

Talk #140, 1/17/24

140th meeting of the Lyncean Group of San Diego

Date: Wednesday, 17 January 2024

Location: Southwestern Yacht Club
2702 Qualtrough Street, San Diego, CA 92106 (Point Loma)

Speaker: Dr. Andrea (Andie) Smidler, Postdoctoral scholar,
University of California San Diego (UCSD) School of Biological
Sciences



Source: UCSD

Topic: Using CRISPR genome engineering to study mosquito biology and combat malaria

Speaker Bio: My life's work has been dedicated to developing new tools to control mosquitoes that are vectors of disease. For over a decade, my work has been focused on developing genetic vector control technologies in the African malaria mosquito *Anopheles gambiae*, to control this deadly mosquito through the precision of genetic engineering. During my time at the University of California San Diego, I have developed two new genetic vector control technologies: pgSIT and Ifegenia. These eco-friendly, chemical-free, and species-specific technologies, offer much promise as they could

help us move one step closer to lessening our reliance on insecticides. Targeting the mosquito has been shown to be the best way to control malaria spread, however insecticide resistance is emerging at an alarming rate, making developing next-generation vector control tools of the utmost importance.

Check out more details on the technology for tackling vector-borne diseases at the source on the Outreach Network for Gene Drive Research website [here](#).



Speaker, Dr. Andie Smidler & Lyncean Group MC, Bill Hagan





Dr. Smidler's slide presentation is available for download here: https://lynceans.org/wp-content/uploads/2024/01/LynceanGroup_ASmidler_Jan1923.pdf

Speaker Appreciation

(and a request)



Yellow-Bellied Blue-Striped Sneetch
from the garage drawings of William Hagan II (1991)

Bill Hagan's meeting slides are available for download here:
<https://lynceans.org/wp-content/uploads/2024/01/Hagan-Meeting-Slides-1-17-24-draft.pdf>