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"The eye of the storm" ©L. Meneux, INSERM U1298

Sensory fibers of a mouse cornea imaged with a confocal microscope. The corneal nerves converge toward the centre forming a vortex. This particular transgenic mouse model allows stochastic expression of fluorescent proteins, unravelling the heterogeneity of the fiber origines inside the corneal epithelium. 1st place of France-Biolmaging Image Contest 2021.



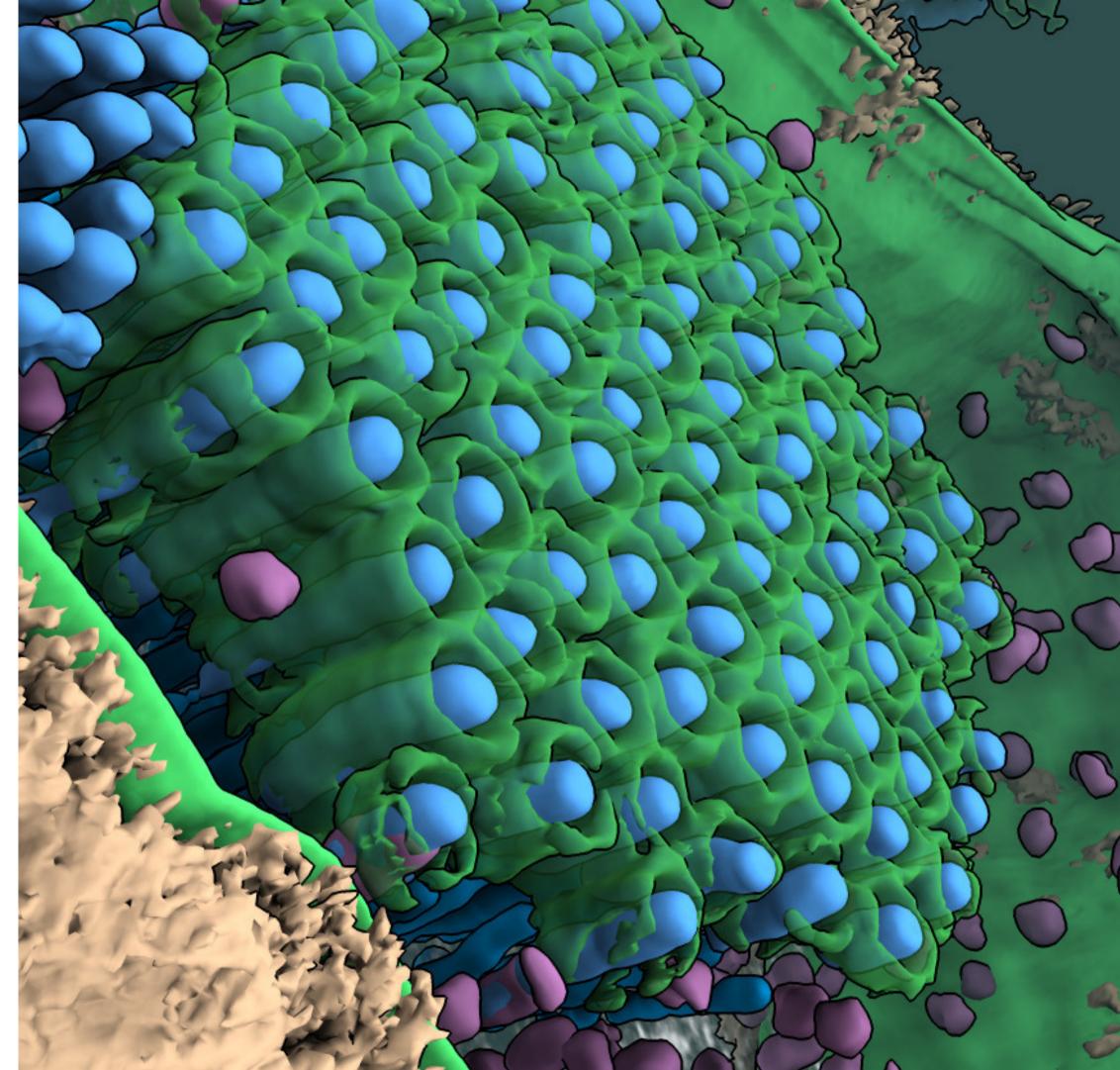
FEBRUARY 22

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"Honeycomb" ©A. Gazi, D. Baquero, M. Krupovic, UTechS Ultrastructural BioImaging & Archaeal Virology Lab, Institut Pasteur

Sulfolobus islandicus filamentous virus (SIFV) inside its host (archeon). Although SIFV is an enveloped virus, it acquires its envelope and reaches its full maturity when inside the host cell cytoplasm! As SIFVs are twice in length than the diameter of their host cell they are tightly packed in twisted bent bundles. In the annotated volume: Membranes are displayed in green color (cell membrane and viral envelopes), viral nucleocapsid in light blue, ribosomes in magenta and S-layer in wheat (light gold).







"Clown" ©C. Boutin, IBDM & N. Brouilly, PICsL Imaging facility Lamellar structure in a differentiating multiciliated cell observed by transmission electron microscopy with a Tecnai G2 200kV FEI. 3rd place of France-Biolmaging Image Contest 2021.

MARCH 22

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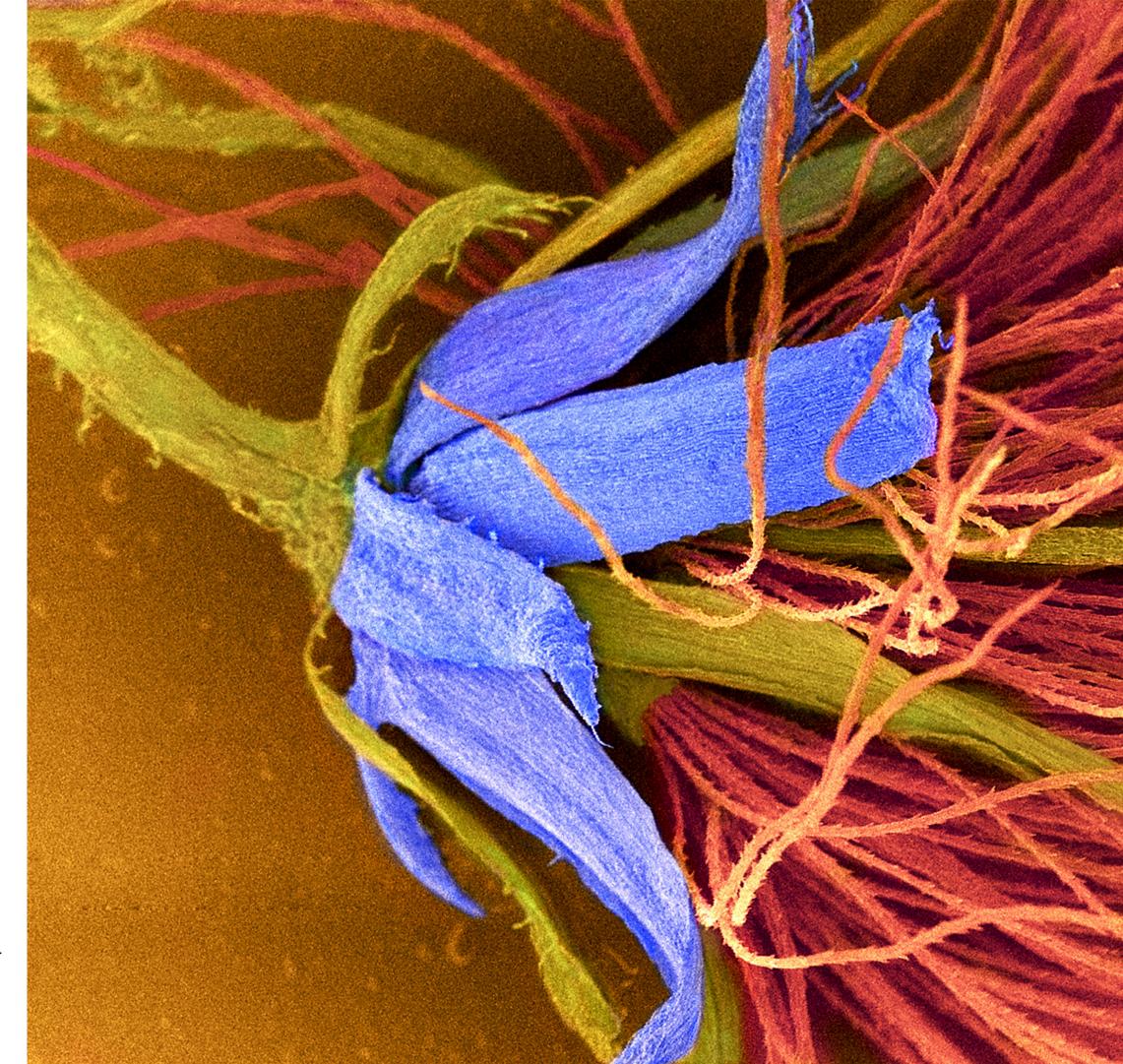
APRIL 22

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"Bloom" ©L. Anderson, Radford University

Ageratum bloom imaged with a scanning electron microscope and digitally colored.







"Inside the plant reproduction: developing pollen surrounded by the nourishing maternal tissues" ©J. Truskina, ENS de Lyon, RDP

In plants, the male gametes are represented by the microscopic round structures called the pollen. The anthers are the flower organs that produce and encase the developing pollen. This confocal microscope image is the cross-section of an anther of Arabidopsis thaliana. The developing pollen can be seen inside the anther. These are the haploid round cells containing protective pollen wall on their surface. The pollen are surrounded by diploid cell layers of the anther which nourish the young pollen supporting their development. This image was taken with the aims to understand how the growing pollen communicate with the surrounding nourishing tissues.

MAY 22

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FRANCE-BIOIMAGING

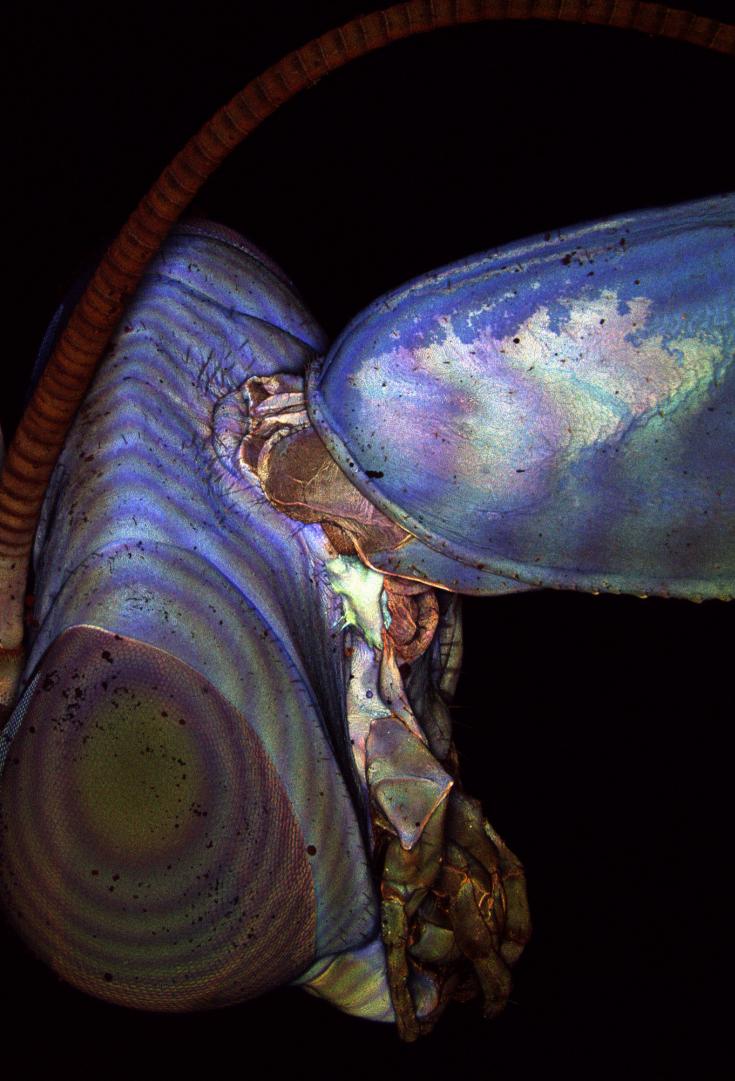
JUNE 22

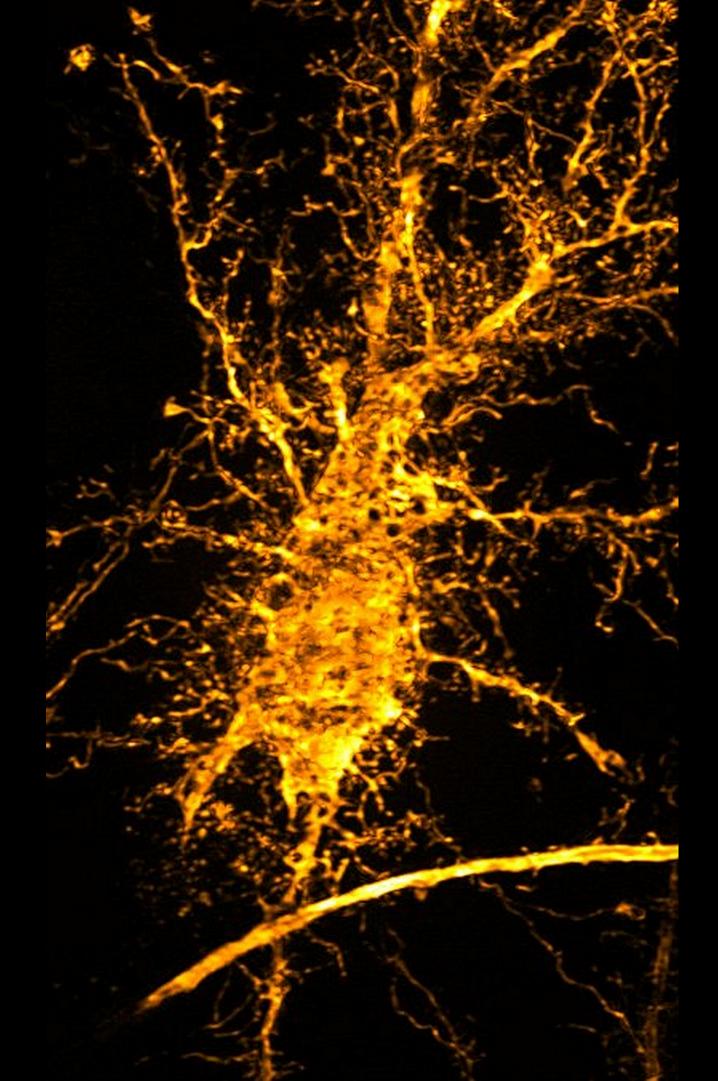
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"Praying Mantis" ©S. Mailfert, ImagImm, CIML-AMU-CNRS-INSERM Image of the auto-fluorescence of a praying mantis by spectral confocal microscopy.









Center

JULY 22

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"Golden Astro" ©M. Ducros, M. Fernandez-Monreal, Bordeaux Imaging

Astrocyte labeled by electroporation expressing a free cytosolic fluorescent protein (GFP) inside a fixed mouse hippocampal organotypic brain slice. A neuronal dendrite is also labeled and visible at the bottom of the image. Maximum intensity projection of a 40x70x100 µm3 volume. 3D deconvolution with in situ PSF.



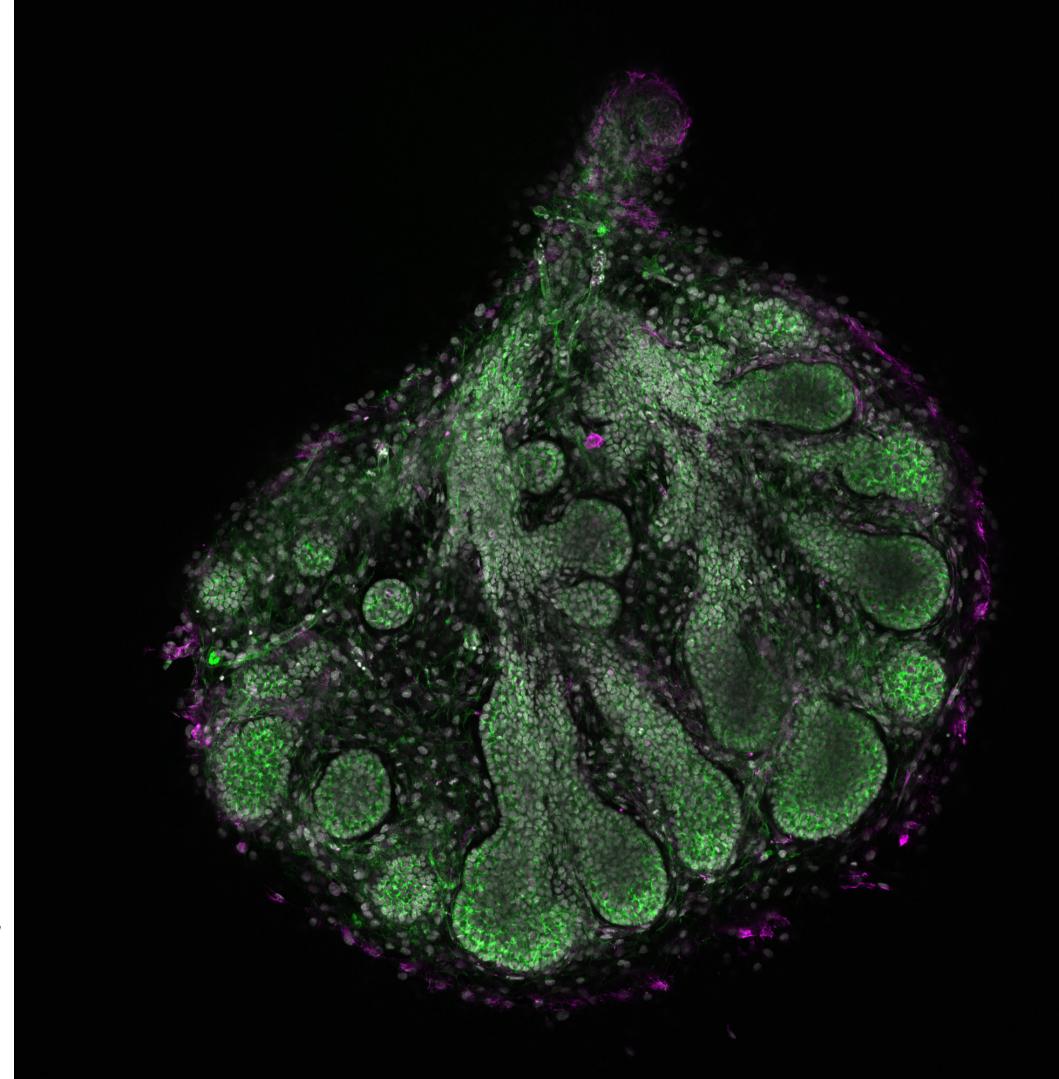
AUGUST 22

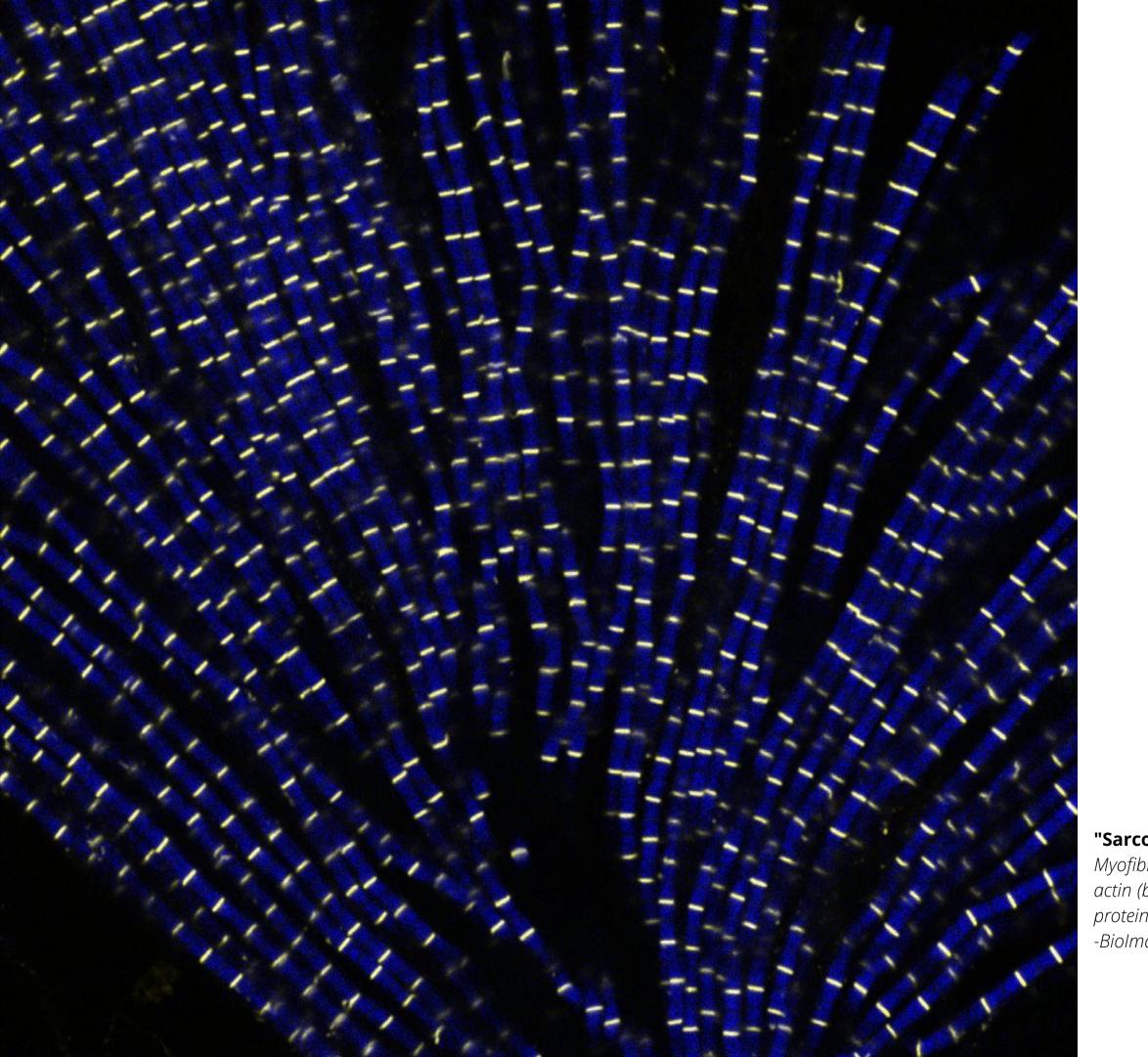
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"The Fig" ©A. Kuony, IJM

Embryonic murine lacrimal gland (E17), with fluorescent staining showing Actin, Fibronectin, phospho-MLC and nuclei. The acquisition was performed using a confocal microscope Zeiss LSM 980, with a 25X air objective.







SEPTEMBER 22

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"Sarcomeric bouquet" ©E. Chan, IBDM

Myofibrils isolated from Drosophila indirect flight muscle labelled with titin (yellow) and actin (blue). Image captured from confocal microscope. We are studying the role of titin protein in muscle mechanics and organisation during development. 2nd place of France -Biolmaging Image Contest 2021.



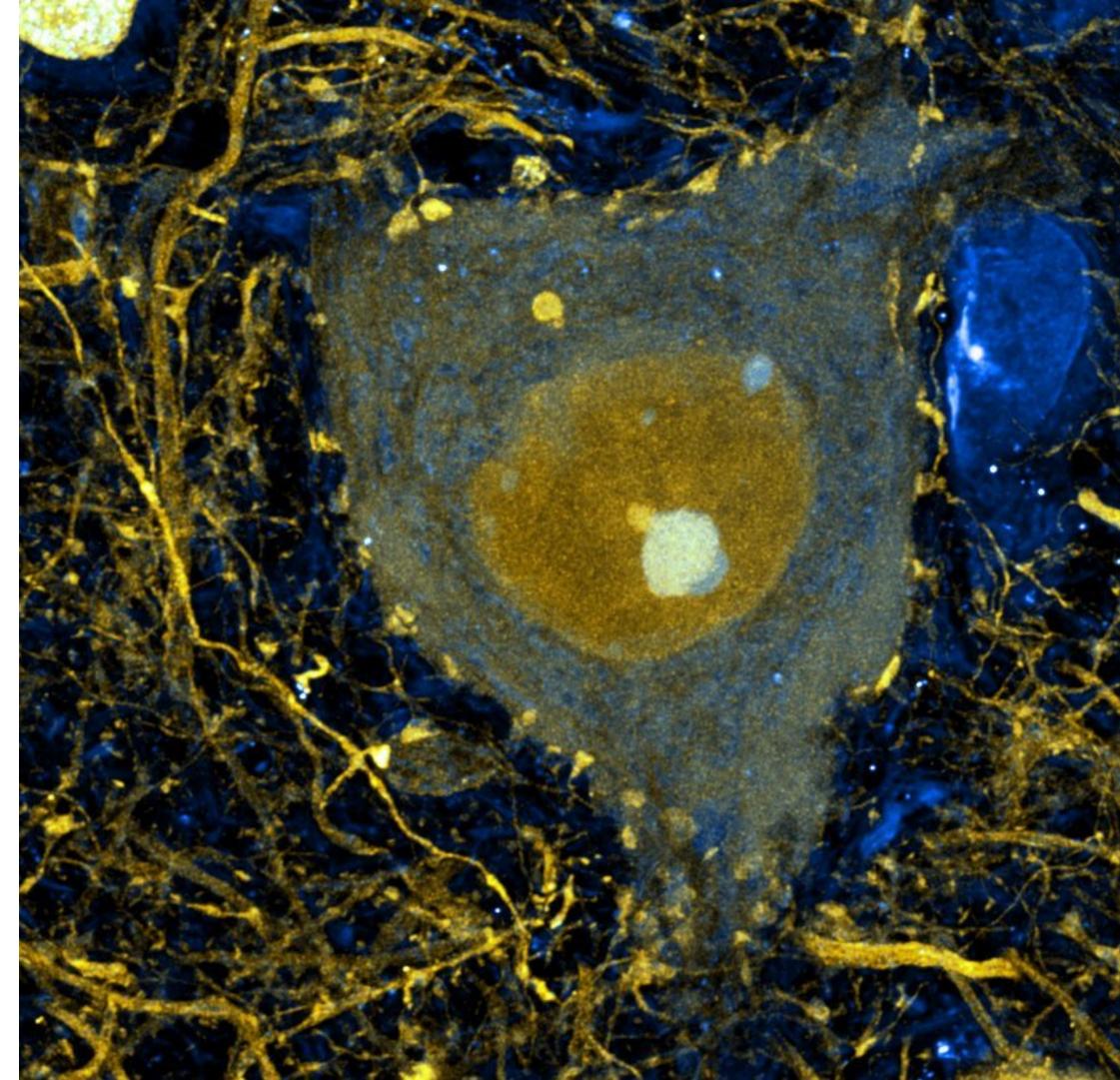
OCTOBER 22

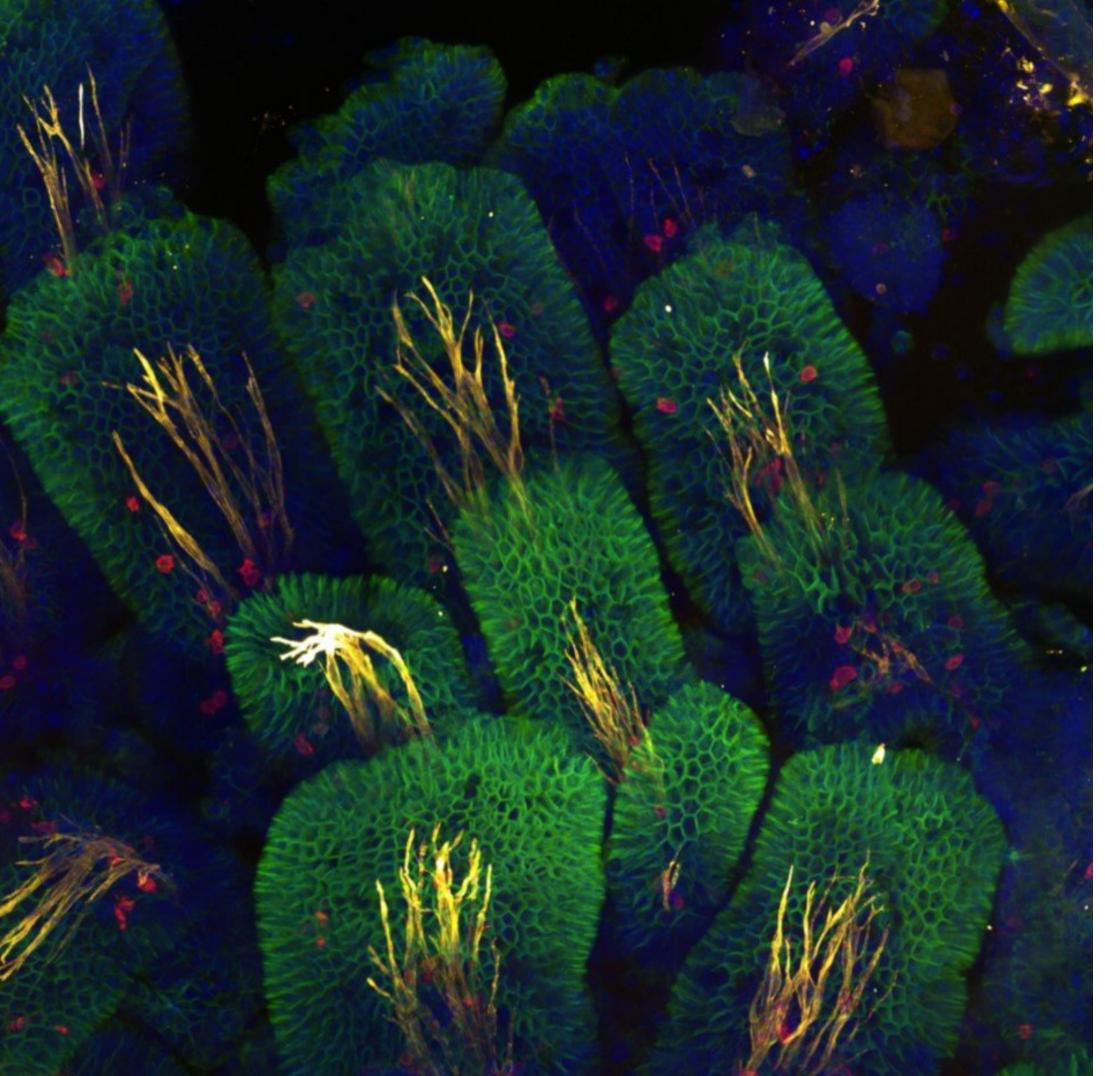
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"Networking" ©M. Fernandez-Monreal, Bordeaux Imaging Center

Hippocampal neurons from organotypic slices receiving inputs from GFP-labeled neurons (in yellow). Pan-Expansion microscopy allows to increase the resolution 4 folds and to obtain an ultrastructural context of the whole brain (in blue).







"Small intestine forest" ©F. Fercoq, CRUK Beatson Institute

Multispectral confocal microscopy image of intestinal vilosities. Blue: cell nuclei, Green: Epithelial cells, Red: CD3 + T lymphocytes, Yellow: fibroblasts.

NOVEMBER 22

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DECEMBER 22

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"Dancing in the street" ©S. Rimpelova, University of Chemistry and Technology Prague

Mouse fibroblasts on a plasma-treated material with improved biocompatibility. In blue: F-actin stained with phalloidin-tetramethyl rhodamine conjugate, in yellow: nuclei stained with DAPI. The objects are false-colored. Technique: wide-field deconvolved fluorescence microscopy of fixed samples. Applicability: tissue engineering.



