

# Open-i

**Description:** Open-i allows users to search and retrieve over 3.7 million abstracts and images (including charts, graphs, clinical images, etc.) from the open-source literature, and

biomedical image collections. Open-I is currently available from the Lister Hill National Center for Biomedical Communication, a research arm of the National Library of Medicine. Users can search using images or text. Open-i contains images from about 1.2 million PubMed Central articles; 7,470 chest x-rays with 3,955 radiology reports; 67,517 images from NLM History of Medicine collection; and 2,064 orthopedic illustrations.

Healthcare Students	Healthcare Providers	Information Professionals	Researchers
<ul> <li>Find images, illustrations, and renderings of anatomical features, diseases, and medical conditions.</li> <li>Find images from veterinary, biology, and clinical research studies.</li> </ul>	<ul> <li>Find and compare medical images.</li> <li>Find images depicting new medical procedures, imaging techniques, and find the associated research articles.</li> </ul>	<ul> <li>Search Open-i using other images.</li> <li>Find images associated with research articles.</li> <li>Guide users on copyright and licensing terms for images.</li> </ul>	<ul> <li>Download various image collections to use for research and data mining.</li> <li>Find images associated with research articles and various health conditions.</li> </ul>

# **Key Points:**

- 1. Find medical images connected with published articles and research or teaching collections.
- 2. Filter options allow people to narrow their search results by the type of image, source, medical specialty, or licensing.

### **Potential Predicaments:**

- The images have varying copyright and licensing terms. Review each image carefully for information about how and if the image can be reused.
- Links to MedlinePlus are provided, but the site is mainly for healthcare professionals and researchers.
- The site contains graphic medical images of cadavers and living patients, so audiences may need to be warned.

#### **Teaching Examples:**

- 1. Find an ultrasound image of fatty liver disease on Google. Have participants use the image searching feature to find similar scans on Open-i.
- 2. Use the advanced search to find Orthopedic Surgical Anatomy Teaching Collection. Look at the licensing terms to see if and how the image can be reused.

## **Real Life Examples:**

- 1. A researcher downloads openly licensed images of chest x-rays to teach an AI or machine learning how to identify medical conditions.
- 2. A clinician looks up images for a new surgical technique and searches for related articles on PubMed to learn more.

#### More Information:

FAQs Introductory Video Contribute a Case

Commercial Equivalents and Other Resources:
There are several commercial educational tools such as AccessMedicine Multimedia, ClinicalKey Multimedia. Other libraries and professional associations may have collections of medical images both copyrighted and openly licensed.