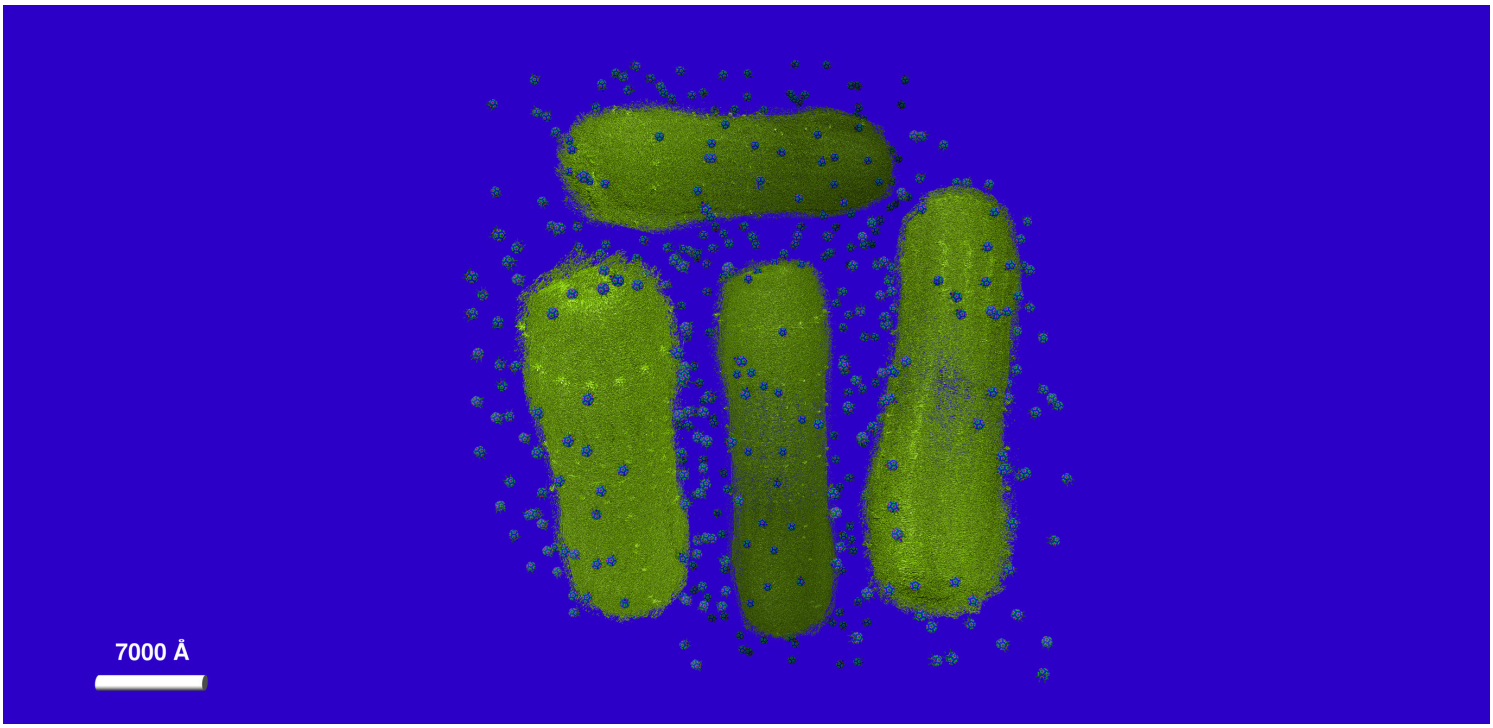
Amino acids

José Manuel Martinez Lopez

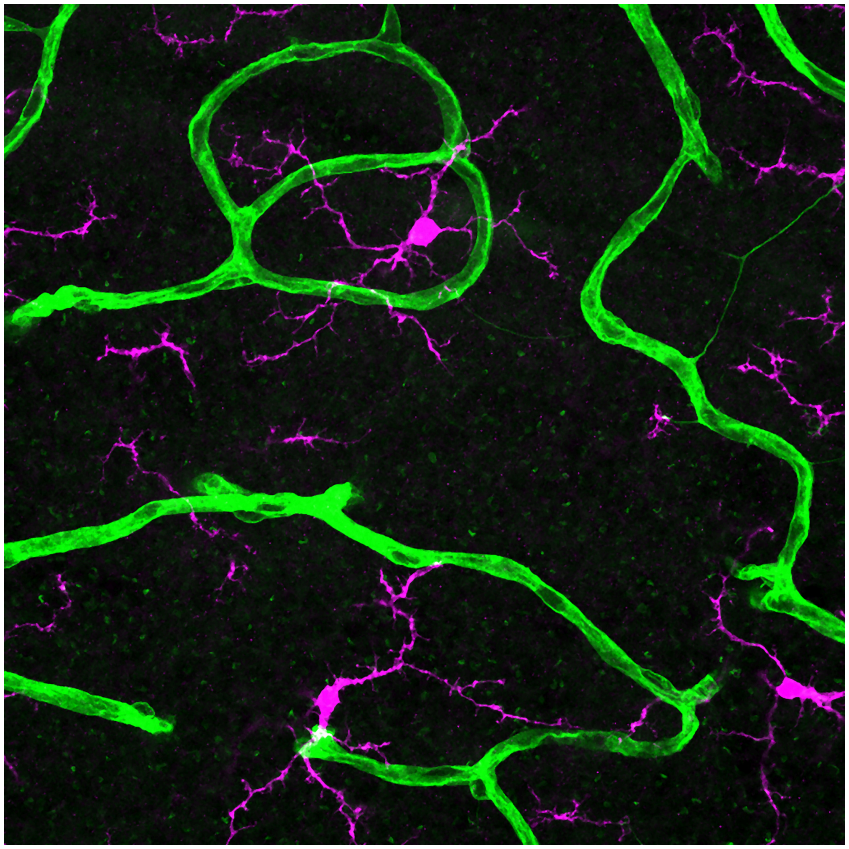
[Left] This photo shows crystals of amino acids in polarized light. After acquiring the 9 photos (3x3 mosaic) in Zen blue, the photos were exported to jpg and then stitched together using Photoshop.



Bacteriophage T7 infection at atomic resolution

Victor Padilla Sanchez

[Above] The image depicts the infection of four *Escherichia coli* cells (green) by hundreds of bacteriophage T7 viruses at atomic resolution, rendered using UCSF Chimera software. The components are represented at their actual scale, with a measurement bar indicating 7000 Angstroms. The shape of the image resembles the Chinese character for rain (radical 173), suggesting a connection to climate change and global warming, and implying the need for Earth to receive rain and cool down. Bacteriophage T7 structures may be valuable for analyzing fundamental biological mechanisms, as they serve as model organisms in numerous research studies. Bacteriophages T were discovered approximately a century ago and have been extensively studied since then.



Blood vessel lassos microglia

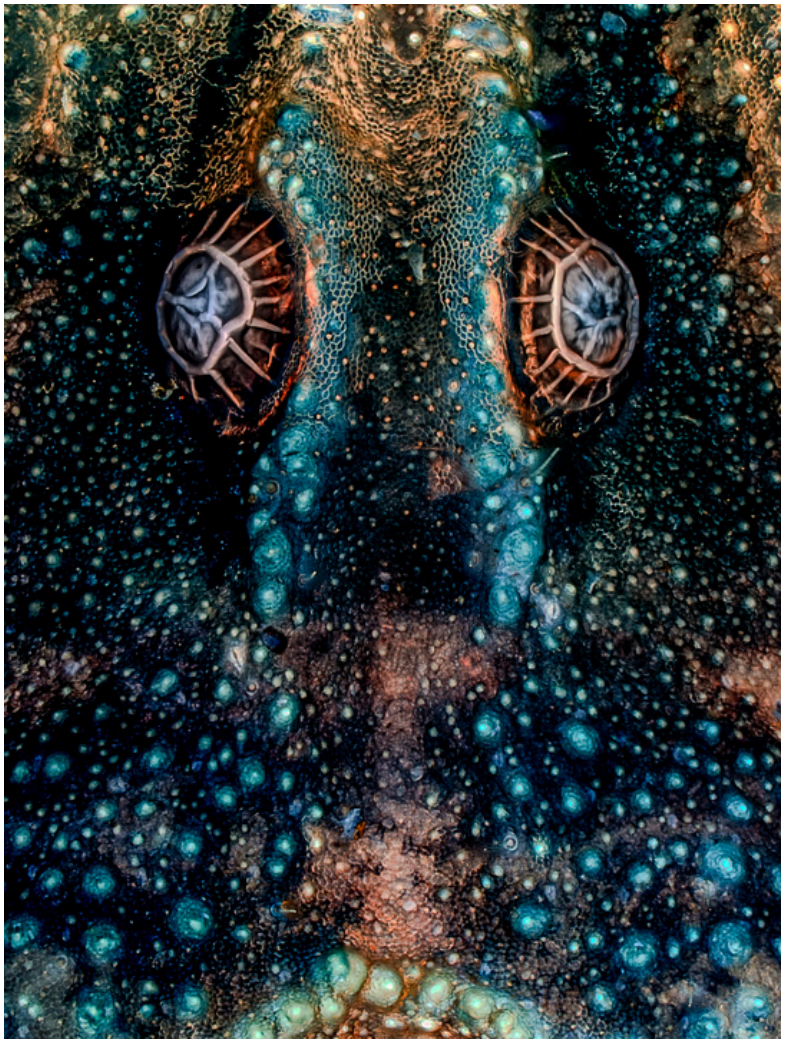
Andrea Wellington

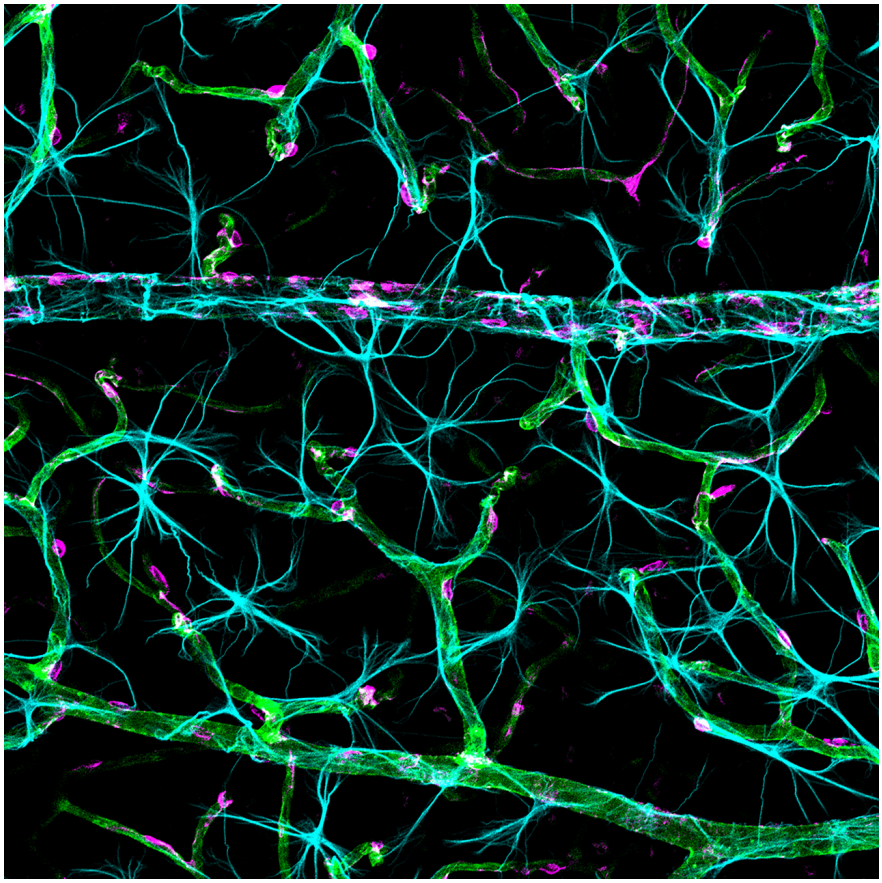
[Left] Z-projection of the outer nuclear layer of a whole-mount mouse retina immunostained for microglia (Iba1-magenta) and stained for blood vessels (IsolectinB-green).

Burned eyes

José Manuel Martinez Lopez

[Right] This photo shows dry eyes of a scorpion in autofluorescence after several hours under the lens of the microscope.





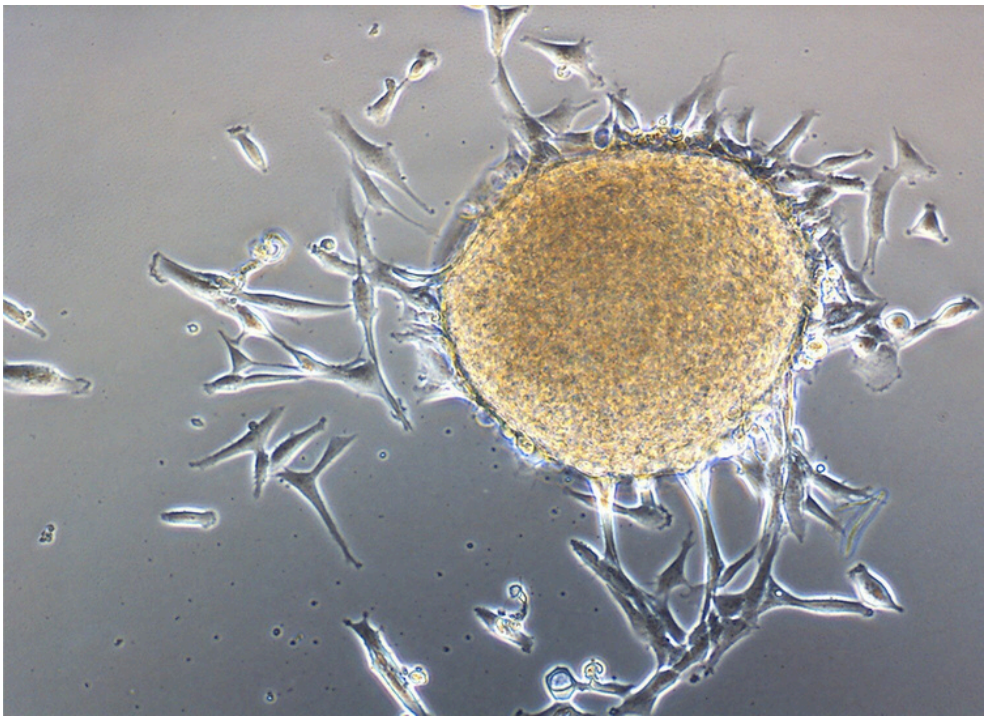
Garden of astrocytes

Andrea Wellington

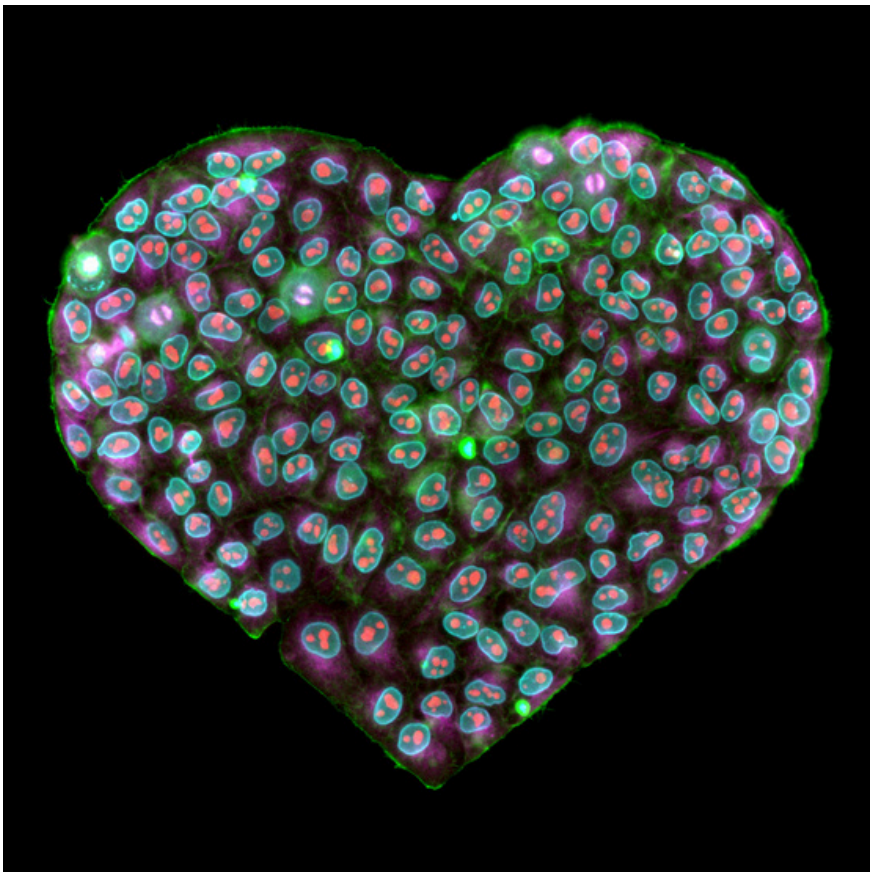
[Left] Z-projection of the ganglion cell layer of a whole-mount 5xFAD (Alzheimer's disease model) mouse retina immunostained for pericytes (NG2-magenta) and astrocytes (GFAP-cyan) and stained for blood vessels (IsolectinB-green).

Glioblastoma spheroid

Thamiris Becker Scheffel Streck



[Right] This striking image captures a glioblastoma spheroid, vividly illustrating the aggressive migration and invasion of tumor cells into the surrounding environment. Employing advanced imaging techniques, this depiction not only highlights the dynamic nature of cancer cell movement but also underscores the relentless invasive potential of glioblastoma, one of the most aggressive brain cancers. The detailed visualization of cells emanating from the spheroid provides crucial insights into the mechanisms of cancer migration, paving the way for groundbreaking therapies to combat tumor spread. This image serves as a powerful tool in the ongoing battle against cancer, offering a glimpse into the cellular interactions that drive disease progression.



Heart

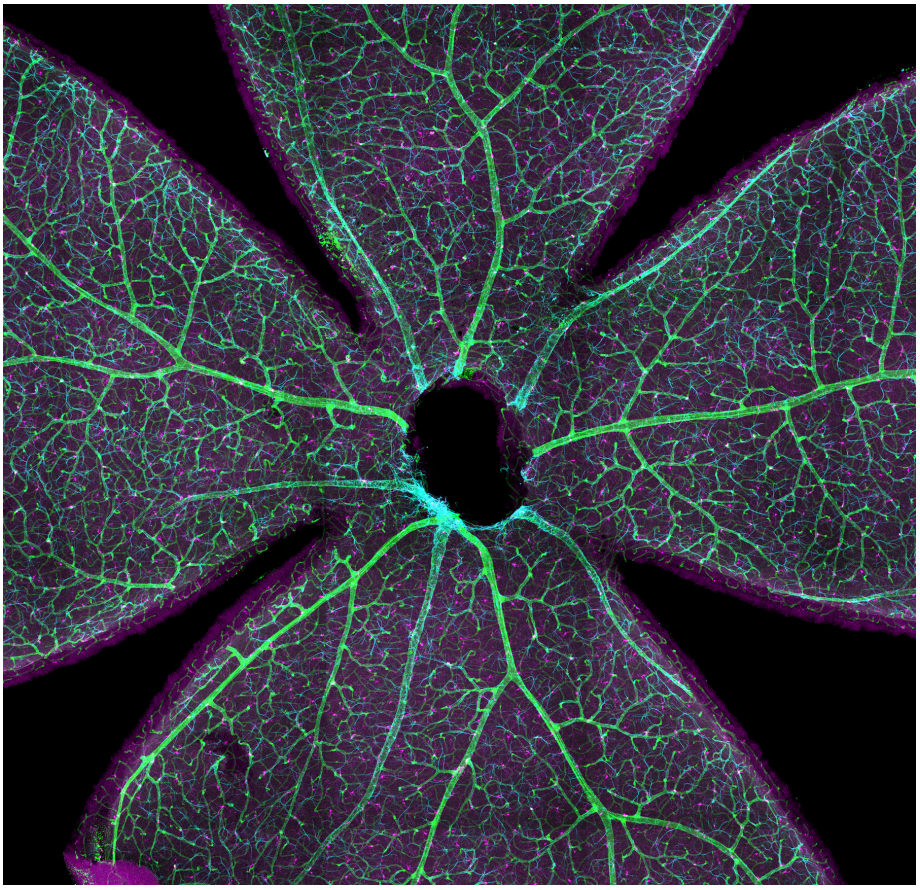
Larisa Yurlova

[Left] Immunostaining of HeLa cells with FlexAble-labeled antibodies (Proteintech): anti-B23, anti-Actin, anti-Lamin A/C, anti-Tubulin. The cells were grown on a micropatterned cell adhesion slide (ibidi, Germany). Epifluorescence image was acquired with a 10x objective and post-processed.

Pretzel

Larisa Yurlova

[Right] Immunostaining of HeLa cells with FlexAble-labeled antibodies (Proteintech): anti-B23, anti-Actin, anti-Lamin A/C, anti-Tubulin. The cells were grown on a micropatterned cell adhesion slide (ibidi, Germany). Epifluorescence image was acquired with a 10x objective and post-processed.



Retinal anemone flower

Andrea Wellington

[Left] Cropped Z-projection of a tile scan whole-mount mouse retina immunostained for microglia (Iba1-magenta) and astrocytes (GFAP-cyan) and stained for blood vessels (IsolectinB-green). The optic nerve head is in the center of the image.

Tardi darkfield pol.

José Manuel Martinez Lopez

[Right] This photo shows a tardigrade observed in darkfield polarized light with 1 lambda compensation.