



## Message from the President



Dear members,

the 54<sup>th</sup> annual congress of GA will be held this year in Helsinki/Finland and will be organized by Prof. Hiltunen assisted by Prof. Vuorela. It is 34 years after the GA congress has been organized for the first time in Helsinki by Prof. Max von Schantz, who is now one of our distinguished honorary members. The main topics of this year's congress will be Drug Discovery from Natural Products, Recent Advances in Analysis of Secondary Metabolites, Genomics, Proteomics and Metabolomics in Medicinal Plant Research, Health Beneficial Effects of Plant Phenolics and Clinical Studies with Herbal Medicinal Products. Therefore it will cover again a broad range of medicinal plant research and we expect interesting lectures and posters.

In Helsinki we will, for the first time, present the new "Willmar Schwabe Award of the Society for Medicinal Plant Research" which has been donated by Willmar Schwabe Arzneimittel AG to promote excellent pharmacological and clinical studies with herbal medicinal products. This

award will complement our well known Egon-Stahl-Award which is dedicated to promote young scientists working in the field of pharmacognosy and analytical phytochemistry.

Besides our annual congress, GA is again co-organizing several other symposia on medicinal plant research during this year. You can find the corresponding information in this Newsletter or on our web site.

You will have realized that our homepage has completely been updated and has received a new layout which is according to the new corporate design of GA. I hope you like it and I want to thank all colleagues in Vienna very much who have been in charge of this update. The new corporate design has been introduced in 2006 and is now used for all mailings, brochures etc. Prof. Kreis developed this design and I want to thank him very much for his work.

Also the layout of the GA-Newsletter has been updated, as you have realized already with the last issue. It has now a much more modern design and contains also photographs. We hope that you appreciate this new design and I want to thank the editor, Prof. Hensel, very much for all his efforts in bringing our Newsletter onto this new level. He always welcomes your feedback and contributions and wants to keep the Newsletter attractive and valuable.

During the BoD meeting in Helsinki, we want to discuss the future development of GA. Therefore, I am looking forward to your e-mails with comments or suggestions in advance and, of course, also to seeing many of you at our annual meeting.

Rudolf Bauer  
GA President

## Editor's Corner



Dear Friends and Members, Greetings!

As you have noticed the newsletter is going to be distributed more and more by electronic mail system in order to save costs and capacity. Actually we still have problems with members who did not inform the secretary about changes of actual mail address. This means that we have many non-deliverable mails, which have to be extracted from our data base and a print copy has to be sent additionally to these members. We can not afford this immense administration work. For that reason we urgently ask you again to

keep your email addresses in the GA file actual. In case the mail is not deliverable GA will not react by sending print copies. We urgently appeal to all members to keep us up-to date with actual addresses! Thank you for your cooperation. Have a good and enjoyable summer and seeing you in Helsinki!

Yours Andreas Hensel

## New GA members

since January 1<sup>st</sup> 2006

The Society welcomes you all warmly and wishes that GA may get a platform for many scientific and personal contacts. All the best for you and GA is looking forward to your participation in the forthcoming GA-events and especially to welcome you at the Helsinki conference 2006.

Dr. Rawiya Alasbahi, Germany; Prof. Dr. Karl-Heinz Altmann, Switzerland; Ms. Jennifer Anke, Germany; Ms. Shereen Ayoub, Germany; Dr. Georges Betti, France; Ms. Edyta Biskup, Poland; Prof. Dr. Ian Castro-Gamboa, Brazil; Mr. Mehdi Chaabi, France; Ms. Thi Thanh Hien Dao, The Netherlands; Vishal Deshmukh, India; Zvezdana Doslov-Kokorus, Serbia & Montenegro; Dr. Noelia Duarte, Portugal; Mr. Ahmed Hamed, United

Kingdom; Mr. John Juul Henriksen, Denmark; Dr. Arne Heyerick, Belgium; Ms. Belinda Hornby, United Kingdom; Prof. Dr. Suthimaln Ingkatawornwong, Thailand; Dr. Henrik Byrial Jakobsen, Denmark; Ms. May Susanne Jalali, Germany; MSc. Mohammad Khader, Austria; Mr. Benjamin Köpke, Germany; Mr. Dominic Kram, Germany; Mr. Premysl Landa, Czech Republic; Dipl.-Biol. Christian Lass, Germany; Dipl.-Ing. Doris Lengauer, Austria; Dr. Louis Maes, Belgium; Dr. Rosilene M. Marcal, Brazil; Mr. Christian Mehner, Germany; Dr. med. Günter Meng, Germany; Dipl.-agr. Oliver Neye, Germany; Master Amal Mukhtar Nour, Germany; Ms. Birgit Ohlendorf, Germany; Dr. Edward Okello, United Kingdom; MSc Sofia Ortlepp, Germany; Ms. Michaela Palluch, Germany; M.Sc.

Ria Paunonen, Finland; Mr. Alexander Pontius, Germany; Prof. Dr. Jindaporn Puripattanavong, Thailand; Dr. Vidhya Ramaswamy, India; Miss Sasiporn Sarawek, USA; Mr. Thanapat Sastraruji, Thailand; Mr. Christoph Schmitt, Austria; Ms. Andrea Schwaiberger, Austria; Miss Hafsat Shittu, United Kingdom; Prof. Dr. Dulce Silva, Brazil; Dr. Florian Conrad Stintzing, Germany; Dr. Heinz Stumpf, Germany; Mag. Pharm. Gabriele Trauner, Austria; Dr. Fanie R. Van Heerden, South Africa; P. Pharm. Ruchi Verma, India; Ms. Nadine Weber, Germany; Dr. Nicola Wilson, United Kingdom; Ms. Nicole Wittschier, Germany; Ms. Janina Zippel, Germany.

Andreas Hensel

## Notes to all GA members



**Note to all GA members**

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

Fax / phone:  
++49 8141 613 749

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



**Deceased members**

(to our knowledge)

Dr. Alfred Katz,  
Basel, Switzerland

Dr. Viktoria Abike Roberts,  
Nigeria

GA will keep commemoration of these members and offers its sincere condolences.



**Editorial remark**

All contributions for the GA-Newsletter are welcome.

Deadline for submission for the next edition is fixed to November 30, 2006.

Please send all contributions by e-mail or disk to:

Prof. Dr. A. Hensel,  
University of Münster, Institute for  
Pharmaceutical Biology and  
Phytochemistry,  
Hitdorffstrasse 56, D-48149 Münster,  
Germany

ahensel@uni-muenster.de

# Reports of GA-Symposia and Workshops

## Workshop “Natural Products in Drug Discovery” in Vienna

The newly created research focus “Drug Discovery From Nature” at the Faculty of Life Sciences serves as a multidisciplinary platform for scientists to strengthen natural products research at the University of Vienna and to increase visibility of the topic. On the 30<sup>th</sup> and 31<sup>st</sup> of March, the Department of Pharmacognosy and GA invited to a two-day workshop, which brought together experts from industry and universities and gave a new look at the subject in a, as many attendees noted, rather unique and relaxed atmosphere.

Its first day was dedicated to “concepts and techniques”. A range of international speakers from industrial companies such as Novartis or Bayer Health Care, as well as from academic institutions covered topics like screening techniques (from virtual to holistic approaches) and the chemical optimization of natural products as pharmacological lead structures. During the second day, interesting “compounds and targets” were presented in more detail. The chemistry behind French “barrique” wine, molecular mechanisms of action of Chinese medicinal plants and new glycopeptide antibiotics derived from micro-organisms out of the Japanese deep sea are only some examples.

The numerous and lively discussions, which arose during the sessions, were also continued until late at night at a typical wine tavern, a “Heurigen”, located in the hills outside Vienna. This, and the fact that many voices were heard asking for a follow-up event, showed, that the concept of the meeting was highly appreciated by the audience. Special thanks go to

Prof. Dr. Verena Dirsch from the Department of Pharmacognosy, who organized this workshop. For more information on the faculty’s research focus please visit [http://www.univie.ac.at/drug\\_discovery\\_from\\_nature/](http://www.univie.ac.at/drug_discovery_from_nature/)

Christoph Schmitt, Vienna

## Pharmacovigilance of herbal medicines: current state and future directions

The Society for Medicinal Plant Research (GA) was a partner in a conference held in London from April 26 to 28, 2006 (on *Pharmacovigilance of herbal medicines: current state and future directions* organised by Dr Joanne Barnes (a member of the GA), Associate Professor in Herbal Medicines, School of Pharmacy, University of Auckland, New Zealand, in association with the Royal Pharmaceutical Society of Great Britain and Academy of Pharmaceutical Sciences. Other partners in the meeting were the European Scientific Co-operative on Phytotherapy (ESCOP), the International Society of Pharmacovigilance (ISoP), the World Health Organisation’s Uppsala Monitoring Centre (Collaborating Centre for International Drug Monitoring) and the School of Pharmacy, University of London. The conference was attended by over 120 delegates from over 30 countries worldwide.

The meeting included sessions on risk management, risk minimisation and risk modification for herbal medicinal products (HMPs), with presentations from Professor Phil Routledge, chairman of the new Herbal Medicines Advisory Committee in the UK, and Professor Peter de Smet

(Scientific Association of Dutch Pharmacists, Netherlands). Dr June Raine and Dr Linda Anderson, both from the Medicines and Healthcare products Regulatory Agency in the UK discussed regulatory pharmacovigilance and its relevance to HMPs, and regulation of herbal medicine practitioners in the UK, respectively. In a session on quality issues, Dr Mohamed Farah (WHO-UMC) and Dr Bob Allkin (Royal Botanic Gardens, Kew, UK) emphasised the need for an internationally accepted directory of botanical names, and Professor Arnold Vlietinck (University of Antwerp, Belgium) described implications of quality of HMPs with respect to safety and efficacy.

Dr Jan Bruhn (Inbio, Sweden) chaired a session comprising oral presentations of submitted abstracts, including results of a cross-sectional study of the herbal pharmacovigilance activities of National Pharmacovigilance Centres (A Aggarwal, School of Pharmacy, University of London and J Barnes, School of Pharmacy, University of Auckland) and an assessment of the quality of published reports of suspected adverse drug reactions associated with HMPs (T Wegener, Germany).

An entire session was devoted to spontaneous reporting schemes initiated by the herbal sector, such as those developed by the UK National Institute of Medical Herbalists and the UK Register of Chinese Herbal Medicine. Dr Alex Doodoo (National Pharmacovigilance Centre, Ghana) presented the traditional healers’ perspective on herbal safety. Other perspectives on herbal safety and ADR reporting discussed in this session included ESCOP (S Mills, ESCOP), the herbal industry (S Köhler, Schwabe, Germany), the pharmaceutical industry (R Tiner, Association of



Audience during the workshop in Vienna “Natural products in Drug Discovery”

the British Pharmaceutical Industry) and consumers (J Barnes, University of Auckland).

The last day of the meeting focused on tools and techniques in herbal pharmacovigilance. Professor Ralph Edwards (Director, WHO-UMC) described the UMC's experiences and activities in global monitoring of herbal safety, and there were several presentations from individuals representing national pharmacovigilance centres (A Doodoo, Ghana; Y Chen, China; U Hagemann, Germany). Andrew Bate (WHO-UMC) described the Bayesian statistical approach used by the WHO-UMC as a step in its signal detection work, including for herbal signals.

Several speakers discussed the potential for the use of observational data in herbal pharmacovigilance. John Parkinson (General Practice Research Database, UK) explored how the GPRD could be used in herbal safety investigations, and others described practitioner-prescription-based models for monitoring safety of HMPs (D Layton, Drug Safety Research Unit, Southampton, UK; M Schaefer, Berlin).

The conference closed with a session looking towards the future with presentations on pharmacogenomics and HMPs (M Pirmohamed, Liverpool, UK) and communication of information on herbal safety concerns (B Hugman, Thailand).

Contributed by Joanne Barnes, School of Pharmacy, Faculty of Medical and Health Sciences, University of Auckland, Auckland, New Zealand.  
j.barnes@auckland.ac.nz  
(more under <http://www.pharmj.com/reports/herbalmedicines/index.html>)

### **Birth day symposium in honour of Dr. Dr. mult. h.c. Albert Hofmann in Basel with a GA workshop "Drug Discovery from Nature"**

GA honorary member Dr. Albert Hofmann celebrated his 100<sup>th</sup> birthday on Jan. 11, 2006. To his honour an international symposium with the title: "LSD – problem child and wonder drug" was organized on Jan. 13–15, 2006 in Basel/Switzerland by various patrons (e.g. Beckley Foundation (UK), Society for Medicinal Plant Research (GA), Swiss Medical Society for Psycholytic Therapy, etc.). About 2000 participants from all over the world greeted Dr. Albert Hofmann with minutes of standing ovations when he entered the audience hall in the Basel congress centre. In admirable health and attentiveness he received all the good wishes and told the story of his famous invention. Among other well-wishers GA president, Prof. R. Bauer, gave a short welcome and congratulation address.

In three days 80 international experts – scientists, psychiatrists, artists and confessing LSD consumers – illuminated history, research, spread, consequences, threads, risks and potentialities of this most potent of all psychoactive substances (at the end the organizers themselves called it "the biggest psychedelic conference ever held").

GA was requested to organize a workshop "Drug Discovery from Nature" on Jan. 13. Three lectures elucidated this topic to an interested audience.

The first speaker, Prof. Wolfgang Kubelka, Vienna, illuminated the historic view under the title "Pharmakon: From Poison to Medicine – the Chemical Improvement of Nature?"

The Greek term "pharmakon" was used for poison, at the same time for antidote and medicine. During the centuries, poisonous and healing plants have been detected by trial and error; it was not before 1800, however, that natural science became successful in isolating and identifying active substances from plants. With the development of chemistry the number of known structures increased enormously, and in many cases their mode of action became explainable. Albert Hofmann in his work, sometimes lead by serendipity, gives us excellent examples for classical natural products chemistry.

Prof. Rudolf Brenneisen, Bern-Switzerland, spoke about "Cannabis – From Phytocannabinoids to Endocannabinoids". The Cannabis plant has been an essential element of traditional medicine for thousands of years. Today, its medicinal use is becoming again popular mainly within self-medication. However, the discrepancy between empirical and evidence-based data is obvious and therefore implies intensive pharmacological and clinical research. On the other hand, the recently discovered Cannabis receptors and their endogenous ligands are potential targets for new therapeutic tools.

In the third lecture Prof. Matthias Hamburger, Basel-Switzerland, explained the "Contemporary Natural Product Drug Discovery". Natural products have been the historically most prolific source for drugs and inspiration for designing synthetic drug substances. Recently, their role in drug discovery has been challenged by the advent of combinatorial synthesis and high-throughput screening. Contemporary opportunities for natural products will be discussed in the larger context of methodological advances and new paradigms in the life sciences. Selected examples will highlight the continued importance of natural products in target discovery and as source for new drug templates with unique properties.

A broad and interested discussion followed.

R. Seitz

### **Global Summit on HIV / AIDS, Traditional Medicine & Indigenous Knowledge – Ghana, March 14–18, 2006**

The „Global Summit on HIV/AIDS, Traditional Medicine & Indigenous Knowledge“ was organised in Accra, Ghana, March 14–18, 2006, and supported by international organisations such as WHO, UNAIDS, and by the Society for Medicinal Plant Research, represented by L. Pieters, University of Antwerp, Belgium. The meeting was officially launched by C. Quarshigah, Minister of Health of Ghana, and was attended by about 100 participants. The program consisted of about 50 oral presentations.

The objectives of the Summit were:

1. To serve as a forum for the identification and testing of potentially beneficial low-cost naturally-derived medicinal products;
2. To promote partnerships between indigenous healers, conventional medical practitioners and corporate institutions for sharing their indigenous knowledge of plants of medicinal value for future development and production of drugs and herbal products; and
3. To encourage governments to adopt and enforce laws to protect and conserve plants of medicinal value; and to protect the rights of indigenous practitioners.

After five days of submissions and engaging deliberations, the Summit adjourned on March 18, 2006, with the following declaration:

That we, the participants of the Global Summit on HIV / AIDS, Traditional Medicine & Indigenous Knowledge, on the basis of stated objectives and on the strength of the findings of this conference, call upon the Ministry of Health of the host country and those represented by their delegates present, WHO, UN Joint Programmes on HIV / AIDS, associated organisations and all governments and world organisations to support traditional medical practices through:

- Promotion of traditional medical practice through collaboration with and recognition by existing healthcare systems and introduction of Traditional Medicine into research and educational curricula at all levels with particular emphasis on the youth.
- Institutionalisation of Traditional Medical Practice within governments, with implementation of standardisation and a code of ethics for Traditional Medical Practitioners.
- Training and certification of Traditional Medical Practitioners in safe practices, addressing both indigenous and academic areas, in accordance with customary laws.



- Promotion of collaboration and three-way referrals between traditional to orthodox medical practitioners, i.e. Traditional Medical Practitioners to Traditional Medical Practitioners, Traditional Medical Practitioners to Conventional Medical Practitioners, and

Conventional Medical Practitioners to Traditional Medical Practitioners.

That we urge State parties, governments and multilateral organisations to respect the customary laws and practices that define access and availability of indige-

nous cultural knowledge, and to ensure adequate and mutually acceptable exchanges. We request governments and funding agencies to commit resources and funding to achieve the stated goals.

Prof. Luc Pieters, Antwerp

## Notes from the Society

### Honorary Member of the Society Albert Hofmann – an event of the century!

On January 11th, 2006, Dr. Dr. h.c. mult. Albert Hofmann, Honorary Member of the Society for Medicinal Plant Research and of the American Society of Pharmacognosy, had the good fortune to celebrate his 100th birthday, and what else, if not this event, would be a perfect reason for cordial congratulations!

“It is said and written again and again, that LSD was a pure chance discovery. This is only partly correct...” Hofmann writes in his well known book: “LSD – my problem child”. This, because LSD was produced during the course of a well planned research project aiming at improved medicinal agents, and it was only five years later, in 1943, when he experienced by chance the unexpected hallucinogenic effects of the substance. Thus, the term “serendipity”, which he himself likes very much, is more appropriate for his discovery: to find something, which you were not looking for, but by chance and perspicacity, you come upon something that was completely unexpected. As a result, Albert Hofmann became famous throughout the world as the inventor of LSD, a substance, which influenced millions of people, and has had an impact upon thousands of lives. Despite many studies which promised the usefulness of LSD as an aid in psychotherapy, due to its misuse and as a psychedelic substance, it has become illegal almost worldwide. This provides an explanation for Dr. Hofmann’s concern and chagrin regarding his “problem child”.

Hofmann’s interest in the chemistry of natural compounds dates back to his childhood, when as a boy he already showed great interest in plants. Later in his doctoral thesis with Paul Karrer he succeeded in degrading chitin by means of snail enzyme. After completing his studies of chemistry at the University of Zürich in 1929, Dr. Hofmann chose a position in the pharmaceutical-chemical research laboratory of Sandoz, Basel, as a co-worker of Prof. Arthur Stoll. At that time the Sandoz group under Stoll initiated a new area of cardiac glycoside research and Hofmann very enthusiastically dedicated his first years of research

to the successful isolation and structure elucidation of cardiac glycosides from squill (“*Scilla maritima*”), and obtained the first crystalline product, scillaren A.

Looking for a new research topic, Hofmann proposed in 1935 to take up work on ergot alkaloids again, following the isolation of ergotamine by Stoll in 1918. In addition to the systematic study of these alkaloids, this decision produced a number of research activities, including the isolation and chemical modification of numerous substances, the development of valuable medicinal agents such as hydergine and dihydergot, and eventually the synthesis of LSD. Later, starting around 1950 to 1960 Hofmann’s interest in hallucinogenic substances led to the isolation, structure elucidation and testing of the active principles of the Mexican magic mushrooms (“*Teonanacatl*”), i.e. the indole alkaloids psilocin and psilocybin. Additionally, from the “Narcotic Ololiuqui of the Aztecs” or the seeds of various Convolvulaceae-plants, surprisingly lysergic acid derivatives were detected for the first time in higher plants. All this work was done performing “heroic” classical natural products chemistry without the benefit of the sophisticated modern tools of chemistry that are readily available nowadays!

One can no doubt imagine, that Dr. Hofmann’s career and personal life has been deeply influenced and determined by his discoveries of genuine plant substances and their derivatives and their broad impact on human beings as part of nature or even cosmos, be it as medicinal agents or as useful or misused hallucinogens. And it is very well understandable, that he has not remained with pure chemistry, but consequently began asking questions which always dealt with reality in its various aspects. As Dr. Hofmann said in his book “Insight Outlook”: “*By observing natural scientific discoveries through a perception deepened by meditation, we can develop a new awareness of reality.*” He goes on to clarify this by saying that “*It is essential to recognize that the one-sided belief in the natural scientific view of life is based on a momentous error.*”



Dr. Dr. h.c. mult. Albert Hofmann

*Certainly, everything it contains is true, but this only represents half of reality;... All of the spiritual dimensions that cannot be described in physical or chemical terms, which include the most important characteristics of that which is living, are absent”.*

With all his modesty as a person, Albert Hofmann has received numerous awards and honours, his three honorary doctorates from Stockholm, Zürich, and Berlin as just some examples. The Society for Medicinal Plant Research is proud to have appointed Dr. Hofmann as an Honorary Member in 1977, “rewarding him for his outstanding and successful research especially on cardiac glycosides from *Urginea maritima* as well as on ergot and Rauwolfia alkaloids including the synthesis of LSD and the discovery of its psychotropic activities”. Reading his books we think of him as a great man, indeed a figure for the century, not only as part of the history of medicinal plant research, but as well as an example for anyone looking at nature and reality not exclusively just from a single, materialistic point of view.

Our best wishes for continued joy and contentment for a life well-lived!

Prof. Wolfgang Kubelka, Vienna  
Prof. Rudolf, Bauer, Graz



# Notes from the Society

## 80<sup>th</sup> birthday of GA honorary member Dr. Hans Georg Menssen

One of the giants among the practitioners of pharmacognosy and phytotherapy, Dr. Hans Georg Menssen, celebrated his 80<sup>th</sup> birthday on June 8, 2006. Not only those working in his special field of research and practise but everybody in the entire area of pharmacy as well is indebted to him, since his thoughts and ideas greatly advanced, and in many instances even were instrumental for the present state of a modern, future-oriented phytotherapy. Through his intimate knowledge of both, research results and their practical application, in this field Dr. Menssen was able to profoundly influence an entire generation of industrial pharmacists.

His vita can be told in a nutshell: born in 1926 in Tossens, a town in the region of Frisian Oldenburg, college, pharmaceutical degree (1957) and subsequent Ph.D. (1958) at the University of Wuerzburg, scientific research assistant and, from 1960 onward, in the service of the phytopharmaceutical manufacturer Nattermann & Co in Cologne. Here he started in the research department, was made head of the production in 1962, became director of research and development in 1970 and, finally, in 1988 was made head executive responsible for the entire field of phytotherapy and phytopharmacy. He retired in 1990.

Although his daily routine was mostly concerned with the aspects of running efficiently an industrial enterprise marketing and producing ethical phytomedicines, he was allowing himself sufficient time to endeavour in scientific research. He is author or co-author of more than 100 scientific publications, patents and

several books. In those he laid the groundwork for today's quantitative standardisation procedures in herbal drugs and their preparations as well as for the modern technological methods in manufacturing phytopharmaceuticals. Both, his all encompassing knowledge and his practical, hands-on experience made Dr. Menssen the ideal candidate for the newly founded Pharmacopoea Europaea Commission, where he served as German expert from the beginning in 1963 up until 1991. Many monographs bear his imprint. He also served as a member of the German Commission E of the BfArM for many years, where his knowledge influenced many of their decisions.

Apart from his special field of pharmacognosy and phytotherapy he was actively involved in the affairs of the pharmaceutical profession as a whole in Germany. For many years he was acting as secretary general of the DPhG (Deutsche Pharmazeutische Gesellschaft/ German Pharmaceutical Society), represented the phytopharmaceutical sector in the BPI (Bundesverband der Pharmazeutischen Industrie/Association of the pharmaceutical industry), was one of the editors of *Planta Medica* and member of the advisory board of GA (Gesellschaft für Arzneipflanzenforschung/Society for Medicinal Plant Research). Because of his meritorious work he was made honorary member of GA in 1997.

His many beneficial activities were recognized even outside the pharmaceutical profession. The federal republic of Germany awarded him in 1986 its special honour, the cross of merit.



**Dr. Hans Georg Menssen**

Next to all these professional merits one aspect is easily overlooked, that is the human face of Dr. Menssen. Everybody, who gets to know him personally, is surprised to discover him as an easy going, happy fellow with a profound knowledge of good food and spirits, resting in himself, always regarding life in a positive, happy and content aspect. He is the direct contrast to the German prejudicial view of the "grumpy introverted Oldenburger". His openness and charm make it almost impossible not to like him.

Dear Dr. Menssen, we all wish You many happy years among Your friends, filled with content, good luck and robust health! Happy birthday!

Prof. Dr. Götz Harnischfeger

# Next GA Meetings



Gesellschaft für Arzneipflanzenforschung - GA

Helsinki, Finland

29 August - 2 September 2006

## [www.GA2006.fi](http://www.GA2006.fi)

The GA Congress 2006 in Helsinki is coming soon and we are pleased to inform GA members of the enthusiastic response to this important event by researchers from every part of the world. Nearly 500 abstracts have been received and about 50 of these have been selected for oral communication: 400 will be presented as posters.

All the invited speakers have confirmed their participation in the following program:

### *Drug Discovery from Natural Products*

DISCOVERY OF NATURAL PRODUCTS BY CHEMICAL AND PHARMACOLOGICAL PROFILING  
Prof. Dr. M. Hamburger, *Dept. of Pharmaceutical Sciences, University of Basel*

### *Recent Advances in Analysis of Secondary Metabolites*

RECENT ADVANCES IN ANALYSIS OF SECONDARY METABOLITES  
Prof. Dr. G. K. Bonn, *Institute of Analytical Chemistry and Radiochemistry, University of Innsbruck*

### *Genomics, Proteomics and Metabolomics in Medicinal Plant Research*

PLANT METABOLOMICS: SMALL MOLECULES TAKE CENTER STAGE  
Dr. R. Trethewey, *Metanomics GmbH & Co. KgaA, Berlin*

### *Health Beneficial Effects of Plant Phenolics*

ABSORPTION AND METABOLISM OF DIETARY PHENOLICS  
Prof. Dr. A. Crozier, *Institute of Biomedical and Life Sciences, University of Glasgow*

(TITLE WILL BE INFORMED LATER)

Prof. Dr. J. Joseph, *Neuroscience Laboratory, Jean Mayer USDA HNRCA at Tufts University*

### *Clinical Studies with Herbal Medicinal Products*

CLINICAL TRIALS AND SYSTEMATIC REVIEWS OF HERBAL MEDICINE  
Prof. Dr. E. Ernst, *Complementary Medicine, Peninsula Medical School*

The four permanent Committees of GA will organize workshops held as usual during lunch time. The following topics have been scheduled:

*Biological and Pharmacological Activity of Natural Products:* Prof. Dr. H. Winterhof.

*Breeding and Cultivation of Medicinal Plant:* PLANT INTELLECTUAL PROPERTY RIGHTS, Prof. Dr. C. Franz

*Manufacturing and Quality Control of Herbal Remedies:* REFERENCE COMPOUNDS, Prof. Dr. B. Meier

*Regulatory Affairs on Herbal Medicinal Products:* IMPLEMENTATION OF THE GUIDELINES ON NON-CLINICAL DOCUMENTATION FOR HMPs IN APPLICATIONS FOR MARKETING AUTHORISATION AND SIMPLIFIED REGISTRATION, Prof. Dr. A. J. Vlietinck

In addition two further workshops are also scheduled:

WORKSHOP DEDICATED TO YOUNG RESEARCHERS. A Workshop for Young Researchers will take place on August 29<sup>th</sup>, 2006. The Young Researchers Workshop will be organized by Prof. Dr. Andreas Hensel, Prof. Dr. Anna-Rita Bilia, Dr. Alexandra Deters, Prof. Dr. Michael Keusgen. The Young Researchers Workshop is available for students only. About 10 to 12 selected talks

*Workshop on Respiratory Diseases*, organised by Bionorica company: RETHINKING THE NEW ROLE OF NASAL EPITHEL – MORE THAN A SIMPLE BARRIER?, Prof. Pontus Stiernä



For further information contact via e-mail [ga-2006congress@helsinki.fi](mailto:ga-2006congress@helsinki.fi); [www.GA2006.fi](http://www.GA2006.fi)

Helsinki is a modern European cultural city whose urban cosmopolitan lifestyle exists in perfect harmony with nature. Surrounded by the sea and its own exotic archipelago, Helsinki offers accompanying persons a great number of possibilities. Throughout its 450-year history, Helsinki has existed in the crosscurrents of the East and West. The colourful layers of history can be seen everywhere; a walking tour of the city centre or of the magnificent Suomenlinna Maritime Fortress will open your eyes to a fascinating past. Visitors can eg. take a tour to The Finnish Museum of Natural History, an independent research institution functioning under the University of Helsinki. It is also one of the three central national museums in Finland and responsible for the national collections in its field. <http://www.helsinki.fi/eng/index.html>

The Congress will conclude on the September 2<sup>nd</sup> with two different excursions. A typical botanical excursion brings to country side, Lammi Biological Station, which is mainly used for field studies and research of biological and environmental sciences. Second excursion as a cultural excursion leads to visiting the Gallen-Kallela Museum Tarvaspää, museum of Finland's national artists, which presents the artist's rich and varied oeuvre. Also the excursion to the Museum Hvitträsk, national romantic style museum, built between 1901–1903 by three famous Finnish architects, is included.

## GA-Meeting 2007

### *55<sup>th</sup> Annual Congress in Graz, Austria*

In 2007 the International Congress and 55<sup>th</sup> Annual Meeting of the Society for Medicinal Plant Research will be held in Graz, Austria, from September 2<sup>nd</sup>–5<sup>th</sup>.

The main scientific topics of the congress will be:

- Anti-inflammatory and immunomodulatory active natural products
- Natural products with antimicrobial activity
- Analysis and biopharmacy of medicinal products
- Traditional herbal medicinal products
- Medicinal plants in animal healthcare

All correspondence concerning scientific items should be addressed to Prof. Dr. Rudolf Bauer [rudolf.bauer@uni-graz.at](mailto:rudolf.bauer@uni-graz.at). All correspondence concerning i.e. registration and accommodation should be addressed to the Organizing Secretariat [congress@semaco.co.at](mailto:congress@semaco.co.at).

Please visit the Congress website soon at [www.GA2007.org](http://www.GA2007.org)

Welcome to Graz in 2007!

## Other Meetings

### **Arlinton, Virginia, U.S.A.**

5–9<sup>th</sup> August 2006:

*Natural products on target; 47<sup>th</sup> Annual Meeting of the American Society of Pharmacognosy*

<http://www.phcog.org/AnnualMtg/Washington.html>

### **Boston, Massachusetts, U.S.A.**

5–9<sup>th</sup> August 2006:

*Plant Biology 2006*

<http://www.aspb.org/meetings/>

### **Nanning, P.R. China**

22–25<sup>th</sup> August 2006:

*9<sup>th</sup> International Congress of Ethnopharmacology*

[http://www.ethnopharmacology.org/newConf\\_05](http://www.ethnopharmacology.org/newConf_05)

### **Winnipeg, Manitoba, Canada**

22–25<sup>th</sup> August 2006:

*XXIII International Conference on Polyphenols*

[http://www.umanitoba.ca/outreach/conferences/polyphenols\\_conference/english/index.html](http://www.umanitoba.ca/outreach/conferences/polyphenols_conference/english/index.html)

### **Marburg, Germany**

4–7<sup>th</sup> October 2006:

*Annual Meeting of the German Pharmaceutical Society – Deutsche Pharmazeutische Gesellschaft. Joint meeting together with the Hungarian Society of Pharmaceutical Sciences and the Czech Pharmaceutical Society. 4–5<sup>th</sup> October: Symposium “New aspects of quality of herbal medicinal products”.*

[www.krieglstein-marburg.de](http://www.krieglstein-marburg.de)

### **Mashad, Iran**

7–9<sup>th</sup> October 2006:

*2<sup>nd</sup> International Symposium on Saffron Biology and Technology. Prof. Dr. A. Koocheki, University of Mashhad*

[www.Saffron-ir.um.ac.ir](http://www.Saffron-ir.um.ac.ir)

### **Padang, Indonesia**

13–18<sup>th</sup> November 2006:

*Asian Symposium on Medicinal Plants, Spices and other Natural Products (ASOMPS) XII*

<http://www.unand.ac.id/asompsxii/>

### **Varadero, Cuba**

November 20–24, 2006:

*1<sup>st</sup> International Symposium about Pharmacology of the Natural Products and 1<sup>st</sup> International Symposium of the Latin-American and Caribbean Bulletin of Aromatic and Medicinal Plants (BLACPMA) FAPRONATURA 2006*

<http://www.scf.sld.cu/natprod/en/portada-en.htm>



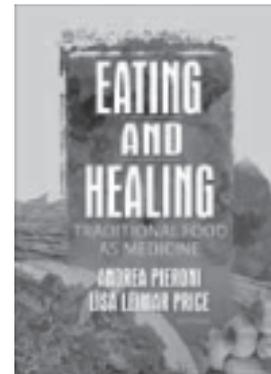
# New Books and Journals

## **Eating and Healing: Traditional Food as medicine**

This volume bridges the fields of medicinal application of herbal material and culinary practices. The continuous message through all chapters is the ethnopharmacological approach, using herbal diet for therapeutic action. The short message of this book is clear: "learn which traditional foods are used as medicines". It is fascinating to see how during anthropological evolution the culinary and medicinal use of plants has developed. On the other side questions arise on the erosion of diminished biodiversity in

our western world and the consequence on medicinal diet. Some special chapters: antioxidants as mediators of high-altitude nutritional physiology; digestive beverages in northern Spain; Seaweed and the traditional ecological knowledge; medicinal food in Cuba and promotion of health in the household; Edible and healing plants in Brazil; Food medicines in Bolivian Andes; traditional herbs in Kenya; Ethnopharmacology in Mexico.

*Eating and Healing: Traditional Food as medicine; A. Pieroni and L. L. Price (2006) The Haworth Press, New York, ISBN 1-56022-983-7, 400 pages, \$39.95.*



Andreas Hensel

# News on regulatory affairs

## **What's on top of European Medicines Agency concerning Herbal Medicinal Products?**



1. Herbal medicinal products often claim a traditional use and bibliographic ethnopharmacological data are used for supporting information. Also the European directive 2001/83/EC allows the use of published literature in bibliographic applications for registration. But what kind of literature can be used and is accepted as valid? For that a new EMEA directive is published 2006 as "Guideline on non-clinical documentation for herbal medicinal products in applications for marketing authorization (bibliographic and mixed applications) and in applications for simplified registration (EMEA/HMPC/32116/05)".

[www.emea.eu.int/htms/human/hmpc/hmpcguide.htm](http://www.emea.eu.int/htms/human/hmpc/hmpcguide.htm)

2. Do you now how to structure a clinical documentation of herbal medicinal products when the clinical study was done with a fixed-combination product? That may be completely different from studies with mono-products! See EMEA guideline HMPC/166326/05 to be found under [www.emea.eu.int/htms/human/hmpc/hmpcguide.htm](http://www.emea.eu.int/htms/human/hmpc/hmpcguide.htm)
3. What about the allergenic potential of herbal medicinal products containing soya and peanut protein? Is that a problem or how can we deal with that potential allergy risk? The EMEA published a statement on this under EMEA/HMPC/138139/05 under [www.emea.eu.int/htms/human/hmpc/hmpcguide.htm](http://www.emea.eu.int/htms/human/hmpc/hmpcguide.htm)

4. For Safety and Efficacy the committee on Herbal Medicinal Products HMPC published the following statements end of 2005:

- Herbal medicinal products containing estragole EMEA/HMPC/137212/2005
- Herbal medicinal products containing estragole EMEA/HMPC/137212/2005
- Herbal medicinal products containing pulegone and menthofuran EMEA/HMPC/138386/2005
- Herbal medicinal products containing asarone EMEA/HMPC/139215/2005
- Capsicum/capsaicin-containing herbal medicinal products EMEA/HMPC/138379/2005
- Risks on herbal products containing Aristolochia species (EMEA/HMPC/138381/2005

Andreas Hensel

## and their Institutes of Pharmacognosy: International, Interesting and Cooperative

We introduce and present different institutes of Pharmacognosy/Pharmaceutical Biology from GA members, dealing with medicinal plant research with their special characteristics from different continents.

### Mumbai University (India) Institute of Chemical Technology, Nathalal Parekh Marg, Matunga (E), Mumbai 400019, India.



Prof. Dr. A. R. Juvekar,  
Mumbai University (India)

Email: arj@udct.org

Homepage: www.udct.org

Head of institution: Prof. Dr. J.B Joshi

Main working areas:

The pharmacology department encompasses the following areas of medicinal plant research: neuropharmacology, antioxidant and hepatoprotective agents; Immunomodulatory activity and cardioprotectives.

Two publications, representing the institution:

1. Nachankar RS, Juvekar AR, Naik AD  
Restraint stress induced changes and their modification by *Spirulina Platensis* in albino rats; An Experimental Study. *Acta Horticulturae*, (2005) 680:49–55.
2. Nachankar RS, Juvekar R, Naik AD, Sonawane A  
Prevention of cold stress induced adrenal hypertrophy by *Spirulina Platensis*. *Acta Horticulturae*, (2005) 680:101–107.

Coworkers:

PhD: Presently four, Postdocs: not available at the moment

The “speciality” or the unique selling proposition of the institution:

One of the oldest and the most prestigious institute for pharmaceutical research in India.

Is the institution open for cooperations, job applications?

The institute invites industries and research laboratories for collaborative research activities in various fields of formulation, pharmacognosy and pharmacology.

### Free University Berlin (Germany) Institute of Pharmacy, Pharmaceutical Biology I, Königin-Luise-Str., D-14195 Berlin, Germany



Prof. Dr. M. F. Melzig,  
University of Berlin (Germany)

Email: melzig@zedat.fu-berlin.de

Homepage: <http://userpage.fu-berlin.de/%7Efunkei/>

Head of institution: Study group Prof. Dr. Matthias F. Melzig

Main working area:

1. In vitro pharmacology/toxicology of natural product and elucidation of biological effects of herbal remedies
2. Isolation and characterization of enzyme inhibitors (proteases, glucosidases) from plants
3. Development of analytical methods for herbal preparation

2 publications, representing the institution:

- Hebestreit P, Weng A, Bachran C, Fuchs H, Melzig MF. Enhancement of cytotoxicity of lectins by Saponinum album. *Toxicon* 47 (2006) 330–335.
- Kiss A, Kowalski J, Melzig MF Induction of neutral endopeptidase activity in PC-3 cells by an aqueous extract of *Epilobium angustifolium* L. and oenotherin B. *Phytomedicine* 13 (2006) 284–289

Coworkers: 2

PhD: 7; Postdocs: 1

The “speciality” or the unique selling proposition of institution:

All investigations about medicinal plants starting with cultivation (own greenhouse), isolation, chemical characterization and resulting in pharmacological screening and detailed biological studies can be performed within the study group and in close collaboration with research groups of the Berlin research network.

Is the institution open for cooperations, job applications?

Prerequisites for potential candidates?

Cooperation is wanted

job applications are possible

prerequisites: only pharmacists

PhD students from abroad need a grant

**Free University Berlin (Germany)**  
**Institute of Pharmacy, Pharmaceutical Biology I, Königin-Luise-Str., D-14195 Berlin, Germany**



Prof. Dr. H. Kolodziej,  
University of Berlin (Germany)

Email: kolpharm@zedat.fu-berlin.de

Homepage: <http://web.fu-berlin.de/pharmazie/bereiche/bio.htm>

Head of working group: Prof. Kolodziej

Working area:

Natural products chemistry; biological activities of secondary metabolites including immunomodulatory (NO, cytokines) and antiparasitic (Leishmania, Mycobacterium) activities; herbal medicines

2 publications, representing the institution:

Kolodziej H, Kiderlen AF. Antileishmanial activity and immune modulatory effects of tannins and related compounds on *Leishmania* parasitised RAW 264.7 cells. *Phytochemistry* (2005) **66**, 2056–2071.

H. Kolodziej (2002), Pelargonium reniforme and Pelargonium sidoides: their botany, chemistry and medicinal use. In: Geranium & Pelargonium (M. Lis-Balchin, ed.), Taylor & Francis, London, (2005) 262–290.

Coworkers:

PhD students: 4 Postdocs: M. Kaloga, R. Gormann

Is the institution open for cooperations, job applications?

Prerequisites for potential candidates?

Yes; preferably pharmacists, for foreign applicants a Master degree is required

**College of Pharmacy, University of Florida**  
**Department of Pharmaceutics, , PO BOX 100494, Gainesville, FL 32610, USA**



Prof. Dr. Veronika Butterweck

Email: butterwk@cop.ufl.edu

Homepage: [www.cop.ufl.edu](http://www.cop.ufl.edu)

Head of Department: Prof. Dr. Hartmut Derendorf

Head of Group: Prof. Dr. Veronika Butterweck

Working areas:

**Research focus: Experimental Phytopharmacology**

A) Development of new therapeutic concepts based on herbal medicines:

- 1) Phytomedicines with CNS activity (e.g. herbal antidepressants).
- 2) Plants with anti-rheumatic activity (e.g. anti-gout activity)

B) Investigations of the pharmacokinetics and bioavailability of herbal medicines:

- 1) co-effectors (“natural solubilizers”);
- 2) Herb-drug interactions

2 publications, representing the institution:

1. Flavonoids of St. John’s wort reduce HPA-axis function in rats. Butterweck, V., Hegger, M., Winterhoff, H.; *Planta Medica* 70 (10), 1008–1011 (2004)

2. Variation of Flavonoids and Furanocumarins in Grapefruit Juices, De Castro, W.V., Mertens-Talcott, S., Rubner, A., Butterweck, V., Derendorf, H.; *J Agricul Food Chem* 54(1), 249–55 (2005)

Coworkers:

PhD students: Oliver Grundmann, Whocely Victor De Castro, Immo Zdrojewski, Sasiporn Sarawek, Stephen Matthew Phipps, Pattaraporn Vanachayangkul

Postdocs: Susanne Mertens-Talcott, PhD

Coworkers: Prof. Dr. H. Derendorf, UFL; Prof. Dr. S. Khan, UFL, Prof. Dr. S. Talcott, UFL

The “speciality” or the unique selling proposition of institution:

Center for Food Drug Interaction Education and Research ([www.druginteractioncenter.org](http://www.druginteractioncenter.org))

Is the institution open for cooperations, job applications?

Prerequisites for potential candidates?

The institution is open for cooperations with industry & academic research groups. Students are encouraged to join our PhD program. For further information: [www.cop.ufl.edu](http://www.cop.ufl.edu)

# Recent thesis on medicinal plant research

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

Ph.D. thesis (2005) Status-quo-analysis: Functional plant products in veterinary medicine. By: Karen Barker-Benfield; Promotors: Prof. Karin Zitterl-Eglseer and Prof. Ch. Franz, University of Veterinary Medicine, Vienna, Austria

Ph.D. thesis (2005) Biosystematische Untersuchungen europäischer und asiatischer Schafgarbenarten – morphologisch-anatomische Befunde. By: Renate Hiessböck; Promotor: a.o. Univ. Prof. J. Saukel, Dept. of Pharmacognosy, University of Vienna, Austria. emer. Univ. Prof. F. Ehrendorfer, Institute of Botany, University of Vienna, Austria

Ph.D. thesis (2005) Phytochemische und pharmakologische Untersuchungen an *Pelargonium sidoides* DC. By: Tanja Gödecke; Promotor: Prof. Dr. H. Kolodziej, Institute of Pharmaceutical Biology, University of Berlin

Ph.D. thesis (2005) Isolation and structure elucidation of bioactive secondary metabolites from marine sponges. By: Mohamed Ibrahim Sabrin Ragab Ibrahim; Promotor: Prof. Dr. P. Proksch and Dr. Rainer Ebel, Juniorprofessor, Heinrich-Heine-University of Düsseldorf

Ph.D. thesis (2005) Isolation and structure elucidation of bioactive secondary metabolites from marine sponges and a marine-derived fungus. By: Pedpradab, Suwigarn; Promotor: Prof. Dr. P. Proksch and Dr. Rainer Ebel, Juniorprofessor, Heinrich-Heine-University of Düsseldorf

Ph. D. thesis (2005) Bioactive natural products from marine endophytic and sponge-associated fungi of the Indian and Pacific Ocean. By: Franka Teuscher; Promotor: Prof. Dr. P. Proksch and Dr. Rainer Ebel, Juniorprofessor; Heinrich-Heine-University of Düsseldorf

Ph. D. thesis (2005) Structure elucidation, biological activity and ecology of terpene isocyanides from Phylloidiid species (Nudibranchia) and their Sponge-preys from the thousand Island National Park, Indonesia. By: Yasman; Promotor: Prof. Dr. P. Proksch and Dr. Rainer Ebel, Juniorprofessor, Heinrich-Heine-University of Düsseldorf

Ph. D. thesis (2005) Natural products from plants used in Indonesian traditional medicine (Jamu): Isolation, identification and characterizations of anti-oxidative activity. By: Bärbel Steffan; Promotor: Prof. Dr. P. Proksch and Dr. Rainer Ebel, Juniorprofessor, Heinrich-Heine-University of Düsseldorf

Ph.D. thesis (2006) Interferon-gamma und Interleukin-15 in der frühen Immunreaktion der Maus auf *Listeria monocytogenes*. By: Carsten Thäle; Promotor: Prof. Dr. H. Kolodziej, Institute of Pharmaceutical Biology, University of Berlin

Ph.D. thesis (2006) Identification of novel mechanisms of acation contributing to the biological activity of cytotoxic natural compounds. By: Nacy López-Antón; Promotor: Prof. Dr. Angelika Vollmar, Department of Pharmacy, University of Munich, Germany

Ph.D. thesis (2006): Properties and antimicrobial activities of  $\beta$ -triketones in essential oils from Myrtaceae. By: Cornelia Sojka; Promotor: Prof. Dr. E. Stahl-Biskup, University of Hamburg, Germany

Ph.D. thesis (2006): Flavonoide und Hydroxymizsäureamide in *Ruscus aculeatus* L. Und in anderen verwandten Arten, Strukturauflklärung, Verteilung und physiologische Bedeutung. By: Nihad Hadzifejzovic; Promotor: Prof. Dr. A. Nahrstedt, University of Münster, Germany

Ph.D. thesis (2006): Apocyanum venetum L.: Untersuchung auf phenolische Inhaltsstoffe und antidepressive Aktivität. By: Sandra Kipke; Promotor: Prof. Dr. A. Nahrstedt, University of Münster, Germany

Diploma thesis (2005) Ausarbeitung mikroskopischer Beschreibungen ausgewählter Arzneidrogen für die American Herbal Pharmacopeia™. By: Karin Herzog; Promotor: a.o. Univ. Prof. R. Länger, Dept. of Pharmacognosy, University of Vienna, Austria

Diploma thesis (2005) Biologische Wirkungen ausgewählter mongolischer Arzneipflanzen – Studien an der isolierten perfundierten Ratteleber und an der humanen Tumorzelllinie MCF-7. By: Nina Holec; Promotor: a.o. Univ. Prof. S. Glasl, Dept. of Pharmacognosy, University of Vienna, Austria

Diploma thesis (2005) HPLC Analytik von Saponinen aus Goldrutenkraut. By: Selma Ibrahimovic; Promotor: a.o. Univ. Prof. G. Reznicek, Dept. of Pharmacognosy, University of Vienna, Austria

Diploma thesis (2005) Arzneipflanzengärten in Österreich. Gestaltung, Bepflanzung und Funktion entsprechender Schaugartenanlagen im Überblick. By: Gabriele Rumpf; Promotor: emer. Univ. Prof. Dr. W. Kubelka, Dept. of Pharmacognosy, University of Vienna, Austria

Diploma thesis (2005) Evolution of Polyphenol Content over 1-year-old Period of Vification (*Vitis vinifera* variety Tempranillo). By: Federico Ronaldo Schlosser; Promotor: Univ. Prof. B. Kopp, Dept. of Pharmacognosy, University of Vienna, Austria. Prof. M. I. Calvo, University of Navarra, Pamplona, Spain

Diploma thesis (2005) Qualitative Analytik von Proazulen in der Schafgarbe mittels Massenspektrometrie. By: Christina Sitte; Promotor: a.o. Univ. Prof. Dr. G. Reznicek, Dept. of Pharmacognosy, University of Vienna, Austria

Diploma thesis (2005) Rasterelektronenmikroskopische Untersuchungen von Kalziumoxalat-Kristallsand in Arzneipflanzen. By: Manuela Stögmüller, Promotor: a.o. Univ. Prof. Dr. R. Länger, Dept. of Pharmacognosy, University of Vienna, Austria

Diploma thesis (2005) Spektrophotometrische Bestimmungen von Arzneidrogen. By: Mukadesa Ustovic; Promotor: a.o. Univ. Prof. Dr. G. Reznicek, Dept. of Pharmacognosy, University of Vienna, Austria

Diploma thesis (2006) Steroidsaponingehalt in verschiedenen Dioscorea-Arten. By: Michael Gotsbacher; Promotor: a.o. Univ. Prof. Dr. J. Saukel, Dept. of Pharmacognosy, University of Vienna, Austria

Diploma thesis (2006) Untersuchungen der fünf Hauptalkaloide in Opium aus Afghanistan. By: Christoph Janitsch; Promotor: a.o. Univ.

Prof. Dr. L. Krenn, Dept. of Pharmacognosy, University of Vienna, Austria

Diploma thesis (2006) Phytochemische Charakterisierung und pharmakologische Testung von Extrakten ausgewählter pflanzlicher Sedativa. By: Ulrike Jäger; Promotor: Univ. Prof. Dr. B. Kopp, Dept. of Pharmacognosy, University of Vienna, Austria

Diploma thesis (2006) Investigation of Essential Oil of *Lippia alba* (Mill.) N. E. Br. ex Britt. & Wils. By: Marko Lubura; Promotor: Univ. Prof. Dr. B. Kopp, Dept. of Pharmacognosy, University of Vienna, Austria and Prof. Dr. S. Canigual, Unitat de Farmacologia I Farmacognosia, Facultat de Farmacia; University of Barcelona, Spain.

Diploma thesis (2006) Dokumentation mongolischer Arzneipflanzen: Makroskopische und mikroskopische Beschreibung von *Heteropappus altaicus*, *Heteropappus biennis* und *Lilium pulmillium*. By: Birgit Wegener; Promotor: Univ. Prof. Dr. B. Kopp, Dept. of Pharmacognosy, University of Vienna, Austria, Ass. Ch. Kletter, Dept. of Pharmacognosy, University of Vienna, Austria.

Diploma thesis, 2006, Phytochemisch-analytische Untersuchungen von *Siegesbeckia*-Arten. By: Walter Illmayer, promotor: Prof. Dr. R. Bauer, Pharmacognosy, University of Graz (Austria).

Diploma thesis, 2006, Entwicklung einer HPLC-Gehaltsbestimmungsmethode für *Rhei radix*. By: Sonja Monschein, promotor: Prof. Dr. R. Bauer, Pharmacognosy, University of Graz (Austria).

Diploma thesis, 2006, Review und Evaluierung von neuen, mit homöopathischen Zubereitungen durchgeführten toxikologischen Experimenten. By: Claudia Göldner, promotor: Prof. Dr. R. Bauer, Pharmacognosy, University of Graz (Austria).

Diploma thesis, 2006, Entwicklung einer Methode zur Isolierung von Casticin aus *Vitex agnus-castus* im Gramm-Maßstab. By: Adisa Omerovic, promotor: Prof. Dr. R. Bauer, Pharmacognosy, University of Graz (Austria).

Diploma thesis, 2006, Etablierung eines nahinfrarotspektroskopischen Systems zum Identitätsnachweis von pharmazeutischen Hilfsstoffen und Pflanzenextrakten. By: Stefanie Kraut, promotor: Prof. Dr. R. Bauer, Pharmacognosy, University of Graz (Austria).

Diploma thesis, 2006, Isolierung von Quercetin-3-O- $\beta$ -D-glucuronid aus *Vitis vinifera* L.. By: Maria Röschel, promotor: Prof. Dr. R. Bauer, Pharmacognosy, University of Graz (Austria).

Diploma thesis, 2006, Phytochemische Charakterisierung der chinesischen Arzneidroge *Jili* (*Tribuli terrestris* Fructus). By: Ines Bürger, promotor: Prof. Dr. R. Bauer, Pharmacognosy, University of Graz (Austria).

## Editorial remark

All contributions for the GA-Newsletter are welcome. Deadline for submission for the next edition is fixed to November 30<sup>th</sup>, 2006. Please send all contributions by e-mail or disk to: Prof. Dr. A. Hensel, University of Münster, Institute for Pharmaceutical Biology and Phytochemistry, Hittorfstrasse 56, D-48149 Münster, Germany; ahensel@uni-muenster.de

