone – widely published herbalist with leading textbooks with other leading authors.

The "speciality" or the unique selling proposition of institution:

Integria Healthcare is a leading company in the area of complementary healthcare in Australia and New Zealand representing several of the leading brands such as Thursday Plantation, MediHerb, Nutrimedicine and

Thompsons. Integria has a mission statement of developing clinically proven efficacious formulas and as such has developed a range of academic collaborators to achieve this goal. These collaborators represent leaders in the fields of Phytochemistry, pharmacology and clinical trials. Integria acts to link together Australian researchers with expertise across a wide range of disciplines to research natural products used for therapeutic outcomes. This enables Integria to achieve its goal of identifying the therapeutic components of its formulas and proving

their efficacy in clinical situations.

Running projects with industrial partners?

Collaborative projects are currently underway with the following Australian research groups:

Dr G Currie - Charles Sturt University

Prof JJ DeVoss and Dr E Gillam - University of Queensland

Prof T Riley - University of Western Australia

Dr J Sarris and Prof C Stough - University of Melbourne/Swinburne University

Dr E Tiralongo and Prof L Griffiths – Griffith University Prof K Watson and Dr L Agnew – University of New England

Dr H Wohlmuth - Southern Cross University

University of Western Australia School of Biomedical, Biomolecular and Chemical Sciences

Assoc. Prof Connie Locher



Connie.Locher@uwa.edu.au.

Dr Locher's natural product and medicinal chemistry group focuses on the isolation and identification of bioactive compounds from a variety of natural sources, in particular from traditional Australian and Asian medicinal plants. Recent projects include the phytochemical investigation of Conkerberry (Carissa lanceolata) and Snake Vine (Tinospora smilacina), Kiwi fruits (Actinidia ssp.) and Turmeric (Curcuma longa).



Currently we are investigating a large range of polyphenol-rich Eucalyptus exudates, known as kinos, with the aim to correlate chemical and antimicrobial activity data with traditional Aboriginal medicinal use. Since the mid-18th century in Europe and, undoubtedly for thousands of years before this by many different indigenous peoples, these red coloured exudates have been used internally and externally mainly for their astringent properties. In some instances, however, they were apparently employed due to a specific antimicrobial activity above and beyond that purely related to their tannin content. These kinos are the particular focus of our investigations. Those keen to learn more about this fascinating though in recent







years somewhat forgotten class of plant exudates might find our article in the Journal of Ethnopharmacology (2010, 128: 259-267) of

Another area of interest to our group are the potential anti-inflammatory and anti-allergic properties of some Euphorbia species, particularly those endemic to (Western) Australia.

Recent thesis (2010) on Medicinal Plant Research

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

Ph.D. thesis (2010) Natural compounds with antiadhesive activities against Helicobacter pylori By: Michael Niehues; Promotor: Prof. Dr. Andreas Hensel, Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Germany.

Ph.D. thesis (2010) From ethnopharmacology to phytochemistry and in vitro activity: wound healing compounds from Phyllanthus muellerianus (Kuntze) Exell. By: Christian Agyare, Ghana; Promotor: Prof. Dr. Andreas Hensel, Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Germany.

Ph.D. thesis (2010) Die Auffindung neuer Bindepartner pflanzlicher G-Proteine durch genetische, zellbiologische und biochemische Methoden (Identification of new proteins interacting with the plant G-protein by genetic, cell biological and biochemical methods) By: Carolin Wolf, Promotor: Prof. Dr. Werner Roos. Martin-Luther-Universität Halle-Wittenberg Fakultät Biowissenschaften, Institut für Pharmazie, Abt. Molekulare Zellbiologie, Halle, Germany.

Ph.D. thesis (2010) The Orca-ome as a key to understanding alkaloid biosynthesis in Catharanthus roseus. By G. Hasnain. Promotors: Prof. J. Memelink and Prof. R. Verpoorte, Institute of Biology Leiden, Leiden University, The Netherlands.

Ph.D thesis (2010) Vitual and real screening of natural products to find effective modulators of protein tyrosine phosphatise PTP1B. By: Renate Baumgartner; Promotor: Prof. V.M. Dirsch, University of Vienna, Austria.

Ph.D. thesis (2010) Optimization of a fluorimetric assay for the search for histone deacetylase modulators from plant origin and its application in bioactivity-guided isolation. By: Dipl.-Ing. Stanimira Mateeva Krasteva; Promotor: Ao. Univ.-Prof. Liselotte Krenn, Dept. of Pharmakognosie, University of Vienna, Austria.

Ph.D. thesis (November 2010) Mechanisms of action underlying ikarugamycinmediated growth inhibition and apoptosis induction in cancer cells. By: Mag. Ruxandra Popescu; Promoter: Prof. B. Kopp, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2010) Beiträge zur phytochemischen Analyse der mongolischen Heilpflanze Myricaria Iongifolia EHRENB. By: Bettina Mraz; Promotor: Ao. Univ.-Prof. Dr. S. Glasl-Tazreiter, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2010) Beeinflussung der Aktivität der Myeloperoxidase durch Flavonoide in Gegenwart von Thiocyanat. By Sandra Meier; Promotor Prof. Jürgen Arnhold and Prof. Karen Nieber, Universität Leipzig, Institut für Pharmazie, Germany.

Diploma thesis (2010) Untersuchungen zur Kooperativität von Inhaltsstoffen des Phytopharmakons STW 5 auf den Tonus und die Acetylcholin-induzierte Kontraktion an Colonpräparaten der Ratte. By Franziska Herr; Promotor Prof. Dr. Karen Nieber, Universität Leipzig, Institut für Pharmazie, Germany.

Diploma thesis (2010) Anxiolytic activity of the flavonols kaempferol, quercetin and myricetin and their corresponding hydroxyphenylacetic acid metabolites in the elevated plus maze. By Cica Vissiennon; Promotor Prof. Veronika Butterweck and Prof. Karen Nieber, College of Pharmacy, Department of Pharmaceutics, University of Florida (U.S.A.).

Diploma thesis (2010) Natural compounds with a putative anti-inflammatory activity and their effect on NF-xB mediated gene transactivaton. By: Olivia Schrammel; Promotor: Prof. V.M. Dirsch, University of Vienna, Austria.

Diploma thesis (2010) Ausgewählte Drogenextrakte der Traditionellen Chinesischen Medizin als mögliche Quelle neuer PTP1B Inhibitoren. By: Sandra Sterkl; Promotor: Prof. V.M. Dirsch, University of Vienna, Austria.

Diploma thesis (2010) Analyse phenolischer Inhaltsstoffe von Drosera-Arten mittels narrow bore HPLC. By: Marija Crnogorac; Promotor: Ao. Univ.-Prof. Liselotte Krenn, Dept. f. Pharmakognosie, Universität Wien, Austria.

Diploma thesis (2010) Phytochemische Untersuchungen am Baumfarn Metaxya rostrata. By: Barbara Merkinger; Promotor: Ao. Univ.-Prof. Liselotte Krenn, Dept. f. Pharmakognosie, Universität Wien, Aus-

Diploma thesis (2010) Screening of Chinese medicinal herbs for inhibition of NO production in RAW 264.7 macrophages and activity guided isolation of the constituents of Radix et Rhizoma Notopterygii. (in German) By Patricia Hofbauer; Promotor: Prof. R. Bauer, Institute of Pharmaceutical Sciences, University of Graz, Austria.

Diploma thesis (2010) Pharmacological investigations on the immunomodulatory properties of the Chinese herb Astragali radix. By Sabine Auer; Promotor: Prof. R. Bauer, Institute of Pharmaceutical Sciences, University of Graz, Austria, in collaboration with Prof. LU Aiping Institute of Basic Theory of TCM der China Academy of Chinese Medical Sciences, Beijing, China.

Diploma thesis (2010) Development of an HPLC Assay for Senna leaves and Senna fruits. (in German) By Angelika Kobath; Promotor: Prof. R. Bauer, Institute of Pharmaceutical Sciences, University of Graz, Austria.

Diploma thesis (2010) Clarification of the internal phylogeny of taxa in various truffle genera. By Adriane Weinberger; Promotor: Prof. R. Bauer, Institute of Pharmaceutical Sciences, University of Graz, Austria, in collaboration with Prof. Dr. Lars Bohlin, Division of Pharmacognosy, University of Uppsala, Sweden.



Diploma thesis (2010) Investigations on the establishment of a monograph of the Chinese herb Notopterygii radix et rhizoma (Qianghuo) in the European pharmacopoeia. (in German) By Carina Wiedner; Promotor: Prof. R. Bauer, Institute of Pharmaceutical Sciences, University of Graz, Austria.

Diploma thesis (2010) Investigations on the establishment of a monograph of the Chinese herb Radix et Rhizoma Salviae miltiorrhizae (Danshen) in the European pharmacopoeia. (in German) By Cornelia Grainer; Promotor: Prof. R. Bauer, Institute of Pharmaceutical Sciences, University of Graz, Austria.

Diploma thesis (2010) Phytochemical Investigations on the Stem Bark of Zanthoxylum gilletii De Wild. (in German) By Thomas Mair; Promotor: Prof. R. Bauer, Institute of Pharmaceutical Sciences, University of Graz, Austria.

Diploma thesis (2010) Phytochemical Investigations on the Leaves, Roots and Stems of Piper sarmentosum Roxb. (in German) By Philipp Wirnsperger; Promotor: Prof. R. Bauer, Institute of Pharmaceutical Sciences, University of Graz, Austria.

Diploma thesis (2010) Investigations on the assay of astragaloside IV in Astragalus mongholicus var. mongholicus BUNGE. (in German) By Isabella Wolf; Promotor: Prof. R. Bauer, Institute of Pharmaceutical Sciences, University of Graz, Austria.

Diploma thesis (2010) Screening of Chinese medicinal plants and testing of constituents from *Sophora flavescens* and *Piper sarmentosum* for inhibition of NO production in RAW 264.7 macrophages. (in German) By Katharina Krampl; Promotor: Prof. R. Bauer, Institute of Pharmaceutical Sciences, University of Graz, Austria.

Diploma thesis (2010) Investigations on the content of salvianolic acid B and miltiron in the roots of *Salvia miltiorrhiza*. (in German) By Michaela Braun; Promotor: Prof. R. Bauer, Institute of Pharmaceutical Sciences, University of Graz, Austria.

Diploma thesis (November 2010) Überarbeitung ausgewählter Monographien des österreichischen Arzneibuchs. By: Monika Heß; Promoter: Prof. B. Kopp, Department of Pharmacognosy, University of Vienna, Austria

Diploma thesis (August 2010) Screening of various extracts of *Artemisia dracunculus* L. for antidiabetic activity in rats. By: Weinöhrl Stefanie Elisabeth; Promoter: Prof. B. Kopp, Department of Pharmacognosy, University of Vienna, Austria, and Prof. Dr. Veronika Butterweck, University of Florida, U.S.A.

Diploma thesis (Juni 2010) Phytonutriments and chemoprevention – role of polyphenols in prevention of colorectal cancer or chronic diseases. By: Katharina Schüller; Promoter: Prof. B. Kopp, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (Juni 2010) Phytochemische Untersuchungen an ausgewählten Drogen der Traditionellen Chinesischen Medizin (TCM). By: Isabella Sprinzl; Promoter: Prof. B. Kopp, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (Juni 2010) Phytochemische Untersuchungen: von der Grundlagen-Forschung zur Arzneibuchmonographie. By: Johannes Köhbach; Promoter: Prof. B. Kopp, Department of Pharmacognosy, University of Vienna, Austria.

Graduated thesis in Pharmacy (2010) Liposomal carriers of artemisinin and cur-

cumin and their in vivo activity in a murin model of malaria. By: Margherita Grazioso; Promotor: Prof. A.R. Bilia and Dr. Benedetta Isacchi, Dept. Pharmaceutical Sciences, University of Florence, Italy.

Graduated thesis in Pharmacy (2010) Liposomal carriers of cyclodextrin-curcumin complexes for dermal use. By: Giulia Guidelli; Promotor: Prof. A.R. Bilia and Francesca Mazzacuva, Dept. Pharmaceutical Sciences, University of Florence, Italy.

Graduated thesis in Herbal Techniques (2010) *Viola odorata L.*: phytochemical analysis and quality control. By: Furlan Claudia; Promotor: Prof. A.R. Bilia and Dr. Anastasia Karioti, Dept. Pharmaceutical Sciences, University of Florence, Italy.

Graduated thesis in Herbal Techniques (2010) Optimisation of separation of polymethoxyflavonoids from *Artemisia annua* L. By: Ros Giorgia; Promotor: Prof. A.R. Bilia and Dr. Anastasia Karioti, Dept. Pharmaceutical Sciences, University of Florence, Italy.

Editorial remark

All contributions for the GA-Newsletter are welcome. Deadline for submission for the next edition is fixed to May 20th 2010. Please send all contributions to: Prof. Dr. A. Hensel, University of Münster, Institute for Pharmaceutical Biology and Phytochemistry, Hittorfstrasse 56, D-48149 Münster, Germany; ahensel@uni-muenster.de

