



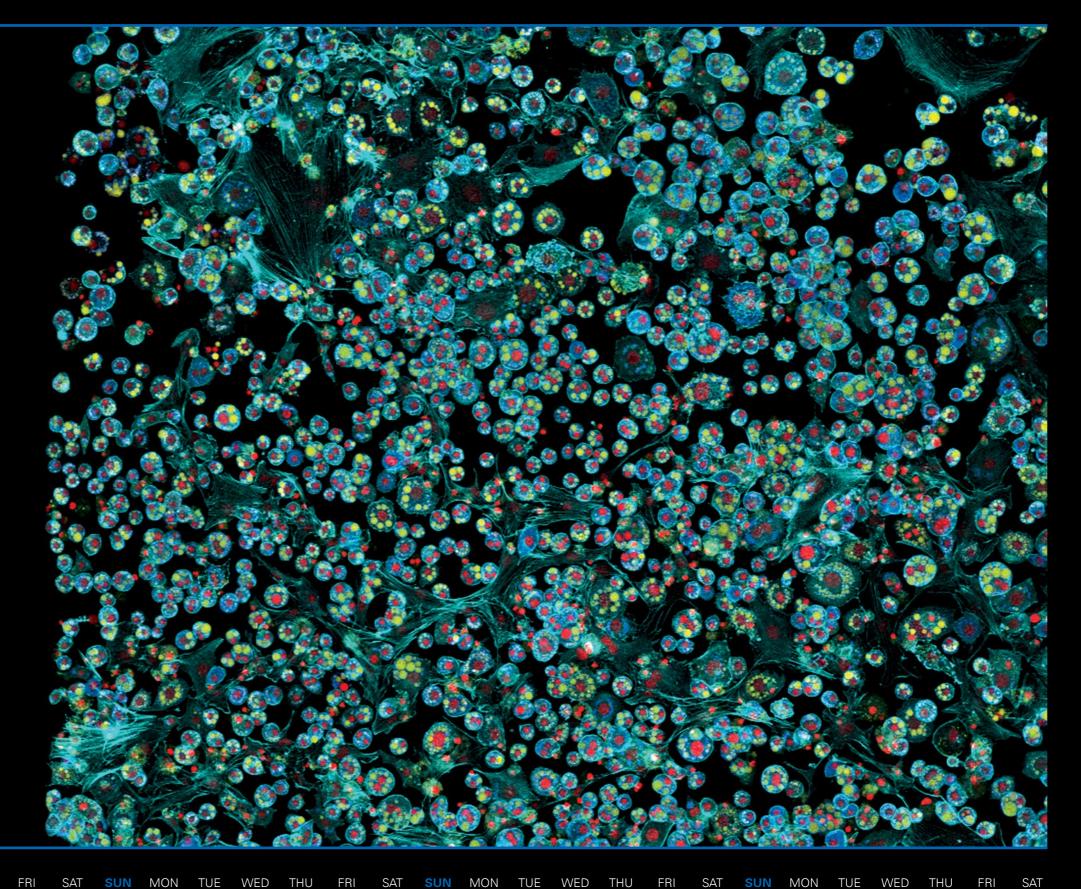
JANUARY

Lena Richter

Helmholtz-Zentrum Dresden-Rossendorf, Germany

Differentiated 3T3-L1 adipocytes cultured in a μ-Slide 8 Well high. The formed lipid droplets were stained with Perilipin-1 (blue) and LipidTOX™ (yellow). F-actin was labeled with phalloidin (cyan) and nuclei were stained using Hoechst 33258 (red). For the image acquisition, an Olympus Fluoview 1200 confocal microscope was used with a 10x magnification.

Follow Lena Richter on LinkedIn.





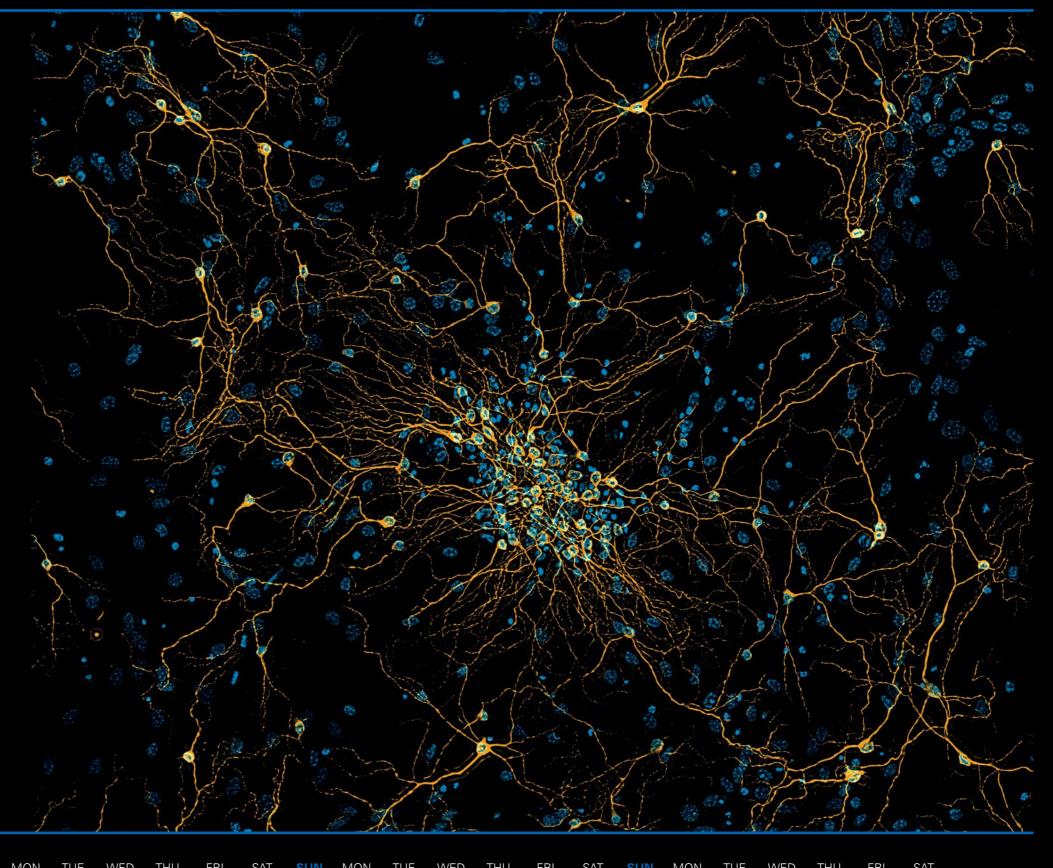
FEBRUARY

AlexandraTsitrina

Ben Gurion University of the Negev, Beersheba, Israel

Super-resolution image of a primary hippocampal neuronal culture acquired by structured illumination microscopy (SIM 2). Microtubules (anti-tubulin, gold) outline neuronal somata and neuritic projections radiating from a central cluster, reflecting organized network architecture. Nuclei (DAPI, cyan) highlight both neuronal and glial populations. Cells were seeded in a μ -Slide 18 Well Glass Bottom and imaged on a Zeiss Elyra 7 SIM system with SIM 2 processing.

Follow Alexandra Tsitrina on LinkedIn and @hell_blondinko on Instagram.





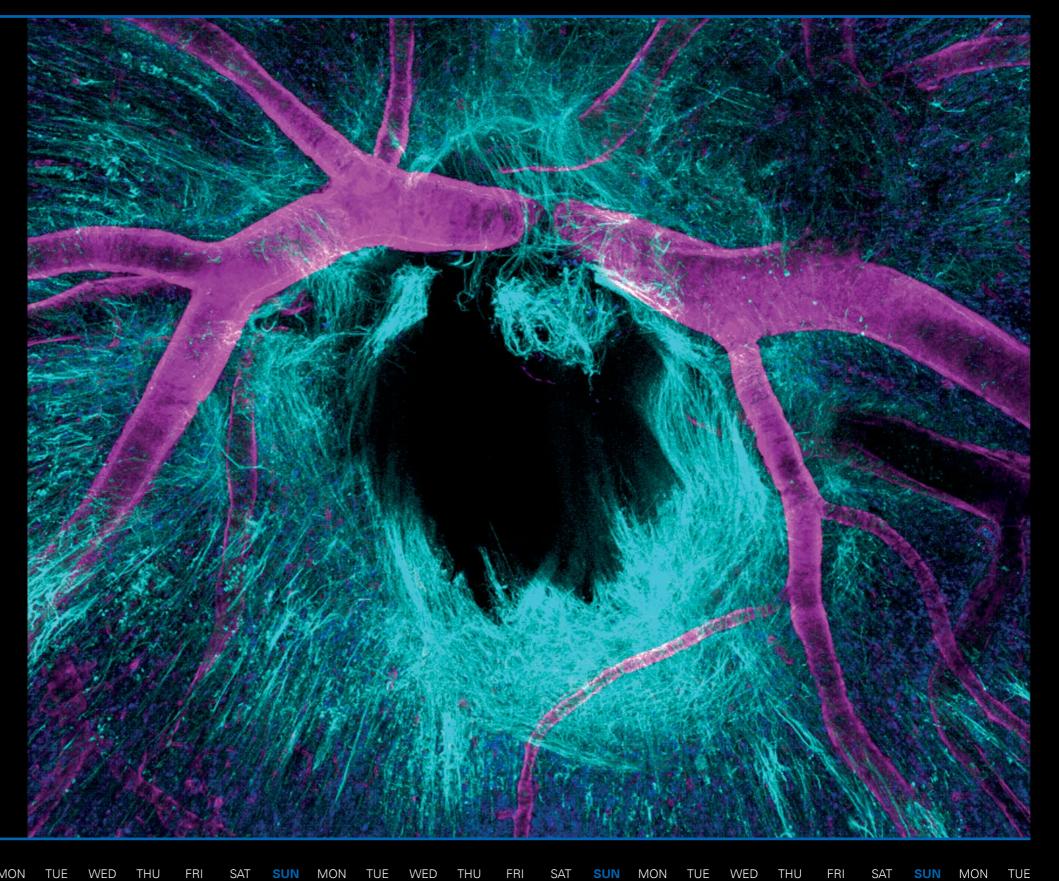
MARCH

Lorna Fowler

University College London, UK

3D-IBEX of optic nerve head (ONH) in human post-mortem globe with glaucoma. The ONH was stained for vessels (collagen IV, pink), Muller glia (vimentin, cyan), and nuclei (DAPI, blue). The image was acquired using a Leica SP8 confocal microscope with a 20x objective.

Follow Lorna Fowler on LinkedIn and @colinchulab on Instagram.





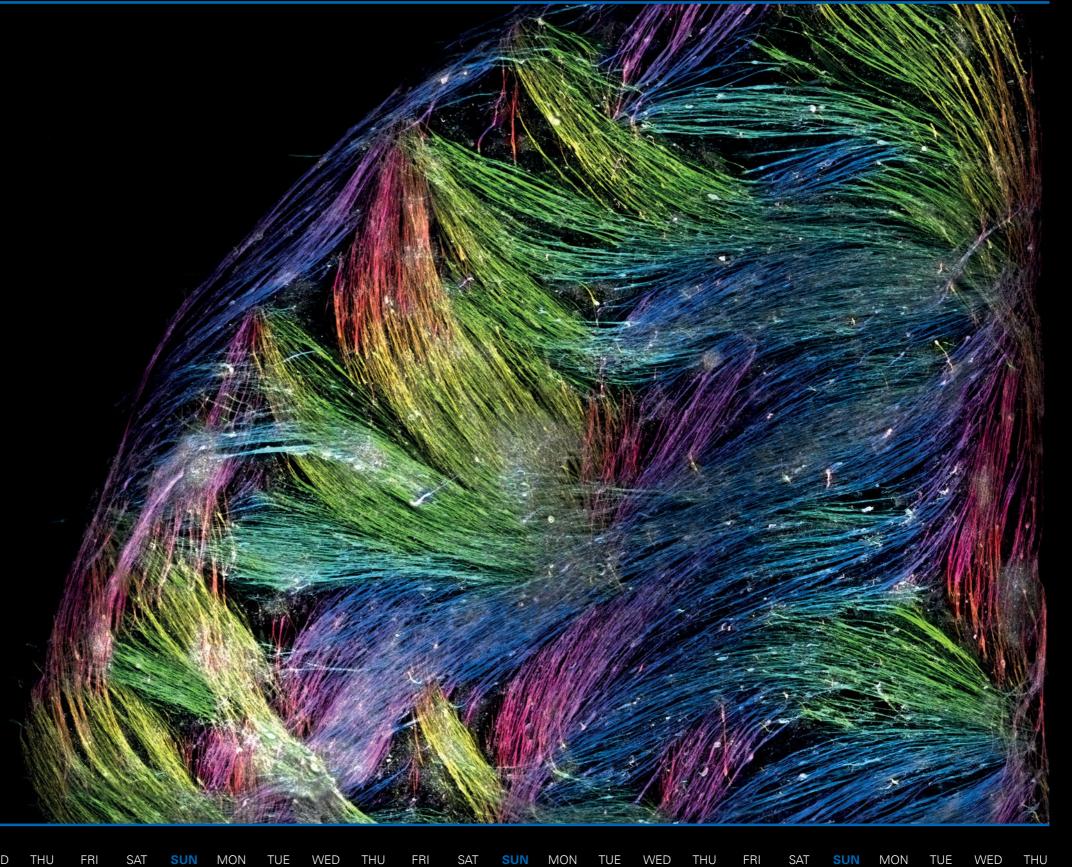


Qiyan Mao

IBDM, Aix-Marseille University, France

Self-organized human myofiber bundles cultured using the Culture-Insert 4 Well in μ -Dish $^{35~mm,~high}$ at the 15th day of differentiation, fixed and stained with phalloidin, imaged with a 10x objective on a Zeiss LSM880, and pseudocolored by orientation angles with the OrientationJ plugin in ImageJ.

Follow Qiyan Mao on LinkedIn and @qiyanmao.bsky.social on Bluesky.



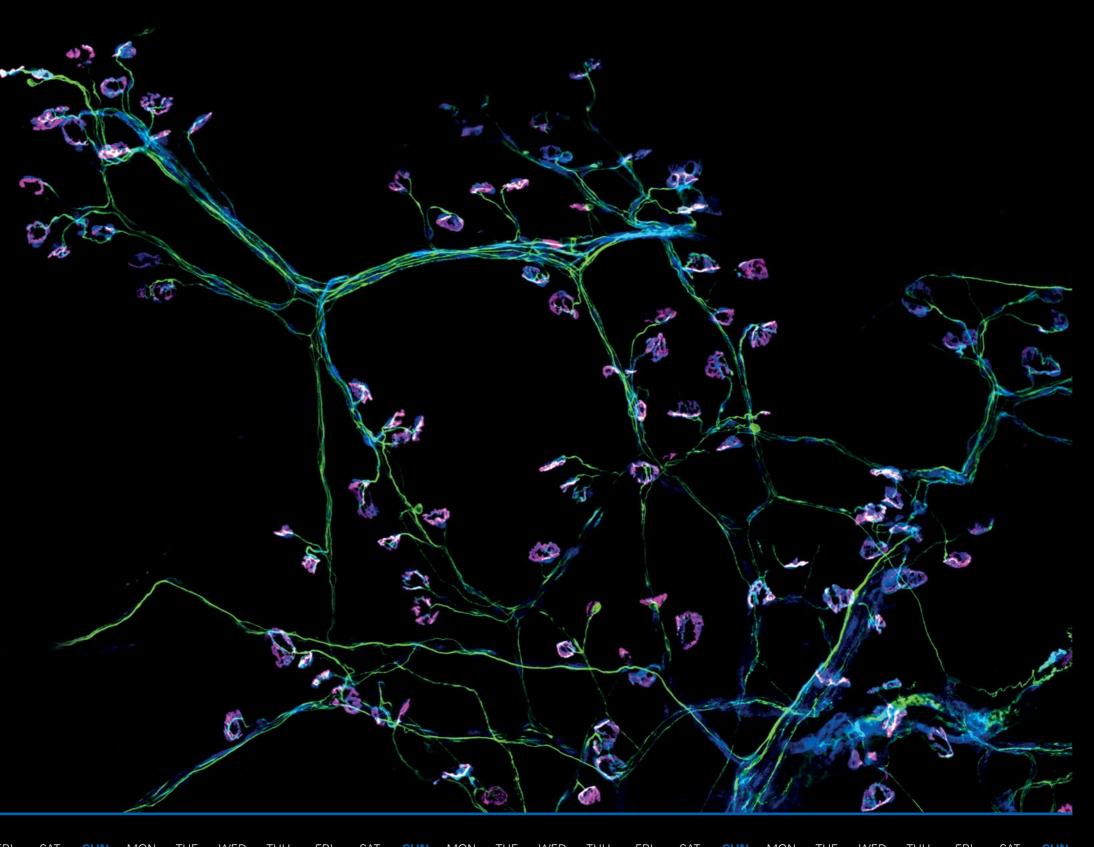




Louisa Snape

University College London, UK

The image shows a confocal micrograph of neuro-muscular junctions within mouse lumbrical muscles. The network of motor neurons innervating the muscle is visualized with labelling of microtubules (β -III-tubulin, green) and myelinated Schwann cells (S100 β , blue). Post-synaptic terminals are stained with α -bungarotoxin (nAChRs, pink). A Zeiss LSM 980 microscope with a 20x objective was used to create a maximum intensity projection from a 3×3 tiled z-stack image (32 sections, 1 μ m steps).





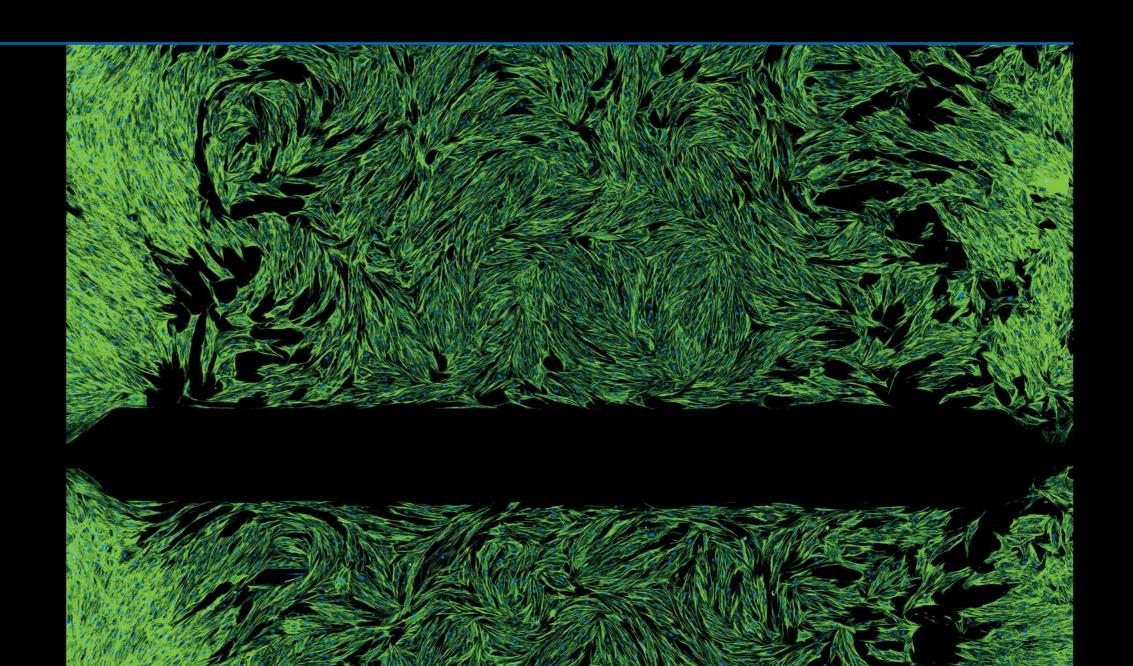


Rozan Vroman

University of Strathclyde, Glasgow, Scotland

Two microfluidic devices containing a cultured monolayer of bone marrow mesenchymal stem cells (MSCs). Actin filaments are labelled using phalloidin (green) and the nuclei are stained with DAPI (blue). Imaging was performed on a Zeiss Axio Observer 7 microscope with a 20x objective. This is the first step in creating a lab-on-a-chip model of bone marrow for studying related diseases.

Visit wee-aye-aye.com and follow @wee_aye_aye on Instagram.





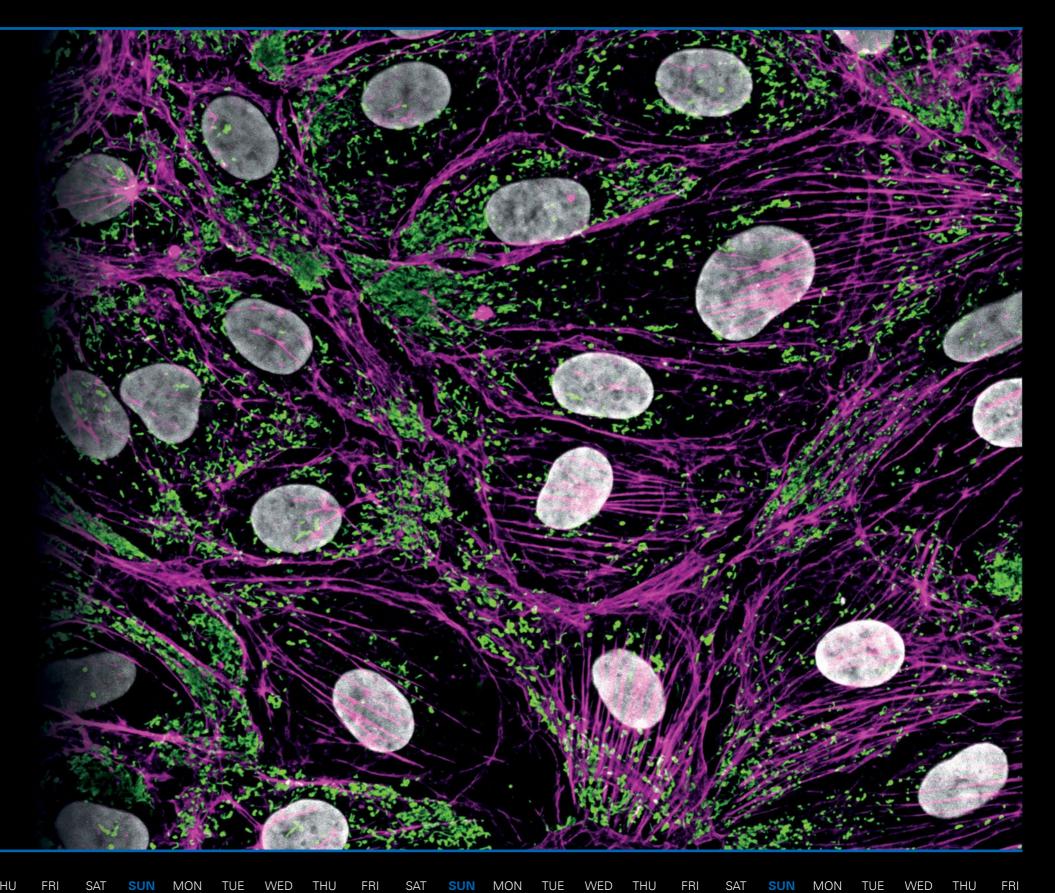


Wendy Stam

IBL, Leiden University, the Netherlands

Human umbilical vein endothelial cells (HUVEC) were cultured in a $\mu\text{-Slide}$ 8 Well $^{\text{high}}$ with a gelatin coating. The cells were stained for von Willebrand factor (DAKO, green), actin cytoskeleton (phalloidin, magenta) and nuclei (Hoechst, white). The image is a maximum intensity projection (z = 2 μm , step size = 0.5 μm) taken with a 63x oil objective on a Leica Stellaris 5 microscope.

Follow Wendy Stam on LinkedIn and @wennesz on Instagram.





AUGUST

Stephanie Le

Heinrich Heine University, Düsseldorf, Germany

Young cortical organoids imaged in a μ -Slide 8 Well high Glass Bottom show SOX2-positive progenitor cells (red) clustering in proliferative zones, while MAP2-positive neurons (cyan) extend early processes. This image reveals the spatial organization and early differentiation dynamics of the developing human cortex *in vitro*. Imaging was performed on a Zeiss Axio Observer microscope with a 5x objective.

Follow Stephanie Le on LinkedIn and @stephaniele.bsky.social on Bluesky.





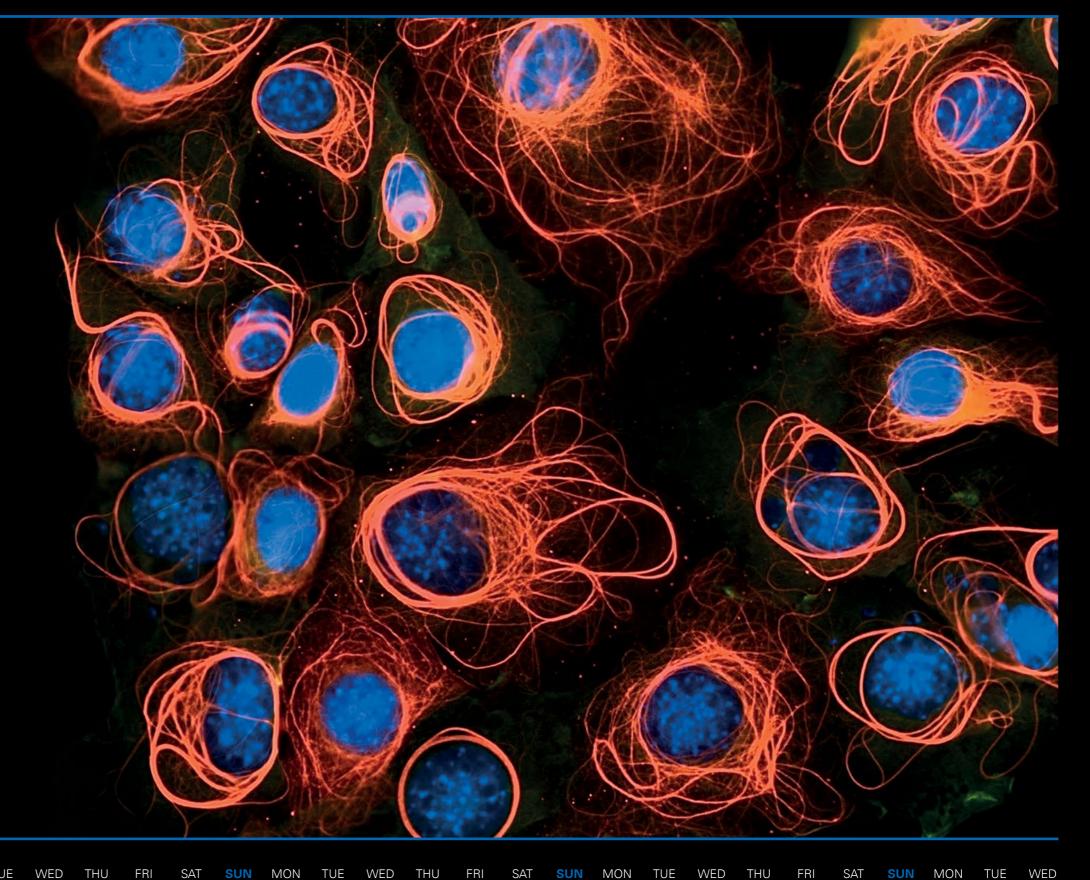


Shansa Jayaweera

University of Notre Dame, IN, USA

Immunofluorescence image showing microtubule bundling induced in NIH3T3 cells upon over-expression of the head domain of the microtubule plus-end tracking protein CLIP-170. Cells were fixed with paraformaldehyde (PFA) and stained for microtubules (TUB-1A2, red), CLIP-170 (green), and nuclei (DAPI, blue). Imaging was performed on a Nikon Eclipse Ti2-E inverted widefield microscope using a 60x oil immersion objective.

Follow Shansa Jayaweera on LinkedIn and @shansa_jaya on Instagram.





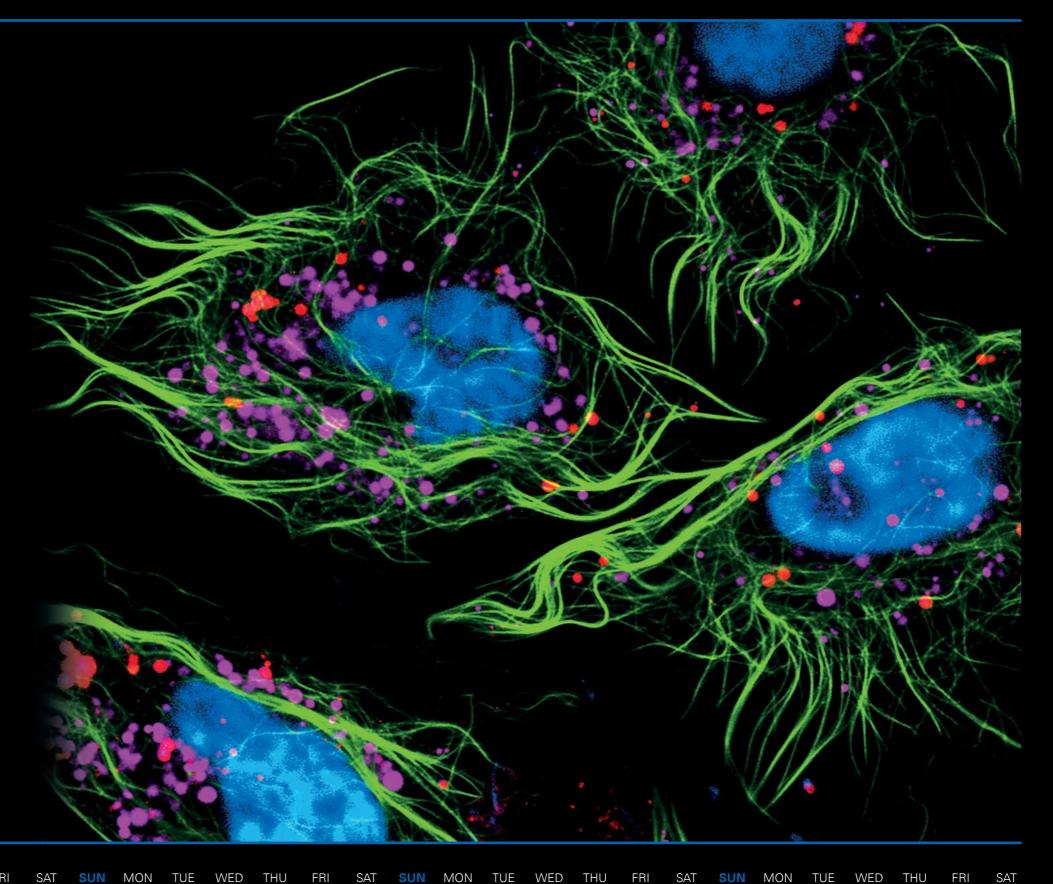
OCTOBER

Monika Kamińska

University of Zurich, Switzerland

Human kidney-2 (HK-2) cells were treated with hydro-xychloroquine, showing enlarged lysosomes (SiR-lysosome, magenta), altered microtubules (SPY555-tubulin, green), and a few lipid droplets (BODIPY 493/503, red). Nuclei were counterstained with Hoechst (blue). This highlights lysosomal stress and cytoskeletal changes. Cells were cultured in a $\mu\text{-Slide }8\text{ Well Glass Bottom}$ and imaged with a Zeiss LSM 980 Airyscan confocal microscope using a 63x objective.

Follow Monika Anna Kamińska on Linkedln.





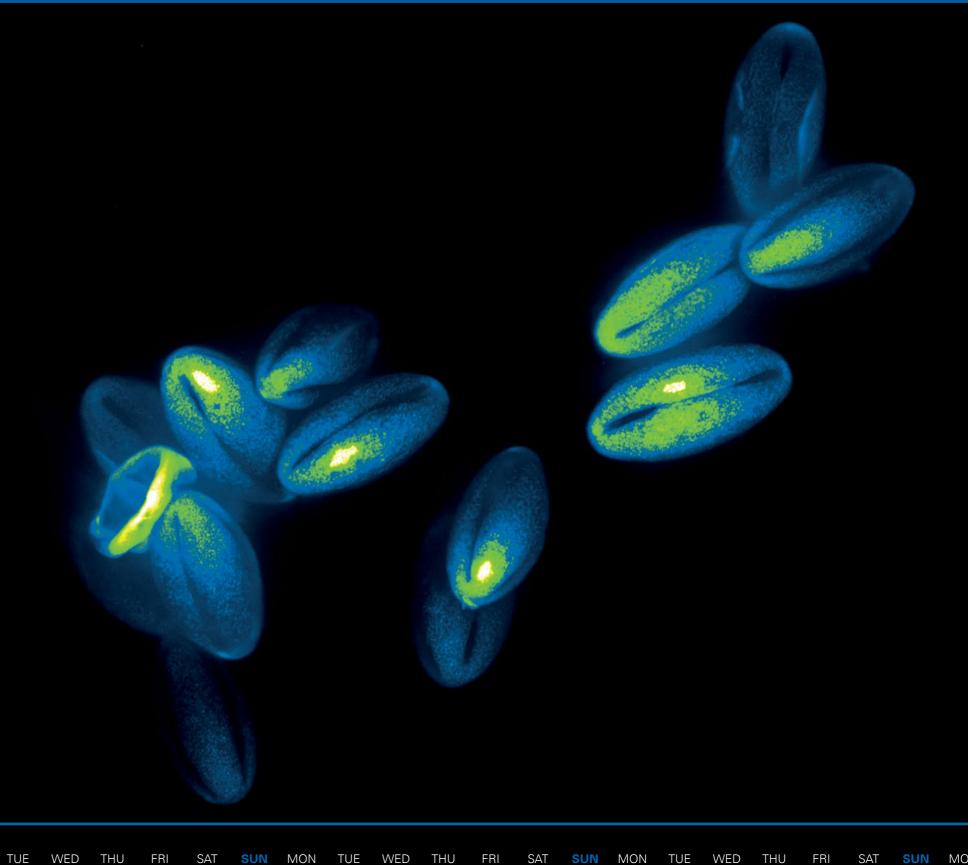
NOVEMBER

Nan Hou

The Chinese University of Hong Kong, Hong Kong

The image shows pollen from Cassia surattensis, prepared on a μ -Dish 35 mm, high . The natural autofluorescence of the pollen was visualized without artificial staining, using 405/488 nm laser excitation. Imaging was performed on a Zeiss LSM 980 confocal microscope with a 60x oil immersion objective.

Follow @erichounan on Instagram.





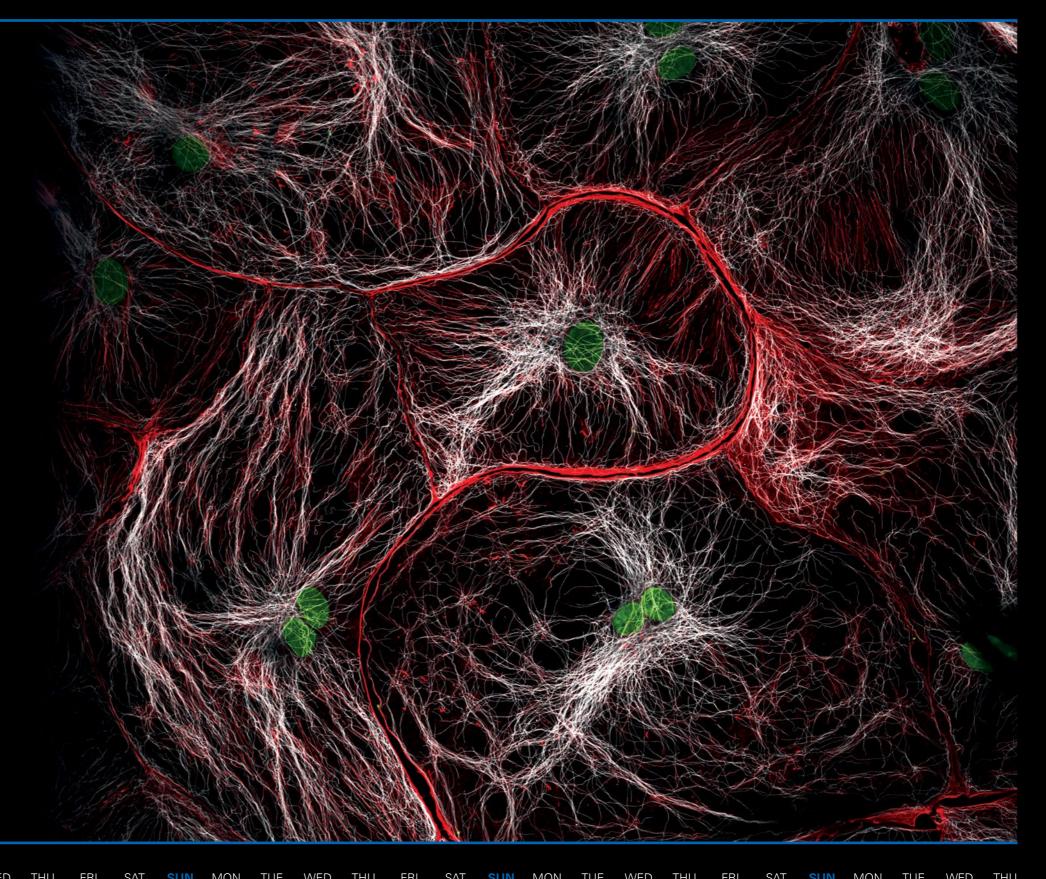
DECEMBER

Francisco Lázaro-Diéguez

Albert Einstein College of Medicine, Bronx, NY, USA

Dedifferentiated rat liver cells were stained to visualize microtubules (α -tubulin, white), microfilaments (β -actin, red), and nuclei (DAPI, green). The image was acquired using a Leica TCS SP5 confocal microscope with a 40x oil immersion objective.

Follow Francisco Lázaro-Diéguez on LinkedIn.







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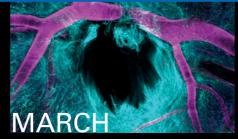
stained with Perilipin-1 (blue) and LipidTOX™ (yellow). F-actin was labeled with phalloidin (cyan) and nuclei were stained using Hoechst 33258 (red). For the image acquisition, an Olympus Fluoview 1200 confocal microscope was used with a 10x magnification.



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Differentiated 3T3-L1 adipocytes cultured in a Super-resolution image of a primary hippoμ-Slide 8 Well high. The formed lipid droplets were campal neuronal culture acquired by structured illumination microscopy (SIM2). Microtubules (anti-tubulin, gold) outline neuronal somata and neuritic projections radiating from a central cluster, reflecting organized network architecture. Nuclei (DAPI, cyan) highlight both neuronal and glial populations. Cells were seeded in a μ -Slide 18 Well Glass Bottom and imaged on a Zeiss Elyra 7 SIM system with SIM² processing.



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3D-IBEX of optic nerve head (ONH) in human Self-organized human myofiber bundles cultured post-mortem globe with glaucoma. The ONH using the Culture-Insert 4 Well in µ-Dish 35 mm, high was stained for vessels (collagen IV, pink), at the 15th day of differentiation, fixed and stained Muller glia (vimentin, cyan), and nuclei (DAPI, with phalloidin, imaged with a 10x objective blue). The image was acquired using a Leica on a Zeiss LSM880, and pseudocolored by SP8 confocal microscope with a 20x objective. orientation angles with the OrientationJ plugin in ImageJ.



Louisa Snape

University College London, UK

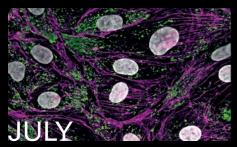
The image shows a confocal micrograph of neuromuscular junctions within mouse lumbrical muscles. The network of motor neurons innervating the muscle is visualized with labelling of microtubules (β-III-tubulin, green) and myelinated Schwann cells (S100 β , blue). Post-synaptic terminals are stained with α -bungarotoxin (nAChRs, pink). A Zeiss LSM 980 microscope maximum intensity projection from a 3x3 tiled related diseases. z-stack image (32 sections, 1 µm steps).



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University of Strathclyde, Glasgow, Scotland

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IBL, Leiden University, the Netherlands

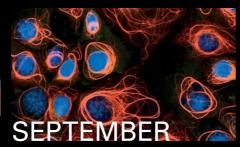
Human umbilical vein endothelial cells (HUVEC) 5 microscope.



Stephanie Le

Heinrich Heine University, Düsseldorf, Germany

Observer microscope with a 5x objective.



Shansa Jayaweera

University of Notre Dame, IN, USA

were cultured in a μ-Slide 8 Well high with a Young cortical organoids imaged in a μ-Slide tubule bundling induced in NIH3T3 cells upon with hydroxychloroquine, showing enlarged gelatin coating. The cells were stained for von 8 Well high Glass Bottom show SOX2-positive overexpression of the head domain of the lysosomes (SiR-lysosome, magenta), altered Willebrand factor (DAKO, green), actin cyto- progenitor cells (red) clustering in proliferative microtubule plus-end tracking protein CLIP- microtubules (SPY555-tubulin, green), and a fluorescence of the pollen was visualized without microfilaments (β-actin, red), and nuclei (DAPI, skeleton (phalloidin, magenta) and nuclei zones, while MAP2-positive neurons (cyan) 170. Cells were fixed with paraformaldehyde few lipid droplets (BODIPY 493/503, red). Nuclei artificial staining, using 405/488 nm laser green). The image was acquired using a Leica (Hoechst, white). The image is a maximum extend early processes. This image reveals the (PFA) and stained for microtubules (TUB-1A2, were counterstained with Hoechst (blue). This excitation. Imaging was performed on a Zeiss TCS SP5 confocal microscope with a 40x oil intensity projection (z = 2 µm, step size = 0.5 µm) spatial organization and early differentiation red), CLIP-170 (green), and nuclei (DAPI, blue). highlights lysosomal stress and cytoskeletal LSM 980 confocal microscope with a 60x oil immersion objective. taken with a 63x oil objective on a Leica Stellaris dynamics of the developing human cortex in Imaging was performed on a Nikon Eclipse changes. Cells were cultured in a µ-Slide 8 Well vitro. Imaging was performed on a Zeiss Axio Ti2-E inverted widefield microscope using a 60x Glass Bottom and imaged with a Zeiss LSM oil immersion objective



Monika Kamińska

University of Zurich, Switzerland

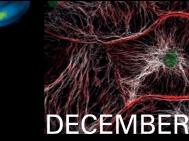
Immunofluorescence image showing micro- Human kidney-2 (HK-2) cells were treated 980 Airyscan confocal microscope using a 63x objective.



Nan Hou

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prepared on a μ-Dish ^{35 mm, high}. The natural auto- to visualize microtubules (α-tubulin, white), immersion objective



Francisco Lázaro-Diéguez

Albert Einstein College of Medicine, Bronx, NY, USA

The image shows pollen from Cassia surattensis, Dedifferentiated rat liver cells were stained



Kamila Kozik

Okinawa Institute of Science and Technology, Japan

The image shows a human aged fibroblast displaying hallmarks of cellular senescence, including altered organelle morphology and cytoskeletal organization. Cells were imaged using a Zeiss LSM 900 confocal microscope with a 40x oil immersion objective after labeling for actin filaments (phalloidin, cyan), mitochondria (Tom20, red), and lysosomes (LAMP1, gold). Imaging was performed in a μ-Dish 35 mm, high.

