

## Vision Stereo



Digital solution for virtual sample preparation in stereo microscopy

virtual sample  
preparation



# New standards in the daily work

## Applications



biology



botany



zoology



life science



medicine



morbid anatomy



forensics



criminology



education



remote consultations



specialist training



telemedicine



## Digital microscopy

Digital microscopy (digital pathology) is a digital environment for managing and analyzing microscopy data, which is obtained using a microscope, a camera, software and a computer.

Digital microscopy allows you to attain qualitative and quantitative results, which are either impossible to receive by other means or cost and time consuming.

## Digital sample

Single images are 'stitched' automatically to make a complete macroscopic digital sample ('virtual sample').

A digital macroscopic sample is indispensable when you have an object that can't be seen entirely in the field of view with the required magnification — it is just not possible to see it completely without creating a "virtual sample".

Digital samples don't fade or break; there is also no risk to damage or lose the object of examination.

# Main benefits



1 Autofocus — automated focus adjustment



2 Z-scanning of the sample layer-by-layer



*I keep macroscopic samples as digital ones on my office computer. I organize them the way I want and I always find what I am looking for easily. Digital samples never fade or get damaged like the glass. I do not worry about breaking or losing it*



3 Digital sample editor



4 Atlas of macroscopic images



5 Database: storage, filters and search options



6 Motorized stereo microscope and Vision digital camera





# Digital sample preparation

1

## Prepare a macroscopic sample

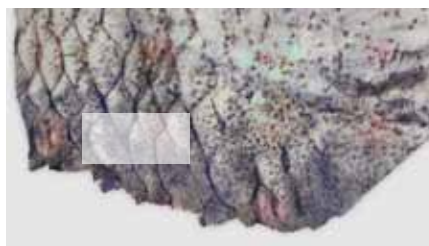
Prepare a macroscopic sample and place it on the stage of your motorized stereo microscope.



2

## Select a specific area of the digital sample

Set the required parameters: size, thickness and location of the object, and autofocus if required.



Vision system will automatically prepare a complete digital sample with high detalization.



3

## Securely save it in the database

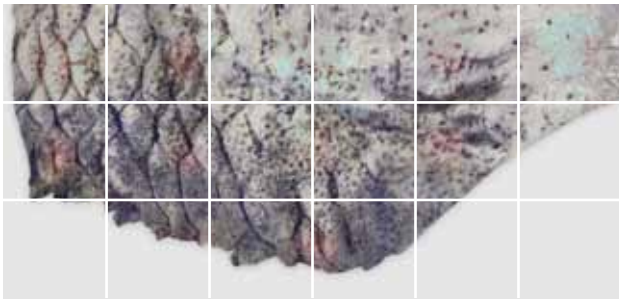
Digital macroscopic samples are saved in the database.



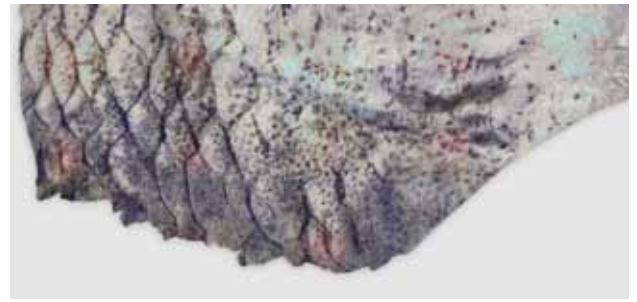
Use the “Digital sample editor” to import, export and edit individual frames as well as complete digital samples.

Digital macroscopic samples can be used for remote consultations with colleagues, video conferences, publications on specialized social networks, etc.

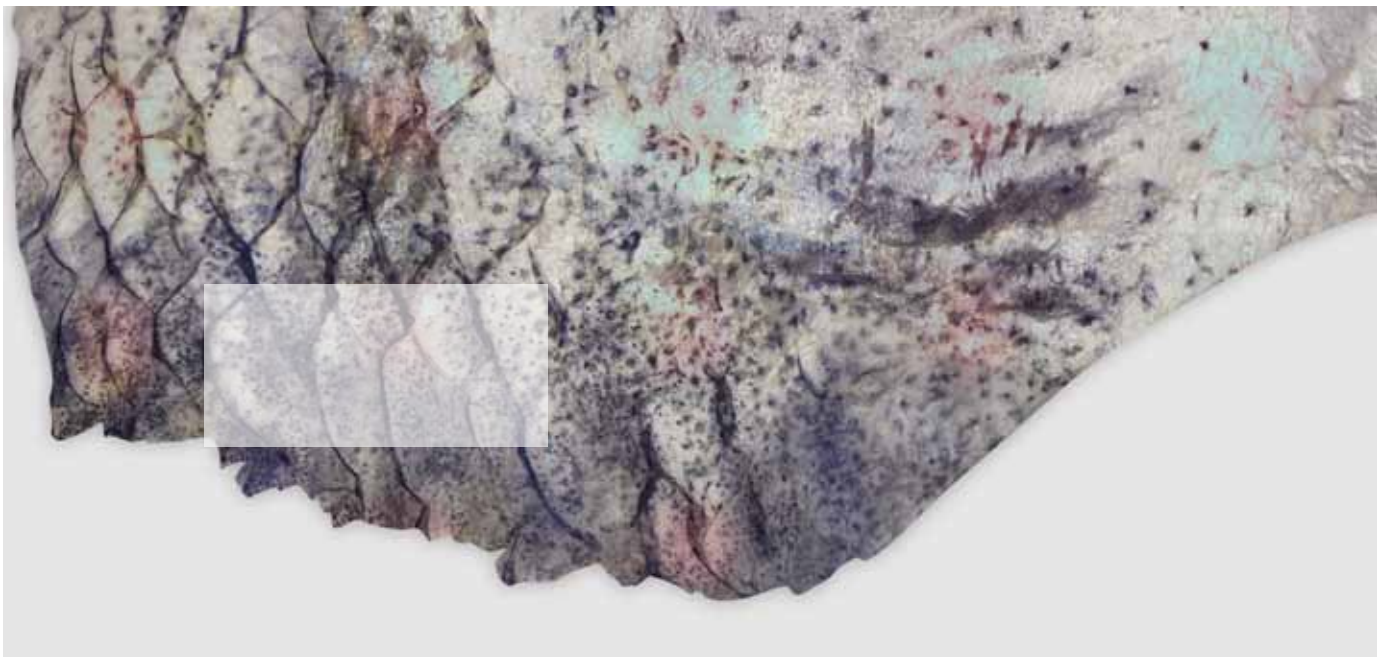
## Example 1 – Fish scale



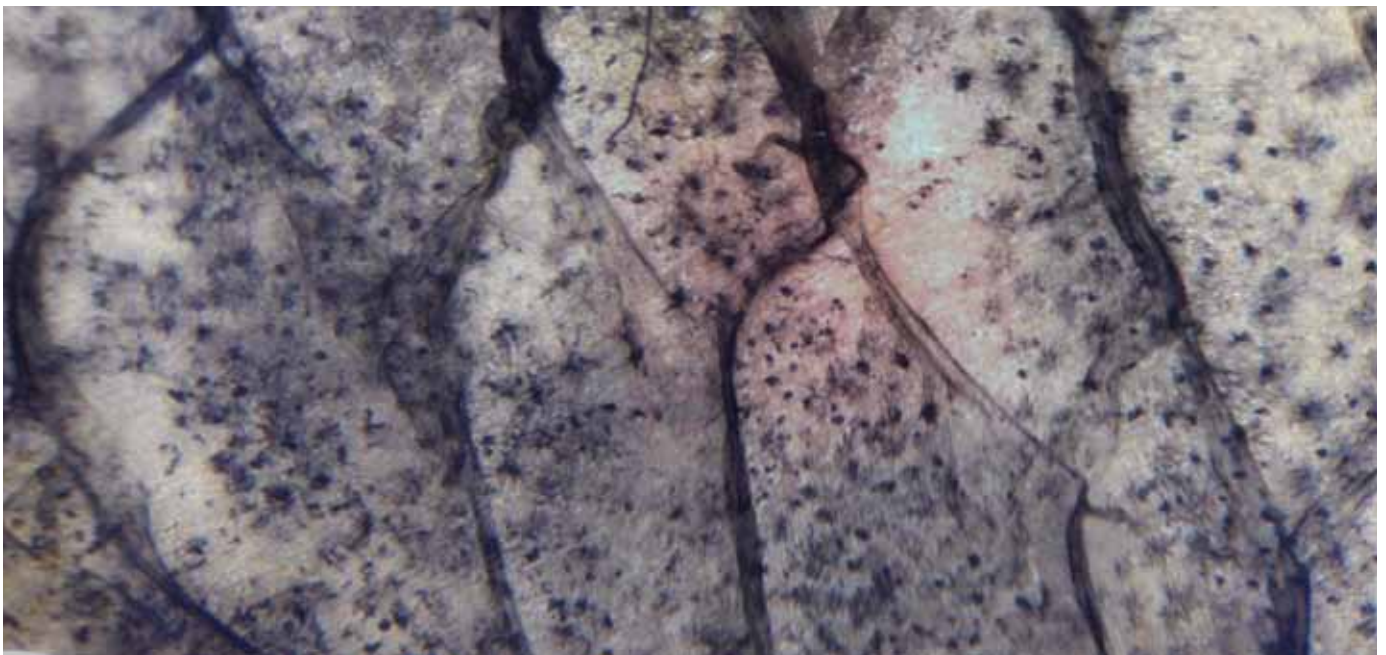
series of macroscopic frames of a digital sample, magnification 20x, 1:4



panoramic digital sample after “stitching” the macroscopic frames, magnification 20x, 1:6

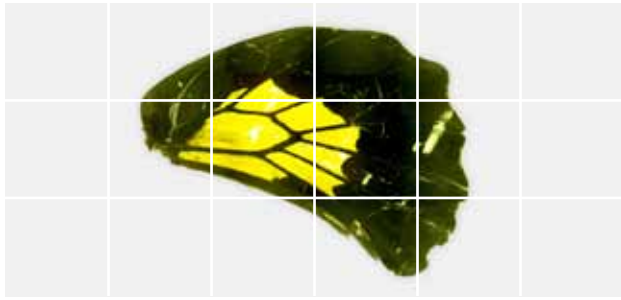


digital sample with an area selected for detailed examination, magnification 20x, 1:4

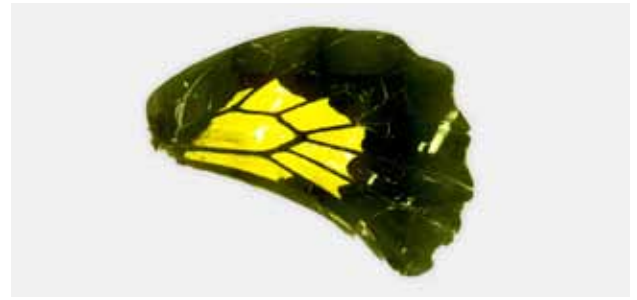


digital sample of a magnified selected area, magnification 20x, 1:1

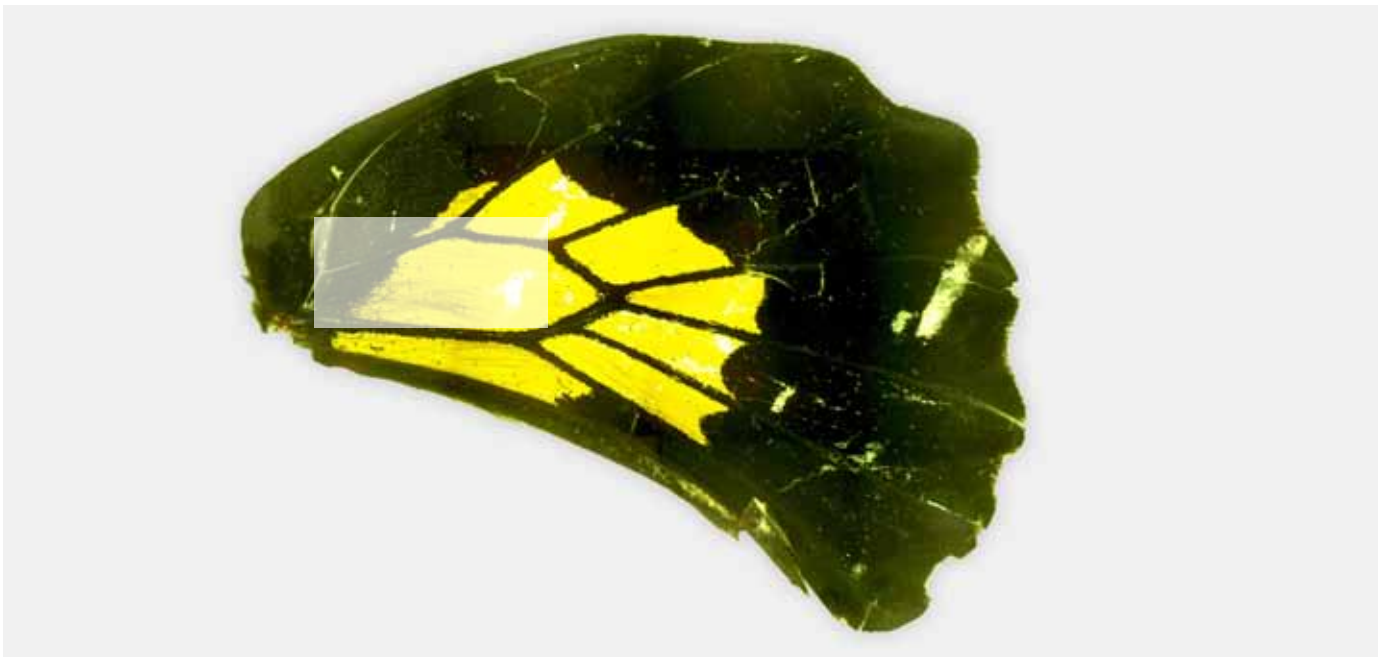
## Example 2 – Butterfly's wing



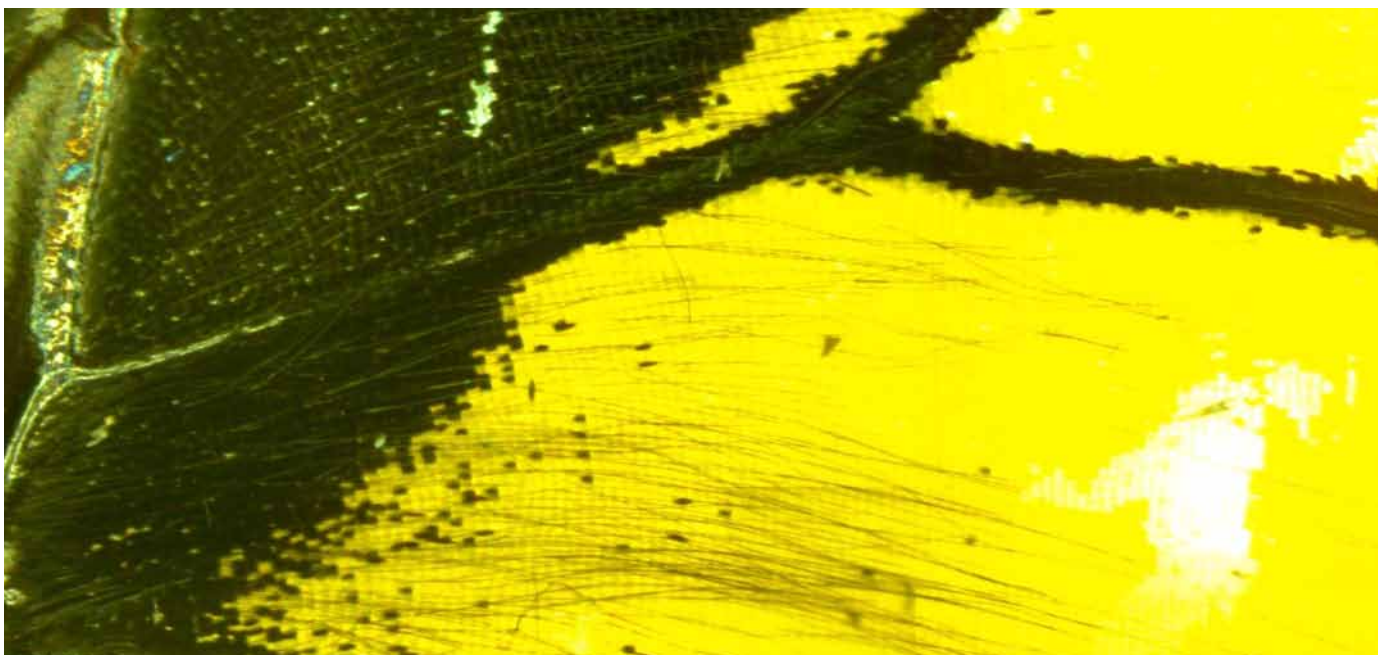
series of macroscopic frames of a digital sample, magnification 10x, 1:6



panoramic digital sample after "stitching" the macroscopic frames, magnification 10x, 1:6

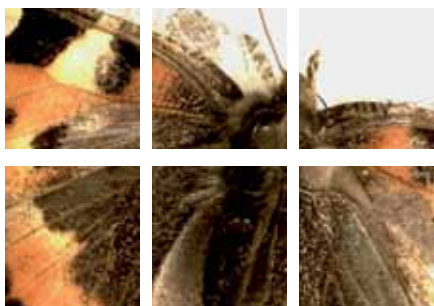


digital sample with an area selected for detailed examination, magnification 10x, 1:6



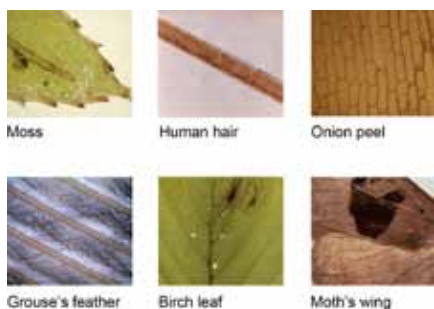
digital sample of a magnified selected area, magnification 10x, 1:1

## Main features



### Editor for digital samples

Image editor is used to manage and edit frames of a digital sample. There is a date, ID and name of every digital sample displayed in the editor. Select a sample in the gallery to display automatically all the its frames, that can be scaled freely.



### Atlas of digital samples

Atlas of macroscopic objects is a customizable hierarchical database. Customize the atlas structure by adding required sections and text comments to macroscopic images.



### Reliable database

Vision database stores all patient records and macroscopic samples. Information is shown in a form of a patient record with an image attached.

The system saves all data automatically, excluding any possibility of losing valuable information. Advanced data management tools, like filtering and sorting, will help you not to waste time on searching.



### Network capabilities

- view digital samples on the screen and discuss with your colleagues
- print out your digital samples
- data import/export to other information networks (LIS/HIS)
- share information with your colleagues wherever they are. Send your digital samples by email
- organize video conferences with colleagues from around the world
- connect, via Internet, multiple workplaces to a remote server
- publish your research on specialized social networks



Improve your standards and enhance the quality of your work! Take control of the increasing amount of information in your laboratory.

### Vision concept

Vision concept is a modern approach to diagnostics, combining microscopy, digital image processing and analysis data. Specialists, that are looking for professional development and recognize new digital technologies, are presented with unlimited resources in their field.

### Vision digital solutions

Vision digital solution is a workplace to obtain, manage, analyze and interpret digital macroscopic samples. You work with a unified system where priority is given to efficiency.

### Vision+ digital solutions

Vision+ digital solution combines the possibilities of digital solutions in microscopy and analytic medical devices to provide an integrated patient assay and a correct diagnosis.

### Ordering information

Description	Code
<b>Vision Stereo system</b> Set includes: motorized trinocular stereo microscope RZ, Vision digital camera CAM V1400, Vision Stereo software, PC, monitor, printer.	<b>71.0105.00</b>

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We reserve the right to change specification without notice.

Official distributor

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