Poster programme

Poster Session 1: Monday 17 July

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S01: Multiscale biophysics of membranes (pages S116–S129)

P1:B1 **Developing ESCRT-III as a toolkit for bottom-up construction of eukaryote-like artificial cells**
Andrew Booth, University of Leeds, UK

P2:B2 **Anomalous diffusion in artificial lipid bilayers**
Helena L Coker, University of Oxford, UK

P3:B3 **Cholesterol and polyunsaturated lipids working in concert to modulate G protein-coupled receptors**
Ilpo Vattulainen, Tampere University of Technology, Finland

P4:B4 **Interaction between a synthetic antitumoral catechin and anionic phospholipids membranes**
Francisco J Aranda, Universidad de Murcia, Spain

P5:B5 **Solid state NMR investigations and MD simulations of triblock copolymers in lipid bilayers**
Ruth Baerenwald, Martin-Luther-University Halle-Wittenberg, Germany

P6:B6 **Model membrane systems for protein therapeutics**
Hanna M Barriga, Karolinska Institute, Sweden

P7:B7 **Bending elasticity of lipid membranes at extremely high curvatures**
Pavel Bashkirov, Federal Research and Clinical Center of Physical-Chemical Medicine, Russia

P8:B8 **A microfluidic platform to study model biomembranes**
Peter J Beltramo, Laboratory of Soft Materials, Switzerland

P9:B9 **Solubilization of trans-membrane proteins by styrene-maleic acid (SMA) copolymers**
Alajos Bérczi, Institute of Biophysics, Hungary

P10:B10 **Axon-glia interactions and their role in regulation of conduction of impulses of nerve fibers**
Maxim G Bokov, Moscow State University, Russia

P11:B11 **Order of monogalactolipid Ð-linolenoyl acyl chains in the lamellar and inverted hexagonal phases**
Lukasz Bratek, Polish Academy of Sciences, Poland

P12:B12 **Statistics of individual leakage events to consistently interpret vesicle leakage**
Maria Hoernke, University of Freiburg, Germany

P13:B13 **Influence of lipid saturation and head group charge on the binding of a short antimicrobial peptide**
Daniela Ciumac, The University of Manchester, UK

P14:B14 **Lipid nanotubes pulled and pushed from freestanding lipid membranes**
Aurora Dols-Perez, Delft University of Technology, Netherlands

P15:B15 **Transbilayer coupling in gel-fluid asymmetric lipid vesicles**
Barbara Eicher, University of Graz, Austria

P16:B16 **New insights into cholesterol's influence on lateral segregation in bilayers**
Oskar Engberg, Åbo Akademi University, Finland

P17:B17 **The notion of catalysis in membrane remodelling**
Vadim Frolov, University of the Basque Country, Spain

P18:B18 **Understanding the lyotropic phase behaviour of cytochrome-c incorporated in monoolein mesophases**
Adrian Gainar, Imperial College London, UK

P19:B19 **Catch me if you can: microfluidic traps for studying biomolecular processes in GUVs**
Kristina A Ganzinger, Max Planck Institute of Biochemistry, Germany

P20:B20 **The vertical location of tocopherol is not altered as a function of membrane lipid unsaturation**
Juan C Gomez-Fernandez, Universidad de Murcia, Spain

P21:B21 **Withdrawn**

P22:B22 **Caveolae dynamics is strongly influenced by the lipid composition of the plasma membrane**
Madlen Hubert, Umeå University, Sweden

P23:B23 **Gold nanowire fabrication with lipid nanotubes**
Kristina Jajcevic, University of Geneva, Switzerland

P24:B24 **Determinants of sodium and calcium adsorption onto neutral lipid bilayers**
Hector Martinez-Seara, Institute of Organic Chemistry and Biochemistry of CAS, Czech Republic

P25:B25 **Cholesterol-like effects on DPPC bilayers induced by a fluorotelomer alcohol**
Tiago Mendes Ferreira, Martin Luther University Halle-Wittenberg, Germany

P26:B26 **Time-dependent phase diagram of bolaamphiphile molecules presenting various lamellar structures**
Jelena Jeftić, ENSCR UMR CNRS, France

P27:B27 **Design of a switchable DNA origami structure for shaping lipid membranes**
Alena Khmelinskaia, Max-Planck Institute for Biochemistry, Germany

P28:B28 **The glue that holds the Gram-negative Outer Membrane together and keeps antibiotics out**
Jeremy H Lakey, Newcastle University, UK

P29:B29 **Impact of cholesterol on lipid-protein interactions revealed by quasielastic neutron scattering**
Lisa Lautner, FAU Erlangen-Nürnberg, Germany

P30:B30 **Illuminating the spatio-temporal dynamics of lipopolysaccharide in the bacterial outer membrane**
Rosalyn M Leaman, University of York, UK

P31:B31 **Membrane interaction of the glycosyltransferase WaaG**
Jobst Liebau, Stockholm University, Sweden

P32:B32 **Charge-dependent membrane fusion in a pure lipid system**
Karin A Riske, Universidade Federal de São Paulo, Brazil

P33:B33 **Charged liposomes of varied lipid composition in the presence of polylysines: quantitative analysis**
Rodion J Molotkovsky, Russian Academy of Sciences, Russia

P34:B34 **Polystyrene incorporated within lipid membrane disrupts bilayer's phase transition**
Mattia I Morandi, Institut Charles Sadron-CNRS, Strasbourg, France

P35:B35 **Behaviour of ceramide in mitochondria-mimicking membranes**
Anna Möuts, Åbo Akademi University, Finland

P36:B36 **Nonuniqueness of local stress of three-body potentials in molecular simulations**
Koh M Nakagawa, The University of Tokyo, Japan

P37:B37 **Interaction of bile salts with lipid bilayers: a multiscale molecular dynamics study**
Luís M S Loura, University of Coimbra, Portugal

P38:B38 **Membrane Shape Transformation Induced by Banana-Shaped Proteins**
Hiroshi Noguchi, The University of Tokyo, Japan

P39:B39 **Interaction of fengycin C biosurfactant with phosphatidylcholine model membranes**
Antonio Ortiz, Universidad de Murcia, Spain

P40:B40 **Intrinsic lipid curvature and membrane charge modulates synergistic activity of magainin peptides**
Michael Pachler, University of Graz, Austria

P41:B41 **Iron-mediated interaction of A53T alpha synuclein with artificial lipid bilayers**
Fabio Perissinotto, University of Trieste, Italy

P43:B42 **The nanoscale dynamics of fluid lipid bilayers is specifically modulated by ions**
Luca Piantanida, Durham University, UK

P44:B43 **Dynamics of Biological Membranes - Quasi Elastic Neutron Scattering Studies of Model Membranes**
Dorthe Posselt, Roskilde University, Denmark

P45:B44 **Diffusion of lipids and GPI-anchored proteins in the plasma membrane and actin free vesicles**
Falk Schneider, University of Oxford, UK

P46:B45 **Lipid domains in confined geometry – How boundaries define domain size and mobility**
Claudia Steinem, University of Goettingen, Germany

P47:B46 **A tale of actin and lipid antigen presentation - A nano tango**
Dilip Shrestha, University of Oxford, UK

P48:B47 **Importance of membrane curvature near hole edges in plasma membrane repair**
Adam Cohen Simonsen, University of Southern Denmark, Denmark

P49:B48 **Flax phenolic compounds: elucidation of their mechanism to prevent lipid peroxidation**
Larissa Socrier, Université de Technologie de Compiègne, France

P50:B49 **Stiffness of natural extra-cellular vesicles is governed by membrane protein content.**
Raya Sorkin, Vrije Universiteit Amsterdam and LaserLab, Netherlands

P51:B50 **Computational study of oxygen transport across domains of the membrane of the eye lens fibre cells**
Robert Szczelina, Jagiellonian University, Poland

P52:B51 **Oxidized phospholipids induce formation of inter-leaflet coupled nanodomains in giant lipid vesicles**
Radek Šachl, J. Heyrovský Institute of Physical Chemistry, Czech Republic

P53:B52 **Lipid bilayer-coated silica beads in membrane fusion assays**
Sarah F Verbeek, University of Goettingen, Germany

P54:B53 **Membrane fusion accelerated by normal forces and elevated in-plane tension**
Andreas Janshoff, Georg-August-University Goettingen, Germany

P55:B54 **The main lipid in the thylakoid membrane stabilizes the Light Harvesting Complex II**
Hannes Witt, University of Göttingen, Germany

P56:B55 **Studies of interactions of 5-n-alkylresorcinols with lipid membranes**
Patrycja Zawilska, University of Wrocław, Poland

S02: Molecular machinery (pages S130–S135)

P57:B56 **Structural dynamics of the 70S ribosome during translocation monitored by single-molecule FRET**
Sarah Adio, MPI biophysical Chemistry, Göttingen, Germany

P58:B57 **Stepping motion and chemo-mechanical coupling of chitinase resolved by single-molecule analysis**
Ryota Iino, National Institutes of Natural Sciences, Japan

P59:B58 **Single-molecule dissection of cytoplasmic dynein force sensing**
Arne Gennerich, Albert Einstein College of Medicine, USA

P60:B59 **Variation in stride length of myosin-5a along actin shown by interferometric scattering microscopy**
Joanna Andrecka, University of Oxford, UK

P61:B60 **Hierarchical construction of molecular machines**
Ali R Atilgan, Sabanci University, Turkey

P62:B61 **A comparative kinetic study of non-canonical eukaryotic translation initiation with IRES structures by single molecule fluorescence microscopy**
Nathalie Barbier, Université Paris Saclay, France

P63:B62 **Structural dynamics in the myosin 7a single α-helix domain**
Michelle Peckham, University of Leeds, UK

P64:B63 **Performance of cell free protein synthesis on single ribosome level**
Joerg Fitter, Institute of Complex Systems, Germany

P65:B64 **Single-molecule analysis of bovine mitochondrial F1-ATPase**
Ryohei Kobayashi, The University of Tokyo, Japan

P66:B65 **RecBCD enzyme repair dynamics in DNA double-strand breaks**
Alessia Lepore, University of Edinburgh, UK

P67:B66 **Dynamics of the Bacterial Flagellar Motor**
Ssu-Yuan Lin, National Central University, Taiwan

P68:B67 **Reconstruct energy landscapes and master equations from single-molecule traces a histogram approach**
Nazul J Lopez-Alamilla, University of Otago, New Zealand

P69:B68 **Pausing kinetics dominates strand-displacement polymerization by Reverse Transcriptase**
Ariel Kaplan, Israel Institute of Technology, Israel

P70:B69 **Overstretching DNA and RNA double helices by optical trapping**
Lena Melkonyan, Nanobiophysique, ESPCI Paris, France

P71:B70 **Testing COI marker for molecular identification of caridean shrimp larvae**
Patrícia G Morgante, UNESP – Campus Experimental de Registro, Brazil

P72:B71 **Macromolecular crowding modulates transport by teams of kinesin-1 motors**
George T Shubeita, New York University Abu Dhabi, UAE

P73:B72 **Direct observation of dynamics in Type IV pili system and archaella motor**
Takayuki Nishizaka, Gakushuin University, Japan

P76:B73 **Proofreading of DNA polymerase: a new kinetic model with higher-order terminal effects**
Ming Li, Chinese Academy of Sciences, China

P77:B74 **Metabolically-tuned levels of SBF and MBF are key factors controlling Start in budding yeast**
Sylvain Tollis, Université de Montréal, Canada

P78:B75 **Interaction of cisplatin with DNA and Proteins Studied by FTIR Spectroscopy and SAXS**
Veronika Travkina, Saint-Petersburg State University, Russia

P79:B76 **Possible scenarios of DNA unzipping process**
Oleksii Zdorevskyi, Bogolyubov Institute for Theoretical Physics, Ukraine

P80:B77 **Mitochondrial dysfunction in neurodegenerative diseases associated with RNA binding proteins**
Li Zhu, Chinese Academy of Sciences, China

S03: Quantitative approaches to gene regulation (page S136)

P81:B78 **Heat triggers specific mRNA localization to regulatory RNA-protein granules in budding yeast**
Edward W J Wallace, University of Edinburgh, UK

P82:B79 **Nucleosome mobility and the regulation of gene expression: insights from single-molecule studies**
Ariel Kaplan, Israel Institute of Technology, Israel

P83:B80 **Functional phenotypic variability via growth rate mediated feedback in Escherichia coli**
Om Patange, University of Cambridge, UK

S04: Synthetic biology (pages S137–S139)

P84:B81 **Nanoparticle-based electrochemical sensor for antioxidant activity monitoring in plant extracts**
Monica Florescu, Transilvania University of Brasov, Romania

P85:B82 **DNA origami dimensions and structure measured by solution X-ray scattering**
Andrew J Tuckwell, University of New South Wales, Australia

P86:B83 **Artificial cell reactor array technology**
Hiroyuki Noji, ImPACT Artificial Cell reactor program, JST, Japan

P87:B84 **Bioinspired sensor material for broad-banded molecular scale, wavelength selective detection**
Javier Vinals, University of Oxford, UK

P88:B85 **The development of hybrid biomaterials for regenerative engineering**
Adam W Perriman, University of Bristol, UK

P89:B86 **G-quadruplex: G-rich DNA sequences like potassium biosensor**
Luca Bruni, Enrico Fermi Historical Museum of Physics and Study and Research Centre, Italy

P90:B87 **Determining the roles of Caf1R gene products in the expression of Caf1 polymers by recombinant Escherichia coli.**
Abdulmajeed D Al-Jawdah, Newcastle University, UK

P91:B88 **Use of fluorescence spectroscopy in synthetic biology**
Martin Hof, J Heyrovský Institute of Physical Chemistry, Czech Republic

P92:B89 **Characterization of new calpain inhibitors based on an intrinsically disordered protein, calpastatin**
Hung H Nguyen, Vlaams Instituut voor Biotechnologie, Belgium

P93:B90 **Computational investigation and design of calcitonin-based amyloids**
Alfonso Gautieri, Politecnico di Milano, Italy

P94:B91 **Toward reproduction of a bacterium from hybrid chamber cells**
Kazuhito V Tabata, The University of Tokyo, Japan

P95:B92 **DNA T-junctions for studies of DNA origami assembly**
Katherine G Young, University of Oxford, UK

S05: Protein-nucleic acid interactions (pages S140–S148)

P96:B93 **Real-time investigation of the assembly dynamics of artificial virus-like particles**
Margherita Marchetti, Vrije Universiteit Amsterdam, Netherlands

P97:B94 **NMR reveals how phosphorylation of the retinoic acid nuclear receptor regulates gene expression**
Bruno Kieffer, IGBMC, France

P98:B95 **Structural information of PTBP1/EMCV complex by combining orthogonal spin labelling with pulse EPR**
Christoph Gmeiner, Institute of Physical Chemistry, Switzerland

P99:B96 **DNA-Protein interactions rule in DNA binding specificity of Androgen and Glococorticoid receptors**
Mahdi Bagherpoor Helabad, Free University of Berlin, Germany

P100:B97 **The mechanism of branch migration during DNA strand displacement**
D Bo Broadwater, Jr., Georgia Institute of Technology, USA

P101:B98 **Mechanical impact of DNA bubbles on single molecules of thousands of base pairs**
Catherine Tardin, Université de Toulouse, France

P102:B99 **DNA synthesis determines the binding mode of the human mitochondrial SSB proteins**
Fernando Cerrón, Insitute of Nanociencia, Cantoblanco, Spain

P103:B100 **Visualizing CTCF-mediated DNA looping at the single-molecule level**
Maria Eugenia Fuentes Perez, Imperial College London, UK

P104:B101 **Dynamic proofreading in bacterial DNA polymerase III**
Hailey L Gahlon, Imperial College London, UK

P105:B102 **High precision single-molecule FRET reveals reversible transitions in nucleosomes on the microsecond**
Ralf Kühnemuth, Heinrich-Heine-Universität, Germany

P106:B103 **Early stage of large ribosomal subunit assembly in E.coli: a single molecule study**
Laurent Geffroy, Nanobiophysique, ESPCI Paris, France

P108:B104 **TRBP and PACT pose stoichiometric questions for Dicer complex assembly**
Michael J Plevin, University of York, UK

P109:B105 **Crystal structure of primosomal loader protein DnaB involved in DNA replication restart**
Chwan-Deng Hsiao, Institute of Molecular Biology, Taiwan

P110:B106 **Sequence-based identification of protein-metal ions binding sites**
Xiuzhen Hu, Inner Mongolia University of Technology, China

P112:B107 ***In vivo* compaction dynamics of bacterial DNA: A fingerprint of DNA/RNA demixing?**
Marc Joyeux, Université Grenoble Alpes, France

P113:B108 **DNA binding fluorescent proteins for visualizing large DNA molecules**
Kyubong Jo, Sogang University, South Korea

P114:B109 **Iterative homology checking and non-uniform stepping during RecA-mediated strand exchange**
Ming Li, Chinese Academy of Sciences, China

P115:B110 **Crystal structures of cyanine fluorophores stacked onto the end of double-stranded RNA**
Yijin Liu, University of Dundee, UK

P116:B111 **The structural and catalytic study of the novel twister ribozyme and TS ribozyme**
Yijin Liu, University of Dundee, UK

P117:B112 **Nanotensioners for FRET assay of helicases with one-nucleotide resolution**
Ying Lu, Chinese Academy of Sciences, China

P118:B113 **Condensation of DNA mediated by the amyloidogenic C-terminal domain of Hfq**
Antoine Malabirade, Université Paris Saclay, France

P120:B114 **Structural heterogeneity of the attC integron recombination site promotes strand selectivity**
Ann Mukhortava, B CUBE – Center for Molecular Bioengineering, TU Dresden, Germany

P121:B115 **Force induced off-target binding of CRISPR/Cas9 with single molecule resolution**
Matthew D Newton, Imperial College London, UK

P122:B116 **A fluorescence polarization based assay for cap-binding proteins**
Anna Nowicka, University of Warsaw, Poland

P123:B117 **Order and disorder prediction in N-terminal domain of the DNA partitioning protein IncC using NMR**
Muhammad F Rehman, University of Birmingham, UK

P124:B118 **NMR and biophysical studies of G-quadruplex DNA within the KRAS proto-oncogene promoter region**
Gilmar F Salgado, Université de Bordeaux, France

P125:B119 **Characterization of a second Single Stranded DNA Binding protein from Mycobacterium smegmatis**
Amandeep Singh, Indian Institute of Science, Bangalore, India

P126:B120 **The forces stabilising the DNA duplex**
Colyn Crane-Robinson, University of Portsmouth, UK

P127:B121 **Target discrimination and dynamic sequence search by the telomeric protein TRF1**
Miłosz Wieczór, Gdansk University of Technology, Poland

P128:B122 **Fluorescence & light scattering approaches to study mechanisms of translation initiation on LL mRNAs**
Anna Wypijewska Del Nogal, Max Planck Institute for Biophysical Chemistry, Belgium

S06: Protein structure to function (pages S149–S181)

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Tea Pavkov-Keller, University of Graz, Austria

P130:B124 **Observation of water-channel opening of cytochrome c oxidase by time-resolved XFEL crystallography**
Minoru Kubo, RIKEN SPring-8 Center, Japan

P131:B125 **A tri-ubiquitin bridges two ABIN2 dimers to form a higher-order signaling complex**
Yu-Chih Lo, National Cheng Kung University, Taiwan

P132:B126 **Molecular Insights for Resistance Conferring Mutations in Competitive Inhibition**
Canan Atilgan, Sabanci University, Turkey

P133:B127 **Biophysical characterization of hypochlorous acid modified human antithrombin**
Parvez Ahmad, Jamia Millia Islamia (A Central University), India

P134:B128 **Homology modelling of the human D2 dopamine receptor protein**
Cevdet Nacar, Marmara University, Turkey

P135:B129 **Iron core structure in ferritin and its pharmaceutical analogues studied by Mössbauer spectroscopy**
Irina V Alenkina, Ural Federal University, Russia

P136:B130 **Biophysical study of a target bacterial protein using DLS, CD and fluorescence spectroscopy**
Alice C M Álvares, University of Brasília, Brazil

P137:B131 **Time-Resolved Crystallography from femtosecond laser driven X-ray plasma source in ELI beamlines**
Borislav Angelov, Academy of Sciences of the Czech Republic, Czech Republic

P138:B132 **Noncovalent PEGylation using lectin–glycopolymer interactions**
Pawel Antonik, National University of Ireland-Galway, Ireland

P139:B133 **Structural characterisation of bacterial AdhE, a potential novel anti-virulence target**
Liyana Azmi, Institute of Infection, Immunity and Inflammation, UK

P140:B134 **Membrane activation of a bacterial GEF investigated by Molecular Dynamics with Excited Normal Modes**
Erika Balog, Semmelweis University, Hungary

P141:B135 **pH induced structural switch of CueR metalloregulatory protein**
Ria K Balogh, University of Szeged, Hungary

P142:B136 **An investigation of effect of glycation on collagen fibrillar structure**
Sneha B Bansode, University of Cambridge, UK

P143:B137 **Intermolecular Interactions of Serum Albumins in Presence of Metal Ions**
Iuliia Baranova, Saint Petersburg State University, Russia

P144:B138 **Allosteric communication in the heterodimeric ABC exporter TmrAB observed with PELDOR**
Katja Barth, Goethe University Frankfurt, Germany

P145:B139 **Functional implications of the crystal structure of visual arrestin polar core mutant- R175E**
Renu Batra-Safferling, Institute of Complex Systems, Germany

P147:B140 **Enzyme allosteric effect without significant conformational changes: role of dynamics and entropy**
Paulo M Bisch, Universidade Federal do Rio de Janeiro (UFRJ), Brazil

P148:B141 **When Bio meets Nano: an affordable BioSAXS solution for shared X-ray instrumentation facilities**
Joerg Bolze, PANalytical B V, Netherlands

P149:B142 **The interfacial self-assembly of BslA and its application in stabilising anisotropic emulsion drops**
Keith M Bromley, University of Edinburgh, UK

P150:B143 **Is full cis-trans chromophore isomerization required for full biological activity of rhodopsins?**
Krzysztof Bryl, University of Warmia and Mazury, Poland

P151:B144 **Molecular details of RNA methyltransferase activity and allosteric regulation: A simulation study**
Andrei V Pisliakov, University of Dundee, UK

P152:B145 **Faster spinning probes and high proton content: when resolution meets sensitivity in solid-state NMR**
Diane Cala-De Paepe, Institut des Sciences Analytiques, France

P153:B146 **Specific post-translational O-mycoloylations mediate protein targeting to the mycomembrane**
Valérie Réat, Université de Toulouse, France

P154:B147 **Early stages of Parkin activation – a computational study**
Catarina A Carvalheda, University of Dundee, UK

P155:B148 **The structural basis of Vps75 histone chaperone tetramer**
Yiping Chen, State Key Laboratory of Biotherapy, West China Hospital, China

P156:B149 **Chlamydia trachomatis DsbA: A weakly oxidising oxidoreductase**
Signe Christensen, University of Queensland, Australia

P157:B150 **Structure and function of drug efflux regulator proteins in Acinetobacter baumannii**
Heather E Clift, Macquarie University, Australia

P158:B151 **Protein functional prediction in genomic scale by structural modeling**
Paulo M Bisch, Federal University of Rio de Janeiro, Brazil

P159:B152 **Determining the molecular basis for interactions between the WW2 domain of WWP2 and target regions**
Danielle De Bourcier, University of East Anglia, UK

P160:B153 **Human SET/TAF-Iβ and plant NRP1 are similarly inhibited by cytochrome c in the cell nucleus**
Miguel A De La Rosa, Universidad de Sevilla, Spain

P161:B154 **Characterization of a putative mannosidase selected in a metagenomic approach**
Gideane M De Oliveira, Universidade de Brasilia, Brazil

P162:B155 **Structural basis of mitochondrial dysfunction in response to cytochrome c phosphorylation**
Irene Díaz-Moreno, Universidad de Sevilla, Spain

P163:B156 **Analysis of the 3D structure of dystrophin fragments in the presence of isotropic bicelles**
Raphael Dos Santos Morais, University of Rennes, France

P164:B157 **Mechanism of chromosome synapsis by SYCP1 revealed through X-ray crystallography, MALS and SAXS**
James M Dunce, Newcastle University, UK

P165:B158 **Hofmeister ions induced changes in conformation and activity of 3C protease**
Eva Dušeková, University of Pavol Jozef Šafárik, Slovakia

P166:B159 **Posttranslational modification and thermal stability of recombinant human serum albumin products**
Seiichi Era, Gifu University, Japan

P167:B160 **Low concentrations of GdnHCl have osmolyte-like effect on GGBP protein**
Aleksandr V Fonin, Institute of Cytology RAS, Russia

P168:B161 **Orchestrated domain movement in catalysis by NADPH-cytochrome P450 reductase**
Samuel Freeman, University of Leicester, UK

P169:B162 **Functional and Thermodynamic Characterization of ATP Analogs Binding P2X2 Receptors**
Christian C Fuentes-Cassorla, Pontificia Universidad Católica de Chile, Chile

P170:B163 **The effect of dissociation and rebinding of FAD cofactor on the properties of glucose oxidase**
Katarína Garajová, P J Šafárik University, Slovakia

P171:B164 **Proton and sodium pumping by pyrophosphatases**
Adrian Goldman, University of Leeds, UK

P172:B165 **Annexin-phospholipid interactions mediating membrane linkage**
David Grill, University of Münster, Germany

P173:B166 **Phosphorylation of cytochrome c: Structure, dynamics and functions**
Alejandra Guerra-Castellano, Universidad de Sevilla, Spain

P175:B167 **Revisiting the functional classification of class A beta-lactamases**
A Brenda Guzovsky, CONICET, IQUIBICEN, FCEyN, UBA, Argentina

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P177:B169 **Determining membrane bound protein structures by infrared reflection-absorption spectroscopy**
Maria Hoernke, Gothenburg University, Sweden

P178:B170 **Dynamic changes in complement component 3 in the presence of thrombomodulin's lectin-like domain**
Julia R Koeppe, SUNY Oswego, USA

P179:B171 **Resonance raman spectroscopy provides insights into biological hydrogen conversion**
Ingo Zebger, Technische Universität Berlin, Germany

P180:B172 **Structural transitions and enzymatic function: Case studies on superoxide reductase**
Marius Horch, Technische Universität Berlin, Germany

P182:B173 **Functional conversion from peptydyl-prolyl isomerase to protease by a single amino acid substitution**
Teikichi Ikura, Tokyo Medical and Dental University, Japan

P183:B174 **Engineering and molecular dynamics simulations of calcium binding in the IgE receptor CD23**
Veronica Ilkow, King's College London, UK

P184:B175 **Anti-aggregation effect of thymoquinone and copper nano-particles: A biophysical insight**
Mohd Ishtikhar, Indian Institute of Technology Bombay, India

P185:B176 **Exploring structural characteristics of chitin deacetylases and chitin oligosaccharide deacetylases**
Adriana Isvoran, West University of Timisoara, Romania

P186:B177 **PDB2CD: A novel tool for protein structure/function analysis**
Robert W Janes, Queen Mary, University of London, UK

P187:B178 **The structure of the proton:fumarate symporter SLC26Dg in membranes probed with EPR spectroscopy**
Eva A Jaumann, Goethe University Frankfurt, Germany

P188:B179 **SNX16 regulates E-cadherin recycling through the mechanism of coordinated membrane and cargo binding**
Xu Jinxin, Chinese Academy of Sciences, China

P189:B180 **Structural insights into the versatility of lipid binding by Necator americanus FAR-1 protein**
Andrei Kamenski, University of Glasgow, UK

P190:B181 **Structure of CaBP6 from E. histolytica and its involvement in trophozoite proliferation**
Venkata Ramana C Kandala, Tata Institute of Fundamental Research, India

P191:B182 **Structure based design of anti-thyroid drug using mammalian heme peroxidases as drug targets**
Punit Kaur, All India Institute of Medical Sciences, India

P192:B183 **Rotamer Libraries of spin and fluorescence labels aid structural interpretation of experimental data**
Daniel Klose, ETH Zurich, Switzerland

P193:B184 **Dynamics of membrane regulator GABARAP revealed by NMR and fluorescence combined with simulations**
Jakub Kubiak, Heinrich-Heine-Universität Düsseldorf, Germany

P194:B185 **PAMs modulate molecular dynamics of nAChR alpha 7: direct observation by DXT and electrophysiology**
Tai Kubo, National Institute of Advanced Industrial Sciences & Technology, Japan

P195:B186 **SEIRA spectroscopic characterization of an oxygen-tolerant NAD+-reducing [NiFe] hydrogenase**
Catharina J Kulka, Technische Universität Berlin, Germany

P196:B187 **A lectin from hyacinth plant bulbs having potent inhibitory activity against human cancer cells**
Sanjit Kumar, VIT University, India

P197:B188 **Exploring a novel oligomerization mechanism of thermostable direct hemolysin**
Nidhi Kundu, Indian Institute of Science Education and Research Mohali, India

P198:B189 **Analysis of the Nuclear Protein Structure**
Fengmin Li, Inner Mongolia Agricultural University, China

P199:B190 **Structural Determinants of the MAP6D1 Peptides Interaction with Tubulin and Calmodulin**
Liliana Lighezan, West University of Timisoara, Romania

P200:B191 **Anisotropic circular dichroism of macroscopically oriented light-harvesting complex II**
Mónika Lingvay, Hungarian Academy of Sciences, Hungary

P201:B192 **Native mass spectrometry demonstrates the function of glycan attachment in viral infection pathways**
Julia Lockhauserbäumer, Heinrich Pette Institute, Germany

P202:B193 **The role of calcium in folding of the major pseudopilin PulG in the type 2 secretion system**
Aracelys Lopez-Castilla, Institut Pasteur, France

P203:B194 **Biophysical and computational modelling tools to study RNA-protein complexes**
Trushar R Patel, University of Lethbridge, Canada

P204:B195 **Destructive effect of non-enzymatic glycation on catalase and remediation via curcumin**
Fayezeh Mofidi Najjar, University of Tehran, Iran

P205:B196 **Protein S-sulfonation and S-thiosulfonation regulates non-enzymatic oxidative folding**
Marc Mora, King's College London, UK

P206:B197 **Essential role of non-stochasticity in the cis-trans isomerization reaction in Pin1**
Toshifumi Mori, Institute for Molecular Science, Japan

P207:B198 **Interaction between calmodulin and bisphenol A**
Koichi Murayama, Gifu University, Japan

P208:B199 **Structural characteristics of S100B protein bound with divalent ions of Mg2+, Ca2+, Sr2+ and Ba2+**
Koichi Murayama, Gifu University, Japan

P209:B200 **Thermodynamic study of off7-MBP interaction at different pHs**
Michal Nemergut, P J Šafárik University, Slovakia

P210:B201 **Prediction of cancer-associated hotspot mutations that affect GPCR oligomerization**
Wataru Nemoto, Tokyo Denki University, Japan

P211:B202 **Disulfide mapping the voltage-sensing mechanism of a voltage-dependent potassium channel**
Masanori Osawa, The University of Tokyo, Japan

P212:B203 **Large production of mammalian membrane proteins toward determination of high-resolution structure**
Haruo Ogawa, The University of Tokyo, Japan

P213:B204 **Lipase-specific foldases are steric chaperones that act as dynamic folding platforms**
Kris Pauwels, Centre for Structural Biology, Belgium

P214:B205 **Applications of non-covalently bound membrane proteins in nanodiscs using LILBID-MS**
Oliver Peetz, Goethe University of Frankfurt, Germany

P215:B206 **Analysis of conformational properties of AsLOV2 domain**
Martina Petrenčáková, P J Šafárik University, Slovakia

P216:B207 **Probing the unique molecular mechanisms used by Clostridium thermocellum for Cellulosome function**
Ana Luisa Carvalho, Universidade de Lisboa, Portugal

P217:B208 **Structural basis of anti-PD-L1 monoclonal antibody avelumab for tumor therapy**
Jianxun Qi, Chinese Academy of Sciences, China

P218:B209 **Structural Virology Studies in Zihe Rao's group**
Zihe Rao, Chinese Academy of Sciences, China

P219:B210 **Structural and functional studies of drug targets for Mycobacterium tuberculosis**
Zihe Rao, Shanghai Tech University, China

P220:B211 **Withdrawn**

P221:B212 **Understanding the interplay between amino acid sequence and water in collagen mimetic peptides**
Lorena Ruiz, Max Planck Institute of Colloids and Interfaces, Germany

P222:B213 **Ion selectivity at low affinity: exploring potassium binding by Kbp by NMR, SAXS and simulation.**
Brian O Smith, University of Glasgow, UK

P223:B214 **Biophysical study and inhibitory effect of toluidine blue O on lysozyme amyloid fibrillogenesis**
Baishakhi Saha, Indian Institute of Chemical Biology, Kolkata, India

P224:B215 **Investigating protein dynamics from multiple crystallographic structures**
Henry L D Sawczyc, University of Oxford, UK

P225:B216 ***In vitro* reconstitution of inhibitory GABAergic postsynapses**
Jonas Schäfer, Georg-August-Universität Göttingen, Germany

P226:B217 **Reconstitution of silicanin-1 into artificial lipid membranes and its function for silica biogenesis**
Philipp Schwarz, Georg-August-Universität Göttingen, Germany

P227:B218 **AFM-based Single-Molecule Force Spectroscopy on monovalent streptavidin**
Steffen M Sedlak, Ludwig-Maximilians-Universität Munich, Germany

P228:B219 **Structural principles for engineering nitrilases**
Bryan T Sewell, University of Cape Town, South Africa

P229:B220 **Characterizing structure-dynamics of native and pH induced partly folded conformation of T7 endolysin**
Meenakshi Sharma, Indian Institute of Technology Roorkee **(**IITR**),** India

P230:B221 **Structual insights into small GTPases regulation by SmgGDS**
Hikaru Shimizu, The University of Tokyo, Japan

P231:B222 **Complex structure of cytochrome c–cytochrome c oxidase reveals a novel interprotein interaction mode**
Kyoko Shinzawa-Itoh, University of Hyogo, Japan

P232:B223 **Self-assembly of Influenza A virus protein scaffold: interplay of structure and function**
Oleg V Batishchev, Frumkin Institute of Physical Chemistry and Electrochemistry, Russia

P233:B224 **Fine–tuning of a tryptophan radical revealed by EPR spectroscopy: from structure to function**
Giuseppe Sicoli, Université Grenoble Alpes, France

P234:B225 **An arginine residue in flagellin as the hot spot of TLR5 binding and activation**
Sung Il Yoon, Kangwon National University, South Korea

P235:B226 **Near-atomic structure of alternative complex III from Rhodothermus marinus by single-particle cryoEM**
Joana S Sousa, MPI of Biophysics, Germany

P236:B227 **Cytoprotective bile acids inhibit Bax activity**
Tânia Sousa, CQFM and IN, IST, UL, Portugal

P238:B228 **Photoactivation reduces side-chain dynamics of a LOV photoreceptor**
Andreas Stadler, JCNS & ICS, FZ Jülich, Germany

P239:B229 **Protein structure determination in living eukaryotic cells by in-cell NMR spectroscopy**
Yusuke Suemoto, Tokyo Metropolitan University, Japan

P240:B230 **Structural insights and the low mechanical stability of the Au-S bond in gold-specific protein GolB**
Yang Sun, Nanjing University, Switzerland

P241:B231 **ParB spreading and chromosomal DNA condensation in bacterial chromosome partitioning system**
Yuh-Ju Sun, National Tsing Hua University, Taiwan

P242:B232 **Understanding the molecular mechanisms of anti-CD32b monoclonal antibodies**
Emma Sutton, University of Southampton, UK

P243:B233 **Capturing a biological nanospring in action**
Marie Synakewicz, University of Cambridge, UK

P244:B234 **Drosophila nucleoplasmin-like FKBP39 forms a partly disordered homotetramer**
Aneta Tarczewska, Wrocław University of Science and Technology, Poland

P245:B235 **Inter-domain communication in protein through intrinsically disordered region (IDR)**
Shin-Ichi Tate, Hiroshima University, Japan

P246:B236 **A novel, proton-detected, MAS solid-state NMR experiment for the assignment of side chain nuclei**
James Tolchard, Universite de Bordeaux, France

P247:B237 **Protein-ligand binding volume determined by fluorescent pressure shift assay, densitometry, and NMR**
Vytautas Petrauskas, Vilnius University, Lithuania

P248:B238 **Novel helical assembly in arginine methyltransferase 8**
Sachiko Toma-Fukai, The University of Tokyo, Japan

P249:B239 **HD exchange and MD simulation study - dipeptidyl peptidase III intrinsic dynamics and ligand binding**
Sanja Tomić, Ruđer Bošković Institute, Croatia

P250:B240 **Understanding human DPP III mechanism – an aid in rationalization of the mutants (in)activity**
Sanja Tomić, Ruđer Bošković Institute, Croatia

P251:B241 **Resolving border conflicts: redefining structural domain boundaries for a biofilm-forming protein**
Lotte Van Beek, University of York, UK

P252:B242 **Advanced visualisation and access to PDB data**
Mihaly Varadi, Protein Data Bank in Europe, EMBL-EBI, UK

P253:B243 **Characterization of a bacterial α2-macroglobulin, a pan-peptidase inhibitor**
Julia F D Vidal, Universidade de Brasília, Brazil

P254:B244 **Structural Basis for Human Thrombopoietin Receptor Recognition by Janus Kinases**
Joni Vuorio, University of Helsinki, Finland

P255:B245 **Withdrawn**

P256:B246 **Interaction of myelin basic protein with model myelin lipid monolayers at the air-water interface**
Katharina Widder, Martin-Luther-Universität Halle-Wittenberg, Germany

P257:B247 **Purification of Ultraspiracle protein from Helicoverpa armigera and its structural analysis.**
Krzysztof Wycisk, Wrocław University of Science and Technology, Poland

P258:B248 **A biophysical and biochemical study of SPSB2 and its inhibitory peptides**
Zhihe Kuang, Jinan University, China

P259:B249 **Structure and function of endolysin protein of enterococci phage**
Yanping Zhu, Institute of Biophysics, China

S07: Nanobiophysics (pages S182–S196)

P260:B250 **The mechanical properties of HIV-1 capsid during reverse transcription: insights into uncoating**
Itay Rousso, Ben-Gurion University of the Negev, Israel

P261:B251 **Using AFM to study red blood cells' morphology and elasticity on Amyotrophic Lateral Sclerosis**
Catarina S Lopes, Instituto de Medicina Molecular, Portugal

P262:B252 **Probing early virus binding steps towards living cells using force-distance curve-based AFM**
Melanie Koehler, Université Catholique de Louvain, Belgium

P263:B253 **The extracellular domain of Her2 receptor: dimerization mechanism and sensitive detection in blood**
Loredana Casalis, Elettra Sincrotrone Trieste, Italy

P264:B254 **Uni-molecular study of the pH- and salt-dependent PAMAM dendrimers-α-hemolysin nanopore interactions**
Andrei Ciuca, Dept Phys, UAIC, Iasi, Romania

P265:B255 **Effect of nano zinc oxide crowding on modulation of amyloidogenicity and cytotoxicity of bovine insulin**
Shreyasi Asthana, National Institute of Technology, Rourkela, India

P266:B256 **Tailoring protein nanomechanics with chemical reactivity**
Amy E Beedle, King's College London, UK

P268:B257 **Cell membranes integrity affected by C60 fullerene**
Agnieszka Borowik, UG-MUG, Gdańsk, Poland

P269:B258 **Detecting synthetic sequence-encoded polyphosphates with biological nanopores**
Mordjane Boukhet, Ionera Technologies GmbH, Freiburg, Germany

P270:B259 **Probing the Heterogeneity of Protein Kinase Activation in Cells by Super-resolution Microscopy**
Oana Coban, King's College London, UK

P271:B260 **Understanding Adenovirus maturation: A nanomechanics approach**
Denise Denning, Rijksuniversiteit Groningen, Netherlands

P272:B261 **CHO cells on uniform and patterned SLG: adhesion and proliferation**
Amira El Merhie, Istituto Italiano di Tecnologica, Italy

P273:B262 **Iron oxide nanozyme: its mechanisms, improvements and applications in nanomedicine**
Kelong Fan, Chinese Academy of Sciences, China

P274:B263 **Remodeling of lipid rafts by photoswitchable ceramides characterized under high-speed AFM**
Henri G Franquelim, Max Planck Institute of Biochemistry, Martinsried, Germany

P276:B264 **Design principles for coiled-coil based materials derived from their molecular mechanical properties**
Melis Goktas, Max Planck Institute of Colloids and Interfaces, Germany

P277:B265 **Experimental study of the polyion potential in polyelectrolyte**
Danijel Grgičin, Institute of Physics, Zagreb, Croatia

P278:B266 **A protein basket for a quantum dot**
Joanna Grzyb, Institute of Physics PAS, Warsaw, Poland

P280:B267 **Incorporation of influenza surface proteins into nanodiscs**
Malte Hilsch, Humboldt-Universität zu Berlin, Germany

P281:B268 **Dendrimers efficiency as a drug delivery system for antiepileptic drugs: A biophysical study**
Silvia Del Valle Alonso, UNQ- IMBICE-CONICET-CICPBA, Argentina

P282:B269 **Revealing binding conformations of protein receptor ligand systems and their nano-arrangement by AFM**
Markus A Jobst, Ludwig-Maximilians-Universität Munich, Germany

P283:B270 **AC electrokinetic immobilisation of nanoobjects as individual singles in regular arrays**
Ralph Hölzel, Fraunhofer Institute IZI-BB, Germany

P284:B271 **Lipid affinity to nanoparticles - possible molecular initiating event for nanoparticle toxicity**
Bostjan Kokot, J. Stefan Institute, Slovenia

P285:B272 **Magnetic (torque) tweezers to probe mechanical properties of dsDNA**
Franziska Kriegel, Ludwig-Maximilians-Universität Munich, Germany

P288:B273 **AC electrokinetic manipulation of nanoparticles and molecules**
Ralph Hölzel, Fraunhofer Institute IZI-BB, Germany

P289:B274 **Fluorescent labelling of nanoparticles for reliable bio-nano interactions study**
Hana Majaron, J Stefan Institute, Slovenia

P290:B275 **The influence of disulfide bonds in the mechanical stability of proteins is context dependent**
Aitor Manteca, CIC nanoGUNE, Spain

P291:B276 **Study of the protein corona formed by the adsorption of hemoproteins on silica nanoparticles**
Laurent Marichal, Université Paris-Saclay, France

P292:B277 **Quantification of surface binding by wide-field total internal reflection FCS**
Jonas Mücksch, Max Planck Insititute of Biochemistry, Germany

P293:B278 **Quantitative detection of local molecular forces at biological membranes**
Kaori Sugihara, University of Geneva, Switzerland

P294:B279 **Biophysical analysis of extracellular vesicles**
Loredana Casalis , Elettra Sincrotrone Trieste, Italy

P295:B280 **Membrane-cytoskeleton bonds rupture in a catch-slip manner at the edge of a cancer cell**
Brenda Farrell, Baylor College of Medicine, USA

P296:B281 **Cation-induced stabilization and destabilization of DNA origami nanostructures in urea and guanidinium chloride**
Saminathan Ramakrishnan, University of Paderborn, Germany

P297:B282 **Analysis of the mechanical properties of HIV-1 capsid and their impact on the uncoating process**
Sanela S Rankovic, Ben-Gurion University of the Negev, Israel

P298:B283 **Non-radiative excitation fluorescence microscopy for studying membrane adhesion at the nanoscale**
Cyrille Vézy, Laboratoire de Nanotechnologie et d'Instrumentation Optique, UTT, France

P299:B284 **Structure and dynamics of amylin-lipid mixed fibers from advanced fluorescence microscopy**
Joana C Ricardo, Centro de Química-Física Molecular and Institute of Nanoscience and Nanotechnology, Portugal

P300:B285 **Tuning rhodamine structure for efficient blocking of the alpha-hemolysin nanopore**
Tatyana I Rokitskaya, Lomonosov Moscow State University, Russia

P301:B286 **Single molecule study of DNA phase transitions under forces. A focus on the mixed phase condition**
Domenico Salerno, University of Milano-Biccocca, Italy

P302:B287 **Surface charge regulated adsorption of semiconductor polymer coated nanorods on lipid membranes**
Barbara Salis, Istituto Italiano di Tecnologia, Genoa, Italy

P303:B288 **New X-ray single molecular observations from super-Poisson distribution using laboratory X-rays**
Yuji C Sasaki, The University of Tokyo, Japan

P304:B289 **Trapping of a single peptide near a protein nanopore**
Irina Schiopu, Al I Cuza University of Iasi, Romania

P305:B290 **Albumin – based γ irradiated nanoparticle: Characterisation, Stability and Binding efficiency**
Silvia Del Valle Alonso, UNQ-IMBICE-CONICET-CICPBA, Argentina

P306:B291 **Tuning polymer-protein interaction with salt**
Monasadat Talarimoghari, University of Freiburg, Germany

P307:B292 **Fluorescence/absorbance spectroscopy on dyes absorbed on hybrids of DNA and carbon nanotubes**
Akihiro Tomura, Tokyo University of Science, Japan

P308:B293 **Interaction of positively charged Co-porphyrins with liposomes made of a mixture of POPC and POPG**
Anahit Torosyan, Yerevan State University, Switzerland

P309:B294 **Alkali cations modify the stiffness of biomembranes by forming slowly evolving interfacial networks**
William J Trewby, Durham University, UK

P310:B295 **Switchable assembly of bacteriophage fibres for nanoscale bioengineering using H-aggregate formation**
Matthew Tridgett, University of Birmingham, UK

P311:B296 **Characterization of voltage sensitive dyes with free-standing lipid bilayers**
Maria Tsemperouli, University of Geneva, Switzerland

P312:B297 **Oxidation/reduction sensing using optical responses of hybrids of DNA and carbon nanotubes**
Kazuo Umemura, Tokyo University of Science, Japan

P313:B298 **Exploring high affinity of TiO_2 nanotubes to lipid membranes**
Iztok Urbančič, University of Oxford, UK

P314:B299 **Investigation of Protein Clusters in Membranes by Atomic Force Microscopy**
Marian Vache, University of Goettingen, Germany

P315:B300 **Nanozymes and its applications in Biomedicine**
Xiyun Yan, Chinese Academy of Sciences, China

P316:B301 **Accelerated molecular dynamics: boosting the probability of rare biological events**
Neville B-Y Yee, University of York, UK

P317:B302 **Single-molecule solution mass spectrometry by interferometric scattering microscopy**
Gavin Young, University of Oxford, UK

P318:B303 **Nano-mechanical signature of different lung diseases**
Joanna Zemła, Institute of Nuclear Physics Polish Academy of Sciences, Poland

S08: Forces in and between cells: filaments, membranes and walls (pages S197–S199)

P320:B304 **Bulk cytoplasmic actomyosin contractions drive streaming in zebrafish eggs**
Shayan Shamipour, Institute of Science and Technology Austria, Klosterneuburg, Austria

P321:B305 **Correlative AFM and cryo-EM approach for probing the nuclear lamina mechanics**
Tanuj Sapra, University of Zurich, Switzerland

P322:B306 **Stiffening and softening of cytoskeletal networks: rheological insights from minimal systems**
Anders Aufderhorst-Roberts, AMOLF, Amsterdam, Netherlands

P323:B307 **Configurations of confined cytoskeletal networks using the monomer ensemble**
Somiealo Azote, Stellenbosch University, South Africa

P324:B308 **Mechanical characterization of a trimeric coiled-coil using atomistic simulations**
Ana Elisa Bergues Pupo, Max Planck Institute for Colloids and Interfaces, Germany

P325:B309 **Red blood cell aggregates in malaria - the role of flow**
Anna M Jötten, University of Augsburg, Germany

P326:B310 **Mechanic properties of filament network: cytoskeleton, extracellular matrix**
Fanlong Meng, University of Oxford, UK

P327:B311 **Dynamics of neutrophil extracellular trap (NET) formation**
Sebastian Kruss, Göttingen University, Germany

P328:B312 **Combined Optical tweezers & AFM - Investigating cell mechanics & single molecules on multiple scales**
Philipp Rauch, JPK Instruments AG, UK

S09: Systems biology (pages S200–S204)

P329:B313 **Applications of stochastic lumping analysis to fluctuations in systems and structure biology**
Cheng-Hung Chang, National Chiao Tung University, Taiwan

P330:B314 **Escherichia coli's strategies for maintaining proton motive force when exposed to photodamage**
Ekaterina Krasnopeeva, University of Edinburgh, UK

P331:B315 **Chemically-driven kinetics of phase separated membrane-free organelles**
Jean David Wurtz, Imperial College London, UK

P332:B316 **Fluorescent probes to evaluate membrane properties of multidrug-resistant isolates of E. coli**
Paula Gameiro, University of Porto, Portugal

P333:B317 **Protective assessment of Phikud Navakot against hypoxia/reoxygenation-damaged H9c2 cardiomyoblasts**
Orapin Gerdprasert, Srinakharinwirot University, Thailand

P334:B318 **Does the DNA damage response depend on growth in bacteria?**
Sebastián Jaramillo-Riveri, University of Edinburgh, UK

P335:B319 **Selective reponse to specific ligands in T cell ligand discrimination**
Masashi K Kajita, The University of Tokyo, Japan

P336:B320 **Enzyme Activity at Lipid Membranes – Correlation of Activity and Membrane State**
Andrej Kanenac Augsburg University, Germany

P337:B321 **Predicting bacterial growth in response to antibiotic combinations using growth laws**
Bor Kavčič, Institute of Science and Technology Austria, Austria

P338:B322 **Synchronous oscillatory network and cholinergic system in the slug olfactory center**
Suguru Kobayashi, Tokushima Bunri University, Japan

P339:B323 **The F-fraction: The variation in allocation of resources to flagella production in Escherichia coli**
Alexander F Mcvey, University of Edinburgh, UK

P340:B324 **Muscarinic receptors are responsible for the cholinergic modulation of projection neurons**
Dongfeng Li, South China Normal University, China

P341:B325 **Cardioprotective potential of Ligusticum sinense on hypoxia/reoxygenation injury in H9c2 cells**
Punnee Nusuetrong, Srinakharinwirot University, Thailand

P342:B326 **Investigation of Relations Between GSTT1 Polymorphism and Lower Extremity Varix**
Nurten Bahtiyar, Istanbul University, Turkey

P343:B327 **General calibration of optical density measurements for microbial growth**
Keiran Stevenson, University of Edinburgh, UK

P344:B328 **Effect of early ischemia on ventricular action potential**
Rimantas Treinys, Lithuanian University of Health Sciences, Lithuania

P345:B329 **Effects of Selenium Supplementation on Cytokines in Experimental Hyperthyroidism**
Nurten Bahtiyar, Istanbul University, Turkey

S10: Quantum biology (page S205)

P346:B330 **Quantum vibrational excitations and protein folding *in vivo***
Leonor Cruzeiro, University of Algarve, Portugal

P347:B331 **Intracellular local temperature as a novel variable in cell biology**
Kohki Okabe, The University of Tokyo, Japan

P348:B332 **2-D Electronic Spectroscopy on the light-dependent enzyme protochlorophyllide oxidoreductase**
David A Farmer, University of Sheffield, UK

Supplementary posters

P1098:B333 **Thermodynamic state of the interface during cavitation**
Shamit Shrivastava, University of Oxford, UK

P1099:B334 **Clathrin light chains modulate the biophysical properties and function of clathrin**
Lisa Redlingshöfer, University College London, UK

P1100:B335 **Optical control of gene expression using a red light-inducible CRISPR-dCas9 system**
Federico M Gasparoli, School of Medicine, University of St Andrews, UK

P1101:B336 **Kibra WW tandem achieve specificity and high affinity with Dendrin via intramolecular coupling**
Zeyang Ji, Hong Kong University of Science and Technology, Hong Kong

P1102:B337 **Microfluidic diffusive sizing enables identification of HLA interactions under native conditions**
Chris Thorne, Fluidic Analytics Ltd., UK

P1103:B338 **Structural insight into substrate recognition and secretion by EccC ATPase domain 3 in mycobacterium**
Shuhui Wang, Shanghaitech University, China

P1104:B339 **Structural basis of the interaction between INAD/INADL and PLCĐ in Drosophila and mammalian phototra**
Fei Ye, HKUST, Hong Kong

P1105:B340 **Photoprotection in plants: nanoscale topography and fluorescence of Light-Harvesting Complex II**
Peter G Adams, University of Leeds, UK

P1106:B341 **Versatile tools towards real-time single-molecule biology**
Rosalie P Driessen, LUMICKS, Netherlands

P1107:B342 **Modelling force generation in phagocytosis**
James E Bradford, University of Sheffield, UK

P1131:B343 **Microfluidic techniques to study biological soft matter**
Kadi Saar, University of Cambridge, UK

Poster Session 2 (P2): Tuesday 18 July

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S11: Computational biophysics (pages S206–S235)

P349:B1 **Beyond sequence: implications of DNA structure and dynamics in genome function**
Agnes Noy, University of York, UK

P350:B2 **Codon recognition on the ribosome - free energy and QM/MM calculations**
Lennart Nilsson, Karolinska Institutet, Sweden

P351:B3 **Structural dynamics of monomeric alpha-synuclein on the ps-μs time scale derived from MD simulations**
Reinhard Klement, MPI for biophysical Chemistry, Germany

P352:B4 **Getting the ion-protein interactions right in Molecular Dynamics simulations**
Elise Duboué-Dijon, Czech Academy of Sciences, Czech Republic

P353:B5 **Molecular dynamics simulation of engineered β-strand peptide interaction with AqpZ membrane protein**
Maral Aminpour, University of Alberta, Canada

P354:B6 **The order-disorder transition in proteins is a jamming transition**
Ioan Andricioaei, University of California, Irvine, USA

P355:B7 **Study of a fluid-gel transition process in a lipid bilayer under the influence of an external electric field**
Alessio Bartocci, University of Genoa, Italy

P356:B8 **A new protocol to improve the predictive power of molecular docking**
Attilio V Vargiu, Università di Cagliari, Italy

P357:B9 **Prediction of complex structure and affinity of CDK2 and its inhibitor using McMD and TI simulations**
Gert-Jan Bekker, Osaka University, Japan

P358:B10 **Investigating the beginnings of material-driven fibronectin fibrillogenesis with MD simulations**
Christian D Lorenz, King's College London, UK

P359:B11 **Interaction of hydrophobic polymers with model lipid bilayers**
Giulia Rossi, University of Genoa, Italy

P360:B12 **Multi-scale simulations of focal adhesion kinase at PIP containing membranes**
Lukas Braun, ETH Zurich, Switzerland

P361:B13 **Directing membrane pore formation in MD simulations using an embedded mechanical 'gadget'**
Gregory J Bubnis, Max Planck Institute for Biophysical Chemistry, Germany

P362:B14 **Amphiphilic cyclodextrins: how long MD simulations give a full picture of membrane insertion**
Sébastien Buchoux, Université de Picardie Jules Verne, France

P363:B15 **Investigation of peptide binding affinity and thermal stability of Human Leukocyte Antigens (HLAs)**
Onur Serçinoğlu, Marmara University, Turkey

P364:B16 **Markov state models of protein aggregation**
Martin Carballo-Pacheco, Research Center Juelich, UK

P365:B17 **Interaction of LCAT enzyme with lipid surfaces and apolipoprotein A-I derived peptides**
Artturi Koivuniemi, University of Helsinki, Finland

P366:B18 **Multi-scale modelling of large biomolecular complexes**
Pierre-André Cazade, University of Limerick, Ireland

P367:B19 **Improved understanding of protein dynamics via energy landscape sampling, analysis, and comparison**
Frederic Cazals, Inria, France

P369:B20 **Ab initio calculation of structural and elastic properties of Mg2Sn and Mg2Pb compounds**
Yassine Chaouche, University of Larbi Tébessi, Algeria

P370:B21 **Plasma Membrane Localization Dynamics of the Filovirus Matrix Protein VP40**
Prem P Chapagain, Florida International University, USA

P371:B22 **Prediction of the anti-apoptosis and pro-apoptosis proteins based on domain and motif information**
Ying-Li Chen, Inner Mongolia University, China

P372:B23 **Proteins at liquid interfaces: insights from molecular simulation**
David L Cheung, National University of Ireland Galway, Ireland

P373:B24 **Decoding and tailoring cooperative DNA recognition at atomic resolution**
Vlad Cojocaru, Max Planck Institute for Molecular Biomedicine, Germany

P374:B25 **Assessment of the interactions of phthalates with the human cytochromes P450**
Adriana Isvoran, West University of Timisoara, Romania

P375:B26 **Parallel folding pathways of UCH-L1 - protein with Gordian knot – differ in topology of intermediate**
Pawel Dabrowski-Tumanski, University of Warsaw, Poland

P376:B27 **Mass spectrometry based modelling of macromolecular assemblies**
Matteo T Degiacomi, University of Oxford, UK

P377:B28 **Towards realistic models of lung surfactant - MD simulations with improved water and ion force field**
Pauline Delcroix, J Heyrovsky Institute of Physical Chemistry, Czech Republic

P378:B29 **RRCRank: a fusion method using rank strategy for residue-residue contacts prediction**
Qiwen Dong, East China Normal University, China

P379:B30 **Conformational states of Kras in its active and inactive form**
Balint Dudás, Pazmany Peter Catholic University, Hungary

P380:B31 **How does membrane composition modulate cholesterol carrier protein NPC2?**
Giray Enkavi, University of Helsinki, Finland

P381:B32 **Molecular dynamics simulations of cationic polymers**
Alexandra Farcaş, Babeş-Bolyai University, Romania

P382:B33 **An engineered peptide toxin analogue with improved Kv1.3 selectivity displays reduced flexibil**
Krisztina Fehér, Ghent University, Belgium

P383:B34 **The prediction of long-range enhancer-promoter interactions**
Qian-Zhong Li, Inner Mongolia University, China

P384:B35 **The HYDRO software for solution properties of bio-macromolecules and nanoparticles**
José Garcia de la Torre, Universidad de Murcia, Spain

P385:B36 **Effects of the L483Y mutation on the ligand binding domain of the AMPA receptor**
Georgios Gerogiokas, University of Oxford, UK

P386:B37 **Dynamic network communication in large proteins**
Tahereh Ghane, Free University Berlin, Germany

P387:B38 **Multiscale simulations of partially disordered systems**
Christoph Globisch, University of Konstanz, Germany

P388:B39 **Hierarchical TMD dynamics provides a rationale for presentation of the APP ϵ-sites to γ-secretase**
Alexander Götz, Technical University of Munich, Germany

P389:B40 **Exploring the Ca2+/Na+ selectivity of NaChBac channel through Molecular Dynamics simulations**
Carlo Guardiani, University of Warwick, UK

P390:B41 **Thermostability of dockerin-cohesin pairs from three cellulosome species with MD simulations**
Melissabye Gunnoo, University of Limerick, Ireland

P391:B42 **Re-engineering the mechanostability of cellulosomal proteins via site-directed mutagenesis**
Melissabye Gunnoo, University of Limerick, Ireland

P392:B43 **Redox-driven proton pumping in respiratory complex I : a molecular dynamics simulation study**
Outi Haapanen, University of Helsinki, Finland

P394:B44 **Platform for a computational integrated analysis of structure and mutation data on SLC transporters**
Akiko Higuchi, The University of Tokyo, Japan

P395:B45 **Charge transfer in photolyases**
Daniel Holub, Karlsruhe Institute of Technology, Germany

P396:B46 **Dynamics and energetics of intrinsic tubulin bending: Novel implications for microtubule assembly**
Maxim Igaev, Max Planck Institute for Biophysical Chemistry, Germany

P397:B47 **Oligomerization pathway of Aβ fragments by the Hamiltonian replica-permutation method**
Satoru G Itoh, Institute for Molecular Science, Japan

P398:B48 **Multiscale simulation study of penta peptide aggregation: From atomistic details to a mechanistic interpretation**
Alok Jain, University of Konstanz, Germany

P399:B49 **CEED: A novel biophysical approach to altering protein stability and enzyme activity**
Hannah Jones, University of Bath, UK

P400:B50 **Impact of cell size on efficacy of single-cell C4 photosynthesis**
Ivan Jurić, University of Warwick, UK

P401:B51 **Influence of polymorphic conformations of DSS1 on its binding with BRCA2**
Sushmita Basu Das, Indian Institute of Technology Kharagpur, India

P402:B52 **Excess sodium dramatically alters binding preference between oxoanions and cationic amino acids**
Sadra Kashef Ol Gheta, Max Planck Institute of Colloids and Interfaces, Germany

P403:B53 **gmfit : an approximated 3D shape for atomic model and density map using Gaussian mixture model**
Takeshi Kawabata, Osaka University, Japan

P405:B54 **Withdrawn**

P406:B55 **Plasma induced pore formation in model cell membranes: Molecular dynamics simulation studies**
Rakwoo Chang, Kwangwoon University, South Korea

P407:B56 **Statistical (mechanical) model for exploring protein sequence subspace**
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P620:B253 **The biophysical characteristic of four [4Fe4S] cluster types coordinated by protein maquettes**
Magdalena Łazicka, University of Warsaw, Poland

P621:B254 **Calixarene glue facilitates crystal structure determination of Penicillium antifungal protein**
Jimi M Alex, National University of Ireland, Galway, Ireland

P622:B255 **Introducing functionality into hyperstable coiled-coil scaffolds**
Aimee L Boyle, Leiden University, Netherlands

P623:B256 **Structural and computational analysis of human ketohexokinase**
Adrienne Chang, New York University Abu Dhabi, UAE

P624:B257 **Designing a novel biocatalysis platform based on β-peptide linkages**
Rory M Crean, University of Bath, UK

P625:B258 **In-vivo assembly and characterization of CCIS, an in-silico designed [4Fe-4S] cluster protein**
Bhanu P Jagilinki, MIGAL – Galilee Research Institute, Israel

P626:B259 **Rational design of SAKe-CuP proteins**
Hiroki Noguchi, KU Leuven, Belgium

P627:B260 **Protein oligomerization triggered by anionic calixarene macrocycles**
Martin L Rennie, National University of Ireland Galway, Ireland

P628:B261 **The multiple origins of the hydrophobicity of fluorinated apolar amino acids**
João R Robalo, Max Planck Institute for Colloids and Interfaces, Germany

P629:B262 **Exploring Gd(III) and Cu(II) binding in coiled coil peptides with EPR distance measurements**
Anokhi Shah, University of St Andrews, UK

P630:B263 **Computational design of symmetric protein building blocks**
Arnout R D Voet, KU Leuven, Belgium

P631:B264 **The Pizza proteins as building blocks for filament assemblies**
Jeroen P M Vrancken, KU Leuven, Belgium

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Oliver Bäumchen, Max Planck Institute for Dynamics and Self-Organization, Germany

P633:B266 **Swimming and rafting of E. coli microcolonies at air-liquid interfaces**
Mauro Chinappi, Sapienza University of Rome, Italy

P634:B267 **Spatial confinement of active microtubule networks induces large-scale rotational cytoplasmic flow**
Makito Miyazaki, Waseda University, Japan

P635:B268 **Spontaneous and induced gait-switching in microswimmers**
Kirsty Y Wan, University of Cambridge, UK

P636:B269 **How growth conditions affect bacterial chemotaxis responses**
Zahra Alirezaeizanjani, University of Potsdam, Germany

P637:B270 **Universality in Incompressible Active Fluids**
Chiu Fan Lee, Imperial College London, UK

P638:B271 **Pressure of a gas of underdamped active dumbbells**
Marc Joyeux, Université Grenoble Alpes, France

P640:B272 **Pattern formation in microtubule-motor mixtures**
Ivan Maryshev, University of Edinburgh, UK

P641:B273 **High-frequency microrheology reveals cytoskeleton dynamics in living cells**
Felix Rico, U1006 INSERM & Aix-Marseille Université, France

P642:B274 **Withdrawn**

P643:B275 **Balancing assembly and contraction in a reconstituted minimal actin cortex**
Sonal, Max Planck Institute of Biochemistry, Germany

P645:B276 **Dynamic and Programmable Self-assembly of Micro-rafts at Air-water Interface**
Wendong Wang, Max Planck Institute for Intelligent Systems, Germany

P646:B277 **Spiral-coil formation in self-propelled chain system**
Yao-Kuan Wang, National Central University, Taiwan

P647:B278 **FeTPPS, not just a peroxynitrite decomposition catalyst**
Pengfei Zhang, Huazhong University of Science & Technology, China

P648:B279 **Hydrodynamics of collectively migrating cellular fluids**
Matthias L Zorn, Ludwig-Maximilians-Universität Munich, Germany

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Ellen Meek, EPSRC , UK

P1108:B281 **Are intrinsically disoredered proteins sensitive to hydrostatic pressure?**
Crehuet Ramon, IQAC – CSIC, Spain

P1109:B282 **Molecular dynamics simulations of proton dependent oligopeptide transporters**
Mariana B Batista, University of São Paulo, Brazil

P1110:B283 **Modelling molecular motors stepping along cytoskeletal filaments**
Naruemon Rueangkham, University of Sheffield, UK

P1111:B284 **EscalTM: kinetic transition network based on effective energy rescaling trajectory mapping analysis**
Zhenyu Wang, Fudan University, China

P1112:B285 **From bacteria to man: 'Force-from-lipids' principle of mechano-sensing at the membrane interface**
Boris Martinac, Victor Chang Cardiac Research Institute, Australia

P1113:B286 **On the possibility of detonation of shock waves at biological interfaces**
Shamit Shrivastava, University of Oxford, UK

P1114:B287 **Orientation of the OmpF porin in planar lipid bilayers**
Sandra A Ionescu, University of Oxford, UK

P1115:B288 **Energy expended maintaining cell structure within a gravitational field**
Steve Thorne, The Berkeley Stem Cell Center, USA

P1116:B289 **In vitro selection of single-domain antibodies from an artificial DNA library by cDNA display**
Hiroki Anzai, Saitama University, Japan

B290 **Absorbance Spectroscopy, Fluorescence Correlation Spectroscopy, and Molecular Dynamics Simulations reveal local surface protonation changes at the K-channel entrance of *P. denitrificans* cytochrome c oxidase**
Ulrike Alexiev, Freie Universität Berlin, Germany

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Catriona Thompson, University of Glasgow, UK

P650:B2 **Membrane protein diffusion in living E. coli: from fundamentals** to **insight in protein translocation**
Yves J Bollen, Vrije Universiteit Amsterdam, Netherlands

P651:B3 **An emerging technique for the characterization of transport proteins: SSM-based electrophysiology**
Andre Bazzone, Nanion Technologies, Germany

P652:B4 **Conformational dynamics of the Na+/H+ antiporter studied by EPR spectroscopy**
Sabrina Dunkel, University of Osnabrück, Germany

P653:B5 **Is it possible to reduce TFP concentration required for MDR reversal and apoptosis induction?**
Kamila Środa-Pomianek, Wroclaw Medical University, Poland

P654:B6 **Characterization of a PIB-ATPase from the psychrophilic** bacteria **Bizionia argentinensis**
F Luis González Flecha, Universidad de Buenos Aires, Argentina

P655:B7 **The pH dependence of synthetic anion transporters**
Oscar Moran, Istituto di Biofisica, Italy

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Karim Fahmy, Helmholtz-Zentrum Dresden - Rossendorf, Germany

P657:B9 **Identification of the pK value of Glu325 in Lactose permease by SEIRAS-perfusion approach**
Natalia Grytsyk, University of Strasbourg, France

P658:B10 **Molecular simulations of cardiolipin interactions with the adenine nucleotide translocase**
George Hedger, University of Oxford, UK

P659:B11 **Uncoupling proteins are highly sensitive to the membrane lipid composition**
Olga Jovanovic, University of Veterinary Medicine, Austria

P660:B12 **Transport of Bacterial Lipopolysaccharides to Liposomes and Immune Cell Membranes**
Andra B Schromm, Research Center Borstel, Germany

P661:B13 **Elucidation of ion selectivity of NaR by electrophysiological measurement**
Yuko Kozaki, Nagoya Institute of Technology, Japan

P662:B14 **Genipin lacks specificity for UCP2**
Jürgen Kreiter, University of Veterinary Medicine, Austria

P663:B15 **Molecular mechanisms of proton transfer in the protein secretion motor SecDF**
Takaharu Mori, RIKEN, Japan

P664:B16 **Rat aquaporin-5 is pH-gated induced by phosphorylation**
Andreia F Mósca, University of Lisbon, Portugal

P665:B17 **Glucose concentrations influence on activities of FoF1 ATPase and hydrogenase 4 in Escherichia coli**
Anna Poladyan, Yerevan State University, Armenia

P666:B18 **The diverse sensitivity of parental and resistant breast cancer cells after electrochemotherapeutic**
Nina Rembiałkowska, Medical University, Poland

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Lóránd Kelemen, Biological Research Centre, Hungary

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Sviatlana Shashkova, University of York, UK

P669:B21 **Pair correlation analysis of fixed PALM and live PALM applied on the water channel AQP3**
Eva C Arnspang, SDU, Denmark

P670:B22 **102 induced deprivation of extracellular polymeric substances** in **Synechocystis and Symbiodinium**
Ateeq Ur Rehman, Hungarian Academy of Sciences, Hungary

P671:B23 **The effect of CDP-choline on autophagy and mitochondrial dynamics in beta-amyloid treated PC12 cells**
Devrim Oz-Arslan, Acibadem University, Turkey

P672:B24 **The population growth dynamics of E. coli in the presence of cell wall targeting antibiotics**
Rebecca C Brouwers, University of Edinburgh, UK

P673:B25 **High Resolution Atomic Force Microscopy of Living S. aureus Bacterial Cell Wall**
Jonathan M Burns, University of Sheffield, UK

P674:B26 **Evaluation of cell malignancy using Digital Holographic Microscopy**
Violeta L Calin, Carol Davila University of Medicine and Pharmacy of Bucharest, Romania

P675:B27 **Cellular imaging of small RNAs using fluorescent RNA-Mango based aptamers**
Adam Cawte, Imperial College, UK

P676:B28 **High-Resolution Imaging of Living Cells by Atomic Force Microscopy**
Alexander Dulebo, Bruker Nano Surfaces Division, Germany

P677:B29 **Topography of cells revealed by variable-angle Total Internal Reflection Fluorescence microscopy**
Rodolphe Jaffiol, Université de Technologie de Troyes, France

P678:B30 **Quantification of bright and dark-field scattering in cryo-scanning transmission electron tomography**
Andrew J Howe, Weizmann Institute of Science, Israel

P679:B31 **Imaging of intracellular ATP level revealed pannexin1-mediated programmed ATP decrease in apoptosis**
Hiromi Imamura, Kyoto University, Japan

P680:B32 **Development of scanning microscope for simultaneous measurements of emission and excitation spectra**
Sankar Jana, Tohoku University, Japan

P681 B33 **Measuring metabolic activities in single bacterial cells by Raman microspectroscopy**
Yota Kato, The University of Tokyo, Japan

P682:B34 **Porphyrin-based voltage-sensitive dyes for imaging and measuring membrane potential of cells**
Anjul Khadria, University of Oxford, UK

P683:B35 **Exploring the potential of Airyscan microscopy for live cells imaging**
Kseniya Korobchevskaya, University of Oxford, UK

P685:B36 **Optical scattering and microscopic imaging of cellular exo- and endocytosis**
Dylan Marques, Universidade Nova de Lisboa, Portugal

P686:B37 **Insights of electroporated cells as reveled by digital holographic microscopy**
Mihaela G Moisescu, Carol Davila University of Medicine and Pharmacy of Bucharest, Romania

P687:B38 **Holotomography (HT) techniques for non-invasive label-free 3D imaging of live cells and tissues**
Yongkeun Park, KAIST, UK

P688:B39 **Death or alive? Correlating the cell wall structure of sacculi and living bacteria using AFM**
Laia Pasquina Lemonche, University of Sheffield, UK

P689:B40 **The Resarch on the Autophagy and Its Markers in Hippocampal Neurons of Rats induced by Microwave Radiation**
Ruiyun Peng, Beijing Institute of Radiation Medicine, China

P690:B41 **Nucleoid reorganization of H-NS in response to environmental stress**
Nafiseh Rafiei, University of Toronto, Canada

P691:B42 **Unlabelled super-resolution imaging using polarisation-contrast super-oscillatory microscopy**
Peter J Smith, University of Southampton, UK

P692:B43 **Intracellular local thermogenesis initiates stress granule formation**
Beini Shi, The University of Tokyo, Japan

P693:B44 **Three-dimensional protein dynamics in the cell nucleus**
Timothy E Saunders, National University of Singapore, Singapore

P694:B45 **How does fluorophore saturation influence intensity-based FRET calculations?**
Timea Szendi-Szatmari, University of Debrecen, Hungary

P695:B46 **Intracellular drug imaging by stimulated Raman scattering microscopy**
William J Tipping, University of Edinburgh, UK

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Katarzyna B Gieczewska, University of Warsaw, Poland

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Chien-Jung Lo, National Central University, Taiwan

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Peter B Crowley, National University of Ireland-Galway, Ireland

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Fördös Ferenc, Karolinska Institutet, Sweden

P700:B51 **Characterization of matrix vesicles biomimetic systems: interaction with collagen fibers during biomineralization**
Pietro Ciancaglini, USP, Ribeirão Preto, Brazil

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Juan Francisco Bada Juarez, University of Oxford, UK

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Guilherme B Berselli, Dublin City University, Ireland

P703:B54 **Delivery of membrane proteins into membrane mimicking systems by charge-mediated fusion**
Olivier Biner, University of Bern, Switzerland

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Pietro Ciancaglini, USP, Ribeirão Preto, Brazil

P705:B56 **Investigating sequence, structure and function relationships in antimicrobial peptoids.**
Elizabeth Bromley, Durham University, UK

P706:B57 **Photo-induced oxidation of bio-mimetic membranes: Giant pore openings and membrane defects**
Aurélien Bour, Laboratoire Jean Perrin, France

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Linda K Bruetzel, Ludwig-Maximilians-Universität Munich, Germany

P708:B59 **Role of membrane sphingolipids in the interaction with amyloid beta-peptide**
Rita Carrotta, CNR - Istituto di Biofisica, Italy

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Veronica M Couto, Universidade Estadual de Campinas, Brazil

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Joana Cristo, Universidade do Algarve, Portugal

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Bartholomäus Danielczak, University of Kaiserslautern, Germany

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Svetlana S Efimova, Russian Academy of Sciences, Russia

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Henri G Franquelim, Max Planck Institute of Biochemistry, Martinsried, Germany

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Aurélien L Furlan, Université de Picardie Jules Verne, France

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Aritz B García-Arribas, Biofisika Institute (UPV/EHU, CSIC), Spain

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Beatrice Gironi, University of Perugia, Italy

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Anne Grethen, University of Kaiserslautern, Germany

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Juan Jin, University of Oxford, UK

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Franck Jolibois, Université de Toulouse, France

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Charlotte Kielar, University of Paderborn, Germany

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Adrian Keller, Paderborn University, Germany

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Bob-Dan Lechner, University of Exeter, UK

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Pauline Lefrançois, University of Bordeaux, France

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Jobst Liebau, Stockholm University, Sweden

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Anna L Matos, Institut für Medizinische Biochemie - WWU, Germany

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Daniel E Mitchell, University of Sheffield, UK

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Masamune Morita, Tokyo Institute of Technology, Japan

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Peter Mühlenbrock, Institute for organic and biomolekular chemistry, Germany

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Chandrashekhar U Murade, New York University Abu Dhabi, UAE

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Sandro Keller, University of Kaiserslautern, Germany

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Wallance M Pazin, Faculdade de Ciências e Tecnologia - UNESP, Brazil

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Rosangela Itri, University of Sao Paulo, Brazil

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Thomas Schick, University of Bern, Switzerland

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Markus Schön, University of Göttingen, Germany

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Jeremias Sibold, Georg-August University Göttingen, Germany

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Liam T E Stubbington, Durham University, UK

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Nelli Teske, Georg-August-University Goettingen, Germany

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Carolyn Vargas, University of Kaiserslautern, Germany

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Tom Robinson, Max Planck Institute of Colloids and Interfaces, Germany

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Vaida Linkuviene, Vilnius University, Lithuania

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Beatriz F C Patricio, Laboratório de Física Biológica, IBCCF, CCS, UFRJ, Brazil

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Maria J Ramalho, Laboratory for Process Engineering, Environment, Biotechnology and Energy, Portugal

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Saad M Ahsan, Centre for Cellular and Molecular Biology (CSIR-CCMB), India

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Borislav Angelov, Academy of Sciences of the Czech Republic, Czech Republic

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Ye Anpei, Peking University, China

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Mauricio S Baptista, Universidade de São Paulo, Brazil

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Debora Baroni, Istituto di Biofisica, Italy

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Harun Basoglu, Bezmialem Vakif University, Turkey

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Andre Bazzone, Nanion Technologies, Germany

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Hannah M Britt, Durham University, UK

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Manuela Leal Da Silva, National Institute of Metrology, Quality and Technology, Brazil

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Chongyun Cheng, Monash University, China

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Luiza Buimagă-Iarinca, National Institute for Research and Development of Isotopic and Molecular Technologies, Romania

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Hans-Joachim Galla, University of Münster, Germany

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Charlotte A Dodson, Imperial College London, UK

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James M B Gordon, Molecular Dimensions Ltd, UK

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Jinpeng He, Chinese Academy of Sciences, China

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Alberto Hidalgo, Complutense University, Spain

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Xiyun Yan, Chinese Academy of Sciences, China

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Christina S Müller, University of Kaiserslautern, Germany

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Raymond S Norton, Monash Institute of Pharmaceutical Sciences, Australia

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Ehmke Pohl, Durham University, UK

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Alin Puia, University of Bucharest, Romania

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Rahila M Rahimova, Université de Montpellier, France

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Izabela A Sadowska-Bartosz, University of Rzeszów, Poland

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Yuhei Tachi, Nagoya University, Japan

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Radu Tamaian, National Institute for R&D for Cryogenic and Isotopic Technologies, Romania

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Radu Tamaian, National Institute for Research and Development for Cryogenic and Isotopic Technologies, Romania

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Małgorzata A Wrońska, National University of Ireland-Galway, Ireland

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Chen Yun-Chu, University of Bath, UK

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Patrycja Zawilska, University of Wrocław, Poland

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Christian Steuwe, KU Leuven, Belgium

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Laurence G Wilson, University of York, UK

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Taishi Kasai, Hosei University, Japan

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Jerko Rosko, University of Edinburgh, UK

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Sophia A Schaffer, Ludwig-Maximilians-Universität Munich, Germany

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Christoph Schreiber, Ludwig-Maximilians-Universität Munich, Germany

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Alfonso Gautieri, ETH Zurich, Italy

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Ana F Guedes, University of Lisbon, Portugal

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Hiro Eto, Max-Planck-Institute of Biochemistry, Martinsried, Germany

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Luciana Stanica, International Centre of Biodynamics, Romania

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Bárbara Abreu, ITQB-NOVA, Portugal

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Michael I Oshtrakh, Ural Federal University, Russia

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Emaan Alsubhe, University of Leeds, UK

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Antonios D Anastasiou, University of Leeds, UK

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Antonella Battisti, CNR – Nanoscience Institute and NEST – Scuola Normale Superiore, Italy

P809:B154 **Biomechanical studies with ultrasound in cell biology**
Valerie Bentivegna, University of Dundee, UK

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Bojan Božič, University of Ljubljana, Slovenia

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Izabeööa Brand, University of Oldenburg, Germany

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Dénes M Lörinczy, University of Pécs, Hungary

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Karol Ciepluch, Forschungszentrum Jülich, Jülich Centre for Neutron Science JCNS, Germany

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Masahito Yamazaki, Shizuoka University, Japan

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Ioan Turcu, National Institute for Research & Development of Isotopic and Molecular Technologies, Romania

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Robert Vácha, Masaryk University, Czech Republic

P1033:B358 Elementary processes of antimicrobial peptide magainin 2-induced pore formation and its mechanism
Masahito Yamazaki, Shizuoka University, Japan

P1034:B359 Translocation of cell penetrating peptides and calcium-induced membrane fusion share same mechanism
Aniket Magarkar, Institute of Organic Chemistry and Biochemistry, Prague, Czech Republic

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Nermina Malanovic, University of Graz, Austria

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Anne Martel, The Institut Laue Langevin, France

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Katia R Perez, Universidade Federal de São Paulo, Brazil

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Christian Nehls, Research Center Borstel, Division of Biophysics, Germany

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Nicolo Paracini, Newcastle University, UK

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Laura Paulowski, Research Center Borstel, Division of Biophysics, Germany

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Luca Piantanida, Durham University, UK

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Tomáš Kubař, Karlsruhe Institute of Technology, Germany

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Sivaramakrishnan Ramadurai, Dublin City University, Ireland

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Sabrina Riedl, University of Graz, Austria

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Sophie E Roberts, University of Leeds, UK

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Nuria Roldan, University of Madrid, Spain

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Filippo Savini, University of Rome Tor Vergata, Italy

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Christian Schwieger, Martin Luther University Halle-Wittenberg, Germany

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Patricia M Silva, University of Lisbon, Portugal

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Sophie Lecomte, CBMN, allée Geffroy St Hilaire, France

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Thomas Gutsmann, Deutsches Elektronen-Synchrotron, Germany

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Remigiusz Worch, Polish Academy of Sciences, Poland

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Aritra Chowdhury, European Molecular Biology Laboratory, Germany

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Myoung Kyu Park, Sungkyunkwan University School of Medicine, South Korea

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