



## The International Conference HeCrA-HSCBB-16

The Hellenic Crystallographic Association & The Hellenic Society for Computational Biology and Bioinformatics

## October 7-9, 2016

## **Agricultural University of Athens**

## **Program**

| Friday 7th October      |  |  |
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| 9.00 – 10.00            | Registration to the Workshop<br>"Complex Network Analysis for Systems Biology"   |  |
| 10.00 – 13.00           | Workshop: "Complex Network Analysis for Systems Biology" (Instructor: Costas Bouyioukos)   |  |
| 13.00 – 15.30           | Registration to the HeCrA-HSCBB-16 Conference  |  |
| 15.30 – 16.00           | Welcome and opening remarks  |  |
|                         | Prof. Elias Eliopoulos (Agricultural University of Athens, Local Organizing Committee), Dr. Spyros Zographos (President of HeCrA) and Prof. Artemis Hatzigeorgiou (President of HSCBB) |  |
| I <sup>st</sup> Session | Chair persons: Elias Eliopoulos – Spyros Zographos   |  |
| 16.00 – 16.30           | <b>Anastassis PERRAKIS</b> "From ARP/WARP to PDB_REDO: a short history and perspectives"   |  |
| 16.30 – 17.00           | <b>John VAKONAKIS</b> "Unravelling the centriole architecture, one component at a time"  |  |
| 17.00 – 17.30           | Efstratios STRATIKOS "Structural insights on the mechanism of generation of antigenic peptides"  |  |
| 17.30 – 18.00           | <b>Demetres D. LEONIDAS</b> <i>et al.</i> "X-ray crystallography screening of plant extracts for the identification of new bioactive agents"   |  |
| 18.00 – 19.00           | Poster session / Coffee break  |  |
| 2nd Session             | Chair person: Elias Eliopoulos   |  |
| 19.00 – 20.00           | Keynote Lecture  |  |
|                         | Simon E.V. PHILLIPS et al. "Mechanism of Hydrogen Activation by [NiFe]-hydrogenases"   |  |

| Saturday 8 <sup>th</sup> October |  |  |
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| 1 <sup>st</sup> Session          | Chair persons: Irene M. Mavridis - Demetres D. Leonidas  |  |
| 09.30 – 10.00                    | Savvas SAVVIDES et al. "Structural basis of cytokine sequestration by the viral decoy receptor GIF to achieve immunomodulation   |  |
| 10.00 – 10.30                    | Tassos PAPAGEORGIOU "Glutathione transferases as molecular tools for green and red biotechnology: Structural insights"   |  |
| 10.30 – 10.45                    | Christina DRAKOU et al. "A mosquito Odorant Binding Protein that "smells" repellents"  |  |
| 10.45 – 11.00                    | <b>Anthi METTOU</b> et al. "Aqueous solubility enhancement of small molecule inhibitors and QSPR analysis: a TNF-α study"  |  |
| 11.00 – 11.30                    | Coffee break   |  |
| 2nd Session                      | Chair persons: Ioannis Michalopoulos - George Kontopidis   |  |
| 11.30 – 12.00                    | Konstantinos BEIS "Structural basis for antibacterial peptide transport across membranes"  |  |
| 12.00 – 12.30                    | Michael KOKKINIDIS et al. "Polysaccharide Deacetylases: Maturation, two Deaths and Resurrection"   |  |
| 12.30 – 13.00                    | Christina KARATZAFERI et al. "Structure-informed research in skeletal muscle function"   |  |
| 13.00 – 14.00                    | Poster session /   |  |
|                                  | General Assembly of the Hellenic Crystallographic Association  |  |
| 14.00 – 15.00                    | Lunch break  |  |
| 3 <sup>rd</sup> Session          | Chair person: Konstantina Mergia - Kostas Bethanis   |  |
| 15.00 – 15.30                    | T. CHOLI-PAPADOPOULOU "The Bone Morphogenetic Protein-2 (BMP-2):Bio-immobilization for stem cell recruitment towards their chondrogenic / osteogenic differentiation"                                  |  |
| 15.30 – 16.00                    | Pantelis N. TRIKALITIS "Reticular Chemistry and the Development of Novel Metal Organic Frameworks"   |  |
| 16.00 – 16.30                    | <b>Vassilios. DRACOPOULOS</b> "Structural evolution and stability of Au-Mo-NiO/GDC cermets under reducing/operating conditions: characterization with insitu (H <sub>2</sub> or CH <sub>4</sub> )-XRD" |  |
| 16.30 – 17.00                    | Coffee break   |  |
| 4 <sup>th</sup> Session          | Chair person: Ioannis Michalopoulos - Costas Bouyioukos  |  |
| 17.00 – 17.15                    | Danai FIMERELI et al." Detection of gene fusions in breast cancer samples using transcriptome sequencing data"   |  |

| 17.15 – 17.30 | Christoforos NIKOLAOU et al. "Monitoring the development of Rheumatoid Arthritis through focal gene deregulation in four dimensions"   |
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| 17.30 – 18.00 | Aris GIOUTLAKIS et al. "PICKLE (Protein InteraCtion KnowLedgebasE) 2.0:<br>Knowledge-driven integration of human protein-protein interaction data via<br>genetic information ontology" |
| 18.00 – 19.00 | Keynote Lecture  David GILBERT "Whole genome bacterial metabolic design - principles and challenges for computational synthetic biology"   |

|                         | Sunday 9th October  |  |  |
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| 9.30 – end of the day   | Voting for the new board of the Hellenic Crystallographic Association   |  |  |
| 1 <sup>st</sup> Session | Chair persons: Kyriakos Petratos – Irene Mariolaki  |  |  |
| 9.30 – 10.00            | Emmanuel SARIDAKIS et al. "Protein stability, entropy and crystallization"  |  |  |
| 10.00 – 10.30           | Oskar AURELIUS et al. "Making use of longer wavelengths in macromolecular crystallography – the 123 beamline at the Diamond Light Source"                                   |  |  |
| 10.30– 11.00            | <b>Konstantina MERGIA</b> et al. "Fe <sup>+</sup> ion irradiation of Fe: structural and magnetic effects"   |  |  |
| 11.00 – 11.30           | Coffee break  |  |  |
| 2 <sup>nd</sup> Session | Chair persons: Georgia Braliou - Vassiliki Iconomidou   |  |  |
| 11.30 – 11.45           | Metaxia VLASSI et al. "Free Energy Calculations of the Binding of RS-repeat containing Peptides to AKT kinase based on Molecular Dynamics Simulations: a Comparative Study" |  |  |
| 11.45 – 12.00           | Haralambos TZOUPIS et al. "Conformational Analysis of the Mayaro Virus Non-<br>Structural Protein 3 Macro Domain via Molecular Dynamics (MD) Simulations"                   |  |  |
| 12.00– 12.15            | Minos MATSOUKAS et al. "Discovery of novel immunosuppressants targeting Calcineurin through computational methods"  |  |  |
| 12.15 – 12.30           | Christoniki MAGA-NTEVE, et al. "Streamlining GC-MS metabolomic analysis using the M-IOLITE software suite"  |  |  |
| 12.30 – 13.30           | Lunch break   |  |  |
| 13.30 – 14.30           | Poster session /  |  |  |
|                         | General Assembly of the HSCBB   |  |  |
| 3 <sup>rd</sup> Session | Chair persons: Christophoros Nikolaou - Margarita Theodoropoulou  |  |  |
| 14.30 – 14.45           | Garyfallia I. MAKRYNITSA et al. "A comparative structure – activity relationship study of alphaviruses' macro domains via solution NMR spectroscopy"                        |  |  |
| 14.45 – 15.00           | Maria SPILIOPOULOU et al. "Structural determination of Coxsackievirus B3 protease 3C via XRPD"  |  |  |
| 15.30 – 15.45           | Catherine VASILOPOULOU et al. "Metabolic Network Analysis of Mammalian Brain; a case study of adult onset hypothyroidism"   |  |  |
| 15.45 – 16.00           | Rafailia BETA et al. "Characterization of the active site of AtHESPERIN"  |  |  |
| 16.00 – 16.15           | Kostas BETHANIS et al. "Structure and anti-proliferative activity of gefitinib-cyclodextrin complexes"  |  |  |

| 16.15 – 16.30 | <b>Zoe COURNIA</b> et al. "Inhibition studies of the Arp2/3 complex using virtual screening and free energy perturbation calculations" |
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| 16.30 – 17.00 | HeCrA Ceremony in honor of retired members   |
|               | Award of "Nikos OIKONOMAKOS" prize   |
|               | Award of "HSCBB Best Student Poster" prize   |
|               | Closing remarks  |