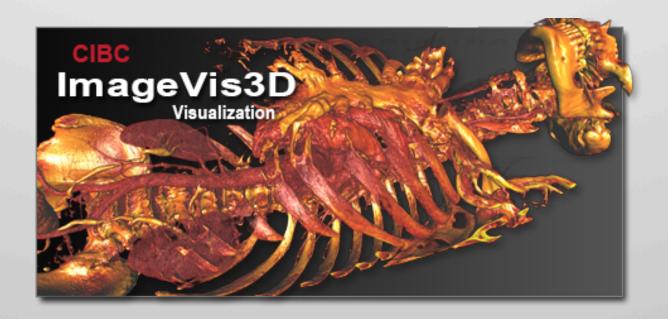
# Case Study II: ImageVis3D as a Teaching Tool for Tomorrow's Scientists

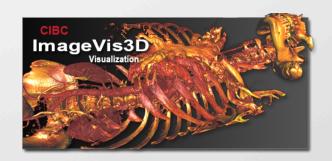


Elizabeth Jurrus, CIBC Technical Manager & James Hughes, Graphics Software Developer

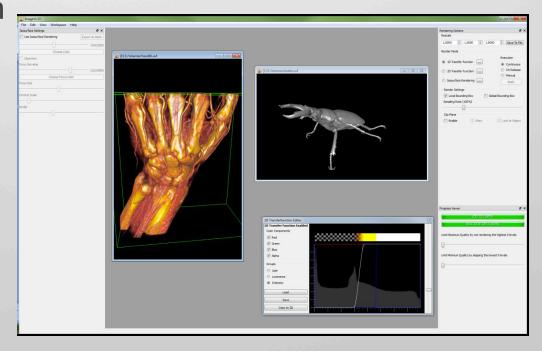




## ImageVis3D



- Data exploration through volume rendering
- · Out of core
  - "Bricking"
- Interactive performance
  - Advanced scheduling
  - Caching algorithms
- Transfer functions



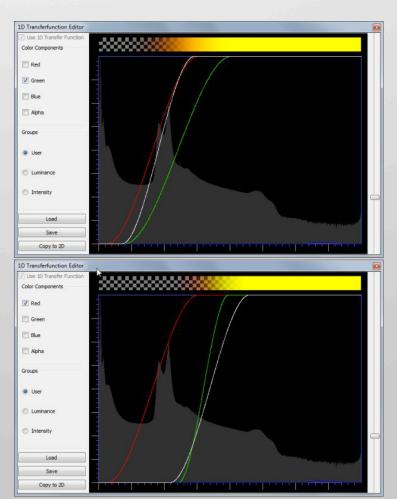




### **1D Transfer Functions**



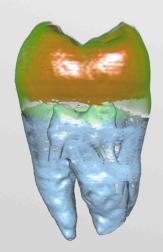


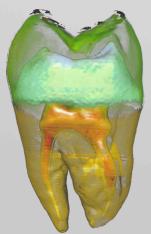


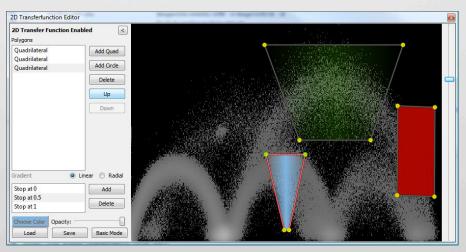


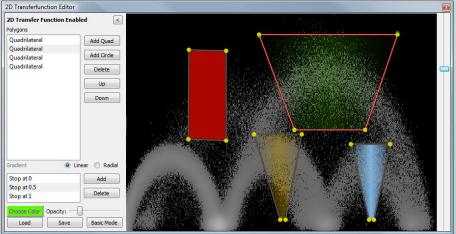


#### **2D Transfer Functions**





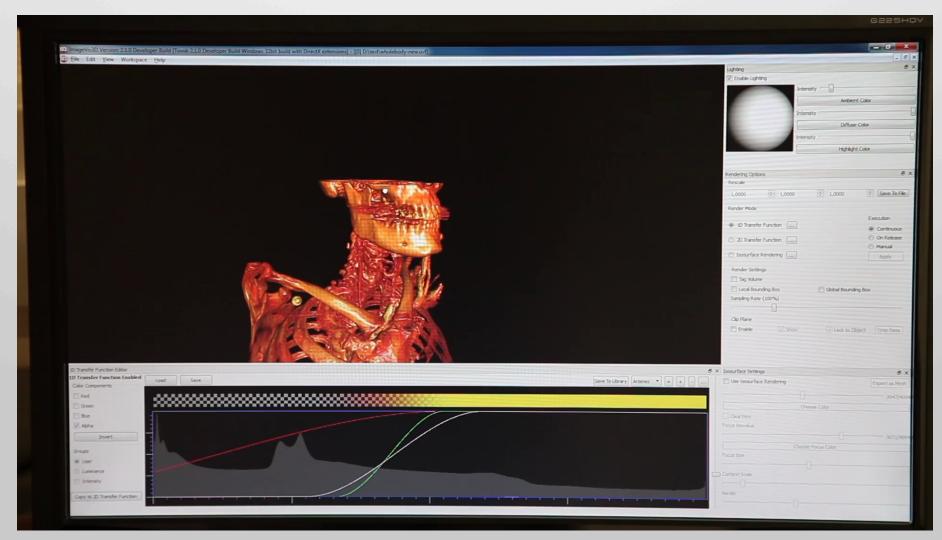








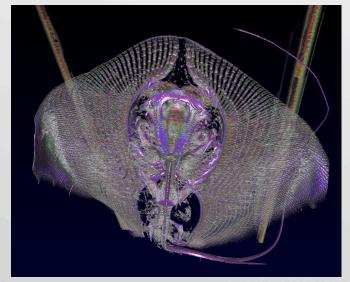
## ImageVis3D - in action

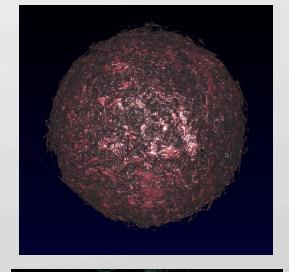


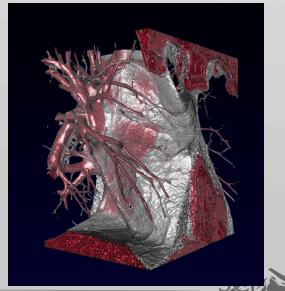




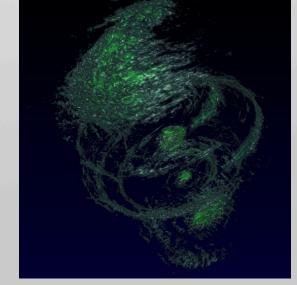
# As a Teaching Tool







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## **Today's Tools – Tomorrow's Scientists:**

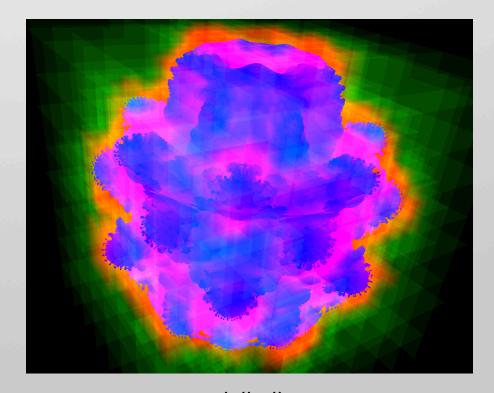
• https://vimeo.com/77005863





#### **Future Work**

- Improved rendering performance
- Dynamic re-bricking
- Client/server rendering
- Region-based statistics



Mandelbulb



