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## Metabolomics Society News

### Conference Corner

**Metabolomics 2021 Virtual Conference—Quick Summary with more to come!**

Thank you for your participation in Metabolomics 2021 Online—what a fabulous time we have had! We thank all the participants for making it a vibrant event full of talks, posters, and other events such as the Town Hall meeting and the pre-conference workshops! We had over 750 attendees from all over the world. If there are specific talks and/or workshops that you missed, you can log back in and watch the different presentations until September 30, 2021. We are compiling all the conference details, which will be presented in next month's *MetaboNews*.

With this year's meeting successfully completed, we hope we will see our current members and welcome new faces at our next annual meeting that will be in person after two years of virtual conferences. We are excited to announce that the conference will be in Europe. Stay tuned, as we will be announcing the specific location soon! More updates on the website for next year's meeting can be found at <http://metabolomics2022.org>.

### Members Corner

#### Early-career Members Network (EMN)

##### EMN Participation in the Online Metabolomics Society 2021 Conference

The EMN would like to express their gratitude to Drs. Jeanita Pritchett and Christopher Rose for their incredible participation in the EMN Career Development Workshop, entitled "Project Management for ECRs: Skills for Career Advancement". They highlighted the importance of project management basic principles and brilliantly shared must-know tips to apply in our daily ECR lives. The workshop ended with a very constructive Q&A session during which the complementarity between the career journeys of the two great speakers was particularly enjoyable. We are grateful to our speakers and the audience that joined us!

#### Opportunity to join the EMN!



**JOIN OUR TEAM**

We welcome applications from early-career scientists to join the Early-career Members Network committee of the Metabolomics Society

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Editor

The Metabolomics Innovation Centre  
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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



METABOLOMICS SOCIETY  
EARLY-CAREER MEMBERS NETWORK

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](mailto:info@metabolomicsociety.org)

### Membership Enquiries

Are you an early-career researcher working in the field of metabolomics and seeking an incredible learning experience, an opportunity to help our community, and a great way to increase your network? Then do not hesitate to join our team! We encourage applicants from all professional statuses (academia, government, or industry) and from all continents. All the information about how to apply can be found [here](#).

## International Affiliates Corner

### Metabolomics Association of North America (MANA)

Visit <https://metabolomicsna.org>

#### MANA 2021

The MANA WomiX Interest Group is looking for your input to shape a special workshop in August. The workshop is part of our Mentorship Program, but we will have it open to all. If you'd like more information about our upcoming CV and Interview skills workshop, fill out this form: <https://forms.gle/em8soVmjnhzrtK227>. WomiX had our last IOS event in June featuring Ph.D. students from different metabolomics labs in our event titled "Ask anything from A to Z: Ph.D. students from metabolomics labs." We were very lucky to have panelist speakers Brianna Garcia (Univ. of Georgia), Erik Anderson (Univ. of Illinois), Eryn Matich, Ph.D. (Univ. of Arkansas), Jenny Zhang (UC Davis), Khyati Mehta (Univ. of Cincinnati), and MaKayla Foster (NC State Univ.). We heard from Ph.D. students from different levels (i.e., early, mid-level, or senior) and a postdoc as they shared their experience about graduate school, metabolomics, and establishing their careers. Maryam Goudarzi, Ph.D. (Project Scientist from Cleveland Clinic Lerner Research Institute, Metabolomics Core) who attended our event said, "I thought the advice the speakers gave was valuable, I wish I had this kind of guidance when I was a student."

## Other News

### 2021 Honorary Fellows of the Metabolomics Society Announced

An Honorary Fellowship is a significant lifetime award granted by the Board of Directors of the Metabolomics Society to recognize exceptional members of the community who have either made outstanding contributions to the Metabolomics Society over a sustained period, and/or made a pioneering and sustained contribution to the science of metabolomics at an international level. With up to two lifetime Fellowships awarded each year, the Board is pleased to recognize the following individuals as the lifetime Honorary Fellows of the Metabolomics Society for 2021:

Ian Wilson, PhD.

*In recognition of your innovative work in metabolomic analysis, especially in promoting the adoption of HPLC-MS and UPLC-MS-based methodology, and more recently LC-ion mobility-MS, for untargeted metabolic phenotyping. Particularly noteworthy is your work to improve standards and data quality via the introduction of pooled samples for use in quality control.*

Tim Ebbels, PhD.

*In recognition of your founding work in metabolomics, particularly for the development of analytic pipelines and integrative omics tools, and your promotion of open-source code. Your contribution and leadership within the Metabolomics Society is also truly exemplary.*

## Metabolomics Society News

### The President's Award

The **President's Award** recognizes outstanding achievements in metabolomics. It is available for Society members who have been awarded a PhD no more than 5-10 years prior to the closing date for nominations in each round.

- Justin van der Hooft, PhD
- Candance Ulmer, PhD

We congratulate both award recipients and look forward to their continued contributions in the years to come.

### Call for Nominations for Directors of the Metabolomics Society

The Call for Nominations and Voting for the next Board of Directors will open in August; be on the lookout for an email with instructions on how to participate. We appreciate the participation of all members to help the future formation of the Metabolomics Society!



## Call for Proposals

TMIC is holding an open call for proposals for Canadian scientists who would like to join TMIC as a new Node member.

Submit your proposal to TMIC by July 31st.

Applicants should contact Jennifer @ <jennifer.reid@ualberta.ca> for more information and an application package.

# SpOtlight



## The Italian Metabolomics Network is Born

Spotlight article contributed by Sara Tortorella<sup>1</sup>, Roberta Pastorelli<sup>2</sup>, Andrea Armirotti<sup>3</sup>, Luigi Atzori<sup>4</sup>, Giuseppe Paglia<sup>5</sup>, Pietro Franceschi<sup>6</sup>

1. *Molecular Horizon srl, Bettona, Perugia, Italy*
2. *Istituto di Ricerche Farmacologiche Mario Negri IRCCS, Milano, Italy*
3. *Istituto Italiano di Tecnologia, Genova, Italy*
4. *Department of Biomedical Sciences, University of Cagliari, Cagliari, Italy*
5. *School of Medicine and Surgery, Università di Milano-Bicocca, Monza, Italy*
6. *Unit of Computational Biology, Research and Innovation Centre, Fondazione E. Mach. S. Michele all'Adige, Trento, Italy*

Networking is essential to ensure scientific progress. The COVID-19 pandemic crisis has severely undermined the opportunities to meet and discuss, but not the will of researchers from different institutions and countries to work together as communities. In this respect, the Italian Metabolomics Network (IMN) was born in 2020. IMN aims to bring together people with different backgrounds working in the field of metabolomics, and, more broadly, in the systematic study of metabolism. IMN aims to be the home for all researchers doing metabolomics in Italy. The Network is open to everybody, no matter the research topic, the technique used, the professional level, the scientific background, or the affiliation. The idea behind IMN is to promote networking, by offering opportunities for discussion, collaboration, training, and exchanges among participants. Discussions on the need for a network of Italian “metabolomers” date back to 2015-2018, during meetings and talks at scientific events. In 2019, the founding board of IMN translated these needs into an active group. Activities somehow started with the IMN website ([www.metabonet.it](http://www.metabonet.it)) and a Twitter account (@IMN\_2020) was also officially launched in 2020. The online kickoff meeting was held on March 29th, and it featured the keynote lecture “Getting to the clinic: Metabolomics twenty years on” from Prof. Julian Griffin, Past President of the Metabolomics Society. Jules described the milestones of metabolomics from its origin and, moving on from the current achievements, he suggested future opportunities indicating new and stimulating directions. He wished all the best to the new metabolomics network and his presence was really appreciated. One of the very first actions of the IMN was to promote a survey (<http://metabonet.it/join/>) to get an overview of people potentially interested in joining and to learn about their activities and engagement in metabolomics. Collected responses were presented during the kickoff meeting but the survey is still open, and

data will continue to be collected. The resulting information will be regularly shared on the IMN website. Based on the answers collected so far, the most challenging steps for the Italian metabolomic community are the following: statistical data analysis, protocol standardisation, outreach, and public engagement activities to create a clear identity and impact on the society, and as often happens, the fundraising. These challenges were discussed in the first “IMN caffè”, a format to encourage interactions among participants and brainstorm on possible solutions/actions and will evolve in the creation of focus groups of the IMN. IMN aims to tackle all these specific points, by building a strong multidisciplinary Italian community, made of experts in metabolomics as well as practitioners. IMN will open new research opportunities, joint applications for funding, and will promote technology transfer. The Network will also promote training activities, allowing young researchers to interact with other Italian metabolomics groups. In the upcoming future, IMN will open its doors to the worldwide metabolomics community, with the aim to foster trans-national collaborations and to coordinate and synergize activities.

# Recent Publications

Recently published papers in metabolomics

- [Anxiety disturbs the blood plasma metabolome in acute coronary syndrome patients](#)
- [Combined Urinary Biomarkers to Assess Coffee Intake Using Untargeted Metabolomics: Discovery in Three Pilot Human Intervention Studies and Validation in Cross-Sectional Studies](#)
- [The Comprehensive “Omics” Approach from Metabolomics to Advanced Omics for Development of Immune Checkpoint Inhibitors: Potential Strategies for Next Generation of Cancer Immunotherapy](#)
- [Dairy consumption, plasma metabolites, and risk of type 2 diabetes](#)
- [Fibromyalgia and Depression in Women: An 1H-NMR Metabolomic Study](#)
- [Inter-study and time-dependent variability of metabolite abundance in cultured red blood cells](#)
- [An integrative method based on UHPLC-Q-TOF-MS/MS combined with metabolomics to authenticate Isodon rubescens](#)
- [Intraocular fluid biomarkers \(liquid biopsy\) in human diabetic retinopathy](#)
- [Mass spectrometry-based metabolomics to reveal chicken meat improvements by medium-chain monoglycerides supplementation: Taste, fresh meat quality, and composition](#)
- [MetaboAnalyst 5.0: narrowing the gap between raw spectra and functional insights](#)
- [Metabolomics and metabolites in ischemic stroke](#)
- [Metabolomics: A Scoping Review of Its Role as a Tool for Disease Biomarker Discovery in Selected Non-Communicable Diseases](#)
- [Multipatform metabolomics for an integrative exploration of metabolic syndrome in older men](#)
- [New frontiers in Alzheimer’s disease diagnostic: Monoamines and their derivatives in biological fluids](#)
- [Pharmacometabolomics identifies candidate predictor metabolites of an L-carnitine treatment mortality benefit in septic shock](#)
- [Renin-angiotensin system inhibition reverses the altered triacylglycerol metabolic network in diabetic kidney disease](#)
- [Serum Metabolomics in PCOS Women with Different Body Mass Index](#)
- [Toxoplasma gondii induces metabolic disturbances in the hippocampus of BALB/c mice](#)
- [Tumor Microenvironment-Derived Metabolites: A Guide to Find New Metabolic Therapeutic Targets and Biomarkers](#)
- [Untargeted metabolomics reveals the mechanism of quercetin enhancing the bioavailability of ticagrelor](#)
- [Wide-Targeted Metabolome Analysis Identifies Potential Biomarkers for Prognosis Prediction of Epithelial Ovarian Cancer](#)



# Metabolomics Events

## Postponed Until 2021

### The Third Annual Canadian Metabolomics Conference

#### Venue

Edmonton, Alberta, Canada

#### 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!

<https://www.canmetcon.ca/>

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## 31 Jul 2021

### Join TMIC: Call for Proposals

#### Venue

Online, TMIC, Canada

#### Overview

TMIC is holding an open call for proposals for Canadian scientists who would like to join TMIC as a new Node member.

Submit your proposal to TMIC by July 31<sup>st</sup>.

Applicants should contact Jennifer at [jennifer.reid@ualberta.ca](mailto:jennifer.reid@ualberta.ca) for more information and an application package.

## Metabolomics Events

### 5 Aug 2021

#### Identification of Unknown Compounds in Untargeted Metabolomics using Freely Available Software for Compound ID

##### Venue

Online, University of California, Davis, California, USA

##### Overview

Dr. Arpana Vaniya, UC Davis

##### Registration

**Required software:** [MS-FINDER](#) & [SIRIUS+CSI:FingerID](#). CFM-ID will be the web-based tool. Versions of tools to be used will be announced closer to the course date.

**Participant prerequisites:** Basic knowledge of computer skills. No coding experience needed.

**Short description of the course:** Compound identification is known as the bottleneck in metabolomics. However, there are many approaches one may consider while tackling this challenge (i.e., mass spectral library search, in silico fragmentation tools, or database searching). This short course will provide an overview on the current status of compound ID in metabolomics, participants will learn how to use some current tools for compound ID (i.e., CFM-ID, MS-FINDER, and SIRIUS+CSI:FingerID), and apply those skills to some unknown challenges.

For more information, please visit the [Bits & Bites: Short Course Series 2021 website](#).

### 30 Aug-10 Sep 2021

#### International Summer Sessions in Metabolomics

##### Venue

Online, University of California, Davis, California, USA

##### Overview

##### Registration

The course will include:

1. Study design, including pitfall analysis and hidden biases in studies from microbial, plant, mouse and human cohort research
2. Sample preparation and quality control
3. In-laboratory detailed discussions standard operating procedures for GC-MS and LC-MS data acquisitions
4. Targeted metabolomics, including monitoring charts and use of isotope labeled internal standards
5. Exercises on flux analysis in cancer cells by isotope tracer analysis
6. Untargeted data processing and exercises on MS-DIAL software
7. Exercises on identification of unknowns by cheminformatics software workflows (including MS-FINDER, CFM-ID, and various databases and small software routines)

## Metabolomics Events

8. Data normalization and transformation with and without internal standards and quality controls
9. Multivariate and univariate statistics
10. Pathway mapping

For information and registration click [here](#).

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### 27-30 Sep 2021

#### CliMetabolomics

##### Venue

Leipzig and Halle / 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.

##### [Event Link](#)

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### 18-21 Oct 2021

#### 3<sup>rd</sup> Annual MANA Conference: Foods for Health Discovery Theme

##### Venue

The Ohio State University, Columbus, Ohio, USA

##### Overview

The 18<sup>th</sup> Annual Ohio Mass Spectrometry Symposium will be held virtually in conjunction with the 3<sup>rd</sup> 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!](#)

##### [MANA 2021 Conference Website](#)

## Metabolomics Events

### 1-5 Nov 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.

##### [Course Flyer](#)

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### 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.

This International Endocrine Care Meet (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.

Website: <https://endocrine.episirus.org/>

##### [Conference Flyer](#)

**Metabolomics Jobs**

# Metabolomics Jobs

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

## Jobs Offered

Job Title	Employer	Location	Posted	Closes	Source
Various Positions	Various	Various	18-Jul-21	Various	<a href="#">Metabolomics Association of North America Jobs</a>
Scientist Specialized in Metabolomics	BioTwin	Quebec City, Canada	15-Jul-21		<a href="#">BioTwin</a>
Postdoctoral Associate Position in Cancer Metabolomics	Yale School of Public Health	New Haven, CT, USA	9-Jun-21		<a href="#">Yale School of Public Health</a>
Senior/Principal Research Associate, Metabolomics	Calico Life Sciences	South San Francisco, CA, USA	26-Apr-21	Until Filled	<a href="#">Calicolabs.com</a>
PhD Student and Post-doctoral Fellow Positions in Mass Spectrometry Metabolomics and Proteomics	Technion – Israel Institute of Technology	Haifa, Israel	29-Mar-21		<a href="#">MetaboNews Jobs</a>
Research Associate, Entomology Department	Cornell University	Ithaca, NY, USA	22-Mar-21	Until Filled	<a href="#">AcademicJobs Online.org</a>
Postdoctoral R&D Scientist - NMR-based metabolomics	Lesaffre	Loos, France	16-Mar-21	Until Filled	<a href="#">SmartRecruiters.com</a>
PhD Research Project Opportunities, Centre for Integrative Metabolomics and Computational Biology	Edith Cowan University	Joondalup, Australia	16-Mar-21	Until Filled	<a href="#">Edith Cowan University</a>

## Metabolomics Jobs

# 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](mailto:metabolomics.innovation@gmail.com)). Upon review, a limited number of job submissions will be selected for publication in the Jobs Wanted section.

- [Dr. Nara Consolo](#) - Seeking a position involving the application of NMR-based metabolomics in animals/animal production; it could be a Researcher position or an Assistant Professorship
- [Dr. Paulina Samczuk](#) - Seeking an interesting Postdoc offer or other position which would allow her to develop herself.