

# MARIA-ELENI GRAFAKOU

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## Experience

### Post-Doc Researcher

Chair of Pharmaceutical Biology, University of Regensburg, Germany

10/2024 –  
02-08/2024

### University Assistant with Doctorate

Institute for Pharmaceutical Sciences, Pharmacognosy, University of Graz, Austria

5<sup>th</sup> semester course: Plant toxins and allergens

01/2022 –  
01/2024

### Post-Doc Researcher

Institute for Pharmaceutical Sciences, Pharmacognosy, University of Graz, Austria;

in collaboration with R&D Phytomedicines Development Center, BAYER Consumer Health

“The role of gut microbiota for the activity of herbal preparations in mental health”

10/2022 –  
09/2023

### Research Fellow

Diagnostic and Research Institute of Hygiene, Microbiology and Environmental Medicine, Medical University of Graz, Austria

10/2017-  
10/2021

### Ph.D. Researcher

Department of Pharmacognosy and Chemistry of Natural Products, School of Pharmacy, National and Kapodistrian University of Athens (NKUA), Greece

05-09/2021

### Teaching Assistant

Undergraduate program, Department of Pharmacognosy and Chemistry of Natural Products, School of Pharmacy, NKUA (Introduction to Laboratory Practices, Laboratory Practical Courses of Pharmacognosy 1 and 2)

03/2021 -

### Academic Service

Reviewing for Journals: Natural Product Research (Taylor & Francis), Phytochemistry (Elsevier), Journal of Ethnopharmacology (Elsevier), Plants (MDPI)

### Research fellow + Erasmus<sup>+</sup> Program Intern

Chair of Pharmaceutical Biology, University of Regensburg, Germany

03-08/2019 &  
03/2020-04/2021

### Teaching Assistant

1<sup>st</sup> years' course “Introduction to Laboratory Practices”, School of Pharmacy, NKUA

10/2017-02/2018

## Education

### Ph.D., Department of Pharmacognosy and Chemistry of Natural Products, NKUA, Greece in collaboration with Chair of Pharmaceutical Biology, Universität Regensburg, Germany

10/2017-  
10/2021

- 4 years program; special entrance Doctorate students - Bachelor's Degree with honors\*

- Competitive Research Grant: funded by European Social Fund- ESF, implemented by the State Scholarships Foundation-IKY

- Thesis title: Chemical analysis and biological activity of: *Calea* spp. from Panama' *Centaurea* spp. from Algeria' *Hypericum* spp. from Crete' *Euphorbia* spp. from Central Greece – grade: Excellent

\*During my Ph.D I had taken 10 ECTS from Master's Level Curriculum «Improvement, Production and Evaluation of Bioactive Natural Products» as specified from the regulations of the Program of Postgraduate Studies (special entrance Doctorate students on account of Bachelor's Degree with honors (9.15/10); without attending Master's level, as it is generally required)

o Chemistry of Natural Products (Grade 10/10)

o Spectroscopy II (Grade 10/10)

<b>Diploma of Pharmacy, NKUA</b> excellent marks (9.15/10)	2012-2017
<b>High School Gythio, Lakonia, Greece</b> excellent marks (19.6/20)	2009-2012

## Skills

**Instrumentation experience** LC-MS, GC-MS, HPLC-DAD, HPLC-RI, NMR, hydro-distillation, UV/Vis, a<sub>D</sub>, CD

**Bio-assays experience** incubations of fecal microbiota under anaerobic conditions, human liver microsomes in vitro assay, cultivation of normal/cancerous cell lines and gram+ bacteria, MTT assay, ICAM-1 assay, disc-diffusion assay, double-dilution assay

**Digital skills** Xcalibur, SIMCA, NAMCO, R studio, inkscape, RAWgraphs, ORCA, Topspin, DataAnalysis, MassHunter, Graphpad, SwissADME, Reaxys, Chemdraw, Microsoft Office

**Languages** English Cambridge Certificate of Proficiency (C2); German (Goethe-Zertifikat B2); Greek (mother tongue)

**Teaching Skills** Teaching and Assistance in undergraduate student courses; Supervision of under- and postgraduate research

## Honors, Awards, Grants

<b>Best Poster Presentation Award</b> Poster: Metabolism of <i>Valeriana officinalis</i> root extract with human fecal samples. Tetranational Congress Phytotherapy 30-31/05/2024, Utrecht, The Netherlands	31/05/2024
<b>Best Poster Presentation Award</b> Poster: <i>Hypericum perforatum</i> L.: in vitro upper gastrointestinal tract digestion and interaction with human gut microbiome. GPT Phytotherapy congress 15-17/06/2023, Bamberg, Germany	16/06/2023
<b>Young Ethnopharmacologist Award</b> Oral presentation: Effect of Upper Intestinal Tract Digestion on <i>Hypericum perforatum</i> extract using the Infogest Protocol; 22 <sup>nd</sup> International Congress of the International Society of Ethnopharmacology, 24-26/02/2023, Imphal, India	26/02/2023
<b>Editor's Choice Collection:</b> "Cajamolides A-N: Cytotoxic and anti-inflammatory sesquiterpene lactones from <i>Calea jamaicensis</i> " is included in the collection of top natural product research published in Bioorganic Chemistry for 2020-2022	03/2022
<b>Most read articles published recently in Journal of Natural Products:</b> Macrocyclic Diterpenoid Constituents of <i>Euphorbia deflexa</i> , an Endemic Spurge from Greece	12/2021
<b>Compensatory Scholarship</b> Teaching Assistant, School of Pharmacy, NKUA	05-09/2021
<b>Young Researcher Workshop, eSymposium, Society for Medicinal Plant and Natural Product Research (GA)</b> Selected (1/12 young researchers) to present a 10min talk: Another proof of wound healing activity from the genus <i>Hypericum</i> ?	07/11/2020
<b>Young Investigator Fellowship Award</b> 19 <sup>th</sup> International Congress of the Society of Ethnopharmacology, 12-14/06/2019, Dresden, Germany	05/2019
<b>Competitive Research Grant - Doctorate Scholarship</b> State Scholarships Foundation (IKY) «IKY Fellowships of Excellence for Postgraduate Studies in Greece» through the Operational Programme (Greece-EU) «Human Resources Development, Education and Lifelong Learning» in the context of the project "Strengthening Human Resources Research Potential via Doctorate Research" (MIS-5000432)	2018-2021
<b>Graduation with honors</b> third place in the graduation ceremony	08/11/2017
<b>Undergraduate Scholarship</b> "Legacy Thomas Sourlis"	2014-2017
<b>Excellence Award</b> Laboratory of Experimental Physiology, School of Medicine, NKUA	03/10/2014
<b>Excellence Award</b> Association of the Lakonians "Lykourgos"	2013

“The Great Moment for Education” by Eurobank in collaboration with the Greek Ministry of Education, Research and Religious Affairs

### Publications in international peer-reviewed journals

- **Maria-Eleni Grafakou**, Eva-Maria Pferschy-Wenzig, Heba Aziz-Kalbhenn, Olaf Kelber, Christine Moissl-Eichinger, Rudolf Bauer. Gut microbiome and metabolites modulation may contribute to the antidepressant effect of St. John’s Wort. Under submission
- **Maria-Eleni Grafakou\***, Christina Barda, Helen Skaltsa, Jörg Heilmann. Study on the metabolism of natural sesquiterpene lactones in human liver microsomes using LC-Q-TOF-MS/MS, *Natural Product Research*, 38(11), 1855–1863, 2024. DOI: [10.1080/14786419.2023.2226301](https://doi.org/10.1080/14786419.2023.2226301).
- Eugenia Ganosi, Christina Barda, **Maria-Eleni Grafakou**, Michael Rallis, Helen Skaltsa. An in-depth stability study of the essential oils from *Mentha × piperita*, *Mentha spicata*, *Origanum vulgare*, and *Thymus vulgaris*: The impact of thermal and storage conditions. *Separations*, 10, 9: 488. 2023. DOI: [10.3390/separations10090488](https://doi.org/10.3390/separations10090488).
- Christina Barda, Alexia Tzoumaka, **Maria-Eleni Grafakou**, Eleutherios Kalpoutzakis, Jörg Heilmann, Helen Skaltsa. Phytochemical characterization of *Phitosia crocifolia*, a monotypic representative of Greek Flora. *Planta Medica*, 89(03): 324-332, 2023. DOI: [10.1055/a-1939-7473](https://doi.org/10.1055/a-1939-7473).
- Christina Barda, Konstantina Anastasiou, Ariadni Tzara, **Maria-Eleni Grafakou**, Eleftherios Kalpoutzakis, Joerg Heilmann, Michael Rallis, Angeliki P. Kourounakis, Helen Skaltsa. A bio-guided screening for antioxidant, anti-inflammatory and hypolipidemic potential supported by non-targeted metabolomic analysis of *Crepis* spp. *Molecules*, 27(19):6173, 2022. DOI: [10.3390/molecules27196173](https://doi.org/10.3390/molecules27196173).
- **Maria-Eleni Grafakou**, Christina Barda, George A. Karikas, Helen Skaltsa. *Hypericum* essential oils—composition and bioactivities: an update (2012–2022). *Molecules*, 27(16), 2022. DOI: [10.3390/molecules27165246](https://doi.org/10.3390/molecules27165246).
- Tsami, Konstantina, Christina Barda, George Ladopoulos, Nikos Asoutis Didaras, **Maria-Eleni Grafakou**, Jörg Heilmann, Dimitris Mossialos, Michail Christou Rallis, Helen Skaltsa. Chemical profile and in vitro evaluation of the antibacterial activity of *Dioscorea communis* berry juice. *Sci*, 4(2):21, 2022, DOI: [10.3390/sci4020021](https://doi.org/10.3390/sci4020021).
- **Maria-Eleni Grafakou**, Christina Barda, Jörg Heilmann, Helen Skaltsa. *In vitro* cytotoxic and anti-inflammatory activities of sesquiterpene lactones from *Centaurea papposa*. *Natural Products Research*, 36:12, 3211-3215, 2021. DOI: [10.1080/14786419.2021.1955882](https://doi.org/10.1080/14786419.2021.1955882).
- Christina Barda, **Maria-Eleni Grafakou**, Ekaterina-Michaela Tomou, Helen Skaltsa. Phytochemistry and evidence-based traditional uses of the genus *Achillea* L.: An update (2011–2021). *Scientia Pharmaceutica*, 89, 4: 50, 2021. DOI: [10.3390/scipharm89040050](https://doi.org/10.3390/scipharm89040050).
- **Maria-Eleni Grafakou**, Christina Barda, Jörg Heilmann, Helen Skaltsa. Macrocyclic diterpenes from *Euphorbia deflexa*, an endemic spurge from Greece. *Journal of Natural Products*, 84 (11), 2021. DOI: [10.1021/acs.jnatprod.1c00654](https://doi.org/10.1021/acs.jnatprod.1c00654).
- **Maria-Eleni Grafakou**, Christina Barda, George Karikas, Jörg Heilmann, Helen Skaltsa. Cajamolides A-N: cytotoxic and anti-inflammatory sesquiterpene lactones from the leaves of *Calea jamaicensis* (L.) L. *Biorganic Chemistry*, 116:105351, 2021. DOI: [10.1016/j.biorg.2021.105351](https://doi.org/10.1016/j.biorg.2021.105351).
- **Maria-Eleni Grafakou**, Christina Barda, Diandra Pintać, Marija Lesjak, Jörg Heilmann, Helen Skaltsa. Prenylated acylphloroglucinols from *Hypericum jovis* with anti-inflammatory potential. *Planta Medica*, 87 (14), 2021. DOI: [10.1055/a-1556-9721](https://doi.org/10.1055/a-1556-9721).
- Artemis Daskalakis, **Maria-Eleni Grafakou**, Barda Christina, Zacharias Kyriotakis, Jörg Heilmann, Helen Skaltsa. Secondary metabolites from *Hypericum trichocaulon* Boiss. & Heldr., growing wild in the island of Crete. *Biochemical Systematics and Ecology*, 97, 104294, 2021. DOI: [10.1016/j.bse.2021.104294](https://doi.org/10.1016/j.bse.2021.104294).
- Elias Valiakos, Marios Marselos, **Maria-Eleni Grafakou**, Eleni Skaltsa, Nikolaos Sakellaridis. Animal medicines and treated diseases in Nikolaos Myrepsos’ *Dynameron*. *Journal of ethnopharmacology*, 276, 11419, 2021. DOI: [10.1016/j.jep.2021.114191](https://doi.org/10.1016/j.jep.2021.114191).

- **Maria-Eleni Grafakou**, Aggeliki Diamanti, Eleytheria Simirioti, Asimina Terezaki, Christina Barda, Ioannis Sfiniadakis, Michail Rallis, Helen Skaltsa. Essential oils from *Hypericum* spp.: wound healing effects in mice. *Planta Medica International Open*, 8(02), e69-e77, 2021. DOI: [10.1055/a-1492-3634](https://doi.org/10.1055/a-1492-3634).
- Christina Barda, **Maria-Eleni Grafakou**, Eleutherios Kalpoutzakis, Jörg Heilmann, Helen Skaltsa. Chemical composition of *Crepis foetida* L. and *C. rubra* L. volatile constituents and evaluation of the in vitro anti-inflammatory activity of salicylaldehyde rich volatile fraction. *Biochemical Systematics and Ecology*, 96, 104256, 2021. DOI: [10.1016/j.bse.2021.104256](https://doi.org/10.1016/j.bse.2021.104256).
- **Maria-Eleni Grafakou**, Christina Barda, Ekaterina-Michaela Tomou, Helen Skaltsa. The genus *Genista* L.: A rich source of bio-active flavonoids. *Phytochemistry*, 181, 112574, 2021, DOI: [10.1016/j.phytochem.2020.112574](https://doi.org/10.1016/j.phytochem.2020.112574).
- Konstantina Papakosta, **Maria-Eleni Grafakou**, Christina Barda, Ioannis V. Kostopoulos, Ourania Tsitsilonis, Helen Skaltsa. Cytotoxicity and anti-cancer activity of the genus *Achillea* L. *Current Medicinal Chemistry*, 27(41):6910-6925, 2020. DOI: [10.2174/0929867327666200505092514](https://doi.org/10.2174/0929867327666200505092514).
- **Maria-Eleni Grafakou**, Aggeliki Diamanti, Eleftheria Antaloudaki, Zacharias Kyriotakis, Ana Ćirić, Marina Soković, Helen Skaltsa. Chemical composition and antimicrobial activity of the essential oils of three *Hypericum* species growing wild in the island of Crete, Greece. *Applied Sciences, Section Chemistry*, 10(8), 2823, 2020. DOI: [10.3390/app10082823](https://doi.org/10.3390/app10082823).
- Eirini Christodoulou, **Maria-Eleni Grafakou**, Helen Skaltsa, Nikolaos Kadoglou, Nikolaos Kostomitsopoulos, Georgia Valsami. Preparation, chemical characterization and determination of serum and tissue pharmacokinetics of crocetin after oral and intravenous administration of Saffron (*Crocus sativus* L.) aqueous extract to C57/BL6J mice. *Journal of Pharmacy and Pharmacology*, 71, 753–764, 2019. DOI: [10.1111/jphp.13055](https://doi.org/10.1111/jphp.13055).
- **Maria-Eleni Grafakou**, Samah Djeddi, Hamel Tarek, Helen Skaltsa. Secondary metabolites from the aerial parts of *Centaurea papposa* (Coss.) Greuter. *Biochemical Systematics and Ecology*, 76, 15-2, 2018. DOI: [10.1016/j.bse.2017.11.005](https://doi.org/10.1016/j.bse.2017.11.005).

## Book Chapter

**Maria-Eleni Grafakou**, Christina Barda, Helen Skaltsa. *Teucrium* species: Biology and Applications, Chapter VIII: Secondary metabolites of *Teucrium* species with toxic effects. Springer Nature, 2020. DOI: [10.1007/978-3-030-52159-2](https://doi.org/10.1007/978-3-030-52159-2).

## Poster presentations in conferences

- **Maria-Eleni Grafakou**, Eva Maria Pferschy-Wenzig, Heba Aziz-Kalbhenn, Olaf Kelber, Rudolf Bauer. Antidepressant treatment of IBS: action of St. John's wort on gut microbiota, United European Gastroenterology Week, 12-15/10/2024, Vienna, Austria
- **Maria-Eleni Grafakou**, Eva Maria Pferschy-Wenzig, Heba Aziz-Kalbhenn, Olaf Kelber, Christine Moissl-Eichinger, Rudolf Bauer. Gut microbiota - a new aspect for understanding the antidepressant effects of *Hypericum perforatum*? International Congress on Natural product Research, 13-17/07/2024, Krakow, Poland
- **Maria-Eleni Grafakou**, Eva Maria Pferschy-Wenzig, Olaf Kelber, Rudolf Bauer. Metabolism of *Valeriana officinalis* root extract with human fecal samples. Tetranational Congress Phytotherapy 30-31/05/2024, Utrecht, The Netherlands
- **Maria-Eleni Grafakou**, Eva Maria Pferschy-Wenzig, Heba Aziz-Kalbhenn, Olaf Kelber, Christine Moissl-Eichinger, Rudolf Bauer. Could gut microbiota be involved in the antidepressant effects of St. John's Wort? Tetranational Congress Phytotherapy 30-31/05/2024, Utrecht, The Netherlands
- **Maria-Eleni Grafakou**, Eva Maria Pferschy-Wenzig, Manuela R. Pausan, Ramy M. Ammar, Olaf Kelber, Rudolf Bauer. A metabolomic approach to investigate metabolization of *Echinacea purpurea* extract in the upper gastrointestinal tract *in vitro*. 70<sup>th</sup> Annual Conference of the Society for Medicinal Plant and Natural Product Research (GA), 02-05/07/2023, Dublin, Ireland.
- **Maria-Eleni Grafakou**, Eva Maria Pferschy-Wenzig, Manuela R. Pausan, Ramy M. Ammar, Olaf Kelber, Rudolf Bauer. Ein metabolomischer Ansatz zur Untersuchung der Metabolisierung von *Echinacea-purpurea*-Extrakt in einem In-vitro-

Modell des oberen Gastrointestinaltrakts. GPT Phytotherapy congress, 15-17/06/2023, Bamberg, Germany. Zeitschrift für Phytotherapie, 44(S 01): S22, 2023. DOI: [10.1055/s-0043-1769545](https://doi.org/10.1055/s-0043-1769545).

- **Maria-Eleni Grafakou**, Eva Maria Pferschy-Wenzig, Manuela R. Pausan, Ramy M. Ammar, Olaf Kelber, Rudolf Bauer. *Hypericum perforatum* L.: in vitro upper gastrointestinal tract digestion and fermentation with human fecal samples. GPT Phytotherapy congress, 15-17/06/2023, Bamberg, Germany. Zeitschrift für Phytotherapie, 44(S 01): S21-S22, 2023. DOI: [10.1055/s-0043-1769544](https://doi.org/10.1055/s-0043-1769544).
- **Maria-Eleni Grafakou**, Christina Barda, Jörg Heilmann, Helen Skaltsa. ICAM-1 bioassay for the evaluation of sesquiterpene lactones from *Calea* and *Centaurea* spp., 69<sup>th</sup> Annual Conference of the Society for Medicinal Plant and Natural Product Research (GA), 05-08/09/2021, Bonn, Germany, Virtual Conference. *Planta Medica* 87(15), 2021. DOI: [10.1055/s-0041-1736976](https://doi.org/10.1055/s-0041-1736976).
- **Maria-Eleni Grafakou**, Christina Barda, Helen Skaltsa, Jörg Heilmann. Identification of parthenolide metabolites in human liver microsomes by LC-Q-TOF-MS/MS, 69<sup>th</sup> Annual Conference of the Society for Medicinal Plant and Natural Product Research (GA), 05-08/09/2021, Bonn, Germany, Virtual Conference. *Planta Medica* 87(15), 2021 DOI: [10.1055/s-0041-1736874](https://doi.org/10.1055/s-0041-1736874).
- **Maria-Eleni Grafakou**, Aggeliki Diamanti, Eleftheria Simirioti, Asimina Terezaki, Christina Barda, Ioannis Sfiniadakis, Michail Rallis, Helen Skaltsa. Wound healing efficacy of EO from *Hypericum* spp. growing wild in Greece. 1<sup>st</sup> Panhellenic Congress of Ethnopharmacology, 11-13/10/2019, Athens, Greece.
- Konstantina Papakosta, **Maria-Eleni Grafakou**, Christina Barda, Ioannis V. Kostopoulos, Ourania Tsitsilonis, Helen Skaltsa. Phytochemical investigation and cytotoxic evaluation of *A. coarctata* Poir. on MCF-7 and HeLa cell lines. 1<sup>st</sup> Panhellenic Congress of Ethnopharmacology, 11-13/10/2019, Athens, Greece.
- **Maria-Eleni Grafakou**, Helen Skaltsa. Flavonol arabinofuranosides from the methanolic extract of *Hypericum jovis*. 67<sup>th</sup> Annual Conference of the Society for Medicinal Plant and Natural Product Research (GA), 01-05/09/2019, Innsbruck, Austria. *Planta Medica*, 85, 1484, 2019. DOI: [10.1055/s-0039-3399884](https://doi.org/10.1055/s-0039-3399884).
- **Maria-Eleni Grafakou**, Aggeliki Diamanti, Eleftheria Simirioti, Asimina Terezaki, Christina Barda, Michail Rallis, Helen Skaltsa. Preliminary results: Essential oils from *Hypericum* spp. growing wild in Greece and their wound healing effects. 67<sup>th</sup> Annual Conference of the Society for Medicinal Plant and Natural Product Research (GA), 01-05/09/2019, Innsbruck, Austria. *Planta Medica*, 85, 1543, 2019. DOI: [10.1055/s-0039-3400074](https://doi.org/10.1055/s-0039-3400074).
- **Maria-Eleni Grafakou**, Aggeliki Diamanti, Eleftheria Antaloudaki, Helen Skaltsa. Chemical analysis of the essential oils of five *Hypericum* spp. growing wild in Greece. 19<sup>th</sup> International Congress of the Society of Ethnopharmacology, 12-14/06/2019, Dresden, Germany.
- Eirini Christodoulou, **Maria-Eleni Grafakou**, Helen Skaltsa, Nikolaos Kadoglou, Nikolaos Kostomitsopoulos, Georgia Valsami. Saffron aqueous extract: phytochemistry & determination of crocetin's serum and tissue pharmacokinetics after oral and intravenous administration to C57/BL6J mice. 30<sup>th</sup> International Symposium on the Chemistry of Natural Products and 10<sup>th</sup> International Congress on Biodiversity, 24-29/11/2018, Athens, Greece.
- **Maria-Eleni Grafakou**, George A. Karikas, Mahabir P. Gupta, Helen Skaltsa. Ten metabolites isolated from *Calea jamaicensis* (L.) L. 8<sup>th</sup> International Conference on Oxidative Stress in Skin Medicine and Biology, 06-09/09/2018, Andros, Greece.
- **Maria-Eleni Grafakou**, Zacharias Kyriotakis, Helen Skaltsa. Chemical analysis of the essential oil of *Hypericum jovis*, a narrow endemic species of Crete (Greece). 8<sup>th</sup> International Conference on Oxidative Stress in Skin Medicine and Biology, 06-09/09/2018, Andros, Greece.
- **Maria-Eleni Grafakou**, George A. Karikas, Mahabir P. Gupta, Helen Skaltsa. Preliminary study: Secondary metabolites from *Calea jamaicensis* (L.) L., First Austrian Summit on Natural Products Science and Technology behind Phytopharmacy, Phytocosmetics and Phytonutrition, 14-16/01/2018, Seefeld, Austria.
- **Maria-Eleni Grafakou**, Samah Djeddi, Hamel Tarek, Helen Skaltsa. Cnicin as chemotaxonomic marker in *Centaurea papposa* (Coss.) Greuter, First Austrian Summit on Natural Products Science and Technology behind Phytopharmacy, Phytocosmetics and Phytonutrition, 14-16/01/2018., Seefeld, Austria.
- **Maria-Eleni Grafakou**, Samah Djeddi, Helen Skaltsa. Secondary metabolites from the aerial parts of *Centaurea papposa* (Coss.) Greuter. 3<sup>rd</sup> International Conference on Natural Products Utilization: From Plants to Pharmacy Shelf, 18-21/11/2017, Bansko, Bulgaria.

## Invited lectures in conferences/seminars

**Maria-Eleni Grafakou:** From Skin to Brain: Exploring *Hypericum perforatum*'s healing potential, 11th Conference in Oxidative Stress in Biology and Skin Medicine and Biology, 12-15/09/2024, Andros, Greece

**Maria-Eleni Grafakou:** The role of gut microbiota for the activity of BCH natural products in mental health, Bayer Consumer Health Fellows Science Talk Series (webinar), 06/06/2024

## Oral presentations in conferences

- **Maria-Eleni Grafakou,** Eva-Maria Pferschy-Wenzig, Heba Aziz-Kalbhenn, Olaf Kelber, Christine Moissl-Eichinger, Rudolf Bauer. Assessing the role of the gut microbiome for the antidepressant effects of *Hypericum perforatum* using a multi-omics approach. 23rd International Congress of the International Society for Ethnopharmacology & the 2nd International Congress of the African Phytomedicine Scientific Society (ISE-APSS 2024), 23-26/10/2024, Cape Town, South Africa
- **Maria-Eleni Grafakou,** Eva Maria Pferschy-Wenzig, Heba Aziz-Kalbhenn, Olaf Kelber, Rudolf Bauer. Antidepressant treatment of IBS: action of St. John's wort on gut microbiota (3 min poster presentation), United European Gastroenterology Week, 12-15/10/2024, Vienna, Austria
- **Maria-Eleni Grafakou,** Eva Maria Pferschy-Wenzig, Heba Aziz-Kalbhenn, Olaf Kelber, Rudolf Bauer. Therapie von IBS mit einem pflanzlichen Antidepressivum? Wirkung von Johanniskraut auf das Darmmikrobiom (8 min). Viszeral Medizin, 30/09-05/10/2024, Leipzig, Germany
- **Maria-Eleni Grafakou,** Eva Maria Pferschy-Wenzig, Olaf Kelber, Rudolf Bauer. Enterolactone and enterodiol produced by fermentation of Valerian root extract with human fecal samples (15 min), International Congress on Natural product Research, 13-17/07/2024, Krakow, Poland
- **Maria-Eleni Grafakou,** Eva Maria Pferschy-Wenzig, Heba Aziz-Kalbhenn, Olaf Kelber, Rudolf Bauer. Bidirectional interactions with the human gut microbiota - a new aspect for understanding the antidepressant effects of *Hypericum perforatum*? (15 min), 2<sup>nd</sup> Panhellenic congress of Ethnopharmacology, 01-03/03/2024, Ioannina, Greece
- **Maria-Eleni Grafakou,** Eva Maria Pferschy-Wenzig, Olaf Kelber, Rudolf Bauer. Metabolization of *Hypericum perforatum* extract by human gut microbiota (15 min). 70<sup>th</sup> Annual Conference of the Society for Medicinal Plant and Natural Product Research (GA), 02-05/07/2023, Dublin, Ireland.
- **Maria-Eleni Grafakou,** Eva Maria Pferschy-Wenzig, Manuela R. Pausan, Ramy M. Ammar, Olaf Kelber, Rudolf Bauer. In-vitro fermentation of medicinal plant extracts related with mental health by human fecal microbiota: The example of *Hypericum perforatum* (10 min). HMPPA Symposium "NEXT GENERATION IN PHARMACOGNOSY", 11-12/05/2023, Salzburg, Austria.
- **Maria-Eleni Grafakou,** Eva Maria Pferschy-Wenzig, Manuela R. Pausan, Ramy M. Ammar, Olaf Kelber, Rudolf Bauer. Effects of in vitro upper intestinal tract digestion and fermentation with human fecal samples on *Hypericum perforatum* extract (20 min). Austrian Summit on Natural Products, 26-28/03/2023, Seefeld, Austria.
- **Maria-Eleni Grafakou,** Eva Maria Pferschy-Wenzig, Manuela R. Pausan, Ramy M. Ammar, Olaf Kelber, Rudolf Bauer. Effect of Upper Intestinal Tract Digestion on *Hypericum perforatum* extract using the Infogest Protocol (10min). 22<sup>nd</sup> International Congress of the International Society of Ethnopharmacology, 24-26/02/2023, Imphal, India
- **Maria-Eleni Grafakou,** Eva Maria Pferschy-Wenzig, Manuela R. Pausan, Ramy M. Ammar, Olaf Kelber, Rudolf Bauer. Metabolization of the herbal preparation BAY 987204 by human gut microbiota (15 min). 70th International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research, 28-31/08/2022, Thessaloniki, Greece. *Planta Medica* 88(15): 1410, 2022. DOI: [10.1055/s-0042-1758933](https://doi.org/10.1055/s-0042-1758933).
- **Maria-Eleni Grafakou,** Eva Maria Pferschy-Wenzig, Rudolf Bauer. Gut microbiota, herbal preparations, and mental health (5min). HMPPA Symposium "NEXT GENERATION IN PHARMACOGNOSY", 19-20/05/2022, Schloss Bach, Austria.

- **Maria-Eleni Grafakou**, Aggeliki Diamanti, Eleytheria Simirioti, Asimina Terezaki, Christina Barda, Ioannis Sfiniadakis, Michail Rallis, Helen Skaltsa. Wound healing effects from Essential Oils from *Hypericum* spp. growing wild in Greece (12 min). 20th International Congress of the International Society of Ethnopharmacology, Virtual Congress, 18-20/04/21.
- **Maria-Eleni Grafakou**, Aggeliki Diamanti, Eleytheria Simirioti, Asimina Terezaki, Christina Barda, Ioannis Sfiniadakis, Michail Rallis, Helen Skaltsa. Another proof of wound healing activity from the genus *Hypericum*? (10min), 14<sup>th</sup> Young Researcher Workshop (selected as 1 of 12 young researchers to present their results), eSymposium, Society for Medicinal Plant and Natural Product Research (GA), 07/11/2020.
- **Maria-Eleni Grafakou**, Aggeliki Diamanti, Eleytheria Simirioti, Asimina Terezaki, Christina Barda, Ioannis Sfiniadakis, Michail Rallis, Helen Skaltsa. Wound healing efficacy of essential oils from *Hypericum* spp. growing wild in Greece (selected from posters to be orally presented -in Greek, 10 min) 1<sup>st</sup> Panhellenic Congress of Ethnopharmacology, 11-13/10/2019, Athens, Greece
- **Maria-Eleni Grafakou**, Helen Skaltsa. NMR strategy in plant metabolomics (presented in Greek, 20min). 3rd Panhellenic Scientific Conference of Pharmacy Students, 08-09/12/2018, Thessaloniki, Greece.
- **Maria-Eleni Grafakou**, Helen Skaltsa. NMR metabolomic strategy: Secondary metabolites from *Calea jamaicensis* (10 min). Athens Conference on Advances in Chemistry (ACAC2018), 30/10-02/11/2018, Athens, Greece.
- **Maria-Eleni Grafakou**, Helen Skaltsa. Chemical analysis of the essential oil of *Hypericum jovis*, a narrow endemic species of Crete (Greece). Poster presentation presented (3min) orally in 8<sup>th</sup> International Conference on Oxidative Stress in Skin Medicine and Biology. 06-09/09/2018, Andros, Greece.
- **Maria-Eleni Grafakou**, Helen Skaltsa. Ten metabolites isolated from *Calea jamaicensis* (L.) L. Poster presentation presented (3min) orally in 8<sup>th</sup> International Conference on Oxidative Stress in Skin Medicine and Biology. 06-09/09/2018, Andros, Greece.

## Volunteer Experience

03/2022-03/2023: PostDoc Peer Mentoring Team, University of Graz

04/2018 - ongoing: Member of European Pharmaceutical Students Association-EPSA

03-04/2018: Athens Science Festival 2018

10/2017 - : Greek Pharmaceutical Students' Federation - GPSF

07/2017 - : Melios Animal protection

04/04/2017: Let's do it Greece 2017, Reforestation, Ymittos, Volunteer Group of Agricultural University of Athens

## Interests

hiking, via ferrata, canoeing, sailing (participation in Greek National Championships, Balkan Sailing Championship 2009, Servia)

## References

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