# An Online Image Management System for Anatomy Teaching

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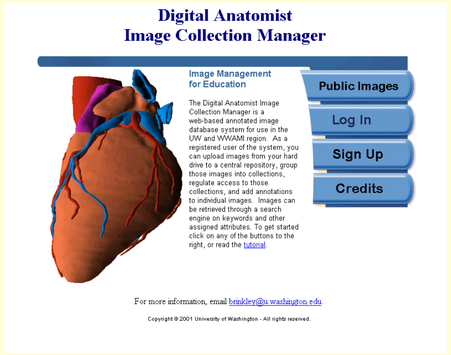
*http://sig.biostr.washington.edu/projects/da/image_manager*




## OVERVIEW

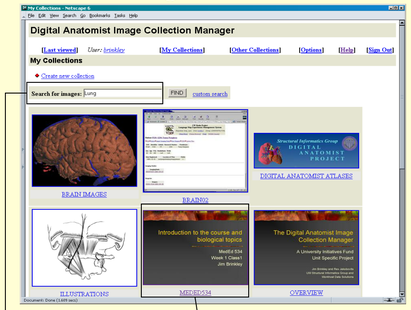
The Digital Anatomist Image Collection Manager is a web-based database and repository for annotated images. Using a standard web browser a registered user can create personal image collections and sub collections, upload individual images or groups of images saved as zip files, upload annotated regions of interest, index the uploaded images by personal and database-wide keywords, edit the image and collection metadata, copy images from other collections, and re-order images in a collection. Collections may be made public, or readable only by specified groups.

Images may be browsed in full mode, in which the image and all metadata are visible, slide mode, which allows online slide shows, and atlas mode, which permits interactive display of annotations as the user clicks on mapped regions within the image.

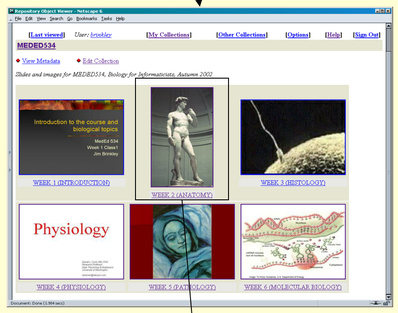
Users of the system may search for images in all collections they are authorized to read, copy found images to their own collections, and retrieve the original images to their desktop.

The Image Manager is currently under active development and evaluation for potential use in anatomy teaching and for other uses that require online archives and sharing of images.

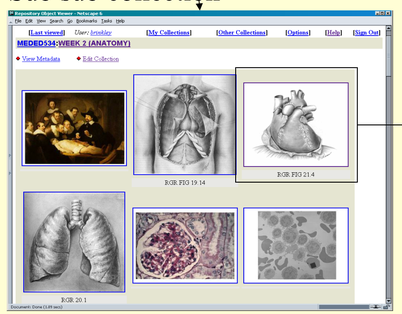
Personal image collection



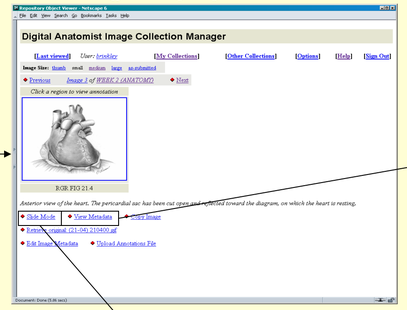

Sub collection



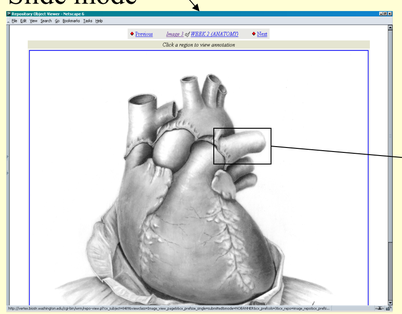

Sub sub collection




Full image display mode




Slide mode




Search results: Lung

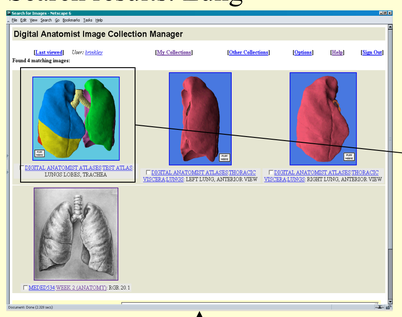
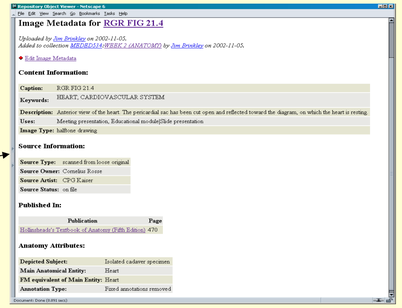



Image metadata




Atlas mode

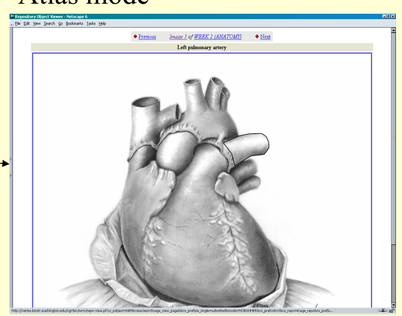
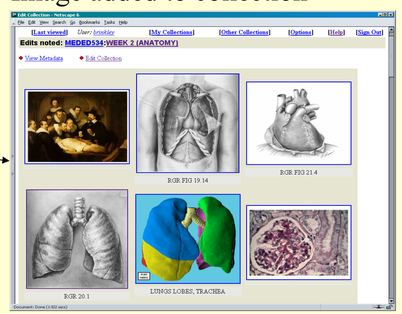
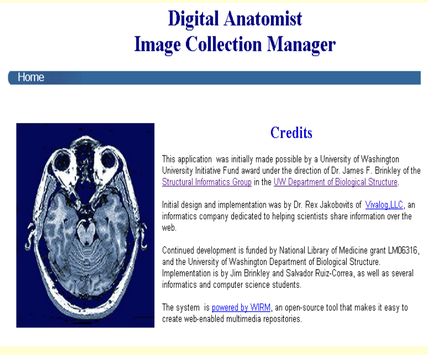



Image added to collection

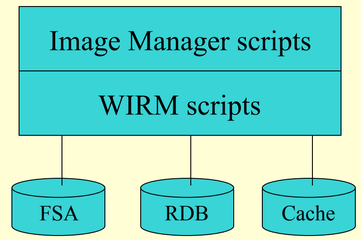



## ARCHITECTURE

The Image Collection Manager is written using the Web Interfacing Repository Manager (WIRM) toolkit[1], which is a set of perl CGI scripts for maintaining web-based data repositories.

Uploaded images are stored in a protected file storage area (FSA) in their original format. All formats supported by the ImageMagick package are allowed. Images can be scaled and converted to web-viewable formats, where they are saved in a web cache. Metadata are stored in the mySQL relational database (RDB). Various WIRM and application-specific perl scripts access these resources to coordinate the RDB and FSA, and to dynamically generate web pages in response to user actions.




1. Jakobovits, R.M., Rosse, C. and Brinkley, J.F. 2002. WIRM: An open source toolkit for building biomedical web applications, JAMIA 9(6): 557-570. http://www.wirm.org