

Semantic search



Task:

- Find proteins that bind hyaluronan and that are expressed in brain tissue
- What if a document mentions a bit of brain anatomy, but does not explicitly say it is brain tissue?

Approach:

- Annotate documents against ontologies
- Search across full text, annotations and ontologies

Semantic search



- Pseudo query:

{Substance S

(where S binds Hyaluronan and isA Protein)}

root:express

{Anatomy A

(where A is partOf Brain)}

Retrieves:

- “BEHAB is expressed at high levels in ventricular tissue”

- Even though this does not say it is about brain tissue, and does not explicitly say that BEHAB binds hyaluronan

Semantic search: GATE Mimir


