

Digital Holographic Microscopy for Life Science Applications

TruImagE system

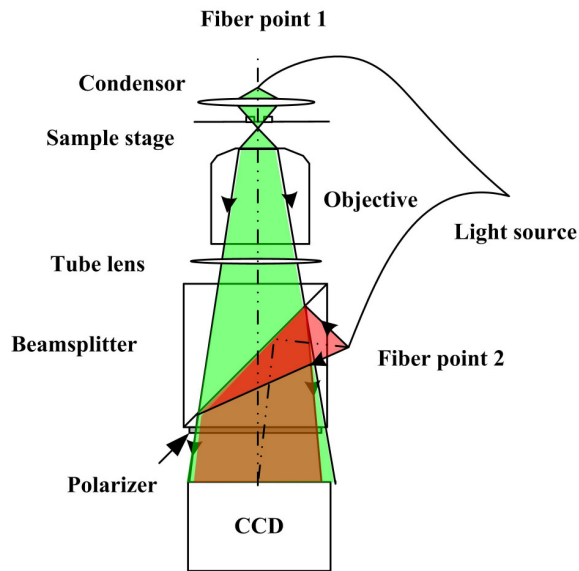


Fig. 1: Schematic of the *TruImagE* system with physical compensation of spherical phase.

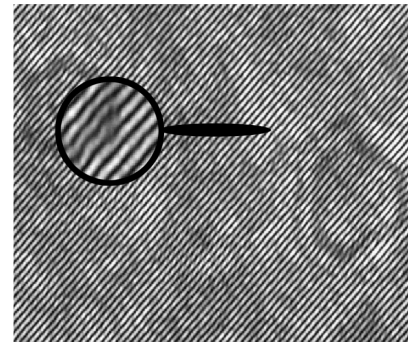


Fig. 2: Digital hologram with straight fringe pattern.

- Lateral resolution : $0.6 \mu\text{m}$ (with 50X objective)
- Vertical resolution : 10 nm
- Field of view : $0.13 \text{ mm} \times 0.1 \text{ mm}$
- Sample stage : x y ($30 \text{ mm} \times 30 \text{ mm}$) z (15 mm)

Vero Cell Division

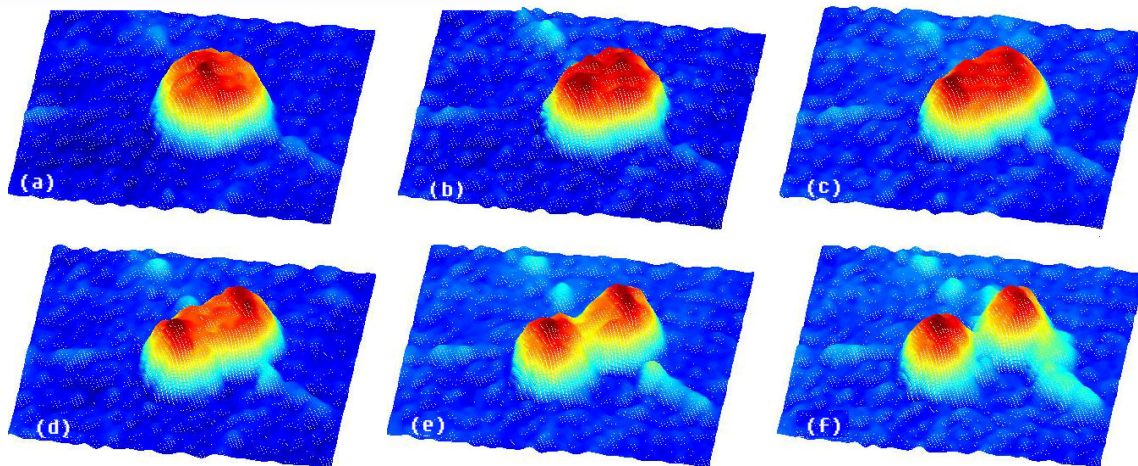


Fig. 3: Quantitative 3D profiling of Vero cell division during (a) Metaphase, (b) and (c) Anaphase, (d) and (e) Cytokinesis, (f) Separation of the two sister cells.

Contact

ASUNDI Anand Krishna (anand.asundi@pmail.ntu.edu.sg)

QU Weijuan (qwe2@np.edu.sg)

CHEE Oi Choo (coc@np.edu.sg)