

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.

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## 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

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## 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*