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Your MetaboNews Team

The Metabolomics Innovation Centre

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

Metabolomics Society News

CONFERENCE CORNER

Metabolomics 2022: Valencia, Spain - June 19-23

Hosted by the Metabolomics Society

Registration and abstracts submission are open

Website: Metabolomics2022.org

We are delighted to announce that registration is open for Metabolomics 2022– the 18th Annual Conference of the Metabolomics Society. We are thrilled to be hosting an in-person event in Valencia, Spain! While the past two virtual conferences were very successful with over 900 participants each year, we welcome back the opportunity to meet face to face with colleagues and industry partners.

Abstract Submission – Do Not Delay!

Abstract submission is open now through **March 14, 2022**, for oral presentations. Poster abstracts will continue to be accepted through May 16, 2022. We look forward to seeing your latest findings!

The website will have additional details added in the coming weeks. Save your space and register soon! Members of the Society will receive discounted registration.

EMN Award 2022

The 2022 EMN Award aims at providing support to early career scientists to attend and actively participate in the 18th International Conference of the Metabolomics Society that will promote their professional development. The Metabolomics Society strives to promote diversity, inclusion, equality, therefore we encourage applications from low- and middle-income countries.

Visit the [Abstract Submission](#) page for additional details. Applications are submitted when you complete your Abstract Submission form.



MEMBERS CORNER

Early-Career Members Network (EMN)

EMN Webinar Series

The EMN would like to thank Professor Pieter Dorrestein and Dr. Emily Gentry for their presentations on “Annotating Unknowns in Untargeted Metabolomics Data,” which highlighted specific strategies to annotate unknowns using synthesis-based reverse metabolomics. If you missed our latest webinar, the recording is now available on [EMN Webinars – 2022 – Metabolomics Society](#). For updates on the EMN Webinar Series, follow our social media platforms. (Twitter: @EMN_MetSoc)

EMN Expert’s Opinion

This month, the EMN presents Johannes Rainer (Twitter: @jo_rainer) who kindly shares his experience in the development of R-based packages for untargeted metabolomics and their implementation on the analysis of large datasets. For more details follow the link [Johannes Rainer - Metabolomics Society Wiki](#).

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

General Enquiries

info@metabolomicssociety.org

Membership Enquiries

membership@metabolomicssociety.org

Membership News for 2022

The Metabolomics Society Membership Committee identified that the current fees are a barrier for some members to join the Metabolomics Society if they reside in low- and middle-income countries. Therefore, we propose to implement changes to our membership fee structure in order to broaden equity and engagement across our membership.

From February 10th, 2022, the membership fees for the Metabolomics Society will change and will be applied at the time of joining or renewing membership. We have decreased membership fees for individuals (full, student, and emeritus) that currently reside in middle- and low-income countries. For other countries, the cost of full membership will increase by a modest \$5 (USD) annually, as membership fees have remained the same for many years and have not considered annual inflation. However, there will be no increases for student and emeritus members.

Jessica-Lasky-Su, Fabien Jourdan, Baljit Ubhi

Officers of the Metabolomics Society

Caroline Johnson

Chair of the Membership Committee, Metabolomics Society

TASK GROUPS CORNER

Metabolomic Epidemiology Task Group

The Metabolomic Epidemiology Task Group hosts the second webinar in our series:

Title: Novel Insights into Chronic Disease: Perspectives from a Biochemist and an Epidemiologist on Metabolomics from the Nurses' Health Study

Date: Thursday, March 24, 2022
11:00 a.m. – 12:00 p.m. US Eastern Standard Time
5:00 p.m. – 6:00 p.m. Central European Time

[Register Here](#)

Speakers:

Dr. Clary Clish, PhD, Broad Institute of MIT and Harvard University
Dr. Heather Eliassen, ScD, Brigham and Women's Hospital and Harvard Medical School

Abstract: The Metabolomics Society's Metabolomic Epidemiology Task Group presents their second webinar featuring, two leaders in their fields—Dr. Clary Clish, Director of Metabolite Profiling at the Broad Institute of MIT and Harvard, and Dr. Heather Eliassen, Associate Director of the Channing Division of Network Medicine at Brigham and Women's Hospital and Professor of Nutrition and Epidemiology at the Harvard TH Chan School of Public Health—discuss their experiences of metabolomic epidemiology studies from conception to publication within the Nurses' Health Studies. The Nurses' Health Study and Nurses' Health Study II, led by Dr. Eliassen, are two ongoing cohorts of more than 230,000 women initiated in 1976. In collaboration with the Broad Institute, nearly 30 metabolomic epidemiology studies have been published from these cohorts to date. As such, Drs. Clish and Eliassen are ideally positioned to share their insights and experience regarding study design, necessary considerations for leveraging archived biospecimens for metabolomics, data analysis strategies and results interpretation. As a reflection of their more than 10 years working together, they will

furthermore describe the importance of communication between the lab and epidemiologists in creating the highest quality science possible when bringing together these diverse but highly complementary fields.

INTERNATIONAL AFFILIATES CORNER

Metabolomics Association of North America (MANA)

Visit <https://metabolomicsna.org>

WomiX

WomiX, an interest group of the Metabolomics Association of North America (MANA), is looking for content for the new WomiX RoundUP, a monthly email to stay connected with members. You can provide helpful tips, external events, job postings, etc. Send in content [here!](#)

Womxn in Metabolomics (WomiX) was established to promote the professional development and engagement of womxn in Metabolomics through creating a sense of community and providing opportunities for networking and mentorship. WomiX is committed to the advancement of womxn in Metabolomics and dedicated to promoting collaboration between researchers in the field of metabolomics.

Using "womxn" with an "x" in order to explicitly welcome trans women, transfeminine, genderfluid, and nonbinary participants. Everyone is welcome to join our community!

If you'd like to join WomiX, [sign-up here!](#) We encourage existing members to also fill this out so we can update member information!



Early Career Members

MANA Early Career Members (ECM) recently held its first virtual job fair of 2022 early in February. It was a great success with over 20 attendees (7 Recruiters/Employers & 21 Candidates). The ECM Virtual Job Fair provides a great opportunity for recruiters/employers and folks looking for their next job in the metabolomics field to meet. We use a “speed-dating” style where you get the chance to talk and network with a lot of people in an hour. If you are interested in participating in our next two virtual job fairs, please register below:

- [May 6, 2022, from 12-1pm ET](#)
- [Aug 5, 2022, from 12-1pm ET](#)

Are you a senior scientist or have a senior career position in metabolomics? Do you have career advice for our early career members? Submit your advice and we'll share them on Twitter as part of our #CareerTipTuesdays campaign!

[Submit your advice today!](#)



The poster features a dark blue background with a large, vibrant green brushstroke in the center. The text "2022 ECM Virtual Job Fair" is written in white, with "YOUR FUTURE AWAITS" below it. At the bottom, there is a white box containing the dates "May 6, 2022 and August 5, 2022". A circular logo in the top right corner contains the letters "E", "C", and "M" in a stylized arrangement.

As an employer or recruiter, you'll get the opportunity to meet potential candidates. As someone who is in the market, this is a great opportunity for you. We will help employers and potential candidates meet effortlessly in a virtual capacity via Zoom! Using Breakout Rooms, we'll set up and manage interviews and/or informal meetings.

May 6, 2022 and August 5, 2022



The advertisement features a light blue background with molecular structures. On the left, there is a logo consisting of three red hexagons. To the right of the logo, the text "TMIC The Metabolomics Innovation Centre" is displayed in large, bold letters. Below this, the tagline "Comprehensive metabolomics and lipidomics services" is written in a smaller font. A list of services is provided, each accompanied by a small icon: a globe for global analysis, a network diagram for targeted assays, a grid of dots for customized assays, a computer monitor for bioinformatics analysis, and a bar chart for research collaboration. At the bottom, the website "www.metabolomicscentre.ca" and contact email "info@metabolomicscentre.ca" are listed.

TMIC The **Metabolomics** Innovation Centre

Comprehensive metabolomics and lipidomics services

- Global analysis of up to 20,000 metabolites and lipids covering most known pathways
- > 50 targeted metabolomic assays starting at \$40 per sample
- Customized assays to meet special needs
- Bioinformatics analysis
- Research collaboration

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

Biswapriya Misra



Director of Platform
Innovation & Operations,
Enveda Biosciences

Biography

Dr. Biswapriya Misra holds an M.Sc. in Botany (Utkal University, India) and a Ph.D. in Biotechnology (Indian Institute of Technology Kharagpur, India). He has published over 60 peer-reviewed publications (with over 1100 citations), authored two book chapters, and has filed three international patents. At Enveda Biosciences (<https://www.envedabio.com/>), he leads a team of metabolomics and multiomics experts, helping to construct and decode the largest-ever anthropological, biological, and chemical dataset of plants to inspire new therapeutics.

Interview Q&A

How did you get involved in metabolomics?

My scientific journey started with a basic science degree and then a master's in botany. That's a passion that I have come back to throughout my career; analyzing the natural world and plants as a source of new bioactive compounds. My Ph.D. was in biotechnology, but the research involved bioprospecting Indian sandalwood phytochemicals using mass spectrometry, gene cloning, protein purification, and microscopy approaches. This work provided the first insights into sandalwood sesquiterpenoid essential oil and lignin biosynthesis. In my first postdoctoral position at the University of Science Malaysia, I led the sequencing of the rubber tree genomes and transcriptomes, gaining invaluable informatics skills in genomics and transcriptomics at scale. During my second

postdoc at the University of Florida (Gainesville, Florida, USA), I undertook extensive training in single cell-type metabolomics and proteomics that relied heavily on phytochemistry and computational mass spectrometry. All of these components and skills come together in my current position.

While at UF, I began my association with the International Metabolomics Society. I was selected as a member of the Society's second Early-Career Members Network (EMN) Committee for two years, starting in 2014. As an Assistant Professor at the Center for Precision Medicine, Department of Internal Medicine, Wake Forest Baptist Medical Center (Winston-Salem, North Carolina, USA), I integrated omics approaches in human populations and cohorts towards a systems biology understanding of the underlying

mechanisms of metabolic disorders such as diabetes, cardiovascular diseases, Alzheimer's disease, and aging. That's when I was elected to the Board of Directors of the Metabolomics Association of North America (MANA) in 2020. I resigned when I made the move back to India to join the Enveda team in New Delhi

What are some of the most exciting aspects of your work in metabolomics?

The field itself is exciting by virtue of how much untapped potential is waiting there--for scientists with the right tools and techniques. But what's absolutely thrilling is the idea of doing metabolomics at scale. That's what we're attempting at Enveda--building the first high-resolution chemical map of the natural world. By indexing the world's chemistry using metabolomics, our algorithms do for small molecule chemistry what AlphaFold, an AI system of Google's, does for protein structure. They help us discover novel, bioactive, and drug-like compounds in nature at scale.

What key metabolomics initiatives are you pursuing at your research centre or institute?

At Enveda Biosciences, we're using multiomics and metabolomics to uncover new bioactive molecules in plants. For plants, it is estimated that we don't know the chemical structure of around 95% of the molecules within them. Metabolomics researchers have introduced a new concept called "bioactivity-based molecular networking" (*Journal of Natural Products*, **81**, 758 (2018)), which allows us to identify potentially active molecules directly from fractionated bioactive extracts. It employs an approach called "bioactivity score prediction," which is calculated based on the relative abundance of a molecule in fractions and the bioactivity level of each fraction. This bypasses a series of steps that are highly laborious and prone to failure, replacing them with an infinitely-scalable bioinformatics tool.

What is happening in your country in terms of metabolomics?

The field of metabolomics has seen impressive growth in India over the past decade. It makes sense: We have a

wealth of well-educated and skilled scientists and a growing knowledge-based economy. You can see a snapshot of some recent peer-reviewed papers here in [Analytical Science Advances](#) (**2**, 495 (2021)). There are very impressive efforts from indigenous scientists driving NMR-, GC-MS-, and LC-MS/MS-based metabolomics in microbial, plant, and natural products chemistry and to tackle biomedical challenges.

Aside from the research, it's worth noting that India has a rich history of extracting alternative medicines from the natural world--particularly plants. For me, that's an exciting intersection. As a scientist from India, I have been able to identify countless bioactive terpenoids, phenolics, and flavonoids from local species using techniques such as NMR and mass spec.

How do you see your work in metabolomics being applied today or in the future?

I think metabolomics will play a big role in future drug discovery. We have barely scraped the surface when it comes to identifying and understanding all the diverse compounds within plants and other organisms. As more and more bottlenecks are overcome and metabolomics becomes more routine, I think we'll see a renaissance in natural product drug discovery and an increased understanding of the full potential of the world's biodiversity.

As we get better at mapping human metabolites through the same methods, we will also see a new era of metabolomics-based disease understanding and precision medicine.

As you see it, what are metabolomics' greatest strengths?

I love that it's unbiased and open-ended. With metabolomics, we can catalogue everything in a complex mixture, be it a blood sample or tumour biopsy or a plant extract. This discipline provides an untargeted, exploratory framework for everything. We can find pathways and patterns that we didn't know existed as we begin to understand the chemical basis of life.

What do you see as the greatest barriers for metabolomics?

One of the most challenging aspects of a metabolomics study is validation of a biomarker identity. As an essential step toward understanding the biological changes occurring within the system, it remains a major bottleneck in metabolomic analysis.

Similarly, metabolite annotation remains a big challenge in the field of untargeted metabolomics, where assigning chemical structures to mass spec features is difficult. There are challenges with the standardization of sample collection, storage, mass spec data acquisition, data formats, data processing, and interpretation workflow analytics. Combined, this can result in very different interpretations across laboratories. The good news for metabolomers/metabolomicists of the 21st century is that this brings enormous job security! We need to be able to resolve and refine each individual step in these complex workflows!

What improvements, technological or otherwise, need to take place for metabolomics to really take off?

Sample preparation strategies and analytical technologies have seen enormous growth. Where the field struggles to keep pace is with the data analytics component. That's the bottleneck that limits how rapidly we can, for example, discover and catalogue new metabolites. We're lucky at Enveda to have an integrated team with dedicated data scientists that we can lean on to take our science even further. This is a field where machine learning is not a *nice-to-have*, it's a *must-have*.

How does the future look in terms of funding for metabolomics?

The field of multiomics is absolutely booming and with metabolomics, it adds enormous value to the biological questions at hand. It's hard to focus on a single omics field when other groups are looking at the same problem using multiple lenses and dimensions. I see this trend driving growth and funding in metabolomics as one particularly exciting new frontier. Over the last five years, there has been explosive growth in metabolomics and interest in

metabolism from a systems biology perspective. Given that millions of US dollars were provided by the National Institutes of Health (USA) for research spanning multiple decades leading to a genomics-driven era of systems biology, one can imagine how much funding should be reserved for advancing metabolomics research. We have yet to see a single decent tool that can paint a truly integrated picture of a given biological system that uses metabolomics and other omics such as transcriptomics, proteomics, and even epigenomics and microbiomics, beyond known pathways.

What role can metabolomics standards play?

The Metabolomics Standards Initiative (MSI) has been around for a long time. They first proposed minimum reporting standards for metabolomics back in 2007. But a recent meta-analysis looking at metabolite identification in untargeted LC-MS metabolomics studies ([Journal of Proteome Research, DOI: 10.1021/acs.jproteome.1c00841 \(2021\)](https://doi.org/10.1021/acs.jproteome.1c00841)) shows that current practices are still woefully misaligned. The MSI guidelines have potential, but only if they are adhered to. As an industry we really need to focus on standardization moving forward. With thousands of publications on metabolomics appearing on a yearly basis, the MSI aimed at helping provide a framework for data-sharing towards *FAIR* (findable, accessible, interoperable, and reusable) practices—it's changing fast but remains a popular practice.

Do you have any other comments that you wish to share about metabolomics?

The field is so interdisciplinary that one needs expertise, not just from biologists, chemists, natural product scientists, and chemical engineers, but also from data scientists, informaticians, statisticians, and programmers, to solve challenges in untargeted metabolomics. We are barely scratching the surface of biological systems and chemical space in the natural world—the potential is enormous here! So it's no wonder that at Enveda, we are continually hiring talented people from all walks of expertise who aim to align with our pursuit of finding drugs from the natural world of plants.

Recent Publications

Recently published papers in metabolomics

- [Microbiome and metabolome features of the cardiometabolic disease spectrum.](#)
- [A Universally EDTA-Assisted Synthesis of Polytypic Bismuth Telluride Nanoplates with a Size-Dependent Enhancement of Tumor Radiosensitivity and Metabolism In Vivo.](#)
- [Integrated meta-omics reveals new ruminal microbial features associated with feed efficiency in dairy cattle.](#)
- [Systemic inflammation and metabolic disturbances underlie inpatient mortality among ill children with severe malnutrition.](#)
- [Stable Isotope Tracing and Metabolomics to Study In Vivo Brown Adipose Tissue Metabolic Fluxes.](#)
- [Dysregulated lipid metabolism blunts the sensitivity of cancer cells to EZH2 inhibitor.](#)
- [Distinct metabolic hallmarks of WHO classified adult glioma subtypes.](#)
- [Metabolomic and microbiome profiling reveals personalized risk factors for coronary artery disease.](#)
- [PM2.5 and Serum Metabolome and Insulin Resistance, Potential Mediation by the Gut Microbiome: A Population-Based Panel Study of Older Adults in China.](#)
- [Single-cell metabolomics: where are we and where are we going?](#)
- [Polystyrene micro-/nanoplastics induced hematopoietic damages via the crosstalk of gut microbiota, metabolites, and cytokines.](#)
- [Comparative metabolomics with Metaboseek reveals functions of a conserved fat metabolism pathway in *C. elegans*.](#)
- [Gut Microbiome-Targeted Modulations Regulate Metabolic Profiles and Alleviate Altitude-Related Cardiac Hypertrophy in Rats.](#)
- [Metabolic Snapshot of Plasma Samples Reveals New Pathways Implicated in SARS-CoV-2 Pathogenesis.](#)
- [Metabolomic selection for enhanced fruit flavor.](#)



Metabolomics Events

February 22-25, 2022

6th HBP Student Conference on Interdisciplinary Brain Research

Online

[Learn More Here](#)

Overview

The 4-day conference will be held in a hybrid format with most sessions being streamed online. Participation in the 6th HBP Student Conference is open to the entire student community and early career researchers, regardless of whether they are affiliated with the HBP (Human Brain Project) or not. Participants without contributions to the scientific programme are also welcome. We encourage all young scientists to register and aim for an equal representation of all genders.

March 3, 2022

Bits & Bites #3

Online

[Learn More Here](#)

Overview

These courses hosted by the UC Davis West Coast Metabolomics Center are great for grad students, postdocs, and other STEM professionals. The 3rd course is "Using MSDIAL to generate accurate comprehensive LC-MS/MS metabolomics datasets" on March 3 with Dr. Jacob Folz. Bits & Bites is an online course series that features in-depth topics in untargeted metabolomics. Each short course can be taken individually, or you can select multiple Bites. You will gain a deeper insight into current software, methods, and pitfalls. We've added multiple fundamental courses for those interested in learning the advantages and disadvantages of such topics as Mass Spectrometry, Lipidomics, Metabolism, and Gas Chromatography-MS in Metabolomics.

March 30, 2022

WCMC Online Guest Lecture Seminar Online

[Learn More Here](#)

Overview

Justin van der Hoof, PhD - Recent Advances in Mass Spectral Embedding and Network based Metabolomics Approaches that Enhance Natural Product Discovery on March 30, 2022 @ 10am PT

[Register Here](#)

[WCMC YouTube Channel](#)

March 31, 2022

Bits & Bites #4 Online

[Learn More Here](#)

Overview

These courses hosted by the UC Davis West Coast Metabolomics Center are great for grad students, postdocs, and other STEM professionals. The 4th course is "Introduction to the GNPS Ecosystem - Tools, Visualizations, and Data" on March 31 with Dr. Mingxun Wang. Bits & Bites is an online course series that features in-depth topics in untargeted metabolomics. Each short course can be taken individually, or you can select multiple Bites. You will gain a deeper insight into current software, methods, and pitfalls. We've added multiple fundamental courses for those interested in learning the advantages and disadvantages of such topics as Mass Spectrometry, Lipidomics, Metabolism, and Gas Chromatography-MS in Metabolomics.

April 7-8, 2022

Course Data Analysis for Metabolomics Wageningen, Netherlands

[Learn More Here](#)

Overview

Metabolomics experiments based on mass spectrometry (MS) or nuclear magnetic resonance (NMR) produce large and complex data sets. This course will introduce approaches to process and analyze data and design high-quality experiments. Through hands-on workshops and lectures highlighting the different concepts you will get a thorough basis for tackling the challenges in metabolomics data analysis.

April 12, 2022

MANA SODAMeet

Online

[Learn More Here](#)

Overview

The goal of SODA is to provide a community-driven resource of actively-maintained software, test datasets used for software benchmarking, and results produced by software. SODAMeets is a platform where data generators and computational scientists can share their use of software/data.

During SODAMeets (every 2 months), we will have two speakers present on software or data they would like to share with the community, emphasizing how these software/data are used.

April 27, 2022

WCMC Online Guest Lecture Seminar

Online

[Learn More Here](#)

Overview

Frances Platt, PhD – “Understanding the complexity of metabolomics in the lysosomal disorders: insights from Niemann-Pick disease type C.” Date/Time: April 27, 10am PT

[Register Here](#)

[WCMC YouTube Channel](#)

May 13-16, 2022

2nd Metabolism in Health and Disease Conference

Cancun, Mexico

[Learn More Here](#)

Overview

Topics will span diverse areas such as cancer metabolism, organismal metabolism in disease, metabolic pathway engagement in cell function, metabolites as signaling molecules, mitochondrial biology, nutrient sensing, metabolism in tissue homeostasis and repair, neurometabolism, and metabolism in host-microbe interactions.

May 29-June 2, 2022

19th International GCxGC Symposium Online

[Learn More Here](#)

Overview

While we had planned to host the meeting in beautiful Canmore, Alberta, we are now moving to a fully virtual event. Early-bird registration pricing is available until March 1, 2022.

Technical Program:

- 2022 John B. Phillips and Scientific Achievement Award Lectures
- 3.5 full days of live talks, posters and discussion sessions
- Opportunities to contribute virtual talks and posters

June 19-23, 2022

18th Annual Conference of the Metabolomics Society Valencia, Spain

[Learn More Here](#)

Overview

The meeting will be co-organized with the Spanish Society for Metabolomics (SESMET) and the Spanish Network for Metabolomics. Building on the success of previous years, the conference will present the latest advances in the field covering the major scientific themes of technological advances, bioinformatics, metabolomics applications in health and disease, exposomics, and a focus on metabolomics in agriculture, plants, food, and nutritional sciences. The scientific program will include plenary and keynote talks, parallel scientific sessions, poster sessions, sponsored luncheons, and other networking events.

June 20-24; September 20-23, 2022

CliMetabolomics France (June); Germany (September)

[Learn More Here](#)

Overview

CliMetabolomics is a Franco-German research workshop that aims to better understand the plasticity of plants and to develop sustainable plants adapted to climate change. CliMetabolomics offers training in analytical tools and an innovation management method for early career scientists. The workshop lasts two weeks and consists of seminars, discussions, and many practical courses.

August 7-12, 2022

Gordon Research Conference on Lipidomics Newry, Maine, USA

[Learn More Here](#)

Overview

In this Gordon Conference series, we will highlight recent developments in standardization, omics integration, and state-of-the-art technologies and their impact on applications to study human health and disease. The time is critical to set the future cornerstones in how to powerfully, adequately, and transparently define the lipidomics rules of new and existing platforms in basic research, and most importantly, in a regulatory environment. Overall, the future of lipidomics in the clinical and biological realms will be discussed at this conference, aligning with other ongoing consortia, with an anticipated active involvement of researchers across all important arenas (academic, industry, government) and different stages of their career (established and young scientists).

Applications for this meeting must be submitted by **July 10, 2022**. Apply early to avoid disappointment!

The conference chair is currently developing their detailed program, which will include the complete meeting schedule, as well as the titles of talks for all speakers. The detailed program will be available by **April 7, 2022**.

August 22-September 2, 2022

International Summer Sessions in Metabolomics Hybrid (Online, University of California-Davis)

[Learn More Here](#)

Overview

The course at UC Davis has been completely redesigned for an hybrid format and will also be recorded for the participants to view at a later time. All software training has transitioned to a virtual machine environment so training can be done from any location. Virtual machines are hosted by Amazon Web Services and can be accessed using either a PC or a Mac computer. Every unit is taught using interactive tools such as polling, using the annotation tool, utilizing non-verbal feedback, live questions, and group work.

September 16 – 18 2022

4th Annual MANA Conference Edmonton, Alberta, Canada

[Learn More Here](#)

Overview

We are very excited to announce that the 4th Annual MANA conference will take place September 16-18, 2022 on the campus of the University of Alberta in Edmonton, Alberta, Canada. The conference will be hosted by the University of Alberta and The Metabolomics Innovation Centre (TMIC), and the organizers have developed an engaging preliminary program. Stay tuned for more information and available travel and career development awards.

October 25-27, 2022

2nd International Diabesity and Metabolic Surgery Summit

Tel Aviv, Israel

[Learn More Here](#)

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

Take the Lead in Metabolomics with Agilent

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Metabolomics Jobs

If you have a job to post, please email your MetaboNews team at metabolomics.innovation@gmail.com.

Jobs Offered

Job Title	Employer	Location	Posted	Closes	Source
Postdoc in Metabolomics/ Exposomics	University of Vienna	Vienna, Austria	4-Feb-2022		University of Vienna
Postdoc in Mass Spectrometry	The Metabolomics Innovation Centre, University of Alberta	Edmonton, AB, Canada	7-Feb-2022	Until filled	MetaboNews Jobs
Various Positions	Various	Various (within North America)	Various		Metabolomics Association of North America
Doctoral Research in Cheminformatics of Persistent, Mobile Contaminants	University of Luxembourg	Luxembourg	24-Jan-2022	1-March-2022	University of Luxembourg Job Portal
Postdoctoral Research Associate (Sumner Lab)	University of North Carolina at Chapel Hill	Kannapolis, NC, USA	12-Jan-2022	Until filled	University of North Carolina Careers

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 the MetaboNews team at metabolomics.innovation@gmail.com. Upon review, a limited number of job submissions will be selected for publication in the Jobs Wanted section.

- **Dr. Rustem Shaykhtudinov** - Seeking a Research or Lab Manager position to apply his extensive experience and knowledge in the area of NMR metabolomics and his skills in NMR instrumentation maintenance.
[Click here for Dr. Shaykhtudinov's CV](#)



Want to see your content in MetaboNews?



Do you have an interesting story you would like to share with the metabolomics community? [Fill out this form](#) to learn more about contributing a Spotlight Article to MetaboNews.

Would you like to share your personal metabolomics story? [Fill out this form](#) to be featured in one of our MetaboInterviews.

Do you have a new publication that the metabolomics community should hear about? [Fill out this form](#) to have your publication featured in MetaboNews.

Are you searching for a highly qualified individual for your organization? [Fill out this form](#) to post your job in MetaboNews.



Vertical banner at the left page margin - \$250 CAD

Horizontal banner at the foot of the page - \$275 CAD

Half page ad - \$300 CAD

Full page ad - \$450 CAD

Featured Job Posting - \$50 CAD

Featured Event Posting - \$100 CAD

Commercial Spotlight Article or Interview - \$300 CAD

Prices do not include GST

Have any questions?

Contact your MetaboNews team at metabolomics.innovation@gmail.com