

Message from the President



Dear members of GA,

Publication of the second newsletter coincides with the end of the year. This is the moment where, on the one hand, one looks back on events and developments that took place in 2015 and, on the other hand, looks forward on what 2016 will bring.

The 63rd Annual Congress was held in Budapest, from 23 to 27 August 2015. It was a successful event. We had participants from all over the world to gather in Budapest for four days, interesting plenary lectures, award lectures, short lectures, posters, and well-attended pre-congress events on Sunday. I wanted to express here my gratitude to Prof. Judith Hohmann, Dr. Desz  Csopor, Attila Varga, and to all the other members of the organizing team for a smooth organization of the congress!

Elections for the Executive Committee (ExC) and Advisory Board took place in the Members Meeting that was held during the congress. I am happy that Prof. Anna-Rita Bilia is my successor as from January 2016. On the other hand, ExC members vice-president Prof. Wolfgang Blaschek and our treasurer Dr. Bernd Roether had decided to step down by the end of 2015. I want to express here my special gratitude and thanks to both of them for their services to GA! As new vice-president Prof. Oliver Kayser was elected, and Dr. Ulrike Reusner as our new treasurer. It is my pleasure to welcome them in the ExC! By the time the newsletter is published we will already have had our first ExC meeting with incoming and outgoing members to ensure a smooth transition.

I also wanted to thank the Advisory Board Members for their contributions over the past two years.

And now to important news for 2016:

The 9th Joint Meeting of Societies will be held from 24 to 28 July in Copenhagen. For this time GA acts as the lead organization, and Profs. Anna Jager and Dan Staerk are heading the local organizing team. The Joint Meeting will be a major event with well over 1000 participants. For the first time the Japanese Society of Pharmacognosy (JSP) will participate, besides ASP, PSE, GA, AFERP and SIF. The Korean So-

ciety of Pharmacognosy also has expressed interest in these joint meetings, and we will discuss in Copenhagen the further extension towards a gathering of all important societies in the field of medicinal plant and natural products research. There will be several pre-congress events on Sunday, namely the Young Researchers Workshop, the Regulatory Affairs Workshop, and a pre-symposium on advances in (bio)analytical techniques applied to natural products research. Please read the announcement of the congress in this newsletter, and consult the congress website for further details on this important event!

Awards given in 2016 include the Egon Stahl Award in Bronze, the Dr. Willmar Schwabe-Award Award, and the Dr. Willmar Schwabe Research Scholarship. Announcements of the awards have been published, and you will also find them in this newsletter and on the GA website. Again I wanted to draw the attention of **ALL** GA members to these awards and prizes of our society. You all should consider whether your research, or maybe that of a research group you closely collaborate with, would fit with the aims of these prizes, or if you know of an outstanding young scientist that would be eligible for the Egon-Stahl Award in Bronze. If you are a senior scientist from a lesser developed country, inform your PhD students of the Dr. Willmar-Schwabe Research Scholarship! And if you are one of our numerous young GA members from lesser developed countries, talk to your supervisor and explore with him a possible application. I can only repeat that this scholarship may be a unique opportunity for your career! Thus, I look forward to numerous applications.

Planta Medica is the official scientific journal of GA. Prof. Luc Pieters, Editor-in-Chief since 2006, has decided to step down from this function by end of 2015. I am grateful to him for taking care of the journal over these past nine years! Also, I wanted to thank the Editors who step down by end of this year for their contributions to the journal. Prof. Pieters will continue to serve as Editor-in-Chief of *Planta Medica Letters*, the open access companion journal of *Planta Medica*. Prof. Veronika Butterweck is the new Editor-in-Chief of *Planta Medica* as per January 2016. She is probably known to most of you, since she has been an Editor of the journal for many years. A certain refocusing of the journal is planned, and some new Editors will join the team.

I reiterate here my invitation to all of you: submit manuscripts to *Planta Medica* and *Planta Medica Letters*! Our official journals thrive with the contributions of GA members. Being myself a former Editor of *Planta Medica*, I wish that our journals continue to serve the scientific community as important reference points for topical information on medicinal plant and natural products research.

Let me close by wishing you all a happy, prosperous, and successful 2016!

Matthias Hamburger
President of GA



Editorial remark

All contributions for the GA-Newsletter are welcome.

Deadline for submission is fixed to May 25th 2016.

Please send all contributions by e-mail:

Prof. Dr. A. Hensel
University of Münster,
Institute for Pharmaceutical
Biology and Phytochemistry,
Corrensstrasse 48,
D-48149 Münster, Germany
ahensel@uni-muenster.de



Deceased members

(to our knowledge)

Prof. Beate Diettrich
(Halle, Germany)
passed away October 10th 2015
GA member since 1990
Obituary in this newsletter.

Prof. Dr. Dres. h. c. Adolf Nahrstedt
(Münster, Germany)
passed away January 7th 2016
GA member since 1972

The Society will keep
commemoration and offers its
sincere condolence.

GA introduces free Webinars for all Members

Why does GA offer webinars? Of course, web-based teaching and conferencing is a common trend. But this format is also an excellent chance to reach scientists in the field of pharmacognosy and natural product research all over the world in order to discuss a specific topic. This may be an opportunity to increase the awareness that GA is a scientific organization that wants to fuel the exchange of knowledge, to strengthen networking and, in particular, to support young scientists. Finally, GA webinars might also help to acquire new members.

Scientific talks followed by a lively discussion are a fundamental part of science. They are of great importance for the distribution of new findings, concepts and methodologies. In contrast to papers, talks provide the unique opportunity to get into contact with interesting and inspiring persons. This is of great advantage especially for young scientists. But giving or listening to a talk is somewhat of a challenge: On the one hand, the presenters have to travel and to invest a substantial amount of time. This also generates considerable expenses. On the other hand, the fixed date and location of a talk is not always easy to handle for the audience, especially for graduate students with a tight schedule full of lab experiments. Fortunately, all these

obstacles can easily be overcome today, since web-based techniques allow to broadcast and to record talks and the subsequent discussions. No need to travel, no need to be at the right place. It's quite simple: The listeners need a computer with a web browser, loudspeakers, and a stable internet connection. On the presenter's side, a webcam and a microphone are additionally required.

GA wants to take full advantage of these possibilities. We will start off with four different topics covered by experts in the field. The dates, topics and speakers can be found in the table. The live webinars will be hosted by Dr. Robert Fürst, Professor at the Goethe-University Frankfurt (Germany). We are very proud to announce that the webinars are free and open to everybody. Participants do not need to be members of the GA. The announcement of each webinar will be distributed to all members of the GA by email (as it has already been done for the first talk). Please feel free to forward this invitation to staff members, collaborators and everybody else who might be interested in the topic. Participants have to register for each webinar by a simple email to ga-secretary@ga-online.org. The registration deadline will be disclosed in the respective invitation email. If you can not join the live event, you will



find the recorded talk and Q&A session on the GA homepage, but of course only in the members' area.

Do you have an idea for a topic or a speaker? Please do not hesitate to make suggestions to Robert Fürst (fuerst@em.uni-frankfurt.de). We are very much looking forward to the first round of webinars and we hope that this new format will attract a high number of participants, in particular young scientists who might see a great advantage of becoming a member of GA.

Robert Fürst, Frankfurt/Main, on behalf of the GA Working Group Congresses and Workshops.



Dates for the Webinars 2016:

Date	Topic	Speaker
December 16, 2015	<i>Dissecting the molecular mechanisms of bioactive natural products – why should you bother and how should you do it?</i>	Dr. Elke Heiss Assistant Professor at the University of Vienna, Austria
February 23, 2016	<i>Metabolomics</i>	Dr. Maria Halabalaki Research Associate at the University of Innsbruck, Austria
April 26, 2016	<i>How to publish in Planta Medica</i>	Dr. Veronika Butterweck Professor at the University of Applied Sciences Northwestern, Switzerland
July 5, 2016	<i>Basics of polysaccharide analysis</i>	Dr. Andreas Hensel Professor at the University of Münster, Germany

Some Data from the Membership Data Base

New GA members

Since May 2015 the following 72 members and 2 company members have joined our Society.

GA warmly welcomes all new members and hopes that the Society may get an international platform for many scientific and personal contacts.

Shereen **Abd El Gaffar**, Sudan; Rania **Abou El Ezz**, Egypt; Dr. Khadiga **Ahmed**, Egypt; Suhaib **Al-Mehrab**, Iraq; Dr. Fuad **Al-Rimawi**, Israel; Aljawharah **Alqathama**, United Kingdom; Chinyere **Amandikwa**, Nigeria; Agyei Felix **Ampadu**, Ghana; Aaron Opoku **Antwi**, Ghana; Amara-chukwu **Anwuchaepe**, Nigeria; Prof. Giovanni **Appendino**, Italy; Dr. Norman **Balcazar**, Colombia; Dr. Rasha **Batran**, Egypt; Freddy **Bernal**, Germany; Dr. Kristin **Bossaert**, Switzerland; Amel **Bouzapoata**, Algeria; Vasiliki **Boznou**, Greece; Mahboobeh **Bozorgi**, Iran; Dr. Lucie **Cahlikova**, Czech Republic; Jayesh

Chaudhary, India; Dr. Christoph **Crocoll**, Denmark; Dicle **Demir**, Turkey; Dr. Haytham **El-Doueik**, United Kingdom; Dr. Samah **El Newary**, Egypt; Dr. Sherien **Eldaly**, Egypt; Mohamed **Elnaggar**, Egypt; Dr. Wael **Elsayed**, Egypt; Dr. Walid **Elsayed**, Egypt; Earnest **Erhirhie**, Nigeria; Ihechiluru I. **Ezeigbo**, United Kingdom; Dr. Rania **Fawzi**, Egypt; Dr. Ahmad **Gaara**, Egypt; Dima **Hammoud**, Benin; Fabian **Herrmann**, Germany; Daniela **Hulcova**, Czech Republic; Dr. Hisahiro **Kai**, Japan; Kyo Bin **Kang**, Korea; Mark Njogu **Kimani**, Kenya; Luiz **Klein-Junior**, Belgium; Paula Mariana **Kustiawan**, Thailand; Nuria **Llurba**, Germany; Oluwatoyin **Makinde-Adeleye**, Nigeria; Guilherme **Mazocante**, Brazil; Rozalia **Michalea**, Greece; Dr. Rasha **Mohamed**, Egypt; Dr. Tahia **Mohamed**, Egypt; Faezeh **Monji**, Singapore; Dr. Balakrishnan **Nair**, India; Mamona **Nazir**, Germany; Charles **Nwachukwu**, Nigeria; Nwando **Nwokoye**, Nigeria; Dr.

Anthony **Ojekale**, Nigeria; Newman **Osafu**, Ghana; Dr. Wilfred **Otang Mbeng**, South Africa; Dr. Federica **Pollastro**, Italy; Anna **Quartey**, Ghana; Dr. Terry **Roberts**, United Kingdom; Dr. Sara Maria **Robledo**, Colombia; Dr. Arash **Rouhani Laridjani**, Netherlands; Marcela **Safratova**, Czech Republic; Tijjani Shinkafi **Salihu**, India; Dr. Joseph **Sarkodie**, Ghana; Jasmin **Schmitt**, Germany; Alma **Shabbar**, Syria; Vitor **Soares**, Brazil; Dr. Laphookhieo **Surat**, Thailand; Dr. Agnieszka **Szopa**, Poland; Barbara Eva **Tóth**, Hungary; Dr. Moufid **Yassine**, Syria; Dr. Martin **Zehl**, Austria; Dr. Aizhan **Zhusupova**, Kazakhstan; Dr. Jelena **Zivkovic**, Serbia.

New company members:

Amway, Germany; **APOMEDICA Pharm. Prod. GmbH**, Austria.

Dr. Birgit Benedek, GA-Secretary

Announcement:

Egon Stahl-Award in Bronze 2016 of the Society for Medicinal Plant and Natural Product Research (GA)



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

The bronze medal and an award of € 1.500 is given to young scholars up to the age of about thirty whose thesis are of outstanding quality.

In 2016 the Egon Stahl Award in Bronze will be given in a ceremony during the 9th

Joint Natural Products Conference 2016, Copenhagen, July 24–27, 2016.

Members of the Society for Medicinal Plant and Natural Product Research are invited to submit nominations for candidates, together with supporting data. A nomination for the prize (self nominations will not be considered) should include a motivation letter explaining the significance of the scientific achievements of the candidate, a curriculum vitae of the candidate, an index on his/her publications, and reprints of his/her most significant publications.

Deadline for submissions for the Egon Stahl-Award 2016 is **March 15, 2016.**

Documents are to be sent in electronic form, attached to an E-mail (maximum size of all attachments 20 MB) to:

Prof. Dr. Matthias Hamburger, Pharmaceutical Biology, Department of Pharmaceutical Sciences, University of Basel, Klingelbergstraße 50, CH-4056 Basel, Switzerland.

e-mail: matthias.hamburger@unibas.ch

Announcement:

Dr. Willmar Schwabe Award 2016 of the Society for Medicinal Plant and Natural Product Research (GA)



Dr. Willmar Schwabe
From Nature. For Health.

The Dr. Willmar Schwabe-Award acknowledges outstanding results of pharmacological and/or clinical research in the field of medicinal plants and natural products. The aim of the award is to motivate preferentially young scientists (normally 40 years or younger) to resolve phytotherapeutical and phytopharmaceutical problems in an interdisciplinary approach, in order to support the evidence-based use of natural products.

The award is endowed with 10,000 €.

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

Up to three relevant scientific publications on a specific topic which have been published during the last three years can be considered. They must be submitted together with CV(s) and list(s) of publications, along with an accompanying document explaining the significance and relevance of the submitted publications in the broader scientific context.

The Dr. Willmar Schwabe Award will be bestowed in a ceremony during the 9th

Joint Natural Products Conference 2016, Copenhagen, July 24–27, 2016.

The award-winning scientific results shall be presented during the congress in a lecture of 30 minutes.

Deadline for submissions for the Dr. Willmar Schwabe Award 2016 is **February 28, 2016.**

Documents are to be sent in electronic form, attached to an email (maximum size of all attachments 20 MB), to:

Prof. Dr. Matthias Hamburger, Pharmaceutical Biology, Department of Pharmaceutical Sciences, University of Basel, Klingelbergstraße 50, CH-4056 Basel, Switzerland.

e-mail: matthias.hamburger@unibas.ch

Announcement:

Dr. Wilmar Schwabe Research Scholarship 2016 for Young Scientists by the Society for Medicinal Plant and Natural Product Research



Dr. Willmar Schwabe
From Nature. For Health.

Awarding Institution:

Society for Medicinal Plant and Natural Product Research (GA)

Endowing Sponsor:

Dr. Willmar Schwabe GmbH & Co. KG, Karlsruhe (Germany)

Endowment: 10,000 EURO

Objective

The aim of the **Dr. Willmar Schwabe Research Scholarship for Young Scientists**

is to support young scientists, especially from developing countries, in a research attachment to a leading research institution. Projects focusing on pharmacological or clinical research of phytopharmaceuticals and their active substances are particularly welcome. The award is exclusively used for travelling and living costs of the awardee, and not for consumables. Duration of the attachment of at least 6 months is mandatory.

Criteria for Application

- Advanced PhD students (year 2 onwards), and postdocs.
- In case of similar scientific quality of applications applicants from developing countries shall have priority.
- GA membership for at least one year prior to application, with paid fees.

- Age: preferably 30 years of age (postdocs) or younger (PhD students).
- The hosting institution states in the Letter of Acceptance that (i) it is prepared to cover the cost of consumables used for the research project; (ii) that the student will have an adequate laboratory infrastructure and; (iii) that a tutor is assigned who will supervise the applicant during his/her stay.

Documents for Application

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

All documents have to be submitted as email attachments to the address below: The **Dr. Willmar Schwabe Research Scholarship for Young Scientists** will be bestowed in a ceremony during the 9th

Joint Natural Products Conference 2016, Copenhagen, July 24–27th, 2016. The scientific results of the project shall be presented during the next annual congress, preferably in a short lecture. The awardee has to prepare a final report on the project supported by this grant. This report is to be signed by the head of the host institution. A copy of the signed report has to be sent to the GA president and to Dr. Willmar Schwabe GmbH & Co. KG. In case of publication of the results the award has to be mentioned in the Acknowledgement.

The **deadline** for submissions for the 2016 announcement is **February 28, 2016**.

Documents are to be sent in electronic form, attached to an email (maximum size of all attachments 20 MB), to:

Prof. Dr. Matthias Hamburger, Pharmaceutical Biology, Department of Pharmaceutical Sciences, University of Basel, Klingelbergstraße 50, CH-4056 Basel, Switzerland.

e-mail: matthias.hamburger@unibas.ch

Awards and Honours during GA 2016 Annual Meeting in Budapest, Hungary

Honorary Membership of GA to Prof. Dr. Brigitte Kopp

The Society for Medicinal Plant and Natural Product Research (GA) appoints meritorious members as Honorary Members. At the 2015 Annual Congress of GA, Prof. Dr. h.c. Brigitte Kopp, Vienna, was awarded with the Honorary Membership. Professor Kopp obtained a degree in Pharmacy from the University of Vienna in 1972, and a PhD from the same university in 1976. She then spent several research attachments in other labs, with Prof. Gerhard Franz in Regensburg, and with late

Prof. Jeffrey Harborne at the University of Reading, UK. Prof. Kopp obtained her habilitation in Pharmacognosy in 1984, and became University Professor in Innsbruck in 1989. She held guest professorships at the University of Navarra, Pamplona, Spain, and the University of Cairo, Egypt. In 2000 she was appointed University Professor in Vienna.

Besides research and teaching Prof. Kopp served the University of Vienna in various administrative functions, such as Dean of



Study Affairs, Head of the Institute of Pharmacognosy, and for 10 years, as Studien-

präses of the University (Chief Officer of Student Affairs). She was representative of Austria in various European Organisations, ranging from the European Pharmacopeia, Strasbourg, to the EC Committee on Pharmaceutical Education and Training, Brussels.

Prof. Kopp served GA for an extended period in various functions, as Member of the Board of Directors, as Vice-President from 1998–2007, and 2012–13, and as President from 2008–2011.

Her research focus has been, in the beginning, mainly on Plant Biotechnology. Later she moved more into the field of isolation and structure elucidation of bioactive natural products, and analysis. In recent years she worked in collaborative efforts on various pharmacologically active compounds. Prof. Kopp published well over 200 contributions in scientific journals, books, congress proceedings. Also, she served as Guest Editor of the Wiener Medizinische Wochenschrift. For her contributions she

has received several distinctions, such as the Theodor-Körner-Prize, a honorary doctorate and, in 2015, the Silberne Ehrenzeichen of the Republic of Austria.

Prof. Kopp was unfortunately unable to attend the award ceremony due to an accident she had suffered while hiking in the Austrian mountains. On her behalf, Prof. Judith Rollinger, her successor in Vienna, came to the stage, to receive the official document of appointment from the president of GA.

Egon Stahl-Award in Silver 2015 of the Society for Medicinal Plant and Natural Product Research (GA)



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

ogy) and Analytical Phytochemistry. The Silver Medal is awarded to scientists up to the age of approx. forty who have published outstanding scientific work during the years after their graduation.

The 2015 Silver Medal was awarded to

Dr. Maria Halabalaki, University of Athens, School of Pharmacy. Dr. Halabalaki obtained a degree in Pharmacy from the University of Athens, and completed in 2005 her PhD in the group of Prof. Skaltsounis. She then continued her research career in Athens, interrupted by various research attachments in other European labs.

The early research was mainly devoted to discovery and characterization of phytoestrogens. In recent years, she increasingly focused on LC-MS and NMR-based metabolomic studies, and in LC-MS based metabolomic characterization of molecular targets and pathways affected by natural products. Dr. Halabalaki authored or co-authored some 40 research papers in well regarded international journals, and several reviews and book chapters.

The award was given by the President of GA, and Dr. Halabalaki delivered a lecture on her research during the second day of the congress.

Bionorica Phytoneering Award 2015



The Bionorica Phytoneering Award acknowledges outstanding research in the field of development and application of phytopharmaceutical products. The 2015 Phytoneering Award was given to **PD Dr. Eike Steinmann** and **Dr. Anggakasuma**, TWINCORE, Hannover, for their project entitled “Turmeric curcumin inhibits entry off all hepatitis C genotypes into human liver cells”.

The team addressed the issue of hepatitis C which is among the most common causes of chronic liver disease worldwide, leading to chronic hepatitis, cirrhosis, and

to various forms of liver cancer. Dr. Steinmann and his team found that curcumin prevented the entry of viral particles into liver cells, by modulating the flexibility of the viral envelope. Given the poor bioavailability of curcumin the compound was packed into a nano-carrier delivery

system to improve bioavailability. These findings may open alternative ways for dealing with this viral infection, given that standard therapy with interferon and direct acting antiviral drugs are typically not accessible and affordable in developing countries.

On behalf of Prof. Michael Popp, CEO of Bionorica, Dr. Bernd Roether presented the award to the winners. PD Dr. Eike Steinmann and Dr. Anggakasuma presented their results in the subsequent award lecture.

Dr. Wilmar Schwabe Research Scholarship 2015 for Young Scientists to Dr. Boakye Duah Yaw



Dr. Willmar Schwabe
From Nature. For Health.



The aim of the Dr. Willmar Schwabe Research Scholarship for Young Scientists is to support research of young scientists, especially from developing countries, to join a leading research institution for at least 6 months.

Projects focusing on pharmacological or clinical research of phytopharmaceuticals and their active substances are particularly welcome.

The 2015 Research Scholarship was awarded to **Dr. Boakye Duah Yaw**, from the Kwame Nkrumah University of Science and Technology, Kumasi, Ghana. With the support of scholarship he will join the group of Dr. Elke Heiss, Molecular Targets Group of the Department of Pharmacognosy, University of Vienna, to carry out a project entitled "Influence of geraniin and *Phyllanthus muellerianus* on vascular inflammation". The award was given by Dr. Günter Meng, Dr. Willmar Schwabe Company.

The awardee will present the results of his project at the 2016 Joint Meeting of Societies, in Copenhagen.

Planta Medica Most Innovative Paper of the Year

Two years ago, on the occasion of the 60th anniversary of *Planta Medica*, the official organ of the Society of Medicinal Plant and Natural Product Research, Thieme Publishers and GA established a yearly award for the Most Innovative Paper of the Year.

The Editorial Board of *Planta Medica* decided that the prize for the most innovative paper published in *Planta Medica* in 2014 would go to the publication: "*Influence of Gut Microbiota-Derived Elagitannins' Metabolites Urolithins on Pro-*



Inflammatory Activities of Human Neutrophils" by Piwowarski, Granica and Kiss (*Planta Medica* 2014; 80: 887–895).

Jakub Piwowarski presented the awarded paper in a few slides at the GA congress in Budapest in August 2015, and accepted the award on behalf of all authors from the Department of Pharmacognosy and Molecular Basis of Phytotherapy, Medical University of Warsaw, Faculty of Pharmacy, Warsaw, Poland.



Poster Awards during GA conference 2015 in Budapest, Hungary, for the most exciting and scientific excellent poster presentations



Bingrui Liu	High-resolution α -glucosidase and radical scavenging profiling combined with HPLC-HRMS-SPE-NMR for identification of bio-active constituents in crude extract of <i>Pueraria lobata</i> .	University of Copenhagen, Denmark
Norbert Kúsz	Isolation and structure determination of novel jatrophone diterpenes from <i>Euphorbia dulcis</i> and their GIRK-channel-inhibitory activity.	University of Szeged, Hungary
Lorraine Ezra	Chemical constituents from <i>Xylocarpus rumphii</i> (Meliaceae).	University of Surrey, Guildford, United Kingdom
Antigoni Cheilari	Comparison of HPLC-UV and NMR methodologies for the quantification of Silymarin complex in <i>Silybum marianum</i> fruit extracts.	University of Innsbruck, Austria
Irem Atay	Isolation of anti-inflammatory compounds from <i>Sambucus ebulus</i> leaves through in vitro activity-guided fractionation.	Istanbul Medipol University, Turkey
Jong Hun Ryu	Ameliorating effect of swertisin in MK-801 induced prepulse inhibition deficits and cognitive impairment.	Kyung Hee University, Seoul, Korea

Young Researcher's Workshop 2015



The Young Researchers' Workshop (YRW) is a very special pre-symposium of each year's GA conference. This year in Budapest it was organized and chaired by Professor Sandra Apers from the University of Antwerp, Belgium, and Professor Robert Fürst from the Goethe University Frankfurt, Germany

Best of the best: the awarded young researchers and the 2015 chairs of the workshop. From left: Robert Fürst, Sandra Apers, colleague of Robert Biney, Diana Ulrich, Kuei-Hung Lai, József Csábi.

The YRW has been established in order to bring together young scientists, in particular PhD students, for the presentation and discussion of their work, thus promoting presentation skills, scientific exchange and networking. Traditionally, all YRWs start with an impulse lecture given by a younger, but already well established scientist. This year, Professor Elke Heiss from



the Department of Pharmacognosy, University of Vienna, Austria, talked about “Dissecting the molecular mechanisms of bioactive natural products – why the effort pays off”.

Professor Elke Heiss

Her brilliant lecture sharpened the view of the audience on why and how to perform mechanistic in vitro studies on biogenic compounds. After this talk, the workshop

was split into a phytochemistry-based and a pharmacology-oriented session, where 7 short talks were given, each. The afternoon ended with a joint wrap-up session and with a discussion on future perspectives. All participants highly appreciated the format of the YRW. Also the implementation of webinars and the reasons to be or to become a member of the GA was discussed with the participants. Most importantly, also the awards were bestowed in the closing session. Due to the generous

and constant financial support of the company Bionorica SE (Neumarkt, Germany), we were able to award 4 prizes for the best presentations. Robert Biney (Department of Pharmacology, Kwame Nkrumah University, Kumasi, Ghana) and József Csábi (Institute of Pharmacognosy, University of Szeged, Hungary) were awarded for their outstanding talk and scientific work with a prize money of 200 Euro, each. Moreover, they had the exciting opportunity to rerun their presentation during the main conference program in front of a much bigger audience. Two further prizes (100 Euro each) were awarded to Diana Ulrich (Institute for Pharmaceutical Biology and Phytochemistry, University of Münster, Germany) and to Kuei-Hung Lai (Graduate Institute of Natural Products, Kaohsiung Medical University, Taiwan). The proud awardees were honored in the closing ceremony of the congress. Unfortunately, Robert Biney could not join this ceremony, so that a colleague of him stepped in.

Thanks to the high scientific standard of each presented work and the very enthusiastic speakers, the YRW 2015 was of great success. The next YRW will take place in Copenhagen on Sunday, July 24, 2016 and will be chaired by Jürg Gertsch and Alessandra Braca. We are very much looking forward to hearing about the latest research of highly talented young researchers!

Prof. Dr. Robert Fürst, Frankfurt, Germany

GA Travel grants for young researcher (Ph.D. students and post docs) for visiting the GA annual conference 2015 in Budapest, Hungary:

GA spends more than 15.000 € for the next generation of natural products researcher!



Ph.D. students

Verena Spiegler
Kuei-Hung Lai
Carmelina Flavia Massaro
Clizia Guccione
Teresa Faleschin
Tina Wardecki

Charlotte Petit
Adnan Amin
Sonja Krstin
Karmen Kapp
Robert Peter Biney
Fong Lai Yen
Ejlal Abdulrazig Omer Ahmed
Ajaghaku Daniel Lotanna

Chika C. Abba
Lorena Cursino
Jelena Katanic

Post docs

Dr. Emelia Oppong Bekoe
Dr. Mohamed L. Ashour

Minutes of GA Members Meeting 2015

The Members Meeting took place during the annual congress in Budapest on 25 Aug. 2015 from 6.30 to 8.30 p.m. 119 GA members attended the meeting.

1. Approval of the Agenda

President Prof. M. Hamburger welcomed all participants. The agenda, published in the GA Newsletter 1-2015, was unanimously approved. One additional topic (Report on the Foundation "Plants for Health") was added to the agenda by Prof. Hamburger (topic 7: Miscellaneous).

Prof. Hamburger informed the participants about the members who had passed away during the last months (Ms. H. Hofer, Prof. R. Hiltunen, Mr. K. Dumkow, Ms. M. Hartwich, Prof. C.A. López Moreno, Prof. J.G. Wolley, Prof. H. Schilcher) and asked for a minute of silent commemoration. He also expressed his gratitude for the outgoing ExC members, Prof. Blaschek and Dr. Roether, for their longstanding service for GA.

2. Approval of the Protocol of the Members Meeting 2014

The minutes of the previous Members Meeting on 2 Sept. 2014 in Guimaraes, published in the GA Newsletter 2-2014, were unanimously approved.

3. Annual reports

3.1 Report of the President

Prof. M. Hamburger

He was in continued exchange with J. Hohmann and D. Csupor regarding the 2015 Annual Congress in Budapest, and he reviewed abstracts for the congress.

As to the 2016 Joint Meeting he did a site visit in Copenhagen to meet with the organizing team of A. Jäger, D. Staerck and N. Ronstaed. He was in continued contact with A. Jäger on various issues.

He attended the 2015 ASP Annual Congress in Copper Mountain, where he gave with B. Timmermann two presentations to promote the 2016 Joint Meeting.

He was involved with preparations for the 2017 Annual Congress of GA in Basel.

He was in contact with D.-a. Guo and H. Stuppner to confirm and the 2018 (Shanghai) and 2019 (Innsbruck) Annual Congresses.

He coordinated the GA awards of 2015 and was member of the respective award juries.

He was in continued contact with Dr. Schiller of Thieme regarding *Planta Medica*. He attended in May 2015 a meeting in Stuttgart for a brainstorming on the future of *Planta Medica*.

He worked on a proposal for a Decision of the BoD on the Future Orientation of the Advisory Board.

Together with the Secretary, Dr. Benedek, he contributed to the new edition of the GA flyer by revising and adapting the text elements.

3.2 Reports of the Vice-Presidents

Report of Vice-President Prof. A.R. Bilia

She was a member of the award juries and participated in the abstract evaluation for the annual congress.

Report of Vice-President

Prof. W. Blaschek

He was involved in the planning and organization of the annual GA-Congress 2015 in Budapest and in the evaluation of award candidates for this congress.

He was in permanent contact with the other members of the ExC for discussion of various issues.

On behalf of GA he was involved in the organisation of the congress Phytopharm 2015 in Bonn on July 21–24 and in reviewing abstracts. He also gave a greeting address of GA during the opening ceremony. He participated in a meeting of the German Group "Zukunft Phytotherapie" in Berlin on May 21 together with representatives from other scientific organisations and from pharmaceutical industry. The future name of the group will be "Bündnis Phytotherapie". A position paper will be elaborated until the next meeting in September. The website of the group is: <http://www.zukunft-phytotherapie.de>

He also has written a greeting address of GA for the Phytokongress 2015 organised by the German Gesellschaft für Phytotherapie in Rostock on October 8–11.

On behalf of GA he will participate in the Misteltoe Symposium in Nonnweiler in November and give a greeting address. GA acts as Co-Organiser of the meeting. As a member of the Scientific Committee he was involved in the abstract reviewing.

3.3 Report of the Secretary

Dr. B. Benedek

She organised, attended and documented the ExC and BoD meetings during the last year.

She was in close contact with the organisers of the annual congress in Budapest, and supported the local organising committee on behalf of GA.

She arranged the graphical relaunch and printing of a new edition of the GA flyer.

She attended the event "111 Years of Pharmacognosy at the University of Vienna" on behalf of GA and wrote a contribution about the event for the NL 1-2015. She prepared the BoD elections, and was in contact with B. Gehrman who accepted to succeed E. Stahl-Biskup as supervisor of the elections.

She presented the members statistics: GA currently has 1.163 active members. 559 thereof pay the regular membership fee of 60 EUR, 536 the reduced fee of 20 EUR. GA has 31 company members. For 38 members the membership fees are waived. Of these, 10 are Honorary Members. For 28 members the fees are waived due to 40 or more years of membership. The following persons have reached 40 years of GA membership in 2015, and

were informed about the waiver of membership fees in a formal letter: Prof. E. Wollenweber, Prof. E. Leistner, Prof. H. Wagner, W. Weber, Dr. I. Bungert-Hansing, Prof. E. Stahl-Biskup, Prof. R. Verpoorte. During the congress in Budapest 30 participants applied for GA membership, and they will be mentioned personally during the closing ceremony. 68 existing members paid their membership fees in cash at the congress with a total revenue of 3.830 EUR. Regarding the countries of origin of the members Germany is the most prominent country, followed by Nigeria.

3.4 Report of the Treasurer

Dr. B. Roether

He reported about the current financial situation of GA: The total assets of GA amount to 146,388 EUR (funds value: 46,530 EUR, cash: 99,858 EUR). The Egon Stahl fund currently amounts to 56,511 EUR (funds value: 52,688 EUR, cash: 3,823 EUR). The revenues in 2015 were 127,967 EUR so far, the expenses in 2015 were 67,0814 EUR so far, leading to a saldo (revenues minus expenses) of 60,886 EUR so far. The high revenues are due to the highly successful annual congress in Guimaraes in 2014, with a surplus of over 80.000 EUR.

Planta Medica online subscriptions: 24 members have subscribed to PM online back to 1998, 18 members back to 1953. He thanked the ExC for the good cooperation during his 8 years of service as Treasurer of GA. He also thanked his assistant, Ms. Lahse, for her support, and he introduced his co-worker Dr. Ulrike Reusner, who will run for the position of the Treasurer at the elections.

3.5 Discharge of the Executive Council

The cash auditor Dr. B. Frank presented the Reports of the Auditors. According to the reports of both auditors (Prof. E. Stahl-Biskup and Dr. B. Frank) the expenses and revenues were plausible and appropriate, and they both expressed her compliments for a good accounting and cost awareness.

Dr. Frank therefor asked for the discharge of the ExC which was accepted unanimously by the whole assembly.

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

Prof. Pieters presented key figures and facts regarding *Planta Medica* and *Planta Medica Letters*. He announced that he was stepping down as EIC of *Planta Medica* at the end of 2015, but that he continues to serve as EIC of *Planta Medica Letters*.

Prof. Hamburger thanked Prof. Pieters for his work over the past years. He also thanked those Editors who will step down at the end of 2015.

Prof. Hamburger introduced Prof. V. Butterweck as new Editor-in-Chief, starting as per January 2016.

5. Elections of the Executive Council and of the Advisory Board

Dr. Beatrice Gehrman, Germany, acted as election supervisor and carried out the elections according to German law. One additional candidate for the Advisory Board, Dr. Günter Meng (Schwabe, Germany), was suggested by Prof. Susanne Alban. His name was duly added to the list of candidates on the ballot papers. 117 persons cast their ballots. Dr. Gehrman presented the results of the elections to the ExC after the meeting.

5.1 Election of the President

Prof. Anna Rita Bilia: 111 votes

5.2 Election of the Vice-Presidents

Prof. Matthias Hamburger: 105 votes
Prof. Oliver Kayser: 96 votes

5.3 Election of the Secretary

Dr. Birgit Benedek: 114 votes

5.4 Election of the Treasurer

Dr. Ulrike Reusner: 115 votes

5.5 Election of the Advisory Board

Five regular and two junior positions (candidates up to 40 years of age) were elected:

Regular Positions:

Prof. Judith Rollinger: 72 votes
Prof. Rudolf Bauer: 61 votes
Prof. Andreas Hensel: 55 votes
Prof. Deniz Tasdemir: 51 votes
Prof. Michael Heinrich: 48 votes

Junior Positions:

Prof. Robert Fürst: 100 votes
Dr. Christian Agyare: 98 votes

According to the bylaws of GA, the Executive Council, co-opted three further persons to the Advisory Board after the elections: Prof. Dezső Csupor, Dr. Nikolas Fokialakis, Dr. Günter Meng.

6. Future Congresses, Symposia and Workshops

Annual GA Congresses

- 2016: Copenhagen, Denmark (Joint Meeting, organiser: A. Jäger)
- 2017: Basel, Switzerland (organiser: M. Hamburger)
- 2018: Beijing/Shanghai, China (organiser: D. Guo)

Future Congresses and Workshops

- "Mistletoe Symposium", 12–14 Nov. 2015, Otzenhausen, Germany
- 6th International Symposium Breeding Research on Medicinal and Aromatic Plants (BREEDMAP 6), June/July 2016, Quedlinburg, Germany

7. Miscellaneous

Prof. R. Bauer presented the recent activities of the foundation "Plants for Health". The key goals of the foundation are: support of highly innovative and multidisciplinary research projects strengthening the academic basis of medicinal plant and natural product research and promotion of new research networks. The funds shall initiate scientific collaborations, the development of new research networks, provide start-up funding for innovative joint projects, and provide start-up funding for best in class junior research groups. The Foundation Board so far has opened a bank account and has started to develop a brochure. Currently prominent stakeholders are asked for statements to be put in the brochure. The creation of a website is also in progress. The assets of the foundation currently amount to 98,653 EUR. Any financial support for the foundation is welcome.

Dr. Birgit Benedek
Neunkirchen am Brand,
November 23th, 2015

Meeting Reports

63rd International Congress and Annual Meeting of GA in Budapest, Hungary



The 63rd International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research (GA) was held in Budapest, Hungary, between 23rd and 27th August, 2015. Budapest, the capital of Hungary, a historic city and at the same time a modern metropolis was an ideal place to host the Congress. The congress venue Budapest Congress Center (BCC) provided all facilities and conditions which were essential to organise the congress in a pleasant and comfortable environment. This was the second time that Hungary was honoured to organise the GA congress. Previously the annual meeting of 1977 was held in Budapest, as a joint meeting with the International Society for Horticultural Science Section Spices and Medicinal Plants.

GA meetings usually attract many participants from all around the world. This year more than 674 scientists from 54 countries (Europe, Africa, North and South America, Asia and Australia) had followed the invita-

tion of the GA and the congress chairs Prof. Judit Hohmann and Dr. Dezső Csupor (Institute of Pharmacognosy, University of Szeged).

The conference program started on 23rd August with the Pre-Congress Symposium on Advanced Analytical Technologies as Applied to Natural Products Research, organised by Mark O'Neil-Johnson (Sequoia Sciences). This meeting was an excellent opportunity to hear cutting edge science from industry leaders who provided complete overview of all the latest analytical equipment available to perform successful phytochemical work. Two workshops were also held on Sunday. The Regulatory Affairs Workshop discussed the problems of Traditional Herbal Medicinal Products (THMP) from Non-European Countries in Europe and vice versa. This workshop, involving 6 lectures, was organised and chaired by Prof. Susanne Alban. The 9th Young Researcher Workshop, including 14 outstanding lectures in two sections, was

conducted by Prof. Sandra Apers and Prof. Robert Fürst. The awards of this workshop were delivered to József Csábi and Robert P. Biney in frame of the closing ceremony, and the awardees had the opportunity to hold their lecture also during the main congress.

The main conference started on Sunday evening with the Get-together-Party in the Patria Hall of BCC; during this an a capella concert was given by the UniCum Laude Vocal Group. The congress was officially opened on Monday morning with the welcome address of Prof. Tamás Freund, vice-president of Hungarian Academy of Sciences, Prof. Gábor Szabó, rector of University of Szeged and GA president Prof. Matthias Hamburger. Prestigious GA awards were delivered during the opening ceremony. Prof. Brigitte Kopp (Vienna, Austria 674a) was awarded as Honorary member of GA for her outstanding and

longstanding service for GA. The Egon-Stahl-Award in silver was given to *Dr. Maria Halabalaki* (Athens, Greece and Innsbruck, Austria) and the Bionorica Phytoneering Award 2015 to *Eike Steinmann* and *Anggakusuma* (Hannover, Germany). The *Planta Medica* most innovative paper 2015 was delivered by *Prof. Luc Pieters*, editor-in-chief and *Dr. Regina Wenzel*, publishing editor of Georg Thieme Verlag to *Jakub Piwowarski* (Warszawa, Poland). Afterwards, all awardees presented their research in brief award lectures. *Dr. Heba Abdel-Aziz* (Darmstadt, Germany) chair of the travel grant committee 2015 announced the winners of GA travel grants (in sum of 15.100 EUR), 17 student and 2 post-docs from different countries. This year *Boakye Duah Yaw* (Kumasi, Ghana) was awarded with the Dr. Willmar Schwabe Research Scholarship for Young Scientists. The last year's winner *Blessing Umeokoli* (Awka, Nigeria) presented her results on the isolation and structure elucidation of antimicrobial and anti-proliferative compounds from the Nigerian medicinal plants *Buchholzia coriacea* and *Talinum triangulare*. This research was elaborated in Prof. Peter Proksch's group at University of Düsseldorf, supported by the fellowship.

The scientific program was started with the plenary lecture of *Prof. Nicholas H. Oberlies* (University of North Carolina at Greensboro, United States) which focused on approaches and progress toward bioactive leads from fungi. The plenary lecture of *Prof. Thierry Langer* (Vienna, Austria) dealt with 3D feature-based pharmacophore models, which are regarded as efficient tools for profiling natural products. Prof. Langer gave an overview on the development of this technology over the last decade and presented the results of several success stories. The importance of ethnobotanical and ethnopharmacological knowledge for research and development of natural products was demonstrated by *Prof. Ben-Erik Van Wyk* (Johannesburg, South Africa) focusing on the African perspectives, and by *Prof. Armando Cáceres* (Guatemala, Guatemala), who spoke about the Mesoamerican medicinal plants used in phytotherapy in Guatemala.

The "Cannabis plant and the endocannabinoids: how an ancient medical plant helps uncovering of a major signaling system in our body" – this was the subject of the plenary lecture of *István Katona* (Budapest, Hungary). He summarized the molecular and physiological logic of endocannabinoid signaling, provided examples for its pathophysiological significance and highlighted recent efforts aiming to exploit the therapeutic potential of cannabis without triggering unwanted side effects. A further neurological topic was "Natural sub-

stances and neurodegenerative diseases: from molecular mechanisms to clinical effects", presented by *Prof. Anne Eckert* (Basel, Switzerland). This lecture surveyed the main pharmacologic features of natural substances and discussed the main outcomes reached by clinical studies designed to demonstrate the efficacy of them in patients.

The plenary lecture of *Prof. Gisbert Schneider* (Zurich, Switzerland) focused on computational approaches in natural products-based lead discovery. He has spoken about concepts and ideas for predictive models of structure-activity relationships, the de-orphaning of bioactive compounds, and discussed *de novo* design approaches that have proven their usefulness in drug discovery. The plenary lecture of *Prof. John S. Markowitz* (Gainesville, United States) gave an overview on the problems and challenges in evaluating botanical-drug interactions using *in vitro* methodologies. The lecture emphasized that many predictions generated from *in vitro* studies are inconsistent with clinical findings. *Prof. Giovanni Appendino* (Novara, Italy) gave a plenary lecture entitled "Helichrysum italicum: back to medicine from the tinsel of luxury", demonstrating many aspects of the title plant, including ethnopharmacology, molecular investigations on its constituents and their pharmacological targets, variability of the phytochemical profile.

The scientific program of the congress offered 75 short lectures in three parallel sections. It is important to note that all lectures were presented, none of them was cancelled! The program represented the broad diversity of medicinal plant and natural product research, with especial interest to the central topics: From natural products toward potential drug leads; Natural products and medicinal plants in CNS-related diseases and in the treatment of chronic diseases; Pharmacokinetics of phytochemicals; Clinical and observational studies with herbal products; Quality assessment of medicinal plants, Phytomedicines and herbal dietary supplements; New opportunities for biotechnology and cell biology and Ethnobotany and ethnopharmacology.

A further hot topic of the congress was "Metabolomics in medicinal plant research". This section of short lectures was introduced by the keynote lecture of *Roger G. Lington* (Burnaby, Canada). He reported about the development of a new platform for integrated natural products discovery that uses image-based screening and high-resolution mass spectrometry to permit 'function-first' annotation of natural products libraries and provide a comprehensive annotation of the identities and biological attributes of all bioactive constituents.

In the poster section 565 posters were presented. The Poster&Wine and Poster&Coffee sessions offered discussions of the lectures and poster, brought together scientists from diverse disciplines and stimulated the exchange of experiences and knowledge. Moreover, the conference provided an appropriate environment for intense discussions of new technological approaches and for networking between academia and industry, since 50 companies (including the exhibitors) involved with phytotherapy, food products, cosmetics and natural product analysis have registered on the congress.

In frame of the congress the Research Institute for Medicinal Plants and Herbs, Budakalász, Hungary celebrated his centenary; this institution was the main sponsor of the congress. The director of the Institute, *József Pallós* in his lecture summarized the history and present activity of the institute. Abstracts for all contributions were published in a special issue of *Planta Medica* (Vol. 81, 2015).

It was now the second time that the "Africa Research Network Meeting" was organised in frame of the GA congress, aiming to promote research with and within African countries, organised by *Christian Agyare*. Furthermore, a very successful Networking Meeting on Animal Healthcare and Veterinary Medicine organised by *Michael Walkenhorst* was held during the conference. As usual, the annual members meeting of the Society for Medicinal Plant and Natural Product Research was held on Tuesday late afternoon with election of the new management. The successful congress was summarised by *J. Hohmann* during the closing ceremony, and awards for the best posters were presented by *M. Hamburger*. Finally the next congress JNPC 2016 – 64th International Congress (Joint Meeting with ASP, AFERP, JSP, PSE and SIF) and Annual Meeting of GA, held from July 24 to 28 in Copenhagen, was announced.

Beyond the scientific program, a great variety of social events were organised which provided an insight into the history and traditions of Budapest and Hungary. An organ concert was arranged for Monday evening in the famous Matthias Church, the congress dinner was held in Lázár Equestrian Park (Domony valley) with horse show and folklore program. Excursions to Tihany and Pannonhalma visiting the monasteries, arboretum, herbal garden, the distillery building and wine degustation in Badacsony gave impressions of the rich culture of Hungary. We hope that all participants had a pleasant and fruitful GA2015 meeting with science, culture and hospitality!

Profs. Judit Hohmann and Dezső Csopor
Chairs of the Congress

Workshop on Regulatory Affairs of Herbal Medicinal Products, August 23rd 2015 in Budapest

Since 2007, a Workshop of the GA's permanent committee on Regulatory Affairs is held as a pre-symposium on Sunday afternoon at the International Congress and Annual Meetings of GA. "Traditional Herbal Medicinal Products (THMP) from Non-European Countries in Europe and vice versa – Experiences and Future Perspectives" was the subject of the this year's Workshop in Budapest, organized and chaired by Prof. Susanne Alban (Kiel, Germany). Experts from both regulatory authorities and industry discussed this topic together with numerous participants of the workshop.

Initially, Prof. Werner Knöss (Chair of the HMPC, EMA) presented the state of the work of the Committee on Herbal Medicinal Products (HMPC). Since the provisions of Directive EC 2004/24 offer also options for THMP originating from non-European therapeutic systems, the HMPC has started corresponding activities including a pilot project on monographs on efficacy and safety of herbal substances of non-European origin, a specific Questions & Answers document also addressing THMP from non-European tradition as well as various meetings and trainings. He emphasized that communication, scientific research and regulatory dialogue are necessary to improve the options for a harmonised global usage of traditional medicines.

Already almost 10 years ago, safety concerns initiated the elaboration of quality monographs on TCM herbal drugs for the European Pharmacopoeia (EP). Prof. Gerhard Franz, Chair of the TCM Working

Party of the EP, reported on the progress, but also the difficulties of this activity. Meanwhile more than 50 monographs of the initially planned 75 monographs are implemented in the EP, but the work program will be successively extended. Ongoing problems include monographs on potentially toxic herbal drugs, the "processing" of TCM herbal drugs and the questionable equivalence of commercial TCM granules with the corresponding herbal drug and the respective decoctions, respectively. Prof. Franz emphasized the importance of a closer collaboration between Europe and China as a prerequisite for a successful quality assurance of TCM.

Dr. Emiel van Galen (CBG/MEB, The Netherlands), who has regulatory experience by the registration of the first non-European THMP, focused on needs and future strategies based on the existing legislative principles for non-European THMP. He considered the preparation of monographs on herbal drugs used in non-European countries as an appropriate strategy whereby quality monographs in EP should be always a first starting point. The selection of herbal drugs for the elaboration of EU herbal monographs will be a multi-disciplinary and critical task. Interestingly, numerous assessment reports on EU herbal monographs already contain information on the use of herbal drugs in non-European traditional medicinal systems, which however seems to be forgotten.

The view of industry regarding THMP from non-European countries was presented by Dr. Mei Wang (TNO Quality of Life, The Netherlands), who was involved in the ap-

plication of the first registered non-European THMP. As shown by the example of the root extract of *Dioscorea nipponica*, it is challenging to translate the "explanatory system-level functionalities" in TCM into a Western biochemical, functional and clinical understanding. Key for acceptance of TCM products is the ability to provide scientific evidence combined with a quality control system ensuring safe use.

Finally, Dr. Bernd Roether (Bionorica SE, Germany) discussed the situation concerning THMP from Europe in non-European countries. Whereas the EU legislation on THMP simplifies the market access for pharmaceutical companies and also opens the access to Ayurvedic and TCM products, if these have been placed for at least 15 years on the EU market, the "vice versa" situation is so far rather disappointing. European THMP often do not inevitably meet requirements stipulated by competent authorities abroad, all the more defining criteria of a tradition might be different. He concluded that harmonization of quality requirements is urgently needed and emphasized that market liberalization throughout the world subsists only on mutual acceptance of rules for different approaches of authorizing THMP and needs therefore a common understanding.

Similarly, it emerged also from the final open discussion that an important prerequisite for the wished globalization of HMP is communication and mutual understanding. For this, the GA and its meetings offers a suitable platform.

Prof. Dr. S. Alban, Kiel, Germany



The discussion panel of the Regulatory Affairs Workshop

2nd Africa Research Network Meeting within the GA 2015 Conference in Budapest



The meeting of the African Research Network was held on Tuesday the 25th August, 2015 at Lehar II-III Hall, Diamond Congress building, Budapest, Hungary.

The meeting commenced at 1:30 pm with the introduction of the speakers for the meeting by Dr. Christian Agyare and they included:

1. Prof. Dr. Andreas Hensel, University of Muenster, Germany
2. Prof. Dr. Michael Heinrich, School of Pharmacy, University of London, UK
3. Dr. Karin Faerber, Chemical Abstracts Services (CAS), Germany

Prof. Dr. Hensel spoke on the topic "Planning of research projects and how to establish a successful project proposal". He also made a presentation on preparation of manuscripts for journal and conference proceeding publications. Prof. Dr. Heinrich spoke on the relevant and important issues to be considered in ethnopharmacological surveys.

Chemical Abstracts Services (CAS) is currently preparing a program to increase their engagement in Africa. Based on the efforts of some of the European members of the network including Prof. Dr. Hensel and Prof. Dr. Thomas Schmidt it was dis-

cussed with CAS to get African members cheap access to SciFinder®, one of the leading data bases for chemicals and natural products, including primary literature, patents and manifold advanced search function. Out of this engagement, Dr. Karin Faerber of CAS made a presentation on SciFinder® and she stressed on the advantages and benefits of the software to scientists. She indicated that SciFinder® has more than 10,000 active journals with 50,000 titles since 1907 and these include CPlus® and more than 5600 in Medline, 63 authorities from the world, more than 37 million references from patents, journals, dissertations, abstracts, reviews and the fact that the software is also link to original publications.

After Dr. Faerber presentation, questions were asked on how this offer can be actualized in some of the member countries and local conditions or situations are different in member countries. The meeting suggested that national academies or Ministry of Education and Research of each country can purchase the special offer of SciFinder® to low income countries in Africa so that universities and research institutions within the same country can easily have access to it without paying as indi-



The chairman of the Africa Network of GA, Prof. Dr. C. Agyare

vidual entity since the cost will be too much for them.

The meeting had 23 participants and was closed at 2.40 pm.

Prof. Dr. C. Agyare, Kumasi, Ghana

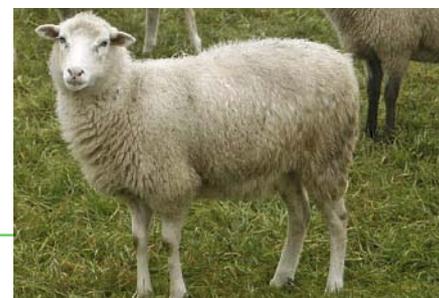
News from the GA-working group on medicinal plants and natural products in animal healthcare and veterinary medicine

Veterinary Medicine and animal healthcare on the international congress of the Society of Medicinal Plant Research (GA) in Budapest 23rd to 27th of August 2015 in Budapest

The topic was successfully integrated into the congress of the Society of Medicinal Plant Research (GA) in the beautiful city of Budapest. Thanks to the preparation of Judith Hohmann, Matthias Hamburger, Michael Walkenhorst, and Anette van der AA there were 20 poster presentations from four continents and a session of lectures with an audience of 60 participants was held with a variation of high-quality talks. Members of the SMGP-vet also participated in that session.

With Jacobus N. Eloff from South Africa as chairman Rik Thybaut from the RIKILT Wageningen presented data on the use of a Ayurvedic plant mixture in the Netherlands. Aloe vera and Curcuma showed a positive effect on the health of the cow's udder. Marta Mendel from the Department of Pharmacology and Toxicology of the

Veterinary Faculty, University of Warsaw presented the effect of flavonoids on the abomasum of cows. The abomasum's muscle cells showed contractive as well as relaxing properties after Apigenin, Luteolin and Quercetin were added. Basharat A. S. Syed from the Department of animal nutrition of the Westbengal University for Animal Production and Fishery showed that a plant mixture was at least as effective as an antibiotic in the upbringing of broiler. Burden of E. coli and Salmonella in the gut were less severe in the group which received the plant mixture than in the control group and are definitely more consumer-friendly. Felix Heckendorn from the Research Institute of Organic Agriculture in Frick, Switzerland, demonstrated the difficulties in transferring in vitro experiments into in vivo when he talked about the use of plant extracts to control gastro-intestinal nematodes in goats. The final talk from Balakrishnan M.N. Nair from the Transdisciplinary University of Bangalore, India was shocking in showing how much antibiotics already contaminate the environment in In-



dia. The resulting bacterial resistance will cause serious problems in the future.

During the lunch break the workshop "GA-networking group on medicinal plants and natural products in animal healthcare and veterinary medicine" took place with 25 enthusiastic participants. After three short lectures from Michael Walkenhorst (Switzerland), Lyndy MacGaw (South Africa), and Nitya Ghotge (India) on the current research of medicinal plants in veterinary medicine, a productive discussion developed as to how to strengthen and further activities of the networking group. These scientific activities in veterinary medicine are important steps to keep humans and animals healthy. The network's aim is to strengthen international cooperations to exchange data and information. The next GA-congress will take place in Copenhagen in July 2016, where veterinary medicine will once again be a topic.

Sabine Vollstedt

20 years' Mistletoe Symposium: "Mistletoe in Tumour Therapy – Basic Research and Clinical Practice"



From 12 to 14th November 2015, over 100 scientists and doctors from a variety of scientific disciplines and therapeutic approaches met at the European Academy in Otzenhausen (in Nonnweiler, Saarland) for the 6th International, Interdisciplinary Mistletoe Symposium, coordinated by Dr. Rainer Scheer. The symposium was organised by numerous medical and pharmaceutical professional associations together with the Karl and Veronica Carstens Foundation.

At the symposium, the latest results from research and clinical medicine were presented, discussed and compared in 46 lectures, producing a multidimensional and comprehensive picture of the current state of scientific knowledge on mistletoe extracts. The specific areas dealt with included manufacture and testing as well as regulatory assessment of mistletoe preparations, the effects of various ingredients, *in vitro* and *in vivo* preclinical studies, studies on immunology and cytotoxicity, clinical results obtained in various applications and tumour entities in both human and veterinary medicine, reports from medical practice and clinical studies designed to demonstrate specific effects, the efficacy, the safety and tolerability of mistletoe preparations. Oncological guidelines and the treatment of pancreatic and gastro-intestinal tumours were chosen as a topic for

special attention and also dealt with in depth in a podium discussion. A particular focus was placed on the results of the pioneering Phase III study conducted by Galun and Tröger, as well as the controversial debate this has kindled in the literature.

The organisers hope that in future the Mistletoe Symposia will prove to be a forum for scientific exchange and discussion of questions relating to safe and reliable use of mistletoe in tumour therapy between professional associations and representatives not only of complementary, but also of conventional oncology.

All the abstracts from the symposium are published in English in *Phytomedicine* 22 (2015) Supplement 1 and are freely available on the Internet at www.ScienceDirect.com. The summary papers that are still in stock are available on request from the author of this article. It is again planned to make the full texts of all contributions to the symposium available in a book published by KVC-Verlag, Essen. The print and online version will probably be available by the end of 2016.

The Mistletoe Symposia have been held every 4 years since 1995. This year's participants again rated the congress as important and stimulating in terms of the results presented, the quality of the lectures, the discussions, the opportunity for indi-

vidual conversations as well as the possibility to establish contacts. This was further underscored by the harmonious atmosphere as well as the excellent culinary, spatial and technical setting of the venue throughout the symposium.

It is planned to continue this fruitful exchange at the 7th Mistletoe Symposium in 2019, again at the European Academy in Otzenhausen and again with simultaneous interpretation into English. For more information about this and previous Mistletoe Symposia visit www.mistelsymposium.de.

† Heinz Schilcher passed away on 17th June 2015. The co-organisers of the symposium acknowledge his reliable long-time support and the indispensable contributions he made to the Mistletoe Symposia.

Dr. Rainer Scheer
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Am Eichhof 30,
75223 Niefern-Öschelbronn;
Tel. +49 (0)7233 68418;
email: rainer.scheer@carus-institut.de



Representatives of scientific associations and organisers of the 6th Mistletoe Symposium (from left): Prof. Dr. Hans Becker (St. Ingbert), Dr. Günther Spahn (Mainz), PD Dr. Harald Matthes (Berlin), Dr. Rainer Scheer (Niefern-Öschelbronn), Prof. Dr. Wolfgang Kreis (Erlangen), Prof. Dr. Wolfgang Blaschek (Kiel).

Next Conferences

9th Joint Natural Products Conference 2016

9th Joint Natural Products Conference 2016

July 24-27, Copenhagen, Denmark

www.jnpc2016.dk



Dear GA Members,
Welcome to JNPC2016 in Copenhagen!

It is a privilege and a great honour to welcome you to the 9th Joint Natural Products Conference 2016 in Copenhagen – a joint conference organized by University of Copenhagen on behalf of:

- The Society for Medicinal Plant and Natural Product Research (GA)
- The American Society of Pharmacognosy (ASP)
- The Phytochemical Society of Europe (PSE)
- Società Italiana di Fitochimica (SIF)
- Association Francophone pour l'Enseignement et la Recherche en Pharmacognosie (AFERP)
- The Japanese Society of Pharmacognosy (JSP)

The conference takes place July 24–27, 2016 at the Tivoli Congress Centre in central Copenhagen. More information can be found on the conference homepage: www.jnpc2016.dk

Abstract submission: March 1, 2016

Notification of acceptance or rejection will be May 1, 2016.

Early registration: Before May 15, 2016.

The conference covers a broad range of scientific disciplines within natural products research. We trust we have put together a tantalizing programme of high scientific standard, with interesting talks and time for networking. The scientific programme includes plenary lectures by invited speakers, and keynote/short talks on recent topics of natural product research. The poster sessions also provide opportunities for scientific discussions.

A Young Researcher Workshop takes place the day before the conference. There will also be a pre-conference workshop on Regulatory Affairs and a pre-symposium on Advances in (Bio)Analytical Techniques Applied to Natural Products Research.

We hope you will enjoy the various social events like an Evening in the Botanical Gardens, and make the most of the light Nordic summer nights.

We have organised a Botanical Excursion the day after the conference. The excursion goes to three unique habitats on Zealand, the island where Copenhagen is situated.

Kind regards,
Anna Jäger, Conference Chair

6th International Conference on Breeding Research of Medicinal and Aromatic Plants

Breedmap 6 will be held from 19th to 23rd June 2015 in Quedlinburg, Germany. Main topics are Next Generation methods as chances for medicinal and aromatic plant characterization, cell, tissue and organ culture techniques, and latest advances on endophytic symbiotic communities. Furthermore, resistance breeding as well new phytopathogens and metabolic optimization of organisms for bioreactors and photo bioreactors are central research

topics to be discussed. Invited speakers will share their knowledge on latest plant breeding concepts, plant analytics and protecting genetic resources by wild collection and domestication. main target groups are breeders and scientist involved in medicinal plant breeding and photochemical analytics.

More information and register at <http://breedmap6.jki.bund.de>



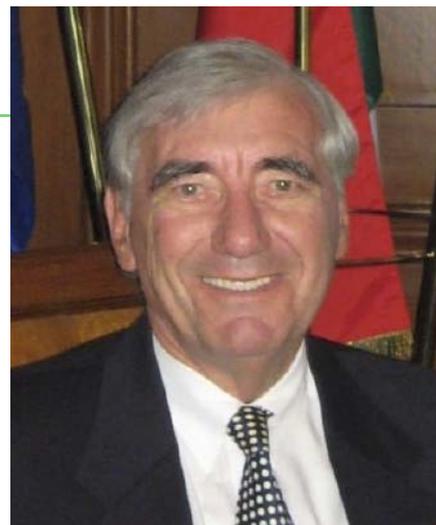
In memoriam Heinz Schilcher (1930 to 2015)

This midsummer we received the sad message that our friend, colleague and Honorary Member of GA, Prof. Dr. Dr. h. c. Heinz Schilcher passed away on 17.06.2015, only few months after his 85th birthday. Inconceivable – since he had been always active, sportive, never resting, never keeping silent also in the very last years, and now he should no longer be among us?

Heinz Schilcher – born 21.03.1930 as son of a mill-owner at Neuburg/Donau, Bavaria – studied pharmacy and also some semesters human medicine at the Ludwig-Maximilians-University Munich. After receiving the degree of a doctor in pharmacy in 1959 he was few years working as research assistant of Ludwig Hörhammer at the Institute of Pharmaceutical Biology, Munich University, together with Rudolf Hänzel and Hildebert Wagner. But already in 1962 he looked for new challenges and took up the position of a research director in the phyto-pharmaceutical industry (Salus-Haus), where he started to introduce a standardisation system of herbal medicinal products. In 1973 he got the position of an Associate Professor in Pharmaceutical Biology at Marburg University, and five years later he moved again in the industry (Fink, Herrenberg/Stuttgart). Finally he became Full Professor at Freie Universität Berlin in 1983 where he acted as director of the Institute of Pharmaceutical Biology and Dean of the Faculty until his retirement in 1995. His professional life was characterized by this change between academia and industry due to his interest and enthusiasm in research, development as well as teaching and application. This was reflected in his broad knowledge from botany and phytochemistry to pharmacology and phytotherapy.

Heinz Schilcher attended an uncounted number of conferences and congresses in Europe and overseas and was a well recognized plenary speaker, assisted by his wife Barbara, who prepared the lectures in English. One could meet him not only at the GA annual conferences, but also at ISEO (the essential oil symposia), at plant breeding and cultivation meetings, and in phytotherapy as well as aromatherapy. There was almost no oral presentation at conferences where Heinz Schilcher did not put a – sometimes very critical and emotional – question. He always liked to share his experience and knowledge with others to promote a science based development of herbal medicinal products and of phytotherapy. Therefore he was active in continuous education of pharmacists, phytotherapists as well as technicians. In addition he was member of several scientific committees and professional associations and he contributed likewise to the development of Good Agricultural Practices of Herbal Materials as to the Commission E Monographs on Herbal Products. He was author of a large number of publications and textbooks, to mention only the „Leitfaden Phytotherapie“ (a phytotherapy manual, now in 5th edition), „Die Kamille“ (camomile) or his contribution to the „Handbuch des Arznei- und Gewürzpflanzenbaus“ (Handbook of medicinal and aromatic plant production). Heinz Schilcher liked also to participate in professional tours to be acquainted with all steps ‚from seed quality to the efficacy of the herbal product‘. I remember several such travels e.g. in Germany, Austria, Eastern and Southern Europe.

Due to his manifold activities he received a number of honours and decorations, be-



sides of Honorary Member of the GA e.g. the S.-Kneipp-Award, the R.F.-Weiss-Award, the Sertürner-Medal and the Federal Order of Merit.

But Heinz Schilcher was also an enthusiastic sportsman, alpine skiing and canoeing have been his favourite disciplines and he collected almost as many medals or trophies as competitions he participated. And he liked to travel – with or without professional background. For instance to Zimbabwe, where his sister-in-law lives and he could get experienced in tropical African botany and primary health care. Or once to „Schilcher-Land“ in Austria („Schilcher“ is a rosé grape and wine in Styria), and there he taught my son in yodel during a botanical excursion.

Heinz, we miss you!

Prof. Chlodwig Franz

In memoriam Prof. Dr. Beate Diettrich (1954 to 2015)

With deep regret we announce the death of our colleague Prof. Beate Diettrich at October 10th 2015.

Beate Diettrich was born in 1954 and started her scientific career in 1976, immediately after she had completed studies of Pharmacy at the Martin-Luther-University of Halle. Under the scientific guidance of Prof. Dr. Martin Luckner she investigated the use of protoplasts in the propagation and cultivation of cell cultures of *Digitalis* species and received the PhD in 1979. This work marked the origin of a successful research into the area of cell and tissue

cultures, predominantly of *Digitalis*. It was based on the idea that systems of lower complexity can help to understand the interdependence of morphological and chemical cell specialization in higher plants, of which the biosynthesis of cardenolides is a prominent resultant. These studies also promoted the use of cell cultures in the production of valuable cardenolides and in the breeding of plant species with a desirable spectrum of secondary compounds. In 1986 Dr. Diettrich was graduated as Dr. Sc. at the Faculty of Pharmacy of the same University and in

1988 accepted a call at the position of a University Professor for Cell Culture Technology at this faculty. In these years, she focused her scientific interest at the cryopreservation of valuable cell strains. Results originating from these studies are of permanent value as they facilitate actual efforts to preserve the diversity of valuable plant species for food and medical purposes by low-temperature storage.

The scientific work of Prof. Diettrich was done in close cooperation with Prof. Martin Luckner, which also led to her deep involvement into the organization and logis-

tical maintenance of the Institute (later renamed Department) of Pharmaceutical Biology. Here, she invested high activity and devotedness to govern the movement to and reconstruction of a new building, and the renewal of scientific and teaching facilities during the processes of German reunification.

Prof. Diettrich was also much interested in providing a modern and research-related

education to both novice and PhD students.

Unfortunately, her high engagement in science, institutional organization and education took its toll from her personal life. In the last years, health problems forced her to seek medical services and to reduce and later on to quit her university activities. We have lost a colleague with extraordinary devotedness to science and educa-

tion in Pharmaceutical Biology. We will miss her refreshing frankness to friends and colleagues and her friendly sense of humor.

Prof. Dr. Werner Roos
Titisee-Neustadt, November 2015

90th Birthday of Prof. Max Wichtl

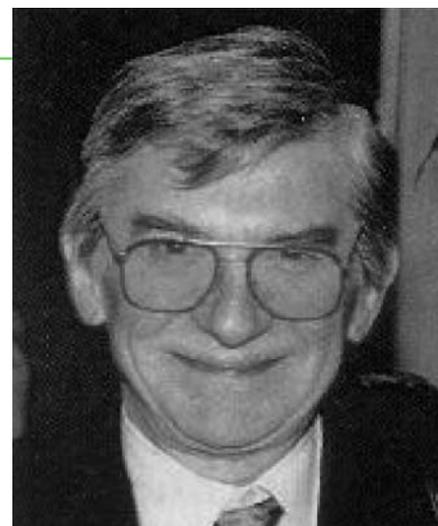
The names of very few pharmacognosists/pharmaceutical biologists have become an eponym for a book they have written. Professor Max Wichtl is among those few. The "Wichtl", as most users call the book titled "Teedrogen und Phytopharmaka" (Herbal Drugs and Herbal Medicinal Products), is a compendium that is known across the world to countless pharmacists, students of pharmacy, and scientists in the fields of pharmacognosy and phytotherapy.

After starting his academic career at the University of Vienna, Professor Wichtl was appointed in 1973 as a Full Professor of Pharmaceutical Biology at the University of Marburg, Germany, where he remained up to his retirement. Besides being an academic teacher and a well-known researcher in the field of cardiac glycosides, Professor Wichtl was a highly appreciated

member of various commissions, such as the Pharmacopoeia Committee, the Scientific Committee of the Bundesgesundheitsamt (BGA), and the Pharmacobotany-Pharmaceutical Biology section of the APV.

His commitments to the Society of Medicinal Plant and Natural Products Research (GA) were manifold: He was a Co-Editor of *Planta Medica*, served in the Advisory Board, as Vice-President, and as President of GA from 1990 to 1993. Also, he was organizer of the Annual Congress of GA in Marburg in 1995. For his contributions to GA and to the field of Pharmaceutical Biology in general, Professor Wichtl was awarded with an honorary membership of GA in 1995, and with the Egon-Stahl-Award in Gold in 2008.

On behalf of GA it is my great pleasure to congratulate Professor Wichtl on the occasion of his 90th birthday by wishing him



many more years of good health and happiness!

Matthias Hamburger

75th Birthday of Prof. Dr. rer. nat. Drs. h.c. Adolf Nahrstedt

Adolf Nahrstedt was born in Northeim/Harz, Lower Saxony, Germany, on August 9th 1940. After studying Pharmacy and Food Chemistry, and receiving a PhD (1971) and Habilitation from the University of Freiburg (1976), he was appointed as an Associate Professor at the Technical University Braunschweig. He was full Professor at the University Muenster (1986-2004), where he served in various capacities, such as Vice-Dean and elected Dean of the College of Chemistry and Pharmacy, and as Vice-Dean of the Faculty of Natural Sciences. He was a member of the Founding Commission for the Institute of Pharmacy, University of Leipzig and, after his retirement in 2004, served as Visiting Professor at Mahasarakham University, Thailand, and as an Adjunct Faculty Member in the Department of Pharmaceutics, University of Florida, Gainesville, USA.

His research covered the biochemistry and physiology of secondary metabolites, particularly of cyanogenic glycosides in plants and insects, as well as the phytochemistry of traditional herbal drugs. He is well known for his major contributions on St. John's wort and its active constituents. He

demonstrated that coeffectors procyanidin B2 and hyperoside influence the biopharmaceutical properties of hypericin. He published over 200 papers and book chapters, and delivered some 200 lectures worldwide. His honors include a Honorary Membership of the European Academy of Natural Medicine, the Rudolf Fritz Weiss Award of the German Society of Phytotherapy, the Varro Tyler Award of the American Society of Pharmacognosy (ASP), and honorary doctorates from the Ovidius University, Constanta, Romania, and the University of Mahasarakham, Thailand.

Professor Nahrstedt is an eminent member of the Society of Medicinal Plant and Natural Products Research (GA). He served for many years on the GA Advisory Board where he continuously gave valuable input to the Society. His balanced and thorough opinions on scientific issues in nearly all fields of phytotherapy and phytochemistry were highly respected and appreciated. His most important service to GA, however, has undeniably been his editorial activities for the official journal of GA, *Planta Medica*. Professor Nahrstedt has been as-



sociated with the journal for more than 30 years, first as Co-Editor (1983-1992), later as Editor-in-Chief (1993-2004), and currently as Senior Editor (2005-present). In recognition of his outstanding service the GA bestowed him in 2005 with an honorary membership.

Those who know Professor Nahrstedt personally have always appreciated his direct, gently teasing, but sympathetic personality. Malcolm S. Forbes once said "You can judge the character of a man by how he

treats those who can do nothing for him". Professor Nahrstedt always treated students, colleagues, coworkers and friends with great respect, absolute fairness and natural human warmth. These characteristics of his personality are probably the key

to his outstanding success as past Editor-in-Chief of *Planta Medica*. On behalf of GA we would like to take this opportunity to congratulate Professor Nahrstedt on the occasion of his 75th birthday, and wish him many more years

of good health, happiness and creative power.

Veronika Butterweck
& Matthias Hamburger

Just before completion of the GA Newsletter we received the sad news that Prof. Dr. Adolf Nahrstedt passed away on the 7th January 2016. Prof. Nahrstedt will be deeply missed in the scientific community not only as a great colleague, but also as a true friend and great personality. Our deepest sympathies are with his family. An obituary will be published in the next GA Newsletter.

Honorary award for Prof. Dr. G. Franz

Prof. Dr. Gerhard Franz, University of Regensburg, Germany received the Annual Award of the *World Federation of Chinese Medicine Societies* in recognition of his contributions which promote the modernization of Traditional Chinese Medicine quality standards. This award acknowledges also the 10 years work of Prof. Franz as chair of the EU-TCM Working Party.

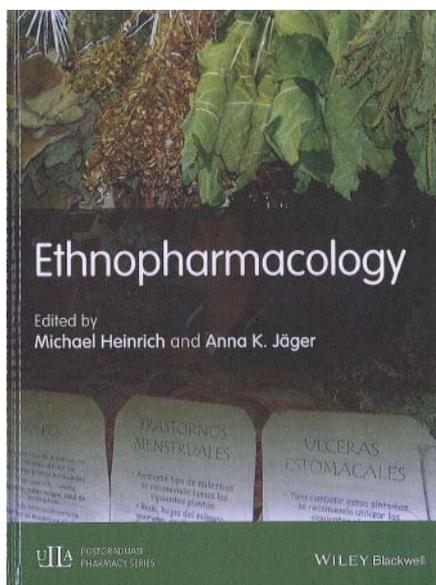
Additionally the German Bundesamt für Arzneimittel und Medizinprodukte – the German drug registration authority – appointed Gerhard Franz in August 2015 as a member of the German Pharmacopoeia Commission „Deutsche Arzneibuchkommission“.

GA congratulates!

Andreas Hensel



New Books



Ethnopharmacology

Edited by **Michael Heinrich** and **Anna K. Jäger**

Ethnopharmacology is one of the world's fastest-growing scientific disciplines encompassing a diverse range of subjects. It links natural sciences research on medici-

nal, aromatic and toxic plants with socio-cultural studies and has often been associated with the development of new drugs. The Editors of **Ethnopharmacology** have assembled an international team of renowned contributors to provide a critical synthesis of the substantial body of new knowledge and evidence on the subject that has emerged over the past decade. Divided into three parts, the book begins with an overview of the subject including a brief history, ethnopharmacological methods, the role of intellectual property protection, key analytical approaches, the role of ethnopharmacology in primary/secondary education and links to biodiversity and ecological research. Part two looks at ethnopharmacological contributions to modern therapeutics across a range of conditions including CNS disorders, cancer, bone and joint health and parasitic diseases. The final part is devoted to regional perspectives covering all continents, providing a state-of-the-art assessment of the status of ethnopharmacological research globally.

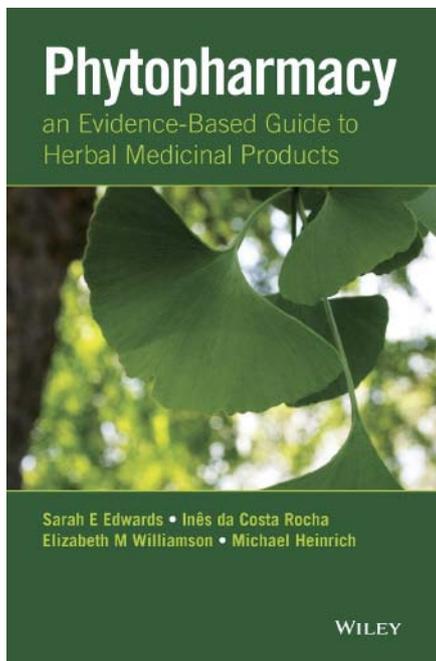
- A comprehensive, critical synthesis of the latest developments in ethnopharmacology.
- Includes a section devoted to ethnopharmacological contributions to modern therapeutics across a range of conditions.



- Contributions are from leading international experts in the field.
- Part of the ULLA Series in Pharmaceutical Sciences.

This timely book will prove invaluable for researchers and students across a range of subjects including ethnopharmacology, ethnobotany, medicinal plant research and natural products research.

Hardback, 464 pages, August 2015
ISBN: 978-1-118-93074-8
£70.00 | €87.50 | \$110.00



Phytopharmacy: An Evidence-Based Guide to Herbal Medicinal Products

**Sarah E. Edwards, Inês Da Costa Rocha,
Michael Heinrich, Elizabeth M. Williamson**

Healthcare professionals, including doctors, pharmacists and nurses, are often confronted with patients who use over-

the-counter (OTC) herbal medicinal products and food supplements. While taking responsibility for one's own health and treatment options is encouraged, many patients use these products based on limited (and sometimes inaccurate) information from non-scientific sources, such as the popular press and internet. There is a clear need to offer balanced, well-informed advice to patients, yet a number of studies have shown that, generally, conventionally trained health practitioners consider their knowledge about herbal medicinal products and supplements to be weak. This book is an attempt to fill this knowledge gap, and is intended for use by the busy pharmacist, nurse, or doctor, as well as the 'expert patient' and students of pharmacy and herbal medicine. It presents clear, practical and concise monographs on over a hundred popular herbal medicines and plant-based food supplements. Information provided in each monograph includes:

- Indications
- Summary and appraisal of clinical and pre-clinical evidence
- Potential interactions
- Contraindications
- Possible adverse effects

An overview of the current regulatory framework is also outlined, notably the EU Traditional Herbal Medicinal Products Directive. This stipulates that only registered traditional herbal medicinal products (THRs), which have assured quality and safety, can now legally be sold OTC. Monographs are included of most of the

major herbal ingredients found in THRs, and also some plant-based food supplements, which while not strictly medicines, may also have the potential to exert a physiological effect.

Authors: Sarah Edwards, Inês da Costa Rocha and Michael Heinrich all at UCL School of Pharmacy, UK and Elizabeth M Williamson, School of Pharmacy, University of Reading, UK.

Paperback, 416 pages, 2015,
ISBN 978-1-118-54356-6
USD \$70.00 £39.95 €49.60

Recent thesis (2015) on Medicinal Plant Research

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

Ph.D. thesis (2015) *Xanthorina parietina* polysaccharides: Isolation, characterization and influence on murine macrophages under in vitro conditions. By: Zalilawati Binti Mat Rashid. Promotor: Prof. Dr. Andreas Hensel, Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Germany.

Ph.D. thesis (2015) Wound healing and antimicrobial activities of *Phyllanthus muellerianus* (kuntze) exell and its major isolate, geraniin. By: Yaw Duah Boakye. Promotor: Dr. Christian Agyare; Kwame Nkrumah University of Science and Technology, Kumasi, Ghana.

Ph.D. thesis (2014) Advanced strategies for the study of bioactive plant constituents and co-culture induced fungal metabolites; By: Nadine Bohni; Promotor: Prof. Jean-Luc Wolfender; Université de Genève, Phytochemistry and Bioactive Natural Products, Switzerland.

Ph.D. thesis (2015) Plants from ethnomedicines used against diabetes mellitus – rationale and quality control of *Leonurus sibiricus* L. (Lamiaceae) and *Juglans regia* L. (Juglandaceae). By: Mag. Anna Pitschmann; Promotor: ao. Univ.Prof. Dr. Sabine Glasl-Tazreiter, Dpt. of Pharmacology, University of Vienna, Austria.

Ph.D. thesis (2015) Studies on underlying mechanism for the medicinal use of almonds in dyslipidemia and endothelial dysfunction supplemented by clinical trial. By Humaira Jamshed; Promoter: Prof. A.H. Gilani, Aga Khan University, Karachi, Pakistan.

Ph.D. thesis (2015) Effect of the combination of Turmeric and Kalongi in metabolic syndrome in fructose-fed rats and a double blind randomized controlled trial. By Faridah Amin; Promoter; Prof. A.H. Gilani, Aga Khan University, Karachi, Pakistan.

Ph.D. thesis (2015) Role of polyphenols in iron homeostasis. By: Lesjak Marija; Promotor: Prof. Prof. Surjit Kaila Singh Srail, University College London, London, UK.

Ph.D. thesis (2015) Phytochemical and pharmacological investigations of the anti-inflammatory principles of *Lonicera* species using a plant metabolomics approach. By Mag. Ortmann Sabine. Supervisor: Univ.-Prof. Dr. R. Bauer, University of Graz, Austria.

Ph.D. thesis (2015). Evaluation of Herb-Drug interactions in Nigeria with a focus on medicinal plants used in diabetes management. By: Ezuruike, Udoamaka F.; Promotor: Dr. J. M. Prieto-Garcia and Prof. S. Gibbons, University College London, UK



Ph.D. thesis (2015) Ethnopharmacological assessment and toxicology pre-clinical in vivo of the crude extract from rhizomes of *Limonium brasiliense*. By: Tânia Mara Antonelli-Ushirobira; Promotor: Prof. Dr. João Carlos Palazzo de Mello, Department of Pharmacy, State University of Maringá, Brazil.

Diploma thesis (2015) Phytochemische Untersuchungen der Farbstoffe und Flavonoide aus *Justicia secunda* VAHL (Acanthaceae). By: Jasmin Kalkus; Promotor: ao. Univ.-Prof. Dr. Sabine Glasl-Tazreiter, Dpt. of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2015) Universelle Quantifizierung unterschiedlicher Substanzklassen in Arzneipflanzen mittels Charged Aerosol Detector. By: Lisa Steiner; Promotor: Dr. Martin Zehl and ao. Univ.-Prof. Dr. Sabine Glasl-Tazreiter, Dpt. of Pharmacognosy, University of Vienna, Austria.

Diploma Thesis (2015) Chemische Untersuchungen von *Actinoalloteichus hymeniacidonis*. By: Yasemin Ayyildiz; Promotor: Prof. L. Krenn, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2015) Phytochemical and antimicrobial studies of herbal drugs in curry powder. By Zikulnig Anna Christina. Supervisor: Ao. Univ.-Prof. Dr. F. Bucar, University of Graz, Austria.

Diploma thesis (2015) An update of the use of cannabis ingredients in cancer therapy. By Schmidt Carina. Supervisor: Ao. Univ.-Prof. Dr. F. Bucar, University of Graz, Austria.

Diploma thesis (2015) Phytochemical and antimicrobial studies on the seeds of *Aframomum corrorima*. By Menner Michael Karl; Supervisor: Ao. Univ.-Prof. Dr. F. Bucar, University of Graz, Austria.

Diploma thesis (2015) Phytochemical and antimicrobial investigation of *Echinops kebericho* Mesfin. By Turek Ivana; Supervisor: Ao. Univ.-Prof. Dr. F. Bucar, University of Graz, Austria.

Diploma thesis (2015) Phytochemical investigations of *Clematis leschenaultiana* DC. By Ho Le Huyen Trang; Supervisor: Univ.-Prof. Dr. R. Bauer, University of Graz, Austria.

Diploma thesis (2015) Investigations of extracts from European medicinal plants on their influence on intestinal motility *in vitro*. By Praper Blaz; Supervisors: Univ.-Prof. Dr. R. Bauer, University of Graz and Ao. Univ.-Prof. Dr. U. Holzer, Medical University of Graz, Austria

Diploma thesis (2015) Enantiomerentrennung der Flavanone Naringin, Naringenin, Alpinetin und Pinocembrin mittels Hochleistungsflüssigchromatographie. By Frießnegger Eva; Supervisors: Ao. Univ.-Prof. Dr. F. Bucar and Ao. Univ.-Prof. Dr. M. Schmid, University of Graz, Austria.

Diploma thesis (2015) Determination of alpha-glucosidase inhibitory activity and phytochemical investigation of *Caesalpinia pulcherrima*. By Prinz Sabine; Supervisor: Ao. Univ.-Prof. Dr. A. Brantner, University of Graz, Austria.

Diploma thesis (2015) Determination of alpha-glucosidase inhibitory activity and phytochemical investigation of *Caesalpinia pulcherrima*. By Prinz Sabine; Supervisor: Ao. Univ.-Prof. Dr. A. Brantner, University of Graz, Austria.

Diploma thesis (2015) Evaluation of Thin Layer Chromatographic Methods for Authentication of Chinese Herb Granules. By Eigner Eva; Supervisor: Univ.-Prof. Dr. R. Bauer, University of Graz, Austria.

Diploma thesis (2015) Investigation of mold fungi of the species *Aspergillus fumigatus* from clinical and environmental samples for their resistance behavior towards azole antifungals. By Lindig Sara; Supervisor: Ao. Univ.-Prof. Dr. F. Bucar, University of Graz, Austria.

Diploma thesis (2015) Gaschromatographic mass spectrometric analysis of the aroma components of Swiss stone pine wood. By Hakeem Boules Angela; Supervisor: Univ.-Prof. Dr. R. Bauer, University of Graz, Austria.

Diploma thesis (2015) The importance of fosfomycin in the empirical therapy of Urinary Tract Infections. By Raudner Gabriela; Supervisors: Ao. Univ.-Prof. Dr. F. Bucar, University of Graz and Ao. Univ.-Prof. Dr. F. Reinhaler, Medical University of Graz, Austria.

Diploma thesis (2015) Investigation of selected essential oils of their antimicrobial properties. By Wegesser Melanie; Supervisors: Ao. Univ.-Prof. Dr. F. Bucar, University of Graz and Ao. Univ.-Prof. Dr. F. Reinhaler, Medical University of Graz, Austria.

Master thesis (M.Sc.) (2015) Quality control and phytochemical evaluation of extract and fractions obtained from *Paullinia cupana* Kunth seeds and its activity against *Helicobacter pylori*. By: Bruna Aparecida Alves Aguiar; Promotor: Prof. Dr. João Carlos Palazzo de Mello, Department of Pharmacy, State University of Maringá, Brazil.

Master thesis (M.Sc.) (2015) *Tagetes patula*, chromatographic methods, capillary electrophoresis, flavonoids, Nuclear Magnetic Resonance, dengue, *Aedes aegypti*. By: Leticia Maria Krzyzaniak; Promotor: Prof. Dr. João Carlos Palazzo de Mello, Department of Pharmacy, State University of Maringá, Brazil.

Editorial remark

All contributions for the GA-Newsletter are welcome. Deadline for submission for the next edition is fixed to May 25th 2016. Please send all contributions to: **Prof. Dr. A. Hensel**, University of Münster, Institute for Pharmaceutical Biology and Phytochemistry, Corrensstraße 48, D-48149 Münster, Germany; ahensel@uni-muenster.de