



EAHIL Workshop
5-8 July 2011 | İstanbul, Turkey

Active Learning and Research Partners in Health

E-LEARNING IN PILLS: NEW TOOLS TO ADMINISTER AND ASSIMILATE LIBRARY SERVICES

F. Topuz, V. Scotti, A. Balduini, G. Gabutti, A. Zeccato, M. Curti

IRCCS Policlinico San Matteo Hospital Foundation - Pavia, Italy
Scientific Direction Library and Documentation Service

Correspondence: f.topuz@smatteo.pv.it

In this work we describe how we created new training models based on special softwares that allow us to:

- 1) make short multimedia training presentations. These modules will allow the student/researcher to follow the teacher's voice via the PC and to see what (s)he' s describing on the monitor.
- 2) make them accessible on the web and make them always usable in and outside the hospital network.

Who are we

- San Matteo Hospital is an Italian public research institute of national preminence.
- Our library is the only 'hospital library' and is the reference point for all the physicians, researchers and nurse staff for their literature research.



- Apart from the traditional library tasks, we also provide **training courses** for the use of Library Services and the Scientific Databases, such as PubMed, Cochrane Library, Cinhal, Embase, Google Scholar.
- We noticed that for our health-care workers, it was **difficult to find time to participate to these courses,**
- so we decided to create **new methods to teach** them how to use Scientific Databases and the Library services.



Why?

- There are too many resources in Internet.
- One limit to the utilization of these resources is that often the methods of investigation of such parent information providers is not intuitive hence they require the knowledge of a certain number of ‘tricks’ which the researchers, because they have no time to deepen their knowledge, are unable to use.

What we think a researcher
needs to retrieve information
(s)he wants?

- new educational methods
- alternative teaching methods
- Web 2.0 tools and training tools

in the Web 2.0 era

- an interesting idea is that of developing a multimedia teaching method (which would then be reusable by other scientific libraries) in order to transfer its end-users with the appropriate tools necessary for an efficient research-work on literature via biomedical resources.

Work-plan

- creation of multimedia educational pills, realized with the help of specific softwares which, by assembling video images and a commentary voice together, guides the end-user to the utilization of electronic resources step-by-step.

- Our initial idea originated from PubMed multimedia tutorials which establish an appreciated model to follow to create customized tutorials.

The screenshot shows the PubMed Online Training website. The header includes the NLM logo, the text 'U.S. National Library of Medicine National Institutes of Health', and a search bar. Below the header are navigation tabs: 'Databases', 'Find, Read, Learn', 'Explore NLM', 'Research at NLM', and 'NLM for You'. The main content area is titled 'PubMed® Online Training' and features a 'PubMed Tutorial' section with a list of links: 'Understanding the Vocabulary', 'Building the Search', 'Managing the Results', 'Saving the Search', and 'Getting the Articles'. Below this is a 'Quick Tours' section with a list of tutorials. The 'Searching PubMed' section is circled in blue and contains the following items: 'Search PubMed by Author (2 min., June 2010)', 'Searching PubMed by Author and Subject (1 min., September 2009)', 'PubMed Simple Subject Search (1 min., January 2010)', 'Search for a Journal (2 min., March 2011) - See also Searching for Journals in the NLM Catalog', and 'Retrieving Citations from a Journal Issue (1 min., February 2010)'. Other sections include 'PubMed's MeSH Database', 'Saving Searches (My NCBI)', 'Collections and Bibliographies (My NCBI)', and 'Preferences and Filters (My NCBI)'. The footer shows the browser's address bar and status bar.

U.S. National Library of Medicine
National Institutes of Health

Contact NLM

Search

The World's Largest Medical Library

Home > Training & Outreach > Distance Education Resources

PubMed® Online Training

Return to PubMed

PubMed Tutorial

The [PubMed Tutorial](#) is based on the NLM's one-day [PubMed training course](#).

Go to:

- [Understanding the Vocabulary](#)
- [Building the Search](#)
- [Managing the Results](#)
- [Saving the Search](#)
- [Getting the Articles](#)

Quick Tours

The following are brief [animated tutorials](#) with audio for using PubMed. Running times are rounded to the nearest minute. Click on the link to launch the tour.

Searching PubMed

- [Search PubMed by Author](#) (2 min., June 2010)
- [Searching PubMed by Author and Subject](#) (1 min., September 2009)
- [PubMed Simple Subject Search](#) (1 min., January 2010)
- [Search for a Journal](#) (2 min., March 2011) - See also [Searching for Journals in the NLM Catalog](#)
- [Retrieving Citations from a Journal Issue](#) (1 min., February 2010)

PubMed's MeSH Database

- [Searching with the MeSH Database](#) (3 min., February 2011)
- [Combining MeSH Terms Using the MeSH Database](#) (3 min., February 2011)
- [Applying Subheadings and Other Features of the MeSH Database](#) (3 min., February 2011)

Saving Searches (My NCBI)

- [Saving Searches and Creating E-mail Alerts](#) (4 min., revised April 2011)
- [Changing Saved Searches](#) (2 min., revised April 2011)
- [E-mail Alerts for Articles from Your Favorite Journals](#) (3 min., revised April 2011)

Collections and Bibliographies (My NCBI)

- [Collections](#) (3 min., revised April 2011)
- [Editing Collections](#) (3 min., revised May 2011)
- [Creating Your Bibliography](#) (4 min., revised April 2011)
- [Sharing Collections](#) (2 min., revised May 2011)

Preferences and Filters (My NCBI)

- [Retrieving Your My NCBI Username or Password](#) (2 min., revised April 2011)

Search: PubMed

[Limits](#) [Advanced search](#) [Help](#)

Search


Clear

PubMed

PubMed comprises more than 19 million citations for biomedical literature, including journal articles, books, and online books. Citations may be linked to PubMed Central and publisher web pages.

To search PubMed for works by a specific author, enter the author's last name and initials in the search box. Use no punctuation.

Using PubMed

[PubMed Quick Start Guide](#)[Full Text Articles](#)[PubMed FAQs](#)[PubMed Tutorials](#)[New and Noteworthy](#) [Single Citation Matcher](#)[Batch Citation Matcher](#)[Clinical Queries](#)[Topic-Specific Queries](#)

More Resources

[MeSH Database](#)[Journals Database](#)[Clinical Trials](#)[E-Utilities](#)[LinkOut](#)

Our Tutorials

- are not intended to substitute existing training programs but rather, to communicate additional and strategic information enhancing the use of tools and resources at our researchers' disposal.
- PubMed tutorials are exclusively in english. Now most health-care workers know basic scientific english but truly only a small number are able to comprehend spoken english. So we have decided to carry out tutorials that are in italian language so that anyone can master bibliographic research, both in our Hospital and in other realities on a wider national level.

Resources to create our tutorials

- a personal computer (PC, operating system: windows XP) with loudspeakers and microphone
- a software of video/audio editing which, by synchronizing images and voice.

Screencasting software

- A **screencast** is a digital recording of computer screen output, also known as a *video screen capture*, often containing audio narration. (wikipedia)





WIKIPEDIA
The Free Encyclopedia

[Main page](#)
[Contents](#)
[Featured content](#)
[Current events](#)
[Random article](#)
[Donate to Wikipedia](#)

Interaction

[Help](#)
[About Wikipedia](#)
[Community portal](#)
[Recent changes](#)
[Contact Wikipedia](#)

Toolbox

Print/export

Languages

[Español](#)
[Français](#)

Article [Discussion](#)

Read

[Edit](#)

[View history](#)

Search

Comparison of screencasting software

From Wikipedia, the free encyclopedia

A comparison of notable **screencasting software** programs, that are used to record activities on the **computer** screen, mouse movement, and often includes live audio for later playback. Screencasting is an asynchronous communication technology (not real-time). This category of software is used for recording demonstrations, remote technical assistance, sales presentations, and training.

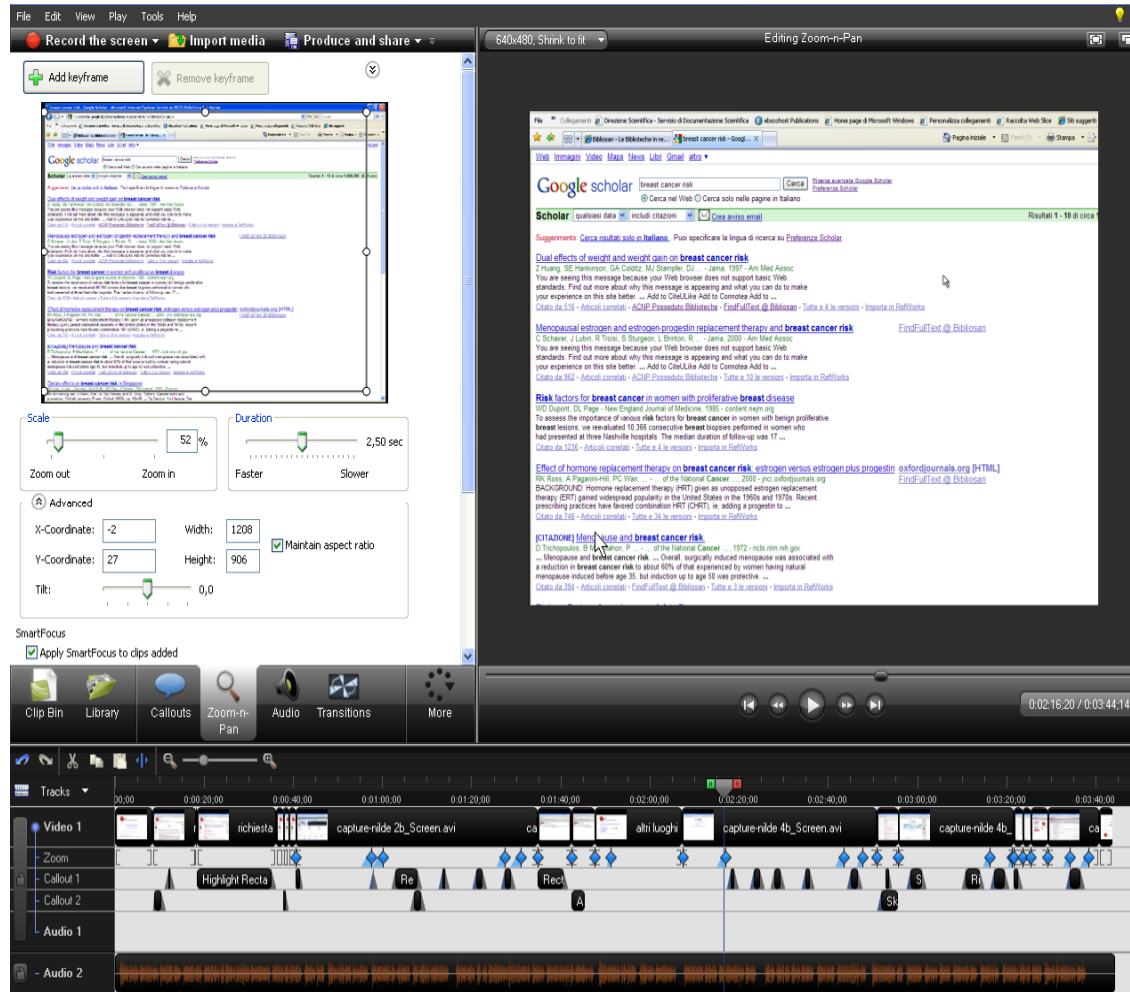
Comparison by specification

[\[edit\]](#)

Product Name ✕	Publisher ✕	Latest stable version ✕	Latest release date ✕	OS ✕	Software license ✕	Open source ✕
Adobe Captivate	Adobe Systems	5.0	2010-06-01	Windows	Proprietary commercial	No
Bandicam	Bandisoft	1.6.1.113	2011-03-16	Windows	Proprietary commercial	No
BB FlashBack	Blueberry Software	2.7	2010-07-15	Windows	Proprietary commercial	No
BB FlashBack Express	Blueberry Software	2.7	2010-07-15	Windows	Freeware	No
BSR Screen Recorder	BSRSoft	5.2.1	2011-04-18	Windows	Proprietary commercial	No
CamStudio	CamStudio.org	2.6 Beta	2010-10-27	Windows	GPL Version 2	Yes
Camtasia Studio	TechSmith	7.1	2010-10-12	Windows	Proprietary commercial	No
Camtasia for Mac	TechSmith	1.1.1	2010-06-01	Mac OS X	Proprietary commercial	No
Capture Fox	Zafer Gurel	0.7.0	2009-11-25	Windows	MPL Version 1.1	Yes
FFmpeg	FFmpeg.org	0.5	2009-03-10	Cross-platform	LGPL	Yes
Fraps	Beepa Pty Ltd	3.4.5	2011-05-28	Windows	Proprietary commercial	No
Growler Guncam	Growler Software	3.2.4.0	2007-06-14	Windows	Proprietary commercial	No
HyperCam	Hyperionics & Solveig Multimedia	3.0.1006.10	2010-06-16	Windows	Proprietary commercial	No
Jing Pro	TechSmith			Windows Mac OS X	Proprietary commercial	No
Jing	TechSmith			Windows Mac OS X	Freeware	No
Microsoft Expression Encoder	Microsoft Corporation	4	2010-06-08	Windows	Proprietary commercial	No
Nero Vision	Nero AG	10.6.10800	2011-04-19	Windows	Proprietary commercial	No
Pixetell	Ontier Inc.	1.3.11913	2010-01-15	Windows	Proprietary commercial	No
QuickTime X (PRO Version Only)	Apple Inc.	10.0 (118)	2010-03-29	Mac OS X	Part of Mac OS X	No

The software we utilized

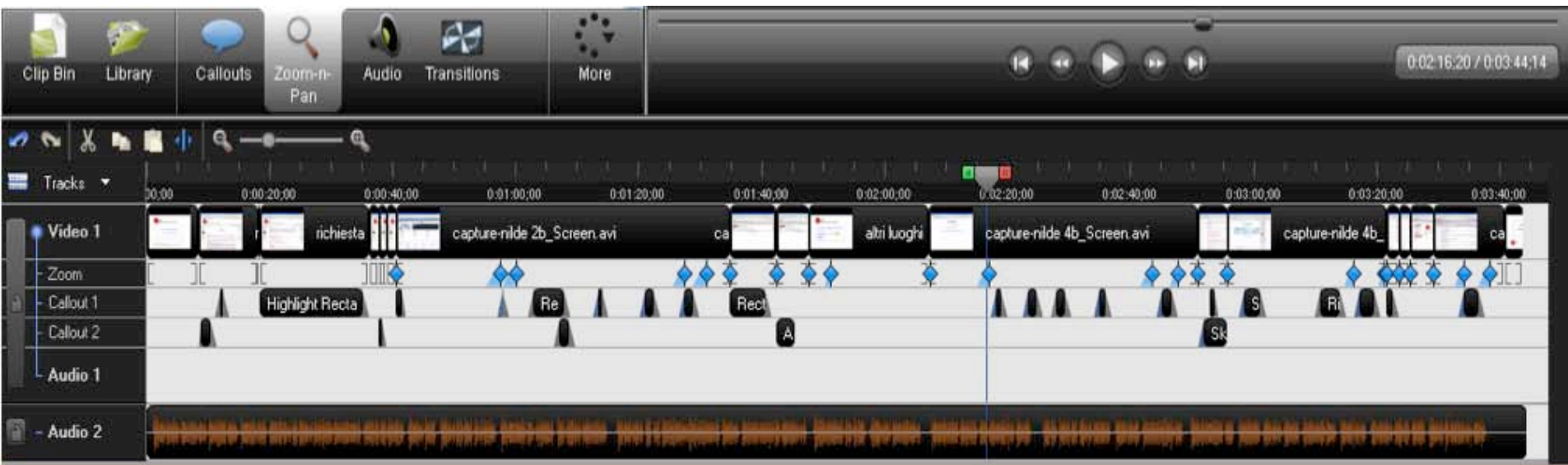
Camtasia Studio



this program offers the possibility to:

- video screen capture
- insert headings
- insert transition effects
- add audio commentaries
- video-audio synchronization
- insert slides
- insert callouts and comments
- style the editing
-other advanced functions

timeline



Clip BIN

The screenshot displays the Camtasia Studio interface with the following sections:

- Camtasia recording file:** Contains three video clips: "capture-nilde 2b.camrec", "capture-nilde 3b.camrec", and "capture-nilde 4b.camrec".
- Image:** Contains six image files: "altri luoghi 2.jpg", "firma 2.jpg", "pubblicazione bollino verde.jpg", "pubblicazione richiesta inevasa.jpg", "pubblicazionefinale.jpg", and "titolo nilde 2.jpg".
- Audio:** Contains one audio icon.

The bottom of the interface shows the **Tracks** panel with a timeline from 0:00 to 0:01:20:00. The tracks include:

- Video 1:** Contains video clips "richiesta" and "capture-nilde 2b_Screen.avi".
- Zoom:** Contains zoom markers.
- Callout 1:** Contains a callout labeled "Highlight Recta".
- Callout 2:** Contains a callout labeled "Re".
- Audio 1:** Contains an audio track.
- Audio 2:** Contains a second audio track.

Navigation arrows on the left point to the "Camtasia recording file", "Image", and "Audio" sections.

zoom

The image displays the Zoom desktop application interface during a Zoom-in-Pan session. The main window shows a Google Scholar search page for "breast cancer risk". The interface includes a menu bar (File, Edit, View, Play, Tools, Help) and a toolbar with options like "Record the screen", "Import media", and "Produce and share".

On the left side, there are controls for "Add keyframe" and "Remove keyframe". Below these are "Scale" and "Duration" sliders. The "Scale" slider is set to 52%, with "Zoom out" and "Zoom in" buttons. The "Duration" slider is set to 2,50 sec, with "Faster" and "Slower" buttons. An "Advanced" section contains input fields for X-Coordinate (-2), Y-Coordinate (27), Width (1208), and Height (906), along with a "Tilt" slider set to 0,0 and a "Maintain aspect ratio" checkbox.

At the bottom left, the "SmartFocus" section has a checked box for "Apply SmartFocus to clips added". Below this is a toolbar with icons for "Clip Bin", "Library", "Callouts", "Zoom-in-Pan", "Audio", "Transitions", and "More".

The main content area shows the Zoom-in-Pan controls, including a "640x480, 5shrink to fit" dropdown and an "Editing Zoom-in-Pan" title bar. The video player shows a Google Scholar search page with results for "breast cancer risk". The search results include titles like "Dual effects of weight and weight gain on breast cancer risk" and "Menopausal estrogen and estrogen-progestin replacement therapy and breast cancer risk".

At the bottom, the "Tracks" section shows a timeline from 00:00 to 03:40:00. The "Video 1" track shows a sequence of clips, including "capture-nilde_2b_Screen.avi" and "capture-nilde_4b_Screen.avi". The "Zoom" track shows keyframes for zooming in and out. The "Callout 1" track shows callouts for "Highlight Recta", "Re", "Rect", "A", "S", and "Ri". The "Audio 1" track shows a waveform of audio. The "Audio 2" track is currently empty.

call-out cloud

The image displays the Camtasia Studio interface during a video editing session. The main window shows a callout cloud being edited over a video of the website www.bibliosan.it. The callout cloud is a white rounded rectangle with a red border and a drop shadow, containing the text "www.bibliosan.it" in red. The editing panel on the left shows the "Shape" and "Text" properties of the callout cloud. The "Shape" panel includes options for "Border", "Fill", "Effects", and "Rotation". The "Text" panel shows the text "www.bibliosan.it" in a blue box. The "Properties" panel shows the callout cloud's dimensions (Width: 531, Height: 93) and fade-in/out times (0,40 sec and 1,00 sec). The video timeline at the bottom shows the callout cloud being edited over a video of the website. The video timeline includes tracks for Video 1, Zoom, Callout 1, Callout 2, Audio 1, and Audio 2. The video timeline shows the callout cloud being edited over a video of the website. The video timeline includes tracks for Video 1, Zoom, Callout 1, Callout 2, Audio 1, and Audio 2. The video timeline shows the callout cloud being edited over a video of the website.

Camtasia Studio - FindFull28.camproj

Record the screen Import media Produce and share

Add callout Remove callout

Shape

Border Fill Effects Rotation: 0

Text

Arial

www.bibliosan.it

Properties

Fade in: 0,40 sec Width: 531 X: 90

Fade out: 1,00 sec Height: 93 Y: 49

Make flash hotspot Flash hotspot properties... Advanced...

Clip Bin Library Callouts Zoom-n-Pan Audio Transitions More

00:08:29 / 0:03:44:14

Tracks

Video 1

Zoom

Callout 1

Callout 2

Audio 1

Audio 2

transition

The image shows the Camtasia Studio interface. The top menu bar includes File, Edit, View, Play, Tools, and Help. Below the menu bar are three main sections: Record the screen, Import media, and Produce and share. The central area is divided into two panes. The left pane displays a grid of 15 transition effects: Barn, Blinds, Checkerboard, Cube rotate, Fade, Fade through black, Flip, Fold, Glow, Gradient wipe, Inceet, Iric, Page roll, Page turn, and Pixelate. The right pane is a preview window showing a slide with the BiblioSan logo and the text "Le Biblioteche in rete degli Enti di Ricerca Biomedici Italiani". The slide content includes the text "Il 'Find full -text' by Bibliosan si trova anche in:" followed by a bulleted list: Google Scholar, Web of Science, Best Practice, and RefWorks. An orange arrow points from the list to a small "find full-text" button. The bottom of the interface features a toolbar with icons for Clip Bin, Library, Callouts, Zoom-n-Pan, Audio, Transitions, and More. A playback control bar is visible above the timeline, showing a progress indicator at 0:01:47.18 / 0:03:44.14. The timeline at the bottom shows a sequence of video clips: capture-nilde 2b_Screen.avi, capture-nilde 2b_Screen.avi, altri luoghi 2.jpg, capture-nilde 4b_Screen.avi, capture-nilde 4b_Screen.avi, and capture-nilde 4b_Screen.avi, connected by black arrows indicating the sequence of transitions.

audio

The image displays the Camtasia Studio software interface, which is used for recording and editing video content. The main window is divided into several sections:

- Global settings:** Includes options for "Enable volume leveling" (unchecked), "Enable noise removal" (checked), and "Enable voice optimization" (checked). Under "Advanced", there are radio buttons for "Male voice" and "Female voice". A volume variation graph shows a transition from high to low volume.
- Editing tools:** A section for audio manipulation with buttons for "Volume down", "Volume up", "Fade in", "Fade out", and "Silence". Below these are "Add audio point" and "Remove audio points" buttons.
- Preview window:** Shows a video recording of a web browser displaying a PubMed article titled "Regular surveillance for Li-Fraumeni syndrome: advice, adherence and perceived benefits." A red circle highlights the "Find Audio" button in the browser's interface.
- Bottom toolbar:** Contains icons for "Clip Bin", "Library", "Callouts", "Zoom-n-Pan", "Audio", "Transitions", and "More".
- Timeline:** A multi-track timeline at the bottom shows "Callout 2", "Audio 1", and "Audio 2" tracks. The "Audio 2" track displays a green waveform with volume levels and markers.

once the recording has ended

the tutorial can be published:

on the **web** or included in a **Power Point** presentation or sent via **e-mail** or recorded in any hardware device (**usb pen, cd, dvd, etc.**)

difficulties we encountered

to be concise but thorough and clear in giving information

to synchronize the audio with the video.

Thanks to the help of the Audiovisual Service, we were able to include an audio commentary which hence illustrated and explained the images and actions viewed on monitor.

Results

During the last months,

- we realized five tutorials of 2-3 minutes each and
- we made these available on web for the Bibliosan Network (The Library Network of Italian Biomedical Research Institutes).



Le Biblioteche in rete degli Enti di Ricerca Biomedici Italiani

- Presentazione
- Regolamenti
- Risorse on-line
- Formazione
- News
- Accesso remoto
- Area riservata



Cerca su bibliosan.it:

Search

Google:

Yahoo: MSN:

Welcome



Ministero della Salute

I Tutorials di BIBLIOSAN

PubMed

- Come registrarsi in My NCBY per salvare strategie e risultati di ricerca in PubMed.
- A cosa serve e come funziona il comando "Find Full Text by Bibliosan"

Clas

- Come registrarsi in Clas per accedere a Bibliosan da "casa".

Google Scholar

- Come personalizzare Google Scholar per integrarlo con le risorse di Bibliosan: FindFullText, RefWorks ed ACNP.

Nilde 4.0 Utenti

- Come effettuare il passaggio da Nilde 3 a Nilde 4.0 per richiedere via Web documentazione scientifica alla propria biblioteca.

RefWorks

- Come utilizzare RefWorks



Trova biblioteche



Statistiche



Area download



Area Tutorials



What have we learned?

- Tutorials must be concise (last only a few minutes).
- Tutorials must be simple and straightforward (so it must not assume FAQs).
- Tutorials must be easily readable and comprehensible.
- Tutorials must maximize the exploitation of all multimedia teaching tool potential.

tutorial problem solving

- A lot of work had to be structured, formulated and set-up before tutorials could be created.
- This meant that also during the phase of their accomplishment, the tutorials were subject to continuing revisions, to ensure that all assets of the software at hand were fully exploited.

Our experience has been very important

- for those who realized the tutorials for their professional growth
- because it opens to a wide range of possibilities of the use of this tool in the realization of new and upgraded e-learning tutorial pills

Our achievements

- we have had a good feedback from users, who have discovered, thanks to these tutorial pills, the great opportunities, sometimes difficult to detect, that on-line resources give
- we were able to identify a new typology of user, the nurse, for whom we will make specific tutorials customized on their specific training needs
- we have enhanced training quality in researchers

Great Expectations

We expect to have a significant improvement in the accesses to on-line resources globally.

We expect to have more self-sufficient users, future researchers.

A collection of various colorful pills and capsules scattered on a white surface. The pills include blue, red, white, and green capsules, as well as blue and white tablets. The background is a soft-focus white surface with more pills scattered throughout.

**here is an example of a tutorial
pill which you may easily find if
you link to www.bibliosan.it**