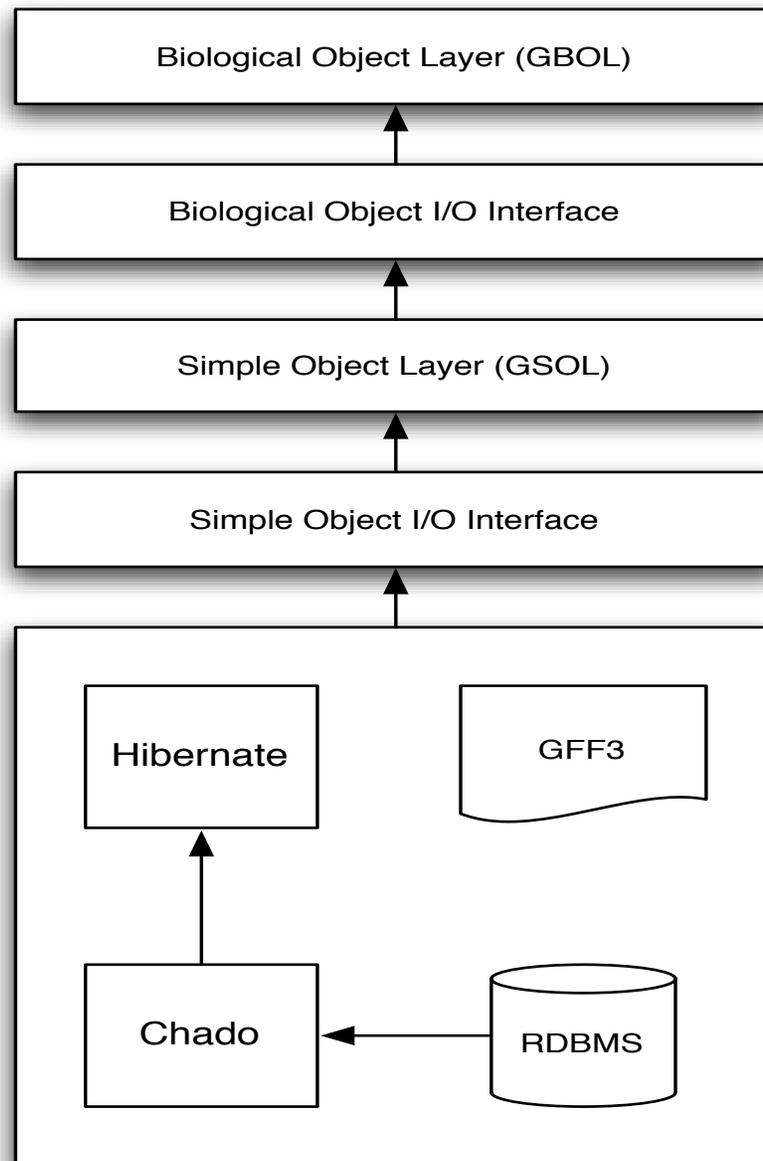


GMOD BIOLOGICAL OBJECT LAYER

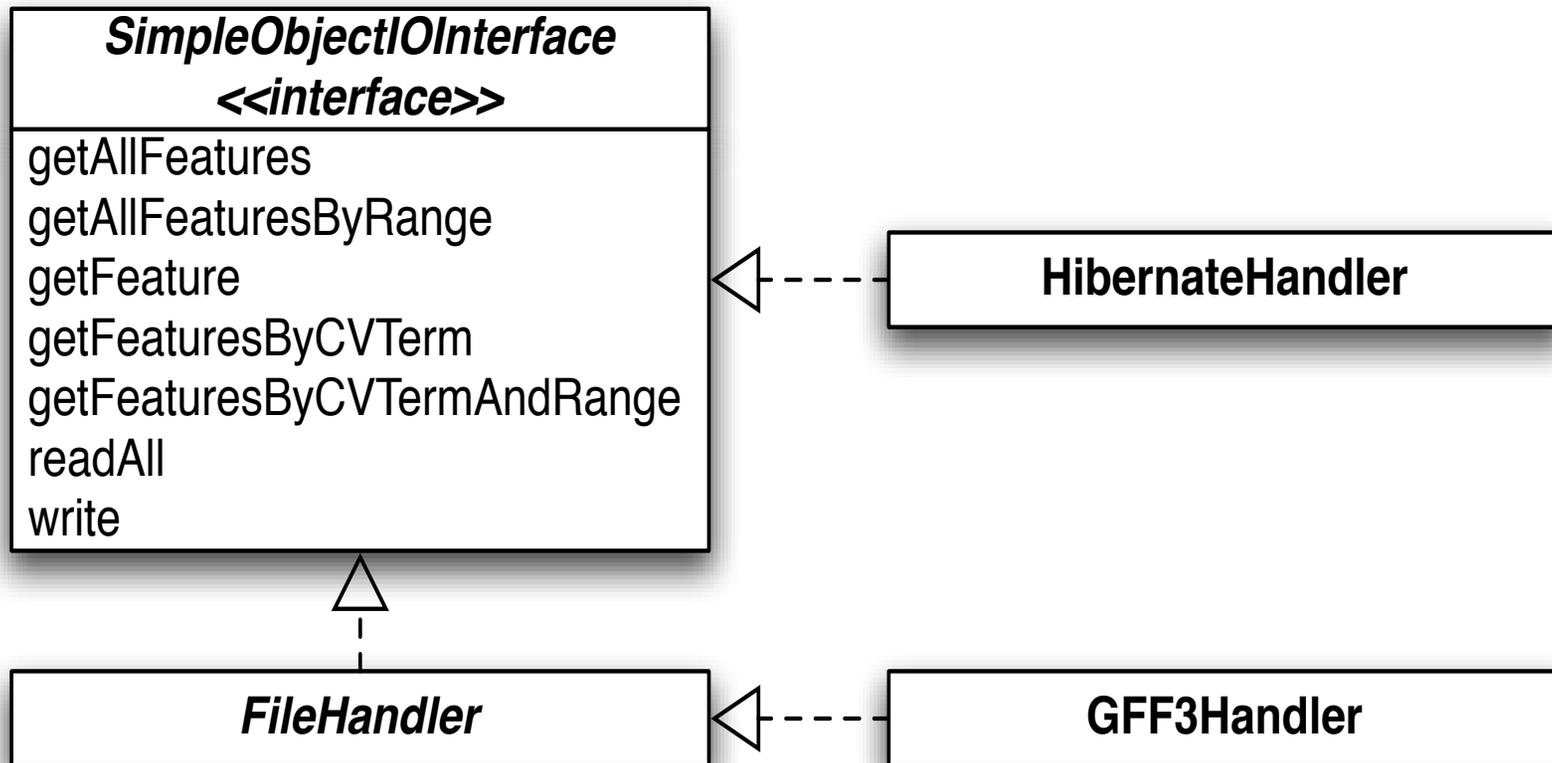
Ed Lee

Lawrence Berkeley National Laboratory

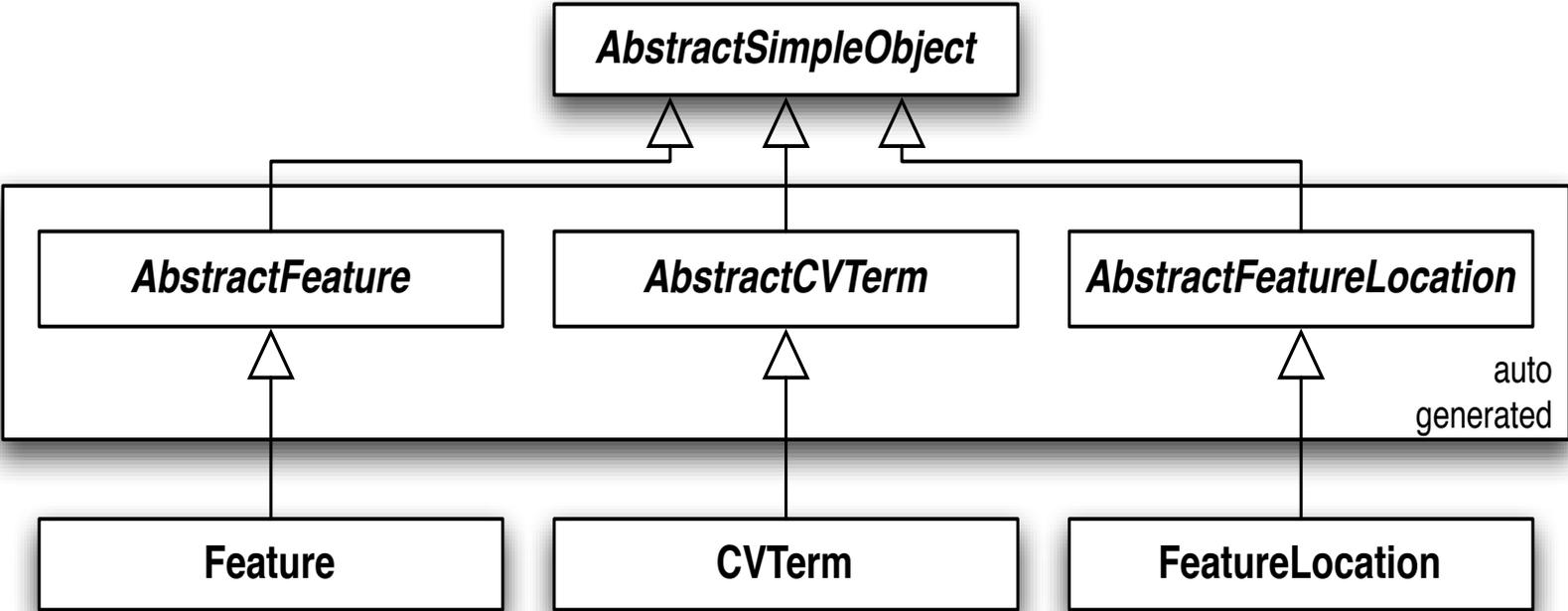
ARCHITECTURE



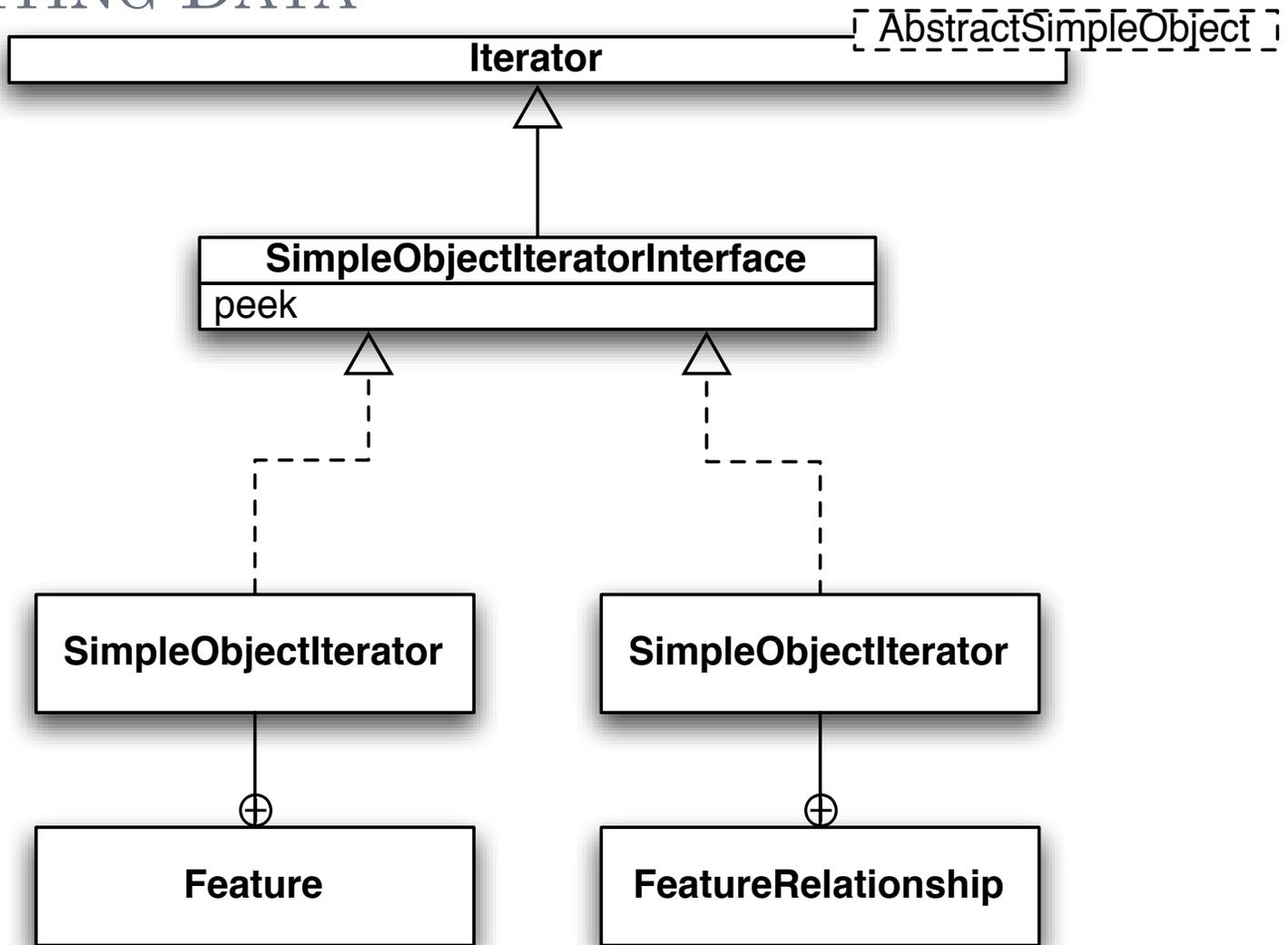
SIMPLE OBJECT I/O LAYER



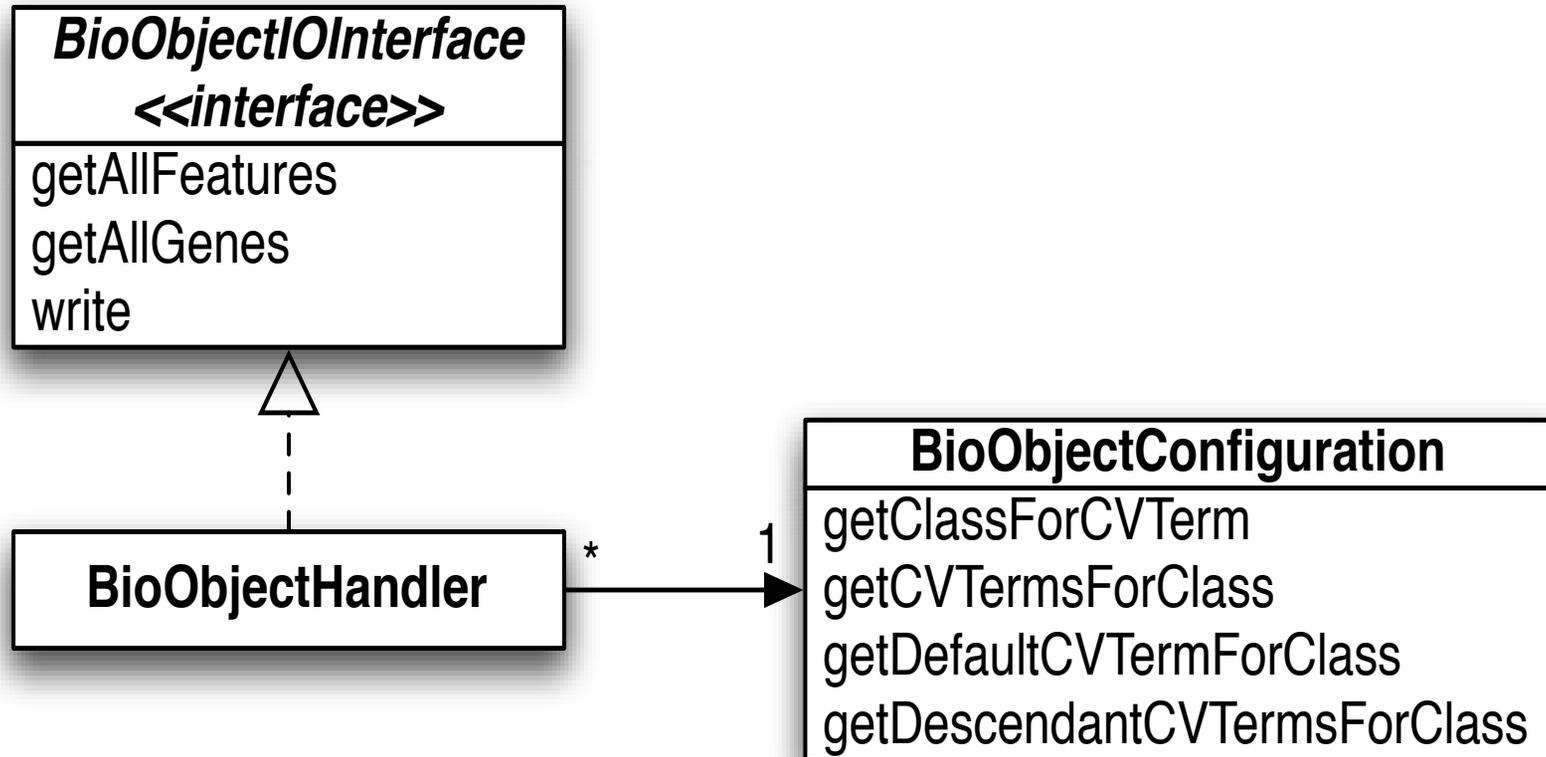
SIMPLE OBJECT LAYER



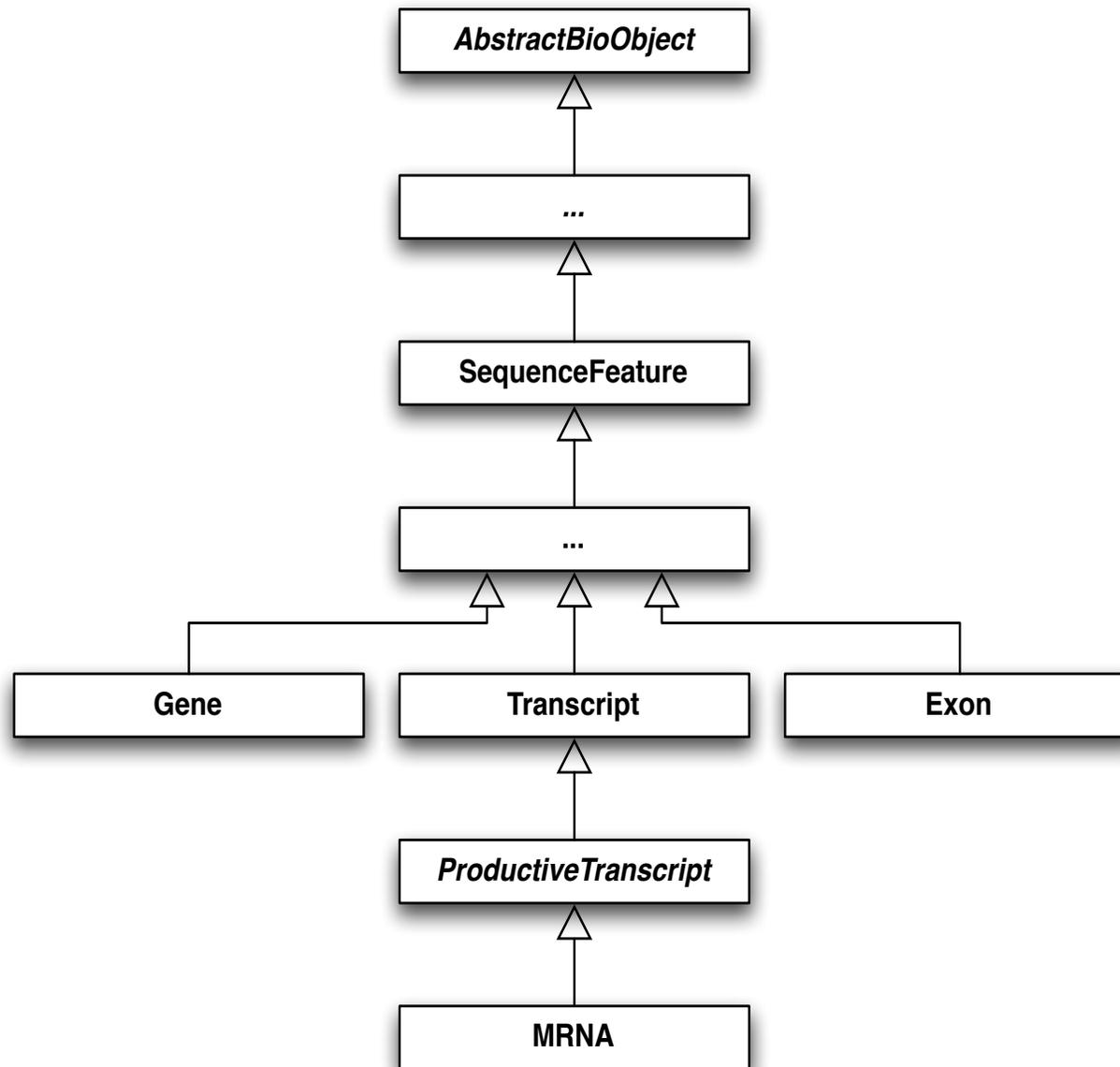
WRITING DATA



BIOLOGICAL OBJECT I/O LAYER



BIOLOGICAL OBJECT LAYER



BIOLOGICAL LAYER CONFIGURATION

```
<?xml version="1.0" encoding="UTF-8"?>
<gbol_mappings>
  <feature_mappings>
    <type cv="SO" term="gene" default="true">
      <read_class>Gene</read_class>
    </type>
    <type cv="SO" term="transcript" default="true">
      <read_class>Transcript</read_class>
    </type>
    <type cv="SO" term="my_transcript">
      <read_class>Transcript</read_class>
    </type>
    ...
  </feature_mappings>
  <relationship_mappings>
    <type cv="relationship" term="part_of" default="true">
      <read_class>PartOf</read_class>
    </type>
    ...
  </relationship_mappings>
</gbol_mappings>
```



FUTURE DEVELOPMENT

- Continued development on Biological layer
- Inference of data
 - Infer introns from exon structure
- New format handlers
 - ChadoXML
 - GAME XML
 - BioPerl bridge*
- Configuration of common relationship variations
 - ESTs aligned to the genome directly vs having a “match” feature



ACKNOWLEDGEMENTS

- Berkeley Bioinformatics Open-source Projects
 - E.O. Stinson
 - Robert Bruggner
- Wellcome Trust Sanger Institute
 - Robin Houston
 - Adrian Tivey



<http://code.google.com/p/gbol>

