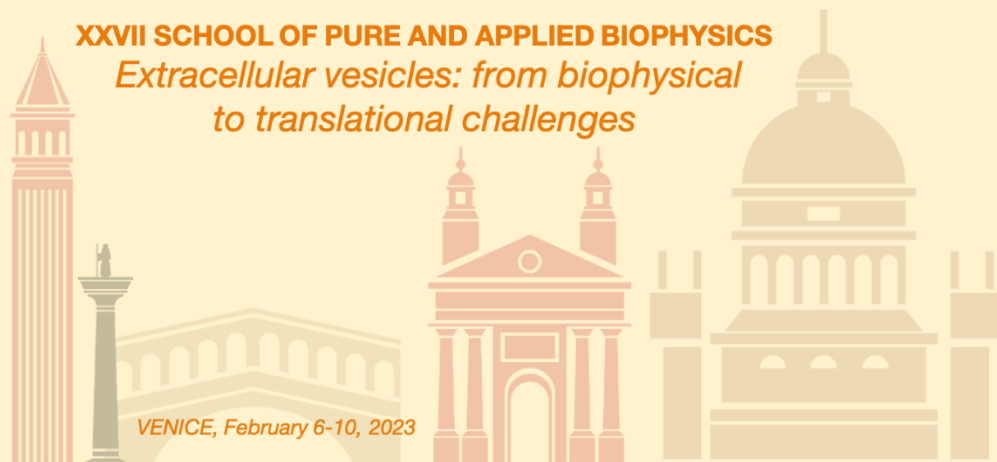


- **Calls for Positions [CfPo]**
- **Congresses [CONGR]**
- **Conferences/Meetings [CONF/MT]**
- **Workshops/Symposia [WS/SY]**
- **Courses and Schools/Webinars [CS/WB]**
- **Call for papers/applications [CfP/A]**
- **EBSA News associated with biophysics [Ebsa]**
- **Media (publications, communication) [Mpc]**
- **Events sponsored a/o supported by SIBPA [bySIBPA]**

[bySIBPA] XXVII School of Pure and Applied Biophysics



The Società Italiana di Biofisica Pura e Applicata (SIBPA), the Istituto Veneto di Scienze Lettere e Arti (IVSLA), along with the Italian Society for Extracellular Vesicles (EVIta) and the H2020-FET-Proactive project BOW, promote the XXVII School of Pure and Applied Biophysics on contemporary and emerging scientific topics related to Extracellular Vesicles (EVs):

- EVs colloidal and surface properties,



- Techniques for biophysical characterization,
- EVs versus other (synthetic and extracellular) nanoparticles,
- EVs manipulation and engineering.

The selected subjects will draw young researchers' attention to frontier research issues of considerable scientific and educational impact. The School will be held in the magnificent Palazzo Franchetti, in the historical centre of Venice.

Applications are encouraged from all young scientists (PhD students and postdocs). The participation fee is 600 €, which includes five nights accommodation. Students who do not need an accommodation may request a reduced fee (300 €). The deadline for pre-registration is November 11th 2022.

Further information at <http://venice2023.ibf.cnr.it/>

[CfPo] Professorship Position in computational biophysics at the University of Helsinki

You can apply for the position at all levels (assistant, associate, full professor) (Tenure Track, although you can get the position right from the start as a permanent professor). A detailed description of the position and the application process can be found at:

<https://jobs.helsinki.fi/job/Professor-or-assistantassociate-professor%252C-computational-biophysics/756350002/>

The conditions for the cooperation of computational biophysics with the experimental sector are excellent, because the experimental life science sector is particularly strong in Helsinki:

HiLIFE (Helsinki Institute of Life Science) <https://www.helsinki.fi/en/hilife-helsinki-institute-life-science>

Biomedicum (Biomedical Research Center) <https://biomedicum.com/>

Applicants may also be interested in the fact that computational resources (such as the capacity offered by supercomputers) are at the top of the world in Finland: Finland maintains an exascale supercomputer (LUMI), whose performance is currently at the top-3 level worldwide. The share dedicated to Finland is about 25%. Separately, Finland has its own supercomputer center (www.csc.fi), whose services are of an exceptionally high standard by all measures.

If these resources are not enough, there are also EU-level capacities such as PRACE.

The deadline for applications is November 7, 2022.



For more information, please contact
Ilpo Vattulainen, ilpo.vattulainen@helsinki.fi

[CfPo] Professorship Position in Washington University in St. Louis

Washington University in St. Louis invites applications for a cluster hire of four faculty positions in the broad area of quantum sciences, including two positions in the Department of Physics (expt or theory; one Asst/Assoc, one open rank), one in Electrical and Systems Engineering at McKelvey School of Engineering (open rank), and one in Cell Biology & Physiology at the School of Medicine (open rank). We seek candidates working in topical areas including quantum information, materials, and sensors; quantum optics, advanced spectroscopy and microscopy; and applications to biophysics or other physics, engineering, or medical fields.

Information can be found at <https://physics.wustl.edu/> , <https://ese.wustl.edu/> , and <https://cellbiology.wustl.edu/> . Faculty will be associated with the Center for Quantum Leaps (<https://quantumleaps.wustl.edu/>), and are encouraged to pursue interactions with the Institute for Materials Science and Engineering (<https://imse.wustl.edu/>), the McDonnell Center for Space Sciences (<https://mcss.wustl.edu/>), and the Center for Cellular Imaging (<https://wucci.wustl.edu/>).

Candidates should have a Ph.D. in Physics, Engineering, Biology, or closely related field. Joint applications exhibiting a high degree of research synergy will be considered. Candidates for the rank of associate or full professor should have outstanding teaching, service, and publication record commensurate with tenure at that rank. Duties will include conducting research, teaching, advising students, and participating in departmental governance and university service. Diversity and inclusion are core values at Washington University, and we seek to create inclusive classrooms and environments in which a diverse array of students can learn and thrive. Applications consist of a cover letter; detailed curriculum vitae; statements of research directions (3 pages) and interests in teaching, outreach, and diversity (2 pages); and contact information for at least three references should be submitted to <https://apply.interfolio.com/112603> by Nov. 14, 2022 to receive full consideration.



Washington University in St. Louis is committed to the principles and practices of equal employment opportunity and especially encourages applications by those underrepresented in their academic fields. It is the University's policy to provide equal opportunity and access to persons in all job titles without regard to race, color, age, religion, sex, sexual orientation, gender identity or expression, national origin, protected veteran status, disability, or genetic information.

[CfPo] Postdoc Position at Institut Pasteur, Paris

A Postdoctoral position in biochemistry and biophysics of protein membrane interactions is available for 2 years (start. January 2023) in the research group of Alexandre Chenal, Biochemistry of Macromolecular Interactions Unit. Institut Pasteur, Paris. Post-doc description here: <https://research.pasteur.fr/fr/b/bGX>

CyaA is a multi-domain protein of 1706 amino-acid residues produced by *Bordetella pertussis*, the causative agent of whooping cough. CyaA is able to translocate its catalytic domain directly across the plasma membrane in the cytosol of eukaryotic cells, where it produces supraphysiological levels of cAMP, leading to subversion of host cell functions. The objective of the PTR is to optimize CyaA-based antigen delivery vehicle (OptiCyaA4ADV). Several optimizations are required to enhance the applicability of CyaA-based ADV. The parameters allowing an efficient ACD translocation into target cells are still unknown. A systematic analysis of the effects of the length, mean net charge and folding state of the ACD-cargo would be instrumental to broaden the scope of use of CyaA-based ADV. Moreover, we propose to enhance the translocation efficiency (P454 membrane flip and CaM affinity) to rationally design more efficient CyaA-based ADV for cargos characterized by unfavorable properties. The skills for this project cover molecular biology, protein sciences (biochemistry, protein production & purification, biophysics), membrane preparation and characterization (not all skills are required, some skills can be acquired by the post-doc fellow during the project).

Candidates should email a motivation letter, a CV and send the names of three references to Alexandre Chenal (chenal@pasteur.fr). POSITION: Post-Doc (Senior)



[CfPo] Postdoc Position at IBF, CNR, Trento

RESEARCH TITLE: Functional evaluation of nutraceutical neuroprotection of neuronal ion channels in neurodegenerative diseases: a putative molecular target for neuroresilience

PROJECT: Neurodegenerative diseases (NDD) are irreversible and incurable disorders of the nervous system and the brain that cause progressive degeneration, leading to the death of neurons. In NDDs, the analysis of neuronal excitability is crucial for monitoring the disease. The neuronal signal is generated and diffused by transmembrane proteins, called ion channels, crucial in the control of membrane physiology and neurotransmission. The pathogenic role of ion channels lies in the alteration of the intrinsic excitability of the cell and in the pathophysiological signs of disease. In previous works on SBMA-Spinal and Bulbar Muscular Atrophy we have: 1) proposed the alteration of neuronal excitability as a marker of the pathological phenotype of the disease; 2) demonstrated the role of different drugs in improving the symptomatic picture of the disease through the improvement of impaired excitability. The project, with the use of different NDDs' cell models and biophysical-pharmacological approaches, intends to quantitatively establish whether natural and/or nutraceutical compounds can exhibit neuroprotective and neuroresilient effects, acting as symptomatic rescuers in NDD through the regulation of ion channels electric activity.

REQUIREMENTS: The candidate must have a PhD in neuroscience or neuropharmacology or neurobiophysics, and documented previous research work experience. The successful candidate would have strong ability to work independently, independence in planning, performing experiments and data analysis, full command of English, be self-motivated, goal-oriented and have a positive attitude.

Essentials: Strong experience in electrophysiology (patch-clamp), in establishing and/or maintenance of cell culture, in molecular biology techniques and pharmacological approaches.

Desirables: Experience with molecular imaging techniques (functional imaging, ion- and voltage probes) and with iPSCs. Previous experience in studying neurodegeneration would be an asset.

HOST LABORATORY: The lab of "Neurosystems and Photosensory Biophysics" (Dr. Carlo Musio, PI) belongs to the Institute of Biophysics (IBF) of the Italian



National Research Council (CNR) located in Trento, Italy. The lab is engaged in researches dealing with the role of the physiological and altered neuronal activity, at ion channels level, in the pathogenesis of neurodegenerative diseases. This project is funded by an Italian banking foundation, Fondazione CariVerona, based in Verona, Veneto, with the synergy of an Italian nutraceutical company and the lab of Stem Cells at University of Trento. We are equipped for patch-clamp recordings, functional imaging, microscopy, molBio and cellBio.

DURATION AND SALARY: 1+1 years, gross salary € 26.000 p.a., net salary € 22.965 p.a. (≈ € 1.900 monthly).

APPLY: Candidates are requested to send inquiries a/o a letter of interest explaining how they would fit, a CV, a record of their academic results and the names of two references to: Dr. Carlo Musio, carlo.musio@cnr.it

[CfPo] 2 PhD Positions at Krakow, Poland

A call for two PhD positions in computational glycoscience/neurobiology is now open in the Dioscuri Centre for Modelling of Posttranslational Modifications at Malopolska Centre of Biotechnology in Krakow, Poland.

Two projects will use molecular simulations to explore the mechanism of protein interaction shielding by glycans and role of glycans in neurotransmitter receptors:

https://science.phd.uj.edu.pl/en_GB/recruitment/biomedical/-/journal_content/56_INSTANCE_b9SFysKAM4oV/142594442/151865805

https://science.phd.uj.edu.pl/en_GB/recruitment/biomedical/-/journal_content/56_INSTANCE_b9SFysKAM4oV/142594442/151866221

Deadline: 8.11.22

Starting Date: May 2023

In case of questions please contact Matt Sikora (masikora@biophys.mpg.de)

[WS] La microscopia ottica a super risoluzione con STELLARIS 8 τ-STED, 10 novembre 2022, Dipartimento di Fisica, Genova

Al Dipartimento di Eccellenza di Fisica dell'Università di Genova verranno presentate le prestazioni di uno dei sistemi di microscopia ottica più avanzati al mondo acquisito nell'ambito delle attività di ricerche del progetto DIFILAB finanziato dal MUR e cofinanziato dall'Università di Genova. Il microscopio ottico



STELLARIS 8 τ -STED è frutto delle intuizioni scientifiche che hanno valso a Stefan W. Hell il riconoscimento Nobel nel 2014. Sarà un'occasione per esplorare le potenzialità della super risoluzione ottica attraverso le collaborazioni scientifiche con istituti di ricerca come il CNR, l'IIT e l'Ospedale Policlinico di San Martino e la prospettiva di raccordo con le realtà di impresa del territorio coordinata attraverso la Camera di Commercio di Genova. Le attività del DIFILAB sono inserite in iniziative europee come EuroBioimaging e MOSBRI e fanno parte del piano di investimenti di rafforzamento infrastrutturale finanziato dal piano NextGenerationEU dell'Unione europea nell'ambito del progetto PNRR IR "SeeLife" (B53C22001810006).

Il Workshop si articolerà in relazioni scientifiche dedicate sia agli aspetti tecnologici innovativi che alle applicazioni negli ambiti principali della biofisica, biologia, medicina, biochimica, neuroscienze, scienza dei materiali, fisica applicata e bioingegneria.

Giovedì, 10 novembre 2022, Dipartimento di Fisica, Università degli Studi di Genova, via Dodecaneso 33, Genova

Programma degli interventi:

14.00 – 14.50 Apertura e saluti istituzionali

Federico Delfino, Magnifico Rettore dell'Università degli Studi di Genova.

Maurizio Canepa, Direttore del Dipartimento di Fisica dell'Università di Genova.

Antonio Uccelli, Direttore Scientifico dell'IRCCS Ospedale Policlinico San Martino.

Mauro Dalla Serra, Direttore dell'Istituto di Biofisica IBF del CNR.

Agnieszka Wykowska, Coordinatrice del Center for Human Technologies, IIT.

Maurizio Caviglia, Segretario Generale della Camera di Commercio, Genova.

Relazioni scientifiche

14.50 Paolo Netti, UNINA – IIT. Cell instructive interfaces for controlling and guide cell fate.

15.20 Giuseppe Vicidomini, IIT - ERC BrightEyes. Time-Resolved STED microscopy for improving contrast and resolution: from timegating detection to phasor analysis.

15.40 Francesca Baldini, DISTAV UNIGE – IIT. Biology from the micro to the nano scale.

16.00 Luis Alvarez, Leica Microsystems. From WLL and PowerCounting to TauSTED: a lifetime of possibilities for functional imaging with the STELLARIS platform

16.20 Q&A, Tea and coffee time



16.40 Irene Farabella, IIT - Armenise Harvard Award. Investigating genome plasticity at the nanoscale.

17.10 Paolo Bianchini, IIT – DIFILAB UNIGE – UNIPR. From STED to Expansion microscopy.

17.30 Claudio Canale, DIFILAB UNIGE - MOSBRI EU. Correlative Nanoscopy, coupling STED and AFM.

17.50 Alberto Diaspro, DIFILAB UNIGE - IIT- CNR-IBF - SEELIFE EU. The Intelligent Microscope

18.00 Q&A, Farewell

[CONGR] GRC Physical Virology

Dear Colleagues,

Together with Mike Hagan from Brandeis, I am organizing the 2023 edition of the GRC Physical Virology. This meeting is hopefully of interest to many EBSA members. More information can be found via the following link:

<https://www.grc.org/physical-virology-conference/2023/>

Kind regards,

Prof. Dr. Charlotte Uetrecht

Chair GRC Physical Virology 2023 Jan 22-27, Italy



www.sibpa.it



www.facebook.com/SIBiofisicaPA/



[@SIBPA](https://twitter.com/SIBPA)



www.sibpa.it/youtube