

Work in team

- user access rights management, concurrent access control, support of multiple simultaneous database connections.

Create a custom database

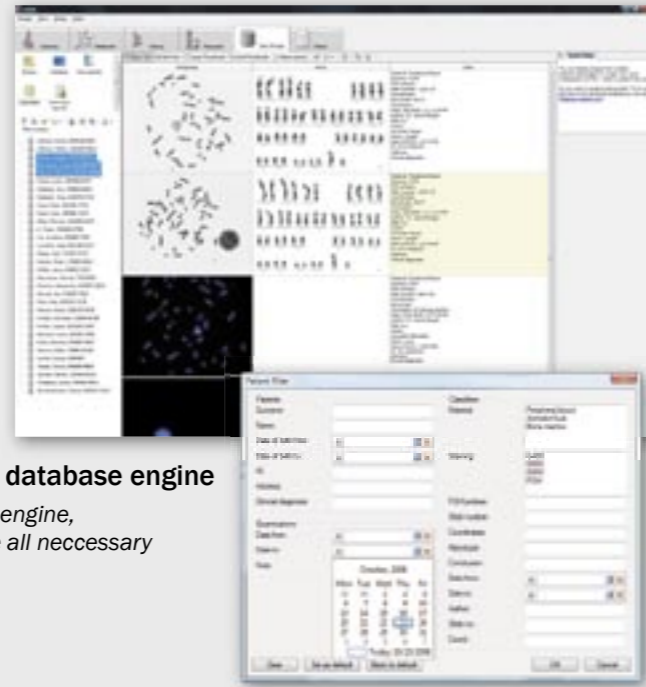
- the database structure can be modified to satisfy any laboratory-specific needs.

Search the data efficiently

- an integrated advanced filtering tool (including date and time absolute and relative filters) is included.

Utilize the powerfull database solution based on SQL database engine

- primarily developed and tested with the Firebird SQL database engine, though available also for other engines. SQL databases provide all necessary infrastructure including backups, networking etc.



Make a Report...

Create a report

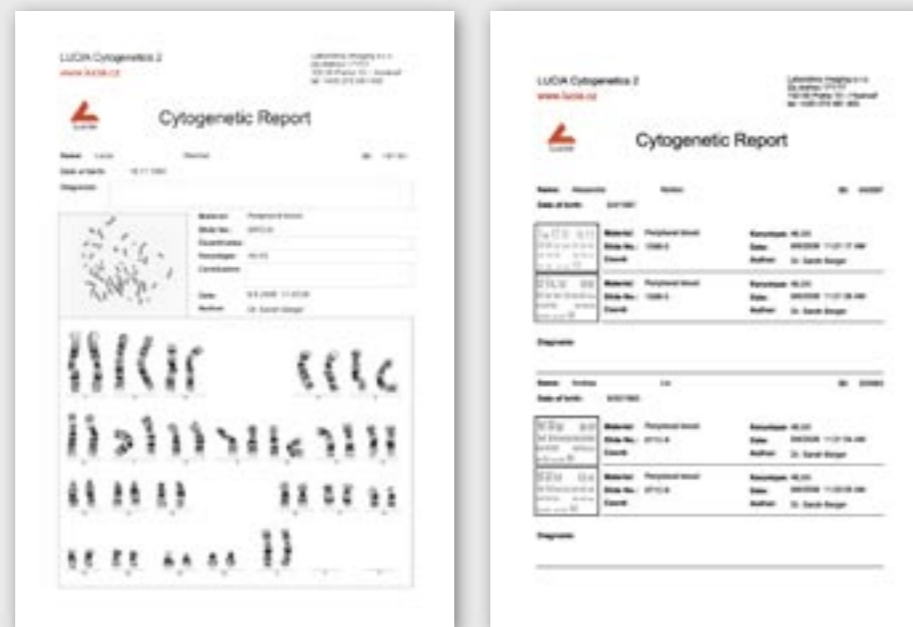
- import data to an easy to use „what you see is what you get“ report editor.

Create a report template

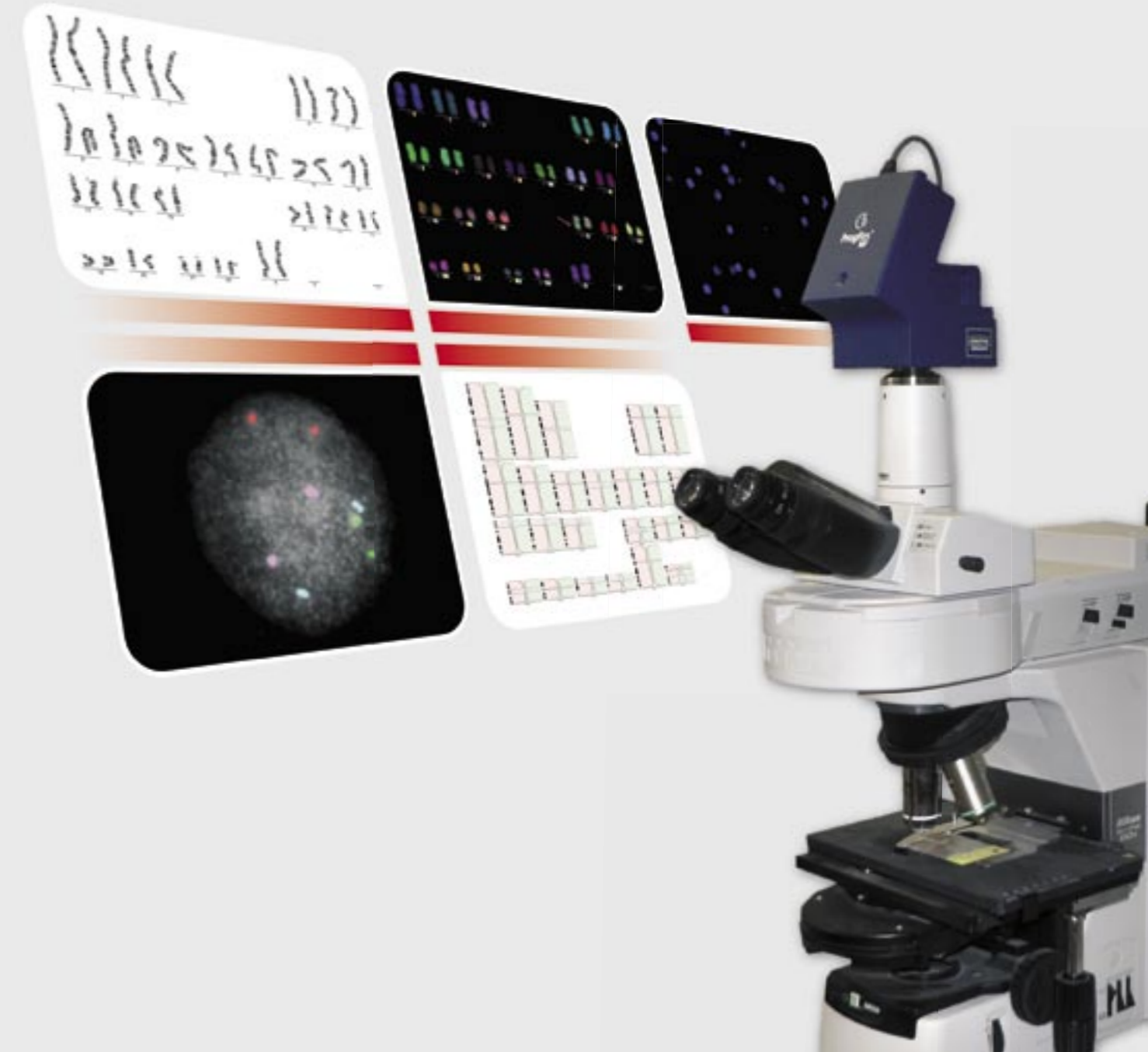
- link the report template items (text fields, image areas) to database records dynamically.
- use repetitive objects to generate summary reports.

Export the reports to PDF

- easy export of the report to PDF makes it ready to be published, sent by e-mail, or printed.



LUCIA Cytogenetics 2 Improves Your Image



Acquire the Image...

Select a camera appropriate to your demands

- cost-effective camera models as well as cooled highly sensitive digital cameras are available.

Obtain the optimal hardware configuration

- variety of computer-controlled devices such as motorized microscopes, filter wheels, or scanning stages are available.

Let the auto exposure do the job

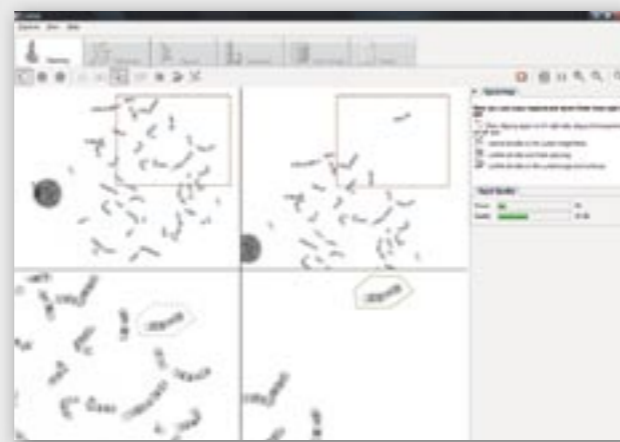
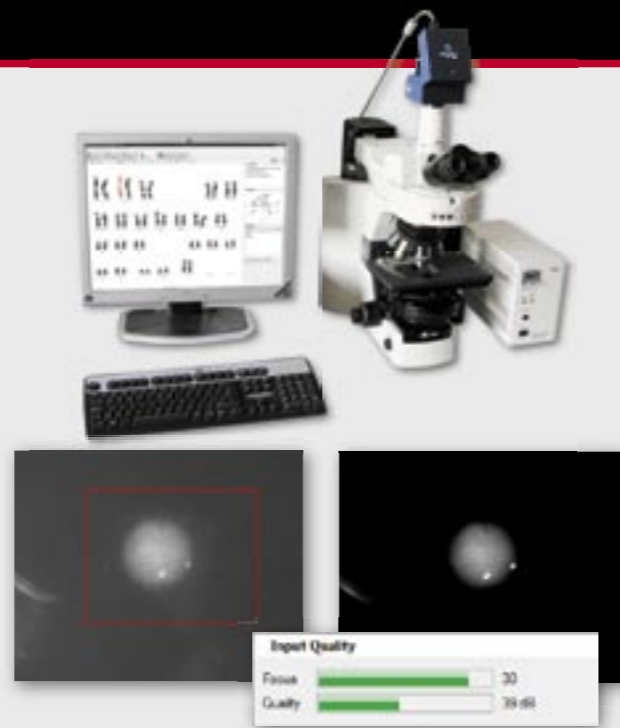
- the continuous auto exposure algorithm balances intensity of the whole scene or just within a user defined region of interest (aimed for fluorescence microscopy).

Be sure you get the required quality

- LUCIA Cytogenetics is equipped with an automatic image quality assessment system.

Acquire even scenes larger than the field of view

- the chromosomes which escaped too far from the metaphase can be easily moved to the metaphase image.
- the seamless image stitching algorithm enables you to merge several fields of view together.



Enhance It...

Take a good look at the image

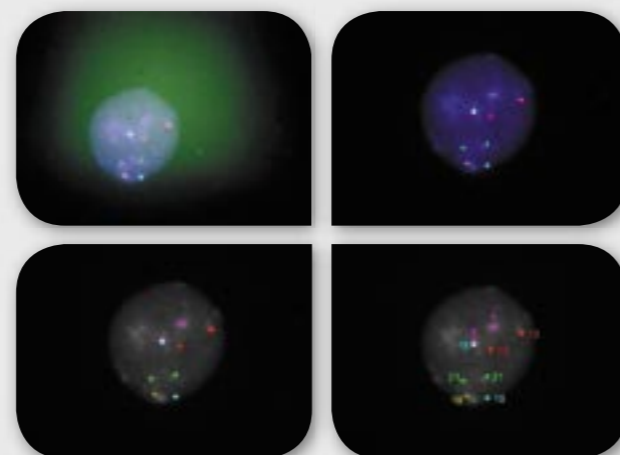
- high quality antialiased image rendering including true color display of multi color fluorescence images corresponding to the emission wavelengths is provided.

Enhance the image

- if there is the need, various enhancement functions including contrast, regional contrast, color tuning etc. are available.
- the banding pattern of chromosomes gets enhanced automatically.

Annotate the image

- arrows and text labels can be inserted and kept with the image.
- easy assisted chromosome counting procedure can be performed.



Karyotype...

Click and get the result

- chromosome classification and other tasks are performed automatically.

Correct possible inaccuracies

- the chromosome clipping, shape editing, and overlap resolving tools will help you.
- easy zooming and scrolling of the image area will help as well.

Arrange the karyogram

- drag and drop, rotation, mirroring, and straightening of single chromosomes can be performed within the karyotype image.

Select chromosomes which need individual enhancement

- image enhancement of a selected chromosome or a group of them.

Trace chromosomes within the corresponding metaphase image

- simultaneous display of the karyogram and the metaphase image coupling the corresponding chromosomes.

Examine details

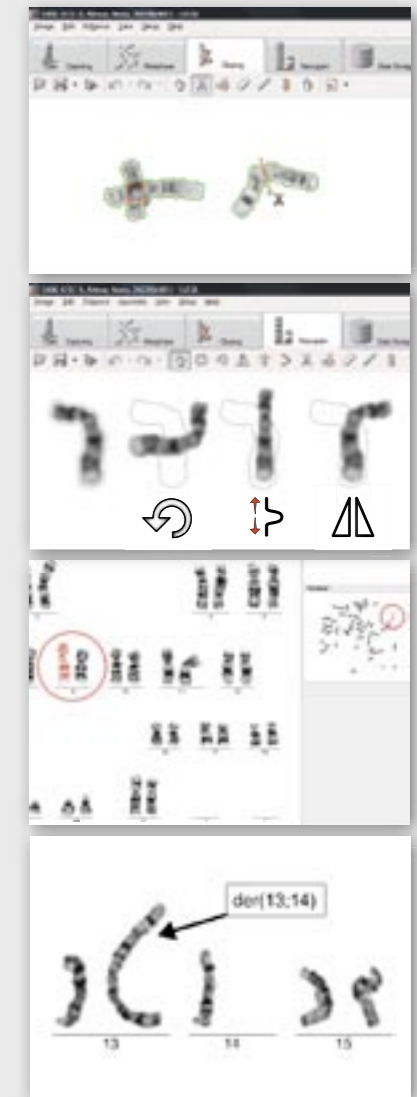
- use the magnifier glass tool to zoom in any part of the karyogram.

Use predefined ideograms

- ideograms for different techniques and banding resolutions are provided (G400, G550, G850, R400 etc.).

Annotate the karyogram

- arrows and text labels can be inserted and saved with the karyogram image.



Track the History...

Browse the history of actions comfortably

- use the multiple step back and forth ability, the number of steps remembered is not limited.

