

Café Scientifique Headingley

Monday 22nd February 2021 at 7:30pm

**Will red wine and chocolate really keep you healthy?
The science behind the search for anti-ageing medicines**

by

Lizzy Ostler



Outline: There is growing evidence that many of the processes of ageing, such as heart disease, dementia and arthritis, could be prevented or remediated by simple chemical compounds. Over the last five years, researchers have shown that the removal or alteration of the behaviour of senescent cells has the potential to reduce multiple age-related pathologies. The development of orally-available broad-spectrum anti-degenerative medicines based on targeting senescent cells is now a realistic goal.

A wide variety of natural products, often isolated from “super-foods” including grapes and cocoa beans, have long been identified as potential lead compounds for such anti-ageing therapeutics. However, many such compounds have multiple biological activities, and may be poorly absorbed. We designed and synthesised a library of variants of Resveratrol and have been using this panel of Resveralogues to find out how they really work, and whether they can be turned into real life anti-ageing therapies.

A subset of our compounds is able to “rejuvenate” cultures of senescent cells. The implications of our findings for the design of future anti-degeneratives will be presented.

Lizzy Ostler is Head of Chemistry in the School of Pharmacy and Biomolecular Sciences, University of Brighton. She took both her BSc in Chemistry and PhD in heterocyclic synthesis at Bristol University, before moving to Brighton to work on Catalytic Antibodies. There she was appointed lecturer in analytical chemistry and began to work closely with the ageing group. The application of analytical and synthetic chemistry tools to solve the problems of human ageing has been the focus of her research over the last 15 years, culminating in the award of a Professorial chair in 2018.

Venue: By ZOOM



Link: Join Zoom Meeting

<https://zoom.us/j/99295368270?pwd=ZXlwd252VnB3RmNNdnN0NWhyVm9TUT09>

Meeting ID: 992 9536 8270

Passcode: 294173