Craniofacial Mouse Ontology & Craniofacial Human-Mouse Mappings Ontology

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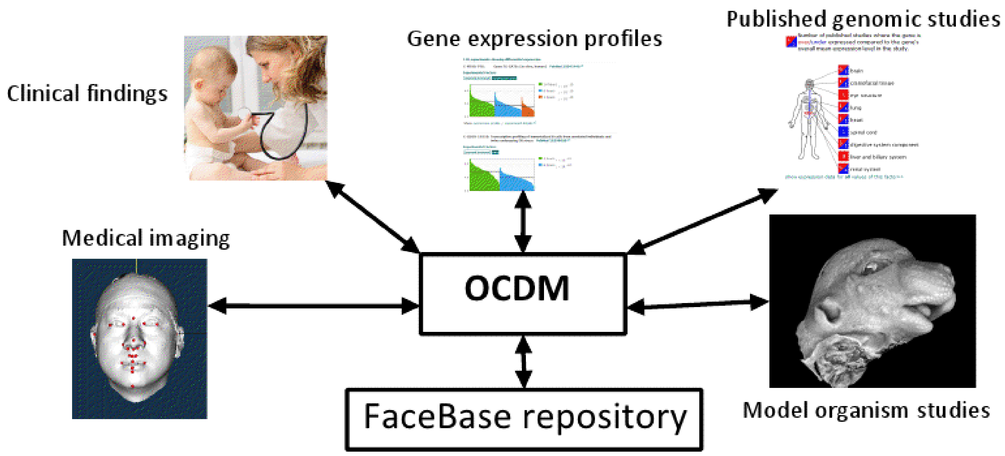
1. Introduction

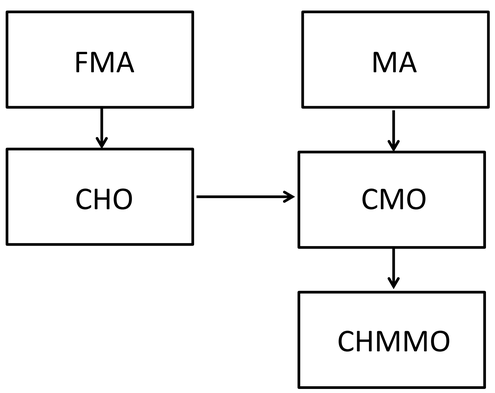
- OCDM: application ontology to serve as unifying framework for integrating multiple forms of data generated by different members of the FaceBase Consortium
- Craniofacial Human Ontology (CHO), the Craniofacial Mouse Ontology (CMO), and the Craniofacial Human to Mouse Mapping Ontology (CHMMO): components of OCDM
- CMO: Craniofacial Mouse Ontology: ontology of mouse craniofacial structures
- CHMMO: Craniofacial Human-Mouse Mapping Ontology: mappings of mouse structures to homologous human structures



2. Data sources

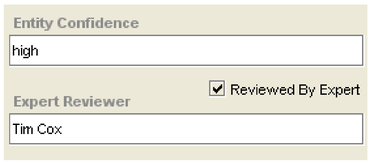
- CHO: Craniofacial Human Ontology subset of Foundational Model of Anatomy
- Mouse Anatomy Dictionary: Jackson Laboratories
- PubMed literature on translational research

3. Methodology



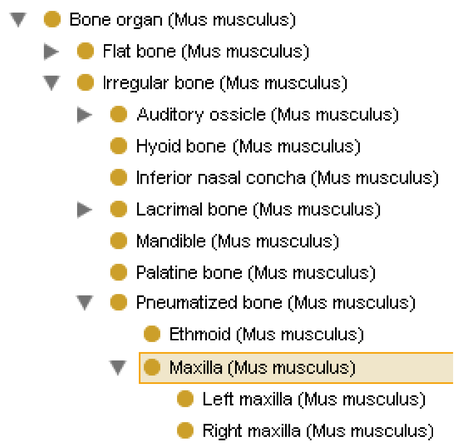
4 Validation

- Programmatically generated anatomical structures and mappings are validated by domain experts
- False positives are removed from the knowledge base, and false negatives fixed by adding needed structures (examples: "snout", "vibrissae")

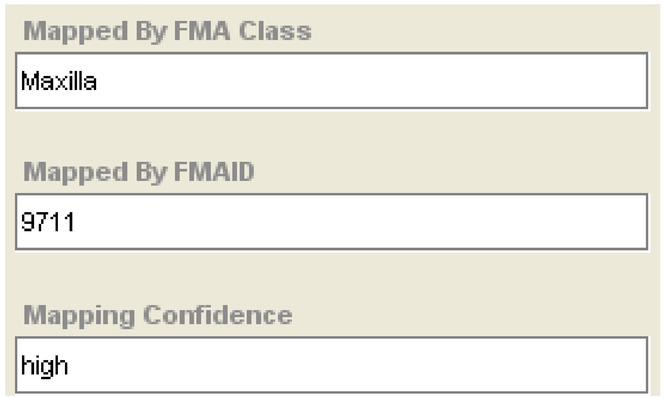


5 Results

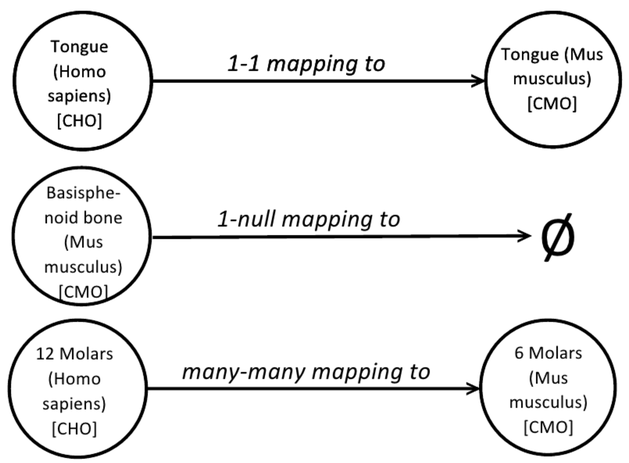
CMO



CHMMO



Mapping types



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