For my lung cancer ontology I attempted to model the cancerstaging.org poster criteria as closely as I could, including the addition of a number of AnatomicalStructures (e.g., GreatVessels, Carina, PleuralSpace), Fluids (Pericardial and Pleural), adding VisceralPleura stages (PL1, PL2, and PL3), Effusions (Pericardial and Pleural), and MedicalConditions (including renaming and moving LungCancerDiagnosis under it). I realized as I was making these changes that the LungCancerExamples would not necessarily have all these specific criteria, but I preferred to be explicit and follow the criteria “to the letter” should this ever evolve into a more general-purpose ontology intended to solve real use cases in my research.

I believe I’ve successfully captured staging for all patients except Patient9 – assuming that Patients appearing as a descendent of a given stage in the Inferred Class Hierarchy is acceptable as classification. I believe the ontology failing to classify Patient9 is likely due to the tumor size (3cm to 5cm), but after much experimentation and review of Manchester syntax I was not able to determine why my logic in T2a and Stage1B were not sufficient for classification. Therefore I look forward to working with my team to hopefully build upon this solution.