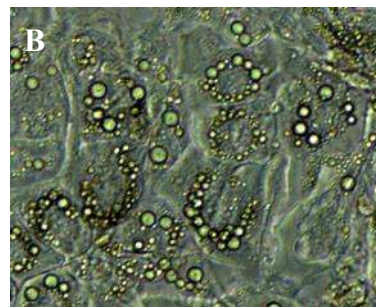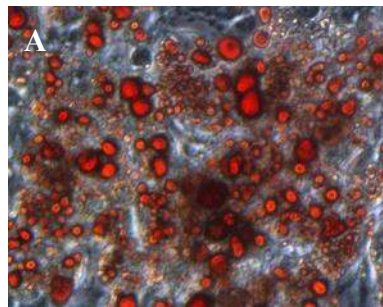# WimLipid – Lipid Droplets

Image Analysis for Lipid Droplets

Lipid droplets are fundamental in regulating the storage of neutral lipids, that could be accessed according to metabolic request. But they are not only energy depots, as this dynamic organelles form part of many biological processes like cellular energy homeostasis and lipid metabolism. The lipid droplets assay is used, therefore, in research of metabolic diseases, such as obesity, diabetes and atheroscleros.

WimLipid is our image analysis solution specially developed to quantify objectively the proliferation, growth and distribution of these organelles. That is possible by mean of our fast high-end image processing algorithms, which allows an accurate detection of the whole lipid droplets population.

WimLipid uses as inputs brigthfield, phase contrast or fluorescence microscopy images of lipid droplets assay images. Lipid droplets could appear refractile or stained, as shown in the next image. Optionally, cells can be stained with nuclear dyes (such as the DAPI or Hoechst), which will be helpful to provide extra parameters of the analysis.

Lipid Doplets images granted by the ZIEL Molecular Nutritional Medicine department of the Technische Universität München. (A) Stained and (B) refractile lipid droplet.

WimLipid tool provides the following output data per image analyzed:

- Number of lipid droplets
- Covered area by lipid droplets
- Mean area
- Distribution of areas in intervals
- Number of lipid droplets and area per cell (only for nuclei stained samples).

Try WimLipid tool for free at mywim.wimasis.com and experience for yourself the objective quantification of lipid droplets biogenesis.

WimLipid is engineered with the flexibility to adapt to the peculiarities of each and every existing Lipid droplets assay; if your images do not fit the requirements above, send us a quick note or reach us at:

contact@wimasis.com   or   +49 (0)89 452 44 66 50