

# Poster Session 1

10:45 - 11:15 & 12:25 - 13:30

**P1. A multi-target approach for hormone-dependent breast cancer: estrogen receptors and aromatase**

Almeida, C., Oliveira, A., Amaral C., Ramos, M. J., Correia-da-Silva, G., Teixeira, N. and Fernandes, P. A.

**P2. Understanding Structural and Dynamic Differences of GHSRGq and GHSR-Arr Complexes**

Barreto, C., Melo, R., Magalhães, P. R., Renault, P., Machuqueiro, M., Moreira, I. S.

**P3. The influence of conformational diversity on enzyme catalysis**

Calixto, A. R., Ramos, M. J. and Fernandes, P. A.

**P4. Coarse grain-molecular dynamics simulations of cyclic peptide nanotubes on biological membranes for different negative charge content**

Calvelo, M., Claro, B., Bastos, M., Garcia-Fandiño, R.

**P5. From All Atoms to Coarse Grain: Simulating the Molecular Imprinting Process of a Silica Polymer**

Concu, R., Cordeiro, M. N.

**P6. Estimation of solvation free energies by continuum methods: How to tackle halogenated species?**

Nunes, R. and Costa, P. J.

**P7. The pH-dependent membrane stability and insertion mechanism of GALA peptide**

Dias, J. R., Silva, T., Machuqueiro, M.

**P8. Is the 5,10-methylenetetrahydrofolate cofactor through a non-enzymatic or enzymatic mechanism?**

Fernandes, H. S., Sousa, S. F., and Cerqueira, N. M. F. S. A.

**P9. Text Mining for Recognition of Cancer Biomarkers**

Gaspar, A. C., Pires, M. N., Preto, A. J., Moreira, I. S.

**P10. The importance of unstructured termini in the aggregation cascade of beta-2-microglobulin: insights from molecular simulations of D76N mutant**

Loureiro, R.J.S., Vila-Viçosa, D., Machuqueiro, M., Shakhnovich, E.I., Faísca, P.F.N.

**P11. Influence of codon 35 amino acid insertion in HIV-1 protease: insights from molecular dynamics**

Luís, J. P., Mata, A. I., Alves, N. G., Simões, C. J. V., Pereira-Vaz, J., Vaz, D.C., Duque, V. and Brito, R. M. M.

**P12. pH effects on PG/PC and PS/PC lipid binary mixtures: a CpHMD study**

Magalhães, P. R., Vila-Viçosa, D., Silva, T., Machuqueiro, M.

**P13. Creation of a Structural Database for Inhibition of BioFilm Formation**

Magalhães, R. P., Vieira, T. F., Fernandes, H. S., Cerqueira, N. M. F. S. A., Melo,A., Simões, M., Sousa, S. F.

**P14. MENSAdb: A Major Structural Statistical Analysis of Membrane Protein Dimers**

Matos-Filipe, P., Preto, A. J., Almeida, A. J., Koukos, P. I., Bonvin, A. M. J. J., Moreira, I. S.

**P15. Dynamical Rearrangement of Human Epidermal Growth Factor Receptor 2 upon Antibody Binding: Effects on the Dimerization**

Melo R., Almeida J. G., Melo A., Cordeiro M. N. D. S., Gumus, Z. H., Cabo-Verde S., Moreira I. S., Correia J. D. G.

**P16. Drug-Target Interaction Prediction: End-to-End Deep Learning Approach**

Monteiro, N.R.C, Arrais J.P., Ribeiro B.

**P17. In silico design of halogenated carbohydrate mimetics as potential halogen-bonding ligands**

Nunes, R., Xavier, N. M., and Costa, P. J.

**P18. New phosphorylated amino acid parametrization to correctly reproduce their acid/base equilibria, including in protein binding events**

Oliveira, N. F. B. M., Pires, I. D. S., Machuqueiro, M.

# Poster Session 2

13:30 - 14:30 & 15:50 - 16:30

**P19. Exploring the Catalytic Mechanism of the Malonyl-Acetyl Transferase Domain of Human Fatty Acid Synthase**

Paiva, P., Sousa, S.F., Ramos, M.J., Fernandes, P.A.

**P20. Comparing Molecular Dynamics Force Fields in Bacteria Membrane Models**

Peón, A., Claro, B., Bastos, M., Piñeiro, Á., García-Fandiño, R.

**P21. Application of QM/MM Methods in the Study of PNPOx**

Pina, A., Sousa, S. F., Cerqueira, N. M. F. S. A.

**P22. Machine Learning to Predict Binding Affinity of Ligand-Target Interactions**

Pinho, X., Preto, A. J., Moreira, I. S.

**P23. Unravelling the molecular details of the pH-dependent gating mechanism in the outer membrane protein G**

Pires, I. D. S. and Machuqueiro, M.

**P24. Estimating pKa shifts of encapsulated drugs through a CpHMD approach**

Reis, D., Machuqueiro, M., Vila-Viçosa, D.

**P25. Implementation of a biocomputing platform to settle a new drug discovery pipeline towards post-synaptic receptors**

Ribeiro R., Giorgetti A.

**P26. A Survey of Enzyme Chemistry using the Mechanism and Catalytic Site Atlas**

Ribeiro, A. J. M., Tyzack, J. D., Borkakoti, N., Thornton, J. M.

**P27. Combined experimental and computational studies devoted to the synthesis of 1,4-lactones**

Rocha, J. F., Freitas, D. S. , Noro, J., Teixeira, C. S. S., Sousa, C. E., Sousa, S. F., Alves, M. J., Cerqueira, N. M. F. S. A.

**P28. Metabolic Engineering of Cyanobacteria for Bisabolene Production**

Rodrigues, J., Dienst, D., Lindberg, P.

**P29. A Molecular Dynamics Insight to Non-Structural Protein 1 (NS1) – A Hub Protein Essential for Influenza Infection**

Rosário-Ferreira, N., Melo, R., Moreira, I. S., Brito, R. M. M.

**P30. The HIV-2 envelope glycoprotein as a differentiated target in structure-function relationships to structural elucidation and characterization**

Serra, P., Martins A., Taveira, N., Guedes, R.C.

**P31. Carbohydrate-aromatic interactions mimetics: the role of C-Br...pi bonds**

Šivickytė, O., Nunes, R., and Costa, P. J.

**P32. Experimental and Computational Studies Addressed to 1,3Dipolar Cycloadditions of D-Erythroose 1,3-Dioxane 1,5-Lactone with Regio- and Stereo-selectivity**

Sousa, C. E. A., Ribeiro, A. M. P., Fortes, A. G., Cerqueira, N. M. F. S. A., and Alves, M. J.

**P33. Single vs Multi Conformational QM/MM approach for enzymatic catalysis: The case of study of the HBPS desulfinase from the 4S pathway**

Sousa J. P. M., Sousa S. F., Ramos M. J., Fernandes P. A.

**P34. Unraveling the Catalytic Mechanism of Tryptophan Synthase, a Drug Target Against Mycobacterium Tuberculosis**

Teixeira, C. S. S., Sousa, S. F., Cerqueira, N. M. F. S. A.

**P35. Initial studies on the sensibility of Aquaporin-4 to membrane PAINS**

Luz, A.F.S., Victor, B.L.

**P36. Evaluation of Different Scoring Functions for Docking and Virtual Screening against GPCR Drug Targets**

Vieira, T. F., Magalhães, R. P., Cerqueira, N. M. F. S. A., Sousa, S. F.

**P37. Folding of cyclic peptides stabilized by halogen bonds**

Vila-Viçosa, D., Nunes, R., Costa, P. J.