

Instruct Biennial Structural Biology Conference

Alcalá de Henares, Madrid 22 - 24 May 2019



Sponsors





















Partners













Welcome

Welcome to the Instruct Biennial Structural Biology Conference 2019!

We welcome you to the fourth Instruct Biennial Structural Biology Conference in the historical city of Alcalá de Henares, Spain. Alcalá de Henares is the original location of the Universidad Complutense, which was founded in 1293, making it one of the oldest unversities in the world. It is also the birthplace of the world-renowned writer, Miguel de Cervantes.

Instruct-ERIC is a distributed European Research Infrastructure, providing access to all major, cutting-edge technologies that enable bio-macro-molecular structure determination at atomic resolution. Access to these technologies has been available to European Members since February 2012.

We hope that you will make the most of your time with us and we thank you for contributing to the growth and development of Instruct-ERIC.

The Scientific Organising Committee



Jose-Maria Carazo
CNB-Madrid



Thomas Vosegaard

Aarhus University



Margarida Archer
Universidade Nova
de Lisboa



Stephen Cusack FMBI Grenoble



Vladimir Sklenar CEITEC



David Stuart
University of Oxford

Practical Details

Venue

Parador de Alcalá, Alcalá de Henares, Madrid Tel: +34 918880330, +34 918880527 Email: alcala@parador.es

Registration desk

Registration for the Instruct Biennial Conference will be open on Wednesday 22 May between 12:00 - 15:00, and Thursday 23 May between 08:00 - 09:00.

Name badges

For identification and security purposes, delegates must wear their name badges at all times whilst in the conference venue. You should show your badge at the hotel reception in order to access the conference.

Poster exhibition

The poster exhibition will take place in the Rettorica Meeting Room. All posters must be in place before Session 1 on Thursday 23 May, and should be removed at the end of Session 4 on Friday 24 May.

Internet access

Free Wi-Fi is available throughout the hotel with the password: paradores1928

Questions and answers during sessions

For some sessions we will use mentimeter to manage questions. Simply visit www.menti.com and enter the code given on the powerpoint for that session.

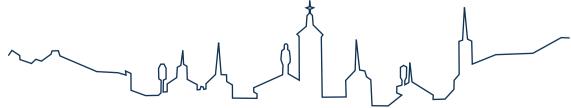
ask a question.

Gala dinner

The Gala dinner will be hosted at the Restaurante Hostería del Estudiante, across the road from the Parador Hotel.

Conference app

We are using EventsXD App which can be used on smart phones and laptops. To access the full Speaker and poster abstracts and a customisable conference schedule, download from the App Store or Google Play Store. For more instructions turn to the final page of the programme.



Wednesday 22 May

Pre-Meetings

12:00 - 15:00 Registration

Instruct-ULTRA General Assembly

13.00 - 15.30



Instruct-ERIC Managers Meeting

13.00 - 15.30



Women in Science Workshop

16:00 - 19:00



EΘΝΙΚΟ ΙΔΡΥΜΑ ΕΡΕΥΝΩΝ National Hellenic Research Foundation





For training and machine access

Visit our events page:



Visit our technology catalogue:



www.instruct-eric.eu

























Thursday 23 May

Programme

9:00 - 9:15	Inauguration of the Biennial Conference and official welcome to Spain as a member of Instruct-ERIC
	Prof. Rafael Rodrigo Montero, Secretario General de Coordinación de Política Científica, Ministerio de Ciencia, Innovación y Universidades.
Session 1	Structural Biology towards Cellular Biology: Integrating Biology Chairs: Margarida Archer and Vladimir Sklenar
9:15 - 9:40	Takeover and destruction of red blood cells by malaria parasites Helen Saibil Birkbeck University of London
9:45 - 10:10	Molecular views into cellular function by in situ cryo-electron tomography Julia Mahamid EMBL
10:15 - 10:40	Unravelling cancer cell nanoarchitecture through multiscal imaging; coupling molecular activation, biosensors and their functional output Dorit Hanein Institut Pasteur
10:45 - 11:00	Break for refreshments
11:00 - 11:20	Deadly spiders & scary zombies - NOT a Halloween story - a near atomic resolution glance into the CNS Moran Shalev-Benami Weizmann Institute
11:20 - 11:45	GEMINI: an integrated structural approach for vaccine identification and pathogenesis insight Ilaria Ferlenghi GSK
11:45 - 12:00	Presentation of the Ivano Bertini Award award by Ruediger Weisemann (Bruker) and Lucia Banci (CERM).
12:00 - 12:25	Ivano Bertini Award presentation: The molecular machinery of protein degradation: structural studies <i>ex situ</i> and <i>in situ</i> Wolfgang Baumeister Max Planck Institute of Biochemistry
12:30 - 14:00	Break for lunch
13:00 - 13:30	Presentation by ThermoFisher

Thursday 23 May

Programme

Session 2	Structural Biology and Health: Current Challenges Chairs: Helen Saibil and Wolfgang Baumeister
14:00 - 14:25	Structural insights into the allosteric control of GPCR activity Andy Dore Heptares
14:30 - 14:55	Structures of tau filaments extracted from the brains of individuals with Alzheimer's and Pick's disease Sjors Scheres MRC
15:00 - 15:20	CryoEM analysis unveils the conformational activation of CRIS-PR-Cas12a and the endonuclease activity resetting Guillermo Montoya NNF-CPR
15:20 - 15:50	Break for refreshments
15:50 - 16:15	Structure and Dynamics of Membrane Transport Proteins Poul Nissen Aarhus University
16:20 - 16:40	Snapshots of T7 viral connector and tail machinery structures suggest a model for DNA retention inside the capsid Ana Cuervo CNB-CSIC
16:40 - 17:00	Unravelling the structure of toxic protein aggregates in situ Rubén Fernández-Busnadiego Max Planck Institute of Biochemistry
17:00 - 19:00	Poster Session
17:00 - 18:00	Even number posters
18:00 - 19:00	Odd number posters
19:00 - 20:00	Satellite Meeting: Reunion de la Comunida Naciona Instruct Meeting open to Spanish delegates in the main hall
20:00	Gala Dinner Restaurante Hostería del Estudiante

Friday 24 May

Programme

Session 3	Emerging Technologies in Integrative Structural Biology Chairs: Dave Stuart and Jose-Maria Carazo
9:00 - 9:25	Integrative structural biology Andrej Sali UCSF
9:30 - 9:55	Visualizing the invisible genome: fleeting structures of DNA in gene expression and genome stability Hashim M Al-Hashimi Duke University
10:00 - 10:25	Correlative X-ray imaging of cells Eva Pereiro Synchrotron ALBA
10:30 - 11:00	Break for refreshments
11:00 - 11:20	3D-Bioinfo: ELIXIR Community of Structural bioinformatics Bohdan Schneider Institute of Biotechnology of the Czech Academy of Sciences
11:25 - 11:50	Molecular-scale biophysics methods for sample quality control and quantitative characterization Patrick England Institut Pasteur
11:55 - 12:20	Studying multicomponent complexes by integrative structural biology Teresa Carlomagno Leibniz University Hannover
12:25 - 12:40	Group Photo
12:40 - 14:00	Break for lunch
13:00 - 13:30	Presentation by European Network of FT-ICR Research Centers: An Extreme Resolution Mass Spectrometry and Structural Biology Resource for Europe
Session 4	New Trends Chairs: Anastassis Perrakis and Thomas Vosegaard
14:00 - 14:25	Structure determination by microcrystal electron diffraction Brent Nannenga Arizona State University
14:30 - 14:55	Increasing the throughput cryo EM sample preparation Alex de Marco Monash University
15:00 - 15:30	Research Infrastructures in the Changing landscape of Structural Biology Dave Stuart University of Oxford
15:30 - 16:00	Poster Prize and Closing Ceremony





PHOTON III – Best performance for your application needs

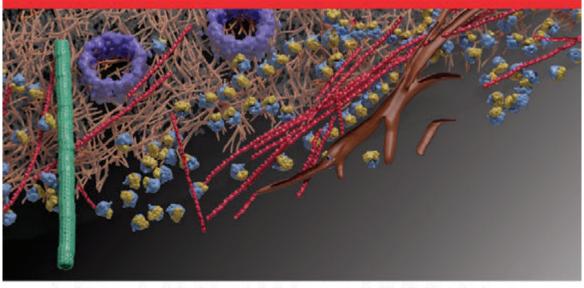
The PHOTON III detector series benefits from mixed-mode detection, seamlessly combining photon counting and integration modes, to dramatically improve the data quality:

- No parallax smearing for superior data
- Photon counting with zero read noise and zero dark current for the ultimate in sensitivity
- Strong reflections accurately integrated with no count rate saturation
- Largest home-lab detector for efficient data acquisition
- Zero dead time, shutterless and continuous data collection for the fastest experiments

www.bruker.com/photon3

Crystallography

thermoscientific



Cryo-electron tomography reveals the molecular organization of various components of the HeLa cell in their natural environment.

Data courtesy of Dr. J. Mahamid, Department of Molecular Structural Biology, Max Planck Institute for Biochemistry, Martinsried, Germany.

Advancing *in situ* cell and structural biology

Cryo-electron tomography allows researchers to study proteins in their functional cellular environments and resolve supramolecular structures that cannot be readily purified. The Thermo Scientific Aquilos Cryo-FIB is the first cryo-DualBeam (focused ion beam/scanning electron microscope) system dedicated to preparation of frozen, thin lamella samples from biological specimens for high-resolution tomographic imaging in a cryo-transmission electron microscope (cryo-TBM). Imaging cellular ultrastructure at unprecedented resolution in 3D is possible while maintaining structural integrity to accelerate understanding of entire processes inside cells.



Find out more at

thermofisher.com/EM-life-sciences

Thermo Fisher SCIENTIFIC

© 2019 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thormo Fisher Scientific and its subsidiaries unless otherwise specified. FL00XX-EN-01-2019

Poster abstracts

No.	Title	Author
1	Nanobodies4Instruct	Belgium Instruct Centre
2	Instruct Czech Republic	Czech Republic Instruct Centre
3	The Integrated Structural Biology Platform at Instruct-Centre France-1 (Strasbourg)	France 1 Instruct Centre
4	The Integrated Structural Biology Platform at Instruct-Centre France-2 (Grenoble)	France 2 Instruct Centre
5	PROSS "Protein Repair One Stop Shop" to produce much more stable protein	Israel Instruct Centre
6	CERM/CIRMMP - Italian Instruct Centre	Italy Instruct Centre
7	Instruct-NL highlights and opportunities	Netherlands Instruct Centre
8	The Instruct Image Processing Center (I2PC): support to structural biologists	Spain Instruct-ERIC Centre
9	Instruct-UK with focus on the Membrane Processing Laboratory (MPL)	UK Instruct-ERIC Centre
10	RI-VIS: Expanding the visibility of European research infrastructures	Natalie Haley
11	New Insights into Glucocorticoid Receptor Quaternary Structure	Alba Jiménez Jiménez-Panizo.
12	High-Resolution 2D NMR Spectroscopy of Patient-Derived Glycoproteins at Natural Isotopic Abundance	Alistair Jagger
13	Cryo-EM of Fully Recombinant Human Proteasomes – A New Tool for Functional and Structural Studies	Ana Toste Rego
14	Structural analysis of SAS-6 reveals the molecular mechanism of centriolar cartwheel assembly	Anastassia Kantsadi
15	Structural characterization of the PHD5-C5HCH tandem domains of NSD family as epigenetic readers of H3K27me3 and interactors of Nizp1-C2HR	Andrea Berardi
16	Design of an In Silico workflow to discover new Influenza A NS1 inhibitors and Experimental Validation using NMR	Andreia E. S. Cunha
17	Cryo-EM analysis of the role of RUVBL1-RUVBL2 ATPases during Nonsense-mediated mRNA decay	Andrés López- Perrote1
18	Portugal at Instruct	Maria Arménia Carrondo
19	Structural basis of archaeal RNA polymerase elongation	Ane Martinez-Castillo
20	Antibody-derived aptamers as ligands of aβ(1–42) amyloid peptide	Anna Maria D'Ursi
21	Structural basis for Acinetobacter baumannii biofilm formation	Anton Zavialov
22	Structural characterization of the adaptor protein Nck1	Antonio Rodriguez- Blazquez
23	Structural studies on carbonic anhydrases: the power of crystals	Areej Abuhammad
24	Structural basis of RNA polymerase I stalling at UV light-induced DNA damage	Carlos Fernandez- Tornero
25	Structural insights into the regulation of human phenylalanine hydroxylase	Catarina Tomé



Concentrating Proteins?



Miniaturized Tangential Flow Filtration : Buffer Exchange

Poster abstracts

No.	Title	Author
26	Dimeric structures of active quinol-dependent Nitric Oxide Reductases (qNOR) revealed by cryo-Electron Microscopy	Chai Gopalasingam
27	Structural insights into the PBX1-PREP1 and PBX1-MEIS1 interactions obtained by cross-linking mass-spectrometry approach	Chiara Bruckmann
28	Molecular Understanding of Metal-Porphyrins efficacy in the Treatment of Prion Diseases	Chiara Zucchelli
29	The structure of human pyrroline-5-carboxylate synthetase, determined by cryoEM, explains channelling within this bifunctional enzyme that is associated with two genetic disorders presenting dominant or recessive inheritance	Clara Marco-Marín
30	Protein cysteinylation as a hallmark of chronic kidney disease	Dalila Fernandes
31	The Structure-based Development of Novel Bile Acid-derived Agonists of FXR	Dannielle Kydd- Sinclair
32	Bringing together functional annotations related to structure	David Armstrong
33	Genome release of Echovirus 18	David Buchta
34	Structural studies of multispecific Antibody/Antigen complexes by cryo-EM	David Fernandez Martinez
35	Matching evolutionary couplings and ambiguous NMR contacts to derive homo- oligomers structure	Davide Sala
36	Developing electron diffraction of 3D protein nanocrystals at the IBS	Dominique Housset
37	Preliminary cryo-electron microscopy 3D reconstruction of the eukaryotic 4F2hc/LAT1 amino acid transporter	Ekaitz Errasti- Murugarren
38	Molecular Mechanism of Bacterial Replicative Helicase loading	Ernesto Arias-Palomo
39	Mechanistic insights into peptidase gating of the 26S proteasome	Eri Sakata
40	Structural studies of intrinsically disordered proteins towards the development of formulations for market-oriented pharmaceutical products	Evangelia Chrysina
41	Structural and functional insights into the inhibition of HMGB1/CXCL12 axis by small molecule Diflunisal	Federica De Leo
42	Arsenite oxidase: Structural and functional insides on the electron transfer pathway	Filipa Engrola
43	Characterization of the novel type rotary ATPase as an essential component of the Chlamydial Na+ coupled energetics	Ganna Krasnoselska
44	Cross-linking and mass spectrometry as a tool for structural biology	Gianluca Degliesposti
45	Encapsulation mechanisms and structural studies of GRM2 bacterial microcompartment particles	Gints Kalnins
46	Succinimide-based conjugates improve isoDGR cyclopeptide affinity to aVb3 without promoting integrin allosteric activation	Giovanna Musco
47	Structural insight into the lipid raft scaffold protein by EM	Ilaria Peschiera
48	Arrythmia-Associated Mutations to the Human Cardiac Ryanodine Receptor N-Terminal Domain Alter its Dynamics	Jacob Bauer
49	NMR Feasibility Assessment Road Map	Jakob Nielsen
50	Structural characterisation of α1-antitrypsin polymers isolated from patient tissue	James Irving



QUADRO for Micro Electron Diffraction

Size does matter after all!

We are talking about the size of your crystals, of course. Are they too tiny? Our motto is "no small crystal left behind!" We have the right solution for you: micro electron diffraction.

This is the winning combination of your standard TEM and our QUADRO detector.

Technical features

- 514 by 514 pixels
- 32 bit dynamic range
- Up to 107 er/pixel/second
- Maximum 4500 frames/sec
- Direct detection
- Si or CdTe sensor
- Radiation hard

Poster abstracts

No.	Title	Author
51	Centre of Molecular Structure in BIOCEV – State of art structural biology facility	Jan Stránský
52	Three-dimensional structure of a prolate ssRNA bacteriophage virus-like particle	Janis Rumnieks
53	Structural and functional analysis of the role of the chaperonin CCT in mTOR complex assembly	Jorge Cuéllar
54	Mechanism of action of pyruvate carboxylase	Jorge Pedro López- Alonso
55	Structural basis of the interaction between integrin α6β4 and the bullous pemphigoid antigen BP230 in hemidesmosomes	Jose M de Pereda
56	Iridium metallodrug intracellular localization by a correlative approach between cryo-SXT and cryo-XRF	José Javier Conesa
57	Structural basis for the inhibition of translation through eIF2 α phosphorylation	José Luis Llácer
58	Multivalent interactions between Pub1, Pab1 and eIF4G drive the formation of protein condensates	Jose Manuel Perez Cañadillas
59	Cell wall repair and antibiotics resistance mediated by Lytic Transglycosylase Slt of Pseudomonas aeruginosa	Juan A. Hermoso
60	Crystal structure of Borrelia burgdorferi outer surface protein BBA69	Kalvis Brangulis
61	Structural effect of synthetic peptide incorporation in alpha-1 antitrypsin investigated by biomolecular NMR and X-ray crystallography	Kamila Kamuda
62	Architecture of TAF11/TAF13/TBP complex suggests novel regulation state of basal transcription factor TFIID	Kapil Gupta
63	What can we learn from high pressure protein crystallography	Katarzyna Kurpiewska
64	Access Models for EU-OPENSCREEN ERIC	Katja Herzog
65	Candida parapsilosis Mgm101 in the maintenance of mitochondrial telomeres	Barbora Keresztesová
66	Development of Coherent Phasing Method for Macromolecular Electron Crystallography	Krishna Khakurel
67	Spider silk: from NMR structural studies to mechanism of formation and artificial fibres	Kristaps Jaudzems
68	FAD-dependent oxidoreductase from Chaetomium thermophilum: Structural data-based identification of substrate specificity	Leona Švecová
69	A fragment screening experience against ABA-receptors possibilities the definition of key residues that trigger ABA signaling	Lourdes Infantes
70	The structure of cell wall binding domain of Corynephage BFK20 endolysin revealed a tetrameric arrangement	Lubica Urbanikova
71	Structural characterization of the human tyrosine hydroxylase	M. Teresa Bueno- Carrasco
72	Catching dynamics of ribosomal RNA for new antibiotic targets	Maja Marušič
73	NMR structure of the membrane proximal external region of FIV gp36 envelope glycoprotein	Manuela Grimaldi
74	Fluorinated Ionic Liquids for Encapsulation of a Therapeutic Protein	Marcia Alves
75	Cryo-EM Structures and Regulation of Arabinofuranosyltransferase AftD from Mycobacteria	Margarida Archer Frazao



Three steps to success in protein crystallography!



1. Screening

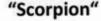
- Reformatting and Optimization Screens
- Fill up reservoirs
- Aspirate from deep well blocks and tubes
- Salt, pH and concentration gradient
- Speed and versatility

2. Dispensing

- 96-head for fast aspiration/dispension
- Non-contact nano and optional LCP module
- Dispense proteins and viscous solutions
- Hanging and Sitting Drop
- Micro Batch and Seeding



"Crystal Gryphon LCP"



3. Imaging

- Scan, capture, score and store
- Autofocus
- Simultaneous view of visual & UV light
- Imaging of fluorophores
- Three sizes of plate hotels with optional temperature control





Great results:

protein crystals captured with the "CrysCam"

"CrysCam UV"

Poster abstracts

No.	Title	Author
76	Structural model for differential cap maturation at growing microtubule ends	Maria A. Oliva
77	$TGF\beta\text{-} \ and \ BMP\text{-} \ activated \ Smad \ proteins \ adopt \ different \ monomer/dimerstructures \ to \ interact \ with \ cis \ regulatory \ elements$	Maria J Macias
78	New hit compounds for the therapeutic regulation of synapse dysfunction in neurodevelopmental disorders and neurodegeneration	Maria Jose Sanchez- Barrena
79	Zinc-dependent S1–P1 type nuclease from Legionella pneumophila	Mária Trundová
80	Molecular level investigation of ubiquitinated Tau	Mariapina D'Onofrio
81	The RUVBL1-RUVBL2 Complex Regulates Assembly of Ribonucleoproteins through the ZNHIT Adaptor Proteins	Marina Serna
82	Structural studies of flexuous Potato virus Y filaments	Marjetka Podobnik
83	AAnchor: CNN guided detection of anchor amino acids in high resolution cryo-EM density maps	Mark Rozanov
84	Crystal structures of bacteriophage receptor binding proteins	Mark J. van Raaij
85	Crystal structure of Bacillus subtilis transcription repressor DeoR in complex with its operator \ensuremath{DNA}	Markéta Nováková
86	Structural characterization of thaumatin-like proteins from various species and analysis of their putative allergenic potential	Markus Eder
87	Modeling atomic structures from cryo-EM maps using Scipion	Marta Martínez
88	Structural studies of the Penicilin Binding Protein 2a (Pbp2a) from Staphylococus aureus	Marta Ukleja
89	Structural and functional studies of Salmonella virus epsilon15 tailspike	Mateo Seoane-Blanco
90	Role of adenovirus core protein VII in capsid stabilization and maturations	Mercedes Hernando- Pérez
91	Structure-based design of carboranes and metallocarboranes inhibitors targeting cancer-associated carbonic anhydrase isoforms IX and XII	Michael Kugler
92	Structure of Leishmania RNA virus 1 uncovers cap4 binding site	Michaela Prochazkova
93	Degron recognition by the 26S proteasome	Migle Kisonaite
94	Theoretical Analysis of Molecular Structure and NMR Spin-Spin Coupling Constants in Sulphated Oligosaccharides	Milos Hricovini
95	Architecture of the membrane-assembled retromer coat by cryo-electron tomograph	Natalya Leneva
96	A Molecular Dynamics Insight to Non-Structural Protein 1 (NS1) –A Hub Protein Essential for Influenza Infection	Nicia Rosario-Ferreira
97	Structure-function Relationships and Modulation of Biofilm-associated Amyloids	Nimrod Golan
98	Candida parapsilosis Mgm101 in the maintenance of mitochondrial telomeres	Nina Kunova
99	Extreme Amyloid Polymorphism in Staphylococcus aureus Virulent $PSM\alpha$ Peptides	Nir Salinas
100	Cryo-EM Structure Determination of the Vault Particle from Dictyostelium discoideum	Pablo Guerra

Poster abstracts

No.	Title	Author
101	Integrating Molecular and Cellular Structure Data for Enhanced Visualisation and Analysis	Paul Korir
102	Structural studies of the interaction between the Toxoplasma gondii protein GRA24 and MAPKs	Pauline Juyoux
103	Modified serum glycome in novel ALG12-CDG patient	Peter Barath
104	Exploring the Protein-Membrane Interactions on the Intracellular side of PRLR	Raul Araya Secchi
105	The R2SP co-chaperone: expression, purification, biophysical analysis and preliminary crystallization	Sara Silva
106	A synthetic biology toolbox for antiviral antibacterial C-nucleosides	Sisi Gao
107	Discovering Novel Ligands for Mosquito Odorant Binding Proteins (OBPs) using a combined computational methodology	Sypros Zographos
108	Human Telomeric G-quadruplex structures containing 8-oxo-7,8-dihydroguanine $(oxoG)$ – one of the most common oxidation product of guanine	Stase Bielskute
109	The first case of active site complementation and novel oligomeric state in family GH29 revealed by crystal structure of $\alpha\text{-L-fucosidase}$ isoenzyme 1 from Paenibacillus thiaminolyticus	Terézia Kovaľová
110	Insight in to the function and structure of HeID, the interaction partner of RNA polymerase from Bacillus subtilis	Tomáš Kovaľ
111	Crystal Structures of Porcine Pancreatic Elastase and Human Neutrophil Elastase in Complex with Novel 3-Oxo-β-Sultams Inhibitors	Vanessa Almeida
112	Pdr17 - yeast phosphatidylinositol transfer protein	Veronika Kotrasová
113	Towards structure determination of plant membrane-anchored calpain DEFECTIVE KERNEL 1	Viktor Demko
114	Unique crystal structure of human derived antimicrobial peptide reveals an outstanding hexameric formation	Yizhaq Engelberg





SHARED SERVICES FOR LIFE-SCIENCE

CORBEL is a cluster project uniting 13 biological and medical European research infrastructures (RIs) that each offer scientists access to their expertise. However, as modern interdisciplinary biomedical and translational research involves complex projects and requires a variety of different resources, concerted effort by the RIs is necessary to enable cutting-edge cross-RI research.

Based on the needs of biomedical user communities, CORBEL is developing a framework for harmonised user access to services and resources across the biomedical RIs by

- >> developing the actual ACCESS environment
- >> unifying DATA management
- >> creating common ethical and legal (ELSI) services
- >> offering joint INNOVATION support
- >> delivering TRAINING measures for technical operators at the RIs

CORBEL is currently enabling 37 user projects, giving them the unparalleled chance to access high-end technologies and services at the biomedical European RIs.

Participating Research Infrastructures:

























Get in touch with us!

We are represented at the Instruct Biennial Structural Biology Conference by our EU-OPENSCREEN partners - visit our booth and poster!



www.corbel-project.eu



www.corbel-project.eu/newsletter



@CORBEL eu





EU FT-ICR MS proposal aims to establish a European network of FT-ICR (Fourier Transform Ion Cyclotron Resonance) mass spectrometry (MS) centers in association with a manufacturer and a SME software company. Mass spectrometry (MS) has become the most ubiquitous analytical techniques in use today, providing more information on the composition and the structure of a substance from a smaller amount of sample than any other techniques. This EU project promotes the use and development of high end FT-ICR MS through TransNational Access (TNA), dedicated training and education, open data & e-infrastructure program as well as joint research activities and networking.

To get free access to the newest and most FT-ICR advanced tools: http://www.eu-fticr-ms.eu/

Skoltech WARWICK Provide the EU academic, SME and industrial unities' with free access to world-class FT-ICR MS centers. **≠ LIÈGE** Université de Lille Develop open source software and UNIVERSITÉ DE ROUEN and FT-ICR MS scientists. Strengthen the FT-ICR MS application absiskey SAPIENZA.



Transnational access



Education & training



Joint research activities

Organicchemistry

IR Spectroscopy oflons in the gas phase

Imaging

BioOrganic & bioinorganic

Medicine

Nanoparticles

Physical chemistry



AN EU FT-ICR MS

First European FT-ICR MSnetwork Academic & Industrials free access

Petroleum & bio-oil

Environment

Lipidomics

Glycomics

Structural biology

Cultural heritage

Proteomics



Participant list

These are names of participants who were willing to be listed.

Name	Institute	Country
Sura Abbood	University of Leicester	UK
Areej Abuhammad	University of Jordan	Jordan
Iván Acebrón	CSIC	Spain
Shira Albeck	Weizmann Institute of Science	Israel
Armando Albert	CSIC	Spain
Martin Alcorlo Pages	IQFR	Spain
Hashim M Al-Hashimi	Duke University School of Medicine	USA
Vanessa Almeida	ITQB NOVA	Portugal
Claudia Alen Amaro	Instruct-ERIC	UK
Raul Araya Secchi	Niels Bohr Institute, University of Copenhagen	Denmark
Margarida Archer	ITQB	Portugal
Ernesto Arias-Palomo	CIB-CSIC	Spain
David Armstrong	PDBe	UK
Rocío Arranz Ávila	Centro Nacional de Biotecnologia	Spain
Dunia Asensio Cob	Institute of Health Carlos III	Spain
Lucia Banci	CERM	Italy
Peter Barath	Institute of Chemistry, SAS	Slovakia
Jacob Bauer	Institute of Molecular Biology, SAS	Slovakia
Wolfgang Baumeister	Max Planck Institute of Biochemistry	Germany
Andrea Berardi	Ospedale San Raffaele S.r.L.	Italy
Stase Bielskute	National Institute of Chemistry	Slovenia
Catherine Birck	CBHGBMC	France
Rolf Boelens	Utrecht University	Netherlands
Aditi Borkar	University of Cambridge	UK
Kalvis Brangulis	Latvian Biomedical Research and Study Centre	Latvia
Chiara Bruckmann	IFOM - FIRC Institute of Molecular Oncology	Italy
David Buchta	CEITEC MU	Czech Republi
Teresa Bueno	CNB-CSIC	Spain
Ramón Campos Olivas	Spanish National Cancer Research Center (CNIO)	Spain
Jose Maria Carazo	Centro National de Biotecnología	Spain
Elodie Caremoli	CNRS ISBG	France
Diego Carlero Carnero	Centro Nacional de Biotecnología	Spain
Teresa Carlomagno	OCI - Univeristy of Hannover	Germany
Jose L. Carrascosa	Centro Nacional de Biotecnología, CSIC	Spain
Aleiandra Carriles	Instituto de Química-Física Rocasolano	Spain
Maria Arménia Carrondo	ITOB NOVA	Portugal
Patricia Casino	Universidad de Valencia	Spain
Stephanie Chapman	Instruct-ERIC	UK
Maria-Despoina Charavgi	National Hellenic Research Foundation	Greece
Francisco Javier Chichón	CNB-CSIC	Spain
Evangelia Chrysina	NHRE	Greece
Rocío Coloma Ciudad	Centro Nacional de Biotecnología	Spain
Gabriela Condezo		Spain
José Javier Conesa	Spanish National Centre for Biotechnology Centro Nacional de Biotecnología, CSIC	Spain
Carlos Cordeiro	FT-ICR-MS-Lisboa	Portugal
Jorge Cuéllar	CNB-CSIC	Spain
Jorge Cuellar Ana Cuervo	CNB-CSIC CNB-CSIC	
Ana Cuervo Andreia Cunha	University of Coimbra	Spain
	,	Portugal
Susan Daenke Sacha De Carlo	Instruct-ERIC Dectris Ltd.	UK Switzerland

Name	Institute	Country
Federica De Leo	Università Vita Salute San Raffaele	Italy
Alex De Marco	Monash University	Australia
Jose M de Pereda	Instituto de Biologia Molecular y Celular del Cancer	Spain
Gianluca Degliesposti	MRC - Laboratory of Molecular Biology	UK
Auguste Demenge	IGBMC	France
Auriane Denis-Meyer	ISBG-IBS	France
Mariapina D'Onofrio	University of Verona	Italy
Lucie Drbohlavová	Institute of Physics CAS	Czech Republic
Anna Maria D'Ursi	University of Salerno	Italy
Spyros E. Zographos	National Hellenic Research Foundation	Greece
Markus Eder	University of Graz	Austria
Yizhaq Engelberg	The Technion	Israel
Patrick England	Institute Pasteur	France
Ekaitz Errasti-Murugarren	Institute for Research in Biomedicine (IRB Barcelona)	Spain
Brendan Farrell	University of Leeds	UK
Ilaria Ferlenghi	GSK Vaccines	Italy
Dalila Fernandes	UNL ITQB-NOVA	Portugal
David Fernandez Martinez	ESRF	France
Ruben Fernandez- Busnadiego	Max Planck Institute of Biochemistry	Germany
Maria Rosario Fernandez- Fernandez	Centro Nacional de Biotecnología, CSIC	Spain
Carlos Fernandez-Tornero	CIB-CSIC	Spain
Ignacio Fita	University of Barcelona	Spain
Carlos Frazão	ITQB NOVA	Portugal
Yael Fridmann Sirkis	Weizmann Institute of Science	Israel
Madalena Gallagher	Instruct-ERIC	UK
José Gallardo Hernanz	Centro Nacional de Biotecnología	Spain
Sisi Gao	University of St Andrews	UK
Samuel Garcia Poveda	CNB-CSIC	Spain
Zuzana Garlikova	TESCAN Brno s.r.o.	Czech Republic
Damià Garriga	ALBA Synchrotron	Spain
llektra-Chara Giassa	CEITEC-Central European Institute of Technology	Czech Republic
Thomas Gohl	Formulatrix	USA
Nimrod Golan	Technion - Israel Institute of Technology	Israel
Beatriz González	Instituto de Química-Física Rocasolano, CSIC	Spain
Carlos González	Instituto de Química Física Rocasolano, CSIC	Spain
Chai Gopalasingam	University of Liverpool	UK
Marcos Gragera	CNB-CSIC	Spain
Naomi Gray	Instruct-ERIC	UK
Manuela Grimaldi	CNR-Naples	Italy
Pablo Guerra	IBMB-CSIC	Spain
Kapil Gupta	School of Biochemistry, University of Bristol	UK
Natalie Haley	Instruct-ERIC	UK
Dorit Hanein	Institute Pasteur	France
Nicola Harrington	Diamond Light Source	UK
Darren Hart	France 2, ISBG-IBS	France
Samar Hasnain	University of Liverpool	UK
Juan A Hermoso	CSIC	Spain
Mercedes Hernando-Pérez	Centro Nacional de Biotecnología	Spain
Katja Herzog	EU-OPENSCREEN ERIC	Germany
Dominique Housset	Institut de Biologie Structurale	France
Ondrej Hradil	CEITEC - Central European Institute of Technology	Czech Republic
Milos Hricovini	Institute of Chemistry	Slovakia
Lourdes Infantes	IQFR-CSIC	Spain





Instruct Training Programme 2019

Joint INSTRUCT-CAPRI Workshop on Integrated Modelling of Protein-Protein Interactions
Bijvoet Center, Utrecht, Netherlands

1 - 2 Apr



22 May

Instruct-ERIC Centre Managers' Workshop 2019 Alcala de Henares, Madrid, Spain



Instruct Course on Biology at Different Scales: Interplay Between Physics and Integrative Biology

29 May - 7 Jun



8 - 11 Jul

Instruct Course on Image Processing for Electron Microscopy and Hybrid Modelling National Centre for Biotechnology (CNB), Madrid, Spain



Joint Instruct and OPEN SESAME MX Thematic School Diamond Light Source, near Oxford, UK

30 Sep - 4 Oct



7 - 10 Oct

Instruct Workshop on Integration of Computational Approaches in Structural Biology
BIOCEV, Vestec near Prague, Czech Republic



Joint Instruct-ULTRA and ARBRE MOBIEU Workshop. The Quality Control Training School: From Sample Preparation and Optimization Towards Biophysical Characterization and Integrative Structural Studies Institut Pasteur, Paris, France

14 - 19 Oct



19 - 20 Nov

3rd Instruct Workshop for Best Pratice in CryoEM IGBMC, Strasbourg, France



of Biological Macromolecules and their Interactions: Multi-Method Approaches and Global Data Analyses. IBS, Grenoble, France

26 - 31 Jan 2020



11 - 13 Feb 2020

Joint Instruct-ULTRA and ARBRE MOBIEU Workshop: Analysis and Optimisation of Sample Quality for CryoEM and Other Structural Techniques. CEITEC, Brno, Czech Republic



Name	Institute	Country
Elena Jiménez Ortega	Instituto de Químice-Fíalca Rocasolano	Spain
Pauline Juyoux	EMBL	France
Gints Kalnins	Latvian Biomedical Research and Study Centre	Latvia
Komila Komuda	University College Landon	UK
Anostassia Kontsadi	University of Oxford	UK
Barbora Keresztesová	Institute of Molecular Biology, SAS	Slovakia
Migle Klsonalle	MRC Laboratory of Molecular Biology	UK
Paul Korir	EMBL-EBI	UK
Veronika Kotrasová	Institute of molecular biology, SAV	Slovakia
Tomas Koval	Institute of Biotechnology of the Czech Academy of Sciences	Czech Republic
Terezia Kovalova	Institute of Biotechnology of the Czech Academy of Sciences	Czech Republic
Ganna Krasnoselska	University of Oxford, Research Complex at Harwell	UK
Michael Kugler	IO CBPrague	Czech Republic
Andreas Kuolstatter	F. Hoffmann La Roche	Switzerland
Nina Kunova	Institute of Molecular Biology, SAS	Slovakia
Dannielle Kydd-Sinclair	University of Reading	UK
Melisa Lázaro	CICElogune	Spain
Natalya Leneva	Cambridge Institute for Medical Research, University of	UK
itutulya culava	Cambridge	OK
Jose Llacer	Instituto de Biomedicina de Valencia	Spain
Jorge P López Alonso	CIC bioGUNE	Spain
Andres Lopez Perrote	Spanish National Concer Research Centre (CNIO)	Spein
Daniel Luque	ISCIII	Spain
Maria J. Maclas	IRB Barcelona	Spain
Moisés Maestro López	CNB·CSIC	Spain
Julia Mahamid	EMBL Heldelberg	Germany
Eva Martín Solana	Centro Nacional de Biotecnología, CSIC	Spain
Jaime Martin Benito Romero	Centro Nacional de Biotecnología, CSIC	Spain
Marta Marlinez	CNB-CSIC	Spain
Ane Martinez-Castillo	CIC bio GUNE	Spain
Maja Marusic	Karolinska Institute	Sweden
Ariel Mechaly	Institut Pasteur	France
Roberto Melero	CSIC	Spain
Samuel Míguez Amil	CNIO	Spaln
Inayathulla Mohammed	University of Bosel	Switzerland
Gulllermo Montoya	NNF-CPR, University of Copenhagen	Denmark
Giovanna Musco	Fondazione Centro S. Raffaele	Italy
Brent Nannenga	Arizona State University	USA
Poul Nissen	Aarius University	Denmark
Markéta Nováková	IOCB, CAS, v.v.l.	Czech Republic
Lissette Ochoa Ibarrola	Centro Nacional de Biotecnología	Spain
Maria A. Oliva	CSIC-Centro de Investigaciones Biológicas	Spain
Gabriela Ondrovicova	Institute of Molecular Biology SAS	Slovakia
Ray Owens	Instruct-ERIC	UK
María Angeles Pajarea	Centro de Irwestigacionea Biológicas (CSIC)	Spain
Els Pardon	Vrije Universiteit Brussei	Belgium

Israel

Spain

Spain

Italy

UK

Spain

France

Netherlands

Czech Republic

Weizmann Institute

ALBA Synchrotron

CERM, University of Florence

CEITEC - Masaryk University

Diamond Light Source Ltd

CNB-CSIC

CNB-CSIC

NKI

Yoav Peleg

Eva Pereiro

Mar Póraz-Rulz

Anastassis Perrakis

Michaela Prochazkova

Roberta Pierattelli

Alberto Podjarny

Andrew Quigley

Erney Ramirez

Name	Institute	Country
Janis Rumnieks	Latvian Biomedical Research and Study Center	Latvia
Helen Saibil	Birbeck University of London	UK
Erl Sakata	Max Planck Institute of Biochemistry	Germany
Davide Sala	Center of Magnetic Resonance, University of Florence	Italy
Andrej Sali	University of California, San Francisco	USA
Nir Sallnas	Technion	Israel
Carmen San Martin	Centro Nacional de Biotecnología (CNB-CSIC)	Spain
Maria Jose Sanchez-Barrena	Instituto "Rocasolano", Spanish National Research Council	Spain
Fiona Sanderson	Instruct-ERIC	UK
Cesar Santiago	CNB.CSIC	Spain
Marta Maria Sanz Murillo	Centro de Investigaciones Biologicas	Spain
	3	
Julia Sanz-Aparloio	CSIC-IQFR Q-2818002-D	Spain
Sjors Scheres	MRC Laboratory of Molecular Biology	UK Czech Republi
Magdalena Schneiderova	Biotechnologicky ustav AV CR	
Gideon Schreiber	Weizmann Institute of Science	Israel
Harald Schwalbe	Goethe University	Germany
Luigi Scietti	University of Pavia	Italy
Mateo Sec ane Blanco	Centro Nacional de Biotecnología	Spain
Moran Shalev-Benami	Weizmann Institute of Science	Israel
Irena Sieglová	Institute of Organic Chemistry and Biochemistry, CAS. v.v.i.	Czech Republi
Sara Silva	Instituto de Tecnologia Químicae Biológica - UNL	Portugal
Vladimir Sklenar	CEITECMU	Czech Republ
Callum Smith	Instruct-ERIC	UK
Vernon Smith	Bruker Biospin GmbH	UK
Carlos Oscar Sorzano	I2PC	Spain
Marta Sousa Silva	FT-ICR-MS-Lisboa	Portugal
Jan Steyaert	VIB-VUB	Belgium
Jan Stransky	Institute of Biotechnology	Czech Republi
Dave Stuart	Instruct-ERIC	UK
Leona Svecova	Institute of Biotechnology of the Czech Academy of Sciences	Czech Republi
Kaspars Tars	Biomedical Research and Study Centre	Latvia
María Carmen Terrón	ISCIII	Spain
Catarina Tome	ITOB NOVA	Portugal
Ana Toste Rego	MRC-LMB	UK
Deniz Ugurlar	Thermofisher	Netherlands
Marta Ukleja	CNB-CSIC	Spain
Tamar Unger	Weizmann Institute of Science	Israel
Lubica Urbanikova		Slovakia
	Institute of Molecular Biology SAS CEITEC	Czech Republi
Katerina Vágnerová		
José M. Valpuesta	Centro Nacional de Biotecnología (CNB CSIC)	Spain
Joopvan den Hervel	Helmholtz Zentrum fuer Infektionsforschung	Germany
Mark Johan van Raaij	CNB-CSIC	Spain
Nuria Verdaguer	IBMB·CSIC	Spain
Juliana F. Vilacha Madeira Rodrigues dos Santos	University of Groningen	Netherlands
Wim Voorhout	Thermofisher	Netherlands
Thomas Vosegaard	Aarhus University	Denmark
Martin Walsh	Diamond Light Source	UK
Wenjia Wang	Groningen Research Institute of Pharmacy	Netherlands
Pernilla Wittung-Stafshede	Chalmers University of Technology	Sweden
Haim Wolfson	Tel Aviv University	Israel
Anton Zavialov	University of Turku	Finland
Maria Zervou	NHRF	Greece
Chiara Zucchelli	Ospedale San Raffaele	Italy

Notes

Conference App

Download events to from the App Store App Store



- 2 Sign up for an EventsXD account and login with your account
- Tap the magnifying glass to search and search for "instruct biennial"
- Select the event "Instruct Biennial Structural Biology Conference"



5



Your app is now set up

You should be able to reach the Instruct Biennial conference page by selecting "My" instead of "Featured" from the application home

Key:

- Reception Registration and Information
- 2. Conference Room
- 3. Sponsors
- Estándar Rooms Guest accommodation
- Jardír Refreshments'
- 6. Retorica Meeting
- Restaurants Breakfast
- 8. Biblioteca
- 9 Noche

Women in Science tapas reception

* In case of adverse weather, events in the Jardin (5) will be hosted in the Biblioteca (8).

Pedro y San Calle San Pablo

Conference map

