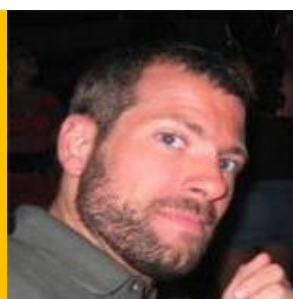


# **“Using Big Data and Machine Learning to Develop a Tool for Determining the Postmortem Interval”**

Skin microbiome of decomposing human cadavers data was used in a machine learning approach to develop a predictive statistical model for estimating the postmortem interval of a sample taken from a body of unknown postmortem age. Our regression model successfully predicts the postmortem interval to within 55 degree-days, or two days in summertime, over several weeks of decomposition. This is a marked improvement over existing methods and warrants a larger-scale study.



**Nathan H. Lents, PhD**



Professor of Molecular Biology , Genetics,  
Forensic Biology, Forensic DNA, Forensic  
Toxicology

Director of the Honors John Jay College of  
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York (CUNY)

**Entrada Livre**

**Dia 11 Abril | 11H**  
**Auditório 1**

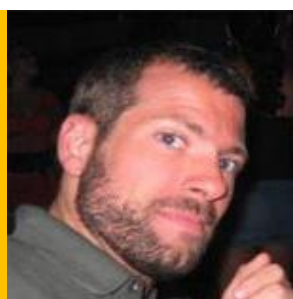
Com o apoio:



FORENSIC  
TALKS

## “The Biological Foundations of Justice”

Studies of animal behavior have revealed that animals approach issues of fairness, rules, and punishments in ways that are strikingly similar to humans. With this knowledge, there are powerful lessons we can learn from animals regarding the pursuit of justice. From restorative justice, to prisoner reentry, to community policing, our animal cousins and our own evolutionary history can light our way.



**Nathan H. Lents, PhD**



Professor of Molecular Biology  
at John Jay College of Criminal Justice,  
The City University of New York

**Entrada Livre**

**Dia 13 Abril | 11H**  
**Auditório 1**

Com o apoio:

