## **Run Description**

This run uses query expansion using external data sources with different weights for different types of expanded terms. The external data sources we employ include Human Disease Ontology and Lexigram API. The HDO has been developed as a standardized human disease ontology, playing the role of providing consistent, reusable, and sustainable descriptions of human disease terms. As HDO is organized hierarchically, we retrieve the parent-class and the sub-class disease concepts. From Lexigram, we extract the entities from the original queries and types of entities. As a result, a query is expanded with potentially alternative disease terms, entity labels, and entity types. Specifically, we assign original query terms with weight 1.0, alternative disease terms 0.7, entity labels 0.4, and entity types 0.1. In practice, we use the Indri Language Model with Dirichlet smoothing with mu=2500.





Per-topic difference from median NDCG@10 for all Round 1 runs



Per-topic difference from median P@5 for all Round 1 runs