

3D/4D RECONSTRUCTION OF NON-ADHERENT CELLS

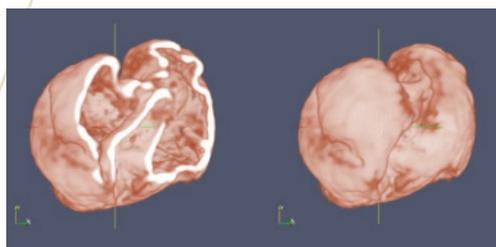
A tool, using a standard optical microscope, allowing 3D/4D imaging of non-adherent cells

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L'AVENIR EST FAIT D'AUDACE

PRESENTATION

While 3D imaging of adherent cells is provided with almost all microscopes, there is currently no reliable and reproducible method for the non-adherent cells. The device presently proposed combines a microfluidic circuit, an electromagnetic field generator and a control software. The combination of these three elements allows studying the cell and its environment in three dimensions while minimizing the exogenous constraints. This solution opens up new fields of basic research in embryology (i.e. monitoring the fusion of gametes), hematology (i.e. liquid cancers) and microbiology.



3D reconstruction of a non-adherent cell
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Imaging - Biology - Non-adherent cell - 3D - 4D -
Microscopy - Hematology - Embryology

COMPETITIVE ADVANTAGES

- Standardized method for 3D visualization of non-adherent cells
- Unique method for observation of suspended living cells
- Interoperability with all microscopes
- Ease of use
- Improves the resolution of the microscope

INTELLECTUAL PROPERTY

International patent application :
WO2009125131, WO2009125132

APPLICATIONS

- Hematology
- Embryology
- Microbiology
- Fondamental research

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DEVELOPMENT PHASE

- Prototype ready to use