

Message from the President



Dear members,

the 2018 Annual Meeting of GA is approaching. The 66th International Congress will be held in Shanghai, from 26th to 29th August. For the first time the congress of our society is organized in China and the meeting will be jointly held with 11th Shanghai International Conference on Traditional Chinese Medicine and Natural Medicine. I am grateful to Prof. Dr. De-an Guo and the other colleagues of the Local Organizing Committee for hosting the event! We expect more than 400 scientists from all over the world to gather in Shanghai for four days. The scientific program is very exciting and includes plenary and key lectures by distinguished senior scientists from academia and industry, award lectures, short lectures, posters, and several Workshops on Sunday. The Young Researcher Workshop will take place on Sunday and I strongly encourage all the young researchers to join it to share their experiences. In the same day, the annual pre-conference workshop on Regulatory Affairs, and a pre-symposium on traditional Chinese medicine, organized by the Shanghai Center of Biomedicine Development, in cooperation with the GA society will also take place. Moreover, the 500th anniversary of the birth of Li Shizhen, the great herbalist in Ming Dynasty who published the Compendium of Materia Medica will also be celebrated, followed by the “get-together party”. Various social and cultural events will take place during the conference, and post-congress excursions to discover scenic areas nearby Shanghai are organized. Awards will be donated this year during the opening ceremony on Monday morning and they include the Egon Stahl Award in Bronze, the Dr. Willmar Schwabe Award, and the Dr. Willmar Schwabe Research Scholarship. Numerous travel grants to graduate students and post docs will be also bestowed. GA donates diverse awards every year to young scientists and I would like to draw once again the attention of **ALL** GA members to awards and prizes of our society. Probably, the existence and aims of these awards is not sufficiently well known. While the decisions for the awardees

of this year have been taken, the invitation for submissions for the 2019 awards will follow towards end of this year. Thus, 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. Moreover, if you are a senior scientist from a lesser developed country, inform your PhD students of the Dr. Willmar-Schwabe Research Scholarship and travel grants!

During the Annual Congress, the Members Meeting will be held. The agenda is included in this newsletter and I invite you all to participate!

Detailed information about the Congress is available from our homepage, but please read also the announcement in this newsletter and consult the congress website for further details on this important event! I hope that many old and new members meet again at this very attractive event. I look forward to seeing you in Shanghai!

This year GA is involved in other co-organised meetings, namely “Phytotherapie 2018”, a joint meeting of German speaking societies, on 31st May–2nd June in Vienna (Austria), “Phytopharm 2018” from June 25th–27th in Wädenswil (Switzerland), 8th Symposium on MAP on September 10th–13rd in Bonn (Germany), “International Conference on Natural Product Biotechnology” on September 20th–2st at TU Dortmund University (Germany), “Cannabis – Phytochemical, Pharmacological and Clinical Evidence” on November 15th in Vienna (Austria), 30th International Symposium on the Chemistry of Natural Products and the 10th International Congress on Biodiversity (ISCNP30 & ICOB10) on November 25th–29th in Athens (Greece). I deeply express my gratitude to all those have been involved with the organization of these meetings.

I would like to remind to all members that GA has a foundation, “Plants for Health”, aiming to promote research and scientific knowledge in the field of natural products, medicinal plants and phytotherapy, especially of outstanding young scientists. I hugely invite all of you to make donations to support these activities, details are at the website www.plantsforhealth.org.

Finally, the President’s message represents an opportunity to thank the dedicated members who have offered their time and expertise to ensure all GA activities. I would like to thank the new board members because they have become promptly active in managing the growing tasks of GA activities. I thank Prof. Hensel for his dedication to the keep our Newsletter always attractive and informative. I express huge gratitude to the Editor in chief of *Planta Medica*, Prof. Butterweck and all the team for the extraordinary work and I invite all members to consider this scientific journal for the publication of their valuable studies and to enquire for the low rate online access. I cordially invite all of you also to submit your contributions to the *Planta Medica International Open*, the open access companion journal to *Planta*

Medica, focused on the rapid publication of important new results in all fields of medicinal plant and natural product research. I am

grateful the Editor in chief Prof. Pieters, and the editors for their precious support.

I hope to welcome many of you at the upcoming fascinating GA Congress in Shanghai!

Cordially,
Anna Rita Bilia, GA President



A Foundation of the Society for Medicinal Plant and Natural Product Research (GA)
Eine Stiftung der Gesellschaft für Arzneipflanzen und Naturstoffforschung (GA)

Announcement of the 3rd Research Award of the Foundation Plants for Health

GA has established the Foundation "Plants for Health" aiming at supporting highly motivated and talented research groups. We provide start-up funds, which help to develop collaborative projects leading to promising developments in the area of medicinal plant and natural product research including the search for innovative lead compounds, exciting product ideas and novel pharmacological, clinical and other approaches in medicinal plant and natural product research.

As the foundation successfully has started to receive donations and additional endowments from different sources, in 2018 we are again able to support researchers from our (still limited) revenues. In order to be eligible you must be a member of the GA at the time of the application and for the entire duration of the project.

The foundation offers a research subsidy of up to 4.000 € for the initiation of a high quality research project.

The grant will support visits between collaborating labs for performing experiments or learning innovative techniques. It is expected that results will be presented at the GA meeting 2019 in Innsbruck Austria.

Applications with an informative and concise description of the project (1 page), a short CV of the researchers involved (half a page each), and the type of collaboration proposed should be forwarded to the chair of the foundation, Prof. Dr. R. Bauer (E-mail: rudolf.bauer@uni-graz.at) by Sep 30th 2018.

The awardee will be announced by October 15th 2018.

We are looking forward to many exciting proposals, which will promote interdisciplinary and innovative research on medicinal plants and natural products.

The Foundation's Board:
Prof. Dr. Rudolf Bauer
(Graz, Austria)

Prof. Dr. Michael Heinrich
(London, U.K.)


Prof. Dr. Andreas Hensel
(Münster, Germany)

Dr. Bernd Röther
(Neumarkt, Germany)

<http://www.plantsforhealth.org/>

The Society informs

Notes to all GA Members



Editorial remark

All contributions for the GA-Newsletter are welcome.

Deadline for submission is fixed to November 20th 2018.

Please send all contributions by e-mail:
Prof. Dr. A. Hensel
University of Münster,
Institute for Pharmaceutical Biology and Phytochemistry,
Corrensstrasse 46,
D-48149 Münster, Germany
ahensel@uni-muenster.de



The Board of Directors during the last February meeting in Vienna.

Notes from the Society

Invitation to the Members Meeting 2018

During the 66th Annual Meeting of our Society, which will take place in Shanghai, China, from 26th to 29th August 2018, a regular Members' Meeting will be held. It is scheduled for Tuesday, 28th August 2018, 6.00 p.m. – 8.00 p.m.

Location: Chenggu Hall, Administration Building Shanghai, Institute of Materia Medica, Chinese Academy of Sciences. Zuchongzhi RD# 555. Zhangjiang High-Tech Park, Pudong New Area, Shanghai 201203 China

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

Preliminary Agenda

1. Approval of the agenda
2. Approval of the minutes of the Members' Meeting held in Basel on 5th September 2017, (published in GA Newsletter 2-2017)
3. Annual reports
 - 3.1 Report of the President
 - 3.2 Reports of the Vice-Presidents
 - 3.3 Report of the Secretary
 - 3.4 Report of the Treasurer
 - 3.5 Report of the Auditors
 - 3.5 Discharge of the Executive Council

4. Report of the Editor-in-Chief of *Planta Medica*
5. Report of the Working Groups
6. Report Foundation "Plants for Health"
7. Future congresses, symposia and workshops
9. Miscellaneous

On behalf of the Executive Council
Prof. Anna Rita Bilia, GA President

"Let's connect" – African Research Network of the GA Registration open for interested scientists!



The African continent features areas with extremely high biodiversity and high levels of endemism, indicating that many of the continent's plant resources are uniquely African. African traditional medicine is therefore based on a broad ethnomedicinal knowledge and represents a major socio-cultural heritage, which has accumulated during the last millennia and features valuable and unique ethnomedicinal information.

The GA aims to foster the scientific development of African research pursuits by establishing an African Research Network among members of the GA and thus expanding and improving research capacity. Therefore, a working group was established to stimulate and facilitate the interaction of African re-

searchers within the GA. The working group consists of five members of the GA's advisory board including Deniz Tasdemir, Michael Heinrich, Andreas Hensel, Emerson Ferreira Queiroz and Cica Vissiennon (chair).

As a working group of the GA we provide a regular platform for scientific exchange by establishing a sustainable communication channel between the members of the network and organizing regular scientific symposia during the annual conference.

All interested GA-members who would like to participate in the African Research Network are kindly asked to register via email to africanresearch_ga@gmx.net.



Dr. Cica Vissiennon, the new chair of the GA African Research Network

66th Annual Meeting and International Congress of GA in Shanghai, China, (26 to 29 August 2018)

The 66th Annual Meeting and International Congress of the Society for Medicinal Plant and Natural Product Research (GA) will be held in Shanghai, China, from 26 to 29 August, 2018, the meeting will be jointly held with 11th Shanghai International Conference on Traditional Chinese Medicine and Natural Medicine this year.

This is the first time that GA Annual Meeting comes to China, where the Traditional Chinese Medicine (TCM) was originated. With the idea of traditional medicine is gradually being accepted by the world, TCM and Natural Medicine have been constantly advancing and innovating, while creating a healthy well-being of mankind.



The conference venue is at the Parkyard Hotel located in Zhangjiang Hi-tech Park of Pudong New Area, which is famous in the world as "The Silicon and Medicine Valley in China", now it constructs the innovation chain of biomedicine, and Shanghai Biopharmaceutical Science and Technology Base in the past 20 years. Currently, the Shanghai Metro system is the world's largest rapid transportation system by route length and second largest by number of stations, serving almost all the municipal districts. In particular Zhangjiang High-Tech Park station of Metro line #2 is just only 100 meters away from the hotel.

The congress will start on Sunday 26th August and three pre-congress events will be held. The Young Researchers Workshop will offer a platform for young scientists to present their latest findings, and the Regulatory Affairs Workshop will serve as a forum for industry to update on the latest trends in regulation of herbal medicines and related

areas. Moreover, the Shanghai Center of Biomedicine Development (SCBD), in cooperation with the GA society, will organize a pre-congress Symposium on traditional Chinese medicine. The 500th anniversary of the birth of Li Shizhen, the great herbalist in Ming Dynasty to compile his masterwork of *Compendium of Materia Medica* will also be celebrated at the opening ceremony on Monday 27th of August. The Members Meeting will be held on Tuesday 28th August, from 18:00 to 20:00 at the lecture hall of Shanghai Institute of Materia Medica, Chinese Academy of Sciences, which is just 100 meters away from the congress hotel.

Distinguished speakers from academia and industry will deliver plenary lectures on some of the main topics of the congress. Also, we look forward to the plenary lectures delivered by the awardees of the Egon-Stahl Awards in Bronze, and the Dr. Willmar Schawbe Award.

Short lectures and Poster sessions will be held in three parallel sessions in order to accommodate for the large number of contributions, and to leave enough time for discussions. The Congress Dinner will be held in a boat cruising on the Huangpu River, to enjoy two hours on the Huangpu River, which is the best place to view old and new Shanghai, see the many attractions in modern Pudong and the historic Bund on either side of the river.

The overview of the program, further details, and news updates are provided on the congress website at www.ga2018.cn.

Registration is still open, please register immediately if you plan attending!

On behalf of the Organizing Committee, I look forward to welcome you in Shanghai!

Prof. De-an Guo, Chair of Organizing Committee

SAVE THE DATE! 12th of September - WORKSHOP

Join us in one of the upcoming workshops of GA

"Supporting rural entrepreneurship through the production and exploitation of medicinal and aromatic plants"

The workshop will be organised during the **8th symposium on MAP in Bonn, Germany.**

For more details check : www.dfa-aga.de

Dear colleagues,

On behalf of the International Union of Pure and Applied Chemistry (IUPAC), it is our privilege and special pleasure to invite you to the 30th International Symposium on the Chemistry of Natural Products and the 10th International Congress on Biodiversity (ISCNP30 & ICOB10), which will be held on

November 25th–29th 2018 in Athens, Greece.

Greece, the tip of the Balkan peninsula, is at the crossroads between Europe, Asia and Africa. This unique location offers Greece an outstanding species diversity and a variety of natural and semi-natural ecosystems and habitats. According to recent surveys

Greek flora encompasses more than 6700 species and subspecies of vascular plants belonging to more than 1000 species genera and 180 families.

The high degree of endemism (1278 endemic species and 452 subspecies, accounting to 22% of all represented species) classifies Greece among the hot-spots of plant

biodiversity in Europe. Marine and aquatic habitats of Greece are also considered as hot-spots for the biodiversity, at a regional and global scale, with more than 515 taxa of marine microalgae.

We sincerely believe that the IUPAC symposium in Athens will bring together scientists from all over the world in order to contribute to a better understanding of the role of natural products in drug discovery, material science, nutrition and applied chemistry.

Through a careful selection of conferences from established scientists, the addition of emerging topics from young group leaders and the participation of young scientists, through several travel fellowships, we aim to shed light into recent advances in natural products.

In this context, we would like to welcome you in Athens, in the center of European biodiversity and the cradle of modern civiliza-

tion and wish you a fruitful and pleasant stay!

With my best regards,

Leandros A. Skaltsounis

Professor of Pharmacognosy and Natural Products Chemistry, Department of Pharmacy, National and Kapodistrian University of Athens, ISCNP30 & ICOB10 Chairman

New Projects



Investigating plant-microbe interactions for optimizing the production of bioactive molecules in Boraginaceae plants.

A new ITN (MARIE SKŁODOWSKA-CURIE ACTION Innovative Training Network) with the acronym “MICROMETABOLITE”, and the title **Microbial Enhancement of Bioactive Secondary Metabolite Production in Plants** started on May 2017 investigating the plant-microbe interactions in Boraginaceae species.

The overall objective of **MICROMETABOLITE** is to explore interactions between plants and microorganisms involved in the production of secondary metabolites (SM) for introducing novel ingredients in pharmaceutical and cosmeceutical industry. Effects of microorganisms on the plant metabolome and the biosynthesis of bioactive SM will be studied in the Boraginaceae plant family, aimed at optimising plant cultivation and alkalannins/shikonins (A/S) production. Microorganisms will be integrated in plant produc-

tion systems, and protocols needed for efficient implementation in industry will be elaborated. Thereby a platform will be established that will support long-term interactions between academia and industry.

MICROMETABOLITE is an international PhD programme for highly motivated young scientists, offering 11 early-stage researchers (ESRs) the opportunity to improve their research and entrepreneurial skills and enhance their career prospects.

MICROMETABOLITE's approach is: **Multidisciplinary:** MICROMETABOLITE combines experts on microbial diversity assessment, plant-microbe interactions, plant and microbial genome and transcriptome analysis, plant-based production systems, natural product chemistry and technology, metabolomics, secondary metabolites identification and metabolite production and application, who will share their know-how within the consortium.

Intersectoral: MICROMETABOLITE reinforces the interaction between public and private sectors. The participation of SMEs and big companies active in the production of medicinal plants, application of microorganisms, and discovery/development of novel bioactive compounds enabled to follow a novel and innovative concept.

For more information please visit: www.micrometabolite.eu or contact the GA members:

Dr. Andreana Assimopoulou:
andreana@eng.auth.gr

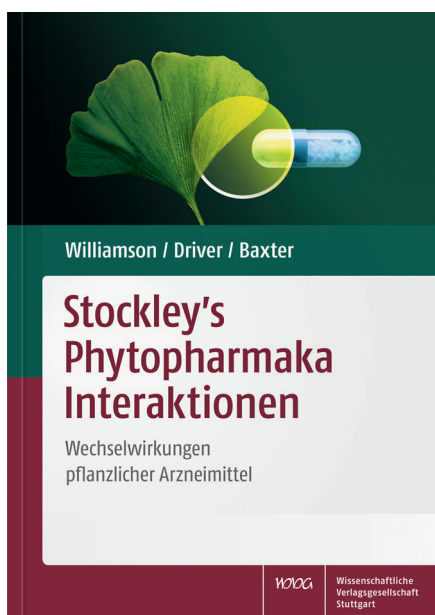
Dr. Nikolas Fokialakis:
fokialakis@pharm.uoa.gr

Acknowledgment: This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 721635





New Books



Stockley's Herbal Medicines Interactions provides a reference text for healthcare professionals who require evidence-based information on the interactions of conventional medicines with herbal medicines, dietary supplements and nutraceuticals. The book brings together available data on over 190 of the most commonly used herbal medicines, dietary supplements and nutraceuticals in highly structured, rigorously researched, and fully referenced monographs. Most of the herbal materials used for medicinal purpose have been listed in the book and are extensively reviewed for potential interaction with other medicinal entities. Differentiation is made in experimentally found interactions with clinical proof and further interactions, which might be possible due to potential secondary products or mode of action. Additionally the end of each chapter provides a clear assessment. On one hand, the book provides a clear overview what could happen by use of the med-

icinal plants but on the other side sometimes a kind of over-kill gets obvious as many potential interactions occur very rarely and are not really based on clinical evidence. From this point of view the book is interesting and nice to read, but some details should be used more pragmatically and should not prevent to get a black light on some valuable medicinal plants.

"Stockley's Phytopharmaka Interaktionen", 2018, Elizabeth Williamson, Samuel Driver, Karen Baxter; German Version: Wissenschaftliche Verlagsgesellschaft Stuttgart, ISBN 978-3-8047-3733-4 450 pages, 45,00 €. English version: "Stockley's Herbal Medicines Interactions", 3rd. edition 2013, Elizabeth Williamson, Samuel Driver, Karen Baxter; Pharmaceutical Press.

Andreas Hensel

Recent thesis (2017/18) on Medicinal Plant Research



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

Dr. rer. nat. thesis (2018) Natural products as antiviral agents: Identification of triterpene saponins inhibiting HSV-1 induced membrane fusion. By: Diana Ulrich. Promotor: Prof. Dr. A. Hensel. Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Germany.

Dr. rer. nat. thesis (2018) Intracellular signaling pathways involved in human keratinocyte differentiation induced by natural products. By: Stefan Esch. Promotor: Prof. Dr. A. Hensel. Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Germany.

Dr. rer. nat. thesis (2018) Identifizierung und Charakterisierung des JAM-A Interaktoms. By: Tim Steinbacher. Promotor: Prof. Dr. K. Ebente, Prof. Dr. A. Hensel. Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Germany.

Dr. rer. nat. thesis (2017) Suche nach neuen Leitstrukturen aus Weihrauch und Myrrhe gegen protozoale Krankheitserreger. By: Hippolyt Lutz Greve. Promotor: Prof. Dr. T. J. Schmidt, Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Germany.

Dr. rer. nat. thesis (2018) Antitypanosomal activity of natural products from Nigerian *Holarthra Africana* A. DC. (Apocynaceae). By: Charles Okeke Nnadi. Promotor: Prof. Dr. T. J. Schmidt, Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Germany.

Ph.D. thesis (2017) A hexa-herbal Chinese formula for treatment of atopic dermatitis: phytochemical analysis and selected anti-inflammatory activities. By: Jennifer Bay Chang. Promotor: Prof. Michael Heinrich, Research Group Pharmacognosy and Phytotherapy, UCL School of Pharmacy, London, United Kingdom.

Ph.D. thesis (2017) Phytopharmacy Research in the Context of Saudi Arabian Healthcare – the Example of *Nigella sativa* L. Efficacy on Asthma Inflammation and Outcomes. By: Abdulrahman Koshak. Promotor: Prof. Dr. M. Heinrich, UCL School of Pharmacy, University College London, United Kingdom.

Ph.D. thesis (2017) Lichens and gastropods from *Crozet archipelago*: chemical ecology between the lichenophagous subantarctic gastropod and eaten lichens. By: Alice Gadea. Co-Promoters: (Prof. Joel Boustie/Dr. Françoise Le Devehat), Institute of Chemistry of Rennes and Dr. Maryvonne Charrier, ECOBIO, Rennes, France.

Ph.D. thesis (2018) Grundlegende Studien mit *Petasites hybridus* Extrakt Ze 339 bei Pferden: Pharmakokinetik und Bioverfügbarkeit bei klinisch gesunden Pferden sowie Wirkstudien bei Pferden mit Recurrent Airway Obstruction. By: Elisabeth Pommer. Promotor: Prof. Dr. K. Zitterl-Eglseer, Institute of Animal Nutrition and Functional Plant Compounds, Prof. Dr. R. Van den Hoven, University Equine Hospital, University of Veterinary Medicine Vienna, Austria.

Ph.D. thesis (2016) Pharmacognostic quality control with quantitative chromatographic analyses, statistical mixture design with antibacterial evaluation and phytochemical study of *Limonium brasiliense* (Baicuru). By: Andressa Blainski Pinha. Promotor: Prof. Dr. João Carlos Palazzo de Mello, Laboratório de Biologia Farmacêutica, Universidade Estadual de Maringá, Brazil.

Ph.D. thesis (2016) Phytochemical and biological research of extracts obtained by supercritical technology from *Paullinia cupana* seeds (guaraná). By: Leila Larisa Medeiros Marques. Promotor: Prof. Dr. João Carlos Palazzo de Mello, Laboratório de Biologia Farmacêutica, Universidade Estadual de Maringá, Brazil.

Ph.D. thesis (2017) Bioassay guided fractionation of *Pluchea odorata* (L.) Cass., focusing on apoptotic effects. By: Michael Blaschke. Promotor: Univ. Prof. Mag. Dr. Dr. h.c. Brigitte Kopp and Prof. Dr. Georg Krupitza, Department of Pharmacognosy, University of Vienna, and Medical University of Vienna, Austria.

Ph.D. thesis (2017) Bioactive alkaloids from bacteria associated with lichens. By: Alba Noel. Promoters: Prof. Sophie Tomasi/Prof. Jean-Pierre Hurvois, Institute of Chemistry of Rennes, France.

Ph.D. thesis (2017) Activity-guided investigation of eight rare marine Actinomycetes. By: Andrea Lubich. Promotor: Liselotte Krenn, Department of Pharmacognosy, University of Vienna, Austria

Doctoral thesis (2017) Functional and mechanistic characterization of novel selective modulators of retinoid x receptors. By: Simone Latkolik. Promotor: Prof. Dr. Verena M. Dirsch, Department of Pharmacognosy, University of Vienna, Austria.

Master thesis (2016) Evaluation of *in vitro* antimicrobial potential of *Trichilia catigua* and chemical characterization of aqueous oligomeric fraction. By: Mariane Roberta Ritter. Promotor: Prof. Dr. João Carlos Palazzo de Mello, Laboratório de Biologia Farmacêutica, Universidade Estadual de Maringá, Brazil.

Master thesis (2017) Healing activity of the crude extract of *Poincianella pluviosa* incorporated in hydrogels. By: Ana Carolina Guidi. Promotor: Prof. Dr. João Carlos Palazzo de Mello, Laboratório de Biologia Farmacêutica, Universidade Estadual de Maringá, Brazil.

Master thesis (2017) Isolation and identification of polyphenols in extract of Catuaba (*Trichilia catigua*). By: André Oliveira Fernandes da Silva. Promotor: Prof. Dr. João Carlos Palazzo de Mello, Laboratório de Biologia Farmacêutica, Universidade Estadual de Maringá, Brazil.

M.Sc. thesis (2017) "Beeromics of the World" – Klassifizierung von Bieren aus aller Welt anhand ihrer analytischen Fingerabdrücke. By: Peter Tebbe. Promotor: Prof. Dr. T. J. Schmidt, Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Germany.

Diploma thesis (2017) Screening of natural products for ABCA1 induction. By: Susanne Rotter. Promotor: Prof. Dr. Verena M. Dirsch, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2017) Die Wirkung von Inhaltsstoffen des Olivenöls auf die ABCA1-Expression von Makrophagen. By: Sarah Wesemann. Promotor: Prof. Dr. Verena M. Dirsch, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2017) Charakterisierung eines synthetischen Leoligin-Derivates hinsichtlich seiner FXR-agonistischen Wirkung in Leber- und Darmzellen. By: Ulrike Kirchweger. Promotor: Prof. Dr. Verena M. Dirsch, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2017) Isolation and characterization of constituents in an aqueous NaHCO₃ extract of Norway spruce balm. By: Julia Langeder. Promotor: Ao. Univ.-Prof. Dr. S. Glasl-Tazreiter, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2017) Anatomische und morphologische Untersuchungen an der Blüte von *Justicia secunda*. By: Sofija Laufer. Promotor: Ao. Univ.-Prof. Dr. S. Glasl-Tazreiter, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2018) In vitro-Vermehrung der tibetischen Arzneipflanze *Lancea tibetica* Hook. F. & Thomson., By: Nhu Le. Supervisors: Univ. Prof. Mag. Dr. Dr. h.c. Brigitte Kopp and Ass. Prof. Mag. Dr. Christoph Wawrosch, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2017) Nanostructured Lipid Carriers for oral delivery of Silymarin: formulation and *in vitro* characterization. By: Lemmi Beatrice. Promoters: Prof. M. C. Bergonzi and Prof. A. R. Bilia, Department of Chemistry "Ugo Schiff", University of Florence, Italy.

Diploma thesis (2018) Liposome and Nanostructured Lipid Carrier for the topical delivery of Resveratrol: formulation and *in vitro* characterization by skin-pampa test. By: Casamonti Marta. Promoters: Prof. M. C. Bergonzi and Prof. A. R. Bilia, Department of Chemistry "Ugo Schiff", University of Florence, Italy.

Editorial remark

All contributions for the GA-Newsletter are welcome. Deadline for submission for the next edition is fixed to November 25th 2018. 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