“AlwaysOpen” ImmGen

The bulk of ImmGen data are generated by ImmGen member labs, using strict SOPs and common data generation pipelines. Each ImmGen lab brings deep knowledge about a given cell lineage and takes on the responsibility for cell preparation and analyses related to that lineage. This mode of operation was useful to ensure coherent datasets, but it missed benefitting from other colleagues’ expertise, experimental models, or different viewpoints. ImmGen has on occasion opened its data generation to community participation, in two “OpenSource” programs (first MonoNuclear Phagocytes, currently immgenT). In the present call, we are asking for proposals from qualified labs who would contribute samples for population RNAseq in any immunologic cell-type of the mouse, if representing useful additions to the ImmGen compendium.

Contexts and variables of interest may include in vivo differentiated states, tissue location, cell activation, immunologic challenges. Most ImmGen data are on the B6/J background; genetic variants may be proposed, not in and of themselves, but if they are needed for a particular disease state or cell-type. ImmGen data generation works best when combining specific interests in a lab with more general goal of building up the compendium.

Ultra-low input RNAseq (ULI) is a quick and efficient method to profile expression levels of mRNAs in finely purified cell-types, and has been one of ImmGen’s workhorses. In practice, the cell purification would be performed in the proposing lab, strictly following ImmGen SOPs and to high purity, samples then shipped to the ImmGen core lab for RNAseq and data processing. The raw and processed data will be sent immediately to contributing labs to use any way they see fit. Per ImmGen policy, results would be posted on the ImmGen databrowsers (Skyline, etc) upon curation and validation (typically pre-publication). Costs of mice and cell sorting born by the lab, RNAseq and data processing supported by ImmGen.

If you would like to participate, please complete this short proposal. There is no formal deadline, but please send us proposals before June 30 2023.