Poster

Protein-Ligand Interactions with the Dianthus Screening Platform

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In 2023 the Dianthus screening platform was delivered to the joint laboratories of the Biophysical Sciences Institute at Durham University. So far, a number of projects ranging from protein-protein interactions to ligand discovery and optimization have benefitted from this new technology. Here, examples and experiences from our drug discovery campaigns focusing on neglected tropical diseases[1], cancer, and neurodegenerative diseases[2] will be presented. Results will be discussed considering new crystal structures.

[2] Sowerby, K., Freitag-Pohl, S., Murilla, A.M., Silber, A.M., Pohl, E. (2023) "Cysteine synthase: Multiple structures of a key enzyme in cysteine synthesis and a potential drug target for Chagas disease and Leishmaniasis" *Acta Cryst* D79 518-530.

[3] Chisholm, D.R., Tomlinson, C.W.E., Zhou, G.-Z., Manning, R., Holden, C., Affleck, V., Lamb, R., Newling, K., Ahston, P., Valentine, R., Redfern, C., Erostyak, J., Makkai, G., Ambler, C., Whiting, A., Pohl E. "New fluorescent retinoic acid analogues as unique tools for understanding retinoid biology" (2019) *ACS Chem Biol* 14, 369-377