

Message from the President



Dear members,

the 55th annual congress of GA will be held in Graz, Austria, and I am very happy that I can organize a GA congress by myself during the last year of my presidency.

The main topics of the congress will be anti-inflammatory and immunomodulatory active natural products, natural products with antimicrobial activity, analysis and biopharmaceutics of herbal medicinal products, traditional herbal medicinal products, and medicinal plants in animal healthcare. However, scientific contributions of other topics related to medicinal plant research will also be presented.

I am very happy, that Prof. Dr. H.R.H. Princess Chulabhorn Mahidol has accepted to give the opening lecture of the congress. Moreover, seventeen distinguished scientists have accepted to give plenary or keynote lectures. In total, more than 750 abstracts have been submitted for oral or poster presentations. So we are expecting an intensive exchange of information and an inspiring programme.

The BoD of GA has decided to award an increased number of travel grants in 2007. In total 20.000 Euro will be spent for PhD students and post docs in order to support them to be able to attend our annual congress.

More information on the GA congress 2007 is available in this newsletter and at the homepage of the congress.

Besides our annual congress, GA is again co-organizing several other symposia on medicinal plant research during this year, and I hope that you can attend some of these meetings as well.

There are also some news regarding our Society. On April 1st, 2007, Dr Volker Christoffel has retired from being treasurer of GA for personal reasons. The ExC is very sad about this decision, since he always has been extremely enthusiastic, and served GA with many ideas and initiatives, especially in modernizing the accounting system. However, we have to respect his decision and I want to thank him very much for all his impact and efforts in the last years.

During the members meeting of 2007 in Graz, we will not only have to elect a new treasurer, but the whole Executive Counsel and Advisory Board of GA. I hope that especially some young members will be willing to candidate and to serve GA with ambition and new ideas. Please see also the chapter on the nominations for the elections in this newsletter.

So, I am looking forward to seeing many of you in the charming city of Graz, during an exciting and stimulating congress.

Cordially,

Rudolf Bauer, GA President

Egon-Stahl-Award in Gold 2008

The Egon-Stahl-Award in Gold is the highest scientific honour of the Society for Medicinal Plant Research (GA). It acknowledges the outstanding scientific lifetime work of a research scientist who has been closely attached to Pharmaceutical Biology (Pharmacognosy, Chemistry of Natural Products), in its whole range, through his scientific work. The Egon-Stahl-Award in Gold is endowed with a gold medal and with € 5.000. The prize will be awarded

during the annual congress of the Society for Medicinal Plant Research.

Nominations can be made by all regular members of the Society for Medicinal Plant Research. Nominations of oneself can not be considered. The following must be enclosed with the nomination: a detailed acknowledgment of the scientific works and names of further experts who could be consulted.



Nominations must be submitted to the President of the Society for Medicinal Plant Research by **March 1st 2008**.

R. Bauer

Invitation to the GA Members' Meeting 2007

During the 55th Annual meeting of our Society which will take place in **Graz, Austria**, from September 2–6, 2007, a regular Members' Meeting will be held. It is scheduled for **Tuesday, 4 September 2007**, 5.30 p.m. – 7.30 p.m.

Location: Convention Center Graz, Albrechtgasse 1, A-8010 Graz, (www.grazercongress.co.at), Kammermusiksaal

This announcement in the Newsletter has to be considered as the official invitation to the Members' Meeting (in accordance with the GA bylaws), as this Newsletter is sent out to all members of our Society.

Preliminary Agenda

1. Approval of the agenda
2. Approval of the minutes of the Members' Meeting held in Helsinki on 31

Aug. 2006 (published in GA Newsletter 2-2006)

3. Annual reports
 - 3.1 Report of the President
 - 3.2 Reports of the Vice-Presidents
 - 3.3 Report of the Secretary
 - 3.4 Report of the Treasurer and report of the auditors
 - 3.5 Discharge of the ExC
4. Report of the Editor-in-Chief of *Planta Medica*
5. Reports of the Permanent Committees
6. Discussions and decisions
 - 6.1 Change of the name of the Society into "Society for Medicinal Plant and Natural Product Research – Gesellschaft für Arzneipflanzen- und Naturstoff-Forschung (GA)"

- 6.2 GA Research Trust, rules
- 6.3 Change of bylaws due to future online membership application without signature
- 6.4 New ESA monetary values
- 6.5 Reduced membership fees for retired members

7. Election of the Board of Directors
 - 7.1 Election of the president
 - 7.2 Election of the two vice presidents
 - 7.3 Election of the treasurer
 - 7.4 Election of the secretary
 - 7.5 Elections of the members of the Advisory Board

8. Future congresses, symposia and workshops

9. Miscellaneous

On behalf of the Executive Council
Prof. Dr. Rudolf Bauer, GA President

Notes to all GA members




Note to all GA members

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

Fax / phone: ++49 8141 613 749

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

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




Deceased members

(to our knowledge)

Prof. Dr. R. Hegnauer
(Egon Stahl Price holder in Gold)
at 14. April 2007

The Society will keep commemoration of Prof. Hegnauer, GA Honorary Member, and offers its sincere condolences (see also page 3).



Editorial remark

All contributions for the GA-Newsletter are welcome.

Deadline for submission is fixed to November 30th 2007.

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

During the Members' Meeting 2007 the Board of Directors for the period of 2008–2009 will be elected. Only GA members are entitled to vote. Supporting members are requested to transfer their vote to an authorized representative in writing to the GA secretary, no later than 21 Aug. 2007. Ab-

sent members may **not** be represented by proxy during the casting of ballots (§ 11.5 of the bylaws).

Nominations of candidates for the Board of Directors (Executive Council and Advisory Board) should be made in writing to the GA President, no later than 10 Aug. 2007; the

nomination must include a written statement of consent by the candidate. Each candidate will be asked to submit a short CV on a powerpoint template for a presentation before the elections.

Notes from the Society

In memoriam Prof. Dr. Dr. h.c. Robert Hegnauer (1919 – 2007)

On April 14, 2007 Professor Robert Hegnauer passed away after a short hospitalisation due to a hip fracture, a subsequent operation and an infection.

Professor Hegnauer was born August 1, 1919, near Bern (Switzerland). In that city he started his pharmacy education, which he continued in Zürich, where he obtained his pharmacist diploma. Thereafter he worked for one year in a pharmacy, during which period he also collected the plant material he needed for his subsequent Ph.D. study. He performed that study at the ETH Zürich, where he obtained his Ph.D. degree in 1948; his thesis was entitled „*Beitrag zur chemischen und morphologischen Kenntnis der schweizerischen Thymusformen*“.

In 1949, he moved to The Netherlands, where he began his academic career at the Institute of Pharmacy of Leiden University, and where he was appointed Professor of Pharmacognosy in 1952. Rather soon he focused his research on chemotaxonomic topics. As a result, in 1962, he changed his position from the Institute of Pharmacy to that of Biology, where he became Professor of Experimental Plant Systematics. His scientific life has always been dedicated to the secondary constituents of higher plants, and it is his great merit that he gave a strong impulse to the inclusion of not only chemical, but also biogenetic and physiological data into plant systematics.

Most famous – of course – is Professor Hegnauer by his enormous opus „*Chemotaxonomie der Pflanzen*“, that is used as a rich source of information by all pharmacognosists, phytochemists, taxonomists, plant biochemists, and scientists of related areas. The first volume appeared in 1962,

the 13th and last one (volume XI-b2) in 2001. So, it took almost forty years to finish this unique “masterpiece” consisting of more than 9300 pages; most of these were written after he retired from the university in 1979.

The highest scientific honour of our Society (GA), to be awarded to scientists for their lifework, is the Egon Stahl-Award (ESA) in Gold. When he was nominated for that award, it was stated in one of the nominations: “more than numerous times I was looking for some data in the book series „*Chemotaxonomie der Pflanzen*“, and always I found the relevant data”. In another nomination, the following description was given: “The book series is not only compiling phytochemical data, but it is also discussing the structural variation of plant constituents, their biosynthetic routes, their variability in different taxa above and below the level of species, their impact on plant systematics, their biological effects, and last but not least their function in terms of plant's benefit.” It could not have been described in a better way, indeed. Therefore, I also cited these words when it was my great privilege to award Professor Hegnauer the ESA in Gold, five days before his 80th birthday anniversary, in 1999. Several of our GA members will remember the ESA ceremony during the Joint Meeting in Amsterdam.

In earlier years Professor Hegnauer had already received several honours. He was honorary member of the American Society of Pharmacognosy, of our „*Gesellschaft für Arzneipflanzenforschung*“, since 1978, and of the „*Deutsche Botanische Gesellschaft*“. He received honorary doctorates from the ETH Zürich, already in 1972, and of the



University of Utrecht. In 1977, he was honoured with the Flückiger Medal and, in 1987, he was awarded the silver Medal of the Phytochemical Society of Europe.

The loss of Professor Hegnauer will be deeply felt in the world of Plant Sciences. We will remember him not only as a great colleague and teacher, but also as a good friend, who has always been ready to help and inform those who asked his advice. The number of students and researchers who have experienced the great hospitality of him and his wife in their home is really large.

We wish Mrs. Minie Hegnauer-Vogelenzang, who also strongly supported her husband with his books as is clear from her co-authorship of the last volumes, much strength for the time to come. We also wish that to their three children and their families.

J.J.C. (Hans) Scheffer,
Center for Bio-Pharmaceutical Sciences,
Leiden University

Anniversaries

On Jan 20, 2007, GA honorary member **Prof. Dr. Dr. h.c. Max von Schantz** celebrated his 85th birthday. Nevertheless he still participated with great interest at last year's GA congress in Helsinki and his many friends and colleagues from earlier times of GA and academia were happy to see him in good health.

His academic career led Professor v. Schantz from the Swedish speaking University, Abo Akademi of Turku, Finland (M.S. in Pharmacy and Natural Sciences) to the Finnish spoken University of Helsinki (Dr. phil.) and to postdoctoral positions in Sweden, Germany, Denmark and Yugoslavia, before he finally settled scientifically at the University of Helsinki, where he was Professor of Pharmacognosy and head of this department as well as dean of the faculty of Pharmacy over 30 years. Since 1987 he is emeritus professor of the University of Helsinki. Because of his unusual strengths in all natural sciences, he was an ideal and encouraging teacher for young aspiring scientists and was always interested to drive forward scientific endeavours which during that epoch were entirely innovative in the field of pharmacy. He used to intensively follow the development of emerging technologies. His scientific work strongly focussed on essential oils

and terpenes and their biosynthesis as well as non-volatile secondary plant metabolites. Right from the beginning he introduced and promoted the very new and developing chromatographic separation techniques into his own work and kept on a life long correspondence with late Prof. Egon Stahl, the founder of TLC. In general he developed strong international collaborations between leading university departments and institutes.

Professor v. Schantz published over 100 papers and two books and was honoured by some awards of scientific societies and institutions as well as by the Dr. h.c. of the University of Geneva, Switzerland, in 1975. He was board member of a number of national and international scientific societies, among these for many years associate chairman of the Finnish Society of Entomology – despite his devotion to the Division of Pharmacognosy he was and is well-known for being a famous expert in entomology! He has been an active member of GA since 1961 and was a member of the Advisory Board from 1970 – 1987. He organized the 20th Annual Congress in Helsinki in 1972 and was awarded GA honorary membership in 1987 during the 35th Annual Meeting of the Society for Medicinal Plant Research in Leiden. Since the death



GA honorary member, Prof. Max von Schantz.

of his wife a few years ago he mainly lives in his summer house at the coast of the Baltic Sea, where he liked to receive his many international friends and to always heat for them a good finnish sauna. GA warmly congratulates him and wishes him vigour and health for the years to come and many butterflies in his garden!

R. Bauer, GA president

(R. Seitz, see more in Newsletter 1-2002 by R. Hiltunen)

Honorary doctorates h.c. for 2 GA members

On May 18, 2007, **Prof. Dr. habil. Reinhold Carle**, professor of food technology at the University of Hohenheim, received the "Doctor honoris causa" of the University of Food Technologies in Plovdiv, Bulgaria (UFT) in the presence of the Bulgarian minister of culture and education and the am-

bassadors of Greece, Italy and Turkey and other dignitaries.

On May 31, 2007, **Prof. Dr. Dr. h.c. mult. Hildebert Wagner**, Prof. em. from the Institute of Pharmaceutical Biology at the Centre of Pharmacy of the LM-University Mu-

nich, was venerated by the G. Popa University of Medicine and Pharmacy of Iasi, Romania, with the promotion to the "Doctor honoris causa" in appreciation of his merits to medicinal plant research.

Congratulations to both Drs. H.c.!

109 new GA members since November 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 active participation in all GA events!

Mag. Pharm. Martina Blunder, Austria; **Mr. Yong Nam Kim**, DPR Korea; **Prof. Dr. Kwan Sim Mun**, DPR Korea; **Dr. Brian Schaneberg**, USA; **Prof. E. M. Abdurahman**, Nigeria; **Prof. Dr. Francesco Scaglione**, Italy; **Mr. Mohammad Rafieiolhossaini**, Belgium; **Dr. Olivier Poterat**, Switzerland; **Dr. Sharon Aisling Aherne**, Ireland; **Ms. Bernadette Herbst**, Germany; **Dr. Abdelhamid Bellatar**, Algeria; **Ms. Aidee Estrada**, Germany; **Dr. Natsajee**

Nualkaew, Thailand; **B.Pharm. Pattaraporn Vanachayangkul**, USA; **Prof. Dr. Anake Kijjoa**, Portugal; **Ms. Adriana Rolim Capos Barros**, Brazil; **Ms. Liene Dooghe**, Belgium; **Ms. Jana Partschefeld**, Germany; **Ms. Inken Groth**, Germany; **Mr. Niels Grünwald**, Germany; **Ms. B.Pharm. Enitome Bafor**, Nigeria; **Ms. Aikaterinia Argyropoulou**, Greece; **Ms. Chrysoyla Gousiadi**, Greece; **FM Katja Karppinen**, Finland; **Prof. Dr. Maria Carla Marcotullio**, Italy; **Dr. Tracy Seaman**, South Africa; **Mr. Andreas Bossy**, Germany; **Ms. Esther Goellner**, Germany; **Mr. Ulrich Breit**, Germany; **Dr. Yang Mooi Lim**, Malaysia; **Mr. Alok Wakade**, India; **Dr. Jafri Malin Abdullah**, Malaysia;

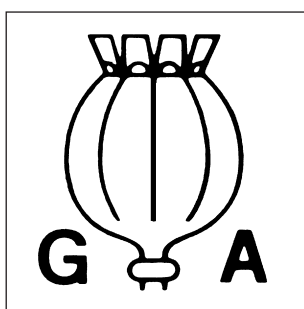
Paed. Dr. Beata Taylorova, Slovak Republic; **MSci. Werayut Pothitirat**, Thailand; **Dr. Pongtip Sithisarn**, Thailand; **Dr. Khaled Shams**, Egypt; **Mr. Tobias Mohn**, Switzerland; **Dr. Simla Basar**, Germany; **Dr. Ceyda Kilic**, Turkey; **MSci. Ewelina Gilgenast**, Poland; **Ms. Sukanda Chaibong**, Thailand; **Ms. Amal Hassan Aly**, Germany; **Mr. Abdessamad Debbab**, Germany; **Prof. Dr. Shagufta Khan**, Pakistan; **Dr. Sharmila Chattopadhyay**, India; **Dr. Konstantia Graikou**, Greece; **Ms. Catia Beatriz Almeida Ramalhete**, Portugal; **MSci. Charilaos Damianakos**, Greece; **Dr. Muhammad Shahid**, Pakistan; **Dr. Chantana Aromdee**, Thailand; **Mpharm. Nithida Phonkot**, Thailand; **Ms. Jelena**

Kukic, Serbia; Mr. Christoph Jaeger, Germany; Dr. Abimbola Sowemimo, Nigeria; MSci. Anna Maria Szpitter, Poland; Mr. Luigi Menghini, Italy; Dr. Mahjouba Mosaddak, Maroc; Ms. Kathrin Nickl, Germany; Ms. Gesine Bradacs, Germany; Mr. Yao Wang, Germany, Dr. Gudrun Ulrich-Merzenich, Germany, Dr. Rosa Tundis, Italy; Dr. Marco Bonesi, Italy; MD Federica Menichini, Italy; DVM Zuraini Ahmad, Malaysia; Dr. Mahmoud Sharaf-Eldin, Egypt; Dr. Sharida Faku-razi, Malaysia; Ms. Tina Asgari, Iran; Dr. Nurdun Erdemoglu, Turkey; Dr. Esra Kupeli, Turkey; Ms. Samah Djeddi, Greece; Mr. Andreas Herrmann, Germany, MSc.

Henrietta Ogbunugafor, Nigeria; MSc. Samad Nejad Ebrahimi, Iran; Ms. Tatjana Cebovic, Serbia; Dr. Nur Tan, Germany; Dr. Roslida Abdul Hamid, Malaysia; Dr. Keivan Zandi, Iran; Mr. Javad Hadian, Iran; Dr. Ezekiel Olugbenga Iwalewa, South Africa; Dr. Sabrina Sukardi, Malaysia; Mr. Kenny Kuchta, Germany; Dr. Babak Esmaelian, Iran; MSci. Yousef Yari Kamrani, Iran; Prof. Dr. Namrita Lall, South Africa; Dr. Shanthi Ganabadi, Malaysia; Dr. Chantana Wessapan, Thailand; Ass. Prof. Narisa Kamkaen, Thailand; Dr. Fotini Lamari, Greece; Dr. Natali Pankrushina, Russia; Dr. Hossein Hosseinzadeh, Iran; Mr. Michael Klaes,

Germany; Dr. Matteo Politi, United Kingdom; Dr. Behzad Zolfaghari, Iran; Dr. M. Alaadin Alaadin, Iraq; Ing. Pavel Kloucek, Czech Republic; Prof. Dr. Celso Vataru Nakamura, Brazil; Dr. Siripen Jarikasem, Thailand; MSc. Rodrigo M. Padua, Germany; MSc. Serge Ph. Kuate, Germany; Dr. Everaldo Attard, Malta; Dr. Emmanuel Ogbadoyi, Nigeria; Mr. Hans Wohlmuth, Australia; Dr. Mag. pharm. Johannes Misselhorn, Australia; Dr. Md. Mukhlesur Rahman, United Kingdom; Dr. Gholamreza Amin, Iran; Dr. Olga Pozharitskaya, Russia; Mr. Milenko Cilic, Croatia; Mr. Saketh Ram Thrigulla, India

Next Annual GA Meeting



55th International Congress and Annual Meeting of the Society for Medicinal Plant Research

Graz, Austria
September 2–6, 2007

<http://www.ga2007.org>



The GA Congress 2007 will take place September 2 – 6 in Graz, Austria. The main topics of the congress will be:

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

However, scientific contributions in other topics related to medicinal plant research will also be presented. The main congress will be organized at the Convention Center Graz

On September 2, a special workshop will be organized at the University of Graz for young scientists, as well as a workshop on regulatory affairs of herbal medicinal products.

We are pleased to inform GA members that the congress has been accepted very well

by researchers from all parts of the world. We have received ca. 750 abstract submissions; about 50 of these have been selected for oral communication, the rest of accepted abstracts will be presented as posters.

The opening lecture will be given by Prof. Dr. H.R.H. Princess Chulabhorn Mahidol, Bangkok, Thailand.

The following plenary speakers have confirmed their participation:

- Prof. Dr. Paul A. Cox, Jackson Hole, WY, USA
“Biodiversity and the search for new medicines”
- Prof. Dr. Verena Dirsch, Vienna, Austria
“Natural products and chronic inflammatory vascular processes”
- Prof. Dr. Chlodwig Franz, Vienna, Austria
“Functional plant products in veterinary medicine and animal nutrition”
- Prof. Dr. Simon Gibbons, London, UK
“Phytochemicals for bacterial resistance – strengths, weaknesses and opportunities”

- Prof. Dr. Louis Maes, Antwerp, Belgium
“Natural products with antimicrobial activity – from figures to facts”
- Prof. Dr. Nikolaus J. Sucher, Boston, MA, USA
“Chips and Qi: microchip-based authentication of traditional Chinese medicinal plants.”
- Prof. Dr. Oliver Ullrich, Zürich, Switzerland
“Immune surveillance of the central nervous system in health and disease – therapeutic intervention by natural products”
- Prof. Dr. Yang Ye, Shanghai, China
“Alkaloids from *Stemona* plants, structures and biological activities”

The four permanent Committees of GA will organize workshops:

Permanent Committee on Regulatory Affairs on Herbal Medicinal Products:
Importance of HMPC community monographs and community list for the marketing authorisation and registration of herbal medicinal products in Europe
(Chair: A. J. Vlietinck, S. Alban)



This workshop will be organized as a pre-symposium of the congress on September 2, 2007 at the Karl-Franzens-University Graz. [Registration](#) for this workshop is necessary.

The other workshops will be held as usual during lunch time on September 3, 4 and 5 at the Convention Center Graz:

September 3, 2007

Permanent Committee on Manufacturing and Quality Control of Herbal Remedies:

Pharmacokinetics of herbal medicinal products – useful or not?

(Chair: B. Meier)

September 4, 2007

Permanent Committee on Biological and Pharmacological Activity of Natural Products:

Models for testing addictive behaviour

(Chair: H. Winterhoff)

September 5, 2007

Permanent Committee on Breeding and Cultivation of Medicinal Plants:

Identification and authentication of plant starting materials

(Chair: C. Franz)

In addition, four further workshops have been scheduled:

Workshop for Young Researchers

Chairs: A. Hensel, A. R. Bilia

Co-chairs: A. Deters, M. Keusgen,

W. Schühly, E. M. Wenzig

This special workshop for young researchers will be organized as a pre-symposium at the Karl-Franzens-University Graz on September 2, 2007.

[Registration](#) for this workshop is necessary for all participants. The workshop is restricted to diploma and PhD students and serves as an opportunity for them to give

an oral presentation and to discuss special issues, problems and unclear results related to their work.

Three special workshops will be organized on specific topics in medicinal plant research from 12:30 – 14:00 on September 3rd, 4th and 5th at the Convention Center Graz:

September 3, 2007

Nasal innate and adaptive immune responses and their influence by herbal preparations

(Sponsored by Bionorica AG)

September 4, 2007

WS 5: State of the art in clinical and pre-clinical studies with EPS® 7630 (Umckaloabo®)

Chair: H. Kolodziej, Berlin

(Sponsored by Dr. Willmar Schwabe GmbH & Co. KG)

September 5, 2007

Echinacea: Update on current research

Chair: R. Bauer, Graz

(Sponsored by Bioforce AG)

Three excursions are scheduled for September 6, 2007. [Registration](#) for excursions is necessary

For further information contact

www.GA2007.org.

Congress site:

Graz is the capital of the Province of Styria and is Austria's second largest city with around 250,000 inhabitants and 40,000 university students. It is a place where many cultures meet: East and West, the Alpine and the Mediterranean regions. The charm of Graz is immediately evident to

visitors. Although it is an old city, it maintains a very youthful atmosphere, partly because of its many universities and high-tech enterprises.

The Old Town of Graz (a UNESCO world heritage site) is one of the best-preserved in Central Europe, and dates back to the times when Graz was the residence of the Habsburg monarchy. You can find courtyards tucked away in the heart of the city centre, Renaissance buildings, and a welcoming Mediterranean atmosphere. Graz is also a city of contrasts: classical music and jazz, tradition and modernism, literature, festivals such as Styriarte and Steirischer Herbst. In 2003, Graz also acted also as the Cultural Capital of Europe.

Graz is hosting four universities: The oldest one, the Karl-Franzens-University, was founded by Archduke Karl in the 16th century. The city also has a Technical University, a University of Arts and a Medical University. There are students from all over the world studying at the various departments of science, technology, medicine, economics, law, architecture, music, etc.

For more information about Graz visit:

<http://cms.graztourismus.at>.



Other Meetings

Portland, Maine, U.S.A.

14–18th July 2007

48th Annual Meeting of the American Society of Pharmacognosy

www.phcog.org;

contact: eamorin@usm.maine.edu

Helsinki, Finland

26–29th August 2007

Plants for human health in the post-genome era

www.phytochemicalsociety.org/helsinki

Info by Salo Marja-Liisa

email: Marja-Liisa.Salo@vtt.fi

Uppsala, Sweden

5–8th September 2007:

Materia Medica: Linnaeus and Medicinal Products

<http://www.lakemedelsakademin.se/>

materiamedica. Contact:

erika.svangard@lakemedelsakademin.se

Erlangen, Germany

10–13th October 2007

Jahrestagung der Deutschen Pharmazeutischen Gesellschaft in Gemeinschaft mit der Österreichischen Pharmazeutischen Gesellschaft und der Gesellschaft für Arzneipflanzenforschung

www.medchem.uni-erlangen.de/

dphg07_jahrestagung.html

Nonweiler, Germany

08–10th November 2007

4th Mistletoe Symposium: Mistletoe in cancer therapy

Dr. Rainer Scheer, c/o Carl Gustav Carus Institut, Am Eichhof 30, D-75223 Niefern-Öschelbronn; phone ++49 7233 68418, Fax ++49 7233 68413,

e-mail: rainer.scheer@carus-institut.de,

www.mistelsymposium.de

Bernburg-Strenzfeld, Germany

18–21st February 2008:

18. Bernburger Winterseminar und 5. Fachtagung Arznei- und Gewürzpflanzen Qualität, Wirtschaftlichkeit und Nachhaltigkeit

<http://www.llg-lsa.de/>;

Sybille.Richter@llg.mlu.lsa-net.de

Athens, Greece

3–8th August 2008

7th Joint Meeting of AFERP, ASP, GA, PSE & SIF and annual meeting of GA "Natural Products with Pharmaceutical, Nutraceutical, Cosmetic and Agrochemical Interest"

For the first circular see

<http://www.ga-online.org/files/Athens/FA2008.pdf>

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

Herbal Medicinal Products – Regulatory Developments in Europe

By: Dr. Barbara Steinhoff; *German Medicines Manufacturers Association (BAH)*; *Cochairperson of the ESCOP Scientific Committee*; Ubieerstr. 71-73; D-53173 Bonn; Mail: steinhoff@bah-bonn.de
GA Newsletter

Herbal Medicinal Products – New Regulatory Developments in Europe

According to the European legal framework for medicines, herbal medicinal products are subject to the same marketing authorization requirements as all medicinal products including their proof of quality, efficacy and safety. In addition to the existing rules for products with a “well-established medicinal use” which may prove their safety and efficacy based on bibliographic data, the Directive on traditional herbal medicinal products (2004/24/EC, part of Directive 2001/83/EC, Articles 16a–16i) provides a new category for herbal medicinal products. It comprises those products with low indication claims which do not require intervention of a medical practitioner, with defined dosage levels and methods of administration as well as sufficient pharmaceutical quality and proven safety. Their efficacy must be plausible on the basis of long-standing tradition and experience.

First experiences with traditional herbal medicinal products

The mentioned Directive had to be implemented by the Member States into national laws by 30 October 2005. Only few registrations for traditionally used herbal medicinal products have been granted so far, e.g. a registration for a Devil's claw preparation as well as for an external Arnica preparation in the United Kingdom and for a mixture of distillates as well as for a Hawthorn tea in Germany.

Recently the European Commission has launched a public consultation on a draft report on the experience acquired as a result of the application of the provisions of the above-mentioned Directive on specific provisions applicable to traditional herbal medicinal products, as required under Article 16i of Directive 2001/83/EC. The draft report is available at:
http://ec.europa.eu/enterprise/pharmaceuticals/pharmacos/docs/doc2007/2007_05/herbals_draft_report_2007_05_29.pdf

It presents the experience acquired on the simplified registration procedure and the work accomplished by the HMPC, then touches upon the genotoxicity data issue and finally considers a possible extension of the traditional-use registration to other categories of medicinal products. The report will be finalised after consultation with stakeholders who have been invited to submit comments.

New HMPC guidance documents for assessment

According to Directive 2004/24/EC a new Committee for Herbal Medicinal Products (HMPC) was established as the successor of the former Herbal Medicinal Products Working Party (HMPWP) which already had prepared numerous guidelines in the field of quality, efficacy and safety of herbal medicinal products. The Committee meets 6 times per year under the chairmanship of Dr. K. Keller, Germany. One of its tasks is the preparation of Community herbal monographs in the area of the “well-established medicinal use” and for traditional herbal medicinal preparations as well as the preparation of a list of herbal substances, preparations and combinations thereof, which will be eligible for a simplified registration procedure.

Community herbal monographs

After publication of monographs on *Valeriana radix* and *Lini semen*, during the past few months the following monographs, which were prepared in the HMPC Working Party on Community monographs and Community list (MLWP), were finally adopted by the HMPC:

Community herbal monograph on *Cassia senna* L., fructus / *Cassia angustifolia* VAHL, fructus (EMEA/HMPC/51871/2005)

Community herbal monograph on *Cassia senna* L., folium / *Cassia angustifolia* VAHL, folium (EMEA/HMPC/51869/2005)

Community herbal monograph on *Aloe barbadensis* Miller / Community herbal monograph on *Aloe* (various species, mainly *Aloe ferox* Miller and its hybrids) (EMEA/HMPC/76310/2006)

Community herbal monograph on *Rhamnus frangula* L., cortex (EMEA/HMPC/76307/2006)

Between the drafts and the published final monographs on these four anthranoid laxatives, profound changes can be noted. In particular, the conclusion concerning the

risk for potential colorectal cancer is – from a scientific viewpoint – not in line with recent data and has led to restrictions of use in the final monographs. In this case, a further public consultation of these drafts would have been useful.

Draft community herbal monographs and entries to the list

Upon recommendation of the Working Party on Community Monographs and Community List (MLWP) which is chaired by Dr. Heribert Pittner, Austria, the HMPC adopted the following draft Community herbal monographs and draft entries to the “List of herbal substances, preparations and combinations thereof” for release for consultation:

Community herbal monograph on *Pimpinella anisum* L., fructus (EMEA/HMPC/137423/2006)

Community herbal monograph on *Pimpinella anisum* L., aetheroleum (EMEA/HMPC/263273/2006)

Draft Community herbal monograph on *Foeniculum vulgare* Miller subsp. *vulgare* var. *vulgare*, fructus (EMEA/HMPC/137428/2006)

Draft Community herbal monograph on *Foeniculum vulgare* Miller subsp. *vulgare* var. *vulgare*, aetheroleum (EMEA/HMPC/263292/2006)

Draft Community herbal monograph on *Foeniculum vulgare* Miller subsp. *vulgare* var. *dulce*, fructus (EMEA/HMPC/263293/2006)

Draft Community list entry on *Foeniculum vulgare* Miller subsp. *vulgare* var. *vulgare*, fructus (EMEA/HMPC/428817/2006)

Draft Community list entry on *Foeniculum vulgare* Miller subsp. *vulgare* var. *dulce*, fructus (EMEA/HMPC/428963/2006)

All these drafts only describe a traditional use for the mentioned preparations. However, clinical experience and experts' opinions are available as well as supportive pharmacological data which can justify the “well-established medicinal use”. Furthermore, on the basis of the available data some of the proposed restrictions of use for aniseed and fennel preparations in infants, children, pregnant and breastfeeding women seemed to be inadequate.

In March 2007 further draft Community monographs have been published for public consultation:

Draft Community Herbal Monograph on *Echinacea purpurea* (L.) Moench, herba recens (EMA/HMPC/104945/2006)

Draft Community Herbal Monograph on *Rhamnus purshianus* D.C., cortex (EMA/HMPC/513579/2006)

Draft Community Herbal Monograph on *Passiflora incarnata* L., herba (EMA/HMPC/230962/2006)

Draft Community Herbal Monograph on *Primula veris* L., *Primula elatior* (L.) Hill, radix (EMA/HMPC/143370/2006)

Draft Community Herbal Monograph on *Primula veris* L., *Primula elatior* (L.) Hill, flos (EMA/HMPC/64684/2007)

Interested parties have submitted comments on these drafts, stating e.g. that for *Passiflorae herba* and *Primulae radix* the well-established medicinal use had not been taken into consideration and the safety assessment of *Echinacea* preparations had not been performed in an appropriate manner.

More recently, the following drafts have been published:

Draft Community Herbal Monograph on *Betula pendula* Roth, *Betula pubescens* Ehrh., folium (EMA/HMPC/260019/2006)

Draft Community Herbal Monograph on *Melissa officinalis* L., folium (EMA/HMPC/5341/2007)

Draft Community Herbal Monograph on *Mentha x piperita* L., aetheroleum (EMA/HMPC/349466/2007)

Draft Community Herbal Monograph on *Thymus vulgaris* L., *Thymus zygis* L., herba (EMA/HMPC/234113/2006)

Draft Community list entry on *Echinacea purpurea* (L.) Moench, herba recens (EMA/HMPC/189629/2007)

Guidance documents on safety and efficacy

In addition to the above-mentioned monographs and entries to the list, further guidance documents for the assessment of

quality, safety and efficacy of herbal medicinal products have been prepared by the HMPC.

With regard to the assessment of clinical efficacy, the "HMPC Guideline on the assessment of clinical safety and efficacy in the preparation of monographs for well-established and monographs/entries to the list for traditional herbal medicinal products/substances/preparations" (EMA/HMPC/104613/2005) was finally adopted together with an overview of the comments received. The guideline provides useful information in particular on the requirements for documentation of the "well-established medicinal use" and the "traditional use" and on the borderline between both these areas. For demonstration of the "well-established medicinal use", in general at least one controlled clinical study of good quality is required. However, alternatives are possible in case "extensive clinical experience with the herbal medicinal product is well documented and supportive, conclusive (human) pharmacological data of good quality are available". In this respect, the comments submitted have been taken into consideration which regard both kinds of proof as equivalent in order to demonstrate the efficacy of a herbal medicinal product.

After publication of the "Guideline on non-clinical documentation for herbal products in applications for marketing authorisation (bibliographical and mixed applications) and in applications for simplified registration" (EMA/HMPC/32116/2005), the HMPC drafted a "Concept paper on the development of a guideline on the assessment of genotoxic constituents in herbal substances/preparations" (EMA/HMPC/413271/2006). This concept paper recommends the development of a more specific document for the practical interpretation and implementation of genotoxicity testing, hazard identification and risk assessment of herbal medicinal products. The comments submitted stated that additional non-clinical testing of herbal medicinal products should only be required if published literature is not available or insufficient and if there is reasonable suspicion for safety concerns. Therefore it was proposed that such a new guideline should include a pragmatic interpretation of the results of genotoxicity testing and restrict the need to perform testing to an appropriate extent.

Safety evaluation of herbal medicinal products

The HMPC released a draft "Reflection paper on the risk associated with furocoumarins contained in preparations of *Angelica archangelica* L." (EMA/HMPC/317913/2006) for public consultation until 15 May 2007. The draft comes to the conclusion that a daily intake of total furocoumarins in herbal medicinal preparations equal or below 15 µg would not be considered to pose an unacceptable risk to consumers. This should be ascertained on the basis of analytical data of the actual herbal preparation, calculating all detectable furocoumarins as 8-methoxypsoralen on a molar basis.

Interested parties have submitted detailed comments on this draft stating e.g. that the assessment and the conclusions made in the draft extrapolate data from psoriasis therapy using highly dosed isolated substances to all kinds of herbal preparations made from the genus *Angelica*. These preparations contain a different spectrum of substances not equipotent to those in question, and a restriction to 15 µg furocoumarins per daily dose would not in any way lead to a risk reduction, but lead to a significant damage of the products used by consumers.

All respective drafts released for public consultation as well as the finalised documents can be found on the EMA website (www.emea.europa.eu).

ESCOP – The European Scientific Cooperative on Phytotherapy

ESCOP, the European Scientific Cooperative on Phytotherapy, is currently working on an addendum to its book containing 80 monographs published in September 2003 (to be ordered from the book trade or from the ESCOP Secretariat www.escop.com). The addendum will contain revised monographs e.g. on Devil's claw, Eleutherococcus, Valerian and *Echinacea* as well as new monographs e.g. on Milkthistle, Capsicum, Pumpkin seed, Hawthorn berries and Lavender flower.

Dr. Barbara Steinhoff, German Medicines Manufacturers Association (BAH), Co-chairperson of the ESCOP Scientific Committee, Ubiestr. 71–73, D-53173 Bonn, steinhoff@bah-bonn.de

and their Institutes of Pharmacognosy: International, Interesting and Cooperative

We introduce and present different institutes of Pharmacognosy/Pharmaceutical Biology, dealing with medicinal plant research with their special characteristics. In this Newsletter: Germany

University of Regensburg (Germany) Pharmaceutical Biology



Address: Universitätsstr. 31, 93053 Regensburg, Germany

Email: joerg.heilmann@chemie.uni-regensburg.de

Homepage: www.uni-regensburg.de/Fakultaeten/nat_Fak_IV/Pharmazie/PharmBio/index.htm

Prof. Dr. Jörg Heilmann

Working area:

Isolation, structure elucidation, analytical and *in vitro* pharmacological characterization of secondary metabolites (from plants and fungi) with cytotoxic and anti-inflammatory activity; ecological aspects of secondary metabolites. Development of *in-vitro* assays focusing on cannabinoid receptors (CB1 and CB2) and test systems related to the Alzheimer disease. Synthesis of chalcones and their derivatives.

2 publications, representing the institution:

Heilmann J., Mayr S., Brun R., Rali T., Sticher O. Antiprotozoal activity and cytotoxicity of novel 1,7-dioxadispiro[5.1.5.2]pentadeca-9,12-dien-11-one derivatives from *Amomum aculeatum*; *Helvetica Chimica Acta* 83, 2939-2945, 2000.
Kraus B., Wolff H., Heilmann J., Elstner E.F. Influence of *Hypericum perforatum* extract and its constituents on amyloid-b-mediated toxicity in microglial cells, submitted 2007

Coworkers:

8 PhD, 2 Postdocs

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

The research covers a broad methodology in the field of natural products research ranging from ethnobotanical fieldwork to target identification and lead optimization
Running projects with industrial partners?
Anti-inflammatory activity of extracts from *Salix* species

University of Münster (Germany) Institute of Pharmaceutical Biology and Phytochemistry

Name and address of institution: Hittorfstrasse 56, D-48149 Münster, Germany

Working groups: Prof. Dr. Andreas Hensel
Prof. Dr. Thomas Schmidt

Homepage: www.uni-muenster.de/Chemie/pb/



Prof. Dr. Andreas Hensel

Pharmacist
ahensel@uni-muenster.de

Working area:

Applied research on medicinal plants for skin care, wound-healing, liver cell activation and with anti-adhesive properties against pathogens (bacterial and viral infections); phytochemistry (carbohydrates, polyphenolics, peptides); glycobiology. *In vitro* test systems for skin cells, liver cells, receptor-mediated signal transduction, microbiological labs. Agricultural studies and plant/seed selection.

2 publications, representing the working group:

Deters A, Schröder KR, Hensel A (2005) Kiwi fruit (*Actinida chinensis* L.) polysaccharides exert stimulating effects on cell proliferation via enhanced growth factors receptors, energy production and collagen synthesis of human keratinocytes, fibroblasts and skin equivalents, *Journal of Cell Physiology*, 202, 717-722.

Lengsfeld C, Titgemeyer F, Faller G, Hensel A (2004) Glycosylated compounds from Okra inhibit adhesion of *Helicobacter pylori* to human gastric mucosa. *Journal of Agricultural and Food Chemistry*, 52, 1495-1503.

Coworkers: 10 PhD, 2 Lecturers (Dr. M. Lechtenberg, Dr. F. Petereit), 1 Postdoc (Dr. A. Deters);
Details see www.uni-muenster.de/Chemie.pb/institut/mitarbeiter/index.html

The "speciality" or the unique selling proposition: Pharmacognosy in our institute is seen as applied science and the basic scientific results on plants, plant extracts and plant secondary products are to be developed towards new products. This implies that a stringent development strategy is applied for our daily research. We try to link academic research on pharmacognosy, phytotherapy and natural product research to industrial development within a strong network of a variety of enthusiastic partners.
The institute offers a whole range of activities around medicinal plants from field studies, seed selection, phytochemical analysis, in vitro testing, molecular biology.

Running projects with industrial partners? Many, see www.uni-muenster.de/Chemie.pb/forschen/hensel/cooperations.html



Prof. Dr. Thomas J. Schmidt

Pharmacist
Email: thomschm@uni-muenster.de

Working areas: Natural Products Chemistry, Search for bioactive compounds in higher plants, structure-reactivity and structure-activity relationships, computational chemistry, chemoinformatics. Chemical diversity of the plant metabolome and chemometric methods. Focus on anti-inflammatory, anti-cancer and anti-infective compounds: Terpenoids, Lignans; recently: Compounds affecting T-cell mediated immune response.

2 publications, representing the research group: Schmidt TJ. Structure-Activity Relationships of Sesquiterpene Lactones in: Atta-Ur-Rahman (ed.) *Studies in Natural Products Chemistry*, Vol. 33, 309-392 (2006). (Many of our own studies are cited there).
Schmidt TJ, Gurrath M, Ozoe Y. Structure-activity relationships of seco-prezizaane and picrotoxane/picrodendrane terpenoids by Quasar receptor-surface modelling. *Bioorg. Med. Chem.* 12: 4159-4167 (2004).

Coworkers: PhD-students: currently 4 (+ 1 external)

The "speciality" or the unique selling proposition: Our "specialties" consist in the isolation and identification of natural products including their often complex 3D-stereostructure and in relating their structural properties to their biological effects by computational methods. Furthermore, our equipment with analytical and computational techniques can be applied to many other fields, e.g. elucidation of metabolome patterns in plant extracts and studies on the biosynthesis of natural products.

Running projects with industrial partners? FumaPharm AG, Lucerne (Switzerland), 2004-2006
Brial allergen GmbH, Greven (Germany), since 2006
PharmaSan GmbH, Freiburg (Germany), since 2006
biogen idec International GmbH (USA/CH), starting 2007

New Books

Medicinal and Aromatic Plants of Himachal Pradesh

The use of plants as source of medicines and human sustenance has been in vogue since antiquity. India has a rich heritage of use of plants as medicines. Indian systems of medicines utilize 80 percent of the material derived out of plants. There are over 2500 plant species in India having documented medicinal value. Global estimates indicate that 80 percent of population cannot afford the products of the western pharmaceutical industry and have to rely upon the use of traditional medicines mainly de-

rived from the plants. The literature on medicinal plants is quite vast, scattered and not available at one place. A great necessity was felt to have relevant literature at one place providing multi-disciplinary information on such resources. This book is based on personal explorations made by the author in all parts of Himachal Pradesh supported by collections, identification, compilation of information on traditional knowledge gathered during surveys. The book covers around 700 species of medicinal and aromatic plants of Himachal Pradesh, representative of not only the western Himalaya, but also of the entire



Hindu Kush Himalayan region. The plants described in detail cover Latin name, family, common and local names, distribution in Himachal Pradesh, description of the plant, parts used, market rate, chemical constituents, formulations, uses and cultivation notes.

Medicinal and Aromatic Plants of Himachal Pradesh. Narain Singh Chauhan, US\$ 52.20, Hardbound, 632 pages

Inulin-Type Fructans – Functional Food Ingredients

Poly- and oligofructosans isolated from a wide variety of plants and integrated more and more into functional food systems. Bioactivity claims for inulins are increasing more and more and within phytotherapy inulin-enriched plants are getting more and more into the focus. The book covers all aspects about oligo- and polyfructosans and is surely the most actual presentation on state of the art on inulin medicinal applications. Focus is laid on the functional food claims and the health concepts. Special chapters: Concepts for functional food, substantiation of claims and communication with consumer; inulin chemistry and technology; inulin-type fructans as non-digestible oligosaccharides; fructans as fermentable fructans; Oligofructose as dietary fiber; inulin as low-calorie carbohydrates; inulin and gastrointestinal functionality; The prebiotic effects; inulin and the homeostasis of lipids; inulin and defense functions. A must for every fructosan researcher!

Inulin-Type Fructans – Functional Food Ingredients. Marcel B. Roberfroid. Series: Modern nutrition (Boca Raton, Fla.) ISBN 0-8493-0059-2. 2005, CRC Press. Hardcover, 392 pages. Pounds 79.99

Phytoestrogens in Functional Foods

Phytoestrogens represent one of the important bioactive non-nutrients found in many plants and consumed in human diet. One problem can be seen thereby that the chemical characteristics for such phytoestrogens are extremely variable and also the biological effects induced are manifold and not as easy to describe as for example for synthetic estrogens. On the other side hard discussion have been communicated pro and contra phytoestrogens as functional food systems. The present book comprises the main knowledge on 315 pages, covering chemical natures of phytoestrogens, biosynthetic pathways, mode and actions, risk and benefit analysis and potential applications. Special chapters: Biosynthesis; chemistry, pharmacokinetics, cell signaling induced by phytoestrogens, benefits and risks, optimization of soy isoflavones in therapy. The book is well written, high-lighting many details and cross-linking practical applications to basic research.

Phytoestrogens in Functional Foods, Fatih Yildiz (ed.) 2006 ISBN 1574445081, Taylor and Francis, CRC Group Boca Raton, Fl. Hardcover, 336 pages. Pounds 125,-

Phytochemicals – Nutrient-Genes Interactions

Everybody is speaking on genomics – but what influence do phytochemicals, extracts and food ingredients have on the gene expression? And what does it mean, if a food ingredient changes gene expression? How can we measure and quantify nutrient-gene interactions and what fallstrips can be critically? Many aspects of nutrigenomics are pinpointed on 207 pages within 12 clear-cut chapters, indicating that food is not only energy intake but a general influence of many biochemical areas of body functionality. From the view of phytotherapy many methods and results described for daily nutrition are also transferable to phytochemicals and extract chemistry and from that point also pharmacognosists can read this book with high interest. Some chapter and their highlights: Diet-disease interactions; anti-inflammatory phytochemicals and their in vitro and ex vivo evaluation; Lipid peroxidation and gene expression and resveratrol-implications for atherosclerosis; adipose tissue gene expression, cardiovascular diseases and plant-based diet; molecular activities of vitamin E.

Phytochemicals – Nutrient-Genes Interactions. Mark S. Meskin, Wayne R. Bidlack, R.Keith Randolph, 2006 ISBN 0-8493-4180-9 Taylor and Francis Group, CRC Press Boca Raton Fl.

Protein Arrays, Biochips and Proteomics

Gen and protein expression studies are getting more and more into the focus of modern pharmacognostic repertoire and can reveal much more information on the molecular mechanisms of extracts and phytochemicals. On the other side the high density of data obtained by such arrays always raises the question how to interpretate this and which conclusion has to be drawn. The present book comprises the elemental and advanced knowledge on how to deal with gene arrays and does not stay on the basic point. A lot of practical questions are answered in a way that the reading, the understanding and the application to the daily lab practice is quite easy. Some chapters: protein-biochips and array – based proteomics, ultra sensitive microarray-based ligand assays; practical approaches to protein microarrays; functionalized surfaces for protein microarrays; protein profiling; dynamic visualization; the proteomic market.

Protein Arrays, Biochips, and Proteomics. Joanna S. Albala, Ian Humphery-Smith ISBN 0-8247-4312-1. 2003, Dekker Inc. U.S.A. hardcover, 304 pages, Pounds 97,-

Pharmazeutische Biologie 2 – Biogene Arzneistoffe und Grundlagen von Gentechnik und Immunologie

The text book from GA honorary member H. Wagner on Pharmaceutical Biology – Pharmacognosy has been a standard since almost two decades and generations of students in pharmacy and related sciences have worked with it. Now the 7th (!) edition has appeared, inserting additionally two new main sections on recombinant drugs, on immunology and on non-plant-derived drugs. The new sections have been prepared by specialists in their field and therefore the actuality is guaranteed. This is the first text book comprising all main topics from modern pharmacognosy in one bibliography.

Section 1 deals with classical phytochemistry, phytotherapy and pharmacognosy of the main plants in use and is practically a condensed and actual version of the former editions. Some herbs, not any more in use have been skipped, while others were newly included. Data on practical use, phytochemistry and biosynthesis are included, but have been put together in a more stringent way. The new design clearly highlights the facts and it is really fun to read and find news in this short, but highly condensed and actual section.

Section 2 dealing with non-plant-derived drugs (mainly antibiotics, cytostatics, hormones, vitamins, antibodies and peptide/protein-biologicals) covers a wide section over the essential drug systems on 100 pages. Structural features, mode of action and practical use are explained and will provide a good overview. Especially for learning students and for quick information this can be a valuable tool.

Section 3 “Gen technology and immunology” covers in short the main aspects of how recombinant proteins can be developed and on the techniques used. Basics of genterchnology are presented on 40 pages, the basics of immunology also on 40 pages. Short, but informative – especially for students, looking for an effective way to get into new subjects a good way to start into modern Pharmaceutical Biology.

Pharmazeutische Biologie 2 – Biogene Arzneistoffe und Grundlagen von Gentechnik und Immunologie. H. Wagner, A. Vollmar, A. Bechthold. ISBN 978-3-8047-1997-2. 2007 Wissenschaftliche Verlagsgesellschaft Stuttgart, Germany. Hardcover, colourprinting, 388 pages. 68,- €.

Editorial remark

All contributions for the GA-Newsletter are welcome. Deadline for submission for the next edition is fixed to May 30st 2007. Please send all contributions by e-mail or disk to: Prof. Dr. A. Hensel, University of Münster, Institute for Pharmaceutical Biology and Phytochemistry, Hitdorfstraße 56, D-48149 Münster, Germany; ahensel@uni-muenster.de





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

Ph.D.thesis (2007) Bioactive Pectic polymers from Malian medicinal Plants. By Kari Tvette Inngjerdigen. Supervisor: Prof. Berit Smetstad Paulsen, School of Pharmacy, University of Oslo, Norway.

Ph.D. thesis (2006) Biological and chemical studies of spices and mangrove plants. By Helle Wangenstein. Supervisor: Prof. Karl Egil Malterud, School of Pharmacy, University of Oslo, Norway.

Ph.D.thesis: December (2006) Ethnopharmacological and phytochemical investigations of medicinal plants used against schistosomiasis in Mali. By Sekou Bah. Supervisor: Berit Smetstad Paulsen, School of Pharmacy, University of Oslo, Norway.

Ph.D. thesis (2007) Genexpressionsprofiling von Extrakten und Naturstoffen – Untersuchungen zur Wirkungsweise von *Cimicifuga racemosa* (L.) NUTT. und *Leuzea carthamoides* DC. in der humanen Brustkrebszelllinie MCF-7. By: Friedemann Gaube; Promotor: Prof. M. Hamburger, Friedrich-Schiller University Jena, Jena, Germany.

Ph.D. thesis (2007) Phytochemical and Antimycobacterial studies on the Liliales. By: Gemma Louise O'Donnell; Promotor: Dr. Simon Gibbons, Centre for Pharmacognosy and Phytotherapy, The School of Pharmacy, University of London, U.K.

Ph.D. thesis (2006) Wild food plants in Graecanic communities in Calabria, Southern Italy – Ethnobotany, current role in Mediterranean diets, and antioxidant activity. By: Sabine Nebel; Promotor: Prof. Michael Heinrich, School of Pharmacy, University of London, UK.

Ph.D.thesis (2007) Ergolinalkaloidvorkommen bei Convolvulaceen: Biochemische und ökologische Interaktionen einer Pflanze-Pilz-Symbiose. By Sabine Hellwig, geb. Kucht; Promotor: Prof. E. Leistner, Institut für Pharmazeutische Biologie, University of Bonn, Germany.

PhD thesis (2007) Evaluation of Grapefruit juice and its components on P-glycoprotein activity (P-gp). By: Whocely Victor De Castro; Promotor: Prof. H. Derendorf and Prof. V. Butterweck, College of Pharmacy, Department of Pharmaceutics, University of Florida, Gainesville, USA.

Ph.D. thesis (2007) *Achillea millefolium* L. s.l. – Analysis of Phenolic Compounds and Biological Testing. By: Birgit Benedek; Promotor: Prof. B. Kopp, Dept. of Pharmacognosy, University of Vienna, Austria.

Ph.D. thesis (2007) Bioassay guided chemische Untersuchungen von tropischen Arzneipflanzen. By: Judith Virtbauer; Promotor: a.o.Univ. Prof. L. Krenn

PhD. thesis (2007) Die zelluläre Kontrolle der PLA₂-Aktivität – ein Element des Signaltransfers zur Auslösung der Alkaloid-Biosynthese in *Eschscholzia californica*. By Dipl.-Pharm. Wieland Schwartz; Promotor: Prof. Dr. Werner Roos

PhD. thesis (2007) Antiprotozoal activity and bioactive constituents of *Xanthium brasiliicum* Lell. and *Ageratum conyzoides* L. (Asteraceae) growing in Sudan. By Amal Nour; promotor: Prof. Dr. Thomas Schmidt, Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Germany.

Diploma thesis (2007) Untersuchungen zur Struktur der polymeren Proanthocyanidinen aus *Myrothamnus flabellifolia* Welw. By Marie-Christin L. Krug. Promotor: Prof. Dr. A. Hensel (University of Münster, Germany) and Prof. Dr. W. Roos (Martin-Luther-University of Halle-Wittenberg, Germany)

Diploma thesis (2007) Untersuchungen zur Lokalisation der Transkription der pmt in den Pflanzen *Datura stramonium*, *Lycopersicon esculentum* und *Calystegia sepium*. By Charlotte Harnisch; Promotor: Prof. Dräger, Martin-Luther University of Halle, Germany

Diploma thesis (2006) Krebszellen als Targets für VIP-Rezeptor-Liganden? By: Anna Ortner; Promotor: Prof. S. Glasl and Prof. W. Mosgöller, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2006) Charakterisierung von Sesquiterpenlactonen und Flavonoiden aus *Saussurea amara* DC. (Asteraceae). By: Katharina Mayr; Promotor: Prof. S. Glasl, Department of Pharmacognosy, University of Vienna, Austria

Diploma thesis (2007) Charakterisierung von phenolischen Inhaltsstoffen der mongolischen Heilpflanze *Euphorbia pallasii* TURCZ. By: Lukas Neusch; Promotor: ao. Univ. Prof. S. Glasl, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2006) Krebszellen als Targets für VIP-Rezeptor- Liganden? By: Anna Ortner; Promotor: ao.Univ.Prof. Dr. S. Glasl and Prof. W. Mosgöller, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2006) Pharmakognostische Untersuchungen an *Ligustri fructus* und *Chuanxiong rhizoma*. By: Anna Elisabeth Putscher; Promotor: ao.Univ.Prof. R. Länger, Dept. of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2006) Dokumentation mongolischer Arzneipflanzen. Makroskopische und mikroskopische Beschreibung von *Heteropappus altaicus*, *Heteropappus biennis* und *Lilium pumilum*. By: Birgit Wegerer; Promotor: Prof. B. Kopp, Dept. of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2006) Steroidsaponingehalt in verschiedenen *Dioscorea*-Arten. By: Michael Gotsbacher; Promotor: Prof. B. Kopp, Dept. of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2006) Charakterisierung von Sesquiterpenlactonen und Flavonoiden aus *Saussurea amara* DC. (Asteraceae). By: Katharina Mayr; Promotor: ao.Univ. Prof. S. Glasl, Dept. of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2006) Guatemalan Plants against Protozoal Diseases: A New Fluorimetric Method for the Evaluation of their Biological Activity. By: Martin Heuberger; Promotor: Prof. W. Kubelka, Dept. of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2007) Charakterisierung von phenolischen Inhaltsstoffen der mongolischen Heilpflanze *Euphorbia pallasii* TURCZ.. By: Lukas Neusch; Promotor: ao.Univ Prof. S. Glasl, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2007) In vitro-Mikrorhizombildung bei *Curcuma longa*. By: Brigitte Maria Karall; Promotor: Prof. B. Kopp, Dept. of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2007) Untersuchungen zur somatischen Embryogenese bei *Glycyrrhiza glabra* L.. By: Karin Lämmermayer; Promotor: Prof. B. Kopp, Dept. of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2007) *Lippia alba* cultivated in Spain: Stability of the Linalool Chemotype. By: Verena Mair; Promotor: Prof. B. Kopp, Dept. of Pharmacognosy, University of Vienna, Austria, and Prof. S. Canigual, Unitat de Farmacologia i Farmacognòsia, Facultat de Farmàcia, Universitat de Barcelona, Spain.

Diploma thesis (2007) Untersuchungen zur Hemmung von Acetylcholinesterase durch Pflanzenextrakte. By: Robert Maicher; Promotor: ao.Univ Prof. L. Krenn, Dept. of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2007) *Ambrosia artemisiifolia*, eine wichtige Allergiepflanze als Neophyt in Österreich. By: Maksida Hanic; Promotor: Prof. W. Kubelka, Dept. of Pharmacognosy, University of Vienna, Austria.

Diploma thesis, 2007, Investigation of Secondary Metabolites from the Marine Sponge *Geodia barrettii*. By: Eva Gerold, promotor: Prof. Dr. R. Bauer; Inst. Pharm. Sci., University of Graz, Austria, in collaboration with Prof. Dr. Lars Bohlin, Division of Pharmacognosy, University of Uppsala, Sweden.

Diploma thesis, 2007, Phytochemische Untersuchungen von *Paeonia*-Drogen. By: Valerie Heusgen, promotor: Prof. Dr. R. Bauer; Inst. Pharm. Sci., University of Graz, Austria.

Diploma thesis, 2007, Pflanzliche Neuraminidase-Hemmstoffe, Susanne Perl, promotor: Prof. Dr. R. Bauer; Inst. Pharm. Sci., University of Graz, Austria.

Eratum to the newsletter edition 2-2007

It has to be mentioned that on occasion of the Young Researcher Symposium in Helsinki at 29th August 2006 Ms. Birgit Benedek, Vienna, has received the 2nd prize for excellent scientific results and mode of presentation.

