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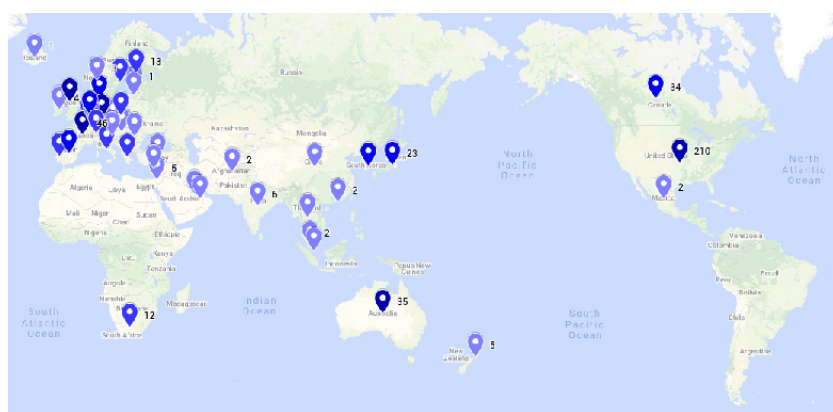
Metabolomics Society News

Conference Corner

Metabolomics 2021 Online - Conference Summary

Once more with feeling! The last week of June 2021 saw the second online incarnation of our yearly conference – Metabolomics 2021 Online. And it has been quite a ride. Earlier in 2020, we hoped the pandemic might subside by 2021, but as the year progressed it became obvious that international in-person meetings would still be impossible in 2021. So immediately after Metabolomics 2020 Online, we made the decision that our 2021 meeting would also be online and follow the successful and well-received structure of the 2020 meeting. As such, the conference sessions for Metabolomics 2021 were distributed over six time zones across the globe. The rolling conference schedule meant that everyone had the chance to participate in multiple sessions during their respective daytime hours.

During conference planning we considered that people might have gotten tired of online conferences after a year of pandemic life and assumed we might attract about 500 registrants. However, we were pleasantly surprised that the conference attendance was in the same order of magnitude as last year's online conference with a total of 751 registrants, 238 of them students. These numbers are especially exciting, given that this year's conference was only 9 months after the 2020 conference. Registrants came from 50 different countries across 6 continents (see the map graphic below). We are especially pleased that once again we had 360 new members, including numerous registrations from the emerging regions of Africa and South America, where we often have poor representation at in-person conferences because of high travel costs. Welcome to all new members! We hope to see and hear more of you in the future!



Registrations were accompanied by 442 submitted abstracts, which is a marked increase in abstract numbers compared to 2020. From these submissions we constructed a varied conference program, centered around three thematic streams and comprising 12 invited keynotes, 24 oral presentations, 12 poster flash talks, 4 workshops, 4 sponsor studios, and 4 sponsor talks. We are especially proud that we again achieved a highly balanced lineup of keynote speakers in terms of scientific topics, gender, and geographical representation.

Ian Forsythe
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MetaboNews is a monthly newsletter published in a partnership between The Metabolomics Innovation Centre (TMIC) and Metabolomics Society.

Metabolomics Society News

Day 1 of the conference kicked off with workshops from the Australian and New Zealand Metabolomics Society (Lipidomics), the Swiss Metabolomics Society (Data Analysis), the Epidemiology Task Group, a project management/career development workshop from the Early Members Network (EMN), and four sponsor workshops. All workshops were well received with excellent attendee feedback. While the Metabolomic Epidemiology Task Group had the highest attendance, we were thrilled with the enthusiastic feedback from both of our affiliate Society groups and the EMN. In addition, the sponsor workshops demonstrated that industry has been able to make successful technological development despite the logistical challenges of the pandemic.

On day two we moved into the scientific sessions, kicked off by a Keynote from Peter Meikle (Baker HDI, Melbourne, Australia), who told us about new developments in lipidomics, including preparation methods for spatially resolved lipidomics. Theodore Alexandrov (EMBL Heidelberg, Germany) continued in that vein by showing impressive developments in mass spectrometry imaging and single-cell metabolomics and managed to have the talk at the conference that was most attended “live”. The third day started with a Keynote by Farhana Pinu (Plant & Food NZ) who talked about the contents of the wine metabolome – something many of us have been “investigating” via different means over the past year – and the surprising discovery of a complex lipidome in wine that is influencing taste and flavour. Equally spectacular was Emma Schymanski’s Keynote (U Luxembourg) who characterized the quantity of pharmaceuticals in Luxembourg’s surface waters with a clever combination of mass spectrometry and bioinformatics. By distributing the sessions across the time zones, we were able to expand the geographical spread of our speakers and the thematic spread of the talks was equally diverse, ranging from new databases and analysis methods, to understanding coffee production, and

metabolomics on a chip.

We do not want to finish this review without thanking all the people involved. First, thank you very much to our generous Platinum and Gold sponsors without whom the event would not have been possible:

- **Platinum:** Agilent Biocrates, Bruker, European Network of FT-ICR MS Centres, Metabolon, SCIEX, Thermo Fisher Scientific, Waters
- **Gold:** Avanti Polar Lipids, Cambridge Isotope Laboratories, LECO Europe, Merck KGaA

Thank you to the Society’s Conference Committee who once again served as the local organizing committee (“LOC”) of the conference, and the whole Board of Directors for their support. Thank you to all the colleagues who were involved in reviewing abstracts and posters. And an especially huge Thank You to Leslie LeClaire and Amy Bornhorst from A-S-K, our professional conference organizer, who were there to support every session and every talk and thus did not get any significant sleep for three days.

We would also like to acknowledge the following winners of prizes and awards connected to the conference:

- Poster prizes: As the winners of the best posters in the three conference streams their posters were upgraded to flash talks.
 - Samuel Bertrand, Université De Nantes
 - Evelina Charidemou, University of Cyprus
 - Li Chen, Institute of Metabolism & Integrative Biology, Fudan University
 - Michael Christopher, North Carolina State University
 - Danielle Haslam, Brigham and Women’s Hospital/Harvard Medical School
 - Ritchie Ly, McMaster University

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- Bernd Mitic, University of Natural Resources and Life Sciences, Vienna
 - Sastia Prama Putri, Osaka University
 - Ana Rosen Vollmar, Yale University School of Public Health
 - Xinyi Shen, Yale School of Public Health
 - Jorien Van der Weerd, University Medical Center Groningen
 - Cecilia Wieder, Imperial College London
- The *Journal of Steroid Biochemistry and Molecular Biology (Elsevier)* awarded one Best Oral Abstract Award (\$300) and two Poster Prizes (\$100 each) to early-career or student scientists and the recipients are:
- **Best Oral Abstract:** Ines Lains, Harvard Medical School (USA)
 - **Best Poster Abstract:** Ritchie Ly, McMaster University (Canada) and Evelina Charidemou, University of Cyprus (Cyprus)
- The winners with the most points for interactive participation during Metabolomics 2021 Online are: **Shayne Mason** (North-West University), **Tomasz Pienkowski** (Medical University of Bialystok) and **Susanne Marr** (Leibniz Institute for Plant Biochemistry). Each winner received a complimentary year of membership to the Metabolomics Society.

Congratulations to all our winners!

Now that the 2021 conference is behind us, we are working through the feedback we have received from you, and have started planning for the 2022 meeting, which we hope we will be able to hold as an in-person meeting in June/July of next year. Stay tuned for some exciting updates over the coming months!

We would also like to announce a special conference edition of *Metabolites*, featuring research presented during Metabolomics 2021 Online. We encourage you all to submit the research you presented at the conference. See the announcement and link below from our guest editors.

Warm thanks to everyone who participated in the online conference,

Horst Joachim Schirra & Jessica Lasky-Su

International Affiliates Corner

Metabolomics Association of North America (MANA)

Visit <https://metabolomicsna.org>

#MANA 2021

We are excited to announce that **registration for the 3rd Annual MANA conference is now open!** You can access the conference registration page [here](#) or alternatively go directly to the [registration portal](#). As in previous years, **registration costs are \$25 for early career members and \$50 for established investigators**. Registration includes 1-year of MANA membership.

During registration, you will have the opportunity to apply for 9 different types of MANA awards. These are summarized below. Contact mana@metabolomicsna.org for full application details.

Application required:

- **Early Career Award**, \$1000, Deadline: Sept. 24, 2021
- **Mark P. Styczynski Early Career Award in Computational Metabolomics**, \$1000, Deadline: Sept. 24, 2021
- **Emerging Leader Award in Metabolomics Service Cores**, \$1000 toward training, Deadline: October 1, 2021
- **MANA Childcare Grants**, up to \$250, Deadline: October 1, 2021

Presentation based:

- **ECM Lightning Talk Award**, \$100
- **ECM Best Poster Award - Postdoctoral fellow**, \$100
- **ECM Best Poster Award - Graduate student**, \$100
- **ECM Best Poster Award - Undergraduate student**, \$100
- **Metabolomics Service Cores Best Presentation Award**, \$500

MANA WomiX Interest Group

Save the date for our IOS Seminar “**Best Practices for Effective Science Communication**” on **Tuesday, October 19th from 12:00-1:00 pm EST** which will take place during #MANA2021. Science communication is an important transferable skill for all researchers at any career stage. We’ll hear strategies on effectively communicating our strengths as scientists and the importance of our research findings from experts in both the fields of metabolomics as well as science communication. Lastly, WomiX will also be

Metabolomics Society News



The Metabolomics Society is an independent non-profit organisation dedicated to promoting the growth, use and understanding of metabolomics in the life sciences.

General Enquiries

info@metabolomicsociety.org

Membership Enquiries

launching some new projects that have been in the works this summer! So, keep an eye out for it!

Other News

Metabolites Special Issue Announcement

Dear Colleagues,

We are announcing a Special Issue of *Metabolites* dedicated to Metabolomics 2021 Online.

For this Special Issue, we particularly, but not exclusively, welcome papers presented at or resulting from Metabolomics 2021 Online, the second virtual conference of the Metabolomics Society that took place from June 22-24, 2021. The focus of this issue is topics relevant to metabolomic science.

More information about the Special Issue can be found at: https://www.mdpi.com/journal/metabolites/special_issues/Metabolomics_2021

We encourage you to submit an article and look forward to reading your papers.

Dr. Krista Zanetti and Assoc. Prof. Dr. Horst Joachim Schirra, Guest Editors

Spotlight | A Perspective on Metabolomics

SpOtlight

From the Human Genome Project to Precision Medicine

Spotlight article contributed by Dr. Jessica Lasky-Su¹

1. Brigham and Women's Hospital and Harvard Medical School, USA

"Those that fail to learn from history are doomed to repeat it." Winston Churchill.

The year was 2004 and I remember sitting in the auditorium and Harvard School of Public Health listening to Eric Lander talk about the completion of the Human Genome Project. At that point, I had been working as a genetic epidemiologist for several years. It certainly was an exciting time. Concurrently with that, was the developing technology that enabled the generation of "Genome-Wide Association Studies" (GWAS) that enabled a way to measure 100,000's of genetic variants in one individual at the same time. This idea was truly transformative. Up until then, we were only able to measure hundreds of variants in an individual or use an approach that focused on genetic variants for a candidate gene. The excitement of identifying important genetic variants for several common diseases was tremendous. There was a belief that identifying genetic variants for many diseases would transform medicine. It was at this time the term "Precision Medicine" was coined, and importantly, the driving force behind precision medicine was genetics.

While other biologic variants, such as RNA and DNA methylation were known to be important in the overall manifestation of genetics, the focus of measuring these variants on a genome scale was behind genetics. However, technology quickly advanced and shortly thereafter, multiple other variants were able to be measured on a genome scale. With this increase in type and depth of large-scale data related to genomics, "omic" data became a ubiquitous term for the global and/or complete measurement of a biological data type. With the expansion of both type and depth of data, genetic epidemiologists, such as myself, expanded their interest to other "omic" data types that were still related, yet distinct from genetics.

In retrospect, there is much that one may glean from the developments that occurred over these years of genetic epidemiology. Most notably, is the development of scientific rigor required to substantiate and ensure the robustness of genetic findings and how these approaches may be generalized to other omic data types. First, the small effect sizes that were observed in most genetic associations resulted in a change of standard, whereby an increasing number of journals required replication of genetic association findings in an independent population to be able to publish the finding. Another added benefit of the

use of multiple independent populations, was that it forced researchers to collaborate, rather than compete, with one another. Second, correction for multiple testing by adjusting the overall significance threshold became the expected standard approach to declare overall statistical significance for publication. In addition to these changes, advancements in programs that facilitate the analysis of large omic datasets, and the development of sophisticated statistical methods should not go underappreciated, as these advances also enabled newer omic areas to progress more quickly. In my mind, as well as many of my colleagues who were now also exploring other omic data types, these "standards" became the norm of our viewpoint of what was acceptable for publication. To date, I firmly believe that the implementation of these standards for metabolomic epidemiological studies will result in tremendous advancements in the field overall.

With the development of multiple omic data types, also came an expansion in perspective and understanding of what is meant by the term precision medicine. Without even recognizing the change, precision medicine went from an assumption that genetics data alone would drive the personalized treatment approach, to an understanding that precision medicine may be informed by multiple omic data types. However, despite the change in the understanding, to date most of the large-scale precision medicine initiatives remain primarily focused on genetics.

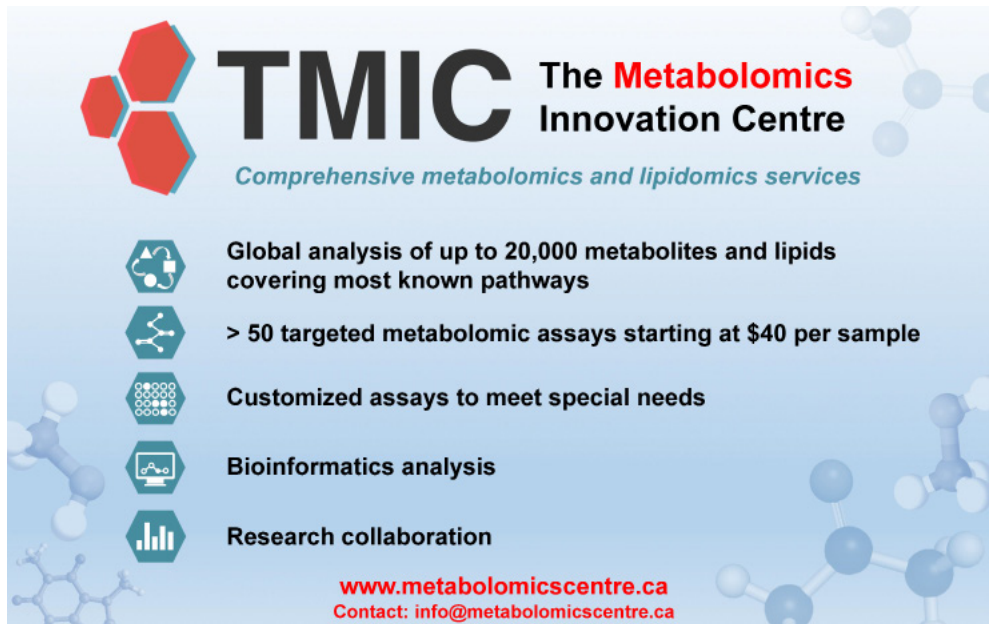
While many scientific endeavors remain largely focused on genetic-centric approaches to precision medicine, I believe that there remains low-hanging fruit that, with well-designed studies and scientifically rigorous approaches, metabolomic studies may identify and have significant translational impact. The clear potential that metabolomics offers in the realm of precision medicine is undeniable, given that a significant portion of both drugs and clinical biomarkers are metabolites. Following the identification and validation of a metabolite in well-powered discovery and replication populations, the subsequent steps to clinical translation are substantially less than other omic data types. While other omic data types often necessitate additional laboratory work that may require years to identify a functional effect, the clinical effect of many metabolites is often immediately obvious or easily assessed in a designed study (e.g., random-

Spotlight | A Perspective on Metabolomics






ized controlled trial), expediting the steps toward clinical translation. Furthermore, as the extent of clinically relevant metabolites, including both clinical biomarkers and drug metabolites, identified via global metabolomic profiling continues to increase, the clinical potential of metabolomics will only increase. A paradigm shift in the overall viewpoint of precision medicine would suggest that metabolomics should be the focus of precision medicine initiatives that are subsequently informed by other omic data types, such as genetics.

is fully immersed in large-scale metabolomic epidemiological studies of complex disease, I remain appreciative of the perspective I have as a genetic epidemiologist, while remaining optimistic about the potential that metabolomics has for translational medicine. While I'm sure there are many things I'm sure I could not come close to predicting, as I would have never predicted what transpired from that Human Genome Project symposium in 2004 until now, what I am sure of is if we implement the lessons learned from this time until now, the future for metabolomics is bright.

As I reflect on my journey to my current scientific focus that



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www.metabolomicscentre.ca
Contact: info@metabolomicscentre.ca

Recent Publications

Recently published papers in metabolomics

- [A map of mass spectrometry-based in silico fragmentation prediction and compound identification in metabolomics](#)
- [Analyzing Assay Specificity in Metabolomics Using Unique Ion Signature Simulations](#)
- [Applications of Metabolomics to Precision Nutrition](#)
- [Challenges in LC-MS-based metabolomics for Alzheimer's disease early detection: targeted approaches versus untargeted approaches](#)
- [Deciphering Microbial Metal Toxicity Responses using RB-TnSeq and Activity-Based Metabolomics](#)
- [Enantioselectivity Effects in Clinical Metabolomics and Lipidomics](#)
- [Grading of endometrial cancer using ¹H HR-MAS NMR-based metabolomics](#)
- [Integrated transcriptomics and metabolomics analysis to characterize alkali stress responses in canola \(Brassica napus L.\)](#)
- [Interrogating in vivo T-cell metabolism in mice using stable isotope labeling metabolomics and rapid cell sorting](#)
- [Metabolomics and lipidomics in NAFLD: biomarkers and non-invasive diagnostic tests](#)
- [Metabolomics and Molecular Approaches Reveal Drought Stress Tolerance in Plants](#)
- [Metabolomics for personalized medicine: the input of analytical chemistry from biomarker discovery to point-of-care tests](#)
- [Metabolomics reveal alterations in arachidonic acid metabolism in Schistosoma mekongi after exposure to praziquantel](#)
- [Metabolomics reveals the role of isopentenyl group in coumarins metabolism](#)
- [Metabolomics workflow for quality control of differently-processed pre-cooked chicken fillets](#)
- [Metabolomics-based molecular signatures reveal the toxic effect of co-exposure to nitrosamines in drinking water](#)
- [Pathway analysis in metabolomics: Recommendations for the use of over-representation analysis](#)
- [Serum Metabolomics Identifies Dysregulated Pathways and Potential Metabolic Biomarkers for Hyperuricemia and Gout](#)
- [SubTap, a Versatile 3D Printed Platform for Eavesdropping on Extracellular Interactions](#)
- [Systematic selection of competing metabolomics methods in a metabolite-sensory relationship study](#)
- [Targeted ¹H NMR metabolomics and immunological phenotyping of human fresh blood and serum samples discriminate between healthy individuals and inflammatory bowel disease patients treated with anti-TNF](#)
- [Targeted metabolomics revealed changes in phospholipids during the development of neuroinflammation in Abcd1^{tm1Kds} mice and X-linked adrenoleukodystrophy patients](#)
- [Targeted urine metabolomics with a graphical reporting tool for rapid diagnosis of inborn errors of metabolism](#)
- [Unravelling Plant Responses to Stress-The Importance of Targeted and Untargeted Metabolomics](#)
- [Untargeted metabolomics and lipidomics analysis identified the role of FOXA1 in remodeling the metabolic pattern of BaP-transformed 16HBE cells](#)
- [Untargeted metabolomics coupled with chemometric analysis deducing robust markers for discrimination of processing procedures: wine-processed Angelica sinensis as a case study](#)
- [Urinary metabolomics analysis of the protective effects of Daming capsule on hyperlipidemia rats using ultra-high-performance liquid chromatography coupled to quadrupole time-of-flight mass spectrometry](#)



Metabolomics Events

Postponed Until 2021

The 3rd Annual Canadian Metabolomics Conference

Venue

TBD, *The Metabolomics Innovation Centre*

Overview

The Third Annual Canadian Metabolomics Conference has been postponed until 2021. The conference will highlight work by leading researchers, including new technologies and approaches for metabolomics research, and applications in various fields. The conference will feature networking opportunities and a poster session designed for trainees to present their work. Our goal is to highlight the exceptional metabolomics science that is being done in Canada and abroad, and foster Canada's leadership role in the global research community. We look forward to seeing you in 2021!

Additional information [here](#).

20-22 September 2021

Market Insight Webinars – Singapore Agrifood Innovation

Venue

Online 9:00-10:30 PM EDT, *Canadian Technology Accelerator with Asia Biobusiness*

Overview

The Canadian Technology Accelerator (CTA) in Singapore in collaboration with Asia Biobusiness are organizing a two-part webinar series exploring the Agrifood Innovation landscape in Singapore titled, “Understanding the investment, regulatory and R&D environment in Singapore”, (September 20) and a second session “Opportunities in Alternative Proteins, Cellular and Fermented Foods, Waste Valorization and Novel Ingredients in Singapore” held on September 22, 2021. The webinars will begin at 9:00 PM EDT (duration 90 min).

The first session will feature three speakers from varying perspectives who will cover topics from public infrastructure and support to the innovation and investment appetite for Agrifood technologies. In the second session the speakers will focus on the key technology areas: alternative proteins, cellular agriculture, fermented foods, waste valorization and novel ingredients and share information on trends, market needs and commercial and collaboration opportunities Canadian companies can leverage in Singapore.

Additional information [here](#).

Metabolomics Events

1-2 October 2021

2nd International Webinar on Food Science & Food Chemistry: Nourishing Ourselves: Unlock the Potential of Food

Venue

Online Webinar, 12:00-13:00 CET, Science Meditech

Overview

Food Science and Food Chemistry 2021 is a principle address for Food Science and Food Chemistry, Nutritionists, Dieticians, President's, Founders, CEO's, business delegates, Scholastic workforce, Enrolled Dieticians and Experts, Young researchers and talented understudy bunches from universities and research labs giving an ideal space to share the latest progressions in the Food and Health. Food Science Meetings, Food Chemistry Conference and Food Health Events are basic for the common nationals to remain strong and fit for the length of their life. Food Science conferences, Food Science events and Food Science meetings are very important in terms of the research that are going on worldwide, so that the Knowledge can spread to remain fit and healthy throughout our life.

The key of Food Science 2021 is to share and discuss their research and critical reviews and converse about the newest research and novelties in the arena of Nutritional science, Immunology & Food Allergies, Food Toxicology, Food Engineering & Technology, Human Nutrition, Foodomics & Nutrigenomics, Food additives. Which includes keynote presentations, Oral talks, Poster presentations and Exhibitions..

Additional information [here](#).

4-8 October 2021

ELIXIR Fluxomics Training Shool 2021

Venue

Virtual Training School, ELIXIR-Metabolomics Community

Overview

The 1st ELIXIR Fluxomics Training School is organized by ELIXIR-GR (FORTH/ICE-HT) in collaboration with ELIXIR-ES (UB) in the context of the ELIXIR Metabolomics Community-lead Implementation Study "Standardizing the fluxomics workflows".

This 5-day course will take place in virtual mode on October 4-8, 2021 from 9:00 to 17:00 Central European Time (CET) and will provide an introduction to the field of fluxomics and the experimental and computational methods used to estimate and predict metabolic fluxes. The course is addressed mainly to graduate students and junior post-docs, of either experimental or computational background. Learning outcomes include familiarity with the basic concepts, experimental techniques, data deposition standards and computational methods and software tools in fluxomics.

The course includes hands-on experience in computational methods and software tools and mini team projects that will help the students apply the taught concepts.

Additional information [here](#).

Metabolomics Events

17-21 October 2021

3rd Annual MANA Conference: Foods for Health Discovery

Venue

Virtual Conference, Ohio State University & MANA

Overview

The 18th Annual Ohio Mass Spectrometry Symposium will be held virtually in conjunction with the 3rd annual Metabolomics Association of North America conference (MANA 2021). Join us for “Mass Spec Mornings” on October 19-20, 2021.

If you seek to get your planned metabolomics event endorsed by MANA and receive MANA funds, please [contact us!](#)

Additional information [here](#).

1-5 November 2021

Hands-On Mass Spectrometry Course

Venue

Department of Animal Science, Aarhus University, Blichers Allé 20, Tjele, Denmark

Overview

At Aarhus University, Department of Animal Science, we are organizing a “Hands-on mass spectrometry course”, which will give insight in the use of mass spectrometry for a range of analyses with relevance in animal science. The course will take place November 1-5, 2021.

Additional information [here](#).

15-18 November 2021

Hands-on Data Analysis for Metabolic Profiling

Venue

Virtual Sessions, Imperial College of London

Overview

This course will be run online, with Live lectures and tutorials using MS Teams.

We offer a comprehensive, hands-on training in processing and analysing metabolomics data from LC-MS and NMR technologies.

Attendees will have the opportunity to learn directly from internationally recognised leaders in the field and benefit from practical training in computational techniques and statistical methods.

This 5 day online course provides a comprehensive overview of data analysis for metabolic profiling studies focussing on data from NMR spectroscopy and Liquid Chromatography-

Metabolomics Events

Mass Spectrometry. It combines lectures and tutorial sessions using open source software to ensure a thorough understanding of the theory and practical applications.

Additional information [here](#).

19-20 Nov 2021

World Endocrine & Obesity Conference

Venue

Bangkok, Thailand

Overview

The 2021 World Endocrine and Obesity Conference (2021WEOC) will be organized around the theme “Endocrine Care through Innovation & Discovery”. The conference program for the 2 days will run as a hybrid conference model allowing Virtual / Digital and Physical platform. 2021WEOC is offering a line-up of local and international speakers with inspiring insights to share on advancing Endocrinology, Obesity, Diabetes and Metabolism Quality Improvement through Patient and Family Experiences.

2021WEOC anticipates hundreds of participants including Didactic keynote and session lectures, panel discussions, case-based breakouts, and original scientific abstracts, questions and answers, young researchers’ investigations and poster presentations. Leading experts will present new concepts, technologies, management protocols, and clinical experiences in their respective disciplines. This conference is perhaps a giant event that creates an ideal platform to share expertise addressing current advancements involved in critical care management. It will be a wonderful opportunity for all the delegates as it provides an international networking opportunity to collaborate with the world-class trauma and critical care and medical associations.

Additional information [here](#).

[Conference Flyer](#)

21-25 November 2021

Australian and New Zealand Society for Mass Spectrometry

Venue

Virtual, ANZSMS

Overview

The ANZSMS brings together a broad spectrum of scientists who work with mass spectrometry. The aim of the Society is to promote mass spectrometry by providing contact with local and international leaders in all areas, and provide a forum, through its meetings, for the presentation of research in mass spectrometry and its related disciplines. ANZSMS strongly supports early career researchers, gender diversity and equal opportunity in mass spectrometry.

ANZSMS28 is the premier conference for mass spectrometry in the Australia & New Zealand region and the latest in a series of conferences dating back to 1971.

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Participants of ANZSMS28 will discuss contemporary aspects of mass spectrometry relating to chemistry, biology, earth science, archaeology, environmental science, forensics, physics and the latest advancements in mass spectrometry technology and techniques. The program will also include panel discussion forums for early career researchers and mass spectrometry careers in academia and industry. The Australian Core MS Facilities Annual Meeting will be held as a satellite meeting. This is an event not to be missed!

ANZSMS28 is switching from hybrid to virtual-only. Due to the recent deterioration of the COVID-19 situation in Australia and New Zealand – the ANZSMS executive committee and ANZSMS28 organising committee have been left with no option but to cancel the in-person element of the conference and make ANZSMS28 a virtual-only event. We are excited to confirm that ANZSMS28 will use the highly reputable cloud-based OnAir virtual conference portal from EventsAIR to provide the best possible experience to all participants.

Registration prices have been reduced substantially to reflect the lower costs of the virtual event and promote strong online participation, support students and encourage people to join ANZSMS.

Additional information [here](#).

2 December 2021

Think big: from study design to metabolomics data interpretation

Venue

Virtual, 9:00 AM PST

Overview

In this short course, we will discuss pitfalls in study designs that may severely hamper metabolomic studies, shortly reviewing power analyses, bias in studies, biological and chemical controls. We will very briefly review the types of metabolomic assays that give investigators data and problems associated with the choice of assays. Most of the time will be allotted to data interpretation, i.e. what to do once you have received metabolomics data, once data have been curated and once statistics have been completed: how can you then further interpret the data, how to generate new hypotheses, how to link biological data and other -omics data, and how to utilize databases that are available for free online.

Additional information [here](#).

13-16 May 2022

2nd Metabolism in Health and Disease Conference

Venue

Fiesta Americana Condesa, Cancun, Mexico

Overview

Scientific chairs Heather Christofk (UCLA), Erika Pearce (Johns Hopkins University) and Janelle Ayres (Salk Institute) are coming together to host the 2nd Metabolism in Health and Disease conference.

Building on the success of the first meeting, this interdisciplinary meeting will bring

Metabolomics Events

together researchers working on immunity, metabolism, cancer, stem cells, neurobiology, and host-microbe interactions to gain a more integrated understanding of how metabolism impacts health and disease, with the aim of moving research in the field forward.

Additional information [here](#).

20-24 June & 20-23 September 2022

CliMetabolomics

Venue

20-24 June, Leipzig and Halle, France / 20-23 September, Saale, Germany

Overview

CliMetabolomics aims to better understand the plasticity of plants and to develop sustainable plants adapted to climate change. The event consists of seminars, discussions and many practical courses. The workshop is aimed at doctoral students, post-docs and young researchers working in France or Germany. It is funded by INRAE, Science Campus and the Franco-German University.

Additional information [here](#).

7-12 August 2022

Gordon Research Conference on Lipidomics

Venue

Jordan Hotel at Sunday River 27 Grand Circle Newry, ME, US

Overview

Save the date and check back in October 2021 for more information!

Additional information [here](#).

26-27 October 2022

2nd International Diabesity and Metabolic Surgery Summit

Venue

Tel Aviv, Israel

Overview

The focus of the forthcoming IDMSS 2022 will be the relationship between obesity and type 2 diabetes and their associated complications and the beneficial results obtainable from metabolic/bariatric surgery. This Summit is therefore vital to increase the international knowledge of these procedures and stimulate the investigation and development of new and more effective treatments. The Summit will bring together many of the world experts in the fields of metabolic surgery and medicine. A wide range of related topics will be presented,

Metabolomics Events

discussed and debated. The range and scope of the program are a must for all clinicians caring for patients suffering from metabolic diseases.

Additional information [here](#).

Metabolomics Jobs

Metabolomics Jobs

If you have a job you would like posted, please email Ian Forsythe (metabolomics.innovation@gmail.com).

Jobs Offered

FEATURED JOBS IN METABOLOMICS

| Job Title | Employer | Location | Posted | Closes | Source |
|--|----------------------------|--------------------|-----------|--------------|--|
| Metabolomics Expert / Analytical Chemist | MS-Omics | Vedbæk, Denmark | 7-Sep-21 | Until Filled | MS-Omics |
| Data Scientist – Metabolomics | MS-Omics | Vedbæk, Denmark | 7-Sep-21 | Until Filled | MS-Omics |
| Scientist (LC-MS/MS) for Assay and Kit Development | biocrates life sciences ag | Innsbruck, Austria | 12-Aug-21 | Until Filled | biocrates life sciences ag |

| Job Title | Employer | Location | Posted | Closes | Source |
|--|--|---------------------|-----------|--------------|--|
| Various Positions | Various | Various | 14-Sep-21 | Various | Metabolomics Association of North America Jobs |
| PDF Position | Fernandez Lab, School of Chemistry and Biochemistry, Georgia Institute of Technology | Georgia, USA | 2-Sep-21 | Until Filled | Fernandez Lab |
| Team Leader for Computational Metabolomics | Pacific Northwest National Library (PNNL) | Washington, USA | 25-Aug-21 | Until Filled | PNNL |
| Senior computational Metabolomics Scientist | Pacific Northwest National Library (PNNL) | Washington, USA | 25-Aug-21 | Until Filled | PNNL |
| Research Scientist for the Clinical Metabolomics Group at the Department of Congenital Disorders | Statens Serum Institut, Ministry of Health | Copenhagen, Denmark | 23-Aug-21 | 19-Sept-21 | Statens Serum Institut |
| Postdoctoral Appointee in Metabolomics | School of Medicine, Indiana University | Indiana, USA | 29-Jun-21 | | Indiana University School of Medicine |

Metabolomics Jobs

| Job Title | Employer | Location | Posted | Closes | Source |
|---|---|---|-----------|--------------|--|
| Visitor Scientist | ICGEB Laboratories | Cape Town, South Africa; New Dehli, India; and Trieste, Italy | 29-Jun-21 | 20-Sep-21 | PACTs Fellowships for LDCs |
| Metabolomics of Algae - Post-doctoral Fellowship | Cawthron Institute | Nelson, New Zealand | 10-Jun-21 | Until Filled | Cawthron Institute |
| Senior/Principal Research Associate, Metabolomics | Calico Life Sciences | South San Francisco, CA, USA | 26-Apr-21 | Until Filled | Calicolabs.com |
| PhD Student and Post-doctoral Fellow Positions in Mass Spectrometry Metabolomics and Proteomics | Technion – Israel Institute of Technology | Haifa, Israel | 29-Mar-21 | Until Filled | MetaboNews Jobs |
| Postdoctoral R&D Scientist - NMR-based metabolomics | Lesaffre | Loos, France | 16-Mar-21 | Until Filled | SmartRecruiters.com |
| PhD Research Project Opportunities, Centre for Integrative Metabolomics and Computational Biology | Edith Cowan University | Joondalup, Australia | 16-Mar-21 | Until Filled | Edith Cowan University |

Metabolomics Jobs

Metabolomics Jobs

If you have a job you would like posted, please email Ian Forsythe (metabolomics.innovation@gmail.com).

Jobs Wanted

This section is intended for very highly qualified individuals (e.g., lab managers, professors, directors, executives with extensive experience) who are seeking employment in metabolomics.

We encourage these individuals to submit their position requests to Ian Forsythe (metabolomics.innovation@gmail.com). Upon review, a limited number of job submissions will be selected for publication in the Jobs Wanted section.

- [Dr. Paulina Samczuk](#) - Seeking an interesting Postdoc offer or other position which would allow her to develop herself.