

# CENTER FOR THE MULTIPLEX ASSESSMENT OF PHENOTYPE NEWSLETTER

Spring | May 15, 2020

<https://www.cmap.gs.washington.edu>



## WELCOME

The Center for the Multiplexed Assessment of Phenotype, (CMAP) is a Center of Excellence in Genome Sciences, supported by the National Human Genome Research Institute. Our goal is to develop technologies to assess the functional impact of variants in human genes. Linking phenotype to genotype is one of the most pressing problems in biology and our goal is to facilitate variant interpretation to enable genome-guided precision medicine in clinical decision making. We are based at the University of Washington and at the University of Toronto.



## A NEW NORMAL



Zoom meetings have replaced our in person connections due to the impact of COVID19. Despite these trying times, we are adapting and staying connected virtually.

## SAVE THE DATE

**Annual Retreat:** August 2-4th 2020

**Deep Mutational Scanning Symposium and Workshop:** Spring 2021

**Mutational Scanning Journal Club :** Every Wednesday @ 1:30pm

# RESEARCH NEWS

CMAP members are celebrating recent publications.

- **MaveQuest**: a web resource for planning experimental tests of human variant effects. Kuang et al *Bioinformatics* Apr 2020 (Roth lab)
- **Dimensionality reduction by UMAP** to visualize physical and genetic interactions. Dorrity, et al. *Nat Commun.* Mar 2020 (Queitsch and Fields labs)
- **Identification of phosphosites** that alter protein thermal stability Ian R. Smith, et al *bioRxiv* Jan 2020 (Villén Lab)
- **An improved platform** for functional assessment of large protein libraries in mammalian cells. Matreyek et al *Nucleic Acids Res.* Jan 2020 (Fowler Lab)



“There is something better than science, and that is science with a moral compass, science that contributes to social equity, science in the service of humanity.”  
~William H Foege

# IN THE SPOTLIGHT

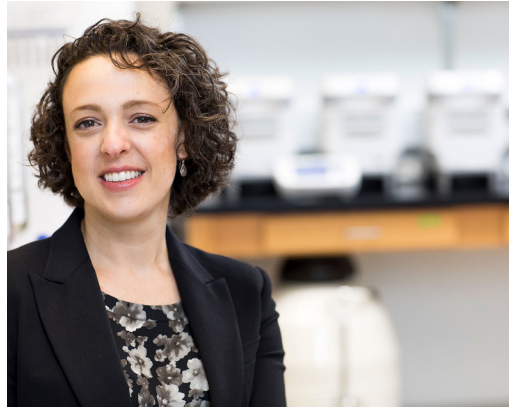


photo credit: Mark Stone/ UW



“Can I use expletives?” @lea\_starita gave a fabulous keynote talk at #TAGC20 on the surveillance of flu and #COVID19 while endearing herself to the entire GSA community with her dark humor! 🤔👉👉👉

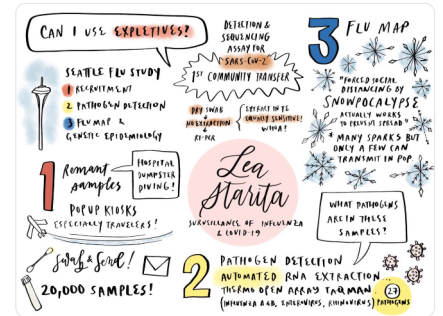


image credit: Vivian Chen (@viviankchen)

COVID19 has impacted our everyday lives and has shifted research priorities. CMAP researcher **Fritz Roth** and his team have made plasmids containing #SARSCoV2 ORFs available to researchers. **Jay Shendure** and **Lea Starita** have responded to the pandemic by focusing their efforts on genotyping the virus and on simplifying testing protocols. Their research has received national attention and manuscripts are already in press including "Preliminary support for a 'dry swab, extraction free' protocol for SARS-CoV-2 testing via RT-qPCR" Sanjay Srivatsan et al *bioRxiv* 22 Apr 2020. Photos above are of Dr. Starita who gave the Keynote talk at TAGC2020 and Twitter science sketch response.

# THESIS DEFENSE - MELISSA CHIASSON



CMAP researcher Melissa Chiasson defended her thesis "Interpreting variation in pharmacogenes using multiplex assays" on April 15th via Zoom. Congratulations Dr. Chiasson!

photo credit: L.Muffley