



IUBMB NEWS

Issue 9

June 2020

President's Message



In December last year, a new type of pneumonia broke out near a fish market in Wuhan, China. Soon after, the disease spread through the city and nearby cities. As the situation worsened, the government declared a lockdown of many cities in Hubei Province. But before the lockdown many residents left the areas and a significant number of them traveled to many countries around the world. This has triggered a cascade of events, causing the disease first to spread to European countries like Italy, Spain and United Kingdoms.

The disease was identified to be caused by a new type of coronavirus, similar to that for SARS outbreak in 2003 and MERS outbreak in 20xx. This virus was named COVID-19, acronym for Coronavirus Infectious Disease in 2019, by the World Health Organization. Other name such as SARS-CoV-2 has also been used. The disease was finally declared "pandemic" by WHO in March 2020.

The ways for dealing with the disease varied greatly from country to country. Some imposed strict public health measurements such as lockdown of communities, social distance, wearing mask in public areas, body temperature measurements, etc. Others took more relaxed measures like the idea of herd immunity, in consideration of the economic impact for the country.

Regardless which strategy each country took, the results have various impacts on the global developments. Some unusual phenomena happened. Many major cities around the world such as New York City, Milan, London, Wuhan all of a sudden became empty on the street and quiet with little human activities. Almost all countries installed border lockdown which made international traveling impossible. The world seemed to come to a halt.

So far there are nearly 8 million confirmed COVID-19 cases and more than 432,000 deaths worldwide. USA, Brazil, Russia, India and UK are the top 5 countries with most confirmed cases. Unfortunately the pandemic situation is still developing in many areas. So a number of countermeasures are needed.

A small bright light shone in the struggle is the rapid response from the scientific community in fighting the virus to help our understanding of the virus itself quickly. The genomic sequence of the virus was quickly determined so the specific sequences for the PCR diagnostic tools can be designed. The PCR detection is still the most reliable way for screening infected patients. The sequence analysis of various strains of the SARS-Cov-2 virus allowed us to understand the propagation pathways of the disease.

Today (June 14), new confirmed cases appeared in Beijing China. The genomic sequence was determined which seemed to indicate a new strain has emerged.

Many scientists also tried to develop drugs to treat the infections. Some antiviral small molecule drugs have been found to be promising. Early clinical trials of Remdesivir showed possible efficacy. Therapeutic monoclonal antibodies with neutralizing activities have been isolated from B cells of recovered patients. All those provide hope for us to help patients to combat virus in the future.

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However, to counter the future pandemic, effective vaccines are a must. Many scientists from academia, government institutes, big pharmaceutical companies, and innovative biotech companies are racing to develop vaccines, which is a hard and uncertain endeavor. As we know, some viruses are extremely clever and have evaded our attempts to develop vaccine against them. For example, we still have not successfully developed vaccine against HIV infection.

Coming back to IUBMB, what are the impacts of the pandemic on us? Well, quite seriously.

Initially the IUBMB EC was to hold a meeting during the Experimental Biology conference to be held in San Diego USA in April 2020. That conference was forced to cancel as expected. So, to maintain frequent communications among the EC members, we have held regular video conferences to discuss important issues associated with IUBMB. We found such arrangements to be quite efficient and effective. One problem is how to accommodate everyone from different time zones for the same meeting. But by not having to travel for us, we save some money, an unexpected side benefit. However, eventually I would think face-to-face interactions still is a better way to deal with various issues.

Another collateral damage due to the pandemic is the economic downturn which makes some countries cutting back support to their scientific societies. Some IUBMB adhering members are withdrawing their membership from the union due to the lack of financial support. We are trying to find a better arrangement of membership dues so all

adhering members can join the union and to enjoy the many benefits our union provides.

Here I would like update some of the IUBMB activities which are affected by the pandemic. The 2019 FAOBMB Conference in Sri Lanka originally scheduled in June has been canceled. The FEBS Congress in Ljubljana will be postponed to 2021. The consequence of this change is that the IUBMB Congress in Lisbon will be delayed to 2022. I urge our members to check out IUBMB website to find the most up-to-date information of various important events.

Another important task we are undertaking is the search of a new Editor-in-Chief of our flagship journal IUBMB Life. After many years of excellent service as the Co-Editor-in-Chief, Dr. Bill Whelan and Dr. Angelo Azzi will end their service at the end of this year. Both of them have the utmost appreciation from us.

In this difficult time of COVID-19 pandemic, it is essential for us to reflect what IUBMB should and can do to face the many challenges forced upon the humankind. Emerging infectious diseases are only part of the challenges. We will be working with UNESCO and other unions to develop plausible strategies.

Finally I hope everyone will keep safe and healthy. I am confident we will overcome the dark shadow over us now and the world will return to normal by my next message!

Andrew H.J. Wang, PhD
President, IUBMB

Brianna Bibel: Explanation of how the COVID-19 test works

When the IUBMB's Student Ambassador, graduate student Brianna Bibel, posted an explanation of how the Covid-19 test works, her lab mate, Kate Meze, suggested she could translate the post into Slovenian, as she was certain that educators and students in her home country would benefit from the translation. This prompted Bri and IUBMB President-Elect Alexandra Newton to use the IUBMB twitter site to ask for volunteers to translate into additional languages. They immediately received an outpouring of responses from students and faculty around the world volunteering to translate the post. Bri has worked with undergraduates, graduate students, postdoctoral fellows, and professors to translate into 30 languages, spoken on every continent, with more in the works.

"I'm so incredibly humbled and grateful for the outpouring of volunteers translating my infographics on COVID-19 testing. I never in my wildest dreams would've thought I could have a global impact and it gives me such a sense of purpose in these hard times."

Bri is known on social media as The Bumbling Biochemist, and you can read more about her here:

<https://www.cshl.edu/labdish/the-world-of-brianna-bibel-the-bumbling-biochemist/>



©Gina Motisi, 2019/CSHL

Bri has created a resource page on The Bumbling Biochemist website where one can choose the level of detail for the post (long, medium, or short), as well as the language.

<https://bit.ly/covid19bbresources>

The graphics and explanations are an invaluable teaching resource not only for biochemistry students around the world, but for anyone interested in how the test for Covid-19 works.

This has been a truly global effort uniting biochemists around the world, and we hope it can lead to future international collaborative efforts in biochemistry education.



ENABLE 2019: Next-generation life scientists: Side by side to break new ground

In November 2019, the 3rd ENABLE conference for young researchers took place in Nijmegen, Netherlands, and turned out to be a huge success, with 229 young researchers participating from 27 countries within and outside of the EU. The ENABLE 2019 event was split into three parts: outreach events, a dedicated career day and the scientific symposium. <https://enablenetwork.eu/wp-content/uploads/2019/01/enable-newsletter-2019.pdf>

Report from Francesco Bonomi

General info

The third edition of this gathering has been held in at the Van der Valk hotel in Nijmegen-Lent, with Francesco Bonomi as the IUBMB observer and Vlastimil Kulda (Pilsen, Czech Republic) as the FEBS observer. Both FEBS and IUBMB contributed EUR 15.000 towards fellowship aimed at European (FEBS) and non-European (IUBMB) participants, for a total of 14 fellowships.

The conference

The format of the conference followed closely the path of previous editions. The program was elaborated by an international and a national committee, both made up of PhD students and post-docs, with only a very loose supervision by senior components of the ENABLE team.

Wednesday 13 was “career day”, with companies meeting students, and students taking part to 30-min interactive workshops with experts from academia or from the business world. Prior to the workshop, both IUBMB and

FEBS were given the opportunity of presenting a few slides for a brief panoramic view of their activities. Students were sort of forced to change workshop every 30 minutes, ensuring appropriate turnover. Both VK and FB manned a joint IUBMB/FEBS booth, where we met students interested in the various form of support offered by either organization, as well as the awardees from either organization (please see the attached picture). After another round of workshops in the afternoon, the program included an interesting round table on Open Access Publishing. A final round of scientific talks from young participant took place at night, under the “pub talk” format, with speakers and audience scattered through downtown bars in Nijmegen, and four presenters giving short talks at designed individual venues.

Thursday 14 was “science only”, with plenary lectures in the morning and in the afternoon, followed by selected short presentations by some of the attendants. A total of four sessions were held. Poster viewing was at mealtime, and during the 1-hour long coffee breaks. FB did not attend the morning session, as he was visiting IUBMB bankers at ABN-AMRO in Amsterdam. The afternoon session was interesting, with very active participation to the debate(s) from the young people in the audience, and lots of people around the posters. The day was closed by the social dinner in a nearby location on the banks of the Rhine (the Waal, in Dutch).

Friday 15 was the last day, with a format similar to that of Thursday 14, if not for the closing events, that included yet another round table, and the distribution of various awards.

The format of the conference was extremely successful, with active engagement of participants in all the scientific events and the career-related activities, and with several of them coming to ask about IUBMB/FEBS initiatives also outside the times in which the booth was manned.



Enable group picture provided by Francesco Bonomi

Enable NMG 2019 at a glance





The 4th European PhD and Postdoc symposium “EXPLORING LIFE DYNAMICS: In and out of equilibrium” will be held in Milan, November 2020.

ENABLE aims to involve young scientists in opening the academic world from within by promoting crosstalk between

biomedical disciplines, collaboration with industry, and engagement with society. The symposia are organized by and for young researchers and are inspiring events not to be missed!

[Save the date for ENABLE 2020 in Milan!](#)



Watch our new IUBMB Video

@ <https://www.youtube.com/watch?v=L7XpyJ8QvN4&feature=youtu.be>

Miami Winter Symposium 2020

The 53rd Miami Winter Symposium (MWS) was held during January 26-29 on the topic of ***Molecular Mechanisms Linking the Microbiome and Human Health***. The symposium showcased an international lineup of 21 renowned speakers who have made a mark in this field. The goal of this distinctive and outstanding symposium was to provide the most current knowledge of relevant topics: biochemical and genetic characterisation; the ecology of the human microbiome; dysbiosis and human diseases; using microbiomes to treat human disease and the impact of the environment on the microbiome. The IUBMB sponsored 20 travel fellows, from Canada, China, Brazil, India, Indonesia, Nigeria, Pakistan, Puerto Rico, South Africa and Spain, who all presented posters and were identified by red rosettes bearing the IUBMB logo. They were among the 315 attendees. Among the invited speakers was Dr. James D. Lewis on behalf of Gary D.

Wu, (University of Pennsylvania, USA) who delivered the IUBMB Lecture on “Lessons learned from interventional studies on diet and the human gut microbiome” and Dr. Bonnie Bassler (Princeton University USA) who delivered the Feodor Lynen Lecture on “Quorum-sensing communication: From viruses to bacteria to eukaryotes”.

The Miami Winter Symposia have been running for 53 consecutive years and have a rich history. Each meeting takes as its theme a topic of current research and/or clinical interest, and aims to broadly cover both basic research, translational issues and potential or actual clinical applications.

The 2021 Miami Winter Symposium on “Molecular and Translational Neuroscience: Focus on Sensory Disorders” will take place on January 13-16, 2021. For further information, please go to: www.miamiwintersymposium.com.

Miami Winter Symposium 2020



Professor James D. Lewis receiving IUBMB medal and certificate from Past President Joan Guinovart and Meetings Chair Ilona Concha Grabinger at the 2020 Miami Winter Symposium.



(Photos courtesy of Ilona Concha)

Education and Training

IUBMB Tang Education Fellowships

The two successful applicants of the inaugural IUBMB Tang Education Fellowships were announced in May 2020. The Fellowships are designed to provide opportunities for the development of both biochemistry and molecular biology educational programs and educators increasing expertise and capability in biochemistry and molecular biology education educators. <https://iubmb.org/guidelines-statutes/guidelines/tang-education-fellowships/>.



Prof Paul Craig, Rochester Institute of Technology, Rochester, NY, USA

Project: The focus of this project will be to develop resources and expertise in the use of virtual reality (VR) and augmented reality (AR) for teaching and research on macromolecular structure and function. Paul will spend time with Professor Philip Poronnik at the University of Sydney, Australia learning from him and creating a vision for the future.

They will focus on two areas of curriculum development: (1) the use of VR and AR to explore enzymatic reactions, transcription and replication in a first semester biochemistry course; and (2) development of a VR substrate docking study to enhance protein function prediction in the Biochemistry Authentic Scientific Inquiry Lab (BASIL; <https://basilbiochem.github.io/basil/>) curriculum.



Dr Mariana Pereyra, University of the Republic (Uruguay), Montevideo, Uruguay

Project: The objective of the fellowship is to promote a change in the approach to science education of undergraduate students through innovation in teaching. In that sense, Mariana seeks to change the focus

of traditional biochemistry laboratory courses for undergraduate students of B.S. in Biochemistry, in courses that allow them to develop research competencies immersed in authentic research experiences. To address this, it is important that the instructor has the ability to anticipate the skills that the

student will develop during the course and design assessments that not only are aligned with the course content but also reveals to what degree the student has developed those targeted abilities". Mariana will work with Professors Nancy Palaez and Trevor Anderson from Purdue University, Lafayette, IN, USA.

The closing date for the next round of IUBMB Tang Education Fellowships is 1st October 2020. Information is available at <https://iubmb.org/guidelines-statutes/guidelines/tang-education-fellowships/>

COVID-19 and Teaching

COVID-19 has had a major impact on teaching, resulting in most universities stopping face-to-face classes and many moving to online formats. To assist with this transition the IUBMB journal "Biochemistry and Molecular Biology Education" (BAMBED) has compiled a virtual issue of articles describing useful resources for educators. BAMBED has also placed a call for brief rapid communications from educators on creative and innovative approaches [https://iubmb.onlinelibrary.wiley.com/doi/toc/10.1002/\(ISSN\)1539-3429.teaching-COVID-19](https://iubmb.onlinelibrary.wiley.com/doi/toc/10.1002/(ISSN)1539-3429.teaching-COVID-19)

The American Society for Biochemistry and Molecular Biology has also collated a list of resources for educators making a quick transition to online learning. <https://www.asbmb.org/education/online-teaching>

Funding for Educational Activities

IUBMB is committed to improving education in biochemistry and molecular biology at all levels and provides sponsorship for a range of activities which contribute to this goal. The funding priorities and further information can be found at:

<https://iubmb.org/guidelines-statutes/guidelines/iubmb-educational-activities/> The closing date for the next round of IUBMB Tang Education Fellowships is 1st October 2020.

Wood Whelan and Mid Career Research Fellowships

IUBMB offers short term fellowships for both early career (Wood Whelan Research Fellowships) and mid career (Mid Career Research Fellowships) scientists to carry out research and training in a laboratory other than their own. The closing date for the next round of research fellowships is 1st October 2020 for travel in 2021. <https://iubmb.org/activities/fellowship-programs/>

Janet Macaulay
Chair, IUBMB Committee for Education and Training

NEWS FROM DR FRANCIS AMARA, IUBMB AMBASSADOR FOR AFRICA

Celebrating Outreach in Africa

Professor Francis Amara (IUBMB's Ambassador for Africa) and Professor Etienne Leygue, Department of Biochemistry & Medical Genetics at the University of Manitoba, Canada, visited Sierra Leone, West Africa, in the spring of 2019 to teach and train future leaders in STEM and Biomedical Sciences. While in Sierra Leone, they established teaching and research partnerships with the Departments of Biochemistry, College of Medicine and Allied Health Sciences, Fourah Bay College, University of Sierra Leone. They are planning to return to Sierra Leone late this year to develop courses in Molecular Biology, and deliver hands-on activities in Enzyme kinetics. During this period, Dr. Amara will oversee progress made so far in construction of the STEM and Biomedical Center, Kenema, Sierra Leone. In future, this Center will serve as the hub for volunteers from IUBMB membership to deliver seminars, and professional development workshops, for universities across Africa.



Francis Amara, PhD, MEd, FHEA (UK)
IUBMB Ambassador for Africa



Drawing DNA on the STEM and Biomedical Center Under Construction, Kenema Sierra Leone, West Africa



STEM and Biomedical Center Under Construction, Kenema, Sierra Leone, West Africa



Fourah College Campus, Freetown, University of Sierra Leone, West Africa

Congratulations to our IUBMB Jubilee Lecturers



**Jack Szostack, Harvard Medical School,
USA**

**“Clues to the Origins of RNA from the
Chemistry of Nonenzymatic RNA Copying”**

Given at the 25th Annual meeting of the RNA Society
May 26-31, 2020 (*online*)

Credit photo by Li Huang



**Melissa Moore, Moderna Therapeutics Inc.,
USA**

“mRNA as medicine”

Given at the 25th Annual meeting of the RNA Society
May 26-31, 2020 (*online*)

The IUBMB was pleased to collaborate with the RNA Society to provide complimentary registration to 20 trainees and junior faculty from 11 countries (Spain, India, Canada, US, India, Puerto Rico, Poland, Austria, UK, Nigeria, China, Mexico) to attend RNA2020, originally scheduled to take place in Vancouver, Canada, but reorganized to take place online.

Upcoming Jubilee Lecturer



Dafna Bar-Sagi, New York University, USA

“Ras oncogene in cancer pathogenesis and therapy”

To be given at FASEB Science Research Conference (SRC):The Cell Signaling in
Cancer Conference From Mechanisms to Therapy

September 21-22, 2020 (*online*)

website: <https://src.faseb.org/cellsig>

Horst Kleinkauf (1930—2020)

On May 3, 2020, Professor em. Horst Kleinkauf at the age of 89 in Berlin. The Institute of Chemistry at the Technical University of Berlin mourns the loss of a remarkable biochemist and organizer.

Horst Kleinkauf studied and received his doctorate in 1957 at the Technical University in Braunschweig. As a postdoctoral fellow, he worked with Heinrich Matthaei at the Max Planck Institutes in Tübingen and Göttingen to decipher the genetic code and habilitated in 1966 at the TU Braunschweig. From 1967 to 1971, he investigated the non-ribosomal biosynthesis of peptide antibiotics in the group of Fritz Lipmann at Rockefeller University New York. In 1971 Horst Kleinkauf was appointed full professor at the TU Berlin and founded the Institute for Biochemistry and Molecular Biology. In the following years he was able to set up a center for research into the biosynthesis of biologically active peptides. The main research areas were the elucidation of biosynthetic pathways for linear and cyclic peptides, the characterization of the multienzyme systems catalyzing the syntheses and the applications of these systems in the production of analogous natural products. The enzymatic syntheses of the classic peptide antibiotics gramicidin S and tyrocidin, the ionophore Enniatin, Beauvericin and Alamethicin, the immunosuppressant cyclosporin, the cytostatic actinomycin, ergot alkaloids and the penicillin precursor aminoadipyl-cysteiny-D-valine were processed. These research activities were characterized by numerous collaborations with colleagues at universities, Max Planck Institutes and industry. From 1979 to 1992, Horst Kleinkauf headed the special research area he founded, of the German Research Foundation "Structure, Function and Biosynthesis of Peptides and Proteins".

In the 1970s he was department spokesman for the Faculty of Physical and Applied Chemistry and a member of the council of the Technical University of Berlin. During this time, he already tried to build relationships with colleagues in the former GDR and Eastern Europe. Since 1985 he has been a member of the Leopoldina and has received several



awards, such as the Heyrovský Gold Medal and the Kitasato Institute, Tokyo.

He was involved in the organization of international scientific events and was chairman of the 17th FEBS (Federation of European Biochemical Societies) conference in Berlin (1986) and then counselor of the following conferences from 1988 to 1996. **From 1991 to 1998 he was secretary general of the International Union of Biochemistry and Molecular Biology (IUBMB).** From 1996 to 1999 Horst Kleinkauf was representative of Germany at the "General Committee of the International Council of Scientific Unions" (ICSU) and from 1999 to 2002 Vice President for external relations of the ICSU board.

During his time at the TU Berlin from 1971 to 2005, Horst Kleinkauf was a tireless and successful organizer in setting up a new research area, as well as an institute where numerous colleagues were trained, and did his doctorate with a special link between academic and industrial research activities.

UPDATES ON IUBMB JOURNALS

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.](#)

Searching for a New Editor-in-Chief for IUBMB Life

The International Union of Biochemistry and Molecular Biology (IUBMB) seeks a new Editor-in-Chief for IUBMB Life, an international, peer-reviewed journal in the life sciences, that is the flagship journal of the IUBMB. IUBMB Life is devoted to the rapid publication of the most novel and significant research and reviews in the broadly defined fields of biochemistry, molecular biology, cell biology, and molecular medicine. IUBMB Life is a well-established, peer-reviewed, ISI-listed journal that has been in publication since 1990.

The successful candidate will be recognized as a leading member of the biochemistry and molecular biology community. He or she will have an outstanding publication record; an extensive, global network; and an appreciation for the diverse fields of relevance. Further, he or she will bring strong leadership, organizational and communication skills to the journal.

For more information on how to apply and the criteria necessary (<https://iubmb.onlinelibrary.wiley.com/journal/15216551>)

UPDATES ON IUBMB JOURNALS

We are excited to highlight new research from the [IUBMB Journals](#): *IUBMB Life*, *BioFactors*, *Biotechnology and Applied Biochemistry*, and *Biochemistry and Molecular Biology Education*.

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!

IUBMB Life

New Issue: Volume 72, Issue 7



Issue Highlights

[The biofilm-associated bacterial infections unrelated to indwelling devices](#)

[Cancer stem cell enrichment is associated with enhancement of nicotinamide N-methyltransferase expression](#)

[MicroRNA-34a-mediated death of acute myeloid leukemia stem cells through apoptosis induction and exosome shedding inhibition via histone deacetylase 2 targeting](#)

[Lack of miR-1246 in small extracellular vesicle blunts tumorigenesis of laryngeal carcinoma cells by regulating Cyclin G2](#)

Special Issue: Inhibitors of Protein Kinases (IPK Conference)

IUBMB Life

VOLUME 72 ISSUE NO 6 | JUNE 2020

Special Issue on Inhibitors of Protein Kinases (IPK) Conference
Guest Editors: Jarosł Pohnanski and Dorlene Fabbro

Published in the International Journal of Biochemistry and Molecular Biology

WILEY

IN THIS ISSUE:

- Genesis of the IPK Conference
- Disease-related mutations of receptor-activated cytosolic G
- Cell-based recording of full-length kinase conformations
- Emerging structure-function roles in protein kinases
- Plasmodium falciparum: cAMP kinase 2 and the host cell protein trafficking

BioFactors

[New Issue: Volume 46, Issue 3](#)



Highlights

[COVID-19, pulmonary mast cells, cytokine storms, and beneficial actions of luteolin](#)

[Special Mini Issue: Challenges in Redox Biology](#)



Biotechnology and Applied Biochemistry

Latest Issue: Volume 67, Issue 2

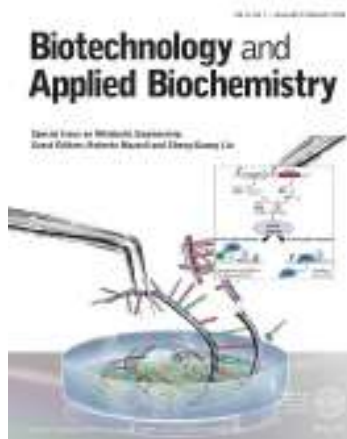


Highlights

[The use of curcumin as an effective adjuvant to cancer therapy: A short review](#)

[MicroRNA-144 relieves chronic constriction injury-induced neuropathic pain via targeting RASA1](#)

Special Issue on Metabolic Engineering



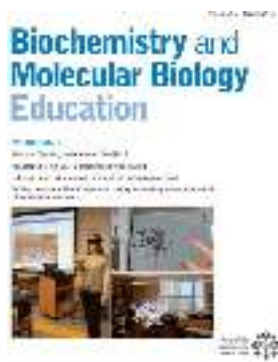
New article highlights:

[CRISPR as a tool in tumor therapy: A short review](#)

Biochemistry and Molecular Biology Education

New Virtual Issue on Teaching in the Time of COVID-19

New Issue: Volume 48, Issue 3



Highlights

[Drawing in 3D: Using 3D printer pens to draw chemical models](#)

[An idea to explore: Use of augmented reality for teaching three-dimensional biomolecular structures](#)

Introducing the New Managing Editor



Gwen Taylor, Ph.D. has recently joined Wiley's team working with the IUBMB journals portfolio. Her degree is in biochemistry from the University of Colorado in Boulder and she did postdoctoral work in the pharmacology department at Yale University School of Medicine. She has extensive experience as a journal editor at Wiley, particularly with the Current Protocols family of life-science laboratory research methods journals. She will be providing strategic guidance for the IUBMB portfolio, working directly with the Editorial Boards to devise and implement ways to increase the profile and impact of the journals. She is thrilled to be working with the Union and the world-class researchers who serve on the journal editorial boards.

UPCOMING IUBMB FOCUSED MEETINGS

IUBMB Focused Meeting “Crosstalk between Nucleus and Mitochondria in Human Disease (CrossMitoNus)”

Seville, Spain

18 May – 21 May, 2021 (**Rescheduled Date**)

visit: <https://crossmitonus2021.iubmb-febs.org/>

IUBMB Focused Meeting “Biochemistry & Molecular Biology of RNA Viruses” – **POSTPONED**

Faridabad, India

24 November – 27 November, 2020

Contact: Dr. Deepak T. Nair: (deepak@rcb.res.in)

IUBMB Focused Meeting "Neurodegenerative Diseases" – **POSTPONED**

Taipei, Taiwan

25 – 27 February 2020

Contact: Dr. Ya-Jen Cheng: (npas@gate.sinica.edu.tw)

visit: <https://iubmb.npas.programs.sinica.edu.tw/>

ADVANCED SCHOOLS MEETINGS



Redox Alterations and Cellular Responses: From Signalling to Interventions

Spetses Hotel, Spetses Island, Greece
 20 September – 26 September, 2021 (**Rescheduled Date**)
 Contact: Dr. Aphrodite Vasilaki (Vasilaki@liverpool.ac.uk)
 visit: <https://redoxalterations2020.febsevents.org/>

ICGEB-IUIS-ALAI-ASCAI2 Immuno-Argentina – **POSTPONED** Immunological memory in infection and vaccination: current knowledge and future directions

Uthgra Hotel, Los Cocos, Argentina
 22 September - 25 September 2020
 Contact: Dr. Andriana Gruppi (ascai2cordoba2020@gmail.com)
 visit: <https://www.icgeb.org/advanced-immunology-course-2020/>

Molecular Targets for Anti-aging Interventions – **POSTPONED**

Spetses Hotel, Spetses Island, Greece
 25 May – 30 May 2020
 Contact: Assoc. Res. Prof. Aleksandra Mladenovic Djordjevic (anamikos@ibiss.bg.ac.rs)
 visit: <https://antiaging2020.febsevents.org/>

UPCOMING MEETINGS



28th FAOBMB & 2nd CBSL Conference: Biochemistry and Molecular Biology for the Future – **POSTPONED**



65th Biophysical Society Annual Meeting

20 February – 24 February, 2021
Boston, Massachusetts

website: <https://www.biophysics.org/2021meeting>



Website: <https://src.faseb.org/cellsig>

LSCDS X CSMB PRESENT

LIFE SCIENCES CAREER EXPO 2020

EDUCATING THE NEXT GENERATION

**MAY 13-15, 2020
HART HOUSE
UNIVERSITY OF TORONTO**

WHAT IS THE LIFE SCIENCES CAREER EXPO (LSCE)?

LSCE is a national three-day, multi-university career conference designed to bring together graduate students and postdoctoral fellows with educators, researchers, industry partners and government stakeholders, with the common interest of educating the next generation of trainees about the diverse careers in the life sciences sector.

EVENT HIGHLIGHTS

- KEYNOTE & CAREER PANEL DISCUSSIONS
- COMPANY SPOTLIGHT PRESENTATIONS
- PROFESSIONAL SKILLS WORKSHOPS
- COMPANY BOOTH FAIRS
- JOB SIMULATIONS PROGRAM
- INFORMATIONAL INTERVIEWS

COMPUTED BY THE LIFE SCIENCES CAREER DEVELOPMENT SOCIETY AND THE CANADIAN SOCIETY FOR MOLECULAR RECOGNITION

FIND OUT MORE AT WWW.LSCE.CA

**** Meeting Postponed. Event planning to be reschedule for May 2021**



The 45th FEBS Congress - Molecules of Life: Towards New Horizons

Ljubljana, Slovenia
3 July – 8 July 2021 (*Rescheduled Date*)
website: <https://2020.febscongress.org/>



Christchurch, New Zealand
22 September – 25 September 2021
website: <https://www.faobmb2021.org/>

Book proposal

An Illustrated Book (Comic Biochemistry Book/Magazine)

Dr. Ibitade Jawonisi, a Biochemist from Nigeria, West Africa, is proposing to publish an illustrated, cartoon-Biochemistry Textbook for Nigerian and African students at the undergraduate level. She is looking for international contributors to provide in-kind service:

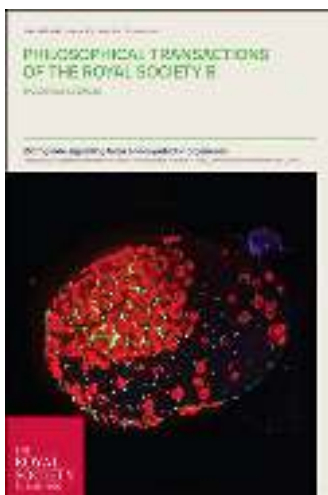
- To make available free content materials including, puzzles, quizzes, and links to websites, and other lecture materials
- As illustrators, cartoonists, and colorists

- As editors and associate editors
- As Proof Readers
- As book pattern designers

In addition, please forward any information on grant funding for such initiatives to her.

If you are interested, directly contact Dr. I. Jawonisi:

Ph.: +2348095304606/WhatsApp



Royal Society Publishing has recently published a special issue of *Philosophical Transactions B* entitled **Retrograde signalling from endosymbiotic organelles** compiled and edited by Thomas Pfannschmidt, Matthew J Terry, Olivier Van Aken and Pedro M Quiros and the articles can be accessed directly at www.bit.ly/PTB1801 The issue is FREELY available online until further notice due to the Covid 19 pandemic!

We are also looking for new theme issues and that if you are interested in submitting, please visit <https://royalsocietypublishing.org/rstb/submit-proposal> or contact the Editorial Office for more information philtransb@royalsociety.org.

PHILOSOPHICAL TRANSACTIONS B

Interdisciplinary journal issues across the life sciences

KEY BENEFITS FOR AUTHORS:

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THE JOURNAL'S FOCUS:

- **Interdisciplinary:** Research spanning multiple life science disciplines
- **High Quality:** Rigorous peer review and high standards
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ROYAL SOCIETY PUBLISHING

Collaboration in the COVID era

We all know that times are strange right now, and the lives of scientists very different from normal. For those who are missing conference travel, and the opportunity to discuss your work and build collaborations with other research groups, we would like to suggest a replacement project: why not edit a theme issue of *Philosophical Transactions B*?

Each issue is carefully planned out, so is more like a book than a standard collection of related papers. The broad scope means that you are not restricted in terms of subject area, and you can be inventive with different article types. As Guest Editor, you will have the opportunity to build your network and gain editorial experience, with a high-profile Editorial Board and experienced staff to help you at every step of the way.

[Read about the experience of former Guest Editors](#) and [download our flyer](#). Then, if interested, feel free to contact the Commissioning Editor, [Helen Eaton](#), with your ideas.

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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 Focussed 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. Up to 3 per year will be sponsored to a maximum of US\$30,000 each.

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.

Mid-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.

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 Lectures. At IUBMB Congresses, several endowed lectures feature prominently in the program: IUBMB, Osamu Hayaishi, Chester Beattie, IUBMB Life, Feodor Lynen, Severo Ochoa, EC Slater and Edward Wood Lectures. In addition, IUBMB Jubilee and Special Lectures are intended as Plenary 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 Speakers. 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, IUBMB Life, Biochemistry and Molecular Biology Education (BAMBE), Biotechnology and Applied Biochemistry, Molecular Aspects of Medicine, BioFactors. 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.

IUBMB programs and benefits of membership (cont'd)

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

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