



EUROPEAN UNION

Seminar Speaker Series

in the framework of Interreg V-A project CAPSID

presents

Prof. Olwyn Byron

University of Glasgow, UK

**The role of AUC and SAXS:
Understanding the structural basis for
bacterial virulence factor function**

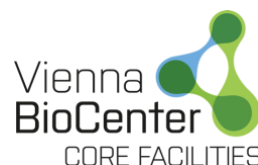
21. 01. 2021 at 14:00

Online virtual talk via Zoom

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Organized by:





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RESEARCH INTERESTS

We specialise in understanding the solution behaviour of biological macromolecules and their complexes. We do this by utilising a number of biophysical techniques to determine the solution shape of molecules and the strength, stoichiometry and architecture of the complexes they form. We collaborate widely and offer expertise in the application of our core methodologies including:

- Analytical ultracentrifugation (AUC)
- Small angle X-ray scattering (SAXS)
- Small angle neutron scattering (SANS)
- Hydrodynamic bead modelling (HBM)

REFERENCE

Kim, G., Yang, J., Jang, J., Choi, J.-S., Roe, A. J. , Byron, O. , Seok, C. and Song, J.-J. (2020) Aldehyde-alcohol dehydrogenase undergoes structural transition to form extended spiroosomes for substrate channeling. *Communications Biology*, 3, 298.

Kim, G., Azmi, L., Jang, S., Jung, T., Hebert, H., Roe, A. J. , Byron, O. and Song, J.-J. (2019) Aldehyde-alcohol dehydrogenase forms a high-order spiroosome architecture critical for its activity. *Nature Communications*, 10, 4527.

Conley, M. J. , McElwee, M., Azmi, L., Gabrielsen, M., Byron, O. , Goodfellow, I. G. and Bhella, D. (2019) Calicivirus VP2 forms a portal-like assembly following receptor engagement. *Nature*, 565(7739), pp. 377-381.

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