

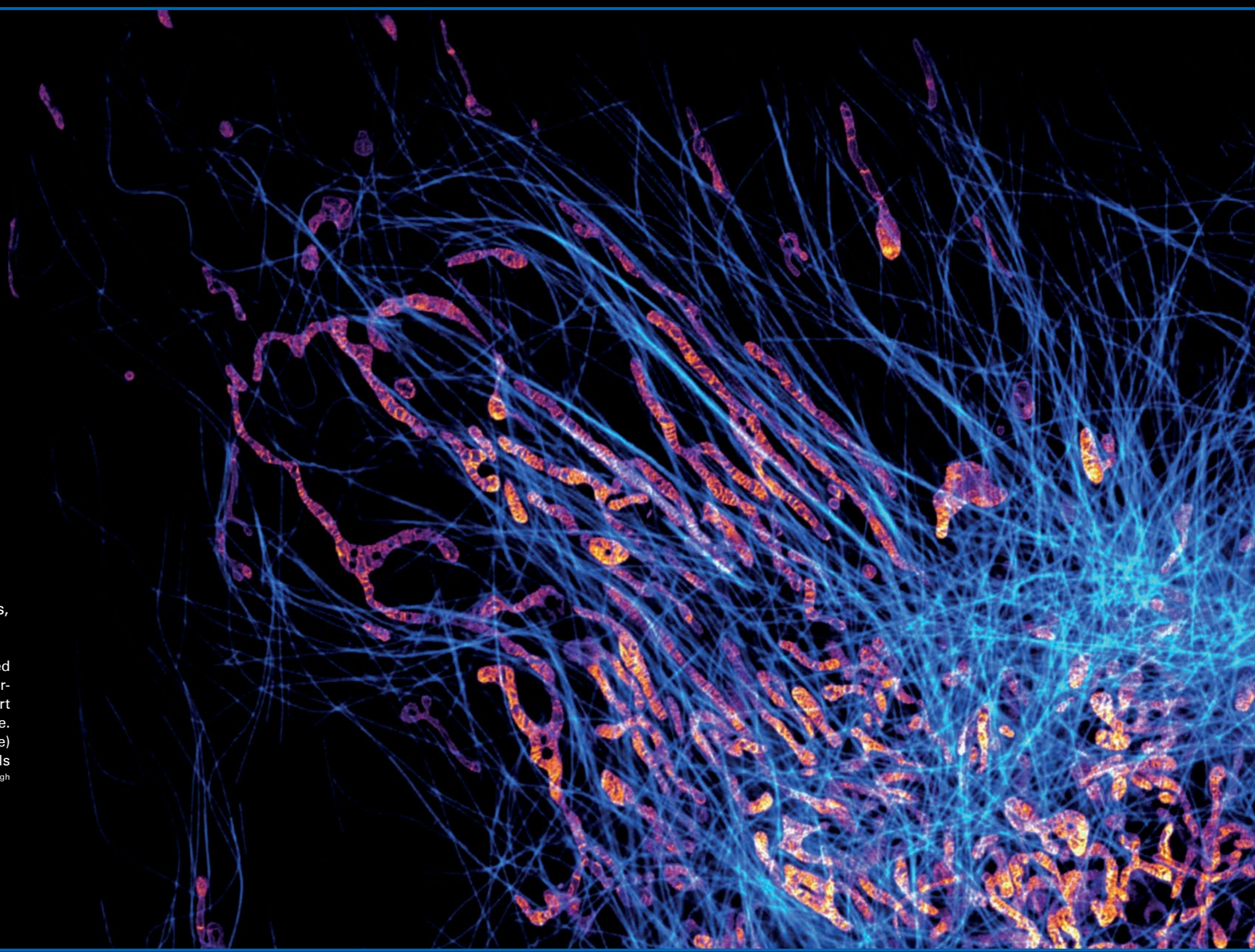
JANUARY

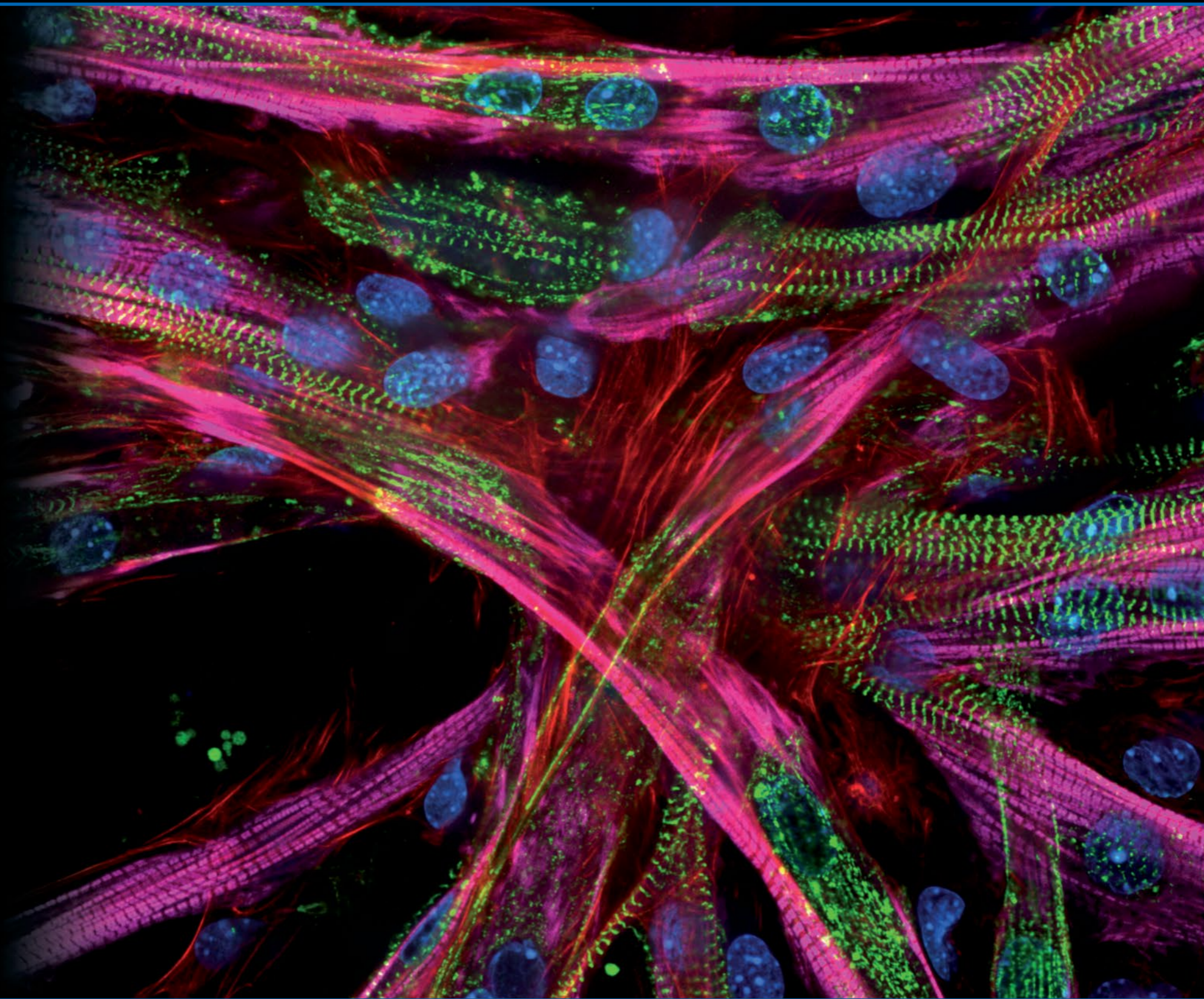
Till Stephan

Buchmann Institute for Molecular Life Sciences,
Goethe University Frankfurt, Germany

The image shows a part of a live cancer cell captured using a stimulated emission depletion (STED) super-resolution fluorescence microscope (Abberior Expert Line STED) with a UPlanSApo 100x/1.40 oil objective. The cells were labeled for mitochondria (orange) and the cytoskeleton (microtubules, cyan). Cells were cultivated and imaged in a μ -Dish^{35 mm, high Glass Bottom}.

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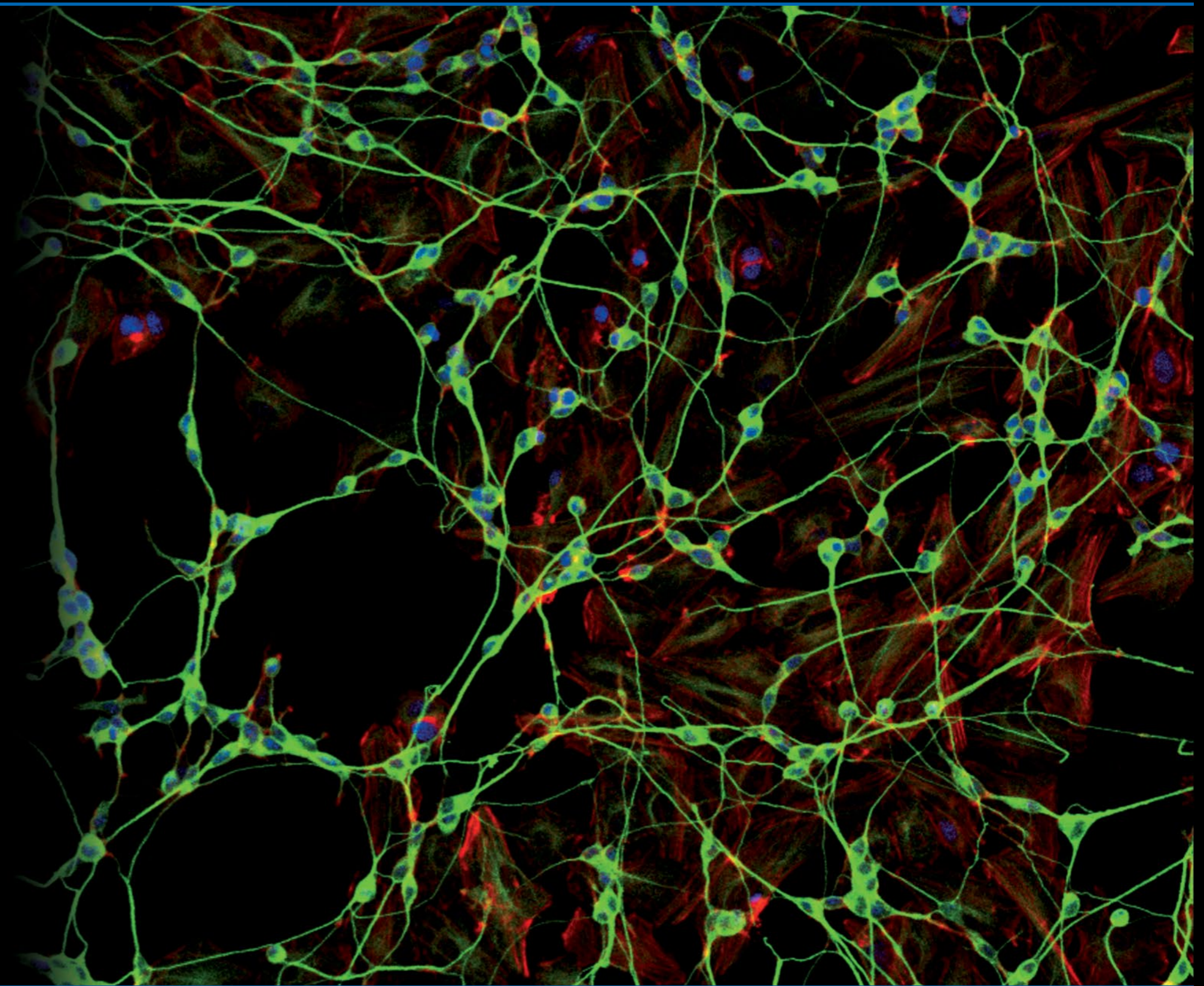
FEBRUARY

Leander Vonk

Amsterdam UMC, The Netherlands

Myotubes differentiated from C2C12 myoblasts, cultured in a μ -Slide 18 Well. Cells were stained for α -actinin (green), actin (phalloidin, red), myosin (magenta) and nuclei (DAPI, blue), to visualize sarcomere formation. This image was acquired using a CrestOptics X-Light V3 spinning disc confocal microscope with a 60x oil immersion objective.

Follow Leander Vonk on LinkedIn.



MARCH

Bárbara M. de Sousa
and Sandra I. Vieira

Institute of Biomedicine, Department of Medical
Sciences, University of Aveiro, Portugal

The beautiful intricacies of an electrified neuronal network: SH-SY5Y cells upon 7 days of neuronal differentiation and daily capacitive electrical stimulation. The neuronal network of N-type cells stands out through a β -III-tubulin labelling (green). Supporting S-type cells beneath the neuronal network are seen through F-actin labelling by phalloidin (red). Nuclei were counterstained with DAPI (blue). The image was acquired in a Zeiss LSM 880 with Airy-scan confocal microscope using a 10x objective.

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and @barbaramsousa20 on X.

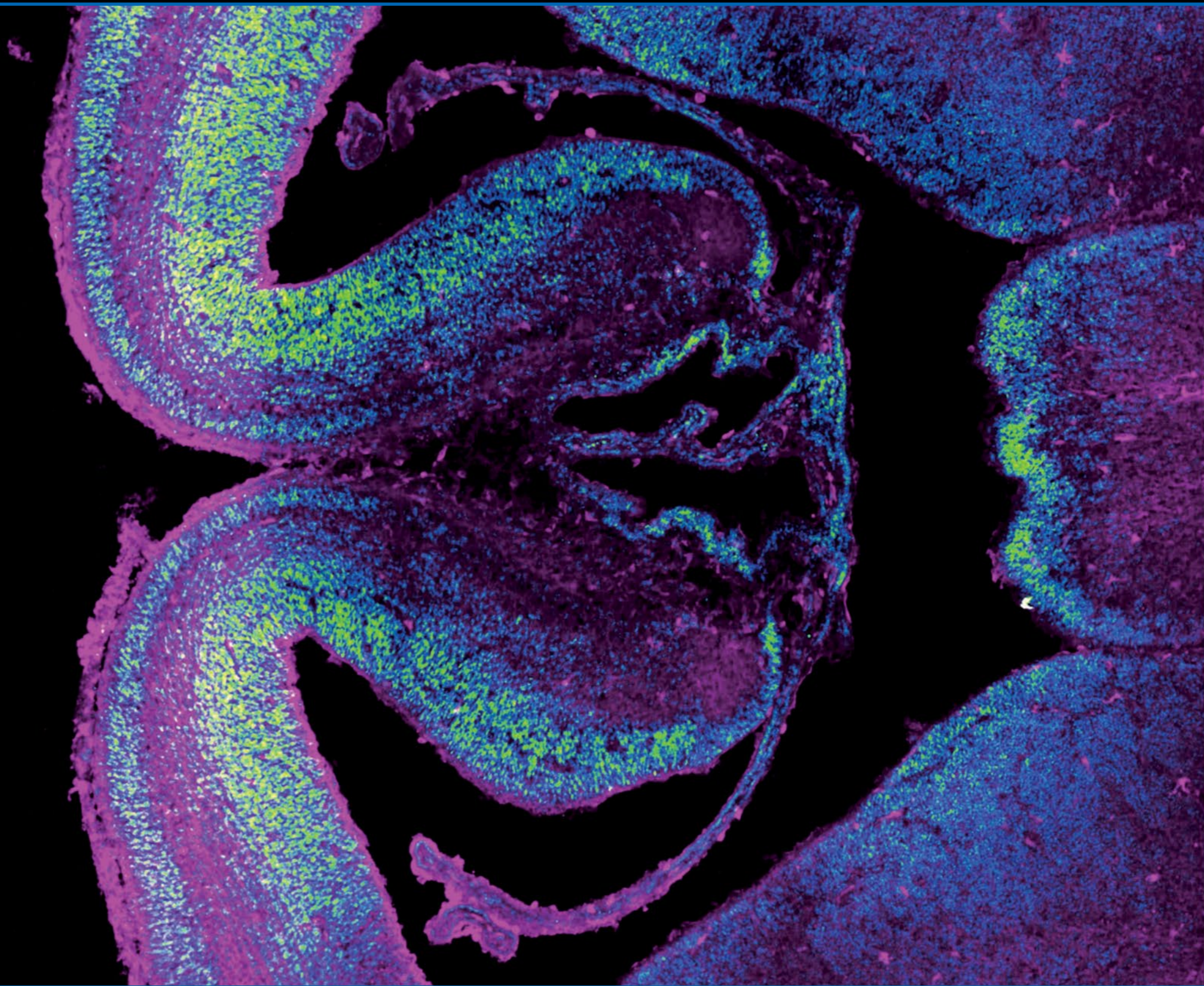
APRIL

Tabitha Rücker

Institut Pasteur, Paris, France

Coronal slice of an E18 murine choroid plexus. The tissue was stained with Hoechst (nuclei) and anti-Iba1 (microglia). A 'GreenFireBlue' hyperstack temporal color code was applied to the Hoechst z-stacks. The imaging was performed using a Nikon Ti2 microscope with a spinning disk confocal setup and a 10x objective.

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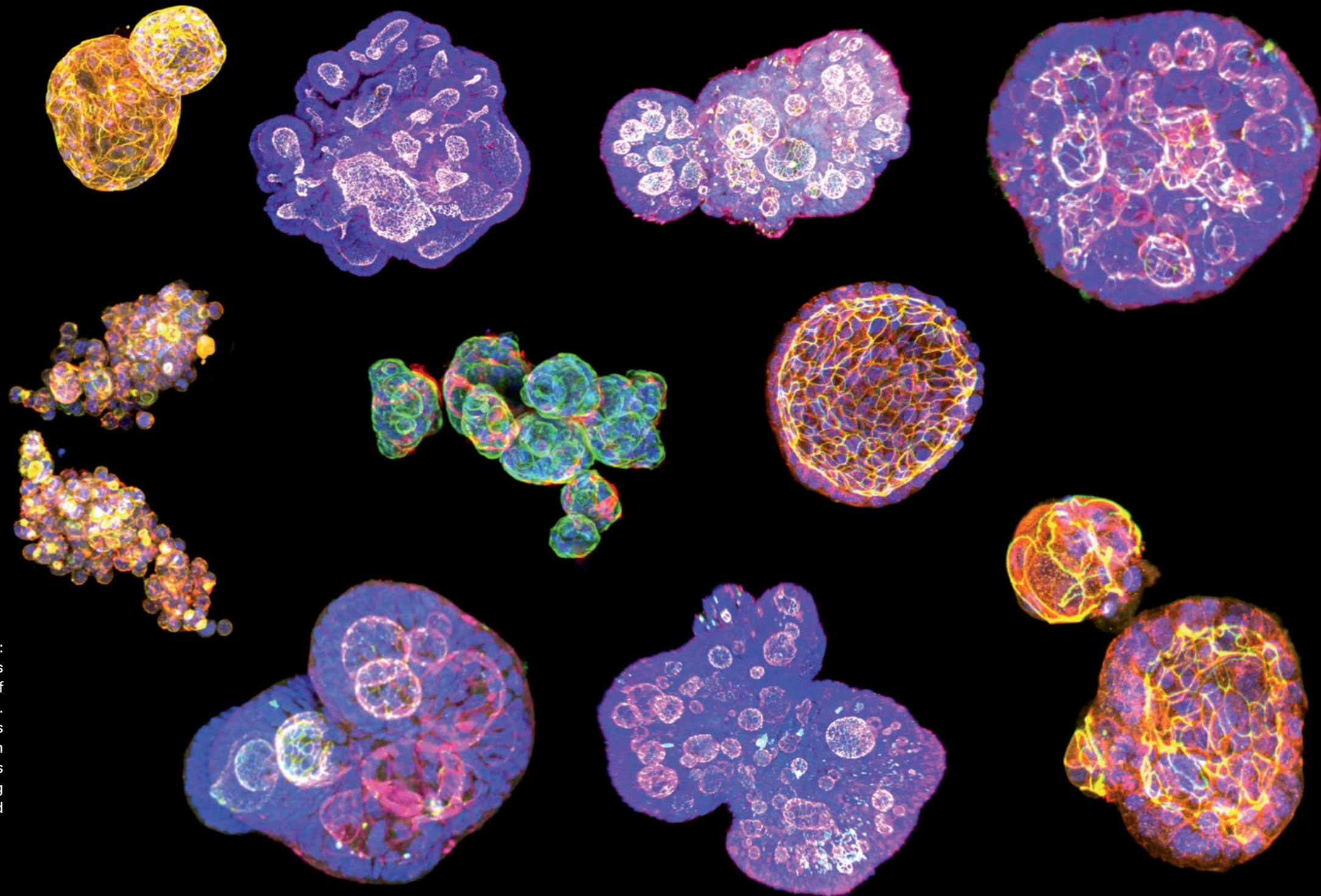
MAY

Sanika Jahagirdar

Cluster of Excellence Physics of Life,
TU Dresden, Germany

The heterogeneity of gastrointestinal (GI) organoids: Patient-derived GI cancer and healthy organoids were studied and imaged with the objective of linking their 3D morphologies to patient outcomes. The organoids were cultured from different patients in μ -Slides 8 Well^{high} Glass Bottom and stained with membrane and nuclear markers, *in situ*. Imaging was conducted using 25x magnification on a spinning disk confocal microscope, providing detailed insights into the 3D organization of tumor cells.

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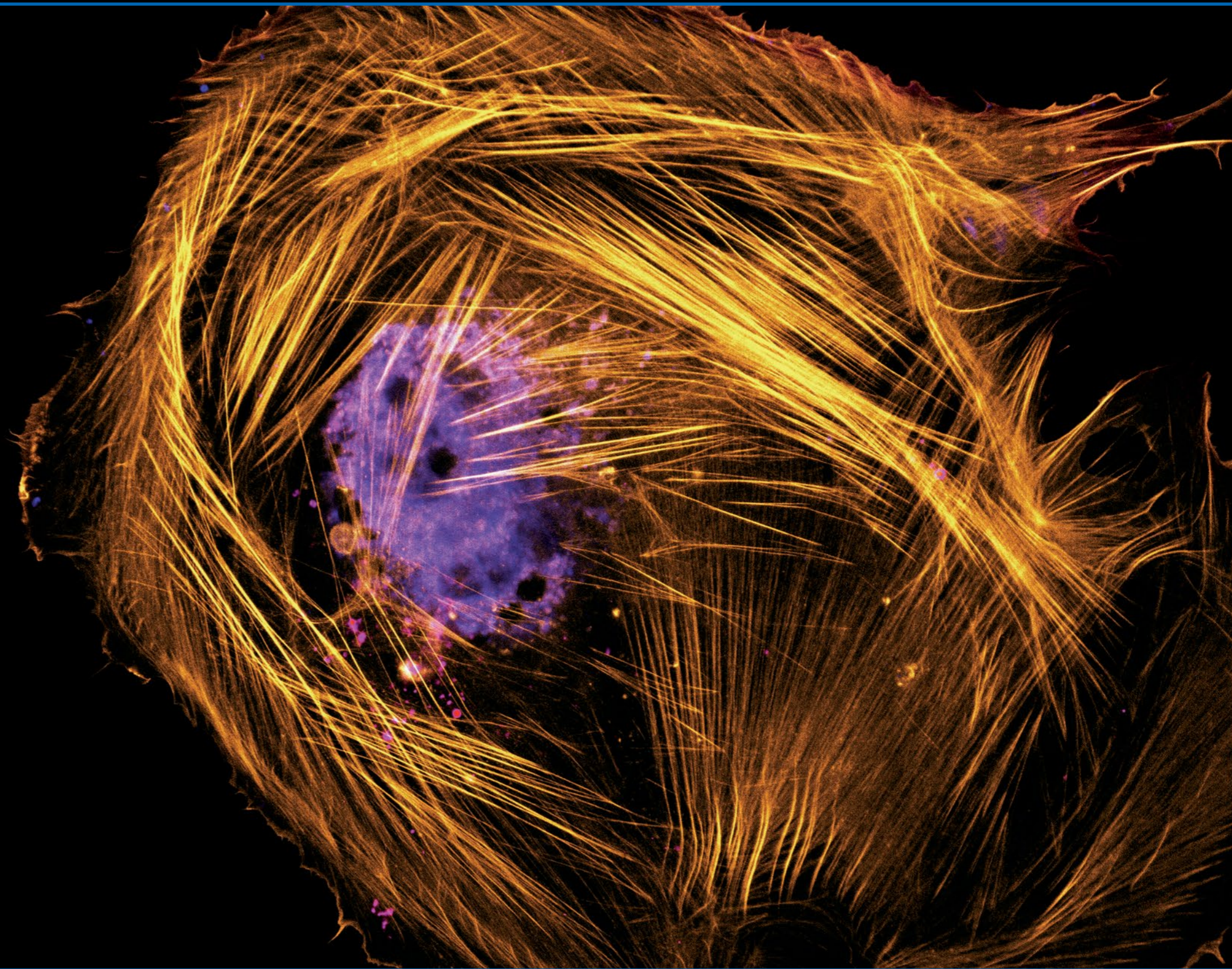
JUNE

Kamila Kozik

Membranology Unit, Okinawa Institute of Science and Technology, Japan

Human senescent fibroblast to study human aging. The cells were seeded in a μ -Plate 96 Well Round Glass Bottom, stained with phalloidin (F-actin, gold), DAPI (nucleus, blue), and LAMP-1 (lysosomes, magenta). The image was acquired using a Zeiss LSM 780 microscope with a 40x objective.

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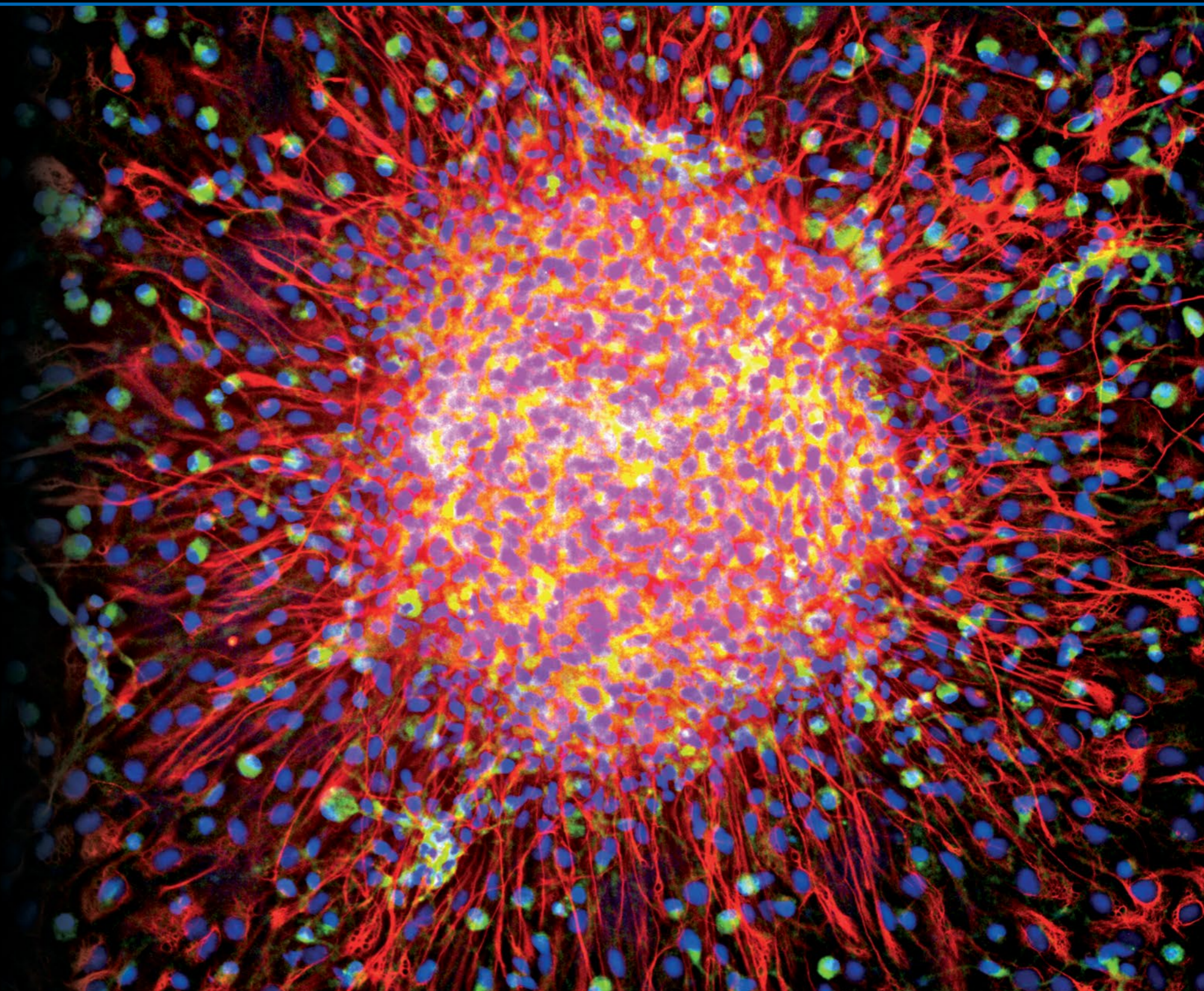


JULY

Rajsekhar Roy
IIT-Jodhpur, India

The thousand suns: Isolated image of a neurosphere derived from neuronal stem cells of isolated P0 Wistar rat pups. Cultured in an ibidi μ -Dish^{35 mm, high}, coated with PDL-Laminin, and maintained in Neurobasal-A media with B-27 supplement until DIV14. Neurons were visualized by staining with TUJ1 (red) and NeuN (green), while nuclei were counterstained with DAPI (blue). The image was captured using an Olympus IX83 inverted fluorescence microscope with a 20x Olympus Plan N objective.

Follow Rajsekhar Roy on LinkedIn,
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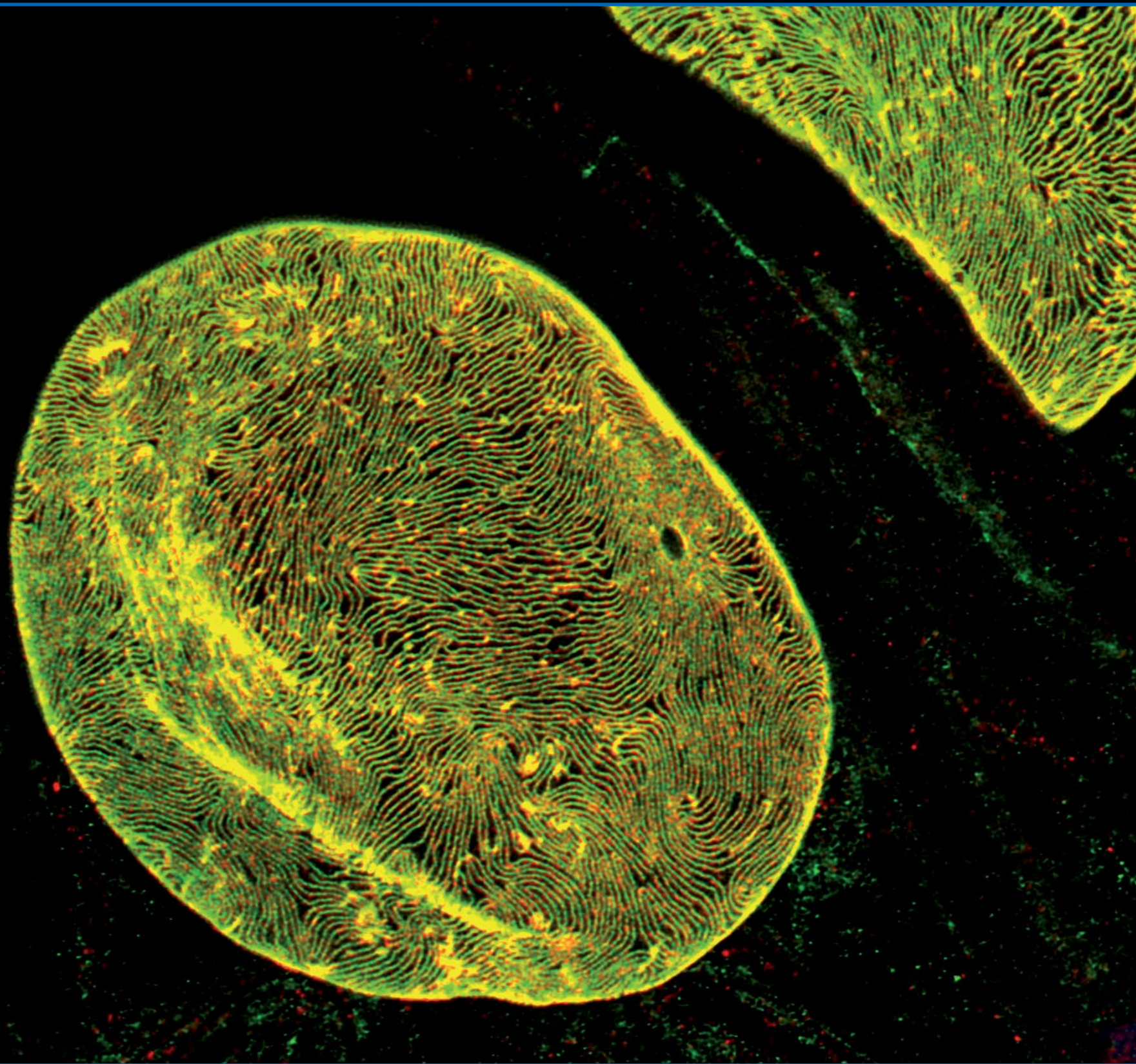
AUGUST

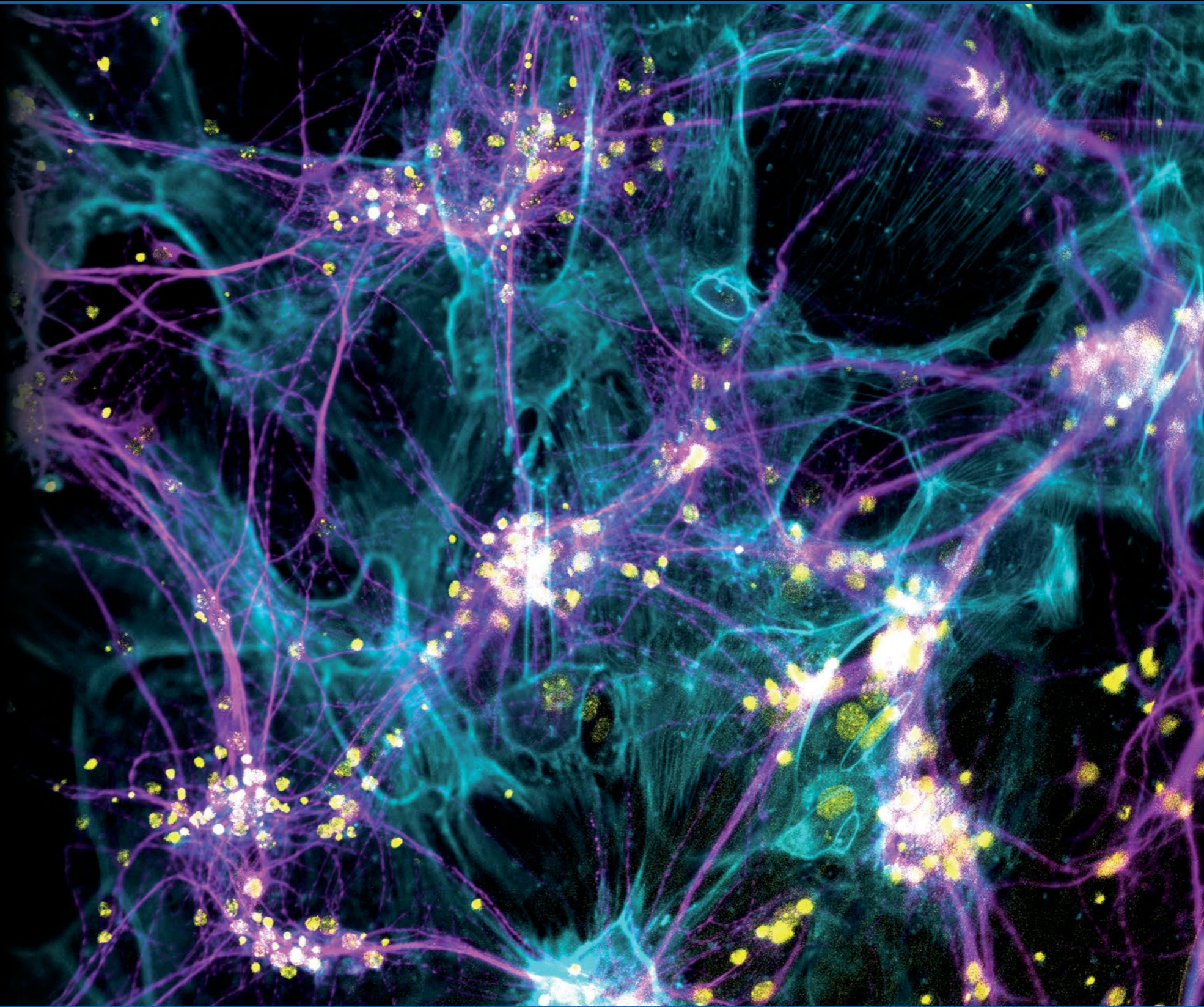
Luisa Bertgen

University Hospital Zurich, Nephrology Lab,
Switzerland

Confocal microscopy of *Drosophila melanogaster* garland nephrocyte surface dissected from L3 larvae and stained for nephrocyte diaphragm markers Sticks and Stones (Sns) and Polychaetoid (Pvd), which are orthologs of nephrin and ZO-1, respectively. The image was acquired using a Leica SP8 confocal microscope with a 63x oil immersion objective.

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SEPTEMBER

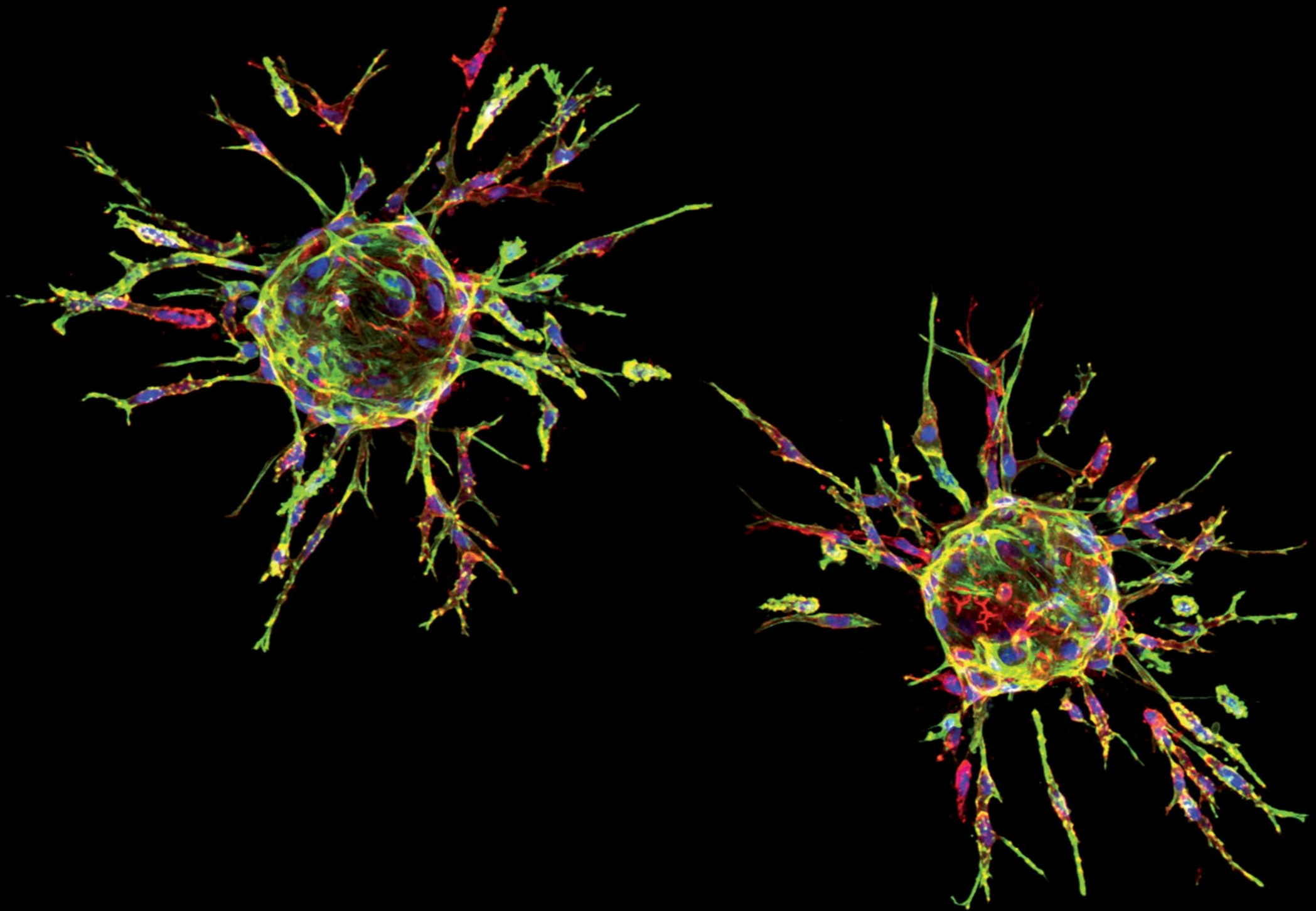
Mari Angeles Juanes

Centre de Investigacio Principe Felipe,
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Connecting with the cosmos: Mouse neurons were fixed and stained for F-actin (phalloidin, magenta), MAP2 (neurite marker, cyan), and nuclei (DAPI, yellow). The neurons were cultured in a μ -Slide 8 Well^{high}, stained, and then imaged using a Leica wide-field DMI8 microscope with a 20x objective.

Follow Mari Angels Juanes Ortiz on LinkedIn and @juanes_lab on X.

MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30



OCTOBER

Juliette Vleeming

Institute of Biology Leiden, Leiden University,
The Netherlands

Human umbilical vein endothelial cells (HUVECs) on a bead, sprouting in fibrin gel. Cells were stained for actin (green, phalloidin-fluorescein), nuclei (blue, Hoechst), and cell membrane (red, WGA). The image was acquired using a Leica Stellaris 5 confocal microscope with a 10x objective. The image is a maximum intensity projection of a z-stack (136 z-sections, 2 μ m step size).

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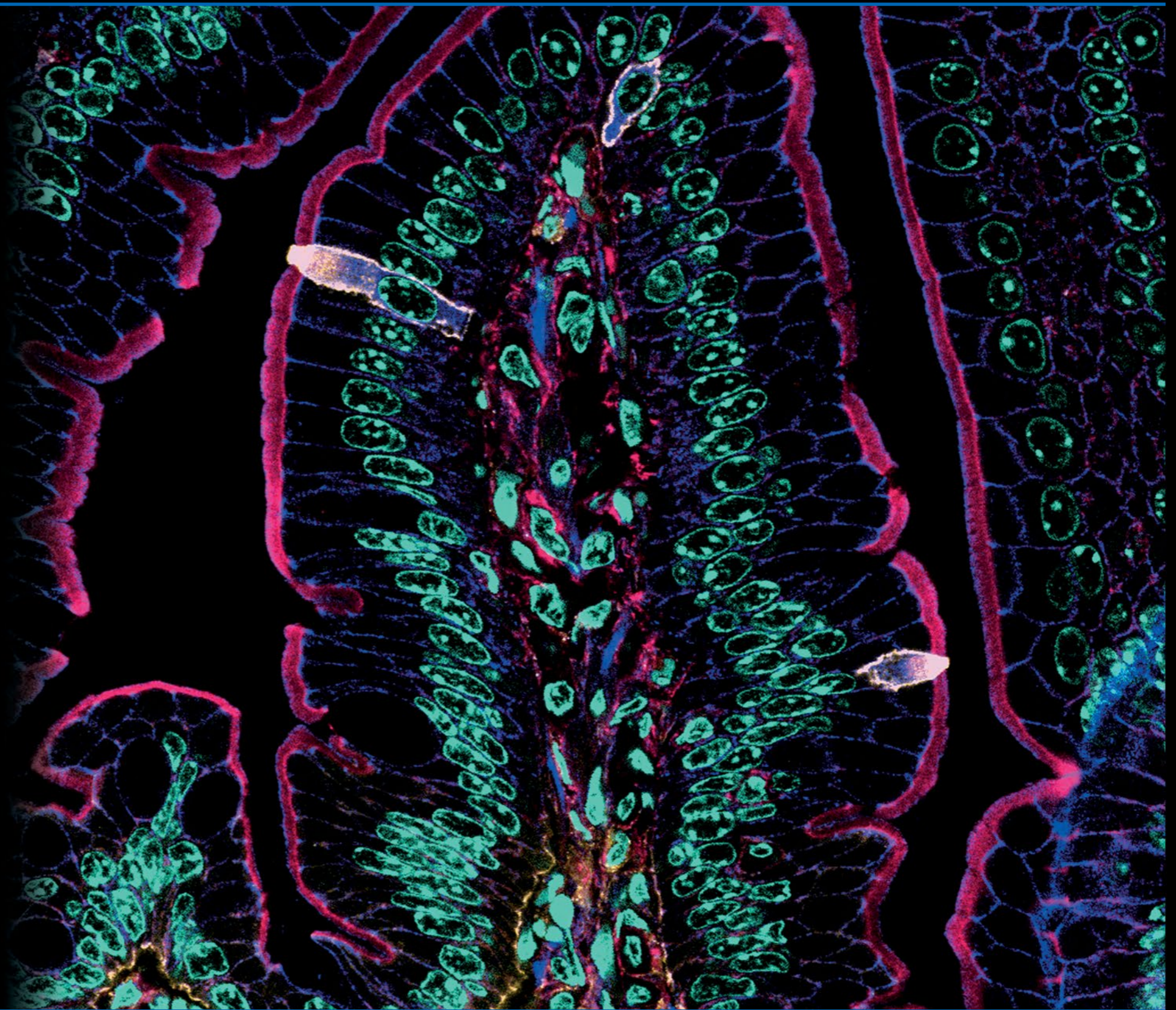
NOVEMBER

Rachel Stubler

Medical University of South Carolina, USA

Immunofluorescent staining of murine small intestine with the apical membrane labeled for β -actin (magenta) and nuclei (Hoechst, teal). The apical and lateral marker CDHR2 (purple) is highly expressed by rare chemosensory tuft cells, marked by phospho-EGFR (yellow). The colocalization of CDHR2 and phospho-EGFR is shown in white. The image was taken on a Leica SP8 confocal microscope using a 40x objective.

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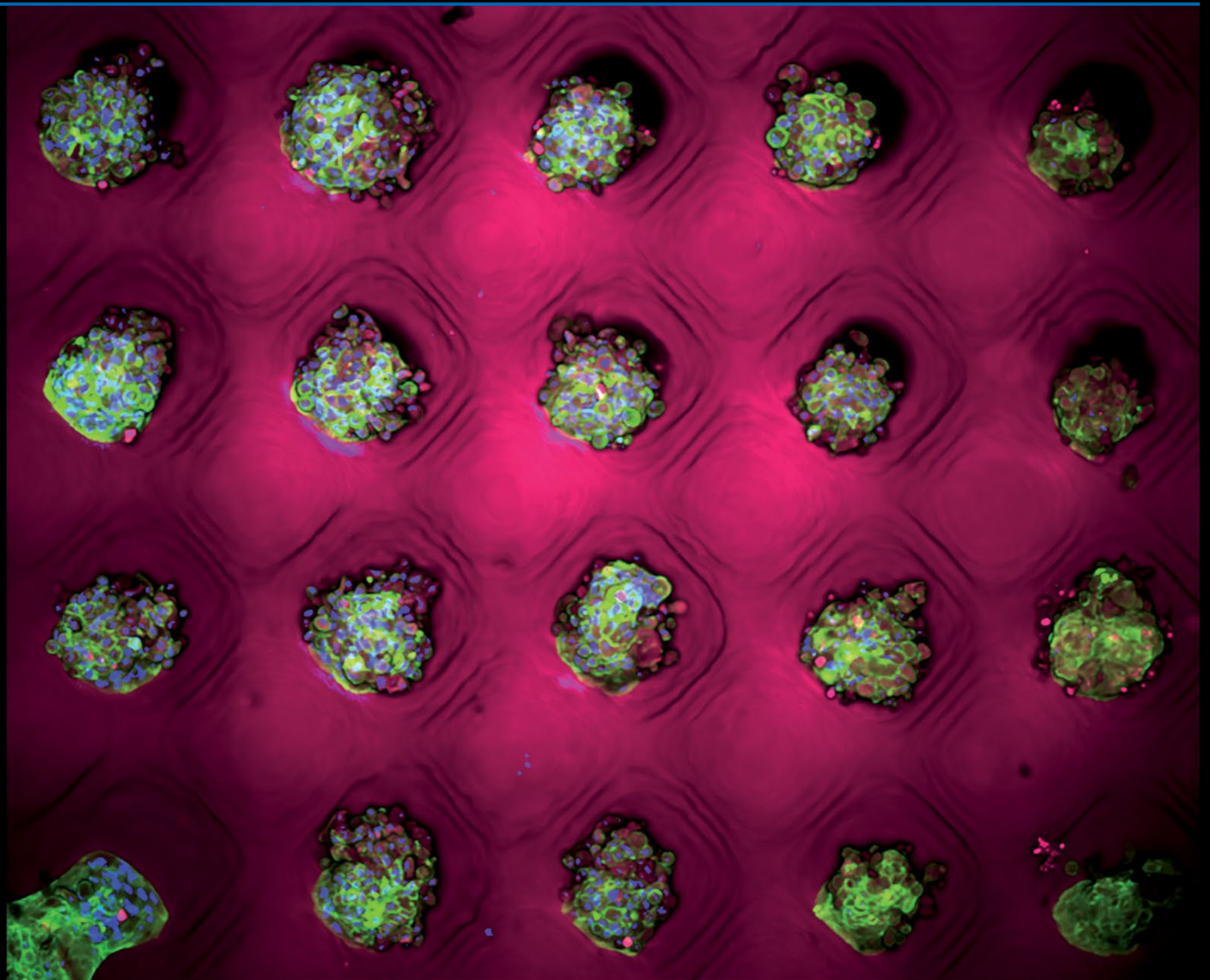
DECEMBER

Mina Aleemardani

University of Bristol, UK

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Follow Mina Aleemardani on LinkedIn and @mina_in_scienceland on Instagram.





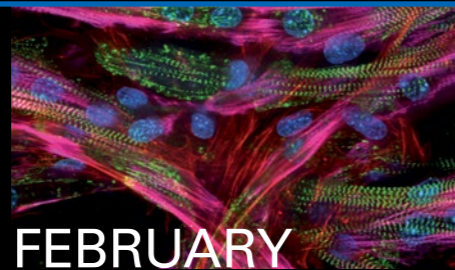
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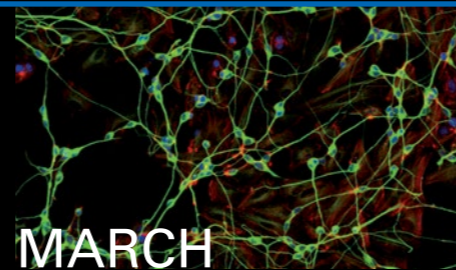
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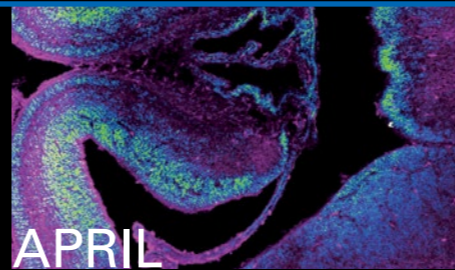
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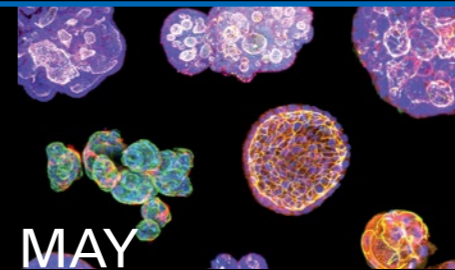
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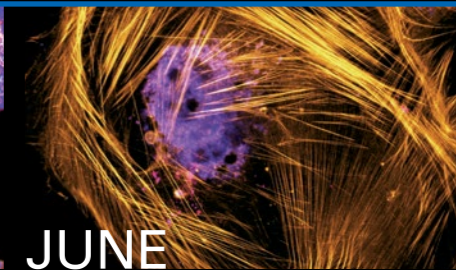
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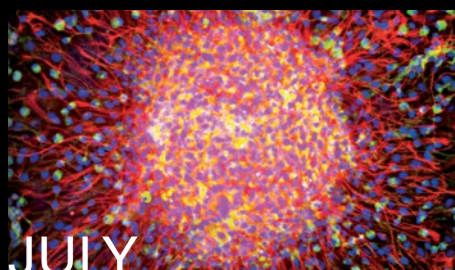
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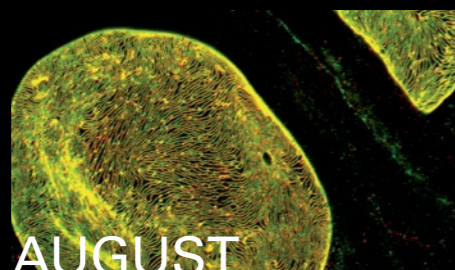
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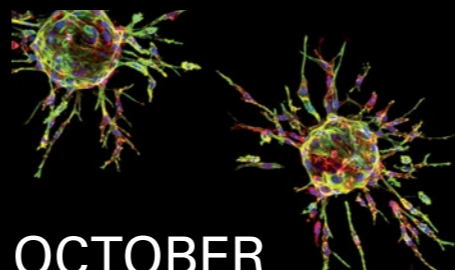
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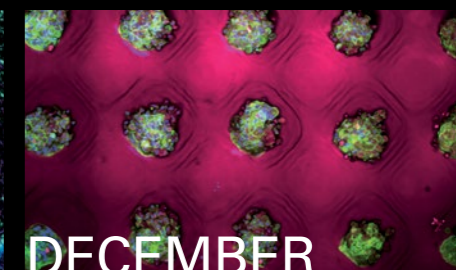
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