## SCIENCE HALL SEMINARS



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## From Wolves to Breeds: A Genomic Journey through Dog Domestication

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Abstract: Dogs were the first species domesticated by humans, a process that began over 10,000 years ago during the Paleolithic. These early dogs were markedly different from the modern breeds we recognize today, which largely emerged through selective breeding practices in the Victorian era. In this talk, I will explore how ancient and historical DNA has deepened our understanding of dog domestication. First, I will discuss how genomic data from prehistoric dog remains provide critical insights into when, where, and how dogs diverged from gray wolves. Then, I will examine how DNA from more recent historical samples reveals the emergence of distinct lineages that eventually gave rise to today's breed diversity. Together, these findings illustrate the complex evolutionary journey of dogs and highlight the power of ancient DNA in reconstructing the origins and development of one of humanity's closest companions.

Wednesday, November 12th | 2:00pm-3:15pm | Science Hall 126 & Zoom For more information, visit our website: go.rowan.edu/sciencehallseminars