Newsletter
August 2024

SIBPA
Società Italiana di Biofisica Pura e Applicata
fondata nel 1973

Comunicazioni dalla SIBPA

SIBPA 2024 - Numero speciale European Biophysics Journal

E' giunto un gran numero di manifestazioni di interesse per la partecipazione al numero speciale del EBJ per il congresso SIBPA2024!!!

Maggiori indicazioni sulla preparazione degli articoli sarà inviata nelle prossime settimane.

La scadenza per l'invio degli articoli è il 31/12/2024.

Biophysical Society Congress 2025

La scadenza per l'invio degli abstract per il congresso annuale della Biophysical Society scade il **1/10/2024 !!!**

Maggiori informazioni qui.

Il bando SIBPA per le borse BSP2025 sarà emanato nelle prossime settimane.

Courses and Schools

HERCULES 2025 - European School

2025 session: 9th March - 12th April, 2025
DEADLINE FOR APPLICATION: 6 October 2024

HERCULES is a European course for PhD students and young researchers using Neutrons and Synchrotron Radiation for applications in Biology, Chemistry, Physics, Hard & Soft Condensed Matter.

The 5-week school includes lectures (60%), hands-on practicals, labs & tutorials (30%), visits, a poster session, group work sessions, ...
Participants will spend one week in a partner institution in Europe among:
ALBA in Barcelona, Spain
PETRA III and EU-XFEL in Hambourg, Germany
KIT light source in Karlsruhe, Germany
SOLEIL in Saint-Aubin, France
This comes in addition to practicals, labs, and tutorials which will take place in Grenoble at ILL, ESRF and Grenoble Laboratories (CNRS, IBS).

The school includes a common part and two parallel sessions:
- Physics and chemistry of condensed matter (session A)
- Biomolecular and soft condensed matter (session B)

The school will be held in an hybrid format. Thus, a part-time online participation is also possible, consisting only in following online the lectures held in Grenoble during weeks 1, 2, 3 and 5.

Why join Hercules?
- to learn new techniques using neutron and synchrotron radiation
- to expand your theoretical and practical knowledge, not only for your present research but also for your scientific career
- to experiment these techniques on world-class instruments & beamlines
- to build a network of relations with fellow young researchers and experienced teachers from all over the World

Bursaries/reduced costs
- A limited number of fellowship grants will be available to reduce registration fees

Full list of lectures: https://hercules-school.eu/general-programme (with links to the dedicated pages)
Download the full 2024 Booklet (lectures, practicals...)
Contact email: hercules@hercules-school.eu

Master in Comunicazione delle Scienze - Università degli Studi di Padova

Fino all' 8 ottobre 2024 saranno aperte le iscrizioni al XXIV corso del Master in Comunicazione delle Scienze dell'Università di Padova

Il "Master in Comunicazione delle Scienze" ha l'obiettivo di formare professionisti della comunicazione pubblica della scienza e della tecnologia in grado di operare in molteplici settori:

- giornalismo scritto, radiofonico, televisivo e su internet;
- comunicazione istituzionale e d'impresa;
- editoria tradizionale e multimediale;

- musei e mostre scientifiche;
- promozione e gestione di iniziative di diffusione di cultura scientifica.

Le attività formative, tenute da novembre 2024 a luglio 2025 nei giorni di venerdì (l'intera giornata) e sabato (mattina), comprendono: lezioni, laboratori, esercitazioni e seminari. Inoltre fa parte integrante delle attività formative un tirocinio professionalizzante (stage) di 200 ore presso aziende, enti e istituzioni convenzionate, da svolgere tra gennaio e giugno 2025.

La peculiarità del Master è quella di offrire a studenti provenienti da diversi ambiti disciplinari e professionali (scientifici, tecnici e umanistici) la maturità culturale necessaria e gli strumenti operativi adeguati per acquisire e trasmettere informazioni sugli attuali sviluppi della scienza e della tecnica in modo comprensibile e rigoroso, per interagire efficacemente con i protagonisti della ricerca nei vari campi, per organizzare le strutture finalizzate alla comunicazione istituzionale, per promuovere e gestire iniziative di diffusione della cultura scientifica.

Gli studenti vengono preparati a lavorare nell'ambito di vari media, da quelli più tradizionali ai servizi di rete sociale (social network), a predisporre e gestire piani di comunicazione per enti di ricerca e istituzioni, pubbliche o private, quali le università e le scuole, le strutture sanitarie, i musei scientifici e i "science center", le imprese. Il confronto tra studenti provenienti da aree disciplinari diverse arricchisce l'esperienza formativa.

I docenti del master sono specialisti attivi a livello universitario o sul campo (in particolare, direttori di istituzioni scientifiche, giornalisti, direttori e conservatori dei musei) scelti per preparazione ed esperienze specifiche.

Per l'ammissione si richiede almeno una laurea triennale, o di vecchio ordinamento, in qualsiasi ambito disciplinare scientifico, tecnico o umanistico. Il superamento del corso dà diritto a 60 crediti.
Ulteriori informazioni sul Master e sulle modalità d'iscrizione si trovano alle pagine http://www.dfa.unipd.it/didattica/master/comunicazione-delle-scienze/ e MCS - Comunicazione delle scienze | Unipd Executive Learning.

News from EBSA

HFSP-funded PhD or Postdoc Position in EPR Spectroscopy & Redox Biochemistry

PhD or Postdoc position: Join our new team in Mainz to uncover the secrets of mechanoradicals by EPR spectroscopy and redox biochemistry - and close international collaboration with Dunn lab Stanford & Zaidel-Bar lab, Tel Aviv.
https://tinyurl.com/y783x8p2

ERC-funded Postdoc Position in Integrative Structural Biology
Postdoc position: Excited about cryoEM/ET, alphafold, integrating experimental data and revealing the inner secrets of collagen's structure? Join us in Mainz!
https://tinyurl.com/y9kvt46n

The team you will join:
https://www.h-its.org/research/mbm/

Your (and our future) workplace:
MPI for Polymer Research / Mainz / Germany
https://www.mpip-mainz.mpg.de/en/home

Two PhD positions funded by ERC AdvG "Energion"

We are seeking candidates for two PhD positions linked to the ERC Advanced Grant "Energion" awarded to Prof. Donald Martin at the Université Grenoble Alpes, France. The "Energion" project will receive €2.9 million over 5 years, with the aim of redefining the concept of biological engineering by conducting fundamental research in assembling smart nanostructured systems of artificial cells using combinations of proteins, biomolecules and lipids with synthetic materials.

https://www.univ-grenoble-alpes.fr/news/headlines/energion-biological-engineering-project-awarded-an-erc-advanced-grant-2023-1454521.kjsp

The details of these positions and how to apply can be found to the following links:

https://euraxess.ec.europa.eu/jobs/266400

https://euraxess.ec.europa.eu/jobs/266405

Kind regards,

Marco Maccarini

Postdoctoral research assistant in single-molecule biophysics of human mitochondrial DNA replication

IMDEA Nanociencia, Madrid, Spain. Duration: 2-3 years

We are looking to hire a Postdoctoral Research Assistant for an exciting project

aimed to understand the dynamics of the human DNA replication in health and disease at the single-molecule level. Our lab (www.borjaibarralab.com) specializes in the single-molecule biophysics of DNA replication and employs state-of-the-art single molecule techniques. We have stablished national and international collaborations to drive cutting-edge research.

Role Overview:

The candidate will:
- Use optical trapping and fluorescence microscopy to study DNA replication on individual DNA molecules.
- Use and develop data analysis routines to interpret experimental data.
- Acquire skills in protein purification and ensemble biochemistry.
- Contribute to building an outstanding interdisciplinary team together with other labs involved in the project, which are experts in the biochemistry (North Florida University), structural biology (CNIO, Madrid) and cell biology (CIB-CSIC, Madrid) of human mitochondria. Secondments will be encourage.

Project Description:

The selected candidate will investigate the dynamics of the human mitochondrial DNA replisome at the single-molecule level. In particular, the project will be focused on elucidating the real-time kinetics, stoichiometry, and exchange dynamics of the components of the mitochondrial replisome. We will also determine the effect of pathogenic variants of replisome factors on replisome operation. This will involve using novel biophysical instruments and collaborating with experts in molecular biology and biochemistry. Based on the relevance of mitochondrial DNA replication in health and disease and the novelty of the results we expect high impact of our results.

Requirements:

- A Ph.D. (or near completion) in biophysics or fluorescence microscopy.
- Experience in the mentioned areas, with strong instrumentation and quantitative analysis skills.
- Motivation to develop a combined biophysics/biochemistry skillset.
- Independent, well-organized work style, with a team-oriented mindset.
- A strong publication record and excellent communication skills.

For more information and application contact borja.ibarra@imdea.org
Applications should include a motivation letter, CV, and contact information of three references. **The closing date for applications is November 15th 2024**.

Postdoctoral research assistant in single-molecule biophysics of human mitochondrial DNA replication

IMDEA Nanociencia, Madrid, Spain. Duration: 2-3 years

We are looking to hire a Postdoctoral Research Assistant for an exciting project aimed to understand the dynamics of the human DNA replication in health and disease at the single-molecule level. Our lab (www.borjaibarralab.com) specializes

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