IUBMB NEWSLETTER

ISSUE NO. 16 • DECEMBER 2023

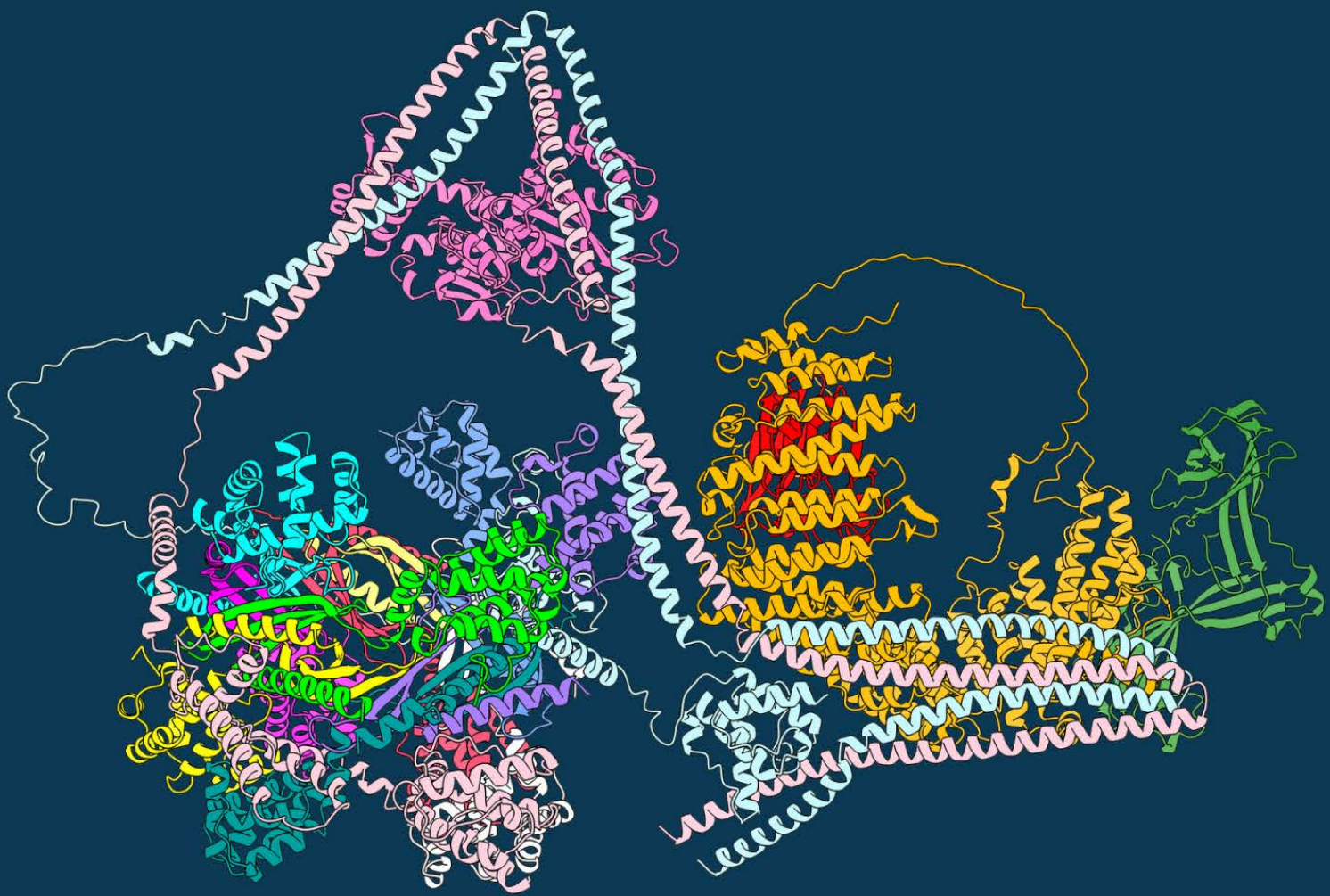


Image: A model of the 16 subunit Commander assembly constructed using cryo-EM, X-ray crystallography and AlphaFold2 modelling.

Credits: This model was constructed through a massive collaborative effort. Healy, M,D., et al., (2023) Cell. https://doi.org/10.1016/j.cell.2023.04.003.

CONTENTS

- Message from the President |3
- IUBMB Trainee Initiative Chair |5
- IUBMB Communications Officer |6
- IUBMB Trainee Initiative |8
- IUBMB Ambassador for FASBMB |18
- ENABLE Report 2023 |20
- IUBMB Focused Meeting, Ljubljana, Slovenia |23
- IUBMB Focused Meeting, Crete, Greece |27
- SPIB 2023, Aveiro, Portugal |30
- IUBMB-FAOBMB Education Symposium, Bangkok, Thailand |33
- Congratulations to IUBMB Lectures |35
- Congratulations to IUBMB Whelan Young Investigator Award |36
- Congratulations to inaugural IUBMB Emerging Leader |37
- Congratulations to IUBMB latest Fellowship Awardees |38
- Congratulations to IUBMB Poster Prize Awardees |40
- IUBMB Journal Highlights |41
- Upcoming IUBMB Deadlines |49
- Upcoming Meetings |53
- Announcements |62
- IUBMB Programs & Benefits of Membership |63
- Executive Committee |65

Message from the President

Alexandra Newton

Dear Friends of IUBMB,

It's been another exciting year for IUBMB as we work towards facilitating discovery and scholarship with new initiatives in place, in person meetings back in full swing, and great involvement of our IUBMB Trainee Initiative in engaging the next generation of biomolecular scientists around the world. I had the pleasure of meeting many trainees and researchers at three meetings this year – the ASBMB meeting in Seattle, where our Executive Committee met, the Focused Meeting on Integrative Omics in Nuclear Functions in Crete, and the trainee-organized FEBS-IUBMB ENABLE Conference in Cologne. A special thank you to our IUBMB Ambassador for Trainees, Bri Bibel, whose amino acid puzzle is a wonderful way to engage meeting attendees in the collaborative venture of making the puzzle (and undoing it and remaking it!).

It's been two years since we created the IUBMB Trainee Initiative, a key priority in my tenure as President. Under the leadership of Élyse Fischer (our inaugural Whelan Young Investigator Awardee) this group of passionate students and postdoctoral fellows from around the globe rose with flying colours to the challenge of building and shaping the initiative. They structured the initiative to have representatives from each of our regions, Africa (FASBMB), Europe (FEBS), Asia/Oceania (FAOBMB), the Americas (PABMB), and elected a leader for each region. The Trainee Initiative organizes an online event, attended by hundreds of trainees from around the world, on diverse topics of interest to trainees, with organization cycling through the four regions. They have hosted 10 events in the past two years, including a discussion with Randy Schekman and Richard Sever on Open Access Publishing (PABMB event), a discussion on Protein Design with David Baker and Brian Koepnick (FEBS event), a webinar on Bioinformatics in Africa (FASBMB event), and a round table discussion on branding as a scientist (FAOBMB). Recording of these webinars are on the IUBMB Trainee Initiative website. And for all our trainees out there – be sure to catch the next event on Addressing Mental Health in Research: From Researchers For Researchers on January 16 at 6:00 pm CET hosted by the FEBS section of the Trainee Initiative (info and free registration here). After two years at the helm, Élyse Fischer will become the Past Chair in January – many thanks, Élyse, for your outstanding leadership. And I am delighted to announce that the team elected Cathy Cozma to lead the

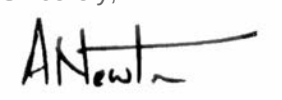
Trainee Initiative starting January. Cathy is a member of the Canadian Society for Molecular Biosciences (CSMB) and is a graduate student at the University of British Columbia in Vancouver – please see her message in this newsletter. Welcome, Cathy! I'm also pleased to announce that our Trainee Initiative member, and FEBS regional Chair, Patrick Penndorf (Germany) has become our inaugural Communications Officer. He has been busy interviewing trainees and our leadership team for insights to share with the global biomolecular science community – details follow in this newsletter.

A second priority in my tenure has been the creation of our new Africa Initiative, which has really taken off. We have to date awarded 10 Fellowships for trainees from Africa to attend the trainee-organized ENABLE meetings in 2022 (Seville) and 2023 (Cologne). Additionally, our first cohort of the new PROBio Africa Fellows have been selected and will be doing research in five labs in Europe. If you are interested in hosting a student, please sign up as a host lab. We also created a new award, the IUBMB Emerging Leader Award, for a beginning investigator in a developing country – with the inaugural one awarded to an exceptionally talented researcher and lecturer, Robert Adamu Shey, who returned to Africa to lead a lab on infectious disease at the University of Buea, Benin, after receiving his PhD and postdoctoral training at the Université Libre de Bruxelles, Belgium. And lastly, we have created the Tatenda Murigo Scholarship – as noted in my previous message, we created this fellowship in memory of our dear Tatenda Murigo, who was an inspirational leader on the IUBMB Trainee Initiative and whose life ended far too early in a tragic car accident. This fellowship funds a female student in Zimbabwe and we are actively raising funds for this – many thanks to those of you who have generously supported the fund and, to anyone else touched by Tatenda's story, please consider donating so we can reach our goal.

I end, once again, by reminding you that the IUBMB is a nonprofit organization run by professors who volunteer their time tirelessly to help support and promote biochemistry discovery, enrichment, and education around the globe. Our growing initiatives require us to secure new funding and while we are exploring obtaining support from companies or philanthropists, especially to help Africa, you can also help with a charitable donation to the IUBMB on our donation platform – note that 100% of your funds go directly to our programs. Please help us elevate the next generation of scholars and biomolecular scientists around the globe! And for all donations above $100, you can opt to receive Bri Bibel's awesome amino acid puzzle.

I look forward to seeing many of you at the 26th IUBMB Congress, held in collaboration with FAOBMB and ComBio, which will take place in Melbourne, Australia in September 2024. And as always, I welcome suggestions from the global community of molecular bioscientists on how the IUBMB can better serve you.

Sincerely,



Alexandra Newton, PhD
President, IUBMB

Message from the TI Chair

Cathy Cozma

Dear Friends of IUBMB,

I'm truly honoured and excited to be named the new Chair of the IUBMB Trainee Initiative and I look forward to continuing to build this amazing resource together.

First, I must commend our current Chair, Élyse Fischer, and all the past and present members of the TI who have dedicated their time and gone to incredible efforts to build this initiative from the ground up. You've created a resource that will continue to inspire and aid trainees to become the best version of themselves as they pursue their passion for biochemistry and molecular biosciences.

A bit about myself – I am a second-year graduate student at the University of British Columbia in Vancouver, Canada and my work is focused on anticancer therapeutics targeting DNA damage repair proteins. As we begin our journey together, my goal is to foster an inclusive and collaborative environment that amplifies the voices and needs of trainees. As a member of the Canadian Society for Molecular Biosciences (CSMB) and the IUBMB TI for the past year, I've had the pleasure of interacting with amazing trainees, performing quality science and hearing about the diverse challenges they face. I was inspired to take on this role to continue help trainees around the globe stay connected, provide financial and academic resources to enrich their research experience and provide opportunities to showcase their personal and academic achievements.

Moving forward, I welcome all of you to share your ideas for how the IUBMB TI can better serve trainees around the world and I look forward to connecting!

Sincerely,
Cathy Cozma, BMSc
IUBMB Trainee Initiative Chair 2024

Message from our Communications Officer

Patrick Penndorf

How is it to study Biochemistry under the Apartheid?

~

What are the biggest IUBMB projects?

~

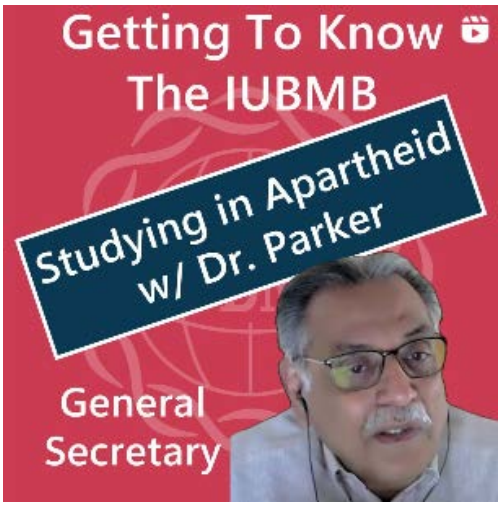
How do we get students through the tough times of a PhD?

All those questions we answer in an innovative new format.
Welcome to the IUBMB Communications!

I am Patrick Penndorf, the new Communications Officer of the IUBMB. I am part of the Trainee Initiative and a scientist myself – including my passion for science communication.

I am interviewing everyone from our president to awardees of fellowships within the IUBMB and from there create short 30 seconds to 2 minute videos to share their insights with you! With those pieces we strengthen our community feeling but also engage new students and researchers on social media. By sharing all the knowledge and experience we gathered within the IUBMB, and to raise awareness of what we stand for. Next year I will meet more of you, so stay up to date on our social media channels to learn more about your colleagues!

Here are three pieces to give you an impression:



click on photo to play video

The Tatenda Murigo Fellowship

One especially emotional example of our work: The Tatenda Murigo Scholarship. Tatenda Murigo was a passionate 23-year-old Biochemistry student with the dream of transforming Africa's research landscape - but then - a tragic car accident ended her journey prematurely, leaving a significant gap. Thus, the Fellowship will support a female Biochemistry students in Zimbabwe, providing financial aid for tuition, accommodation, and crucial research materials. It will empower someone else, echoing her belief that nothing is impossible. The donation page is still available :)

Looking into the future, what is coming up?

IUBMB ♥ Green Research

The IUBMB will invest into sustainability! That means it will invest into you! With a dedicated event series and subpage of our website, we will bring you all you need to reduce the environmental impact of your research!

If you like to learn how to

reduce plastic waste & energy

opt for the most sustainable consumables and machines

convince your peers

while keeping up your workflows – we organize it all for you!
If you think sustainability is an important topic **register for FREE** today for the talk series and handouts!

IUBMB TRAINEE INITIATIVE

An Update on the IUBMB TI Quarterly Events

Marketing Yourself for Careers in Academia & Industry

~ Hannah Pletcher, Bri Bibel, Cathy Cozma & Sunnie Kong ~

On June 29th, 2023, the PABMB representatives organized a "Marketing yourself for academia and industry" workshop, connecting academic and industry professionals with trainees to share practical tips for employment post-graduation. This event reached 65 synchronous and close to 200 asynchronous attendees from 8 different countries including, South Africa, Switzerland, France, Canada, Germany, Denmark, Nigeria, and USA. We heard from two speakers: Dr. Arjun Raj, Professor at the University of Pennsylvania, who discussed do's and don'ts for securing a post-doctoral position; and Dr. Kyle Hess, from Bristol Myers Squib, who shared his industry job-search journey and how to leverage soft skills from graduate school when looking for employment outside academia. Watch the recording *here*.

Your Brand as a Scientist

~ Marta Orlowska, Jessie Wong Ling Ai & Ryan C.V. Lintao ~

The FAOBMB region of the IUBMB Trainee Initiative organized a webinar titled "Your Brand as a Scientist" on the 31st of October, 2023 featuring Associate Professor Stephanie Hicks, Ph.D. of Johns Hopkins University & Jing Mei LI, Ph.D. of Genome Institute of Singapore. This event provided attendees with practical strategies for creating compelling online profiles, engaging wider audiences, and fostering scientific collaborations through social media and science communication. Dr. Hicks shared practical strategies on ways to increase our visibility and networking opportunities using X (formerly Twitter) and LinkedIn. Meanwhile, Dr. Li Jing Mei along with Lim Zi Lin used an interactive approach to engage our audience by converting the webinar into a game in order to share tips and tricks about scientific communication. The event reached 164 participants from all over the world and received positive feedback on the tips provided during the webinar. Watch the recording *here*.

IUBMB TRAINEE INITIATIVE

Mental Health in Academia

Online Event & Panel Discussion

Join an engaging event where we'll raise awareness, but also share personal stories and practical strategies.

🌟 Why Should You Attend?

- Inspiration: Hear personal narratives of triumph over adversity.
- Guidance: Learn strategies to manage mental health crises.
- Awareness: Contribute to fostering mental health awareness in academia.

Our Speakers & Panelists:

Alexander Tsai – Mental Health Expert, **Zack Florentino Murguia Burton** – Mental Health Play Creator, **Madeline McGhee** – Laboratory Technician at MIT and **Stefanie Hodapp** - Ph.D. student at the University of California San Diego

Schedule:

- An introduction to the topic by a mental health expert
- Round Table Discussion with researchers from various backgrounds and experiences
- Time for your Questions in a Q&A session

Experience inspiration, support, and empowerment. Together, let's unlock minds and create a healthier academic community!

16th of January at 18:00 CET / Noon Eastern Time

Register Right Now

IUBMB TRAINEE INITIATIVE

Member of the Trainee Initiative Goes to Asia!

On November 22-25, 2023, the Biochemistry and Molecular Biology section of the Science Society of Thailand (BMB Thailand) organized its 8th BMB Conference along with the 30th Conference of the Federation of Asian and Oceanian Biochemists and Molecular Biologists (FAOBMB). The conference, with the theme *"Biochemistry and Molecular Biology in the New Normal Era,"* was held at Centara Grand at Central Plaza Ladprao in Bangkok, Thailand, and was opened by Her Royal Highness Princess Chulabhorn Krom Phra Srisavangavadhana.

As one of the main sponsors of the conference, the International Union of Biochemistry and Molecular Biology (IUBMB) was represented in the conference by members of the Executive Council as well as one of the FAOBMB representatives of the Trainee Initiative, Ryan C. V. Lintao from the Philippines. Members of the Executive Council as well as FAOBMB Education Chair Dr. Gracia Yu emphasized and reiterated their full support of the events and activities organized by the Trainee IUBMB Initiative.

Trainees ranging from undergraduate to post-doctoral fellows flocked the IUBMB Booth to ask questions about fellowships and publishing opportunities offered by the IUBMB, as well as the chance to join the Trainee Initiative as one of the FAOBMB representatives.

The conference ended with an invitation to attend the Biomolecular Horizons 2024, which will host the 26th IUBMB Congress, 17th FAOBMB Congress and 22nd ComBio Conference, to be held in Melbourne, Australia on September 22-26, 2024. See you there!

IUBMB Executive Council members: Dr. Yang Mooi Lim of Education Committee *(leftmost)*, Dr. Andrew HJ Wang the Past President *(second from the right)*, and Dr. Zengyi Chang of Publications Committee *(rightmost)* with Trainee Initiative representative Ryan C. V. Lintao *(second from the left)* at the IUBMB Booth.

IUBMB TRAINEE INITIATIVE

Member of the Trainee Initiative Goes to Asia!

IUBMB Executive Council members:
Dr. Yang Mooi Lim of Education Committee *(leftmost)*, Dr. Andrew HJ Wang the Past President *(second from the right)*, and Dr. Zengyi Chang of Publications Committee *(rightmost)* with Trainee Initiative representative Ryan C. V. Lintao *(second from the left)* at the IUBMB Booth.

Trainees from all over Asia visiting the IUBMB Booth.

> IUBMB TI - Your Monthly Minutes

Your favorite monthly newsletter

July 2023 - PABMB

Hello to everyone out there!

It is time to hear from Cathy Cozma. We will address the myth of normal as well as some other aspects of education and mental well-being. Especially this time, refraining from mentioning my personal opinion was a great training in writing the minutes! Wish you an engaging read.

> Who Cathy is

Originally from Romania – Working on her master thesis \ Quite sporty – from gymnastics to parkour – Member of the Canadian CSMB

I have an Honours Specialization in Biochemistry and Cancer Biology from the University of Western Ontario. I currently study at the University of British Columbia and am pursuing a Masters in Interdisciplinary Oncology.

Our lab is focused on finding druggable DNA damage repair (DDR) proteins as a synthetic lethal cancer therapeutic strategy. We do this by engineering DDR protein variant libraries and screening for dominant negative variants that have the potential to become "trapped" onto DNA. These 'trapped' DDR variants allow DNA lesions to persist by limiting the accessibility of redundant repair pathways.

Vancouver has no shortage of beautiful trails and mountains. On weekends with good weather, I love going hiking and enjoy being out in nature. In my spare time, I also dabble in parkour although I am afraid of heights :D I'm always amazed and motivated seeing others having fun and the amazing tricks they perform!

Cathy, you know I am very much into anything that connects science and sustainability. The UBC is really invested in this topic, are they not?

Although I'm not familiar with the various environmental initiatives undertaken, I can speak to the value placed on graduate students mental health. There are plenty of resources one can access to get help - whether this be through an online or in-person format. At the BC Cancer Research Center we have a counsellor visiting weekly.

The Myth of normal

I recently read a book titled "The myth of normal". There was much discussion about the amount of stress in our lives. Nowadays, I try and remind myself that there is no normal that applies to everyone and it's important to take a step back from the constant stress of failed experiments and challenging personal lives to take care of ourselves. One does not have to hit a certain threshold before a problem is worth addressing.

Rethinking Publishing

In my opinion, the mere number of publications you have is not a sensible readout for the value of your contribution to the scientific field. Rather, I believe more emphasis could be placed on the value your conclusions provide in furthering any given area of science and our understanding of biology. In particular, with reference to complex disease processes or the generation of creative therapeutic approaches!

Leveraging connection

It's awesome that the IUBMB TI is able to stay connected through our monthly minutes and the various events each region hosts. I also love the diversity of the projects we can work on and how inclusive events are. In the future, I think we can continue to leverage the unique scientific background of each trainee and share tips and tricks with each other. Troubleshooting experiments as a group is much more helpful than just reading about it!

Our Future

As a newcomer to the IUBMB TI, I propose we implement an onboarding system for those joining the TI in leadership positions. This may be in the form of appointed mentors or simply a brief written orientation guidebook. Looking forward, I hope we can organize an event focused on exploring unconventional career paths beyond academia and industry. These can include consulting, patent officers, legal advisors and venture capitalist work.

> Building character

Our current university education lacks opportunities to explore non-academic pursuits. This can include joining clubs or initiatives that are entirely unrelated to your studies. Implementing a four-day work week could be helpful in exploring such opportunities. Overall, this would allow students to become well-rounded individuals with diverse life experiences and interests beyond their very narrow field of study.

A plethora of thoughts and idea - *Hope you digest them well!*

> IUBMB TI - Your Monthly Minutes

Your favorite monthly newsletter

August 2023 - FASBMB

In memory of Tatenda

Today we embrace the beauty of life and the reality of death - for Tatenda Murigo. With enthusiasm and engagement, she was about to shape the face of science in Africa. Tatenda, thank you for your efforts, for your energy and the projects you moved forward. Let's remember her energy and use it to progress the development of science!

> *Who Tatenda is*

Studied in Zimbabwe – Was finishing her Bachelor's degree soon

Driven by creativity – A multifaceted volunteer in various initiatives

I am in the last year of my undergraduate degree. I chose to study Biochemistry because it was the creative aspect of life that I was interested in! Mixing the element of science and creativity seemed just too exciting.

I currently work on the biosynthesis of Nanoparticles. We use plants extracts to couple them with magnesium-oxide-nanoparticles. Our work in bio-drug discovery should help treating skin diseases that are common here in Africa. We compare the efficiency of these extracts to cure infections caused by various bacteria. The ultimate goal to develop a cream for treatment.

I would like to proceed my career in bioprocess-engineering or biological engineering. I see a need for stronger participation and increased uptake of science in our country. We have to communicate how bioengineering can be used in agriculture, environmental, or medical applications. Our science and technology guidelines were last updated in 2012. We urgently need a credible voice to get the potential of scientific innovation recognized.

Tatenda, what do you think are the barriers to get scientific approaches established in in Africa?

Something that might be called the barrier to entry. Especially for genetically modified organisms decision making is limited by a lack of knowledge. Another big challenge I see is the missing transfer of technology. There is a big desire for cooperating with European, Asian or American partners but very few aim at intra-African cooperation. That is often due to the missing funding for such undertakings.

Sharing effectively

Some tips to communicate effectively: At first, it is important is to select the content you want to communicate. That means, decide which points you want to bring across. Then, make sure you not only share the plain content but also why these insights are valuable. Finally, I once took a masterclass on public communication. They could show that the lower the complexity of your language the better. Its even available for you online!

Invest in the future

To my mind, student development is underappreciated. In the pyramid of needs, many are emotionally and mentally malnourished. We need a kind of investment that goes into student well being in the form of mental but also physical health and education. One should get to know things outside of one's current boundaries. When viewed in the long run, that will improve the research output as well.

Whom to choose

I feel that there are very few group leaders who are good administrators and good supervisors at once. Most universities look only for the one or the other. The problem is that many do not know how to delegate when they lack the necessary skills. Whether it is how to handle finances, how to generate new leaders or support people in founding start ups. Still, I do think that many of the top performing universities look for a more holistic picture in their staff.

Our Future

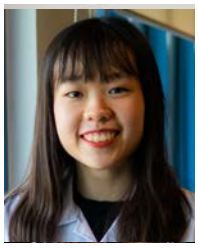
I would like to contribute with a podcast. Such a form of content might engage our audience because it is more relaxed and available on-demand. I could imagine that people will feel better about sending a question to a podcast team rather than asking during a public talk. In the beginning, our Trainee Committee has to get it started. Later, we could start to invite speakers. I think with a rather informal style we can cover diverse set of content.

> What it means to be creative?

What characterizes my creative approach, might be thinking about how to take different perspectives on a process or a particular opportunity. Instead of merely doing research, we have to communicate our findings. Making others understand, even though they might be from other backgrounds. Creativity can be expressed in animations, films, or comics. Again, do not just break things down to make the audience understand but also transmit the importance and especially the beauty of solutions.

Thanks for your inspiration Tatenda - *We will continue to keep it up!*

It is a pleasure to see you again!



Hopefully, we recovered from the tragic news last week – to reignite spirits, we will slowly work on rebuilding the old momentum! Today, we do so together with Jessie Wong Ling Ai and discover how science and entrepreneurship can overlap. Enjoy everyone:

> *Who Jessie is*

Grew up in Singapore – Working on her PhD \ Volunteer in multiple scientific endeavors – Successful in various Tournaments & Competitions

I am currently doing my PhD at the Duke-NUS Medical School, Singapore. My prior research, for my final project of my undergraduate studies, involved finding FDA-approved drug combinations to cause autophagy-mediated cell death in RAS mutant colorectal cancer.

For my PhD, I focus on the role of MAPK signaling in Breast Cancer Brain Metastasis (BCBM). Currently, there isn't much research on the role of MAPK in BCBM. Despite that, we managed to find a role of fatty acid metabolism in its signaling, which prompted my current research topic.

When I was young, my dream was to learn something new every day. And science is the perfect field to make this aspiration come true. Another goal of mine is to combine entrepreneurship with science. As such, I have dabbled a bit in the start-up ecosystem.

Jessie, I saw that you co-founded a company on services for pets, is that right?

Yes, that is indeed correct. I always wanted to do something in relation to entrepreneurship. We founded "PORO" a peer-to-peer pet service community platform with some seed funding we have secured. While the others took over the coding, I was working on the business development. Our skillsets basically complemented each other.

Venture Experiences

The engagement in entrepreneurship can be very valuable. It teaches you various soft-skills and especially improves one's ability in networking. Networking is a skill that is highly valuable, and unbelievable useful in the scientific setting as well. *(According to my humble opinion [Patrick], embracing a fundamentally different perspective will also enable you to see new aspects within your research as well as opportunities outside your current career path.)*

Another Social Media

I came up with the idea to start a Telegram channel as part of a new "initiative". Telegram offers a convenient way for IUBMB TI to reach out to science trainees. This is because Telegram has features such as announcement channels, polling and bots which i believe IUBMB TI can make full use of. *(Personally, I like this idea because Telegram channels transmit a more intimate feeling of connection. And still, they are not limited in size if we successfully grow it.)*

Hidden Synergies

As we may know, doing science is a long process. It requires months, if not years to actually get a manuscript out. In comparison, business or entrepreneurship has a shorter runway and provides refreshing insights from different perspectives which may help in critical thinking and providing an alternative point of view to solve a problem, be it scientific or not.

Our Future

My biggest hope for IUBMB TI is that we can hopefully increase our reach to more scientific trainees around the world! This is also partly the reason why I am in the social media team, where I can help to make a difference. Moreover, I really hope that IUBMB TI develops further so that the IUBMB TI members can meet each other face-to-face too.

> The value of connection

One advice from me would be to put some effort into networking and to be open-minded. Although this might be difficult for introverts like myself, the benefits eventually outweighs the cons. We might be able to meet interesting people along the way that may be able to help you in your scientific career :)

And another minute for you!

It is time to introduce Naveen Vankadari! We are hearing from a very experienced scientist and the minutes will be packed with insights and advice. Thus, without further do, I let you jump in and hopefully you take something useful away for your own career:

> *Who Naveen is*

Grew up in India – Research Fellow in Melbourne \ Experienced Academia & Industry – Author of quite a few papers

I am an infection biologist with a foundation and structural biology and protein engineering. During my PhD journey, I delved into the intricacies of biochemistry and molecular biology. I connected the purification of proteins with the fascinating world of crystallography and ventured into genetic knockouts and conducted various essays to decipher their functions.

Currently, I'm overseeing multiple projects that investigate the dynamic interplay between viruses, bacteria, and host cells during infection. My research ranges from bench to bedside and involves techniques such as cryo electron microscopy and computational biology.

Ever since my masters I was interested in clinical microbiology. The constant battle between immune cells and pathogens is fascinating to understand and offers lots of space for innovation. This is the reason I always wanted to research on the molecular interactions and extend our view on how communication between cells is important for the development of therapeutics and treatments.

Naveen, you have been working in the industry, at Merck, share some of your experiences with us

Yes, I have been making my way to a Senior Scientist as Merck Millipore , where I specialized in developing in vitro diagnostic and molecular biology tools. I have noticed that many young scientists tend to have very ambitious ideas but the consideration of feasibility is as important. It's all about evolving your initial idea. First, you conceptualize it, then you validate it with the proof of concept, create a prototype, and finally, you arrive at the finished product.

A colorful hobby

What is really amazing about working in a big company is that everything is clear cut and well documented. Initially it is very tedious but later it pays off. You will always be able to review in detail what you have done. Also, there was a much greater emphases on reproducibility. Not before you get your experiment to work perfectly well, you repeat it three times and just then hand it over to quality control for them to further corroborate your findings.

Teaching teaches you

My experience at Merck provided valuable insights into the art of pitching projects effectively. In academia, we just focus on sharing research ideas for funding. But in the industry, pitching goes beyond presenting the idea or innovation itself. It involves a comprehensive consideration of the financial aspects, navigating company structures as well as current competitors and communication of your visions as crucial parts of the process.

An idea for you

Before joining a PhD, ask yourself, why do you want to do it? It is not a normal job. It is going to take significant amounts of time and requires a whole lot of resilience, your passion has to make up for all the hours you spend, otherwise you will burn out easily. Remember, in case you could imagine to switch, the industry is not just looking for PhDs. This has nothing to do with you not loving science. If you just want a “good job”, a PhD is not the right option.

Our Future

I am interested in a PhD or honours project where I can mentor ECRs and a supportive way in a mentor-mentee style. Through workshops and symposia, we can share our experiences and help others learn about funding and different career paths. This can also help PhD graduates apply their skills effectively in new careers. That is important because many PhDs have valuable skills they may not know how to leverage.

> All that glitters is not gold

In my opinion, doing lab rotations before starting a PhD is crucial. Especially, when you are considering studying abroad returning might not be as easy due to visa restrictions or personal reasons. It's important to remember PIs can easily say impressive things and that attending a prestigious university does not guarantee having a great supervisor. However, your supervisor plays a critical role in your project’s success. From a distance, everything may seem tempting, but you should understand that even tasks like coding can be quite monotonous.

Certainly, valuable experiences - *Next time, our chair speaks*

> IUBMB TI - Your Monthly Minutes

Your favorite monthly newsletter

NOVEMBER 2023 - FEBS/PABMB

Trainee Initiative

It's finally time to hear from our Chair!

Hello everyone, we are approaching something special today with our minutes introducing Élyse Fischer. Given her experiences being chair, we will double down on leadership but also on career advice in and outside of academic research – so let's go for it:

> *Who Élyse is*

Grew up in the United States – Currently, working at a startup \ One of the few having used EPR! – Endurance sports is her second passion

I have been in love with science ever since high school. At that time, I did my first research internship and then continued with an undergraduate in Molecular Biology. Eventually, I did my PhD at Cambridge. I think you could call me a structural biologist given my background in Crystallography, NMR, EPR, and Electron-Microscopy, but now I work in Protein Design.

Currently, I work at a start-up called Monod Bio, where I use machine learning to design sensitive biosensors. For example, I am developing a diagnostic tool to measure D-Dimer levels in blood samples. D-Dimer is a protein that is upregulated during blood clotting. Most available tests are antibody based and rates of false positive and negatives are quite high positives.

Working at a start-up is fast paced and from time to time hectic. However, this is the environment I thrive in. I work really close with the CEO, COO and CSO – and I can see myself later becoming a Chief Scientific Officer where I can lead people and manage projects.

Élyse, many young researchers dream of working in a startup – share your experiences thus far!

Monod Bio is not a chill and easy going place. Rather, it is a high stress environment. But I like it because I learn a lot quickly – I lead projects, do my own experiments, fix equipment, or buy stuff we need (also from eBay from time to time :D). We are about 30 people here and I like that I feel close to everyone! Of course, it is an economical undertaking which means your project can be canceled at any time if it does not seem to succeed. Although sometimes sad, it can at times be really relieving too!

Leading ≠ Leading

When I started as chair, I was not aware of all the various leadership roles there are. It is not the same to host conferences vs. mentoring in the lab vs. being on a committee vs. starting an initiative from the ground up. Different people need different leading given their different cultures and different personalities. Often, members just need to believe in their ideas, knowing that they are good enough to add value and make a difference.

Lessons being Chair

When taking a leadership role, it is easy to take over everything yourself, especially when you are an "A-type" personality. I have learned that it is important to trust the people you work with and push them to act in roles in which they take leadership themselves. This means working with them and guiding them instead of telling them what to do or doing it yourself. It can feel slower – but this is better for everyone!

Learning Broadly

In my free time, I hike, run, ski, and bike, and while doing this I am constantly listening to science podcasts such as Synbiobeta. I also love to listen to inspiring adventure books such as "Savage Summit". However, these days I also listen more and more to news because I want to be better aware of the 'outside' world. I have always been very sciency and it is super easy to be enveloped and consumed by my work.

Our Future

I am proud of what we have created from scratch. Now, I am very excited for the committee change-over to have fresh minds come in and see where they take it. I would be super open to anyone taking the TI in a completely different direction as well. I would like to see more leadership and focus from Asia or Africa since these regions are still relatively weakly represented in the IUBMB TI.

> *Advice For You*

Find out what type of research you really enjoy. Do internships and get research experience instead of focusing on getting the best grades. Even when you are not the very best in school, you will be able to get into good programs for your research. Also, don't be afraid to look at the industry. Do not listen to people suggesting that leaving academia is like selling your soul. Craft your own way forward!

That was it from our chair - *Next time, this year's grand finale*

> IUBMB TI - Your Monthly Minutes

Your favorite monthly newsletter

DECEMBER 2023 - FEBS

Meet the mind behind the minutes ;)

Welcome everyone! It's been over a year since we began our monthly minutes. I interviewed all our original members, so I thought I would provide you an insight into who I am. Let me also say: thanks to everyone who is following the minutes! And now, let's get into it:

> *Who Patrick is*

Born in Germany – Working in Science Communication and Sustainability \ Wine & Spirit Taster – Pretty much into doing sports

My dedication for science started in high school, due to a teacher that made me fall in love with microbiology. In this instance, I also found my passion for science overall. Thus, I studied Biochemistry in my Undergraduates and finished a double Master degree in Molecular Medicine.

I researched on Epigenetics, Neuroscience, Immunology and Protein-Science. However, I got especially passionate about Neuroimmunology. Thus, I started a project on how the nervous system can regulate immunity to pathogens when triggered by stress, pain or mechanical tension.

For me, science is an approach - to assess what happens outside of our minds, beyond our subjective perspective and perception. This pursuit of uncovering a "truth" distinguishes science from both engineering and a mere quest for recognition. Thus, to me, the common question whether one is passionate about doing science is very different from being passionate about science.

I could discuss with you what is "significant" in statistics really mean, but I thought I would share some more practical advice:

It helped me a lot to read textbooks beyond what we have had to learn for an exam. Similarly, when starting a new project, read the literature thoroughly. Importantly, do not let anyone else influence you. Controversies host numerous opinions – also your PI is to some extent subjective. Hence, approach your readings with an open mind, even though that is undoubtedly challenging.

It is your path

I think we do hear many useful and impactful lessons from others and more often than not, we are even able to re-articulate them. However, we often fail at putting these lessons into action. It's a challenging and discomforting task to honestly explore the implications of these insights. Yet, merely settling for the comfort of knowing about problems and solutions without taking action won't lead to success.

Chewing on thoughts

I've consulted numerous scientists on the importance between laboratory culture and research topic. More often than not, they emphasized the significance of one's colleagues. Still, do not forget that how industrious, dedicated and consciences people are, plays into that too. Especially, if you are ambitious and determined, figuring yourself and your approach out might be the most important thing after all!

An idea for you

There are two YouTube channels I want to share. The first one gives amazing insights about misunderstandings in science (mainly about nutrition and life-style called What I've Learned). The other one is for people who like to take another perspective on firing up their workouts (The Bioneer). For anybody else, here is amazing literature about how we think and draw conclusions: Thinking, Fast and Slow and a "counterpart" to it : Gut Feelings.

Our Future

The TI really surprises me again and again. I love it! However, my idea: doubling down on mental health. Many researchers don't do as well as they could because of not having figured out their mindset. It is a topic that can drive a lot of traction (PS: We, in the FEBS region, will have an event about it in January). Moreover, the resource page is an amazing project, I would love to see it continued when we have figured out the (wo)man-power it needs.

> You make your circumstances

Stay strong and figure out what keeps you going. For a long time, you can push these drives away, especially by comforting yourself. But the days will come when you will have to make decisions. Given that I think there is nothing like an ultimate right or wrong, the guiding principle for me is that it might all be about aligning your ratio with what you feel in order to be able to effectively and fulfillingly live up to your aspirations.

That's it and I was convinced... - *...that we continue next year!*

PROFESSOR FRANCIS AMARA
IUBMB Ambassador for FASBMB

The Power of Community to Sustain STEM Education in Schools

Francis Amara

Universities, government agencies, and NGOs continue to promote Science, Technology, Mathematics and Engineering (STEM) in disadvantaged communities, with emphasis on participation for girls. These activities, to a large extent, depend on grant funding. Supporting and maintaining STEM outreach projects poses longer-term challenges for disadvantaged communities. The challenges include lack of guidance on the expectations of community participation in, and commitment to, STEM education. Unfortunately, institutions and organizations largely neglect the importance of community input that undermines success of these projects. They hardly ask impoverished communities to provide in-kind service or support. For example, to renovate classrooms into STEM labs, to make lab coats, or to raise funds to provide equipment. Consequently, disadvantaged communities feel their contributions are not needed and/or valued, leading to further marginalization. Communities do have the capabilities to play a significant role in developing STEM education, even underserved communities.

Some community members want to know what to do and how to do it to support STEM activities. In addition, leaders can emerge in any community. Disadvantaged or underserved communities have electricians, carpenters, and contractors to provide in-kind and voluntary services. It is vital to establish partnerships with them for sustaining STEM projects. Communities, even the poorest ones, have the capabilities to determine their destiny. If we can reimagine poverty with emphasis on motivating communities to provide in-kind service and support, and to value their capabilities, then they can become “rich” enough to establish STEM projects in their neighborhoods.

At K-STEM Philanthropy Network (https://www.facebook.com/groups/1452817365025414), we started reimagining poverty in 2013. Over the past 10 years much has changed. Our community is “very rich” in sustaining STEM projects. We have policies and practices with greater community input, which include:

- Clearly defined expectations for the Network and community responsibilities
- Defined penalties and solutions to sustain projects
- Equity in leadership roles for both women and men
- Involvement of pupils in service-learning projects
- Professional or vocational contributions, as in-kind services, from everyone whose child participates in the STEM projects

PROFESSOR FRANCIS AMARA
IUBMB Ambassador for FASBMB

The Power of Community to Sustain STEM Education in Schools

Success of the K-STEM community in sustaining STEM education is largely due to the emphasis on shared responsibilities and ownership, rather than depending on institutions, organizations, external grants, or funding sources of support. The community leadership is involved in the planning and management of STEM projects, and raising funds through donations and social events to support the STEM Centre.

Community Members gathered to build the Sunshade Pavillion

Staff and Community Meetings

Sunshade Pavillion with Picnic tables

Community Members provided the materials and labor, by both women and men, to mix and pour the concrete

ENABLE 2023

THE EMERGING CHALLENGE: Environmental impacts on human health

23-25 November 2023 • University of Cologne • Cologne, Germany

Report by Ilona Concha Grabinger, Executive Committee Member for Congresses and Focused Meetings (Chile)

Based on a successful project funded by the EU H2020 Research and Innovation Program, the FEBS-IUBMB-ENABLE conference series is a joint initiative of FEBS (Federation of European Biochemical Societies), IUBMB (the International Union of Biochemistry and Molecular Biology) and four leading biomedical research institutes across Europe: the Institute for Research in Biomedicine (Barcelona, Spain), the Radboud Institute for Molecular Life Sciences (Nijmegen, the Netherlands), the Novo Nordisk Foundation Center for Protein Research (Copenhagen, Denmark), and the European School of Molecular Medicine (Milan, Italy).

Since 2017, the ENABLE consortium has promoted international, interdisciplinary 3-day conferences organized by and for young researchers from the molecular life sciences disciplines, bringing together up to 300 participants worldwide. Each of these annual gatherings has been hosted by a partner research institute involved in the consortium. Since the launch of ENABLE, FEBS, and IUBMB have been the main sponsors of the events and have now joined forces to give continuity to these successful events and to offer research institutes devoted to molecular life sciences worldwide the opportunity to host and participate in the organization of one of these conferences.

ENABLE 2023

THE EMERGING CHALLENGE: Environmental impacts on human health

23-25 November 2023 • University of Cologne • Cologne, Germany

On 16-18 November 2022, the first FEBS-IUBMB-ENABLE conference took place in Seville, Spain, at the Institute of Biomedicine of Seville (IBiS). The conference was a great success with 300 young researchers participating from 31 countries within and outside of the EU.

This year's broad theme was "THE EMERGING CHALLENGE: Environmental impacts on human health", linking research now and in the future of the life sciences. At the scientific symposium, keynote speakers from different fields including complex diseases, novel model systems, epigenetics, and exposome and computational modelling helped us learn more about the interlink of the environment and biomedical sciences.

With the career day, the FEBS-IUBMB-ENABLE event allowed participants to get inspired about their future as young scientists and broaden their skill set to take their future into their own hands. More than 240 participants from 32 different countries could take advantage of different activities throughout the day to build new skills or join discussions about possible career paths outside the academic landscape. The FEBS-IUBMB-ENABLE job fair was a unique occasion for young and talented researchers to meet with companies and public organizations and build up constructive interactions with people from various life science sectors such as Pharmaceutical and Biotech companies, Editing/publishing companies, Academic organizations, and Scientific Societies. FEBS and IUBMB had booths where young researchers could get information about all the activities offered by these institutions. Special recognition should be given to Mihaela Jovanović and Patrick Penndorf, both members of the IUBMB Trainee Initiative, who actively promoted the activities of the IUBMB. Additionally, close contacts were maintained with the African travel grant awardees funded by IUBMB.

There were also many outreach activities and networking. The goal was to bring science closer to society. This year, in harmony with the green and environmental theme, public pub talks and pub quizzes were held on the importance of taking care of our planet. The participants had the possibility of joining pub talks and pub quizzes to raise awareness on adopting a green-lab initiative in their labs.

ENABLE 2023

THE EMERGING CHALLENGE: Environmental impacts on human health

23-25 November 2023 • University of Cologne • Cologne, Germany

In addition, FEBS-IUBMB-ENABLE brought and popularized science to a younger audience, with activities for kindergarten and high school students that encouraged their curiosity, educated them about environmental impacts, and informed them about possible career paths in natural sciences.

Puzzles and T-shirt prizes were given at the IUBMB stand during the conference.

IUBMB MilliporeSigma ENABLE-Africa Fellowship award winners with Patrick Penndorf (Trainee Initiative), Mihaela Jovanović (Trainee Initiative), Ilona Concha Grabinger (IUBMB Executive Committee Member for Congresses and Focused Meetings), and Alexandra Newton (President of IUBMB)

IUBMB FOCUSED MEETING ON EXTREMOPHILIC FUNGI

19-22 September 2023 • University of Ljubljana • Ljubljana, Slovenia

Report by Nina Gunde– Cimerman, Chair (Slovenia)

***Organizing Committee**: Nina Gunde–Cimerman, Chair (Slovenia), Cene Gostinčar (Slovenia), Ramón Batista (Mexico), Laura Selbmann (Italy), Polona Zalar (Slovenia)*

***Scientific Committee**: Amy Gladfelter (USA), Jason Stajich (USA), Julia Schumacher (Germany), Michael Poulsen (Denmark), Vania A. Vicente (Brasil), Luiz Henrique Rosa (Brasil)*

Extreme environments are hostile to most life as we know it. Only a small selection of species have adapted to survive and thrive in some of the most extreme conditions on our planet. Research on extremophiles has traditionally been focused on prokaryotes, but this focus has been repeatedly challenged by the discovery of various fungi as part of the extreme microbiome. Despite their much more complex cell structure, fungi approach, and in some cases exceed, the stress tolerance of bacteria and archaea. The study of fungi from various extreme environments, from arid and hypersaline to cold and acidic, attracted over the last two decades a vibrant and ever-growing scientific community. Although the topic was receiving increasing attention at some of the most prestigious international meetings, a dedicated international conference was urgently needed. This need was overcome by the organisation of the first IUBMB focused Conference on extremophilic fungi (FUN-EX), from 19-22 September 2023, in Ljubljana, Slovenia, at the Biotechnical Faculty of the University of Ljubljana.

The venue:
Biotechnical Faculty of the University of Ljubljana

The programme

Besides IUBMB as the main sponsor, the other sponsors were Current Research in Microbial Sciences, FEMS, Frontiers in Fungal Biology, GOBA, Hisense Europe, ISME, Ljubljana Tourism, Microbiology Research, Mikropolo, University of Ljubljana.

IUBMB FOCUSED MEETING
ON EXTREMOPHILIC FUNGI

19-22 September 2023 • University of Ljubljana • Ljubljana, Slovenia

The conference brought together, for the first time, 112 participants, from 26 countries and five continents. They represented world-renowned experts young scientists, and students who explore the diversity, adaptations, and potential applications of extremophilic fungi.

Participants of the First IUBMB Focused meeting on extremophilic fungi FUN-EX. Picture by: Janez Kotar

Conference and talks

Their scientific contributions recognized fungi as globally an integral part of extreme microbial communities. Unlike their prokaryotic counterparts most fungi adapt to a wide range of an extreme condition, e.g. from no salt to saturation with salt, from low to high pH. They display a typical fungal strategy in adaptations – extremotolerance or even poly-extremotolerance - rather than extremophily. Extremotolerant fungi can be so adapted to multiple environment that they perceive a broad range of extreme conditions as optimal for their growth.

During the break and poster session

Keynote speaker Amy Gladfelter

19-22 September 2023 • University of Ljubljana • Ljubljana, Slovenia

Two keynote lectures (by Amy Gladfelter and Nina Gunde–Cimerman), 20 invited talks (**Table 1**) and 25 selected talks, flash talks and posters addressed the following questions: Who are these fungi? Where can we find them? How did they evolve and how do they survive in some of the most extraordinary conditions we find on our planet? Which unique solutions to universal problems of adaptations they have evolved in comparison with prokaryotes? Can we use them in practical applications? Do they adapt to global climate change? Can they give us some astrobiological answers?

Besides lectures and poster sessions the participants also attended a very popular excursion to two Slovenian extreme environemnts: Carstic Caves Škocjanske jame in the morning and hypersaline environment in Sečovlje man-made Solar Salterns in the afternoon.

Table 1: Invited speakers at IUBMB Focused Meeting on extremophilic fungi – FUN EX.

Invited Speakers	Title	Invited Speakers	Title
Amy Gladfelter	Temperature adaptation of biological phase separation enables extremophilic lifestyles	Gustavo Goldmann	The extreme of the non-extremophiles: *Aspergillus fumigatus* drug tolerance and persistence
Laura Selbmann	Rock Fungi: wired bodies, stunning potential	Sybren de Hoog	Evolution of opportunism in Chaetothyriales
Ramon Alberto Batista-García	Cellular responses of Aspergillus sydowii to kosmotropic growth at extreme concentration of NaCl	Macit Ilkit	Cerebral phaeohyphomycosis
Michael Poulsen	Tailored probes for the study of molecular neurophysiology	Vania A. Vicente	Omics analysis of Cladophialophora exuberance focusing its potential on bioremediation of hydrocarbon and heavy metal polluted habitats
Samah Mohamed Rizk Soliman	Exploring the Surprising Biodiversity: Extremophilic Black Fungal Species from Archaeological Microhabitats in Desert Ecosystems	Jason E. Stajich	Genomic and Phenotypic variation in *Rhodotorula* species sampled from Extreme Environments
Teppo Rämä	Intertidal fungi in the Arctic	Julia Schumacher	Genetic engineering of black fungi: lessons learned from *Knufia petricola*
Steven Hanes	Phase separation as a mechanism for cold tolerance	Igor V. Grigoriev	Comparative Genomics of Thermophilic Fungi
Kathleen C. Benison	How can fungi in extreme acid lakes and their salts inform us about possible life on Mars?	Nancy P. Keller	Isocyanides as Tools of Survival: Unveiling Fungal Strategies for Copper Starvation
Chris Koon Ho Wong	Fungal conidia prepares for the future according to environmental conditions present before dormancy	Elisabet Aranda	Applications of isolated fungi for bioremediation purposes
Michael Daly	The Role of Mn Antioxidants in Extremotolerant Fungi	Nina Gunde-Cimerman	Water, water everywhere, nor any drop to drink
Janet Quinn	Antimicrobial warfare: bacterial-mediated fungal killing through the Type VI secretion system		

IUBMB FOCUSED MEETING
ON EXTREMOPHILIC FUNGI

19-22 September 2023 • University of Ljubljana • Ljubljana, Slovenia

Already at the end of the conference it was decided, that this will not be only a first-time event, helping to usher mycology in the next era of extreme mycology, but that it will become a traditional event in the years to come. The next meeting will be organized in two years (2025) in Spain, followed by the next one in Italy (2027) and Germany (2029).

Local Organizing Committee

15-20 October 2023 • Avra Imperial Hotel • Kolymvari/Crete (Greece)

Report by Axel Imof (Ludwig Maximilian University of Munich, Germany)

***Organizing Committee**:*

Constance Alabert (University of Dundee),Till Bartke (Helmholtz Zentrum Munich), Axel Imhof (Ludwig Maximilian University of Munich), John Strouboulis (King's College London), Michiel Vermeulen (Radboud University Nijmegen)

The IUBMB Focused Meeting on Integrative Omics of Nuclear Functions, held from October 15 to October 20, 2023 in Greece, brought together leading researchers and experts in the field of nuclear biology. The event provided a platform for knowledge exchange, collaborative discussions, and exploration of the latest advancements in integrative omics approaches to understanding nuclear functions.

The meeting kicked off with registration opening at 15:00, allowing attendees to settle in and connect with fellow participants. The evening continued with a general reception fostering a relaxed atmosphere for networking and allowing participants to engage in initial discussions.

The second day commenced with opening remarks from the Organizing Committee, setting the stage for a day focused on chromatin modifications. The highlight of the morning was the Company of Biologists Keynote Lecture by Melike Lakadamyali, who delved into super-resolution imaging of chromatin organization in health and disease. The day featured two sessions on Chromatin Modifications, chaired by John Strouboulis and Tineke Lenstra. Renowned speakers such as Simone Sidoli and Alejandra Loyola presented insights into unexplored chromatin modifications and the maturation of newly synthesized histones. The EMBO YIP Lecture by Tuncay Baubec explored chromatin-protein interactions during dynamic regulatory processes, and Andreas Ladurner discussed chromatin regulation by ADP-ribosylation. Following a stimulating morning, the afternoon session shifted focus to Nuclear Architecture, chaired by Michiel Vermeulen. Ana Pombo's EMBO Keynote Lecture on Multiome-GAM connecting cell states with 3D genome structure captivated the audience. Short talks, poster flash talks, and a poster session enriched the scientific discourse.

The Organizing Team *(from left to right)*:
C. Alabert, M. Vermeulen, A. Newton, Till Bartke, A. Imhof, J. Strouboulis

15-20 October 2023 • Avra Imperial Hotel • Kolymvari/Crete (Greece)

The third day began with a session on Structural Proteomics chaired by Nils Krietenstein. Hitoshi Kurumizaka, Pedro Beltrao, and Georg Kustatscher presented on various aspects of structural biology, multi-omics data integration, and proteome dynamics associated with chromosome condensation. The afternoon session, chaired by Constance Alabert, explored Multi-Omics Data Integration. Alexey Nesvizhskii and Jussi Taipale discussed computational platforms for proteomics and predicting gene expression from DNA sequence. Maria Colomé-Tatché presented on single-cell computational epigenomics, and a sponsor presentation by Diagenode added an industry perspective. The Women in Science Lecture by Melike Lakadamyali and a problem-solving workshop added diversity and interactive elements to the program. The day concluded with a social event, an excursion to Chania Old Town, and dinner in Chania Old Harbour.

The fourth day began with a presentation by IUBMB President Alexandra Newton, who introduced the IUBMB programs to stimulate and fund the international exchange of researchers at various career stages. Her presentation was followed by a session on Quantitative Approaches to Transcription chaired by Tuncay Baubec. Tineke Lenstra's EMBO YIP Lecture on understanding transcription and a presentation by Naama Barkai, who thankfully provided a pre-recorded presentation due to the political turmoil in Israel described the intricacies of transcription factors relationships. The afternoon session, chaired by Till Bartke, focused on High-Resolution Imaging of the Nucleus. Musa Mhlanga, Gernot Längst, and others discussed chromatin-regulated circuitry, adenoviral chromatin organization, and the role of STAG2 in cell quiescence. Wendy Bickmore's EMBO Science Policy Lecture on science funding added a critical perspective.

The fifth day delved into Single Cell Genomics & Proteomics, chaired by Gaelle Legube. Jop Kind, Jason Derks, and others explored remodeling of genome-lamina contacts, single nuclei proteomics, and transcription factor co-binding. The subsequent session on DNA Replication & Repair, chaired by Kathryn Lilley, featured lectures by Evi Soutoglou, Gaëlle Legube, and Constance Alabert. The day closed with an interactive session on Spatial & Interaction Proteomics, chaired by Axel Imhof. Michiel Vermeulen, Kathryn Lilley, and Jean-Philippe Lambert highlighted the importance of integrative omics approaches in understanding gene expression regulation, subcellular processes, and chromatin structure.

Lively Interactions at the Posters

15-20 October 2023 • Avra Imperial Hotel • Kolymvari/Crete (Greece)

The meeting concluded with the announcement of the best presentation and poster prize awards thereby acknowledging outstanding contributions. The Organizing Committee delivered closing remarks, and the participants enjoyed a final dinner, wrapping up a week of fruitful scientific exchange and collaboration.

Group Photo of Conference Participants

Symposium on Pedagogical Innovation in Biosciences – How to engage students in our practices?

October 12-13, 2023 • Aveiro, Portugal

The University of Aveiro, jointly with University of Minho and in association with SPB, FEBS and IUBMB, held a two-day conference (12th and 13th October) in Aveiro, Portugal, entitled “Symposium on Pedagogical Innovation in Biosciences – How to engage students in our practices (SPIB2023)”. The symposium focused on promoting active learning methods that enable students to engage more deeply with the course material, student engagement strategies that foster a sense of community and collaboration in the classroom and leveraging research in science education to enhance the learning experience. Through interactive presentations and workshops, the SPIB2023 provided a valuable opportunity for educators, researchers and professionals to collaborate and exchange ideas on how to improve biosciences education and prepare the next generation of bioscience professionals. Three SPB grants and 3 FEBS grants were attributed to students.

Scientific Program: Day One

The first SPIB2023 session “Session I: Pedagogical Innovations for Better Learning” started with Dr. Ferhan Sagin (Chair of the FEBS Educational Committee) who presented a thought-provoking talk, titled “The wet signs of good teaching and learning: curiosity and creativity”. After a coffee-break and poster session, in which selected posters were presented, Dr. Asta Daunorienė (Kaunas University of Technology, Lithuania) used her own professional experience to discuss about “Enriching Transversal Competence Development and Cultural Experience through Blended Mobility: Exploring Innovative Approaches in Biosciences”. Dr. Jim O’Mahony (Munster Technological University, Ireland) next shared his experience with collaborative learning communities with a talk entitled “Initiating and sustaining a culture of collaborative Learning Communities within a Faculty of Science”. Dr. Christian Neves, Dr. Paulo Claro and Dr. Susana Loureiro (University of Aveiro, Portugal) closed the day invited talks by sharing their experiences on “How to engage students in my classes”. These distinguished professors were chosen by the students as the recipients of “Best professor” award from their respective departments, spanning medical sciences, chemistry and biology. The conference day one ends with

Symposium on Pedagogical Innovation in Biosciences – How to engage students in our practices?

October 12-13, 2023 • Aveiro, Portugal

three selected talks from the submitted abstracts: “Redefining the traditional lecture to enhance the student experience (Emma Yhnell, Cardiff University, UK); “Simulations as an assessment for learning (Nigel Francis, Cardiff University, UK); “Project-based learning in Enzymology: a case-study at University of Minho (João Marcos, University of Minho, Portugal).

Scientific Program: Day Two

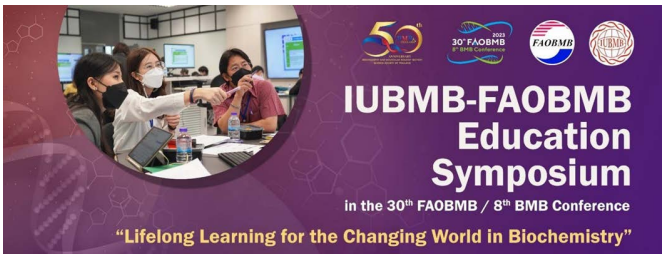
Day two began with three workshops that involved dividing participants to providing them with the opportunity to engage hands-on activities and exchange experiences related various aspects of pedagogical innovation. The workshops entitled: WS1 “Students’ engagement through design thinking methodology”, by Dr. Teresa Franqueira (University of Aveiro, Portugal); WS2 “Students as engaged readers of study materials with Perusall”, by Dr. Rui Oliveira (University of Minho, Portugal); WS3 “Innovative Teaching with App-Free and Web-Based Augmented Reality”, by Dr. Nuno Osório (University of Minho, Portugal). After a coffee-break, Dr. David Smith (Sheffield Hallam University, UK) and Dr. Sarah E. Eaton (University of Calgary, Canada) presented their exciting works about artificial intelligence, entitled “Promise and Peril of AI in Biosciences Education – using these tools for effective learning” and “Academic Integrity and Student Engagement in the Age of Artificial Intelligence: Learning in a Postplagiarism Era”, respectively. These talks closed the second session “Students’ Engagement in our Practices”. Following lunch, Dr. Gabriel Hornink (Federal University of Alfenas, Brazil), started the Session III: “The 4C’s skills for Biosciences students to Succeed in the Workplace”. He presented his work “Brewing science as a tool for the development of professional and academic skills”. Dr. Erick Silva (São Paulo State University, Brazil) then shared his experience running a remote collaborative online international learning (COIL) program between São Paulo State University and University of Aveiro, with a talk entitled “Expanding frontiers: COIL as a tool to foster international collaboration among biochemical students”. Next, Dr. Rui Oliveira (University of Minho, Portugal)

Symposium on Pedagogical Innovation in Biosciences – How to engage students in our practices?

October 12-13, 2023 • Aveiro, Portugal

presented the work “Problem-driven course design to engage students in active learning in Molecular Biology”. After a coffee-break and poster session, Dr. Manuel A. Coimbra (University of Aveiro, Portugal) shared his experience on “Learning in a competing environment: the relevance of complementary expertises. To end up the session, four more attendees presented flash talks on their work.: “Solutions, enablers and barriers to digitally enhanced learning implemented in biochemistry and molecular biology education as a consequence of the COVID-19

pandemic: a rapid review in progress”, by Dr. Julio André (CEDES, Brasil); How can we make dimensionality reduction engaging for biological science students”, by Dr. Nuno Osório (University of Minho, Portugal); “An integrative approach to scaffold employability enhancement in the biosciences”, by Dr. Graham Scott (University of Hull, UK); and “Teach different, teach better: The MacVet Project”, by Dr. Carmen Nobrega (IPViseu, Portugal). The day ended with a closing message highlighting the success of the event and Nigel Francis (Cardiff University, UK) being awarded a prize for the best poster (sponsored by SPB) for his work in the use of PeerWise for biochemical teaching.



Report by Tuangporn Suthiphongchai, Chair of the 30th FAOBMB / 8th BMB Conference and Danaya Pakotiprapha, Chair of IUBMB-FAOBMB Education Symposium

***Symposium Committee**: Manchuta Dangkulwanich, Namkang Sriwattanarothai, Nuttee Suree, Suthida Chamrat, Somsakul Wongpalee, Panuakdet Suwannatat*

***Advisors:** Gracia Fe Yu, Tuangporn Suthiphongchai*

The IUBMB-FAOBMB Education Symposium under the theme of *"Lifelong Learning for the Changing World in Biochemistry"* was held on 23 November 2023 at the Centara Grand at Central Plaza Ladprao, Bangkok, Thailand, as part of the 30th FAOBMB / 8th BMB Conference. This symposium was organized by BMB Thailand together with Department of Biochemistry, Faculty of Science from Chulalongkorn, Kasetsart and Mahidol Universities and supported by the IUBMB, FAOBMB and the conference host.

The symposium aimed to bring together researchers and educators in biochemistry and molecular biology to share ideas, techniques, research methods and findings in biochemistry and molecular biology education to promote effective instructional practices in biochemistry and molecular biology. The focus of the symposium included lifelong learning, cognitive neuroscience, personalized learning, teaching and assessment as well as tools and applications for driving class engagement and learning effectiveness. This one-day symposium included a plenary lecture, invited lectures as well as a hands-on workshop on tools and applications for class engagement.

The symposium kicked off with a Plenary lecture on Nurturing the Future Biochemist through Case Study Workshop by Nirma Samarawickrema, a recipient of FAOBMB Education Award, 2022, from Monash University, Australia. She described how case studies workshops can be effectively used in large undergraduate biochemistry classes. This case study workshop worked well for both in-person and online class format, and was found to encourage student collaboration, communication and critical thinking, help them develop lifelong learning skills and improve students' perception of the relevance of biochemistry course materials to the real-world.

Three invited speakers and one oral presentation in the afternoon session were:

- **Annabel Chen Shen-Hsing**, Nanyang Technological University, Singapore

"*Learning how to learn from the science of learning"*

- **Peter Arthur**, The University of Western Australia, Perth, Australia

"Engaging with Technology of enhance digital skills of teachers and students"

- **Julian Alexander Tanner**, The University of Hong Kong, Hong Kong SAR, China

"Collaborative two-stage examinations in biomedical sciences"

- **Terrence Piva,** RMIT University, Australia

"Transforming the course experience through using authentic practicals"

The symposium ended with workshop by Nuttee Suree, Suthida Chamrat, and Panuakdet Suwannatat from Chiangmai University, Thailand on “Tools and applications for class engagement and formative assessment”.

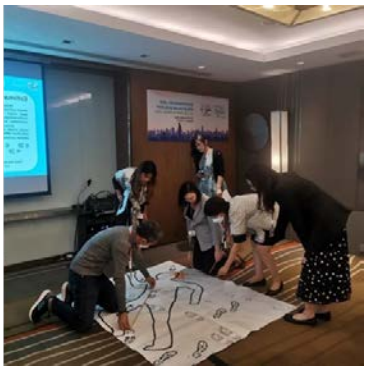
During symposium, participants actively participated with extensive discussion, questions and knowledge sharing. The lectures and activities during the symposium were very impressive and practical. They provided the audience with important insights into biochemical education.

On the left: Nirma Samarawickrema delivered a Plenary Lecture at the IUBMB-FAOBMB Education Symposium in the 30th FAOBMB / 8th BMB Conference in Bangkok, Thailand.

On the right: Yang Mooi Lim Session Chair gave token of appreciation to Samarawickrema

Group photo of speakers and chairs of the Education session.

From left to right: Gracia Fe Yu, Peter Arthur, Annabel Chen Shen-Hsing, Terrence Piva, Julian Alexander Tanner and Danaya Pakotiprapha



Workshop activities

Congratulations to IUBMB Lectures

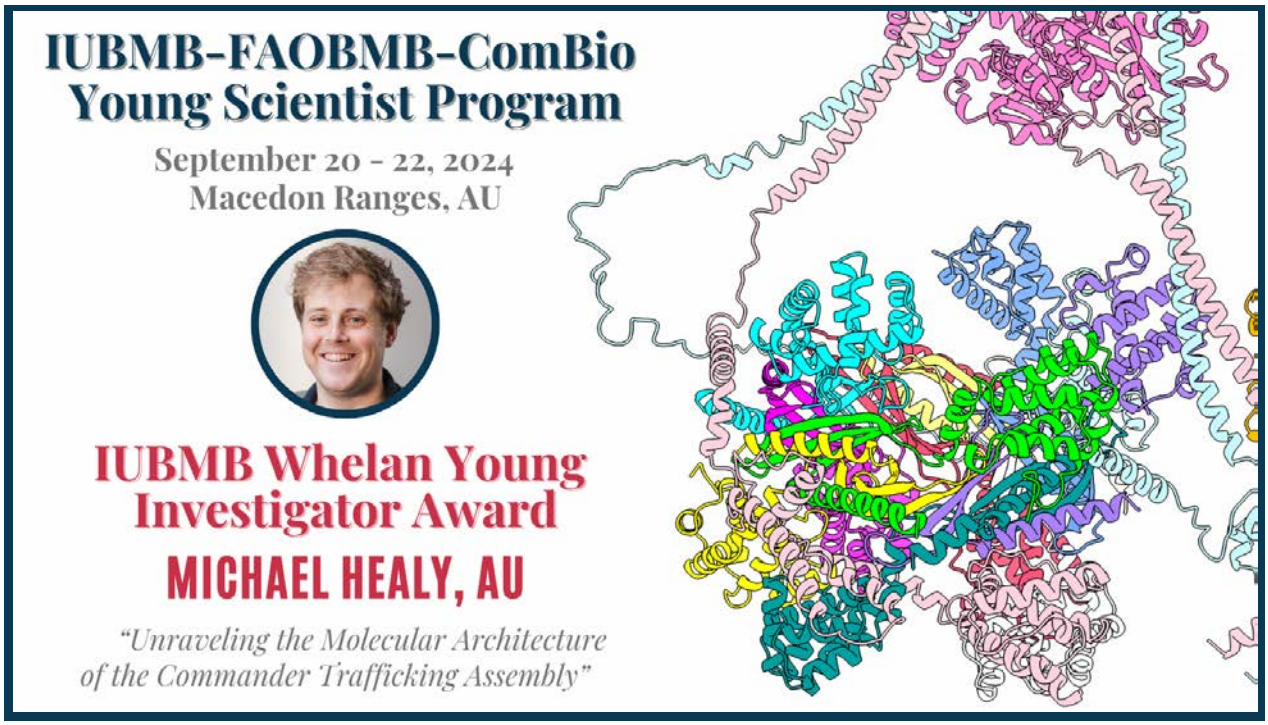
Congratulations to Professor Rachel E Klevit from the University of Washington, USA, who will be presenting the **IUBMB Jubilee Award Lecture** at the EMBO: Ubiquitin and ubiquitin-like proteins in health and disease in Cavtat, Croatia on *"The (Remaining) Mysteries of Ubiquitin"*. She is honored for her outstanding contributions to understanding the structural and functional basis by which ubiquitylation controls the proteome

Congratulations to Professor Vaughn S. Cooper from the University of Pittsburgh, USA, who presented the **IUBMB Plenary Lecture** at the XVIII Annual Meeting of the Argentine Society of General Microbiology SAMIGE on *"Empowering Evolution to Teach Us How Microbes Interact with Surfaces, Drugs, and Host"*.

Congratulations to Dr. Gökhan Hotamışlıgil from Sabri Ülker Center for Metabolic Research at Harvard University School of Public Health, USA, who presented the **IUBMB Plenary Lecture** at the International Biochemistry Congress 2023 & 34th National Biochemistry Congress on "Subcellular Molecular Architecture as a Critical Determinant of Metabolic Programming".

Congratulations to

IUBMB Whelan Young Investigator Award

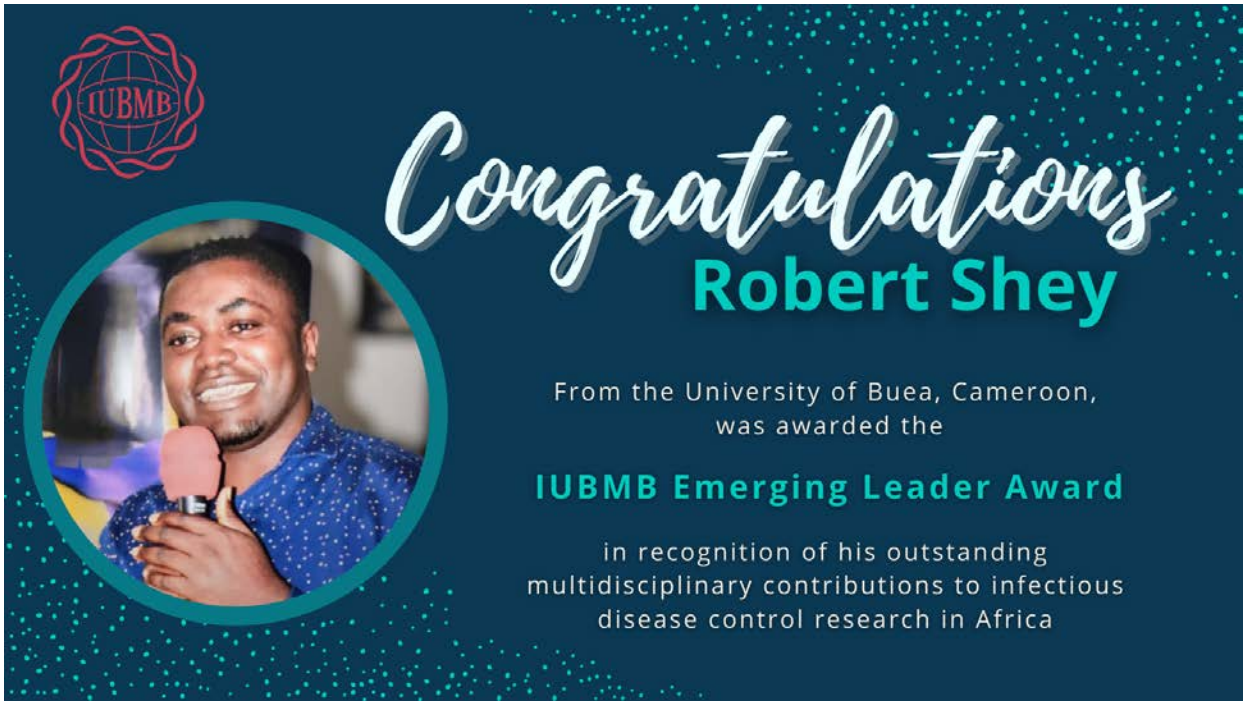


Michael Healy has been a mainstay of the Brisbane protein biochemistry scene having completed both his undergraduate and postgraduate studies at the University of Queensland. In these studies he has worked at unravelling the molecular architecture of a previously unknown Macromolecular complex called the Commander complex – an important complex in regulating cellular homeostasis. This work has led Michael to publish a number of seminal papers including most recently a comprehensive analysis of this complex in Cell entitled "Structure of the endosomal Commander complex linked to Ritscher-Schinzel syndrome".

Michael is known for his oration skills and has presented at numerous national and international conferences where he has been awarded various speaking prizes. Michael was recently awarded the Whelan Young Investigator Award and is looking forward to presenting his work on the Commander complex at the upcoming Young Scientist Program, ahead of the biomolecular horizons conference in Melbourne 2024.

Congratulations to

inaugural IUBMB Emerging Leader Award



Dr. Shey Robert Adamu is an early-career researcher at the University of Buea in Cameroon where he teaches and carries out research on the use of computational tools for the rational design and development of diagnostics and vaccines for infectious diseases. He holds a Ph.D. in Molecular Biology from the Université Libre de Bruxelles in Belgium. His research is also focused on the interaction between NTDs and non-communicable infections. He has been a recipient of the WHO/TDR Clinical Research and Development Fellowship and underwent one-year training focused on research-related project management at the European Vaccine Initiative in Germany. He is currently a recipient of the EDCTP-CANTAM Career Development Fellowship and his project is focused on the development of novel diagnostic tools for onchocerciasis. He is also the principal investigator of two projects funded by the **Integrated Services for Infectious Disease Outbreak Research (ISIDORe)**: one focused on the development of diagnostic tools for monkeypox serosurveillance and the other on the development of transmission-blocking vaccines for Aedes-borne virus using mosquito salivary gland proteins. He was the inaugural recipient of the IUBMB Emerging Leader Award for his contributions to research in the control of infectious diseases in Africa. He is passionate about capacity building, academic mentoring, and research development in Africa.

Congratulations to

IUBMB FELLOWSHIP AWARDEES

The IUBMB Fellowship Committee is pleased to announce that we have awarded fourteen Travel Fellowships to travel and attend a meeting in the IUBMB region. The submission cycles are now every quarter: March 1, June 1, September 1, and December 1. Recipients of the 2023 December cycle for the Travel Fellowships will be announced in January 2024. For more information on this and other fellowships – including Wood-Whelan travel and Early-Career Research Fellowships – please visit the Fellowship Programs on our website. To support these and other programs, please consider visiting the IUBMB Charity and Donations webpage.

Congratulations to

IUBMB FELLOWSHIP AWARDEES

Africa Initiative

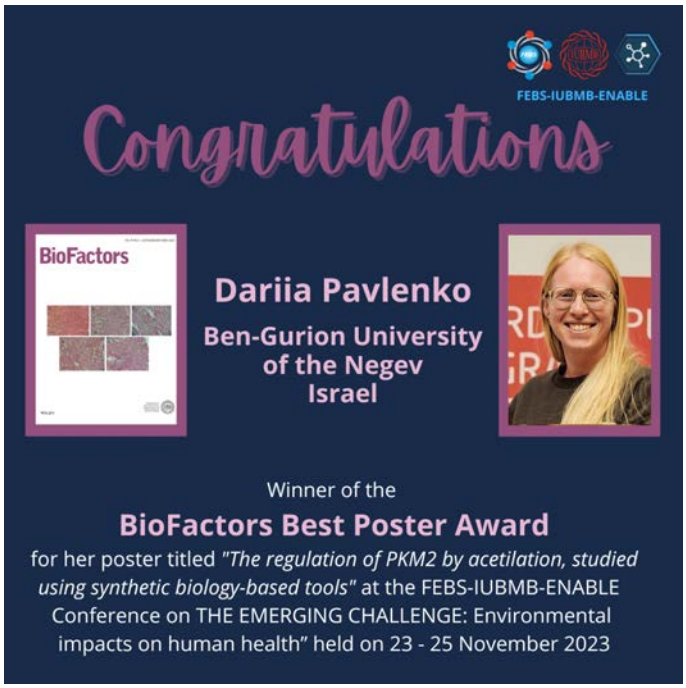
Congratulations to the 5 talented trainees from Cameroon, Ethiopia, and Nigeria, who have received the inaugural IUBMB-FEBS-FASBMB PROBio-Africa Fellowship to spend up to 6 months in a lab in Europe.

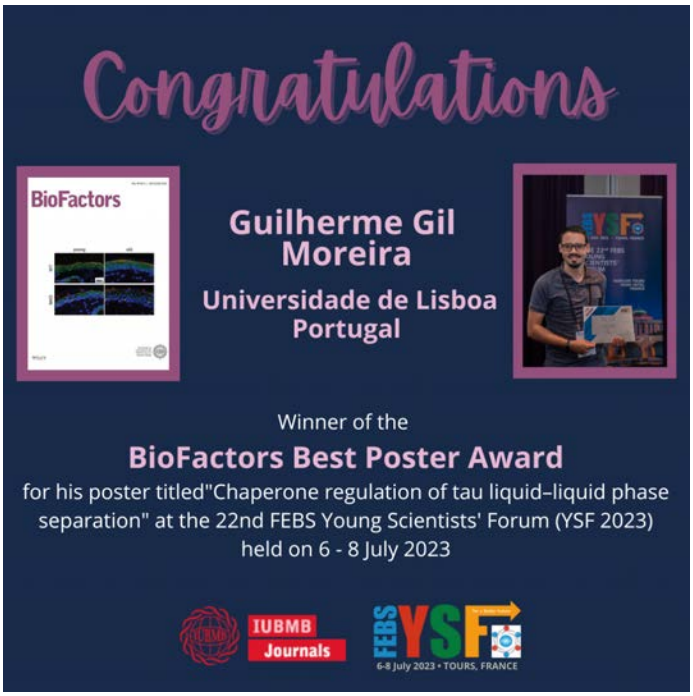
Congratulations to the 5 trainees from Ethiopia, Nigeria, South Africa, and Uganda, who have received the IUBMB MilliporeSigma ENABLE-Africa Fellowships to attend the 2nd FEBS-IUBMB-ENABLE 2023 Conference on THE EMERGING CHALLENGE: Environmental impacts on human health in Cologne, Germany.

Congratulations to

IUBMB Poster Prize Awardees

BioFactors Journal





IUBMB JOURNALS

IUBMB Life

BioFactors

Biotechnology and Applied Biochemistry

Biochemistry and Molecular Biology Education

WILEY

IUBMB Journals

We are excited to highlight new research from the IUBMB Journals

Please also consider submitting your own research to the IUBMB Journals. You can expect to work with **distinguished Editorial Board** members and benefit from **worldwide circulation and readership** through our publishing partnership with Wiley. For more information about the journal and submissions, feel free to peruse the IUBMB journals website.

For now, please enjoy highlights of our recent content. Happy reading!

Did you know? Wiley and Jisc just signed an agreement that allows UK authors to publish Open Access in the IUBMB Journals at no cost to them.

Thanks to a partnership our publisher Wiley has signed with Jisc, certain UK institutions now have full access to journals published by Wiley, including the IUBMB Journals. Further, the partnership enables authors at participating UK institutions to **publish open access at no cost to them** in the IUBMB Journals. Payment of the associated Article Publication Charges (APC) would be covered via the partnership, and authors will not need to cover the APCs from their own pockets.

Wiley has also signed similar agreements with universities in Germany, the Netherlands, Austria, Norway, Hungary, Finland, Sweden, and with the US-based OhioLink And VIVA.

Submit your research to the IUBMB Journals today.

IUBMB JOURNAL HIGHLIGHTS

New Issue:
Volume 75, Issue 12

Follow the IUBMB Life account on Twitter @IUBMB_Life for the journal's latest news and updates.

Glycolipotoxicity conferred tendinopathy through ferroptosis dictation of tendon-derived stem cells by YAP activation

Gang Wang, Shikun Wang, Xingyu Ouyang, Hui Wang, Xiao Li, Zhixiao Yao, Shuai Chen, Cunyi Fan

First published: 28 July 2023

Tendinopathy is a condition characterized by chronic, complex, and multidimensional pathological changes in the tendons. The etiology of tendinopathy is the combination of several factors, and diabetes mellitus (DM) is a risk factor. Increasing evidence has shown that the diabetic microenvironment plays an important role in tendinopathy. However, the mechanism causing tendinopathy in patients with DM remains unclear. Our study found that ferroptosis played an important role in tendinopathy in patients with DM. In vitro, high glucose and high fat treatment was used to simulate the DM microenvironment. Results showed that such a mechanism significantly increased ferro$^{loxp/loxp}$ which was characterized by mass cell death, lipid peroxide accumulation, mitochondrial morphological changes, mitochondrial membrane potential decline, iron overload, and the activation of ferroptosis-related genes, in tendon-derived stem cells cultured in vitro. In the animal studies, db/db mice were used in the DM model, and the db mice had severe tendon injury and high ACSL4 and TfR1 expressions. These phenomena could be alleviated by the ferroptosis inhibitor ferrostatin-1. In conclusion, ferroptosis is associated with tendinopathy in patients with DM, and ferroptosis targeting may be a novel approach for treating diabetic tendinopathy. Our results can provide a new strategy for managing tendinopathy clinically in patients with DM.

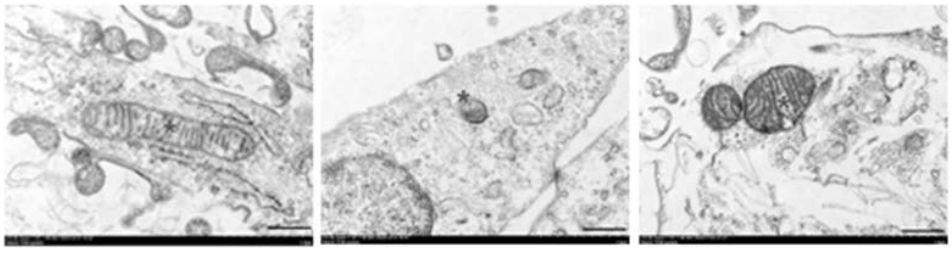
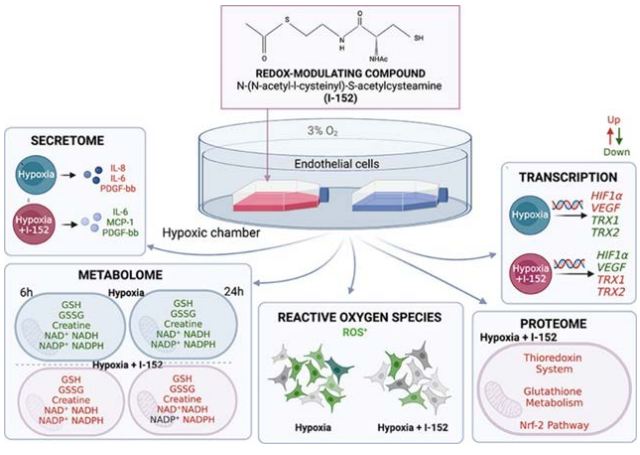


Image legend:
High glucose and high fat (HGHF)-induced Tendon-derived stem cells (TDSCs) ferroptosis in vitro: mitochondrial morphology of TDSCs

IUBMB JOURNAL HIGHLIGHTS

New Issue: Volume 49, Issue 6

Follow the BioFactors account on Twitter @WileyBiomedical for the journal's latest news and updates.



The influence of redox modulation on hypoxic endothelial cell metabolic and proteomic profiles through a small thiol-based compound tuning glutathione and thioredoxin systems

Michela Bruschi, Federica Biancucci, Sofia Masini, Francesco Piacente, Daniela Ligi, Francesca Bartoccini, Antonella Antonelli, Ferdinando Mannello, Santina Bruzzone, Michele Menotta, Alessandra Fraternale, Mauro Magnani

First published: 6 July 2023

Reduction in oxygen levels is a key feature in the physiology of the bone marrow (BM) niche where hematopoiesis occurs. The BM niche is a highly vascularized tissue and endothelial cells (ECs) support and regulate blood cell formation from hematopoietic stem cells (HSCs). While in vivo studies are limited, ECs when cultured in vitro at low O_2 (<5%), fail to support functional HSC maintenance due to oxidative environment. Therefore, changes in EC redox status induced by antioxidant molecules may lead to alterations in the cellular response to hypoxia likely favoring HSC self-renewal. To evaluate the impact of redox regulation, HUVEC, exposed for 1, 6, and 24 h to 3% O_2 were treated with N-(N-acetyl-l-cysteinyl)-S-acetylcysteamine (I-152). Metabolomic analyses revealed that I-152 increased glutathione levels and influenced the metabolic profiles interconnected with the glutathione system and the redox couples NAD(P)+/NAD(P)H. mRNA analysis showed a lowered gene expression of *HIF*-1α and *VEGF* following I-152 treatment whereas *TRX1* and *2* were stimulated. Accordingly, the proteomic study revealed the redox-dependent upregulation of thioredoxin and peroxiredoxins that, together with the glutathione system, are the main regulators of intracellular ROS. Indeed, a time-dependent ROS production under hypoxia and a quenching effect of the molecule were evidenced. At the secretome level, the molecule downregulated IL-6, MCP-1, and PDGF-bb. These results suggest that redox modulation by I-152 reduces oxidative stress and ROS level in hypoxic ECs and may be a strategy to fine-tune the environment of an *in vitro* BM niche able to support functional HSC maintenance.

IUBMB JOURNAL HIGHLIGHTS

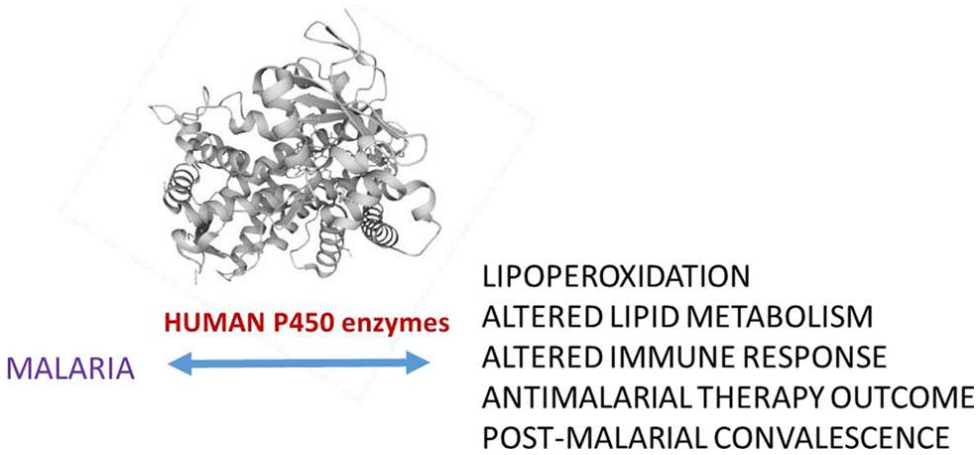
The role of P450 enzymes in malaria and other vector-borne infectious diseases

Oleksii Skorokhod, Ekaterina Vostokova, Gianfranco Gilardi

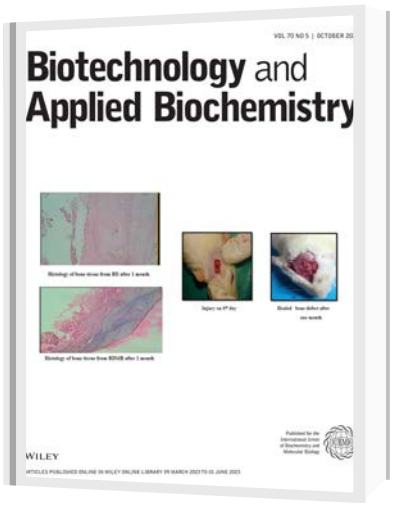
First published: 09 August 2023

AlphaFold Protein Structure Database, 2023

Vector-borne infectious diseases are still an important global health problem. Malaria is the most important among them, mainly pediatric, life-threatening disease. Malaria and other vector-borne disorders caused by parasites, bacteria, and viruses have a strong impact on public health and significant economic costs. Most vector-borne diseases could be prevented by vector control, with attention to the ecological and biodiversity conservation aspects. Chemical control with pesticides and insecticides is widely used as a measure of prevention although increasing resistance to insecticides is a serious issue in vector control. Metabolic resistance is the most common mechanism and poses a big challenge. Insect enzyme systems, including monooxygenase CYP P450 enzymes, are employed by vectors mainly to metabolize insecticides thus causing resistance. The discovery and application of natural specific inhibitors/blockers of vector P450 enzymes as synergists for commonly used pesticides will contribute to the “greening” of insecticides. Besides vector CYPs, host CYP enzymes could also be exploited to fight against vector-borne diseases: using mostly their detoxifying properties and involvement in the immune response. Here, we review published research data on P450 enzymes from all players in vector-borne infections, that is, pathogens, vectors, and hosts, regarding the potential role of CYPs in disease. We discuss strategies on how to exploit cytochromes P450 in vector-borne disease control.



IUBMB JOURNAL HIGHLIGHTS



New Issue:
Volume 70, Issue 5

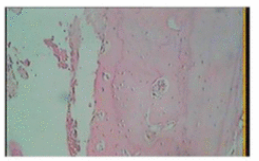
Follow the Biotechnology and Applied Biochemistry account on Twitter @WileyBiomedical for the journal's latest news and updates.

Gymnemic acid-conjugated gelatin scaffold for enhanced bone regeneration: A novel insight to tissue engineering

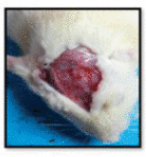
Shilpa Joy, Nebu George Thomas

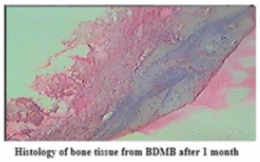
First published: 21 March 2023

Bone tissue engineering deals with the design of bone scaffolds. The selection of porous scaffold for osteoblast attachment and suppression of microbial infections are the major challenges that were addressed by designing gelatin scaffolds conjugated with gymnemic acid. Gelatin scaffold was prepared by loading gymnemic acid and morphological characterization, porosity, water absorption behavior, and biocompatibility of the scaffold were studied. The scaffold was introduced to the rat calvarial bone defect (BD) and analyzed the serum C reactive protein, alkaline phosphatase activity, and histology for 1 month to study the reconstruction. Adult Sprague–Dawley rats were used as sham operated control, animal with BD, and animal with BD which was implanted with scaffold (BDMB). The scanning electron micrograph revealed porous nature of scaffold. There was no significant difference in water absorption ability of scaffold. The C reactive protein was not observed in the serum collected on the 5th day postsurgery, supported the biocompatibility. The alkaline phosphatase activity in BDMB was increased when compared with BD on 15th and 20th day and then decreased. New bone tissue formation was detected with hematoxylin–eosin staining. The scaffold is effective in enhancing bone regeneration, which will have therapeutic significance in orthopedics and dentistry.


Histology of bone tissue from BD after 1 month.


Injury on 0th day


Healed bone defect after one month


Histology of bone tissue from BDMB after 1 month

IUBMB JOURNAL HIGHLIGHTS

Molecular Aspects of Medicine: Glaucoma, Mycosis and Personalized Medicine

By Angelo Azzi, Editor-in-Chief, Molecular Aspects of Medicine, Tufts University, Boston, USA

Today I would like to bring the attention of IUBMB Newsletter readers to an important special issue of Molecular Aspects of Medicine "Insights into the Pathogenesis of Glaucoma: Learning from Genetics and Molecular Models of the Disease" guest edited by Massimiliano Coletta, Francesco Oddone and Diego Sbardella.

Glaucoma, the first cause of irreversible blindness on a global scale, is a chronic optic neuropathy characterized by optic nerve damage and retinal ganglion cells degeneration. Glaucoma has a dramatic impact on the quality of life and imposes overwhelming social and economic costs. The genetic and molecular mechanisms underscoring glaucoma onset and progression are largely uncharacterized yet. Different hypotheses, including dysregulation of mitochondria, proteolytic and inflammatory pathways, as well as the role of neurovascular and mechanical insults have been proposed. Therefore, a multi-disciplinary advancement of current knowledge is demanded to tackle the clinical and therapeutic challenge posed by glaucoma. The articles on Glaucoma that have been accepted for publication in the Journal that are immediately available online are mentioned below. More articles will become available in the next few weeks.

Neuroprotection in glaucoma: Mechanisms beyond intraocular pressure lowering, by James R. Tribble, Flora Hui, Heberto Quintero, Sana El Hajji, Katharina Bell, Adriana Di Polo and Pete A. Williams

The molecular aspect of anti-glaucomatous eye drops - are we harming our patients? By Anne Hedengran, Miriam Kolko

Towards modifying the genetic predisposition for glaucoma: An overview of the contribution and interaction of genetic and environmental factors by Kelsey V. Stuart, Louis R. Pasquale, Jae H. Kang, Paul J. Foster, Anthony P. Khawaja

A second issue of Molecular Aspects of Medicine that is worth signaling is on Recent Advances in Human Mycosis, Guest Editors: Matteo Bassetti, and Antonio Vena

Human mycoses have dramatically changed during the last two decades. Significant medical advances improving the lives of many people with previously fatal health conditions, modifications and improvements in the surgical procedures and supportive care have produced notable changes in terms of new risk factors, epidemiology, and outcome of patients with invasive fungal infections.

IUBMB JOURNAL HIGHLIGHTS

Molecular Aspects of Medicine: Glaucoma, Mycosis and Personalized Medicine

By Angelo Azzi, Editor-in-Chief, Molecular Aspects of Medicine, Tufts University, Boston, USA

Moreover, today we are also equipped with new diagnostic tools and antifungal drugs which are significantly changing diagnostic and therapeutic algorithms. The aim of this special issue is to summarize general knowledge of human mycoses and to discuss current recommendations and controversies regarding management of invasive fungal infections.

Finally, another issue of Molecular Aspects of Medicine Personalized Medicine Edited by Christopher Hopkins needs a special mention.

A variety of technologies are emerging to help clinicians provide patient-specific diagnosis and therapies. This special issue of Molecular Aspects of Medicine is a collection of reviews covering a broad range of topics, from systems to model patient variants and discover therapies (Microphysiological systems with patient derived tissue and CRISPR-humanized animal models), to new modalities in diagnostics and therapeutics (Extracellular Vesicles, RNA therapeutics, microbiome and molecular dynamics).

One of the articles discusses the current state of FDA regulatory affairs in the context of stem cells and extracellular vesicles by highlighting gaps in the current regulatory system and then discussing where regulatory science in regenerative medicine may be headed based on these gaps and the FDA's historical ability to deal with emerging fields. Case studies in stem cell and acellular based treatments are utilized to demonstrate how regulatory science has evolved in regenerative medicine and highlight the ongoing clinical efforts and challenges of these therapies.

In another article "Advances in genome sequencing" are considered. They have greatly facilitated the identification of genomic variants underlying rare neurodevelopmental and neurodegenerative disorders. Understanding the fundamental causes of rare monogenic disorders has made gene therapy a possible treatment approach for these conditions. RNA interference (RNAi) technologies such as small interfering RNA (siRNA), microRNA (miRNA), and short hairpin RNA (shRNA), and other oligonucleotide-based modalities such as antisense oligonucleotides (ASOs) are being developed as potential therapeutic approaches for manipulating expression of the genes that cause a variety of neurological diseases. In a brief review the mechanism of action of these RNAi approaches is discussed in order to provide deeper understanding of the advantages, challenges, and specific considerations related to the development of RNAi therapeutics for neurological disease; and highlight examples of rare neurological diseases for which RNAi therapeutics hold great promise.

UPCOMING IUBMB DEADLINES

Applications are now being accepted for the **P**romoting **R**esearch **O**pportunities for **L**atin **A**merican **B**iochemists (PROLAB) Program. This program gives graduate students and postdoctoral fellows to visit a lab in the US or Canada for up to six 6 months and supports up to US $5,000.

Deadline: February 29, 2024 @ 11:59 pm PST

The IUBMB Travel Fellowships are designed to support up to US $2,000 to travel to meetings for trainees in the IUBMB region.

New Deadlines: March 1, June 1, September 1, and December 1 @ 11:59 pm PST

The IUBMB Relocation Support for Displaced Trainees supports graduate students and postdoctoral fellows displaced from their labs because of natural disasters, war, or other events beyond their control that interrupt their training. Up to US $2000 will be provided to relocate to another laboratory in the IUBMB region to continue their training in the biomolecular sciences.

There is no deadline submission

The Young Scientist Program 2024 (YSP2024) Fellowship is a 2-day scientific and networking program for outstanding young scientists to present their research and promote their career. The fellowship supports participation at both the YSP2024 and the BMH2024.

Deadline: February 29, 2024 @ 5 pm AEDST

Abstracts are now being accepted for oral presentations, poster presentations, and poster with lightning talks at the Biomolecular Horizons 2024 (BMH2024) Congress: Discover, Create, and Innovate.

Deadline: March 12, 2024

UPCOMING IUBMB DEADLINES

• April 1st Deadlines •

IUBMB Educational Activities organizes or sponsors workshops, meetings or symposiums, usually where participants can discuss modern education and related topics.

IUBMB Tang Education Fellowships supports educators visiting another institution to either advise/teach or learn up to 2 months and up to a maximum of US $4,000 for travel expenses.

IUBMB Advanced Schools support training of grad students and postdocs on specific topics in molecular biosciences. One more way we support training the next generation.

UPCOMING IUBMB DEADLINES

The IUBMB Wood-Whelan Research Fellowships supports up to 4 months in a lab and up to a maximum of US $5,000 for travel expenses.

Deadline: April 1 and October 1 @ 11:59 pm PST

The PROBio-Africa Fellowships supports African countries affiliated with FASBMB up to 6 months in a laboratory of a scientist in a FEBS country in order to carry out research work that is a part of their Ph.D. thesis.

Deadline: May 15 @ 11:59 pm PST

The IUBMB Focused Meetings cover "cutting edge science" of clear relevance to Biochemistry and Molecular Biology. IUBMB's financial contribution to each Focused Meeting is for a maximum of US$ 60,000. Funding will be prioritized for new meetings with the goal of helping the organizers launch a new series on the topic. Funding for repeated topics and/or organizing groups will not be considered.

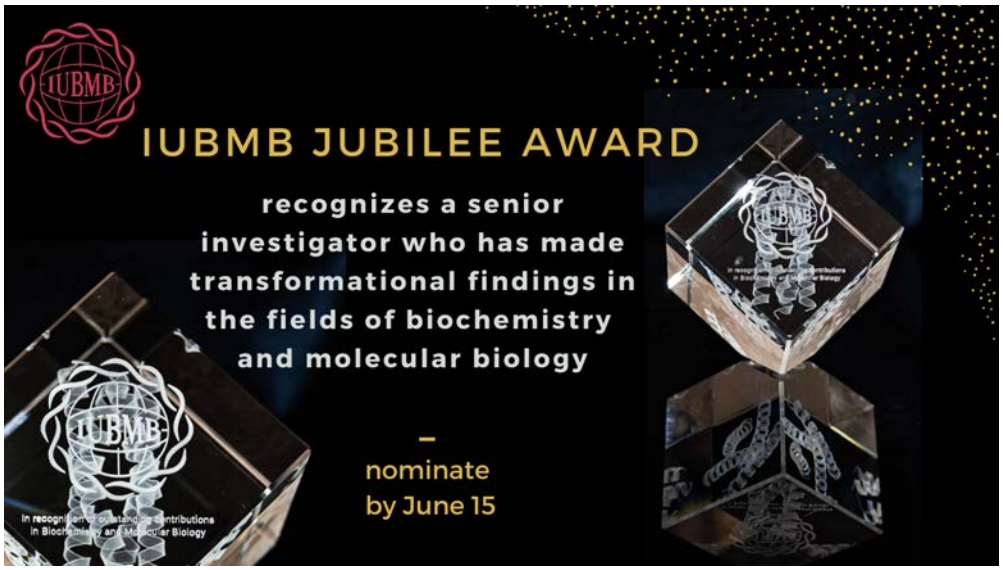
Deadline: June 1 @ 11:59 pm PST

"It was a fantastic meeting; it had all the needed elements: Excellent scientific quality, a good number of early-stage scientists (students), and an impressive willingness to collaborate and exchange information. It goes to one of the top 5 meetings I have participated in during my scientific career."

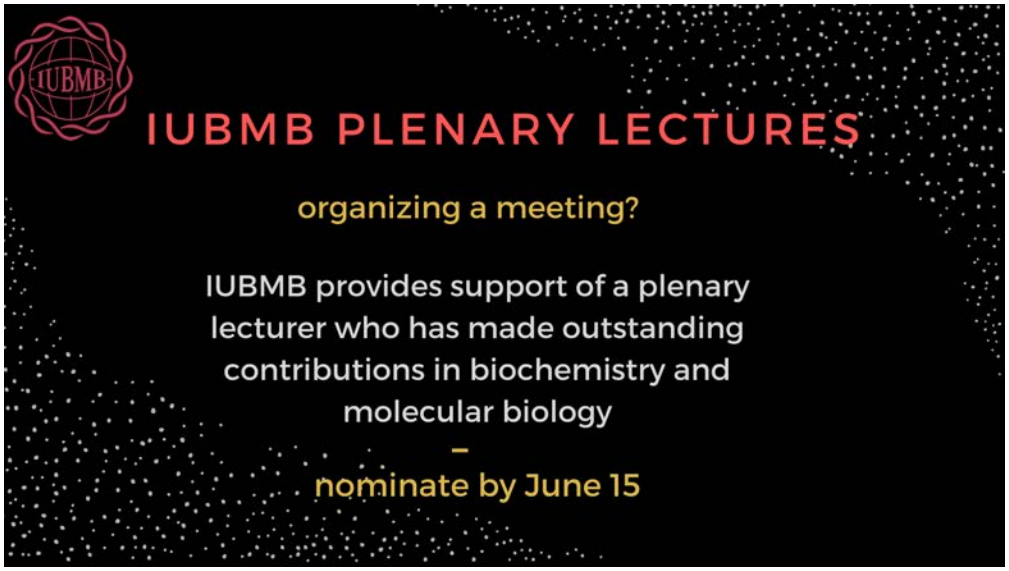
The IUBMB Early-Career Research Fellowships support up to 2 months in a lab and up to a maximum of US $6,000 for travel expenses.

New Deadline: August 1 @ 11:59 pm PST

UPCOMING IUBMB DEADLINES



Organizing a meeting? Consider nominating the Plenary Lecturer for the IUBMB Jubilee Award. Our most prestigious honor recognizes a senior investigator who has made transformational findings in the fields of biochemistry & molecular biology.



Organizing a meeting? IUBMB provides support of a plenary lecturer who has made outstanding contributions in biochemistry and molecular biology. Learn more *here*.

UPCOMING MEETINGS 2024

JAN 16: Event @ 18:00 CET / Noon Eastern Time
Registration

JAN 22: Virtual Registration deadline
Online poster | Meeting link

FEB 13: Virtual Registration deadline
Online poster | Meeting link

MAR 5: Virtual Registration deadline
Online poster | Meeting link

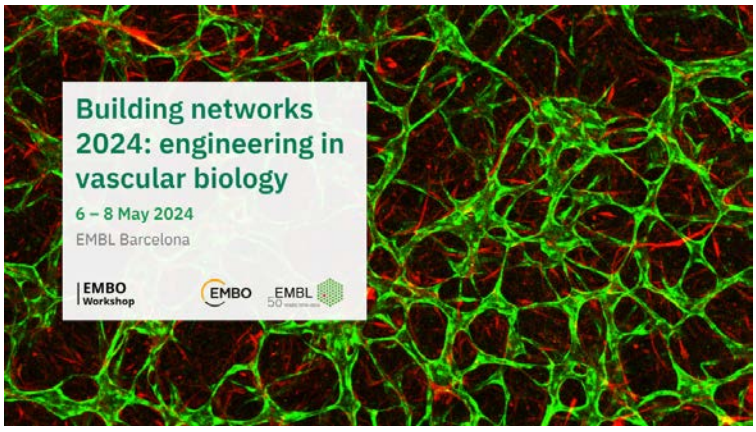
JAN 7: Abstract submission
FEB 6: On-site Registration | **MAR 12**: Virtual Registration
Online poster | Meeting link

JAN 16: Abstract submission
FEB 26: On-site Registration | **APR 2**: Virtual Registration
Online poster | Meeting link

UPCOMING MEETINGS 2024

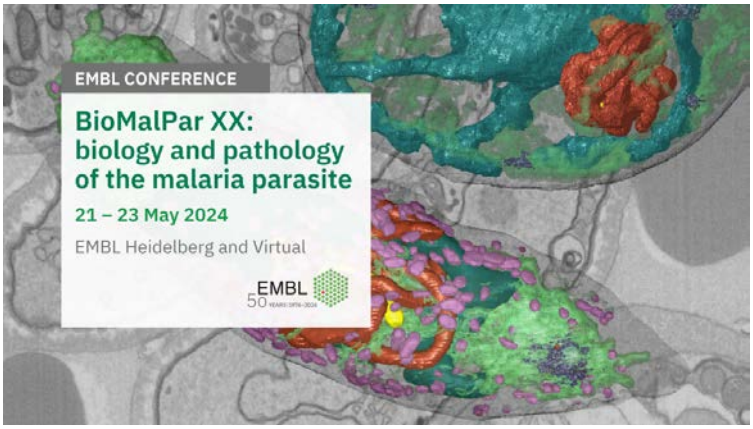
JAN 22: Abstract submission
MAR 4: On-site Registration | **APR 8**: Virtual Registration
Online poster | Meeting link

JAN 30: Abstract submission
MAR 12: On-site Registration | **APR 16**: Virtual Registration
Online poster | Meeting link



FEB 12: Abstract submission
MAR 25: On-site Registration | **APR 29**: Virtual Registration
Online poster | Meeting link

FEB 20: Abstract submission
APR 2: On-site Registration | **MAY 7**: Virtual Registration
Online poster | Meeting link



FEB 27: Abstract submission
APR 9: On-site Registration | **MAY 14**: Virtual Registration
Online poster | Meeting link

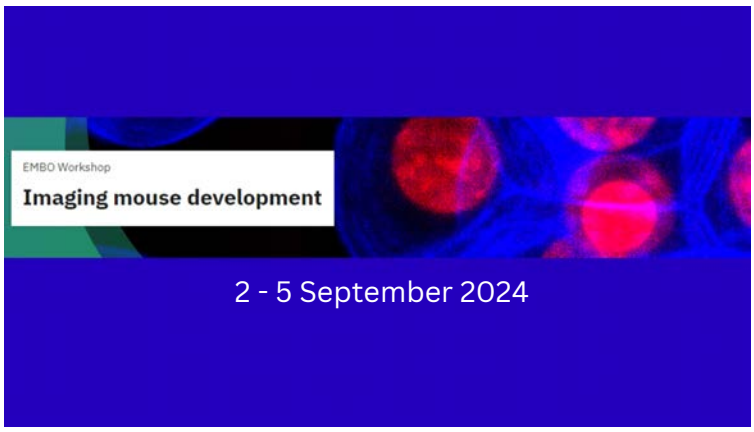
MAR 13: Abstract submission
APR 24: On-site Registration | **MAY 29**: Virtual Registration
Online poster | Meeting link

UPCOMING MEETINGS 2024

MAR 26: Abstract submission
MAY 7: On-site Registration | **JUN 11**: Virtual Registration
Online poster | Meeting link

Featuring IUBMB Lecture: Jennifer Lippincott-Schwartz
MAR 8: Abstract deadline & Early Registration deadline
Meeting link

JUN 3: Abstract submission
JUL 15: On-site Registration | **AUG 19**: Virtual Registration
Online poster | Meeting link



JUL 22: On-site Registration | **AUG 26**: Virtual Registration
Meeting link

JUN 10: Abstract submission
JUL 29: On-site Registration | **SEP 2**: Virtual Registration
Online poster | Meeting link

Meeting link

BIOMOLECULAR HORIZONS 2024:

DISCOVER CREATE INNOVATE

22 TO 26 SEPTEMBER **2024** | MELBOURNE CONVENTION AND EXHIBITION CENTRE, **AUSTRALIA**

INCORPORATING THE

26th Congress of the International Union of Biochemistry and Molecular Biology (IUBMB)

17th Congress of the Federation of Asian & Oceanian Biochemists & Molecular Biologists (FAOBMB)

ComBio 2024 MELBOURNE 22nd ComBio Conference

YOUNG SCIENTIST PROGRAM FELLOWSHIP

APPLICATIONS NOW OPEN

VISIT www.bmh2024.com

20-22 SEPTEMBER 2024

MACEDON RANGES, AUSTRALIA

- Join 40 participants from FAOBMB and IUBMB regions
- 2-day pre-conference science and networking experience for outstanding ECRs
- Presentations from all participants, keynote speakers, workshop, social excursion and activities
- Participants receive travel fellowship and registration fee waiver to Biomolecular Horizons 2024

PROF ALEXANDRA NEWTON
IUBMB President

PROF JOON KIM
FAOBMB President

DR MICHAEL HEALY
IUBMB Whelan Young Investigator Awardee

DEADLINE FOR APPLICATION SUBMISSION
29 February 2024

Scan the QR code for information on the eligibility and submission requirements.

EMAIL:
yspmelbourne2024@gmail.com

@bmh2024Melb

BIOMOLECULAR HORIZONS 2024:
DISCOVER CREATE INNOVATE

22 TO 26 SEPTEMBER **2024** MELBOURNE CONVENTION AND EXHIBITION CENTRE, **AUSTRALIA**

INCORPORATING THE

26th Congress of the International Union of Biochemistry and Molecular Biology (IUBMB)

17th Congress of the Federation of Asian & Oceanian Biochemists & Molecular Biologists (FAOBMB)

ComBio 2024 MELBOURNE 22nd ComBio Conference

THE FUTURE IS BIOMOLECULAR

Join us at Biomolecular Horizons 2024 to be held in Melbourne from 22-26 September 2024.

This important forum will bring together three prestigious congresses, each with a strong history of attracting the Bioscience and Biotechnology communities to discuss and examine the latest developments and research:

- 26th Congress of the International Union of Biochemistry and Molecular Biology (IUBMB)
- 17th Congress of the Federation of Asian & Oceanian Biochemists & Molecular Biologists (FAOBMB)
- 22nd ComBio Conference (ComBio)

Over the five days, the Congress will offer a series of plenary sessions, keynotes, symposia, and poster presentations. There will also be a dedicated Young Scientists Program, Outreach Events, Career Development Events, Education Events, Publication Workshops, Technical Workshops, Art Meets Science and Networking Events and a Government Industry Forum.

The overarching theme: ***Biomolecular Horizons 2024: Discover, Create, Innovate*** will be examined across the key themes:

- Cell, Developmental and Stem Cell Biology
- Biotechnology and Synthetic Biology
- Microbial World
- Cell Signalling and Metabolism
- Genomics, Gene Regulation and Epigenetics
- Bioinformatics, Computational Biology and 'Omics
- Structural Biology and Biophysics
- Molecular Basis of Disease
- Molecular Physiology
- One Health: Indigenous Pathways
- Education
- Career Development

In-Program Focus Days include:

- Gene Editing
- RNA Technology
- Climate Change
- Indigenous Pathways

The Congress is one of the biggest international research events in basic biomolecular science and will showcase developments in research and education to members of the academic, research and industry communities.

Join colleagues from across the world to exchange ideas and research and build valuable professional networks that will extend beyond the Congress itself. To complement the scientific program, you will also be able to experience a showcase of the latest products and services in the exhibition, an integral element of the Congress.

Mark the dates in your diary and plan to join us for what promises to be an outstanding Congress experience.

PLENARY SPEAKERS INCLUDE:

PROFESSOR BRIAN KOBILKA
Stanford University
USA
Nobel Prize in Chemistry 2012
Grimwade Award Lecturer

PROFESSOR PAMELA SILVER
Harvard University
USA
IUBMB Jubilee Award Lecturer

PROFESSOR SERGEY OCVHINNIKOV
Harvard University
USA

PROFESSOR SANDRA EADES
University of Melbourne
AUSTRALIA

PROFESSOR PETRO TERBLANCHE
Afrigen Biologics & Vaccines
SOUTH AFRICA

PROFESSOR CAIXIA GAO
Chinese Academy of Sciences
CHINA

VISIT WWW.BMH2024.COM FOR MORE INFORMATION

EARLY BIRD REGISTRATION SAVINGS NOW ON OFFER

CALL FOR ABSTRACTS NOW OPEN

VALUABLE SPONSORSHIP & EXHIBITION OPPORTUNITIES NOW AVAILABLE

INVITED KEYNOTE SPEAKERS INCLUDE:

PROF. KEI SATO
The University of Tokyo
JAPAN

PROF. MARIAN WALHOUT
University of Massachusetts
USA

PROF. YUE WAN
Genome Institute of Singapore
SINGAPORE

PROF. WEI XIE
Tsinghua University
CHINA

A/PROF. NORBERT PARDI
University of Pennsylvania
USA

A/PROF. ALEXIS KOMOR
UC San Diego
USA

PROF. ALEXANDRA NEWTON
UC San Diego
USA

PROF. NICK BARKER
Institute of Molecular & Cell Biology
SINGAPORE

PROF. JENNIFER LISTGARTEN
UC Berkeley
USA

A/PROF. SHOBHNA KAPOOR
Indian Institute of Technology
INDIA

PROF. ELIZABETH MCKINLEY
University of Melbourne
AUSTRALIA

PROF. BRUCE SPIEGELMAN
Harvard University
USA

PROF. PETER FINERAN
University of Otago
NEW ZEALAND

PROF. ROMMIE AMARO
UC San Diego
USA

PROF. HOZUMI MOTOHASHI
Tohoku University
JAPAN

PROF. JOB DEKKER
University of Massachusetts
USA

PROF. VICTOR NIZET
UC San Diego
USA

PROF. SEIGO SHIMA
Max Planck Institute
GERMANY

PROF. NIENG YAN
Tsinghua University
CHINA

PROF. GREG COOK
University of Otago
NEW ZEALAND

DR. DREW BERRY
WEHI
AUSTRALIA

PROF. HEATHER CHRISTOFK
UC Los Angeles
USA

PROF. LEO EBERL
University of Zurich
SWITZERLAND
FEBS Worldwide Award Lecturer

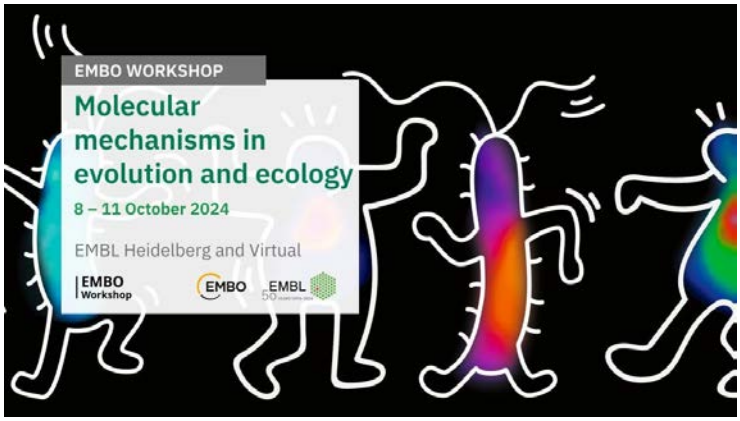
PROF. MICHAEL BARRETT
University of Glasgow
UNITED KINGDOM

PARTNERING SOCIETIES

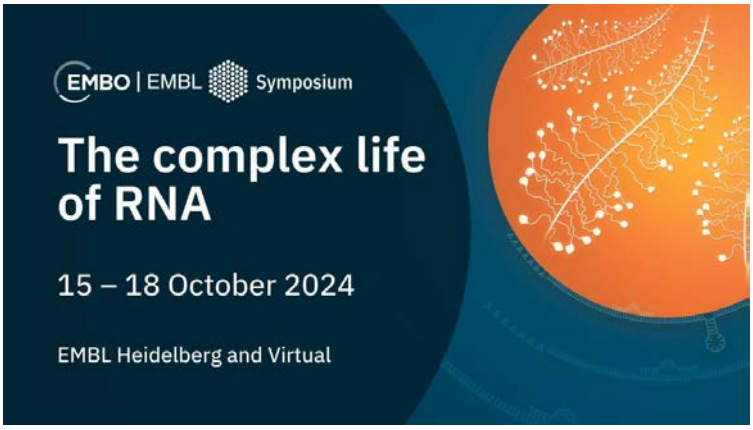
IUBMB · FAOBMB · SBMB · The Australian Society for Microbiology bringing Microbiologists together · Australian Physiological Society · NEW ZEALAND SBMB · ANZSCDB · AUSTRALIAN SOCIETY FOR BIOPHYSICS

UPCOMING MEETINGS 2024

JUL 8: Abstract submission
AUG 19: On-site Registration **|** **SEP 23**: Virtual Registration
Meeting link



JUL 10: Abstract submission
AUG 27: On-site Registration **|** **OCT 1**: Virtual Registration
Online poster | Meeting link



JUL 23: Abstract submission
SEP 3: On-site Registration **|** **OCT 8**: Virtual Registration
Online poster | Meeting link

AUG 13: Abstract submission
SEP 24: On-site Registration **|** **OCT 8**: Virtual Registration
Meeting link

Meeting link

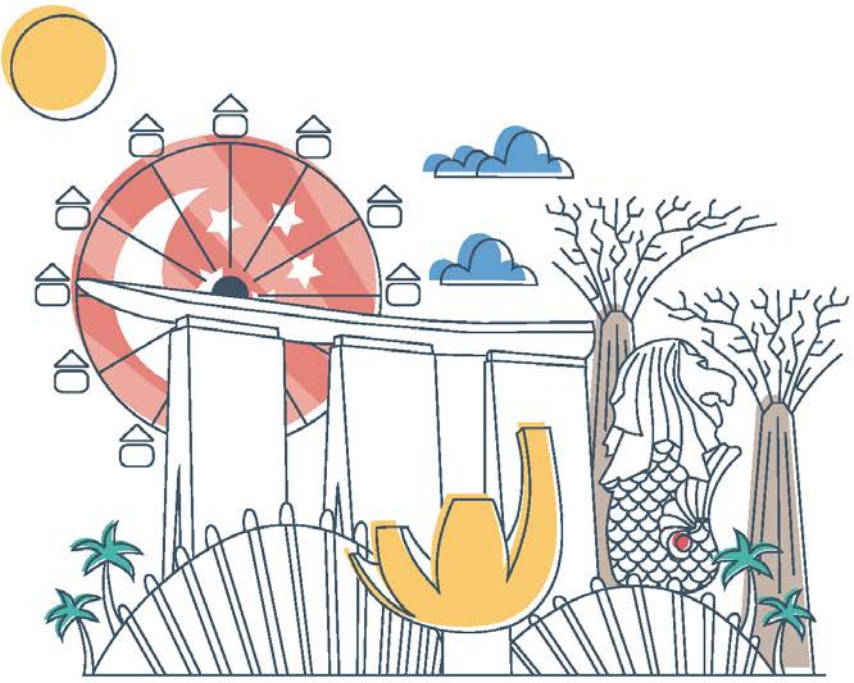
Meeting link

UPCOMING IUBMB MEETINGS 2024

FEBS-IUBMB-enable Conference

3rd International Molecular Biosciences
PhD and Postdoc Conference

Singapore 2024



ARTIFICIAL INTELLIGENCE

Reshaping biomedical and healthcare research

4th-6th December 2024

Nanyang Technological University, Singapore

Stay tuned for updates!

www.febs-iubmb-enableconference.org

@ENABLE_conf @enableconference
@ENABLE Conference @ENABLEconference

UPCOMING MEETING 2025

• save the date •

We are delighted to announce that an IUBMB Special Focused Meeting "The Emerging Roles of (Pseudo)Kinases in Signal Transduction is scheduled for 18-22 August 2025, in Queenstown, New Zealand.

The conference will cover the latest developments in molecular mechanisms of kinase and pseudokinase regulation, which has growing prominence in the world of signaling across many areas of biology. Recent progress has brought to light many opportunities for therapeutic targeting of this intriguing kinase fold, and also broader prominence in infectious disease and plant signaling. This meeting will be co-chaired by Assoc Prof Peter Mace (New Zealand), Prof Natalia Jura (USA) and Prof James Murphy (Australia). Early career engagement and family support will be a priority.

More details will be available soon, but anyone interested is encouraged to save the date—we look forward to seeing you in this spectacular setting!

https://www.newzealand.com/int/queenstown/

ANNOUNCEMENT

IUBMB is committed to ensuring gender equity, diversity, and inclusion in all of its leadership, training, and education missions in the field of biochemistry and molecular biology. As part of this, we are pleased to be a member of the Standing Committee for Gender Equality in Science (SCGES) where we are joined by 19 other unions of the International Science Council. More information is available in the SCGES 3rd Annual Report.

Petsko receives the National Medal of Science from President Biden during a ceremony on Oct. 24. Image: Ryan K. Morris and the National Science and Technology Medals Foundation

Congratulations to Gregory Petsko from Harvard Medical School, President of the IUBMB from 2012-2015, who was awarded the National Medal of Science by President Joe Biden.

IUBMB Programs and Benefits of Membership

Vision. Enhancing pedagogy and discipline-based knowledge in biochemistry and molecular biology through international collaboration.

The IUBMB is committed to improving education in biochemistry and molecular biology at all levels. The IUBMB Committee on Education and Training provides sponsorship for a range of activities which contribute to this goal. The Committee considers applications from all IUBMB Adhering Bodies and Associated Adhering Bodies. When an activity is to take place at a meeting of one of the Regional Organizations (FAOBMB, FASBMB, FEBS and PABMB), it is often appropriate for the application to be made through that organization.

In addition to funding activities which are organized through these organizations, the Committee on Education and Training takes a lead in organizing specific IUBMB Education Workshops around themes which are seen to be of strategic importance for BMB education. Prior advice about these initiatives and their outcomes will be widely disseminated through this website and through IUBMB social media channels.

Providing opportunities for the next generation of biochemists and molecular biologists is a primary mission of the IUBMB. In addition to specific Education initiatives described below, the IUBMB supports trainees through Research Fellowships such as the Wood-Whelan and Mid-Career Fellowships, and by providing funds to Focused Meetings to be used for travel awards to trainees.

IUBMB Programs. The wide range of programs available to scientists resident in IUBMB member countries, include:

Congresses. are held triennially in countries that are members of the Union and have a record of being outstanding and memorable scientific events for the world community of biochemists and molecular biologists.

Focused Meetings. replaced Conferences and Symposia in 2017. One per year will be sponsored to a maximum of US $60,000.

Young Scientists' Programs. are competitive awards covering travel, accommodation and meals for participation in the YSP held in conjunction with Congresses and Focused Meetings.

Advanced Schools. provide advanced training of PhD students and young postdoctoral fellows in the field of biochemistry, molecular biology and cell biology. This competitive funding covers support for the school related to travel, accommodation and meals for successful applicants.

Educational Activities. The IUBMB is involved in a broad range of educational programs. The Union holds or sponsors symposia on education at regional biochemical meetings around the world.

It also cooperates with the editors of the journal Biochemistry and Molecular Biology Education in identifying timely topics for presentation at symposia and workshops.

Tang Education Fellowships. The IUBMB Tang Education Fellowships provide opportunities for the development of both biochemistry and molecular biology educational programs and educators with the specific aims of: increasing expertise and capability in biochemistry and molecular biology education, supporting engaged educators, promoting change/innovation in approaches to education, improving student learning experiences, outcomes, and engagement with biochemistry and molecular biology, building an evidence base on which to make future recommendations on biochemistry and molecular biology education and supporting biochemistry and molecular biology education in developing countries.

Wood-Whelan Research Fellowships. are competitive awards covering travel, incidental costs and living expenses for visits of 1-4 months to other laboratories in the IUBMB region for the purpose of carrying out experiments that require special techniques or for other forms of scientific collaboration or advanced training.

Early-Career Research Fellowships. were established in response to an increased demand for further training of mid-career biochemists in the Developing World. These are short-term Fellowships (1-2 months), covering travel and incidental costs to a maximum of US$5,000, to enable researchers to work in an established laboratory to learn state-of-the-art techniques that are not readily available in their own countries.

PROLAB Fellowships. This collaboration between the IUBMB, PABMB, and ASBMB allows Latin American graduate students and postdoctoral fellows to spend short stays (1-6 months) in the laboratory of a scientist affiliated with ASBMB, in order to develop part of his/her thesis research work.

Travel Fellowships. are available for young scientists in or from developing countries who wish to attend meetings in the IUBMB region.

MilliporeSigma ENABLE-Africa Fellowships. This collaboration between IUBMB and MilliporeSigma provides support to African trainees to attend the FEBS-IUBMB-ENABLE Conference.

Relocation Support for Displaced Trainees. This programme was established to allow IUBMB to respond rapidly to any natural disasters and acts of war that results in loss of infrastructure and resources at universities and research institutions. This program provides financial support of up to three months for trainees to relocate to a new host lab to continue their research.

IUBMB Programs and Benefits of Membership

Vision. Enhancing pedagogy and discipline-based knowledge in biochemistry and molecular biology through international collaboration.

PROBio-Africa Fellowships. This collaboration between the FASBMB, IUBMB, and FEBS allows African postdoctoral fellows and new researchers to spend short stays (1-6 months) in the laboratory of a scientist affiliated with FEBS to carry out experiments that require special techniques and expertise or to facilitate other forms of scientific collaboration or advanced training.

Trans-Continental Youth Travel Fellowships. This collaborative activity between the IUBMB and the Federation of European Biochemical Societies (FEBS) provides trans-continental Youth Travel Fellowships to FEBS Advanced Courses and is financed by IUBMB.

Plenary and Jubilee Award Lectures. At IUBMB Congresses, several endowed lectures feature prominently in the program: IUBMB Jubilee Award and Plenary Lectures are intended as important lectures at scientific meetings, in particular of the smaller Adhering Bodies or Associate Adhering Bodies for which the budget would normally allow only for local speakers.

FEBS-IUBMB Events. This collaboration between IUBMB and FEBS provides financial support for invited speakers at FEBS Advanced Lecture Courses, FEBS Workshops and FEBS Special Meetings. Up to 10 invited speakers are supported per annum (up to US$2,000 each) from outside Europe.

IUBMB Publications. Trends in Biochemical Sciences (TIBS), IUBMB Life, BioFactors, Biochemistry and Molecular Biology Education (BAMBEd), Biotechnology and Applied Biochemistry, Molecular Aspects of Medicine, Aspects of Medicine. In addition, the following books/pamphlets are produced by IUBMB: Wiley-IUBMB Book Series, Standards for Doctoral Degrees in the Molecular Biosciences, and Metabolic Pathways Maps and Animated Maps (Animaps) prepared by the late Don Nicholson, University of Leeds.

Biochemical Nomenclature. The International Union of Pure and Applied Chemistry (IUPAC) and the IUBMB have established the IUPAC-IUBMB Joint Commission on Biochemical Nomenclature (JCBN) and the Nomenclature Committee of the International Union of Biochemistry and Molecular Biology (NC-IUBMB).

In order to maintain and enhance these programs, IUBMB depends on the financial support of its Adhering Bodies. It is important to note that the annual dues have not been increased for many years. Rather, the Executive Committee has preferred to pursue additional sources of income. Publications represent the major source of income for IUBMB but, with the rapid changes occurring in the publication business, particularly with the advent of open access publishing, maintenance of this income at current levels is challenging. The Executive Committee is continuously working hard to develop alternative funding sources, but the Union is still very dependent on the support of its Adhering Bodies.

Adhering Body status in the IUBMB is an investment rather than an expense. The direct financial benefits from membership in the IUBMB surpass the actual cost, and there are many other associated non-monetary benefits. Finally, it is also important to note that IUBMB is an international organization that, in addition to providing opportunities to all member countries, emphasizes programs that support young scientists, particularly from developing countries. The Union's philosophy has always been that rich countries can afford to contribute more than poorer countries to this end. Of course, situations change over time and one of the roles of the Executive Committee is to keep track of such changes and, for example, encourage emerging economies to contribute in proportion to their capacity, and to recruit new members to the Union. The IUBMB is strongly committed to diversity and opposes any type of discrimination.

More details about the extensive list of IUBMB programs can be found on the Union's website: www.iubmb.org.

Social Media Links

IUBMB EXECUTIVE COMMITTEE

President Alexandra Newton • president@iubmb.org

President-Elect Dario Alessi • president.elect@iubmb.org

Past President Andrew H.-J. Wang • past.president@iubmb.org

General Secretary M. Iqbal Parker • general.secretary@iubmb.org

Treasurer Loredano Pollegioni • treasurer@iubmb.org

Member for Education & Training Yang Mooi Lim • education@iubmb.org

Member for Congresses & Focused Meetings Ilona Concha Grabinger • meetings@iubmb.org

Member for Publications Zengyi Chang • publications@iubmb.org

(from left to right) **Loredano Pollegioni, James Murphy (Chair of Publications Committee), Charysse Austria (Secretariat), M. Iqbal Parker, Alexandra Newton, Dario Alessi, Ilona Concha Grabinger, Yang Mooi Lim, Daniel Dries (Chair of Fellowships Committee).** ***Absent: Andrew H.-J. Wang and Zengyi Chang***