

EUPA NEWSLETTER

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MESSAGE FROM THE EDITOR

Dear Colleagues and EuPA Members,

It is a real pleasure for me to launch the new issue of the EuPA Newsletter, and I would like to start by sincerely thanking all contributors!

In this fifth issue, you will find contributions from EuPA grantees and awardees, as well as brief reports concerning Open Lab Days, and TuPA International Proteomics Congress. Please do not hesitate to contact me if you are interested in contributing to a future EuPA Newsletter (Core Facilities, Art & Science, *etc.*). Don't miss your chance to contribute to the literal story of EuPA!

In addition, the Newsletter team is looking for volunteers to help out in a variety of ways. Again, feel free to contact me if you are interested in contributing to making these Newsletters happen!

The EuPA Newsletter will be disseminated every quarter, and the next issue is planned for February 2024. So go ahead and contact me today, so we can make this next Newsletter together!!!

Enjoy reading.

Nicolas Desbenoit, EuPA Newsletter Editor (✉ n.desbenoit@cbmn.u-bordeaux.fr), on behalf of the EuPA Conference and Communication Committee.

Please find below some instructions:

Independent of the type of contribution, please provide the name of the author or authors, affiliations, e-mail address, and a picture of the main author. You can also include figures and legends, as well as references. Times New Roman will be used as font, with size 12 and interline at 1.5. Concerning the length of the contributions: Thesis abstract (½-1 pages), Students / ECRs overviews (1-2 pages), Invited EuPA speakers (½-1 page), European Core Facilities (1-2 pages), and Sponsors (1-2 pages).

*Concerning the core facility section and following the instructions above, please, provide a short description (staff, website, equipment, bioinformatic tools, *etc.*), applications / main axis, national / European / international networks, involvement in education, and contact. Picture(s) would be appreciated. The idea is to promote European facilities which are members of EuPA and to disseminate to other learned societies interested in proteomic aspects.*

EUPA TRAVEL GRANT

Ever since I was little, I knew I wanted to work in the chemistry field, with science and experiments fascinating me and my curious brain. However, like most young children, I lived with the idea that chemistry was essentially putting two things in a flask and waiting for the big explosion of color to happen. It is much more than that, and it's so deeply twined in our daily lives that it surprises my 20-year-old self every day. If someone had asked me two years ago (when I started my degree in Biochemistry) if I could imagine myself being enchanted by the proteomics world, my first answer would probably have been no, because I knew almost nothing about this huge dimension; however, if there's something that this conference taught me in the few days I spent in Newcastle, it was that proteomics is an ever-growing field, always expanding, always seeking knowledge, but never static or taken for granted.

Considering the fact that I'm only a degree student, that had never been on an international conference, this BSPR-EuPA conference was one of the most enriching academic experiences I had. I was blessed with a EuPA Travel Grant, which funded part of the costs of my trip to Newcastle. Moreover, I presented an oral talk on the theme of Subcellular and Spatial Proteomics entitled "Unveiling the health benefits of muscle contraction: proteomics of circulating extracellular vesicles". For a degree student, it was a very scary experience to give a talk in front of such a large audience of scientists who were far more experienced than me; however, the atmosphere of this conference was very welcoming, and talking with the other researchers helped me to see the project I presented in a new light, which opened new doors to its development.

As I mentioned before, this conference was my first international experience, which meant that I started the conference feeling like a fish-out-of-water, just like a small child feels when they enter a university library. However, the YPIC sessions on the first day (that involved introductory sessions for Bioinformatic tools, Metaproteomics and even Proteomics) helped me start this conference on the right foot, and the career sessions in industry and academia gave me some insights in a world I knew very little about. Out of the career sessions, I particularly liked the presentation of Simon England, representing VRS and giving tips to write a good CV, and Chiara Francavilla, for showing that in academia, just like in life, it's essential to have a balance between fun and stress to accomplish all our goals.

The remaining sessions offered a large range of themes in the various aspects regarding proteomics, such as the treatment of data using bioinformatics and top-down proteomics and the application of

proteomics in drug discovery or in a clinical environment, made possible by studying its subcellular and spatial aspects and the post-translational modifications of proteins. The metaproteomics presentations given by Jean Armengaud, Robert Heyer and Celine Henry opened my eyes to the vastness of the proteome and peptidome of our microbiota, underlining the importance of a good sample preservation to obtain good results and later be able not only to identify proteins, but also to find out their taxonomy and connect it to specific species from our microbiota. Marie Chien, on the other hand, captivated my attention with her interactive presentation, that helped me see biostatistics in a not-so-scary way, while Alejandro Brenes' presentation had a lot of innovative slides and images that explained the effect of the immunosuppressive drug rapamycin in shaping immune cell proteomes in an extremely clear and efficient way.

Another crucial part for this amazing experience were the networking moments between the researchers, as well as the interactions with the many companies that attended the conference. By creating the "Passport to Prizes", that involved rewards for those who managed to get a stamp from each companies-occupied booth, the organization team of the event successfully encouraged the contact between scientists and companies in an extremely efficient way. For sure, this conference experience was extraordinarily beneficial for me, and undoubtedly a challenge I would like to repeat in the future.

Ana Carolina Pinto, *LAQV-REQUIMTE, Associated Laboratory for Green Chemistry of the Network of Chemistry and Technology, Department of Chemistry, University of Aveiro, Aveiro, Portugal;* ✉ anacarolinapinto@ua.pt



Figure 1: Ana Carolina Pinto from UA in front of the Frederick Douglass Centre (left) and certificate of the EuPA Travel Grant awarded to Carolina (right).

EUPA POSTER PRIZE



BSPR-EUPA 2023 in Newcastle marked my inaugural entry into the global proteomics community, concluding on a high note. Winning the "EuPA Poster Prize" fills me with immense excitement and I extend my gratitude to the committee for choosing our work amidst a pool of fascinating contributions!

Moreover, I would like to take the opportunity to thank my PhD supervisor, Dr. Efstratios Stratikos from the National and Kapodistrian University of Athens, and

our esteemed collaborators at the BSRC "Alexander Fleming", Dr. Martina Samiotaki and Dr. George Panayotou, for their unwavering support throughout my project! I would also like to acknowledge the Europeans Union's Horizon 2020 research and innovation programme for the funding.

My project, which is part of the CAPSTONE (<https://www.capstone-etn.eu/>) consortium under Marie Skłodowska-Curie actions, focuses on the biology of Endoplasmic Reticulum Aminopeptidase 1 (ERAP1). ERAP1 is an ER-resident enzyme that regulates adaptive immune responses by trimming N-terminal amino acids from antigenic peptide precursors thus preparing them for loading onto Major Histocompatibility Complex I molecules (MHC-I). While ERAP1 activity is necessary for the presentation of many antigenic peptides, it can also over-trim others thus blocking their MHC-I-mediated presentation. This over-trimming can facilitate immune evasion in cancer, diminishing cytotoxic T-cell responses. Subsequently, ERAP1 inhibition is an emerging strategy for cancer immunotherapy. To study the effects of ERAP1 inhibition on a cellular level, mass spectrometry is a very valuable tool. With recent advancements, studying the immunopeptidome, next to the proteome, has become feasible and can help us to better understand complex biological interactions that relate to the pathogenesis of disease.

Last but not least, I would like to congratulate the local organizing committee! Although initially daunting for a PhD student, the superb organization of the conference, insightful talks, interactions with eminent scientists, and YPIC sessions swiftly replaced fear with excitement. I am already looking forward to the next conference, which I will be able to attend thanks to the travel grant offered by EuPA!

Martha Nikopaschou^{1,2}, ✉, *Martina Samiotaki*³, *George Panayotou*³ and *Efstratios Stratikos*^{1,2}

¹National Centre for Scientific Research Demokritos, Greece, ²Department of Chemistry, ²National and Kapodistrian University of Athens, Greece, ³Biomedical Sciences Research Center "Alexander Fleming", Institute for Bioinnovation, Greece. ✉ M.Nikopaschou@chem.uoa.gr



EuPA VACA AWARD



First and foremost, I would like to thank the EuPA Awards committee for honouring me with this Vision and Commitment Award. I want to dedicate this award to all my teammates from the French Proteomics Society, the Young Proteomics Investigators Club and the EuPA Conferences and Communication committee. I have been lucky to organise scientific and non-scientific events for early career researchers for the last couple of years with many enthusiastic colleagues. Dear reader, I can only recommend that you get involved in the proteomics community if you are not already. It is a unique opportunity to shape the scientific community and meet new people, especially when you are an early career researcher. There are a lot of existing initiatives, whether at a local, national, European, or global scale. Feel free to send me a message if you want to have a chat about it!



Marie Chion, *University of Cambridge, UK*, mc2411@cam.ac.uk

EUPA BREAKTHROUGH IN PROTEOMICS AWARD

The BSPR-EuPA 2023 in Newcastle was a fantastic event on multiple levels. The conference assembled excellent speakers from different areas of proteomics, covering new technological and computational advances as well as exciting stories where proteomics uncovered new biology or had impacts in disease relevant settings.

The organizers did a fantastic job on all aspects of the conference. The venue, program, and friendliness in case of questions were all outstanding. The conference dinner at the Wylam Brewery was one of the best I ever experienced at a conference and left a long-lasting memory.

I was incredibly honored to be awarded the “EuPA Breakthrough in Proteomics Award” by EuPA for our labs work on functional proteomics, in particular, on Thermal Proteome Profiling. I was also very nervous before the award lecture since this award represents the work of many people over the years and I wanted to make sure that due credit is given to everyone. I tried to the best of my ability to highlight all the key people that made the work possible starting at the time when I worked at Cellzome and moving on to the recent years at EMBL. I also especially wanted to make the point about how privileged I feel to be part of the proteomics community that was so well represented at the EuPA conference. The field has grown tremendously since I started my PhD as a complete novice to the field in the lab of Roman Zubarev back then at Uppsala University. Today, it is especially exciting, to see so many talented young people entering the field with fresh ideas and lots of positive energy. EuPA serves as fantastic springboard for these young talents to dive deeply into the now very broad and very exciting field of proteomics and enables to establish networks and promote collaborations.

In summary, I would like to thank EuPA again for a fantastic conference experience, the wonderful award, and their outstanding service to the proteomics community.

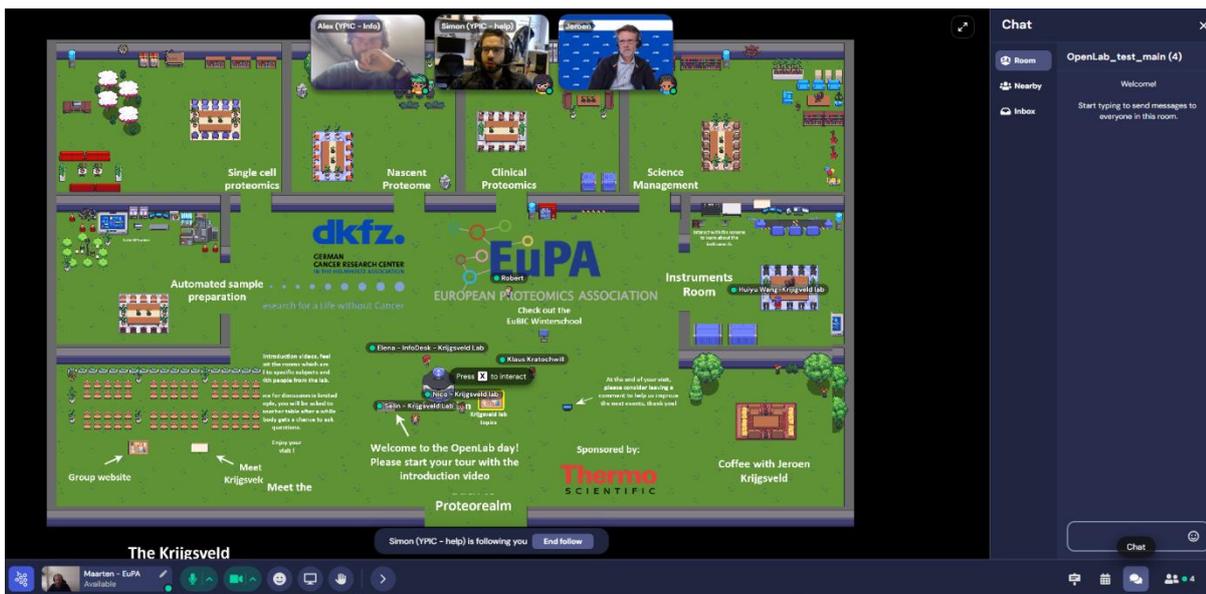
Mikhail Savitski.



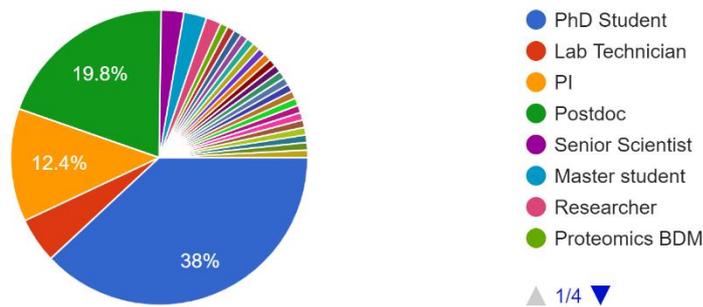
EUPA OPEN LAB DAYS: THE KRIJGSVELD LAB

On October 17th 2023, EuPA organized the very first **Open Lab Days**. This is a new format wherein a European proteomics lab opens its doors to everyone to have a peak into their inner workings. This happens not irl (in real life) however, but in a special place within Proteorealm, a digital world created by EuPA in Gathertown. For this edition, our digital architects Alexandre Leytens and Simon Sugar from YPIC (the Young Proteomics Investigators Club) teamed up with the **Krijgsveld Lab**, that is specialized in low-input, clinical and nascent proteomics.

Exchanging experience is the driving force for enhancing a lab's productivity at all levels, so the event was organized for everyone who has an interest in proteomics. However, that morning, we were still preparing the final setup (Screenshot), when at 125 registrants, we had to close the registration form, because we already had a very diverse crowd banging our digital door (pie chart):



Function
121 responses



30 minutes before the event (1:30PM CET), Gathertown was opened and people started to flood in. At 2:00PM CET, everyone was welcomed with a short tutorial movie at the information booth and invited to watch the amazing (!) [introductory video of the Krijgsveld lab](#) in the virtual auditorium. After that, participants spread out to the 6 different rooms where over a dozen of the Krijgsveld lab members were welcoming them to discuss research management, tweaking of wet lab and dry lab protocols and instrument parameter settings and problem solving. Basically, people got a feel of "**how other labs do it**". One special place was even created where participants could have a digital coffee with Jeroen Krijgsveld! Throughout the event, there was a continuous presence of 30 to 40 people, coming in and out the virtual lab. The tables were buzzing and some people even had to wait in the breakout saloons close to the tables for a little while, where they would start chatting with the other people there.

Taken from the feedback we got, the event was very well received and we will **start looking for the next PI who would be willing to host the next EuPA Open Lab Days!** And who knows, we might even invite a company one day for an Industry Open Lab Day edition! Interested? Just send an email to [EuPA](#) and we will get back to you asap!

Hope to see you all during the next edition! Keep an eye on the EuPA Socials!

Maarten Dhaenens, The EuPA Open Lab Day Team

EuPA ECR DAY

On the 5th October we held the third European Early Career Researchers in Proteomics Day. The online event was a mix of zoom and gather.town.

During this event the EuPA ECR awardees from 2022 presented their work that led to their respective awards.



Tim Vandenbossche
EuPA Best PhD Prize



Wout Bittremieux
EuPA Bioinformatics for Mass Spectrometry Award



Marie Chion
EuPA Vision and Commitment Award

The second part of the event was the second edition of the European Proteomics Science Slam. In total we received 13 video submissions. Out of all the submissions, 5 videos were selected by the audience and awarded a travel grant to a EuPA or HUPO conference in 2024 (1st prize: 1000€, 2nd and 3rd prize: 800€, 4th and 5th prize: 500€).

Afterwards, participants had a chance to speak to the awardees, EuBIC and YPIC representatives as well as each other in an interactive online networking session hosted in the newly created proteorealm.

It was amazing to see all the different videos as well as the nearly 100 participants in the event. We already got feedback to make the next event even more interactive, so maybe see you there in 2024.



Maike Langhini, Education committee

TUPA INTERNATIONAL PROTEOMICS CONGRESS

The TuPA International Proteomics Congress, concomitant with the 5th National Proteomics Congress, was convened at Hacettepe University in Ankara, Türkiye, during the period spanning from the 13th to the 14th of October in the year 2023.

The congress occurred in Ankara, the capital city of Türkiye, coinciding with the centenary celebration of the Republic of Türkiye. The primary objective of the congress was to deliver a scholarly discourse enriched by the involvement of distinguished national and international scholars while upholding the highest standards of academic content.

The program of the congress comprehensively encompassed a wide array of contemporary subjects within the domains of cell biology and functional proteomics. These included structural proteomics, the analysis of post-translational modifications, bioinformatics, multi-omics methodologies, the multiple analysis of DNA damage repair proteins, new approaches in proteomics, and the exploration of associations with diseases and clinical applications.

In addition to the distinguished 17 plenary and invited symposium lectures, the congress featured both oral (20 presentations) and poster sessions (33 posters). The congress facilitated over 200 participants in showcasing their research contributions. The program was also enriched with a diverse range of scientific, educational, and social topics. Moreover, an exhibition was hosted, providing insights and updates from industry collaborators outside the academic sphere. Furthermore, on the 12th of October, an instructive "Glycomics and Glycoproteomics Analysis Workshop" was conducted, incorporating both theoretical and practical components. This workshop was taken place at the Hacettepe University, Department of Chemistry.

The congress encompasses highly original studies, many of which surround the thesis studies of numerous graduate students attending the congress. All oral and poster presentations were successfully and comprehensively completed in the congress. Participants engaged in rigorous scientific discussions during the question-and-answer sessions, which proved to be satisfactory. It has been emphasized that contributing to young researchers gaining experience and expertise in this field during the congress is of significant importance. The presentation and sharing of novel analytical methods will provide a unique analytical perspective to researchers in the proteomics research field.

It has been noted that collaborative efforts in proteomics research within the academy and industry, led by specialized researchers, will make a substantial contribution to the scientific infrastructure of Türkiye. It is believed that the congress organized in Türkiye, particularly in the field of proteomics, will contribute to the establishment of a conducive environment worldwide for conducting activities related to fundamental science, research and development, and manufacturing.

Aysel Ozpinar, TuPA President



UPCOMING EVENTS IN PROTEOMICS

EUBIC WINTER SCHOOL 2024

<https://eubic-ms.org/events/2024-winter-school/>

January 15th – 19th, 2024, Winterberg, Germany

Five days of keynotes, workshops, flash talks, and posters on computational mass spectrometry.



EuPA – HUPO CONGRESS

<https://www.hupo.org/event-5307330>

October 20th – 24th, 2024, Dresden, Germany

The next annual EuPA Congress will be organized together with the 2024 HUPO World Congress, which will take place in Dresden, Germany.

This event brings together an extraordinary scientific program with world renowned speakers, a variety of workshops, sessions, training courses, poster sessions, networking opportunities, industry seminars, exhibits and much, much more!

More details to come soon!



EuPA 2025 CONFERENCE

<https://proteoaix2023.sciencesconf.org/>

June 16th – 20th, 2025, Saint-Malo, France

We hope to welcoming you again in the Corsair City...



The poster features a scenic sunset over the sea with a large stone cannon barrel in the foreground. The EuPA logo is in the top left, and the FPS logo is in the bottom right. The text is centered and reads: 'Save the date', 'The EuPA 2025 Conference will be hosted in Saint-Malo, France from June 16th to 20th', and 'We hope to welcoming you again in the Corsair City'. At the bottom left, it lists the chairs: Charles Pineau, Christine Carapito, Yves Vandenbrouck.

EuPA
EUROPEAN PROTEOMICS ASSOCIATION

Save the date

The EuPA 2025 Conference will be hosted in
Saint-Malo, France from June 16th to 20th

We hope to welcoming you again in the Corsair City

Chairs: Charles Pineau, Christine Carapito, Yves Vandenbrouck

fps
French Proteomics Society

SHORT NEWS

EUPA MERCHSHOP

EuPA launched the Merch Shop where you can buy various clothes and items with EuPA or YPIC logo.



For the full list of items and colour varieties, please visit the EuPA Merch Shop site:
<https://eupashop.myspreadshop.net/>

BSPR/EUPA 2023 CONFERENCE

There was a fantastic conference in July in Newcastle-upon Tyne organized by Matthias Trost's lab, the BSPR and EuPA. Congratulations and many thanks for the Trost lab and the BSPR for doing such a wonderful job!





HUPO 2023 CONFERENCE

The HUPO 2023 Congress as one of the largest international gatherings in the field of proteomics took place September 17 – 21, 2023 in Busan, South Korea. In total, 1,323 attendees from 40 countries, 63 sponsors and exhibitors participated. HUPO brought together an extraordinary scientific program with world renowned speakers, a variety of workshops, sessions, training courses, poster sessions, networking opportunities, industry seminars, exhibits and much, much more. 574 posters and talks in 60 scientific sessions, pre-congress sessions/training courses and industry symposia (including 242 invited faculty) were presented.

Session focused amongst others on Computational Proteomics, Multi-omics, Precision Medicine, Chemical Proteomics, Immunopeptidomics, Metabolism, Metaproteomics, AI and Single Cell. Early career researchers had the opportunity to network with each other, with senior members of the proteomics community and industry members at a fantastic ECR networking event. The World Congress attendees were also able to listen to three outstanding talks from the finalists of the 2023 Early Career Researcher Manuscript Competition. We are already looking forward to the next HUPO World Congress taking place together with the EUPA annual meeting in Dresden, Germany, from October 20th-24th!

CONTRIBUTORS FOR THE CURRENT ISSUE

- *Dr. Nicolas Desbenoit as editor, & Dr. Eva Csoz as co-editor.*
- *Michael David Tuck as proofreaders.*