Biotechnology in Munich

munich biotech CLUSTER

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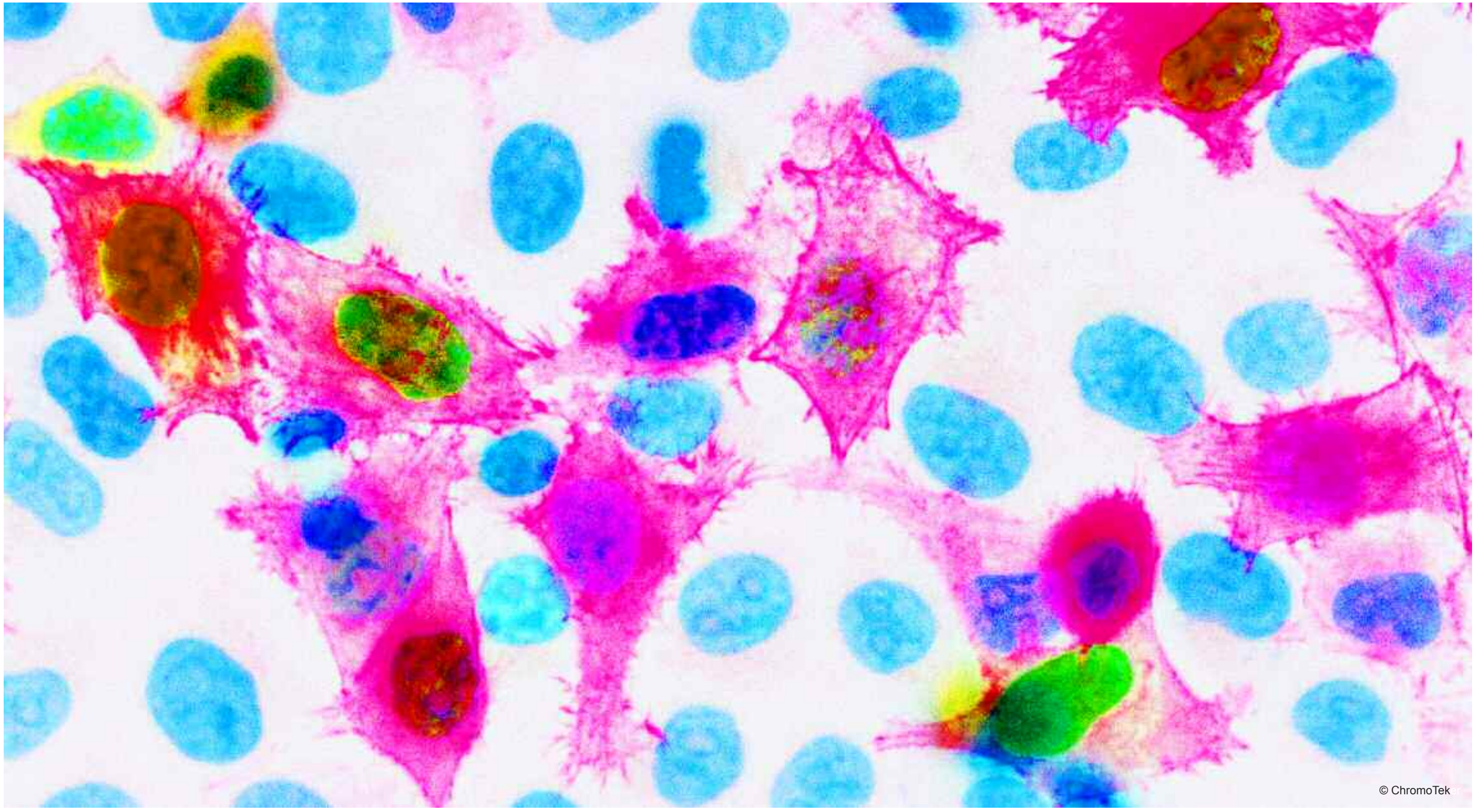

2014

JAN

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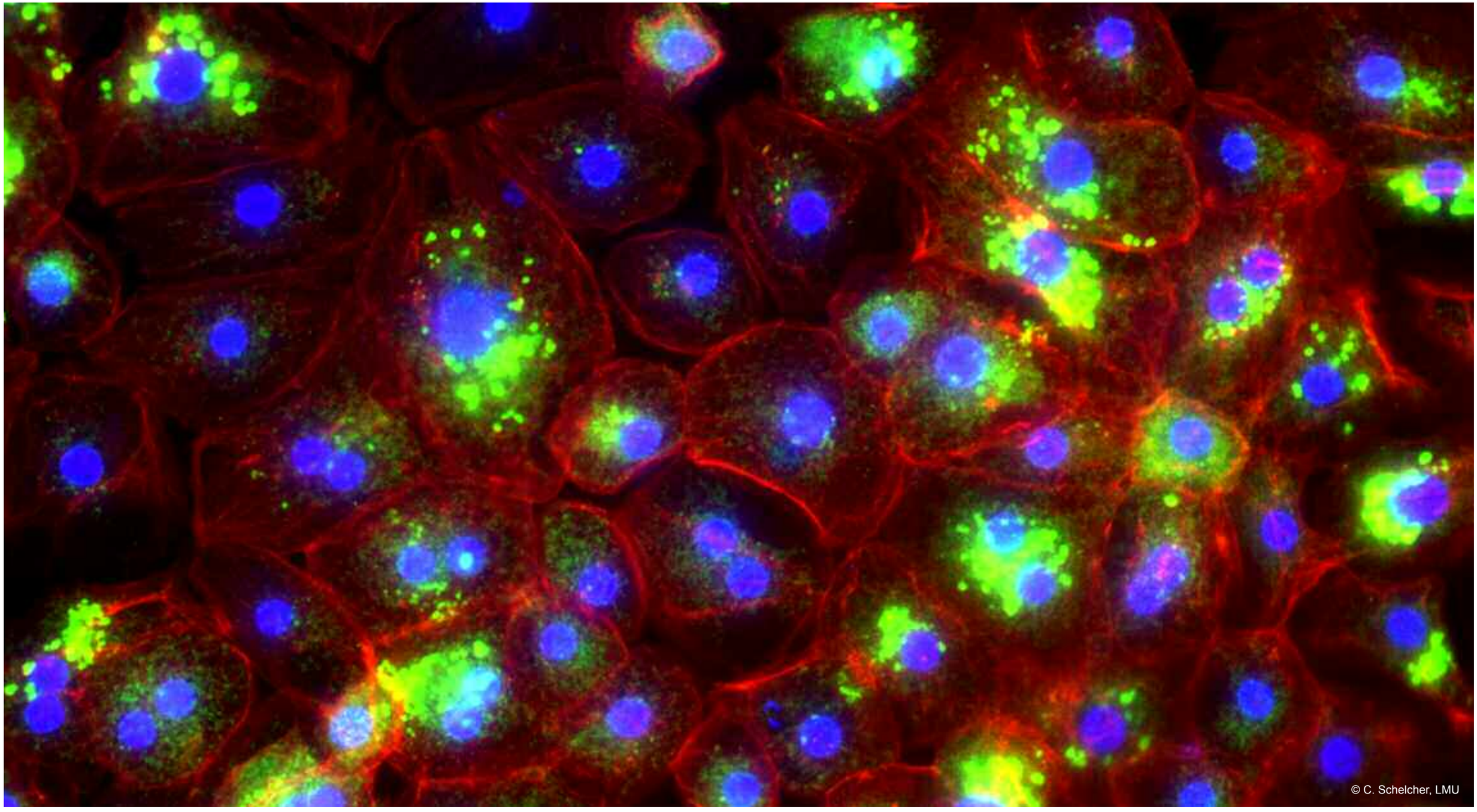

2014

FEB

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2014 MAR

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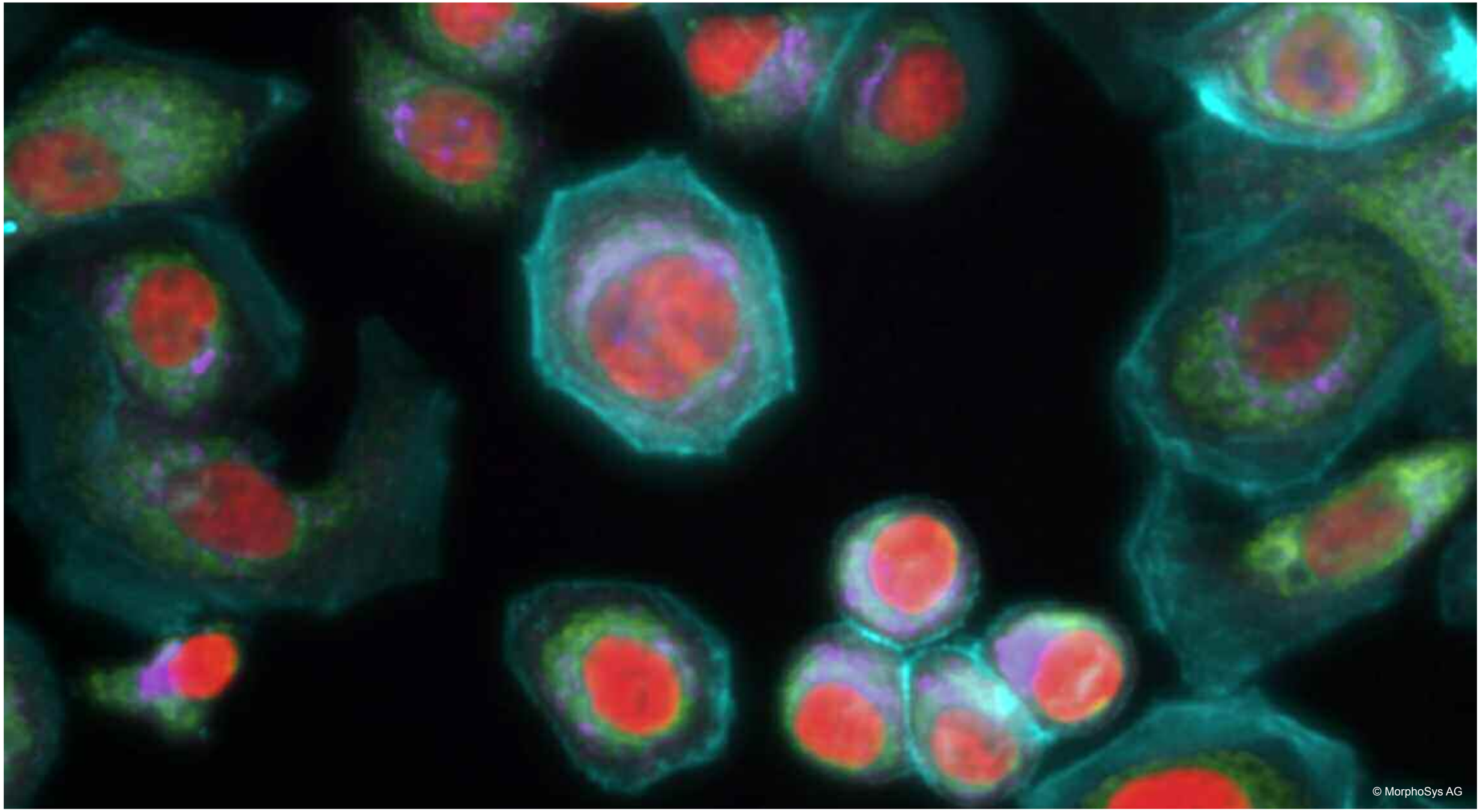

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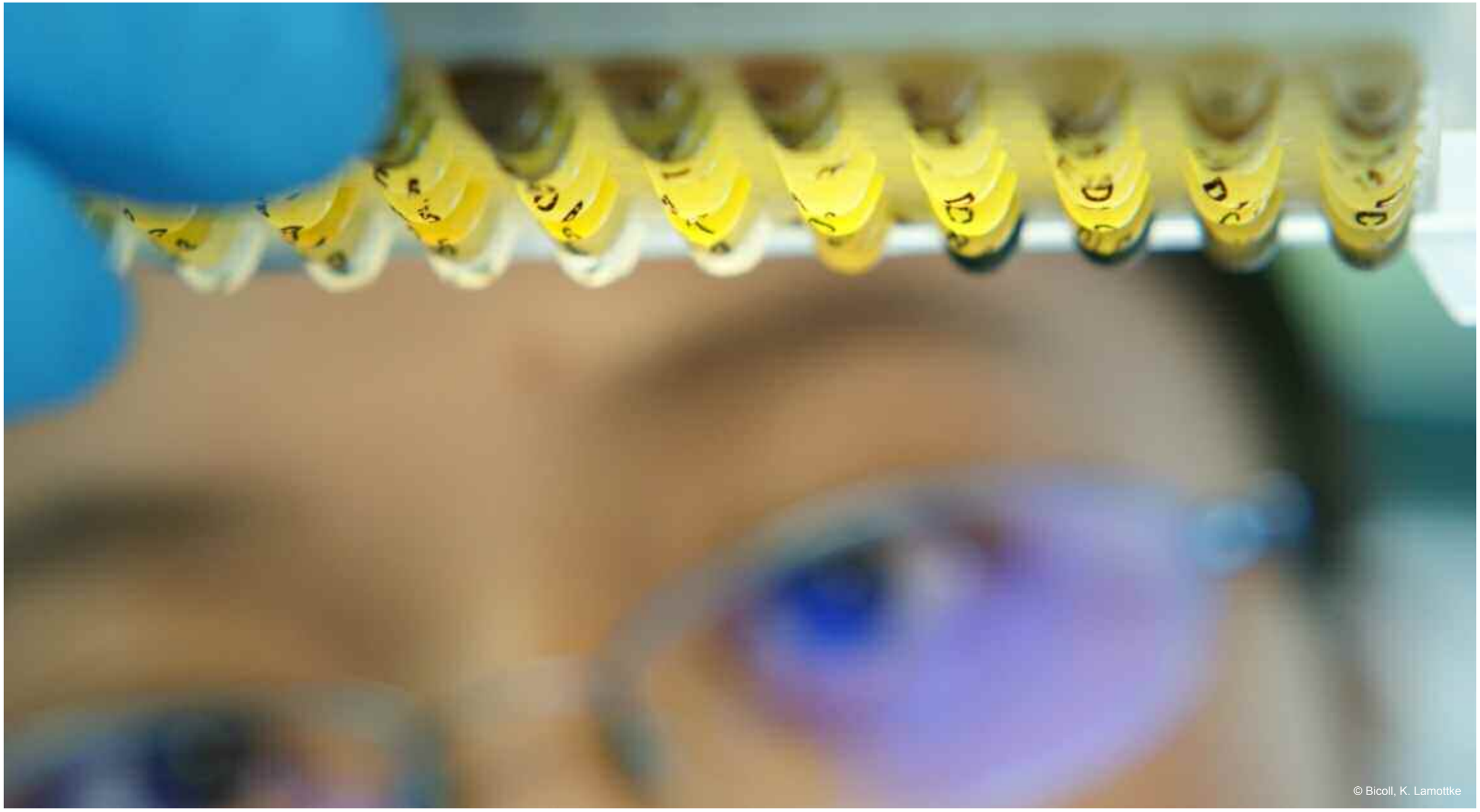

2014

MAY

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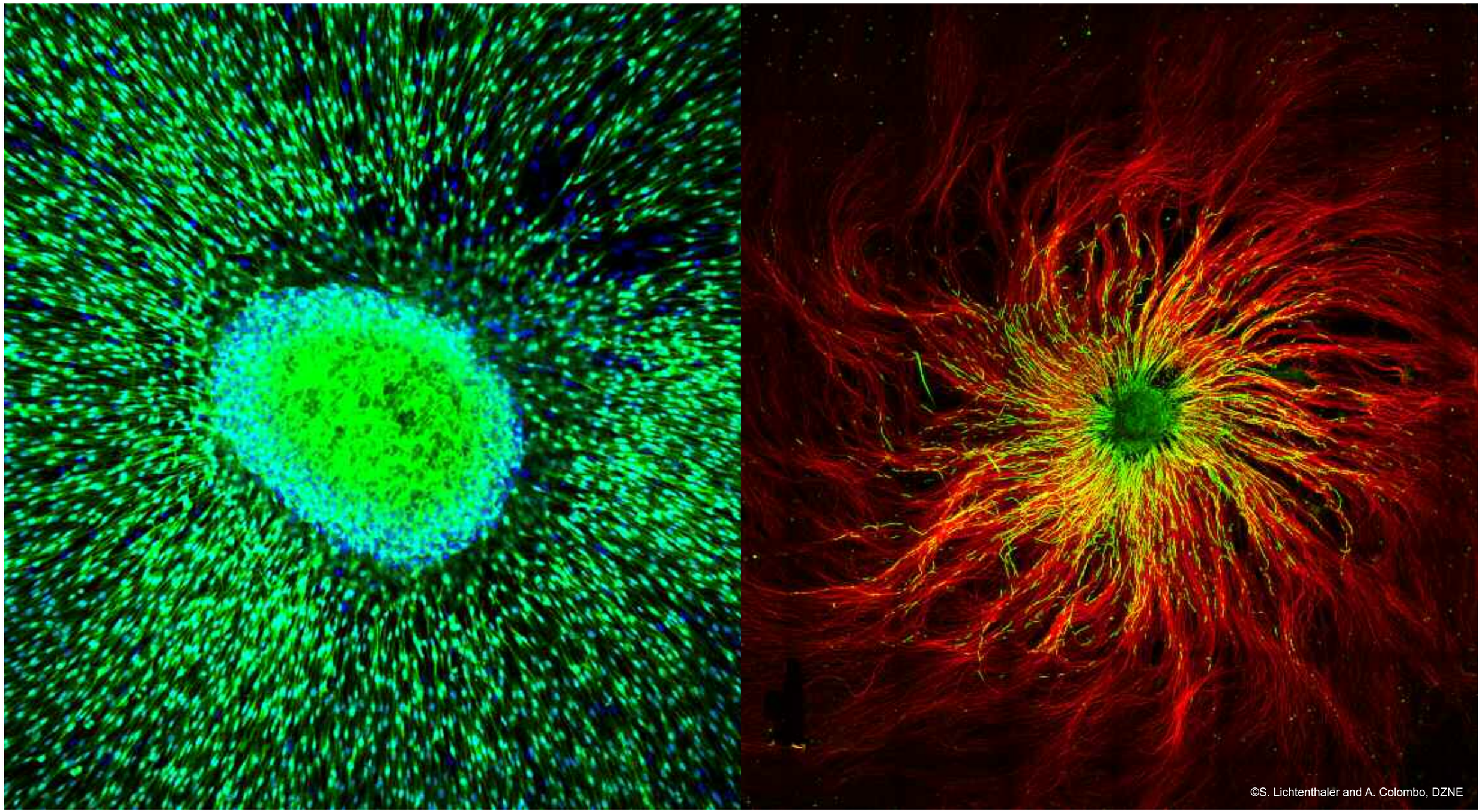

2014 JUN

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2014 JUL

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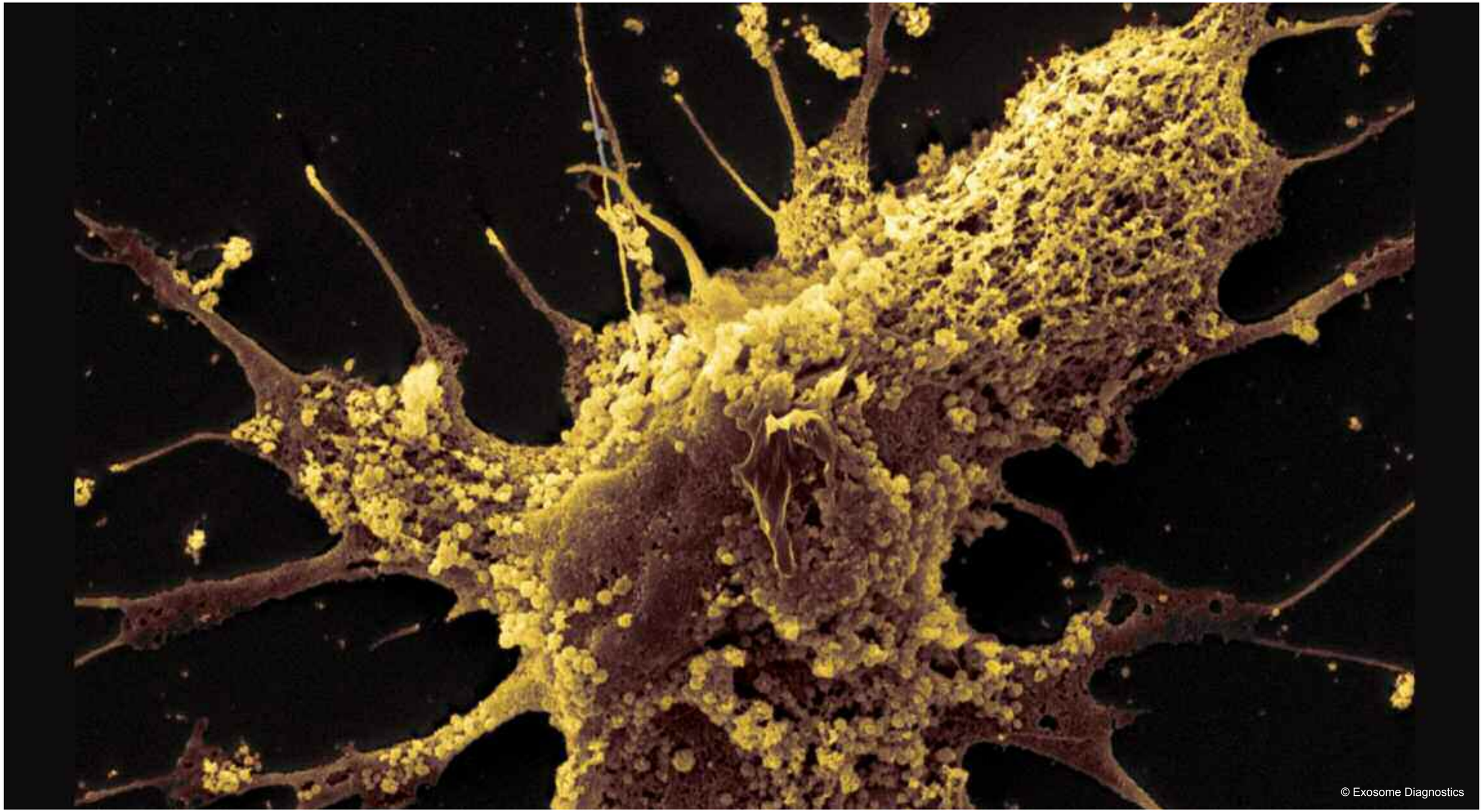

2014 AUG

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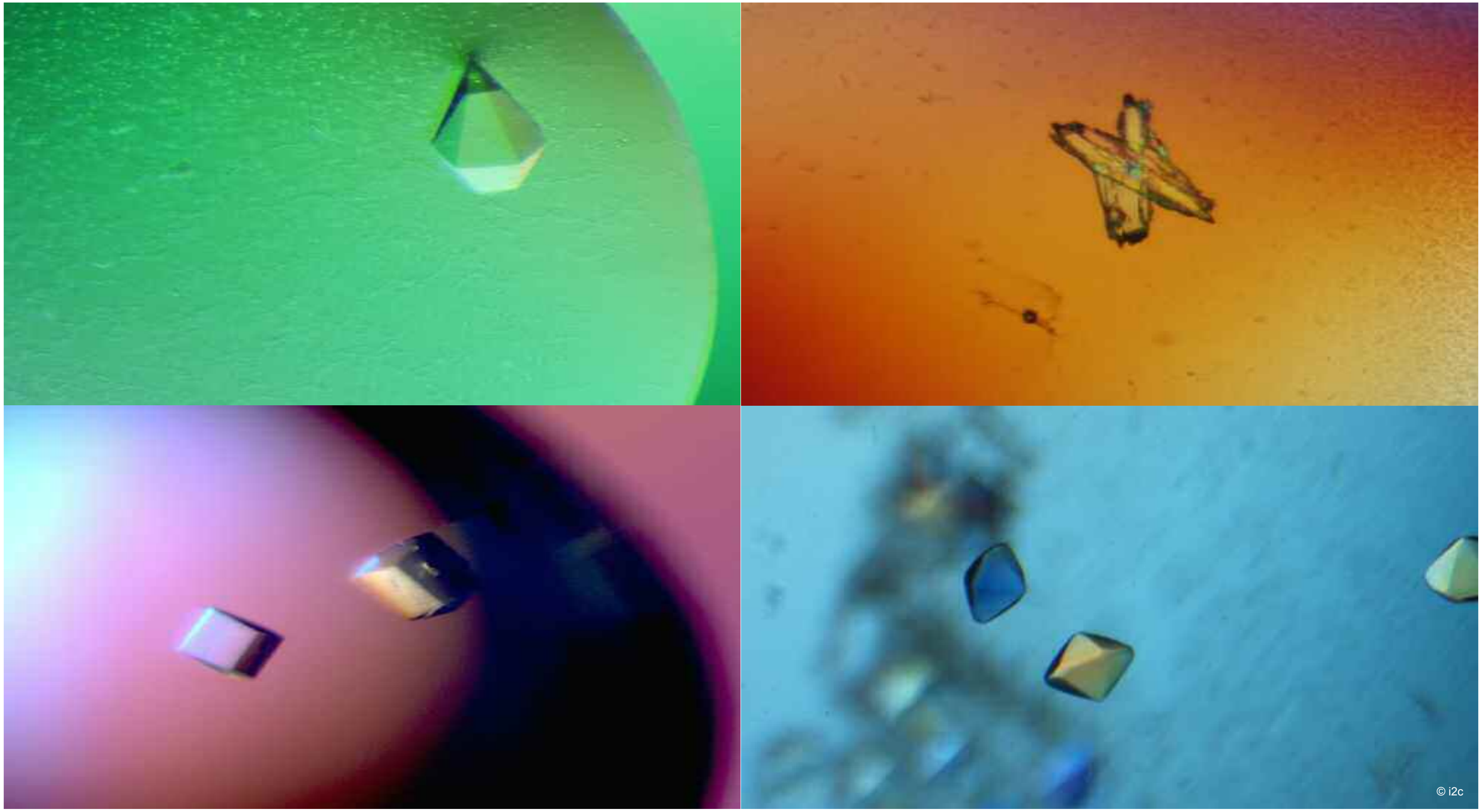

2014 SEP

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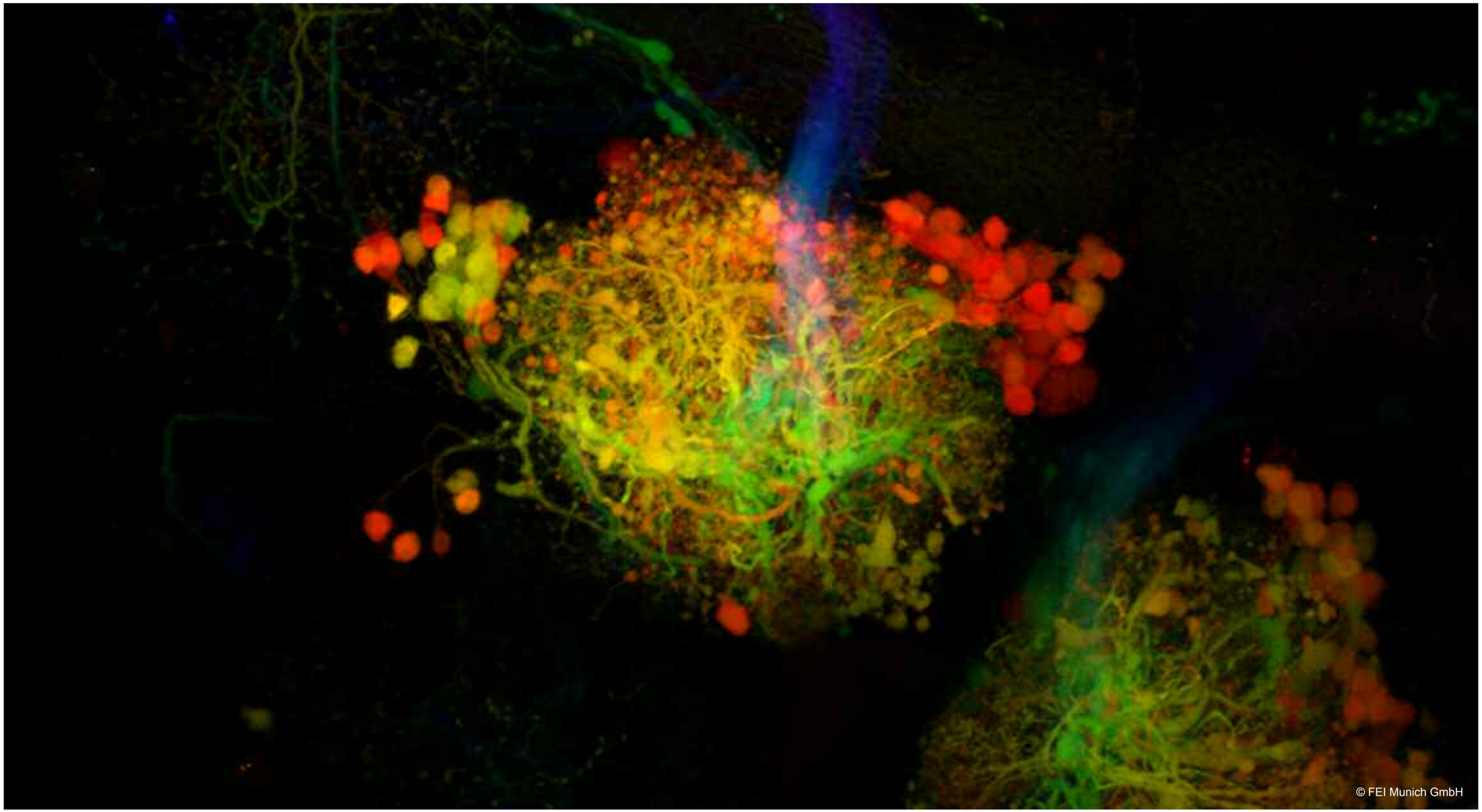

2014

OCT

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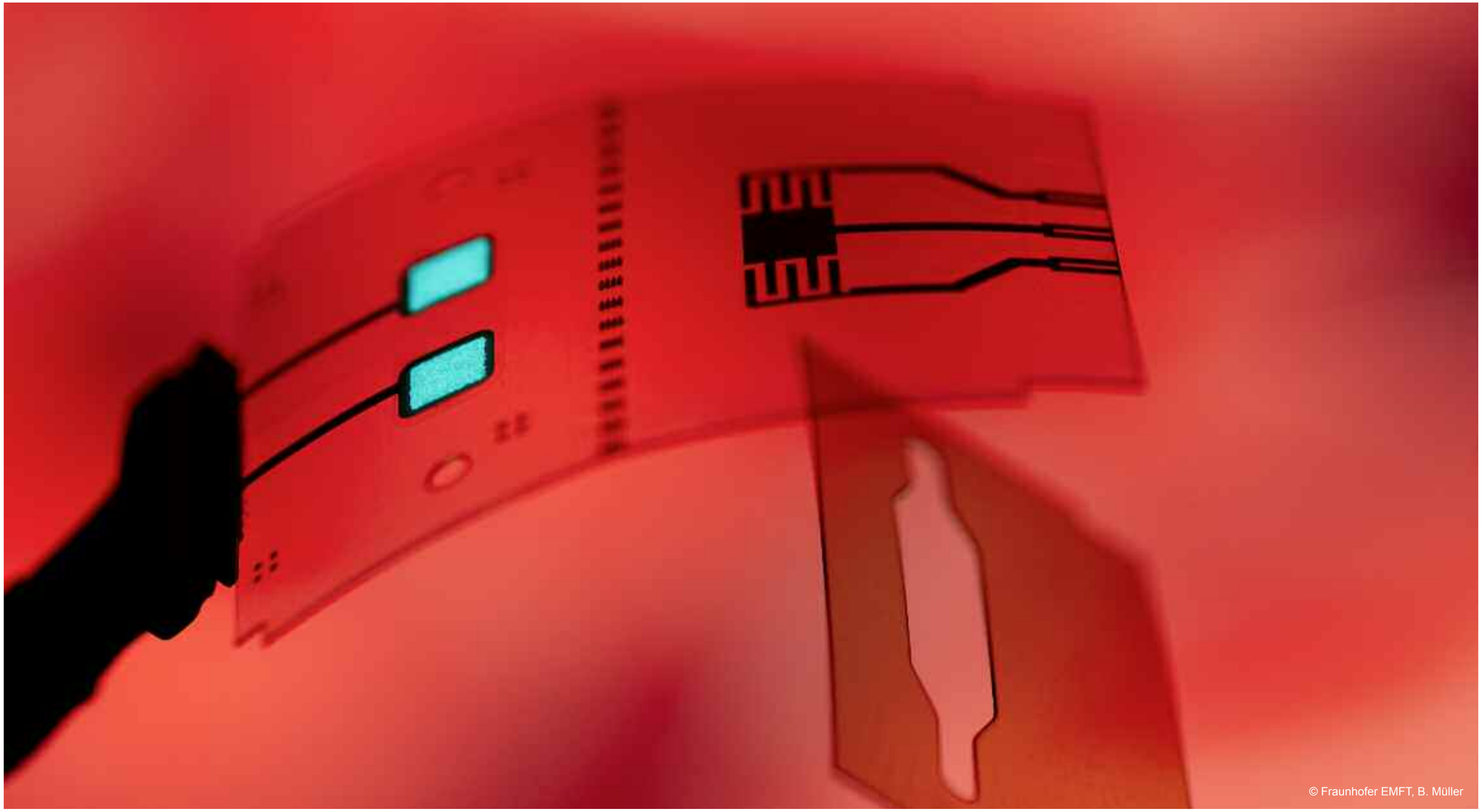

2014

NOV

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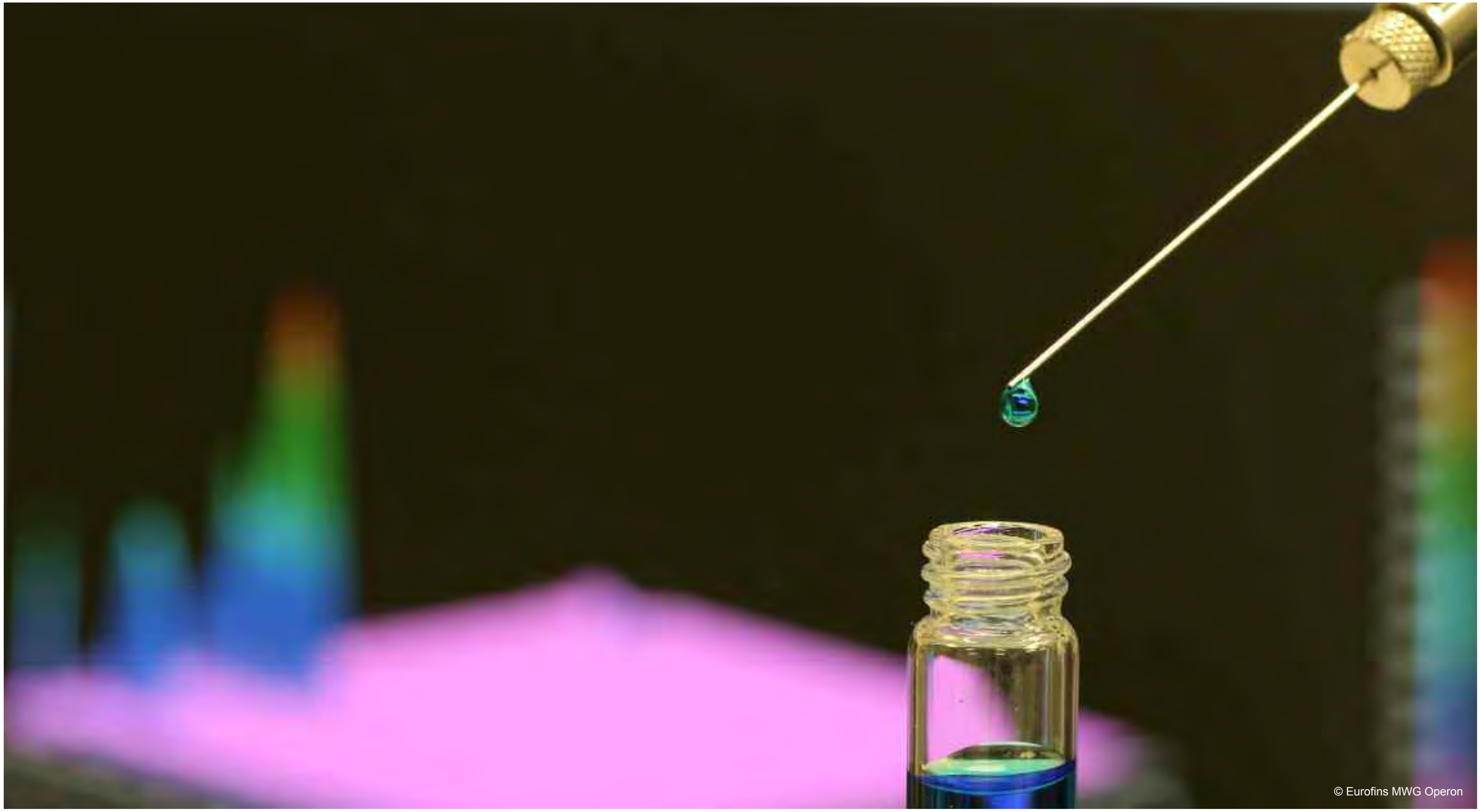

2014

DEC

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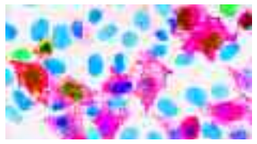
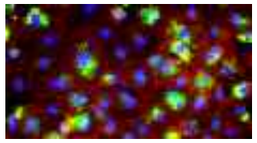


Highlighting cellular shape (actin cytoskeleton, pink), cell cycle progression (green to violet) and cell nuclei (blue) in cancer cells.

ChromoTek offers innovative research reagents based on Camelid-antibodies: Nanotraps® and Boosters for highly efficient immunoprecipitation and detection of fluorescent fusion proteins. In addition to exceptionally specific conventional antibodies against widely used targets in immunofluorescence, ChromoTek recently launched Chromobodies® - unique intracellularly functional antibodies for analysis of endogenous proteins in living cells.
www.chromotek.com

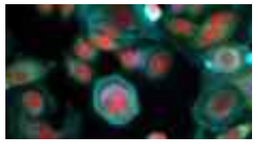


Primary human hepatocytes stained to show the expression of the protein ALR in green.

Prof. W. Thasler leads the liver regeneration group located in the department of general, visceral, transplantation, vascular and thoracic surgery in Grosshadern Hospital. His research focuses on therapeutic applications of a key protein in liver regeneration, hepatocyte proliferation and protection known as the Augmenter of Liver Regeneration (ALR). This research is performed in close collaboration with Hepacult GmbH.
http://www.klinikum.uni-muenchen.de/Chirurgische-Klinik-und-Poliklinik-Grosshadern

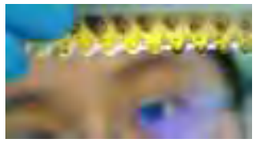
Reagent vessels for diagnostic test systems.

MIKROGEN's scope of business covers the development, production and distribution of genetically engineered *in vitro* diagnostics. The company focuses on the serology of bacterial, viral and parasitic infections as well as on autoimmune diseases. Since 1989 MIKROGEN has been producing antigens for clinical diagnostics. The company has an excellent expertise for the development of test systems based on recombinant antigens.
www.mikrogen.de



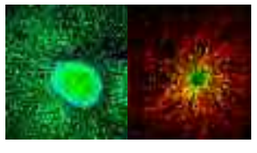
Breast cancer cells stained for DNA (red), lysosomes (purple), internalized receptor (green) and actin (turquoise). Therapeutic focus: Cancer.

MorphoSys is a biotechnology company focused on the development and application of antibodies. Using its proprietary technologies, the company develops and commercializes high-quality antibodies for therapeutic applications. By combining in-house development with selected strategic alliances, MorphoSys has built one of the industry's broadest pipelines of therapeutic antibody candidates.
www.morphosys.com



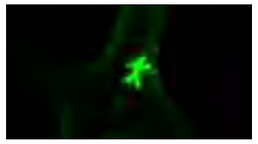
Visual first hand check of a set of Bicoll's plant Profiles™.

Bicoll is a biopharmaceutical company specializing in high-tech natural product chemistry. The identification of novel small molecules for drug discovery is Bicoll's main focus, complemented with experience in medicinal chemistry. The company provides a proven method to make compounds from natural resources compatible with customers' screening systems. Bicoll's advanced approach with plant Profiles™ selects promising lead candidates early on. A smart way to accelerate the development process of new pharmaceuticals!
www.bicoll-group.com



Dorsal root ganglia from E13.5 mouse embryo. Left: nuclei in blue (Hoechst), Schwann cells in green (plp-GFP). Right: neurons in red (b3-tubulin), myelin in green (Myelin Basic Protein).

The **German Center for Neurodegenerative Diseases** (DZNE) is a new research center of the Helmholtz Association and was established in 2009. It is located in 9 German cities, including Munich. More than 70 research groups are investigating the similarities and differences of various brain diseases combining fundamental research with clinical research and population studies.
www.dzne.de



Random conformation of stained proteins coupled to a polyurethane matrix visualising the man of pedestrian traffic lights ("Ampelmännchen").

LEUKOCARE provides proprietary formulation technologies for stabilization and protection of biologics to partners in the fields of vaccines, biopharmaceuticals and combination devices. LEUKOCARE's Stabilizing and Protecting Solutions (SPS) allow to extend shelf life of biologics and to retain biological functionality during sterilization by irradiation or ethylene oxide. Moreover, LEUKOCARE offers related development services in the course of the technology implementation process.
www.leukocare.com

Scanning electron micrograph of exosomes and microvesicles on the surface of a primary cell cultured in vitro *after isolation from a resected tumor from a patient with Glioblastoma Multiforme (GBM).*

Exosome Diagnostics is a leading developer of biofluid-based molecular diagnostic tests for use in personalized medicine. Exosomes are packaged and shed into all biofluids, including blood, urine and CSF, providing a stable source for intact, cell-specific nucleic acids. The company's proprietary exosome technology makes use of the presence and natural stability of RNA in exosomes to detect and measure levels of genes responsible for cancer and other diseases. The company is commercializing *in vitro* diagnostic tests for use in companion diagnostic applications and real-time monitoring of disease.
www.exosomedx.com

Protein crystallization is an integral part of the i2c drug discovery joint venture by CRELUX and 4SC Discovery.

i2c provides collaborative drug discovery by using research driven and information based approaches. Crystal structures of relevant target proteins reveal ligand binding modes and enable rational design of optimized drug candidates. A hallmark of i2c is the seamless combination of molecular modelling, X-ray crystallography and medicinal chemistry with biology and pharmacology. The company's project portfolio focuses on epigenetics, cancer stems cells, and autoimmune diseases.
www.crelux.com and **www.4sc-discovery.de**

Drosophila *brain whole mount, courtesy of Laurence Lewis. Gh146 neurons expressing GCaMP. Colour codes for depth.*

FEI Munich GmbH, founded in 1993 as TILL Photonics GmbH, develops and markets live cell fluorescence microscopes for research applications as well as routine applied science and diagnostics. It provides extremely flexible, modular systems for light and electron microscopy as well as complete turnkey solutions for imaging and photometry systems.
www.fei.com

Light source and photo detector printed on plastic foil substrate for optical detection of analytes in a disposable microfluidic cartridge.

Fraunhofer EMFT conducts cutting-edge applied research into sensors and actuators for man and the environment. The core competences of the research departments in Munich and Regensburg with about hundred employees include: silicon technology, flexible electronics, chemical sensor materials and the capability of system integration. Together these competences enable creation of innovative solutions for various application areas, for example in biotechnology.
www.emft.fraunhofer.de

A futuristic interpretation of an analytical quality control by capillary gel electrophoresis.

Eurofins MWG Operon is part of the Eurofins Scientific Group, a life science company with 180 laboratories in 35 countries and over 14,000 employees. The company is an international provider of genomic services around the core business lines of next generation sequencing, custom DNA sequencing, oligonucleotides, siRNA and gene synthesis. If you want to know more about Eurofins MWG Operon, enter the world of genomic research at:
www.eurofinsgenomics.com

Bio^{M} is a publicly funded not-for-profit service and consulting agency supporting the biotechnology sector since 1997. With more than 270 life science companies, the **Munich Biotech Cluster** is one of Europe's most vibrant biotech locations. Bio^{M} is the Bavarian entry point for global players in biotech and pharma and serves as the first contact point in Bavaria for biotech companies and start-ups. Bio^{M}'s large national and international network of Bio^{M} promotes interactions between regional SMEs and external companies, investors and other players in the life science sector. Furthermore, Bio^{M} offers seminars and events for biotech entrepreneurs and their employees.

For further information on Munich's biotech industry, a company database, news and a job forum, please visit **www.bio-m.org**.