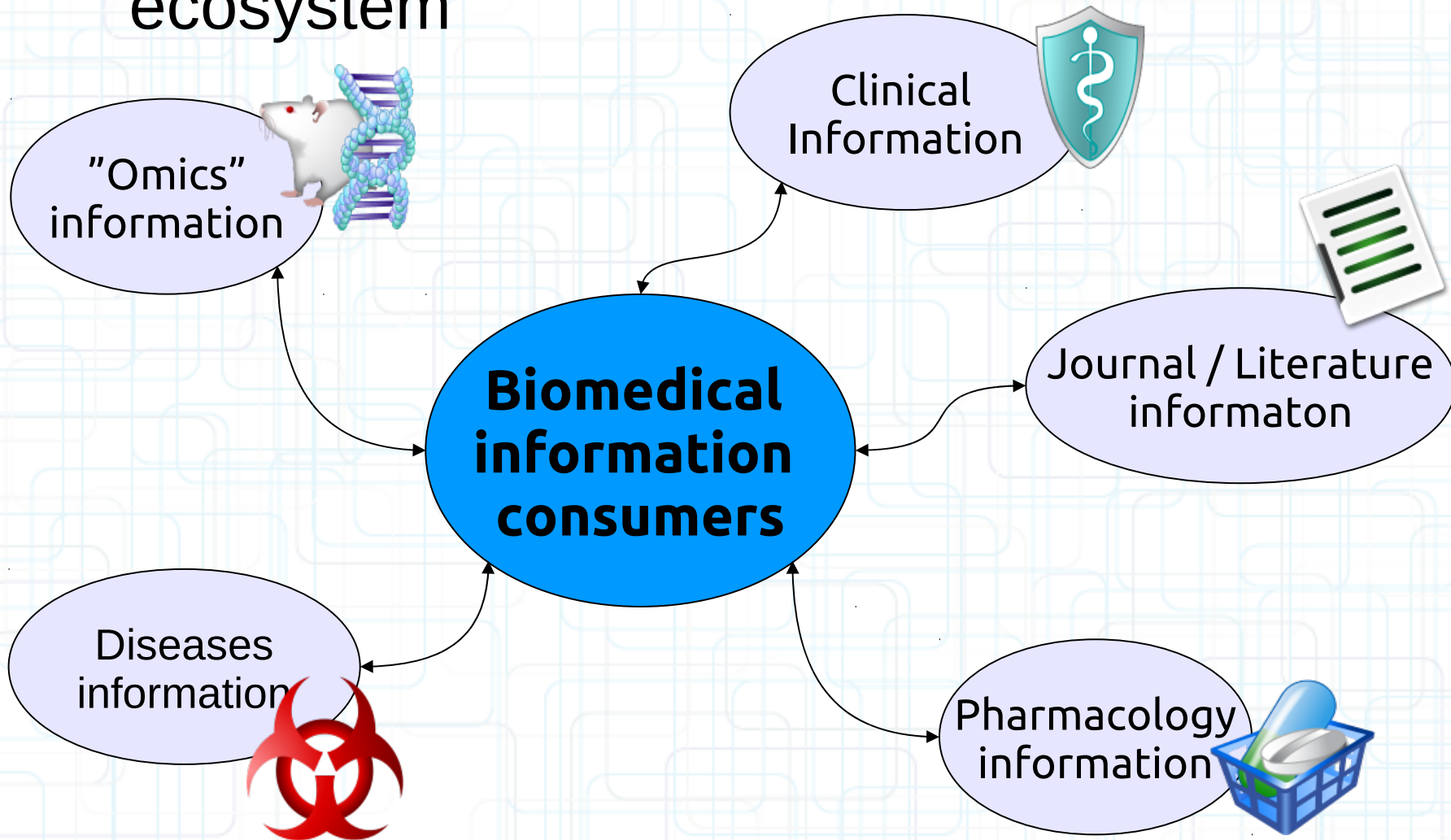


{dismed}

Distributed **S**emantic **MED**iator

Background

- Multiscale biomedical information ecosystem



General goals / requirements

- Goals:
 - Unique query interface for the whole multiscale biomedical ecosystem
 - Automatic integration of biomedical data retrieved from the biomedical ecosystem
- Requirements
 - Semantic query based (ontologies)
 - SPARQL end point repositories

SPARQL semantic based

- Query based on triplets close to natural language.
- General construction:
 - Subject → Predicate → Object
- Example:
 - Person → <name> → "Peter"
 - Protein → <code> → "CFTR"

Use case scenario



BEMM



DISEASOME



DISMED

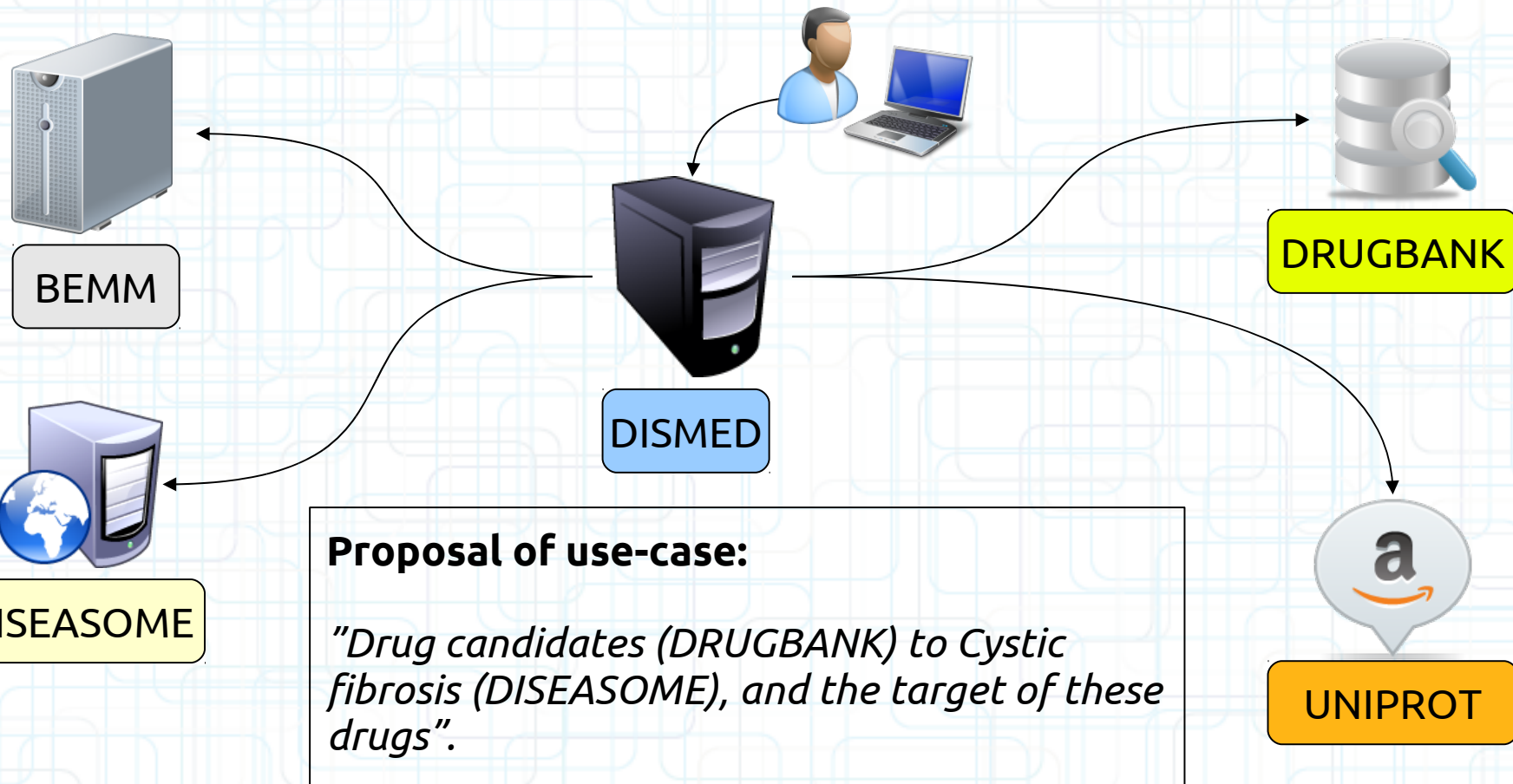
Proposal of use-case:

"Classification of BEMM patient diseases according to categories defined in DISEASOME".

"Disease / Diastolic pressure filtering"

DISMED: Distrubuted Semantic MEDIator
BEMM: Basic Electronic Medical Management
DISEASOME: Diseases & genes

Use case scenario II

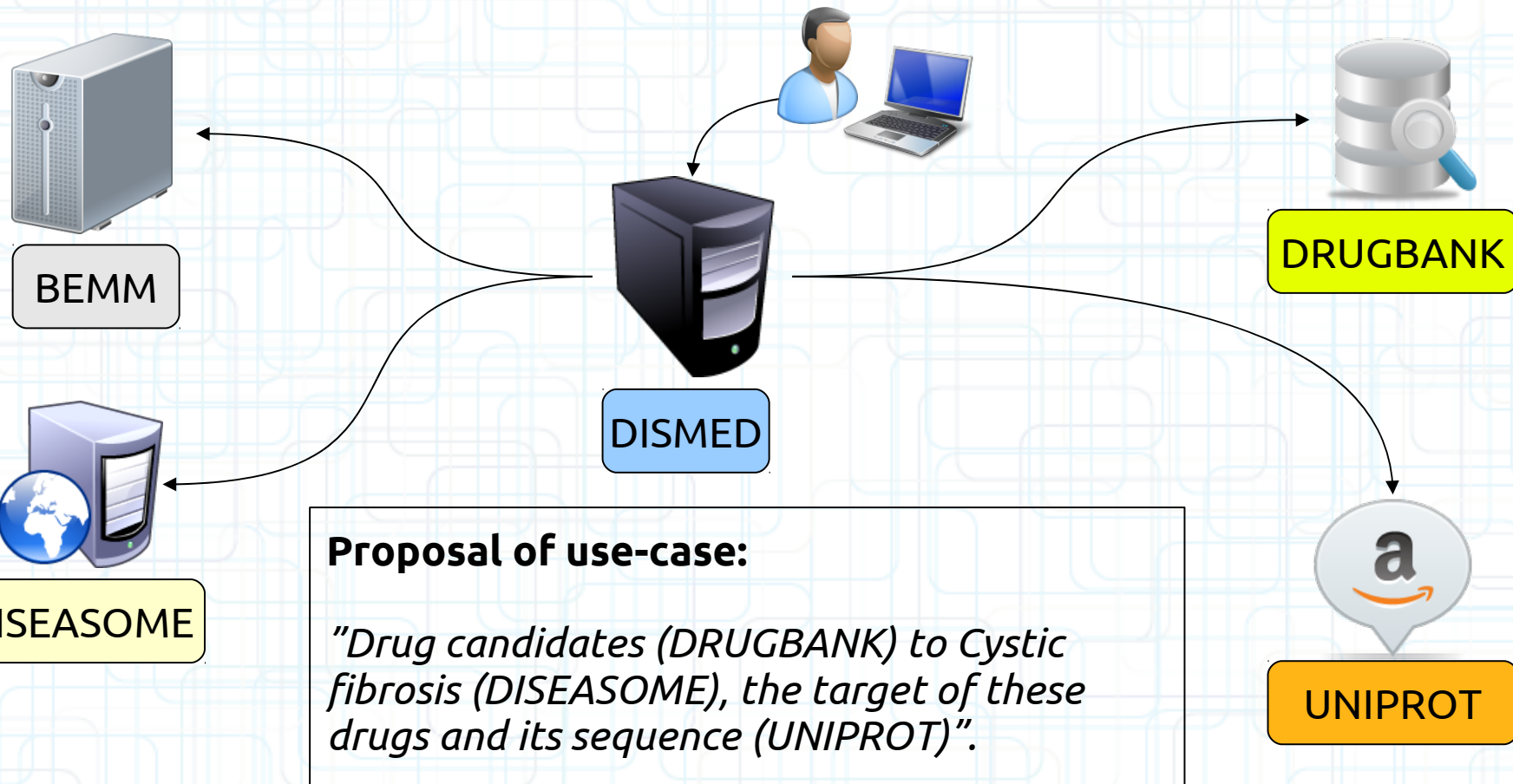


Proposal of use-case:

"Drug candidates (DRUGBANK) to Cystic fibrosis (DISEASOME), and the target of these drugs".

DISMED: Distributed Semantic MEDIator
BEMM: Basic Electronic Medical Management
DISEASOME: Diseases & genes
DRUGBANK: Drugs & diseases & interactions
UNIPROT: Proteomics

Use case scenario III



Proposal of use-case:

"Drug candidates (DRUGBANK) to Cystic fibrosis (DISEASOME), the target of these drugs and its sequence (UNIPROT)".

DISMED: Distributed Semantic MEDIator
BEMM: Basic Electronic Medical Management
DISEASOME: Diseases & genes
DRUGBANK: Drugs & diseases & interactions
UNIPROT: Proteomics