

## DYNAMIC MORPHOLOGY ASSAY

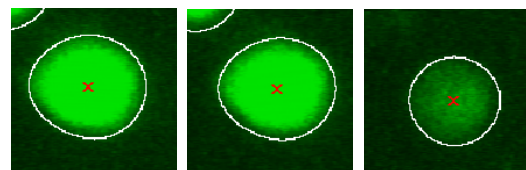
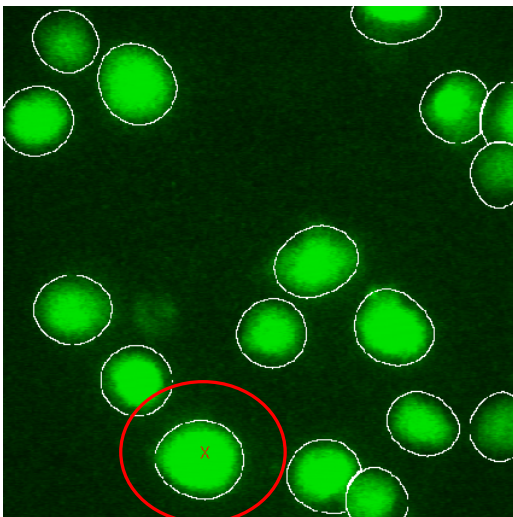
TIME-LAPSE ANALYSIS OF CELLULAR MORPHOLOGY

DOMAIN: pathology

The MORFO package is developed for **time-lapse analyses** of single cells. For each detected cell a set of **morphological features** (size, form factor, volume, ...) is measured and tracked over time. A 'cell' library then shows per cell the morphological changes over time.

Cells (cell lines or primary cells) can be plated on well plates as well as on glass slides. Samples can be recorded in bright field and/or fluorescence mode using e.g. DCILabs' 'Universal Grab' software (which allows recording over time). Images recorded by other imaging scanning stations may also be used.

- Includes a **powerful visualisation module** for quick reviewing of analysed data
- Algorithm settings can simply be adapted to analyse of a **wide range of cell types** in a high-throughput environment.
- Excellent background correction assures outstanding object detection and the discovery of subtle morphological changes
- **Personalisation** (GUI, feature set, data output style) is included to build a software package that perfectly suits your needs



*Individual cells are followed over time to visualise morphological changes. The cell above is stained with a nuclear dye. Analysis of cells with cytoplasmic stains is also possible.*



DYNAMIC MORPHOLOGY ASSAY (MOR)		
Usage	used for	Quantification of dynamic changes in cellular morphology
	application domain	pathology, oncology, toxicology
	key-words	morphology, dynamic changes
Image and system requirements	image input	Images of 2D cell cultures, cell smears, ...
	image importers	Image importers are available for TIFF files, MAIA Scientific, Incell, Nikon and Andor microscopes. Specific importers can be developed on request.
	minimum System Requirements	A PC running Windows XP/Vista/7 (32- or 64-bit), 2GB RAM recommended. A large monitor with a minimum resolution of 1280x1024.
Sample requirements	sample types	The assay can be performed on different cell types relevant for screening.
	staining	Fluorescent marker (nuclear or cytoplasmatic)
Output	features	Position
		Area
		Estimated volume
		Roundness
		Total intensity
		...