

# SpringerProtocolos y SpringerImages: nuevas herramientas para la investigación y enseñanza

*Presentación*

*Thijs Willems*

*Springer*



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*Comprehensive database of peer reviewed, reproducible procedures for scientific experiments*

**SPRINGERPROTOCOLS**

# Contents

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- What are protocols?
- SpringerProtocols: content
- SpringerProtocols: platforms
- SpringerProtocols: business model

# What are protocols?

- Step-by-step instructions, in a standardized format, that help researchers conduct experiments
- Predefined written procedural methods in the design and implementation of experiments including:
  - Bias
  - Safety
  - Equipment
  - Statistical methods
  - Reporting
  - Troubleshooting
- Used primarily in the life sciences

## Contents of this article

### 3.1 Introduction

### 3.2 Materials

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# What makes a good protocol?

- Complete and thorough instructions
- Detailed materials list
- Clearly organized
- Supporting images/tables
- Video Protocols
- Trustworthy source

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2.1 Introduction

2.2 Materials

1. Resol

2. Stacks

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**Methods in Molecular Biology**  
Series Ed.: Walker, J.M.  
ISSN: 1064-3745

Springer Protocols

**Macrophages and Dendritic Cells**  
Methods and Protocols

Editors  
Neil L. Johnson

Humana Press

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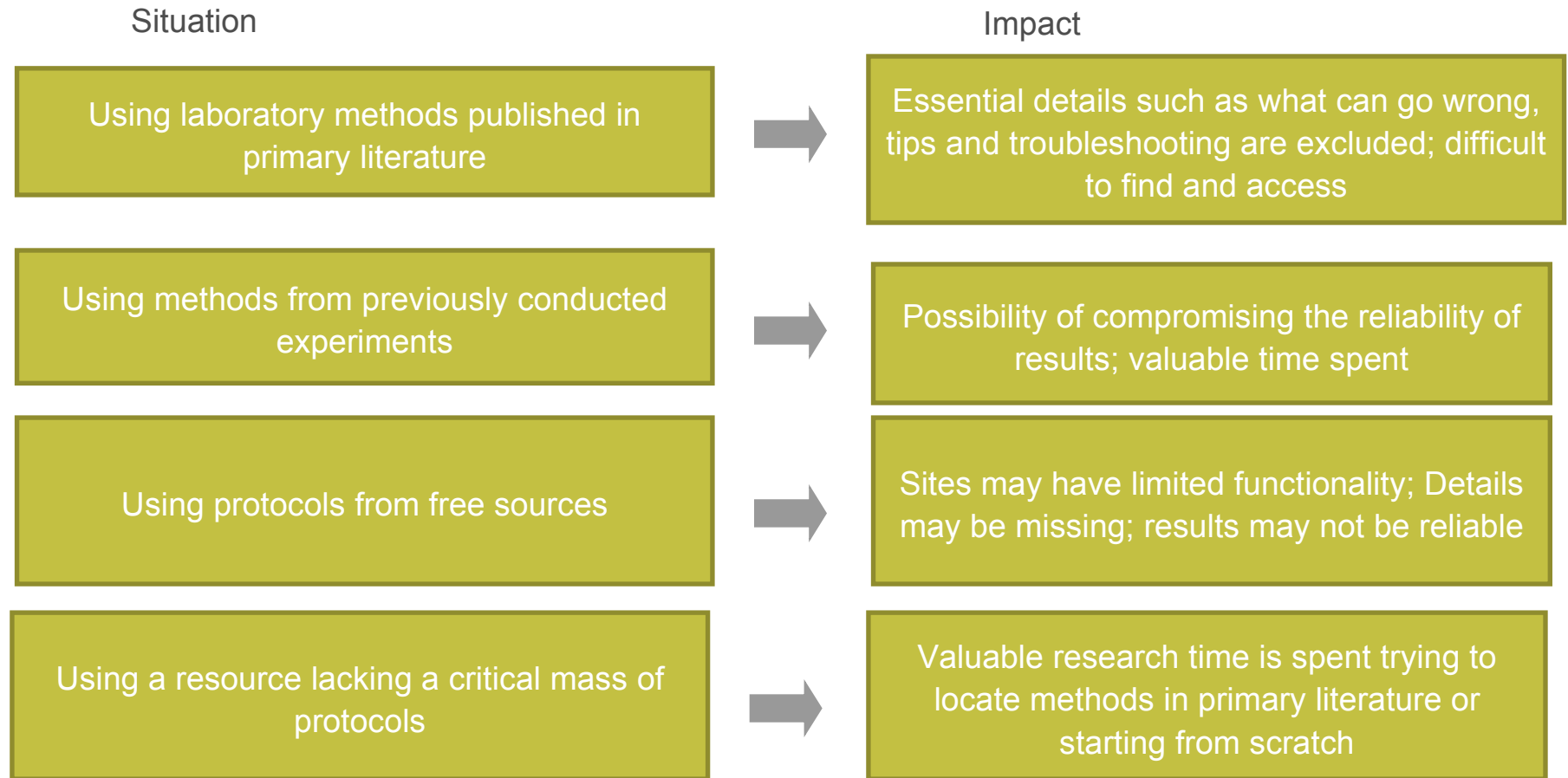
# Applications

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Researchers use protocols to:

- Solve biological problems on a molecular level
- Identify, understand, manipulate, and explain biological processes, functions, structure, and activity of molecular cell components
- Target cellular processes involved in disease (useful in developing early diagnosis and targeted treatments)
- Discover new approaches to treating disease
- Develop new drugs and lower the cost of drug development

# What is the impact when protocols are missing?



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# CONTENT



# High quality content

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- **Book Series** (by Humana Press)

- *Methods in Molecular Biology*

- Editor: Dr. John M. Walker

- Methods in Molecular Medicine

- Methods in Biotechnology

- Methods in Pharmacology and Toxicology

- NeuroMethods

- **Journals**

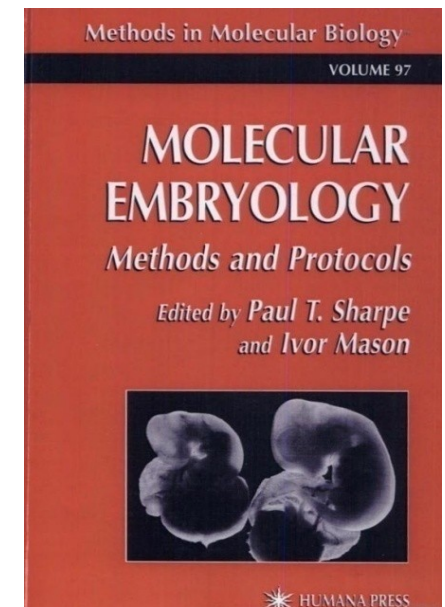
**All protocols are peer-reviewed**

- **Hand Books**

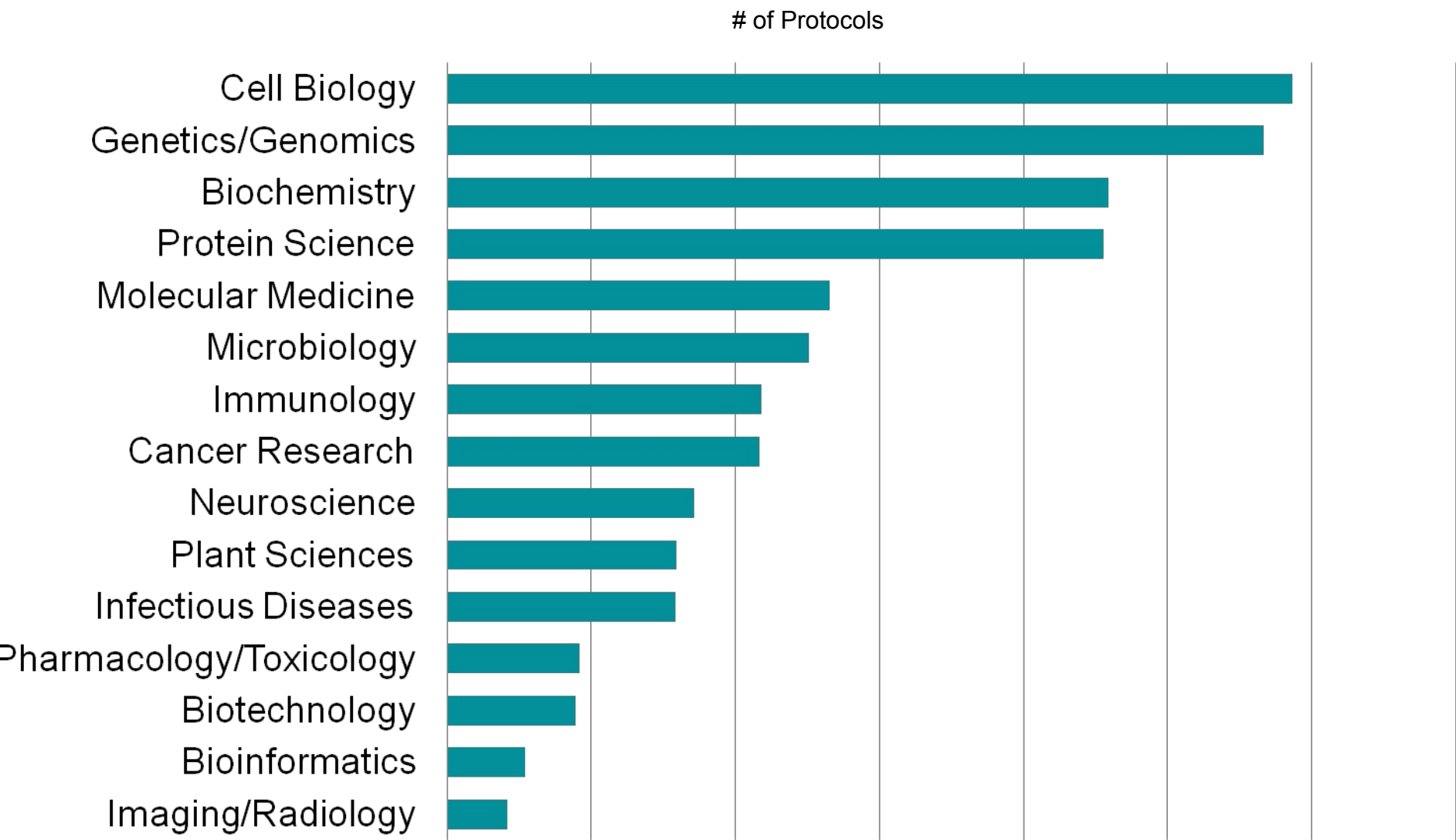
- The Protein Protocols Handbook

- Molecular Biomethods Handbook

And many more....



# Subject Collections



# Discoverability

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Majority of Springer Protocols are available in other indexes:

- MEDLINE
- **PubMed**
- Embase.com
- Scopus
- ISI Web of Science
- **Google and Google Scholar**

And many more...



## Largest collection of protocols

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	2009	2010
# protocols	20,000	22,000

- SpringerProtocols database adds about 2,000 protocols every year
- The SpringerProtocols database keeps the alternative version, when a protocol is being updated. This allow labs without latest equipment to produce the same experiment with older equipment or methods

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# PLATFORMS



SP: Homepage

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### Laser Microdissection Sample Preparation for RNA Analyses

**By:** Christopher J. Vega<sup>2</sup> ✉

**Affiliation(s):** (2) Leica Microsystems, Bannockburn, IL

**Book Title:** [Apoptosis and Cancer: Methods and Protocols](#)

**Series:** Methods in Molecular Biology | **Volume:** 414 | **Pub. Date:** Oct-11-2007 | **Page Range:** 241-252 | **DOI:** 10.1007/978-1-59745-521-2\_17

Gene expression analysis provides an insight into the biomolecular characteristics of a given cell type. However, compositions hinder gene analysis studies from most microdissection (LMD) technique allows for the unambiguous isolation of a specific cell population. However, preserving RNA integrity can be a challenge due to the deliberately limited amount of starting material, so general laboratory procedures for reducing ribonuclease activity in reagents and in the laboratory environment, are required. Quality RNA isolation and quantitation. Quality RNA sections made from flash-frozen and paraffin-embedded tissue sections provide visualization of the cells of interest. Following RNA isolation, RNA integrity should precede downstream analysis.

**Key Words:** Laser microdissection - laser capture microdissection - RNA - sample preparation - RNase

Independently of their surrounding. That is, the unique expression profile of a cell will not be obscured by expression levels contributed from neighboring cells. Neighboring cells are not without value as they can be captured separately to active studies, for example, expression variations in cancerous tissue versus normal tissue.

#### Suppressing Ribonuclease Activity

Preparing samples, to protect RNA from degradation, is paramount to the RNA isolation for gene expression analyses. The ribonuclease (RNase) family of enzymes catalyzes the cleavage of nucleotides in RNA leading to degradation. Unfortunately, RNases are ubiquitous. The ubiquitous nature of these molecules makes working with RNA, for the purpose of isolating RNA, a challenging endeavor.

Reducing the effects of RNases within solutions and upon laboratory equipment and reagents are essential. Bearing this in mind, RNases will not be eliminated; however, their activity can be reduced.

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- Book level detail basic Springer MARC records
- [springer.com/marc](http://springer.com/marc)

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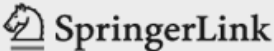
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	ring (172,073)
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SL: Homepage

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**Gradient SDS Polyacrylamide Gel Electrophoresis of Proteins**

Book Series	Methods in Molecular Biology
Volume	Volume 32
Book	Basic Protein and Peptide Protocols
Publisher	Humana Press
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Copyright	1994
ISBN	978-0-89603-268-2 (Print) 978-1-59259-519-8 (Online)
DOI	10.1385/0-89603-268-X:35

**PDF (172.5 KB)** **HTML**

**SpringerLink Date** Friday, March 28, 2008

**Methods in Molecular Biology**  
Basic Protein and Peptide Protocols  
10.1385/0-89603-268-X:35  
John M. Walker

**John M. Walker<sup>2</sup>**  
(2) Division of Biosciences, University of Hertfordshire, Hatfield, UK

**Abstract**

The preparation of fixed-concentration polyacrylamide gels has been described in Chapter 5. However, the use of polyacrylamide gels that have a gradient of increasing acrylamide concentration (and hence decreasing pore size) can sometimes have advantages over fixed-concentration acrylamide gels. During electrophoresis in gradient gels, proteins migrate until the decreasing pore size impedes further progress. Once the "pore limit" is reached, the protein banding

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- **Largest Database**

- 20,000 by end of 2009
- 2,000 added annually
  - 1,000 updated

- **Quality Content**

- Methods in Molecular Biology
  - Editor-in-Chief Dr. John Walker
- Journals
- Peer Reviewed
- Indexed by PubMed

- **Content Updated Constantly**

- **User-Centric features**

- Upload a protocol
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*Your guide to the essence of research*

**SPRINGERIMAGES**

# Contents

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- The value of an image database
- SpringerImages
- Content
- Site guide
- Business model

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# **THE VALUE OF AN IMAGE DATABASE**

# Why does a scientific image database matter?

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**Because often, researchers are looking for answers to specific questions...**

**...and those answers are in the **images****

# Example

Let's say I want to know what the best settings are to achieve the highest adsorption level of PTFEMA?

Not the answer

Answer

1028

USA). Goat anti-rabbit IgG AF (Alexa Fluor) 488 and streptavidin AF 546 were obtained from Molecular Probes, Inc. (Eugene, OR, USA). Biotinylated BSA (B-BSA) was prepared according to a published method [15]. Microtiter plates were obtained from Nunc A/S (Roskilde, Denmark). AZ5214, a novolac-diazomphthoquinone-type photoresist, was purchased from Clariant. Poly(methyl methacrylate) (PMMA,  $M_n = 350,000$ ) was obtained from Du Pont. Epoxy novolac (EPN), an epoxidized novolac of cresol-formaldehyde, was purchased from Shell with the commercial name Epikote 164; this polymer was fractionated and the medium fraction was used ( $M_n = 1,277$ ,  $M_w = 2,438$ , and  $I = M_w/M_n = 1.9$ ). Methyl (3,3,3-trifluoropropylmethylvinyl) siloxane (MTFPMVS) was purchased from United Chemical Technologies, Inc. Poly(2,2,2-trifluoroethyl methacrylate) (PTFEMA,  $M_n = 114,700$ ,  $M_w = 45,900$ ,  $I = 2.5$ , and  $T_g = 68.5^\circ\text{C}$ ) was synthesized by free radical polymerization of 2,2,2-trifluoroethyl methacrylate (Aldrich) using 2,2'-azobis(2-methylbutyronitrile) (Puka) as initiator.

**Apparatus**

The experimental apparatus for laser ablation, which is installed at NHRF, consists of the molecular fluorine laser, which emits at 157 nm, the all stainless steel vacuum chamber, a computer-controlled X-Y-Z translation stage where the polymer substrates were placed, and the focusing optics.

**Procedures**

**Polymer film preparation**

The polymeric films were applied by spin coating on a silicon wafer that was covered by a thick film (200–250 nm) of a protein-adsorbing layer (photoresist AZ5214). These films were thermally treated after spin coating at temperatures in the range 90–200°C for a period of 5–30 min. Further treatment of the polymeric films was applied in certain cases, as indicated in Table 1. Film exposures were performed by using a

**Table 1 Processing conditions and protein binding capacity of PTFEMA film (1% w/w PTFEMA in methyl isobutyl ketone)**

Sample no.	PAB	Exposure (at 254 nm)	% Adsorption
1	120°C, 30 min	–	0
2	150°C, 30 min	–	0.7
3	200°C, 30 min	–	14.3
4	120°C, 30 min	15 min	7.9
5	150°C, 30 min	15 min	12.2
6	200°C, 30 min	15 min	14.3

**Laser ablation of polymeric films**

Polymers were effectively ablated by hitting the target with laser energies from 0.5 to 5 mJ cm<sup>-2</sup> per pulse at 20-Hz repetition rate at a background pressure of  $1 \times 10^{-5}$  mbar. The laser pulse had pulse duration of 15 ns at FWHM. The laser light was focused on the target with a CaF<sub>2</sub> lens having 5-cm focal length. The CaF<sub>2</sub> lens was protected from the ablation products with a 1-mm-thin CaF<sub>2</sub> window, which had to be replaced after 10 h of operation at 20-Hz repetition rate during the contamination of the lens from the ablative products of the polymer following its irradiation at 157 nm. Fine patterning of the laser beam on the target was carried out by moving the substrate in the X-Y plane and by fine focusing in the Z-axis with a micrometric translation stage controlled by a PC.

**ELISA evaluation of protein binding properties of polymer films**

The protein adsorption resistance of the polymeric films was evaluated through a model binding assay (Fig. 1). For this purpose, the polymeric film surface was first incubated with a 20 µg mL<sup>-1</sup> B-BSA solution in 0.05 M phosphate buffer, pH 6.5, for 30 min at room temperature (RT). It was then washed with distilled water and blocked by using a 10 µg mL<sup>-1</sup> BSA solution in 0.05 M

**Fig. 1 Methodology for quantitative measurements by ELISA on water scale**

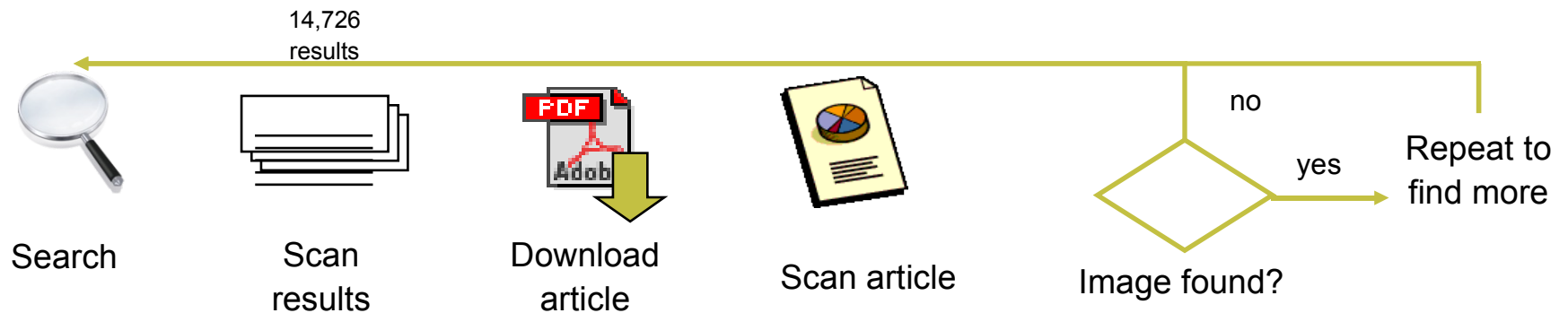
a) Blocking  
b) Biotinylated-BSA  
c) Reaction with enzyme substrate  
d) Incubation with Streptavidin-HRP

**Table 1 Processing conditions and protein binding capacity of PTFEMA film (1% w/w PTFEMA in methyl isobutyl ketone)**

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5	150°C, 30 min	15 min	12.2
6	200°C, 30 min	15 min	14.3

# Where SpringerImages adds value

## Traditional method of finding an image



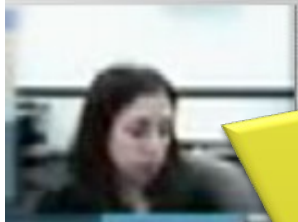
## Finding images via SpringerImages



### Reseachers....

- Find more images
- Find them easier
- Get answers faster

## Feedback from researchers during a usability test



“I wanted to put in a particular biochemical pathway image. I went to Google Images... I tried to do it through PubMed, searching for a few articles...but I wasn't able to find what I was looking for.”

“Searching in PubMed, you can't see until you go the article and scroll through and see whether it has the image you're looking for.”

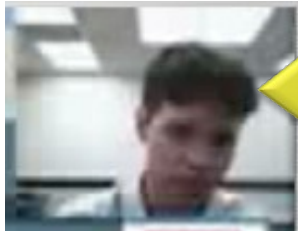
“Google Images, there's all sorts of crap in there...”

“I had to look through all these articles by hand to find a nice picture of the pathway.”

## More feedback



**“You can in fact skip reading the whole paper and honestly that is a huge improvement... it’s one of the most time consuming things in academia.”**



“I liked the details of a given image... being able to drill down and get specific information related to the data itself...  
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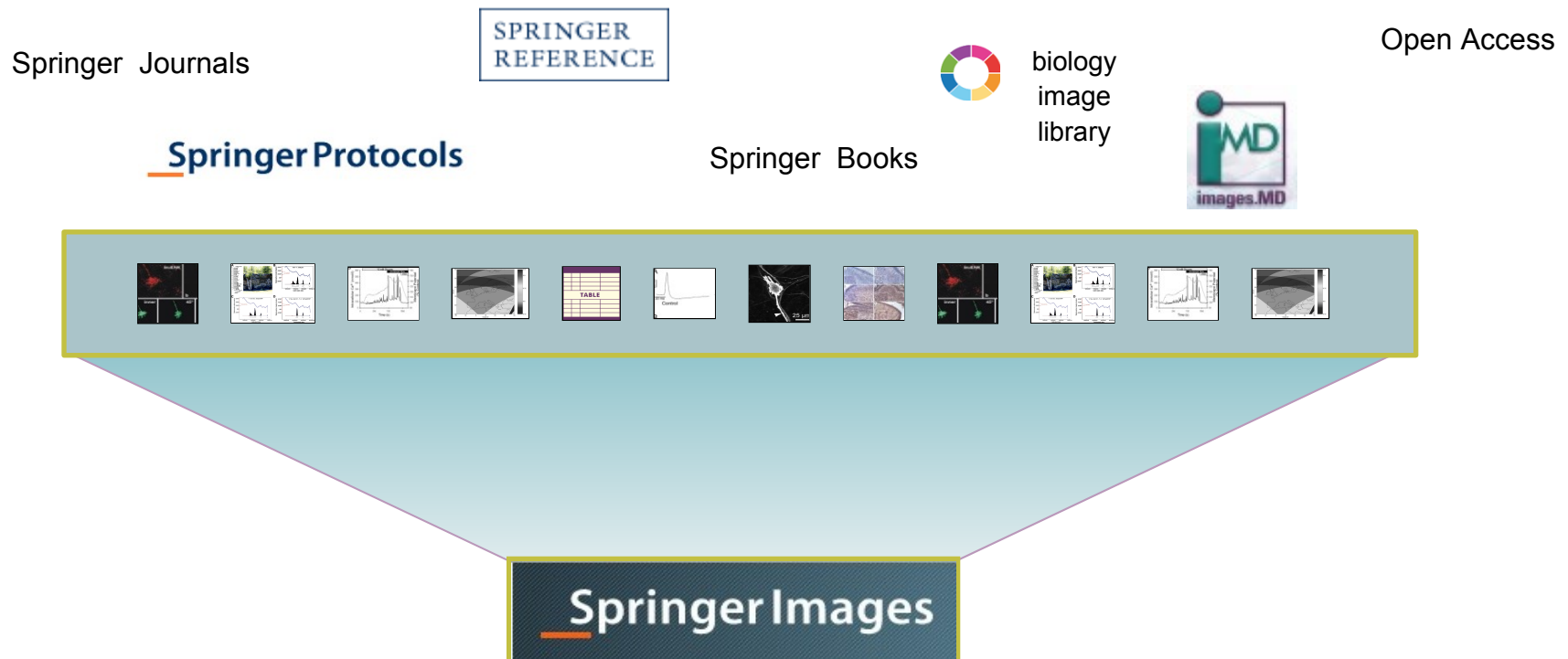


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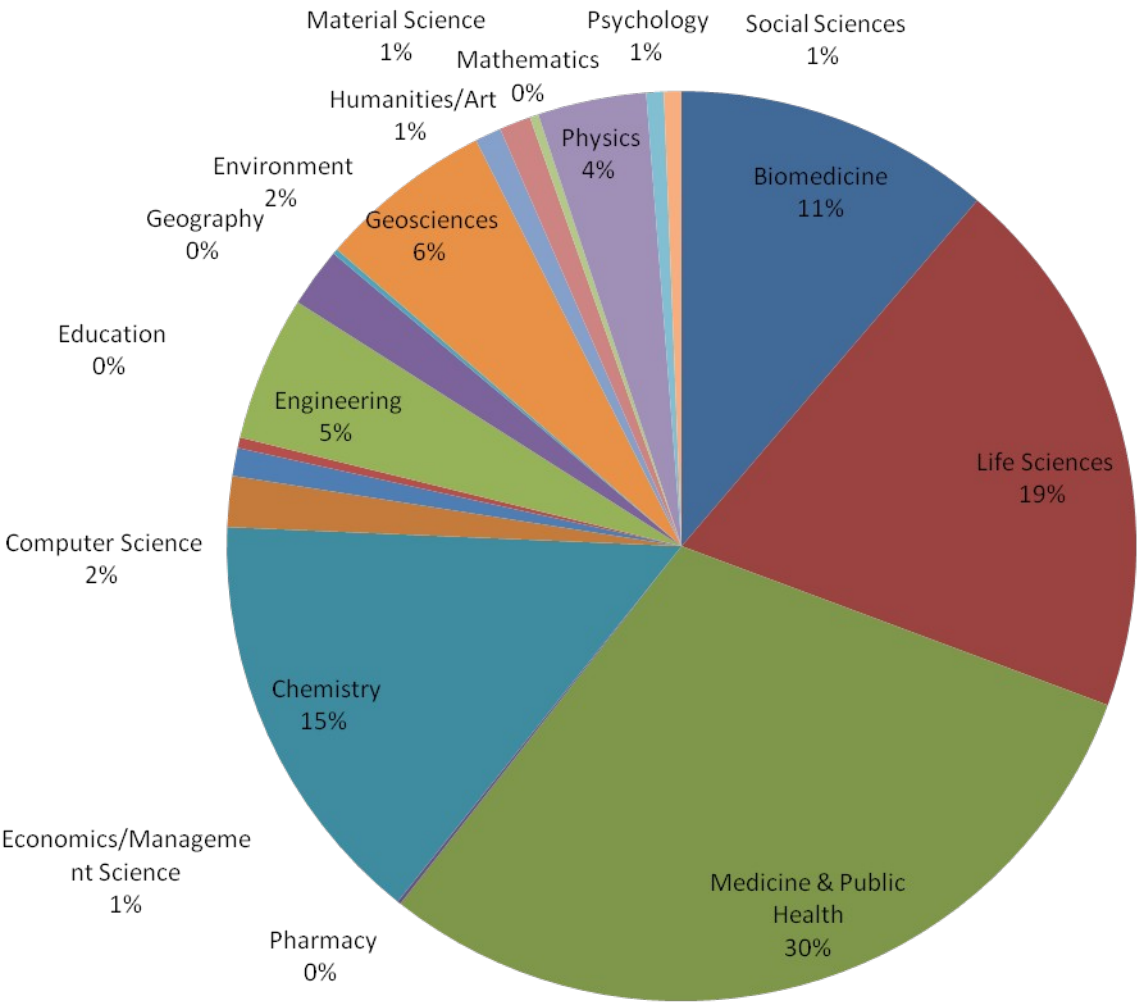
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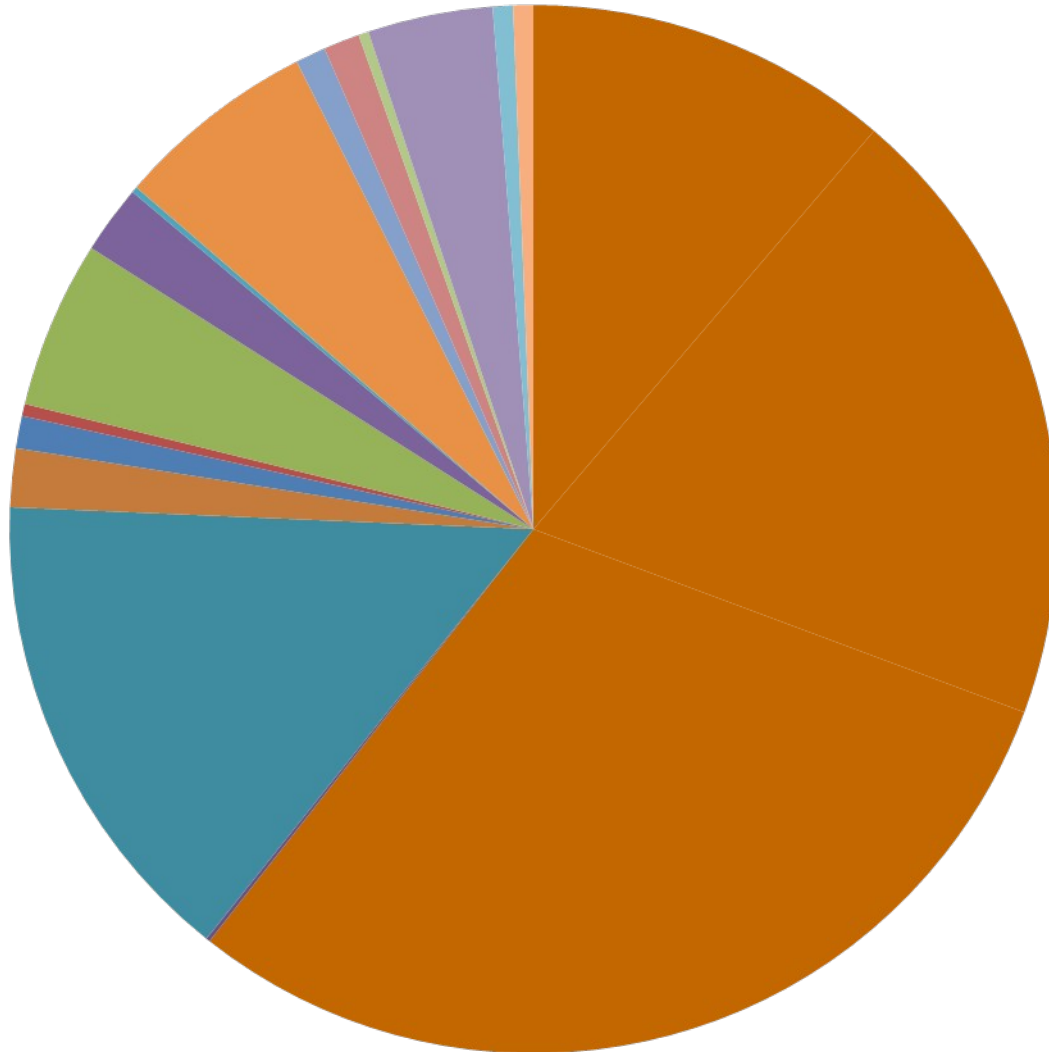


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# Search Results Page

The screenshot shows the SpringerImages search results page for the query 'protein'. The page is divided into several sections:

- Header:** SpringerImages logo, navigation links (HOME, ABOUT, FOR LIBRARIES, CONTACT US, HELP), user status (Welcome Beta Tester), and account links (MY IMAGES, MY ACCOUNT, LOG OUT).
- Search Bar:** A search input field containing 'protein', a 'Search caption' dropdown, a 'GO' button, and a link to 'Show advanced options'.
- REFINE SEARCH:** A sidebar on the left with a 'Search within these results' input field and a 'GO' button. Below it are sections for 'SUBJECTS' (Life Sciences, Biotechnology, Biomedicine, Cell Biology, Medicine & Public Health) and 'SOURCE' (Journal of Molecular Neuroscience, Molecular Biotechnology, Applied Biochemistry and Biotechnology, Cell Biochemistry and Biophysics, Planta).
- SEARCH RESULTS:** The main content area showing '1,232 RESULTS'. It includes a 'Zoom' slider, a 'Display' selector (25, 50, 100), and a 'Hide captions' link. The results are displayed as a grid of thumbnails, each with a caption. Examples include 'Western analysis of Agrobacterium-infiltrated plants', 'Effect of protein composition on dye-based protein', 'β-galactosidase activity from protein-protein', 'Electron microscopy analysis of leaves', 'Light micrograph of cubic crystal protein inclusions', 'Protein solubility (expressed as percentage of total)', 'Inhibition of protein prenylation by s-perillyl', 'Effects of different temperatures on the expression of', 'Comparison of 2-D gel patterns of human plasma', and 'Immunoblot analysis of sera from immunized'.
- MY IMAGE SETS:** A sidebar on the right showing 'protein' and 'bridges' as image sets. It includes a 'drag images' button and a 'SAVED SEARCHES' section with a 'Save current search' button.

Refine your search results easily by:  
text, subject,  
source, publication  
date or image type

Zoom in to have a closer look at the results. Click on one of the thumbnails to go to image details page

Drag and drop your favourite images to one of your image sets (log in required)

Save your search (login required)

# Image Details Page

SpringerImages

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Enter search here Search caption GO Show advanced options

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### IMAGE DETAILS

View full size Download article E-mail Bookmark & Share Add to image set

#### Contents

- Image
- Caption
- Extracts from this Article
- Image Source Details
- Images from this Article
- Copyright Information

#### Keywords

- Transcription factors
- Protein-DNA interactions
- Protein chemistry
- Structural biology
- Functional annotations

Add keyword Add

= user generated What's this?

This image provided by: Springer

#### Caption

C2HC zinc finger domains. (a) Superimposed ribbon diagrams of the third C2H2 domain from TFIIIA in *Xenopus laevis* (PDB 1TF3, shown in blue) and the first C2HC domain of *Drosophila* FOG (PDB 1y0j, shown in gray) demonstrate that C2HC has the same structure as the classic C2H2 domains. (b) Ribbon diagram of the protein-protein interaction between the first C2HC domain of *Drosophila* FOG and the N-terminal treble-cleft zinc finger of murine GATA-1 [37]. FOG amino acids critical to the interaction are displayed in red

#### Extracts from the Article

The variant C2HC was found to be structurally identical to C2H2 ZFs, except for subtle differences in the C-terminal end of the  $\alpha$ -helix (Fig. 3 a; [ 8 ]).

#### MY IMAGE SETS

New View all images

protein

- Protein solubility (expressed as percentage of total protein) of
- Effect of interactions between extracellular
- By Western blotting, the immunoreactive bands of GAPDH

bridges

drag images here

#### SAVED SEARCHES

bridge

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Image tools: see full size image, download original article, email, print or bookmark image or add image to a set

Keywords – derived from original source or added by experts. Users can also add their own keywords

Read the full caption of the image

Extracts from the original article

# Image Details Page

The screenshot displays the SpringerImages website interface. At the top, the Springer logo and navigation links (HOME, ABOUT, FOR LIBRARIES, CONTACT US, HELP) are visible. A search bar and a 'Show advanced options' link are also present. The main content area is titled 'IMAGE DETAILS' and features a large image of a protein structure. Below the image, there is a section for 'Image Source Details' which includes the article title 'Keep Your Fingers Off My DNA: Protein-Protein Interactions Mediated by C2H2 Zinc Finger Domains', the authors 'Brayer, Kathryn J.; Segal, David J.', the journal 'Cell Biochemistry and Biophysics', the volume and issue 'Vol. 50 Issue 3', the DOI '10.1007/s12013-008-9008-5', the publication date '2008-03-07', and the institutions 'University of Arizona, University of California, Davis'. An 'Abstract' section follows, providing a brief summary of the research. Below the abstract, there is a section for 'Other Images from this Article' which displays four smaller images related to the main topic. On the right side of the page, there is a sidebar with 'MY IMAGE SETS' and 'SAVED SEARCHES' sections. The 'MY IMAGE SETS' section shows a list of image sets with their respective thumbnails and titles. The 'SAVED SEARCHES' section shows a list of saved searches with their respective thumbnails and titles.

Springer.com | SpringerLink.com

## SpringerImages

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Enter search here Search caption GO Show advanced options

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### IMAGE DETAILS

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As shown in Fig. 3 b, the residues in the  $\alpha$ -helix of the FOG C2HC domain contact GATA, primarily through polar and hydrophobic interactions.

#### Image Source Details

Download Article Go to Source

**Keep Your Fingers Off My DNA: Protein-Protein Interactions Mediated by C2H2 Zinc Finger Domains**

by Brayer, Kathryn J.; Segal, David J.

Journal: Cell Biochemistry and Biophysics Vol. 50 Issue 3

DOI: 10.1007/s12013-008-9008-5

Published: 2008-03-07

Institution(s): University of Arizona, University of California, Davis

#### Abstract

Cys2-His2 (C2H2) zinc finger domains (ZFs) were originally identified as DNA-binding domains, and uncharacterized domains are typically assumed to function in DNA binding. However, a growing body of evidence suggests an important and widespread role for these

#### Other Images from this Article

more ...

The canonical C2H2 zinc finger structure. A ribbon

A DNA-binding zinc finger. A ribbon diagram

Keep Your Fingers Off My DNA: Protein-Protein

Keep Your Fingers Off My DNA: Protein-Protein

### MY IMAGE SETS

New View all images

protein

Protein solubility (expressed as percentage of total protein) of

Effect of interactions between extracellular

By Western blotting, the immunoreactive bands of GAPDH

bridges

drag images here

### SAVED SEARCHES

bridge

Find meta data from the original source (e.g. journal article), read the abstract and link directly to the full-text

Link directly to other images from the same article

Find information about the copyright and the license

# Export Image Sets

The screenshot displays the SpringerImages web application. At the top, the Springer logo and navigation links (HOME, ABOUT, FOR LIBRARIES, CONTACT US, HELP) are visible. A search bar contains the text 'Enter search here' and 'Search caption'. The 'MY IMAGES' section shows '4 RESULTS >>' for the search 'All My Images'. A 'Download Image Set' dialog box is open, showing the search term 'protein' and '3 images'. It offers two export options: 'Adobe Acrobat (PDF)' and 'Microsoft Powerpoint (PPT)'. The right sidebar, 'MY IMAGE SETS', lists several image sets with thumbnails and titles, such as 'Protein solubility (expressed as percentage of total protein) of', 'Effect of interactions between extracellular', and 'By Western blotting, the immunoreactive bands of GAPDH'. Below this is a 'drag images here' area and a 'SAVED SEARCHES' section with a 'bridge' search.

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## SpringerImages

HOME | ABOUT | FOR LIBRARIES | CONTACT US | HELP

Welcome Beta Tester MY IMAGES | MY ACCOUNT | LOG OUT

Enter search here Search caption GO Show advanced options

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### MY IMAGES

4 RESULTS >>

You searched for: All My Images

Zoom: [slider]

Hide captions

Effect of interactions between

By Western blotting, the immunoreactive

### Download Image Set

protein

3 images.

Please choose your preferred file format:

- Adobe Acrobat (PDF)
- Microsoft Powerpoint (PPT)

### MY IMAGE SETS

New

protein

- Protein solubility (expressed as percentage of total protein) of
- Effect of interactions between extracellular
- By Western blotting, the immunoreactive bands of GAPDH

bridges

drag images here

### SAVED SEARCHES

bridge

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# **HOW TO SUBSCRIBE TO SPRINGERIMAGES**



# Business Model

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- **Institutional licenses**

- Database / access-only license
- No local loading
- Annual subscription fee
- Subscribe to one of the following packages:
  - SpringerImages (all subjects)
  - SpringerImages: Medical and Life Sciences collection
- Tiered pricing based on
  - Size (FTE/FTR)

## Key Facts About SpringerImages - database

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- **1.5 million+** scientific, technical and medical images
  - Images: *photos, graphs, histograms, figures and tables*
- Constantly growing database
- **Variety of sources**: SpringerLink, SpringerProtocols, images.MD, and more
- **Peer-reviewed**, trusted sources
- Unlimited concurrent users
- Availability: Entire collection or Medical and Life Sciences
- **Permission to use images** for personal, non-commercial use

# Key Facts About SpringerImages - platform

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- User-friendly interface
- **Export image sets to PowerPoint and PDF**
  - **Includes caption, full image, source information**
- Create Image Sets easily via a drag and drop function
- **Link back to original source**
- **Context of images** (on image details page)
  - Extracts from the full article, captions, bibliographic data
- High Resolution images (where available)
  - Users can choose size to view
- Save Searches
- Email, share, and bookmark images
- Administrator tool to easily manage access and to provide usage statistics



# Key Facts About SpringerImages - search (I)

- Search

- Captions

- Sentences in the text that include references to the images

- Content of tables

- Keywords

## Extracts from the Article

[What's this?](#)

In the posterior atrio-ventricular groove the fistula showed a tortuous meandering course and terminated in the superior vena cava just above the right atrial appendage (Figs. 2 and 5 ).

While the diagnosis of this anomaly is usually made on the thin-slice original axial images, an overview of the whole course of the anomaly can be obtained using MPR, thin-slice MIP (Fig. 2 ), and 3D-VRT (Figs. 3 – 5 ) of MDCT.

Compound	<i>B. rufocinctus</i>	<i>B. morrisoni</i>	<i>B. griseocollis</i> a	<i>B. confusus</i> b	<i>B. vorticosus</i> <sup>c</sup>	M <sup>++</sup>
Tetradecyl acetate	–	–	82%	–	–	256
9-Octadecenol	5%	–	–	–	–	268
3,7,11,15-Tetramethyl-6,10,14-hexadecatrien-1-ol	–	–	–	30%	–	292
3,7,11,15-Tetramethyl-2,6,10,14-hexadecatetraen-1-ol	–	2%	–	–	13%	290

# Key Facts About SpringerImages – search (II)

- Advanced Search allows users to searches by
  - Source publication
  - **Image type**
  - Journal
  - Publication time
  - **Access availability**, and more.
- Search results visualization: photo, graph or table to be seen at first glance

The screenshot displays the SpringerImages advanced search interface. At the top, there is a search bar with the placeholder text "Enter search here" and a "Search" button. Below this, the interface is organized into two columns of search filters. The left column includes filters for "Subject", "Source Publication", "Publication Date From" (with "Month" and "Year" dropdowns), "Image Provider", "Image Color", and "Author". The right column includes filters for "DOI", "Volume Number", "Issue Number", "Publication Date To" (with "Month" and "Year" dropdowns), "Image Type", "Institution", and "Keyword". Each filter is represented by a text input field with a magnifying glass icon. At the bottom of the filter section, there is a checkbox labeled "Search only images to which I have access (free images and subscription)". Below the filters, a table is partially visible, showing a row with the text "Computer Science" and the number "28,568".

Subject	DOI	Volume Number	Issue Number	Publication Date From	Publication Date To	Image Provider	Image Type	Institution	Keyword
Start typing and select from list				Month Year	Month Year	All	All	Start typing and select from list	Start typing and select from list
<input type="checkbox"/> Search only images to which I have access (free images and subscription)									
Computer Science		28,568							

- Trial (new customers only)
  - 60 days duration
  - With consent to market directly to end users during trial
  - Usage statistics available after trial





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**TIME FOR QUESTIONS!**

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**ADDITIONAL SLIDES**

## Competitor Overview

Publisher	Product	Protocols	Annual Content Increase	Update Frequency	First Year
Wiley	Current Protocols 	10,566	500-700	Quarterly	1987
Nature	Nature Protocols 	1050	225	Monthly	2006
Cold Spring Harbor	CSH Protocols 	1400	250	Monthly	2006
Springer	Springer Protocols 	18,740	2,000	Continuously	1980

---

## 1. Access Only

- **Access:** Access to the full collection (all subject collections/all years) or individual subject (all years) collections is available based on a calendar year basis. Subscriber must renew to maintain access.
- **Perpetual Access:** No perpetual access. Once the subscription expires access will be terminated.
- **Example:** If customer A has a subscription in 2009 and 2010 they maintain full access to the database. If they choose to discontinue their subscription in 2011 then access to the content is terminated.
- **Individual Subject Collections:** Option to purchase by individual subject collections is available as an option

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## 2. Annual subscription including archival rights

- **Access:** Current subscribers are entitled full access to all Protocols contents included in the database until the subscription is cancelled.
- **Perpetual Access:** Perpetual access is available only to years subscribed to.
- **Example:** If customer A has a subscription in 2009 and 2010 they maintain full access to the database. If they choose to discontinue their subscription in 2011 then perpetual access is available to content from copyright 2009 to 2010.
- **Individual Subject Collections:** Option to purchase under individual subject collections is not available.



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## 2a. Full-Ownership Model

- **Access:** Current subscribers are entitled full access to all Protocols content included in the database until the subscription is cancelled.
- **Perpetual Access:** Perpetual access is available to all years subscribed to.
- **Additional Provisions:** Perpetual access must be purchased for archived content (1980 to year prior to current) to be entitled to special annual pricing. Payment for archive can be allocated over a period of three years. The first year subscription must include purchase of the archive and current year ownership.
- **Example:** If customer A purchases the archive collection (1980-2008) and a subscription to 2009 they maintain full access to the database. If they choose to discontinue their subscription in 2010 perpetual access is available to content from copyright 1980 to 2009.
- **Individual Subject Collections:** Option to purchase under individual subject collections is not available.

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# **COMPETITION SPRINGERIMAGES**

# Competition overview

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## **CSA Illustrata**

- CSA Illustrata is the only relevant competitor in the field of imaging databases for Springer and is hosted by ProQuest CSA .

## **Amirsys**

- Image databases that provides online diagnostics and images for physicians

## **Elsevierimages.com**

- Collection of hand-painted medical illustrations from Elsevier books

## **Software Products**

- Significant software products especially in the fields of Biomedicine and Medicine are rarely at the market, too, e.g. 3D anatomy software of Primal Pictures

# CSA Illustrata vs. SpringerImages

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## Difference to SpringerImages

- CSA **only aggregates images** from various publishers
  - CSA Illustrata **does not include the full images** itself, it only links to the original content. So, if user has no access to publisher's original content, he has no access to image
- CSA Illustrata does **not have the option to create image sets or export images** to PPT or PDF with just couple of clicks. User need to do quite a lot of steps to locate and actually save an image