**Healthcare Students** 

**Healthcare Providers** 

Researchers



# ) <u>Open-i</u>

**Description:** Open-i allows people to search and retrieve over 3.7 million abstracts and images (including charts, graphs, clinical images,

etc.) from open-source literature and biomedical image collections. People 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 the NLM History of Medicine collection; and 2,064 orthopedic illustrations.

#### Popular uses of this product:

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 people 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:**

- 1. The images have varying copyright and licensing terms. Review each image carefully for information about how and if the image can be reused.
- 2. Links to MedlinePlus are provided, but the site is mainly for health care professionals and researchers.
- **3.** The site contains graphic medical images of cadavers and living patients, so people 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 the 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 model how to identify certain medical conditions.
- 2. A clinician looks up images for a new surgical technique and finds the associated article on PubMed and searches for related or similar articles.

#### More Information:

FAQs Introductory Video Contribute a Case

#### **Commercial Equivalents and Other Resources:**

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