

May, 2021

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In the first place IUPAB wants to thank to our Adhering Bodies, National Societies of Biophysics and to the Biophysics Community for their support during the special and difficult times that we are living due to the pandemia and wishing that all of you are keeping safe.

During February-March 2021, an on-line General Assembly was held to approve the new Statutes and Rules of Procedure of IUPAB. The new text can be found in our [website](#). The modified text try to accommodate to the new situations that we are finding nowadays.

The 20th IUPAB Congress will be held on October 4th-8th 2021 in a virtual format and the registration and submission of Abstracts are now open. You will find information about it in this issue, together with an invitation letter from the organizers. This is the main activity of IUPAB and therefore you are all invited to participate. During this Congress the Avanti-IUPAB prize will be presented to Prof. A. Watts and the IUPAB-Young prize will be presented to Dr. Yoav Shechtman. In association with the Congress an IUPAB General Assembly will be held and during it the new elected officers will take office. The election of these officers will take place through an on-line procedure during June 2021.

In the same way the venue for the IUPAB 2027 IUPAB Congress will be elected from the bids submitted before June 30th 2021 and the organizers will



Juan Carmelo Gómez-Fernández

make a presentation during the Congress.

The two IUPAB Focused Meetings due for 2021, to be held in India and in Canada, were postponed to 2022 and details about them should be known soon.

The 2023 Congress due to be held in Kyoto in June 2023 was postponed to similar dates but of 2024.

The organizers of these important IUPAB events will be invited to present their preparations during the October Congress.

Please remember the new modalities of sponsoring policies of IUPAB [here](#).

Among these new modalities are:

- Sponsorship of a prize for communications made by students or young biophysicists.

Societies of countries linked to IUPAB as Adhering Bodies may apply for this prize to be awarded to presentations made by young biophysicists during meetings of these societies. The prize could also be given during meetings of associations of young biophysicists. See in this [link](#) the details to be taken into account.

- Sponsorship of Plenary Lectures in major biophysics meetings and conferences.

IUPAB will sponsor plenary lectures in major meetings or congresses of biophysics like those of EBSA (Europe), ABA (Asia-Pacific), Biophysical Society and LaFEBS (Latin American countries). See this [link](#).

Applications should be sent to the Secretary General (jcgomez@um.es).

Best wishes from IUPAB Secretary General.

20th IUPAB Congress

October 4 - 8, 2021 | Virtual



On behalf of the Brazilian biophysics and biochemistry communities, we are honored to announce the progresses in the organization of the **20th IUPAB Congress**, to be held from **4th to 8th of October of 2021** in the virtual format.

We aim to offer a broad international overview of research frontiers and recent developments in biophysics and biochemistry. We have organized an outstanding program with contributions in the form of keynote lectures and symposia, as well as oral and poster presentations. **10 key note speakers**, two of them **Nobel prize winners**, and 24 symposia will cover a wide range of interests in biophysics and biochemistry. **Over 80 speakers** (29 from North America, 27 from Europe, 23 from South America, 8 from Asia, Oceania and Middle East) from all continents (24 countries) in a male:female rate of ~ 2:1 have accepted to deliver lectures. Chairs will also select 28 oral presentations from the submitted abstracts. There will be two specific periods for poster presentations and we are expecting more than 500 poster presenters.

The presence of leading scientists among the invited speakers will certainly contribute to create a very rich scientific environment, which we hope will also allow for bringing together the best of Science in biophysics and biochemistry. We have contracted the most advanced platforms for virtual conferences to allow a very interactive experience during the event.

We are also working hard to involve young scientists (YS) in the event. An ongoing webinar Series (**The YS Webinar Series**) comprises **10 webinars between May and September 2021**, covering different areas of biochemistry and biophysics. The program includes 10 senior speakers (8 males, 2 females) and 32 young scientist participants (15 males, 17 females) from 14 countries and five continents (Argentina, Belgium, Brazil, Hungary, India, Iran, Italy, Netherlands, Nigeria, Portugal, Spain, South Africa, UK, USA). The YS speakers were selected by an evaluation committee from 146 applicants from all over the world and leading senior speakers were invited and happily agree to participate. The webinars will comprise a 40 min talk from a leading scientist in the field plus 3-4 short talks (15 min) from young scientists (Postdocs, PhD students). Registration to the YS Seminars is free of charge. The Webinars will be hosted in the Zoom platform and recorded for late view in the Societies web channel, and the YS participants will have full waiver of the registration fee in the IUPAB congress.

With resources provided directly from IUPAB, we are organizing a sponsorship award for helping 50 enrolled PhD students to participate in the IUPAB congress ([IUPAB fellowships](#)). We will also organize the [24th Young Talent Award](#) in Life Sciences promoted by SBBq and Cytiva and a poster award.

SBBqExpo, which is an exhibition hall for companies and sponsors that usually is one of the greatest aspects of our past congresses, will be held during the 20th IUPAB Congress and we are optimistic that it will likewise be a success in the virtual format.

To conclude, we are certain that the congress will be an unforgettable event and we look forward to welcoming you to the virtual 20th IUPAB!



Rosangela Itri

Chairs of the IUPAB-SBBf-SBBq Congress



Mauricio da Silva Baptista

Young Scientist Program Webinars Series

Webinar 1: May 19, 2021 - 2:00 pm



IUPAB
20th IUPAB Congress

45th Annual SBBF Meeting
50th Annual SBBq Meeting

2021

Young Scientists Program Webinars Series

Webinar 1: May 19th, 2021 - 2 pm



Advanced fluorescence methodologies in membrane biophysics and lipid-protein interaction
Dr. Manuel Prieto, iBB-IST, Portugal

Young Scientists:



Stability of membranes containing different types of anionic lipids
Fernanda S.C. Leomil, Unifesp, Brazil



Langmuir films at the oil/water interface revisited
Milagro Mottola, IIBYT (CONICET-UNC), Argentina



A complete membrane fusion system: determining fusion intermediates, kinetics, efficiency and force
Rafael Bezerra de Lira, University of Groningen, the Netherlands



Royal Society Publishing - *Philosophical Transactions A*

Fifty Years of Synchrotron Science: Achievements and Opportunities

Compiled and Edited by **S. Samar Hasnain** and **C. Richard A. Catlow**

The year 2018 marked the 50th anniversary of the first scientific applications of synchrotron radiation in the UK. Over this period, synchrotron science has been transformed from a highly specialized field into a mainstream area in physics, chemistry, engineering, biomolecular, medical and heritage science. A conference was held at the University of Liverpool in June 2018, to celebrate 50 years of synchrotron radiation in the UK, its impact nationally and globally, and to survey the achievements of the field



and look to the future. This volume contains a collection of articles from contributors to the conference. It includes historical aspects relating to the development of synchrotron sources, accounts of current facilities and discussions of key application areas. We hope that the volume helps to give a perspective on how the field has developed over the five decades and indicates some of the future opportunities.

The issue is now completely **FREE** to access directly...

...[HERE!](#)

We are grateful to all who contributed to the conference and to this volume. Special thanks are due to the organizing committee that included Susan Smith (STFC) and Andrew Harrison (DIAMOND) and the programme committee. We are also grateful to Sue Waller and her team for the event organization.



Report on SIBPA- IVSLA XXV International School of Pure and Applied Biophysics - Quantitative analysis of optical imaging for Medicine and Biophysics

January 18 - 22, 2021

The SIBPA- IVSLA XXV International School of Pure and Applied Biophysics on "Quantitative analysis of optical imaging for Medicine and Biophysics" developed over 5 days during the week of 18-22 January 2021. The school was the result of the joint effort of the Italian Society of Pure and Applied Biophysics (SIBPA), the Venetian Institute for Sciences and Arts (IVSLA), the Institute Pasteur (IP, Paris) and the Institute of Applied Sciences and Intelligent Systems (ISASI) of the National Research Council (CNR). The school, which should have been held in Venice in the gorgeous

venue of Palazzo Franchetti, was converted to an online event due to the travel restrictions related to the COVID19 pandemic and was supported by the Università di Milano-Bicocca (Unimib, Milano, I).

The school offered to 35 participants, coming from 14 countries (Belgium, Ecuador, Egypt, France, Greece, Iraq, Iran, Italy, Peru, Portugal, Russia, Spain, UK, USA), an overview of the foundations and applications of some of the most recent methods for quantitative analysis of data provided by modern optical and multimodal

imaging, with a special focus on recent machine learning approaches. The scientific committee constituted by Giuseppe Chirico (Unimib), Pietro Ferraro (CNR) and Christophe Zimmer (IP), supervised by Giorgio Giacometti (IVSLA), organized the school schedule in five one-hour lectures per day. Technical details of the quantitative analysis were discussed in these extended (1 hour) lectures that were given by leading researchers in the fields of Artificial Intelligence for biophysical and biomedical analyses, of Medical Imaging Data analysis and of optical

microscopies and nano-scopies. Besides these lectures held during main online sessions, and in the effort to offer to the attendees the possibilities of free informal discussions with the lecturers, shorter separate video-calls were scheduled with each of the lecturers in three slots during the day.

Details on the program of the school can be found at this [link](#).



Gregorio Weber Award, 2021

Francisco Barrantes

Professor Francisco Barrantes was the recipient of the 2021 Gregorio Weber Award for Excellence in Fluorescence Theory and Applications. The award was presented during the Biological Fluorescence Subgroup Symposium at the Biophysical Society virtual meeting in March of this year.

Francisco Barrantes is a professor at the Faculty of Medical Sciences at the Catholic University of Argentina (UCA), and emeritus researcher at the National Council for Scientific and Technological Research of Argentina (CONICET). He is currently the head of the Molecular Neurobiology Laboratory at the Institute for Biomedical Research (UCA-CONICET).

Prof. Barrantes has trained dozens of students from all over Latin America and supervised Ph.D. students and young scientist during his period in charge of the UNESCO

Chair of Biophysics and Molecular Neurobiology in his more than 50-year teaching and research career at the Universities of

Buenos Aires, del Sur (Bahia Blanca), and since 2010, at UCA in Buenos Aires.

In his presentation at the conference, centered around fluorescence microscopy studies on the topography and dynamics of the nicotinic acetylcholine receptor and its interactions with cholesterol, Barrantes shared his life-long friendship and professional experience with Gregorio Weber, describing him as a generous mentor who inspired and guided much of his scientific career. Barrantes trained with Prof. Weber during the latter's visit to the University of Buenos Aires and later at the University of Illinois at Urbana-Champaign. The first fluorescent probe for the cholinergic system stemmed from this period.

Francisco Barrantes



7th International Iberian Biophysics Congress

June 14 - 16, 2021 | Virtual



Biophysicists worldwide Get Together Online

with very low fees

The scientific program is organized in nine symposia, including *Biophysics in Health*, in addition to the more traditional areas of Biophysics focused on *Proteins, Nucleic Acids and Membranes, complex Systems and Cells*.

Plenary Lectures

José Feijó (University of Maryland, USA)
Miguel Castanho (IMM/FMUL-Lisboa)
Oscar Llorca (CNIO Madrid, Spain)
Stefanie Kramer (ETH-Zurich, Switzerland)

Invited Speakers

Anthony Watts (DB/UO-Oxford)
Beatriz Herguedas (BiFi-Zaragoza)
Bruno Correia (EPFL-Lausanne, USA)
Cláudia Nunes (UCIBIO-Porto)
Eurico Morais de Sá (i3S/UP-Porto)
Francisco Enguita (IMM/FMUL-Lisboa)
Iban Ubarretxena (Universidad del País Vasco)
Isabel Rocha (ITQB-UNL-Lisboa)
Javier Luque (Univ Barcelona)
João Moreira (CNC/UC-Coimbra)
Jorge Alegre-Cebollada (CNIC-Madrid)
José Maria Valpuesta (CNB-Madrid)
Manuel Prieto (IST-Lisboa)
Mariana Pinho (ITQB-UNL-Lisboa)
Pedro Matias (ITQB/UNL-Lisboa)
Valerie Booth (Univ Newfoundland, Canada)
Xavier Salvatella (ICREA/IRB-Barcelona)

Organizing Committee

Maria João Moreno (CQC/FCTUC-Coimbra)
Armindo Salvador (CNC/UC-Coimbra)
Nuno Santos (IMM/FMUL-Lisboa)
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Jorge Martins (CCMAR/UAlg-Faro)
Hugo Filipe (CQC/FCTUC-Coimbra)
Patrícia Martins (CQC/FCTUC-Coimbra)
Filipe Gomes (QOPNA/UA-Aveiro)

Early Registration by April 20

The Congress will be Online only
For registration and more information visit

<https://iibc2020.organideia.pt>



13th European Biophysics Conference

European Biophysical Societies' Association (EBSA)

July 24 - 28, 2021 | Vienna, Austria

The EBSA 13th European Biophysics Congress will take place in Vienna from 24 - 28th July 2021.

The information about the congress is updated regularly on the [congress web site](#) and we can confirm that a physical event will take place under appropriate safety conditions. For anyone unable to be there in person, for example due to travel restrictions in their country, it will also be possible to attend the **Congress virtually**.

The **IUPAB** Sponsored Plenary Lecturer will be Francesco Bezanilla, Chicago.



Public Lecture

Ada Yonath

Nobel prize 2009
Weizmann Institute of Science
Israel

Plenary Lectures

Thomas Südhof

Nobel prize 2013
Stanford University, USA

Francesco Bezanilla

University of Chicago, USA

Maria Rodnina

MPI Göttingen, Germany

Raimond Dutzler

University of Zurich, Switzerland

Gerhard Hummer

Max Planck Institute, Germany

Karolin Luger

University of Colorado, USA

Carol Robinson (tbc)

University of Oxford, UK

Symposia

Protons on interface
Channels and Ca²⁺ signaling
Medical biophysics / Imaging
Membrane transporter & channels
Virus biophysics
Advanced optical microscopy
Mechanobiophysics
Light as a tool in biophysics
Biomimetic nanopores
Protein translocation, assembly and folding
Bioenergetics
Quantification of molecular forces
Membrane signal transduction
Cytoskeleton / Motor proteins
Membrane architecture and asymmetry
Membrane active peptides
Biomolecular simulations
Synthetic cell
Liquid-liquid phase separation and intrinsically disordered proteins
DNA architecture and gene regulation
Lipid-Protein interactions
Biosensors
Instruct-ERIC

Deadlines

1 Dec 2020	Start of registration and abstract submission
31 Mar 2021	End of abstract submission
30 Apr 2021	End of Early bird registration

[Conference Website Link](#)

SFB-GEM Meeting 2021

Biophysics of Membranes and Beyond

September 27 - 30, 2021 | Virtual

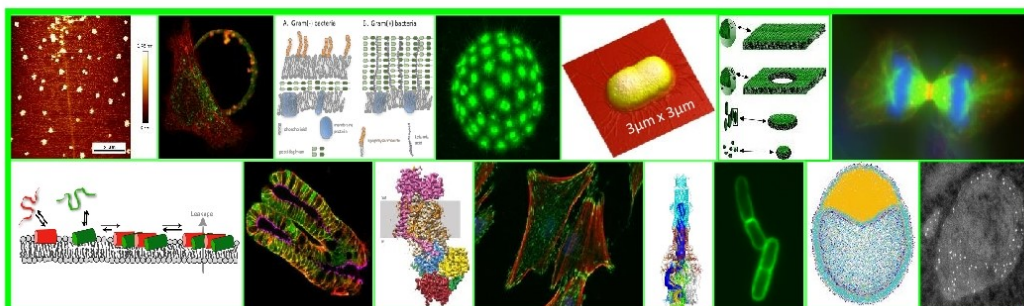


SFB-GEM MEETING 2021



BIOPHYSICS OF MEMBRANES AND BEYOND

27th-30th September 2021, online



- Protein-lipid interaction and membrane remodeling
- Glycobiology, sweets and membrane
- Membrane protein structure and dynamics
- New technologies
- Disordered protein domains and liquid-liquid phase separation
- Mass Spectrometry approaches in membrane studies
- Integrative approach in Molecular Modeling
- New Frontiers in Bioimaging
- Mechanobiology and Cell motility

<https://sfb-gem2021.sciencesconf.org/>

Organizing Committee

ALVES Isabel (CBMN, Bordeaux)
GRAUBY-HEYWANG Christine (LOMA, Bordeaux)
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SALGADO Gilmar (ARNA, Bordeaux)

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[Meeting Website Link](https://sfb-gem2021.sciencesconf.org/)

66th BPS Annual Meeting

February 19 - 23, 2022 | San Francisco, California, USA



Upcoming Biophysical Society Annual Meeting!

[Here](#) is the information

IUPAB News Number 77, May, 2021

Executive Committee of IUPAB

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The Executive Committee and the Council are depicted at the end of the General Assembly in Edinburgh, 18th July, 2017



IUPAB News Number 77, May, 2021

**Activities of the
INTERNATIONAL UNION for
PURE and APPLIED
BIOPHYSICS**

**From the Secretary-General:
Professor Dr. Juan C. Gomez-
Fernandez**

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Telephone: +34-868884766.

Email: jcgomez@um.es

**IUPAB is registered in France
according Loi du 1er Juillet
1901-Art. 5, n°**

**ordre 03/000309, n° dossier
00158190**

The International Union for Pure and Applied Biophysics (IUPAB) was formed in Stockholm in 1961 as the International Organisation for Pure and Applied Biophysics. It was established as the International Union in 1966, when it became a member of the ICSU (International Council for Science) family. Affiliated to it are the national adhering bodies of 61 countries. Its function is to support research and teaching in biophysics. Its principal regular activity is the triennial International Congresses and General Assemblies.



Important Announcement Sponsorship Policy of IUPAB

As from now on there will be a change in the sponsorship policy with respect to that posted in:

<http://iupab.org/about/sponsorship/>

So that point 8, will read:

Applications for financial support of Conferences, Schools and other

should be returned to the Secretary General at least before June 30th of the year prior to the event if it is scheduled for the first semester of the following year or before the 31st of December if it will take place during the second semester.

If organizers of meetings are seeking only the approval of IUPAB, including the use of the IUPAB logo, but not requesting financial support, applications may be submitted to the Secretary General at any time and will be considered by the Executive Committee by correspondence.

Note from the Editor:

IUPAB News will be happy to reproduce articles previously published by bulletins or other publications of any of our Adhering Bodies. We will be also happy to consider articles written by biophysicists on scientific or other subjects of broad interest for the biophysical community. You may contact the Secretary General with respect to this matter.

IUPAB is not responsible for the opinions expressed in the articles here included, nor necessarily share these opinions.

The Editor of IUPAB News is the IUPAB Secretary General Juan Carmelo Gómez-Fernández. This publication is produced and published at the University of Murcia, Departamento de Bioquímica y Biología Molecular A, Campus de Espinardo, Murcia, Spain.

Assistant Editor: Alessio Ausili

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