

The UDN is a research study funded by the National Institutes of Health Common Fund. The objectives of the UDN are to: **(1)** improve the level of diagnosis and care for patients with undiagnosed diseases; **(2)** facilitate research into the etiology of undiagnosed diseases; **(3)** create an integrated and collaborative research community to identify improved options for optimal patient management.

TALKS

Wed Oct 17, 9:30AM // Concurrent Platform Session A, 12. Bone and Muscle: Identifying Causal Genes

31 Ronit Marom, Baylor College of Medicine

COPB2 loss of function leads to disrupted collagen trafficking and juvenile osteoporosis

Wed Oct 17, 6:00PM // Concurrent Platform Session C, 34. Reanalysis of Sequencing Data to Increase Diagnostic Yield

99 Christopher Lau, NHGRI

Assessing variants in genes of unknown significance: the quest for novel gene discoveries at the NIH Undiagnosed Diseases Program

Fri Oct 19, 9:00AM // Concurrent Platform Session F, 69. Using RNA-seq to Improve DNA Sequence Interpretation

255 Shan Chen, Baylor College of Medicine

Rare disease diagnosis by integrating RNA sequencing in the Undiagnosed Diseases Network

Fri Oct 19, 5:40PM // Featured Plenary Abstract Session II

277 Lindsay Burrage, Baylor College of Medicine

Biallelic variants in *TONSL* cause SPONASTRIME dysplasia and an expanded spectrum of skeletal dysplasia phenotype

POSTERS

Wed Oct 17, 2:00-3:00PM

1383 Hane Lee, UCLA

Identifying splice alterations using RNAseq to improve genetic diagnosis for rare Mendelian disorders

1797 Diane Zastrow, Stanford University

Beyond the exome report: approaches to additional analysis for undiagnosed genetic disease

3003* Xia Wang, Baylor College of Medicine

De novo missense variants in *TRAF7* cause developmental delay, congenital anomalies, and dysmorphic features

3093* John Phillips III, Vanderbilt University

Familial autonomic ganglionopathy and neurogenic orthostatic hypotension associated with rare *CHRNA3* variants

Wed Oct 17, 3:00-4:00PM

1194 Devon Bonner, Stanford University

Dilated cardiomyopathy: a novel finding in a patient with *ADSSL1*-related myopathy

Thu Oct 18, 2:00-3:00PM

1207 Jennefer Kohler, Stanford University

Non-coding variants in *MECR*: case report and molecular phenotype

3055 David Murdock, Baylor College of Medicine

Comparative quality of whole exome sequencing among commercial laboratories for patients in the Undiagnosed Diseases Network

Fri Oct 19, 2:00-3:00PM

1535 Nick Balanda, NHGRI

Transcriptome analysis by RNA-sequencing as an adjunct to whole genome analysis in undiagnosed genetic disease

Fri Oct 19, 3:00-4:00PM

1112 Liliana Fernandez, Stanford University

A new case of an intermediate phenotype along the spectrum of *ATP1A3*-related neurological disorders

1412 Blythe Hospelhorn, NHGRI

Construction of a structural variant detection pipeline for the Undiagnosed Diseases Program

1580* Shruti Marwaha, Stanford University

Comparison of indel callers and metrics to evaluate performance of new tools

1682 Daron Ross, NHGRI

Undiagnosed Diseases Program Database (UDPdb) of genomic data: development and utility

2894 Jeremy Woods, UCLA

Characterization of recessive myopathy and ataxia syndrome due to *MSTO1* variants

* Reviewer's Choice Abstract