

POSTER INFO FORM

Event: 2024 Beckman Symposium

Irvine

Boston

Poster Title:

Presenter Name (First and Last): Olivia Fernflores

Program/Year (select one):

2020 BYI

2021 BYI

2022 BYI

2023 BYI

2024 BYI (optional)

2021 AOB Postdoc

2022 AOB Postdoc

2023 AOB Postdoc

2023-2024 BSP

Discipline Category (select one):

BYI – Bio

BYI – Chem

AOB Postdoc – Chem

BSP – Bio

BSP – Chem

Subdiscipline: Genetics

Institution: University of Arizona

Department (if applicable): Molecular and Cellular Biology

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Poster Abstract (max. 175 words):

Title: Inferring Distributions of Fitness Effects of Wild House Mice from Allele Frequency Spectra

Authors: Oliva Fernflores, David Castellano, Emanuel Fonseca, Travis J Struck, Ryan N Gutenkunst

Abstract: The distribution of fitness effects (DFE) of new mutations is a key input into the evolutionary process. We aim to infer the DFE among multiple populations of wild house mice, so that the extensive knowledge of mouse molecular biology can be leveraged to understand the biological basis of the DFE. Here we present distributions of fitness effects for pairs of populations from Iran and France, France and Germany, and Germany and Heligoland. We find that for all population pairs, the best DFEs are those that infer a high correlation between mutational fitness effects in the two populations.

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[PRESENTERlastname]_[PRESENTERfirstname]_Poster Info Form.docx