

## Lichfield Science & Engineering Society



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Professor Carolyn Roberts FRGS, FIEnvSc, FCIWEM, CEnv, CWEM

8:00 pm on Tuesday, 13th April 2021 A virtual lecture via Zoom

## THE INSIDE OUT OF FLIES

Dr. Erica McAlister Natural History Museum



Flies (Diptera) have long been reviled or ignored by the public, conservation bodies and many students except for those involved with the model organism *Drosophila* or those looking at disease vectors. They receive more negative press that any other species but is this fair? Flies have evolved to become one of the most diverse mega-orders on the

planet and along the way have undergone some extraordinary morphological changes, many of which and how and why they have done so we are yet to understand. In this talk Erica will introduce the form and function of flies and some of the ways these magnificent creatures are helping us, including some interesting bio-inspired technology.

Dr Erica McAlister is Senior Curator of Flies and Fleas at the Natural History, London and has been working with the fly collection there for over 15 years. As well as curating the collection she has been working on the taxonomy and ecology of this Order, as well as helping with the development of novel DNA extraction methods to resolve species identifications. Very much involved with outreach and science communication, Erica has published two popular Science books on Flies (The Secret Life of Flies and The Inside Out of Flies) and appears on TV and radio discussing flies and other insects, as well as presenting two Radio 4 series on Insects and what they can teach us. (Who's the Pest and Metamorphosis.)