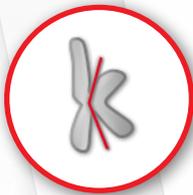




# Karyotyping

## LUCIA Cytogenetics





### Optimized hardware configurations

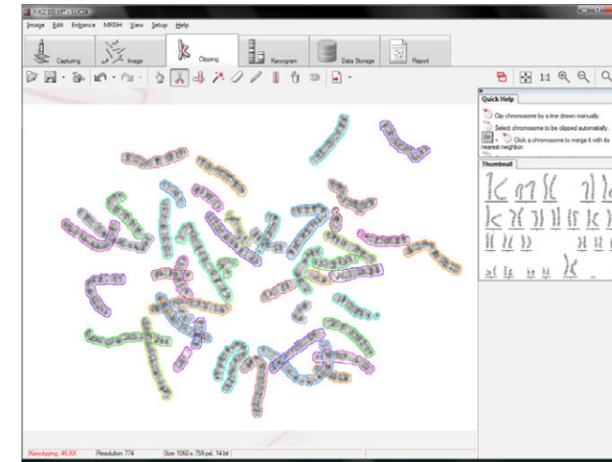
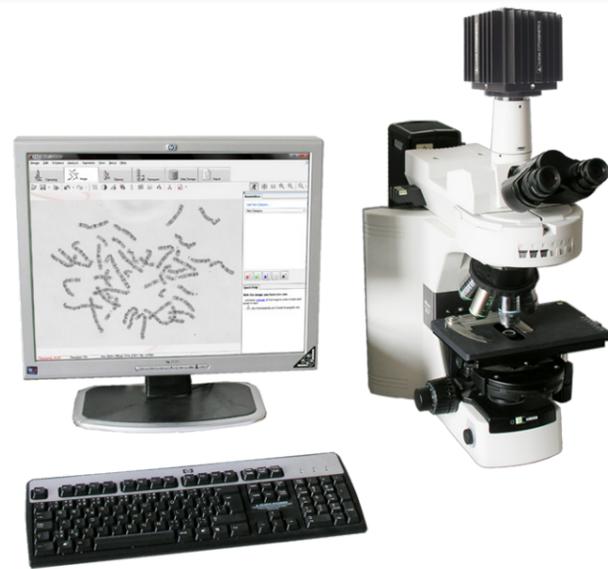
Variety of computer-controlled devices such as motorized microscopes, filter wheels, or scanning stages are available.

### Carefully selected cameras

Cost-effective camera models as well as cooled, highly sensitive digital cameras are available and will be recommended to you based on your requirements.

### Let the system optimize the scene

The continuous auto-exposure algorithm balances intensity of the scene while the automatic image quality assessment system leads you to get the maximum of details.

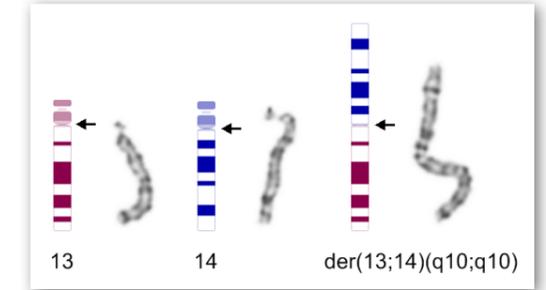
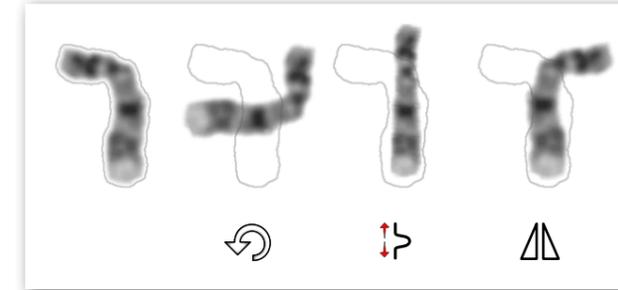
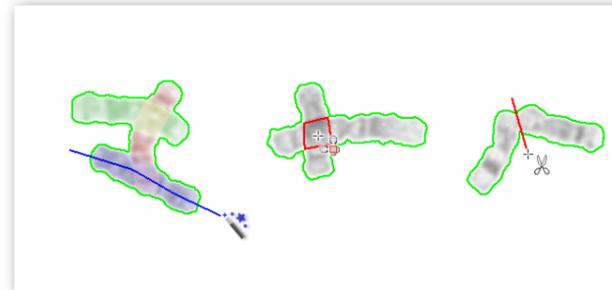
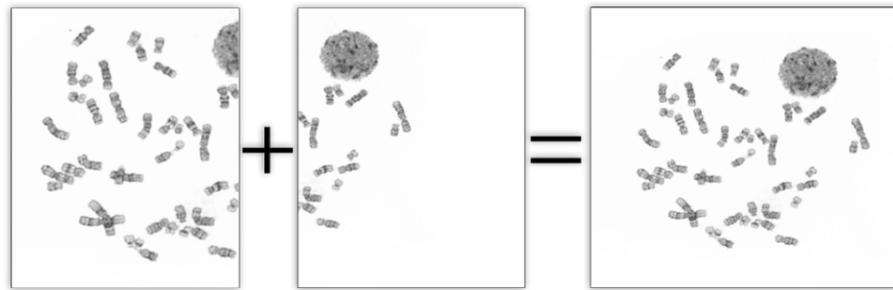
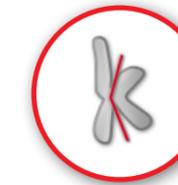


### Automation

Chromosome classification and other tasks are performed automatically.

### Correct imperfections of the image

Automatic zooming and scrolling of the image, chromosome clipping, shape editing, and overlap resolving tools will help you to create karyograms fast and comfortably.

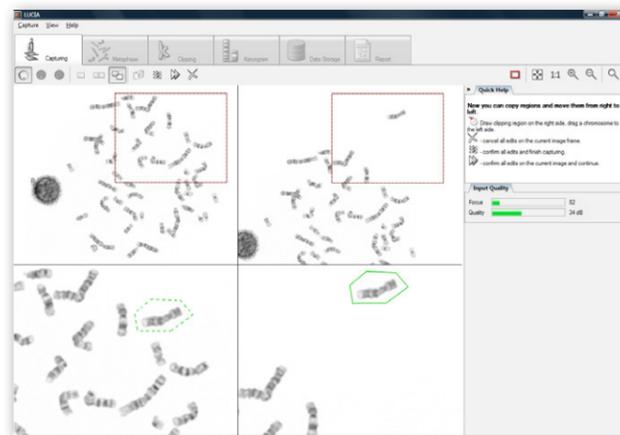


### Acquire extra large scenes

The seamless image stitching algorithm enables you to merge several fields of view of the camera together.

### No chromosome escapes!

The chromosomes which escaped too far from the metaphase can be easily moved to the metaphase image. The Capture Chromosome feature lets you easily acquire a missing chromosome even after karyotyping.



### Create your karyogram layout

Arrangement of the chromosome pairs within the karyogram area may be modified.



### Arrange the karyogram

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

### Annotate the karyogram

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

### Individual chromosome enhancement

Individual enhancement of a selected chromosome or a group of chromosomes.

### Use predefined ideograms or create your own

Ideograms for different techniques and banding resolutions are provided (G400, G550, G850, R400 etc.) and custom ideograms can be created as well.

### See where chromosomes originate from

Simultaneous display of the karyogram and the metaphase image couples the corresponding chromosomes.



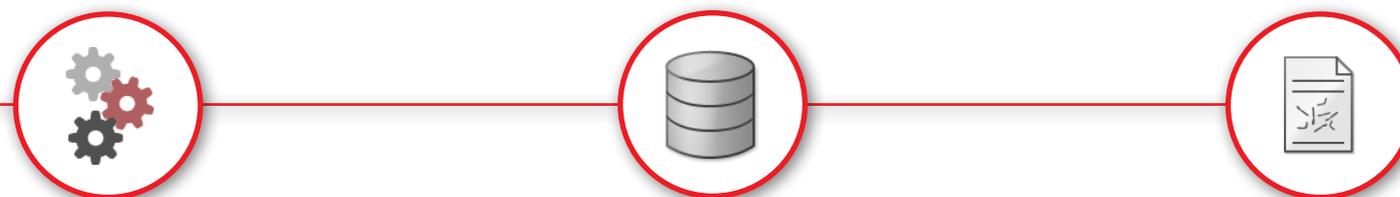
## Browse the history of actions comfortably

Use the multiple-step back and forth ability. The number of steps remembered is not limited and is saved into the database together with the document.



## Audit trail module

Enables to fully manage document history and patient data including examinations.



## Integration with other LUCIA products

LUCIA Cyto genetics - Karyo is fully compatible and can be integrated with other LUCIA products:

LUCIA Cyto genetics - Metaphase Finder

LUCIA Cyto genetics - Database

LUCIA Cyto genetics - Report Tool