

Disordered and biological soft matter

Group of Prof. Christof Aegerter

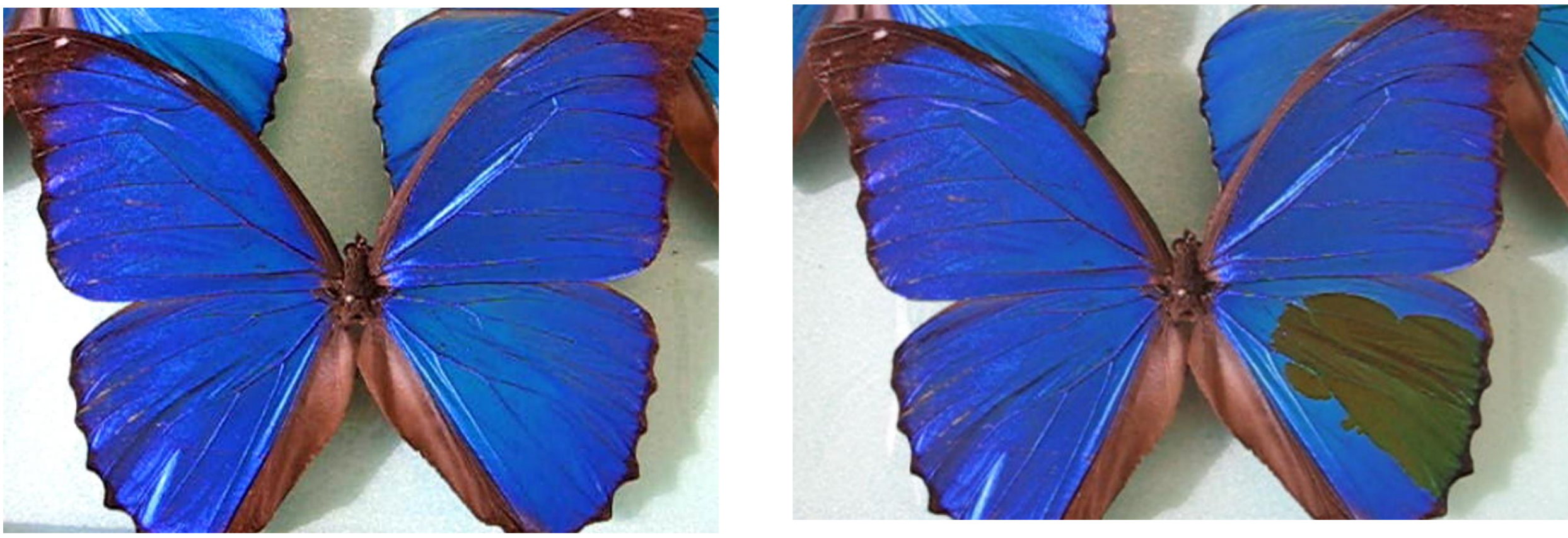


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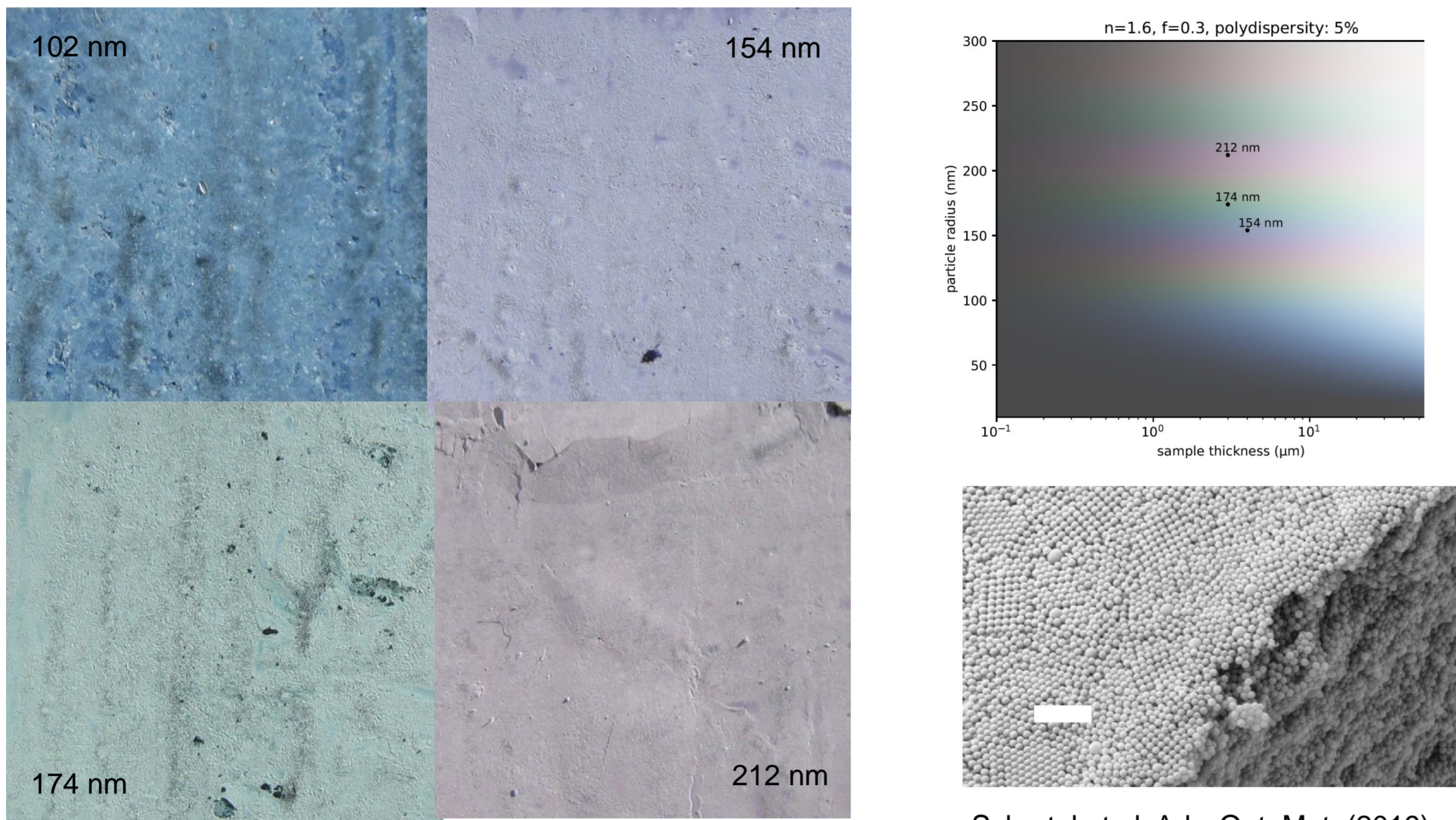


Structural colours in photonic structures

The blue of Morpho Menelaus is NOT a pigment

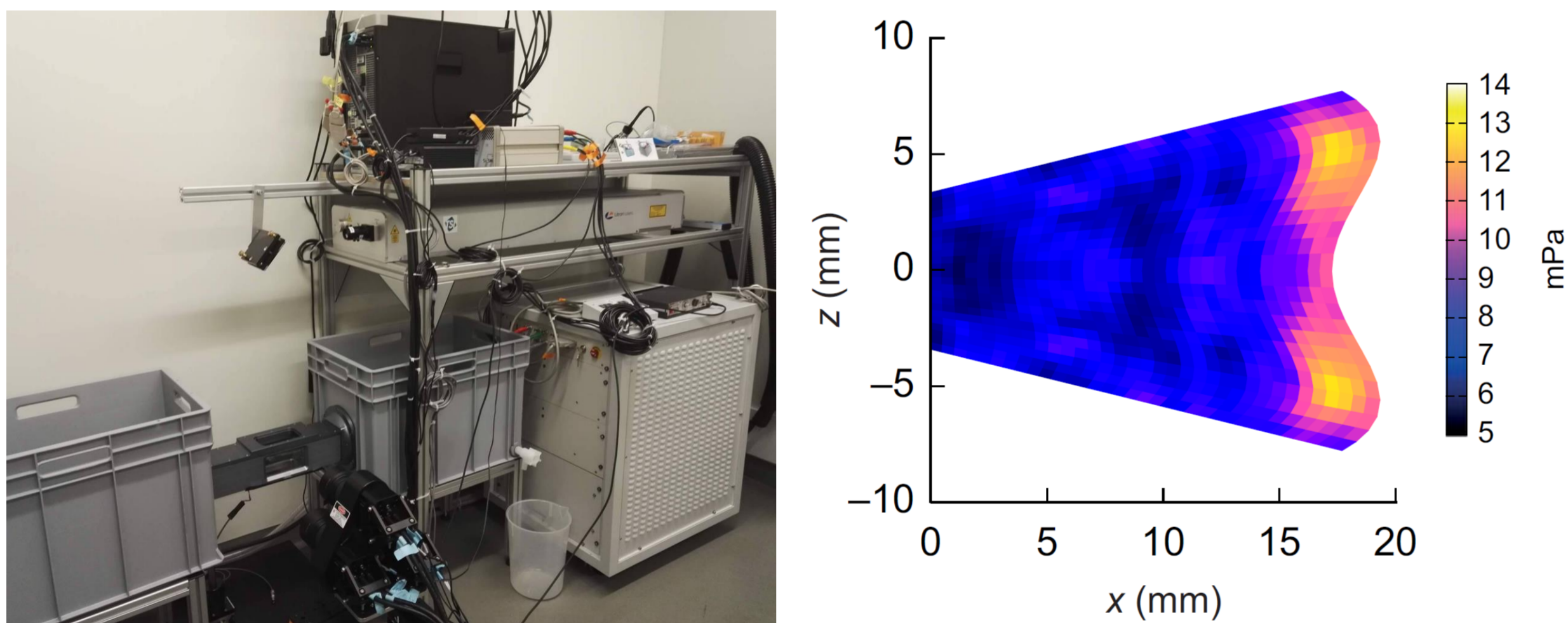


Colours without pigments/ theory and experiment



Schertel et al, Adv. Opt. Mat. (2019).

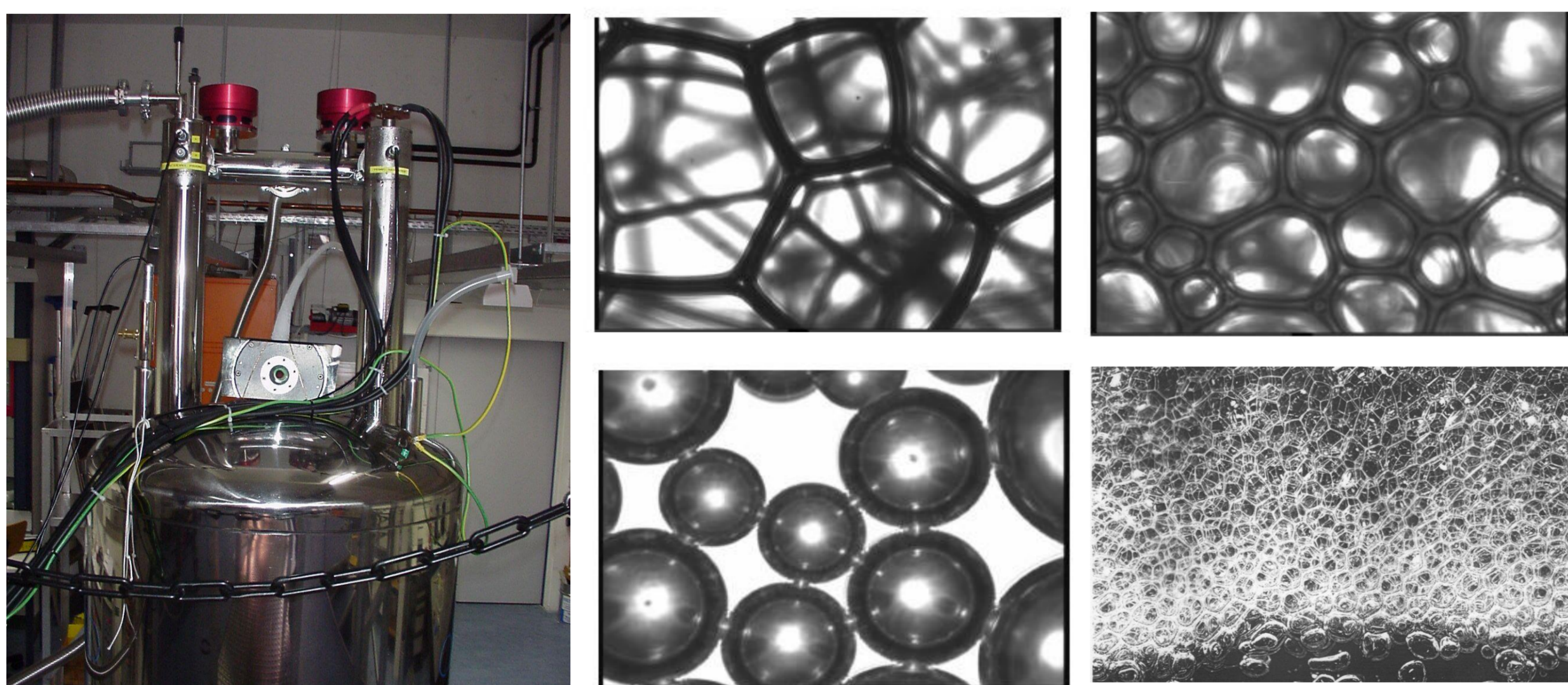
Colours without pigments and fin regeneration / hydrodynamics in zebrafish



Dagenais and Aegerter, J. Fluid Mech. (2020).

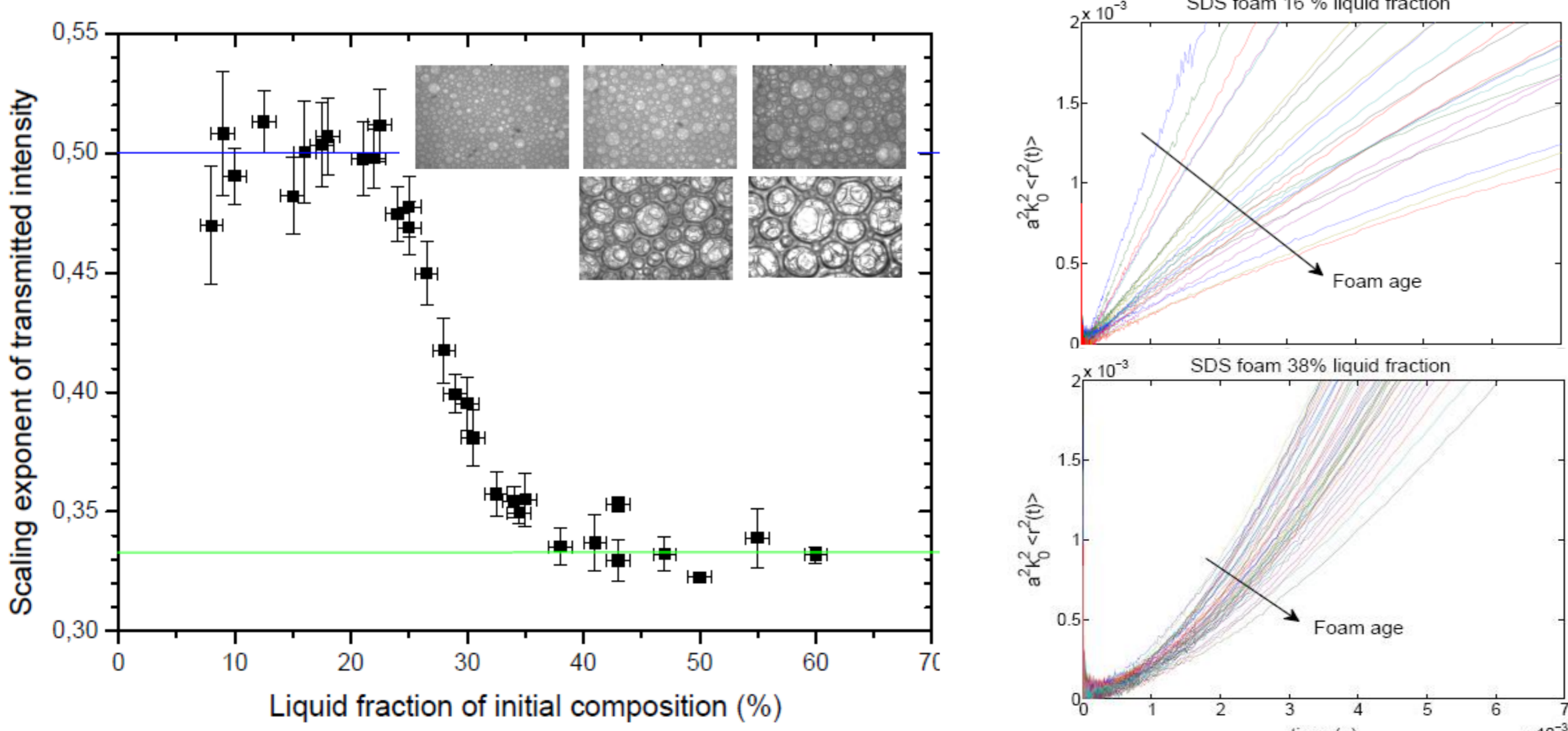
Levitated non-equilibrium systems

Levitating foams to study their long time coarsening behaviour at different amounts of wetness



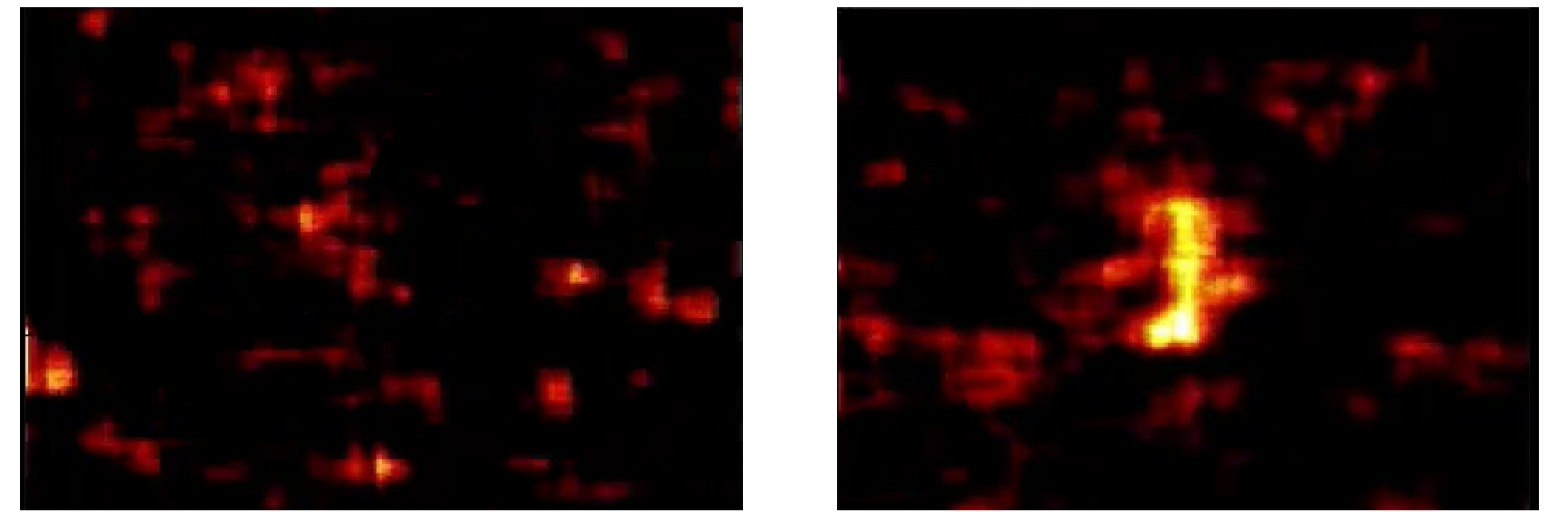
Iserl, et al, Coll. Surf. A (2015).

Phase transition observed in both microscopic and macroscopic dynamics



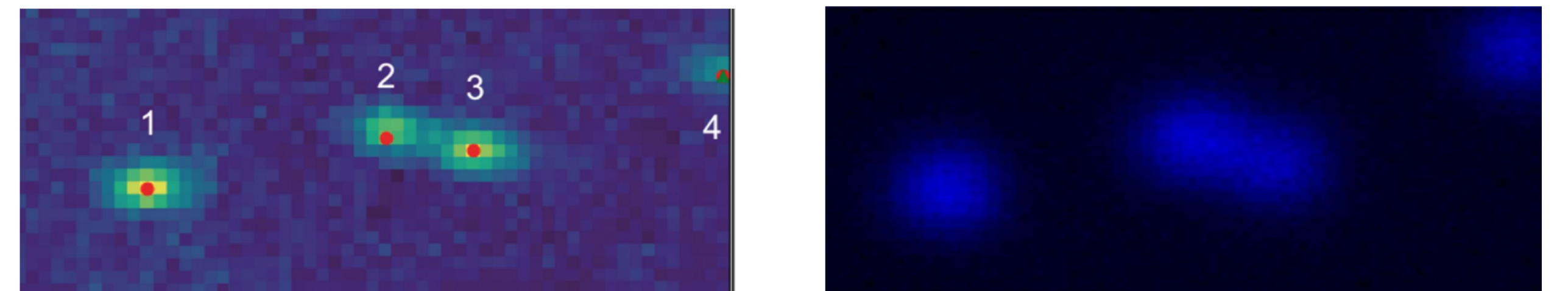
Imaging through turbid media

Focussing behind turbid media using wave front shaping



Schneider and Aegerter, J. Europ. Opt. Soc. (2018).

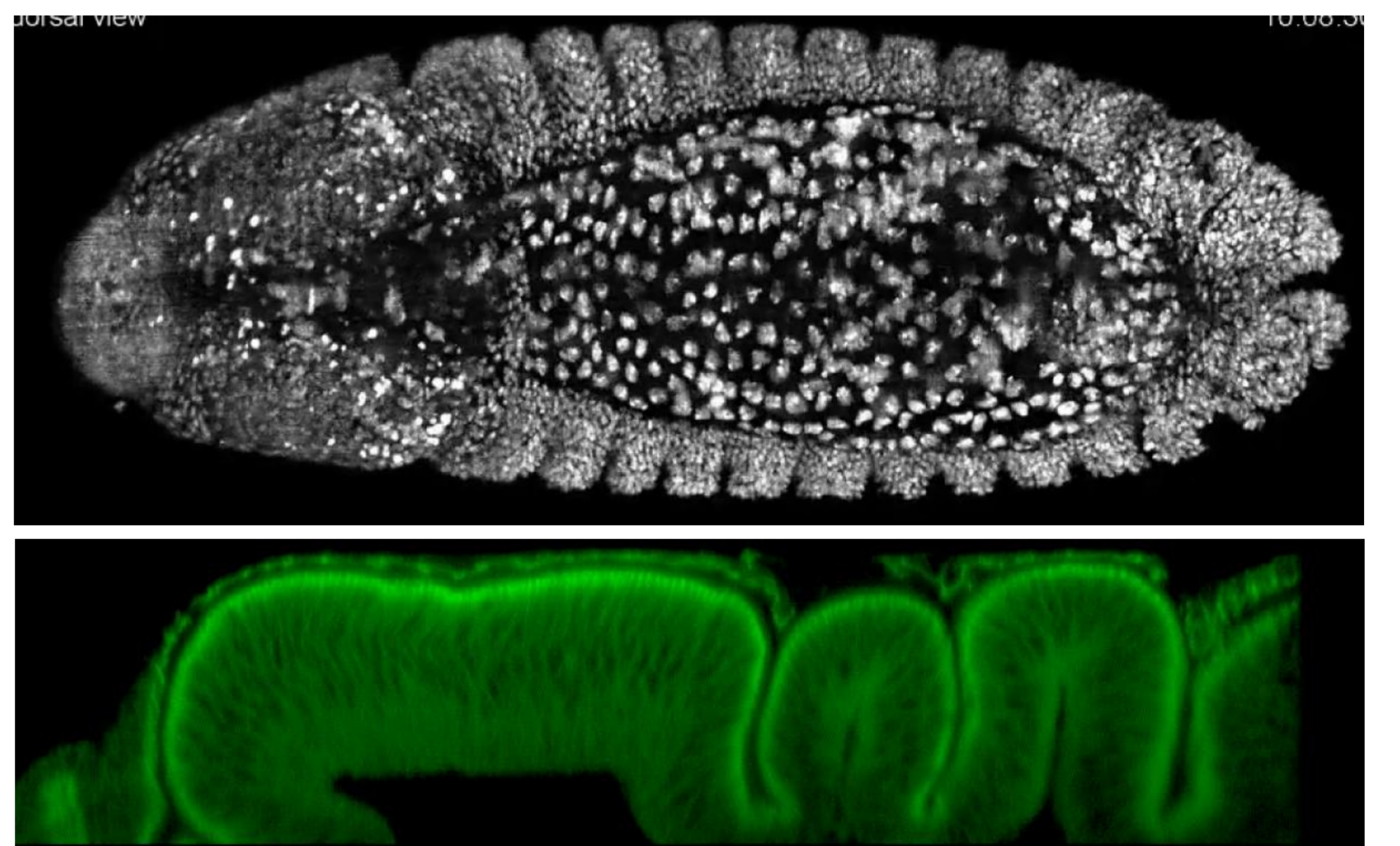
Scanning the focus to image fluorescent particles



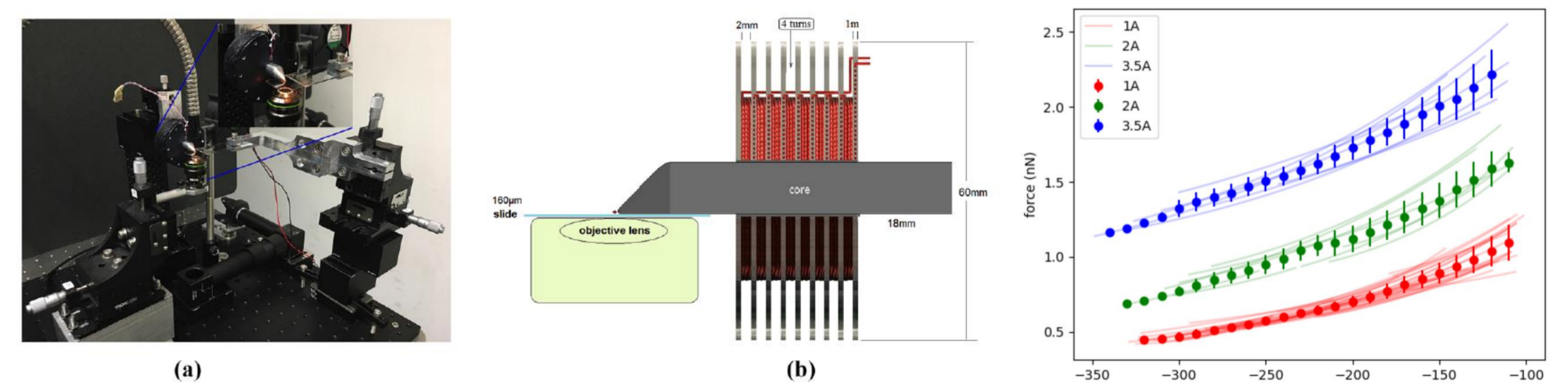
Scheibler et al, OSA Continuum (2019).

Mechanical regulation of biological development in Drosophila

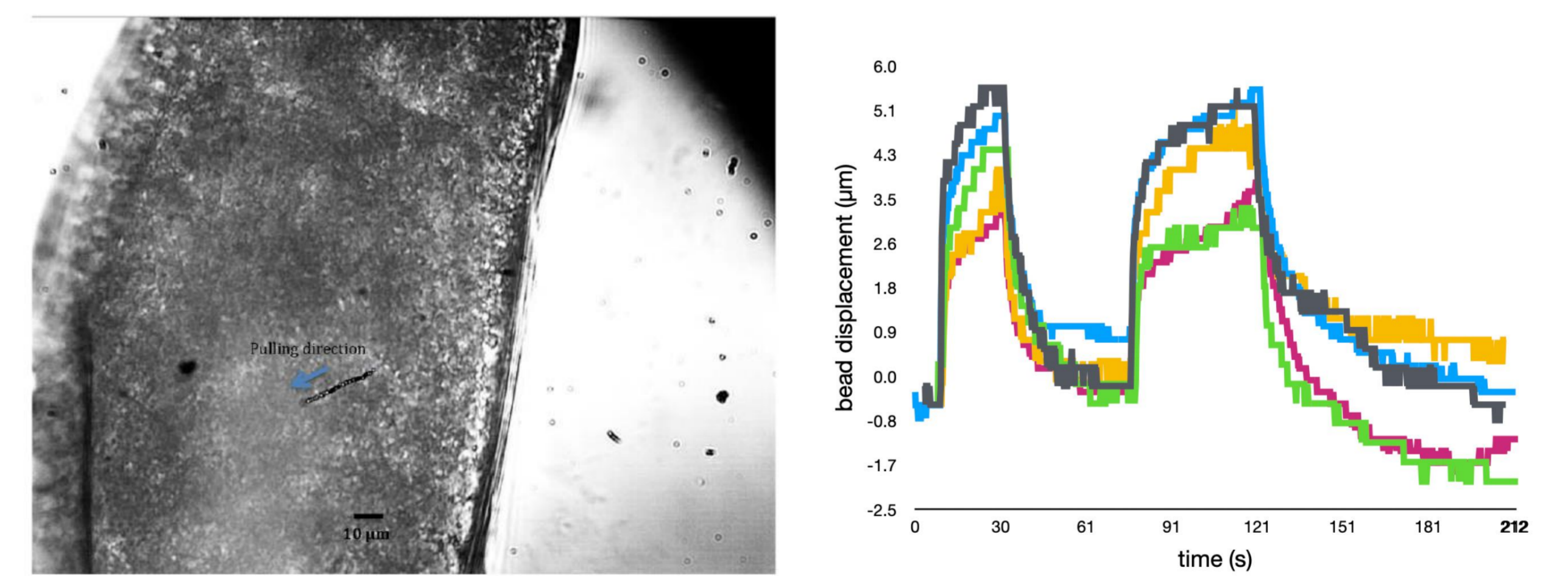
Three dimensional structure formation in embryonic and larval epithelial tissues



Measuring and applying forces on the scale of nN

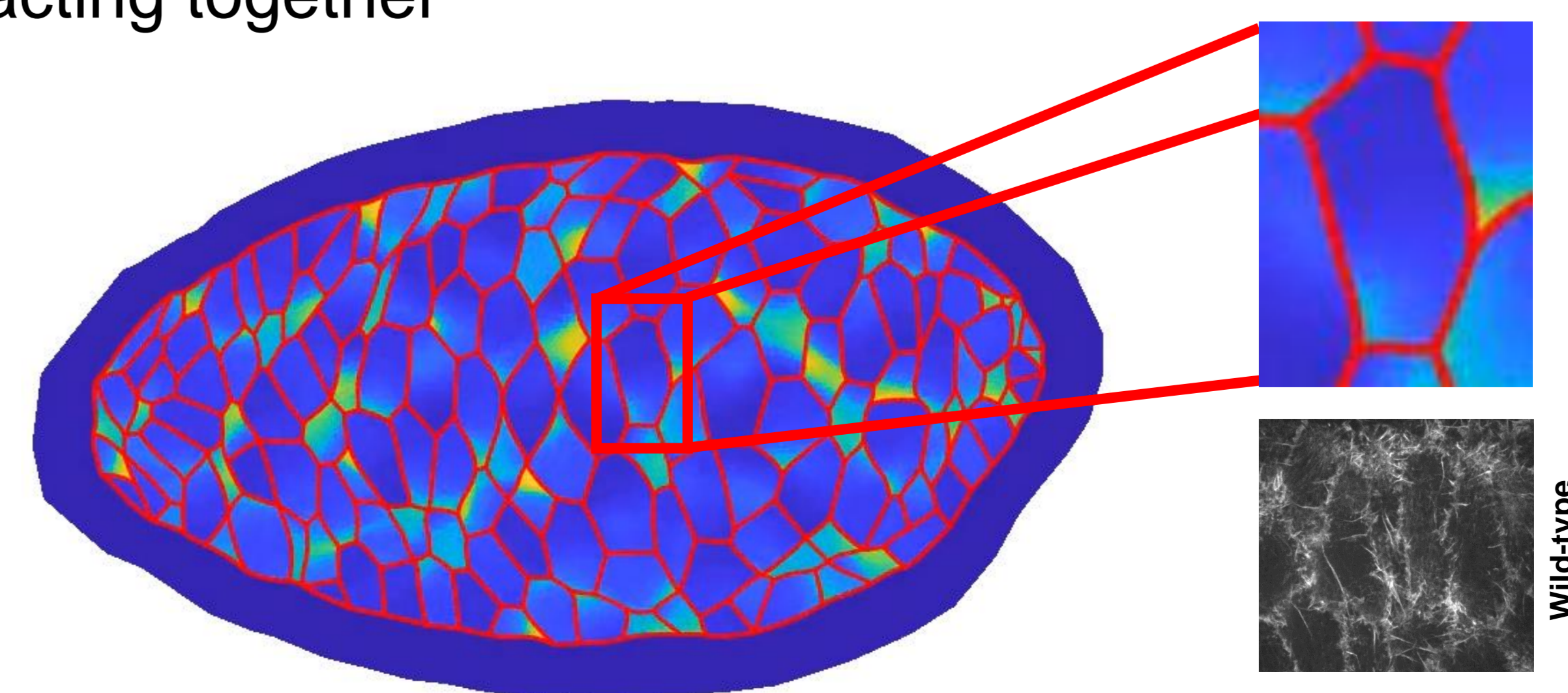


Selvaggi, et al, Rev. Sci. Instr. (2018).



Selvaggi, et al, Biophys. J. (2021).

Simulating mechanical and biochemical regulation acting together



Atzeni et al, BioArXiv. (2020).