

Yale CANCER  
CENTER

A Comprehensive Cancer Center Designated  
by the National Cancer Institute

# Center of Molecular and Cellular Oncology Seminar

**Thursday, April 6, 2023**

Lecture Hall 157 (1<sup>st</sup> floor) at 300 George St

1:00PM

**Join Online:**

<https://yale.zoom.us/j/98606750547?pwd=bFhqQVptZDVQemlMR3ZjTlNKVXIYdZ09&from=addon>

**Meeting ID:** 986 0675 0547

**Meeting Passcode:** 585644

*“Aberrantly spliced surface proteoforms with new roles in immunotherapy”*



***Andrei Thomas-Tikhonenko, Ph.D.***

*Professor of Pathology & Laboratory Medicine and Pediatrics  
Perelman School of Medicine at the University of Pennsylvania*

*Host: Dr Markus Müschen  
Arthur H. and Isabel Bunker Professor of Hematology  
Professor of Immunobiology | HHMI Faculty Scholar  
Director, Center of Molecular and Cellular Oncology*



**Abstract:**

**Our most recent work informed the central hypothesis that non-canonical exon usage plays a dual role in leukemia and other pediatric cancers. On the one hand, it provides cancers with intrinsic mechanisms of epitope loss, which can render targeted immunotherapy ineffective. On the other hand, alternative splicing could be a source of cancer-specific epitopes and as such could aid immunotherapy. By simultaneously exploring the effects of alternative splicing on antigen loss and neo-epitope gain, we aspire to lay ground for the development of new immunotherapeutics that would target pediatric cancers with the specificity current modalities do not possess.**