Parameter tuning

Preprocessor
- Extract transporter–related PFAMs
- Extract transporter GO terms
- Build HMM Models for TC families
  - Training on model genomes to generate SVMs

Web interface
- Application server
  - Input sequences

Command line interface

Predictor
- BLAST search
- Scoring on HMM models
- Score integration and decision making
  - Phase 1: Initial classifier
    - Initial predictions
      - Collect evidence and convert into features
        - TMS, KNN, Pfam, GO Terms, Swissprot
      - Classification by ensemble of balanced SVMs
  - Phase 2: Refining classifier

Output predictions