



ariadne.ai

SPATIAL

**Neuropathology
applications**

Learn more at <https://ariadne.ai/spatial>

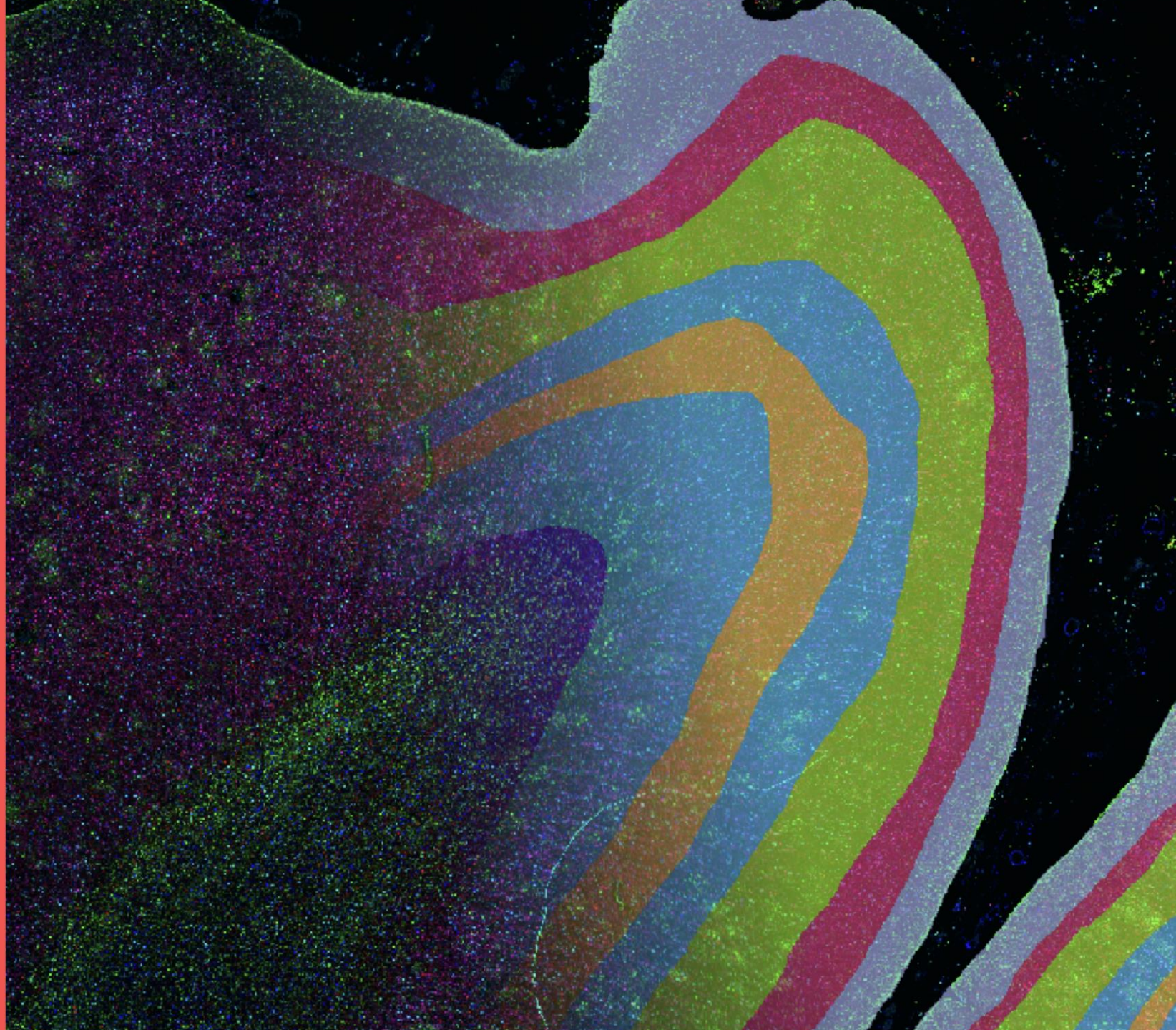


Neuroanatomy

Cortical layer segmentation as key to uncover structural changes of the brain.

Easily quantify cells and structures (e.g. A β -plaques, lewy bodies) for each cortical layer separately.

Layer based spatial multi-omics analysis allows you to compare expression differences between cortical layers.



Precise analysis of neurons and glia

How do cells of a certain cell type change in morphology in diseased tissue?

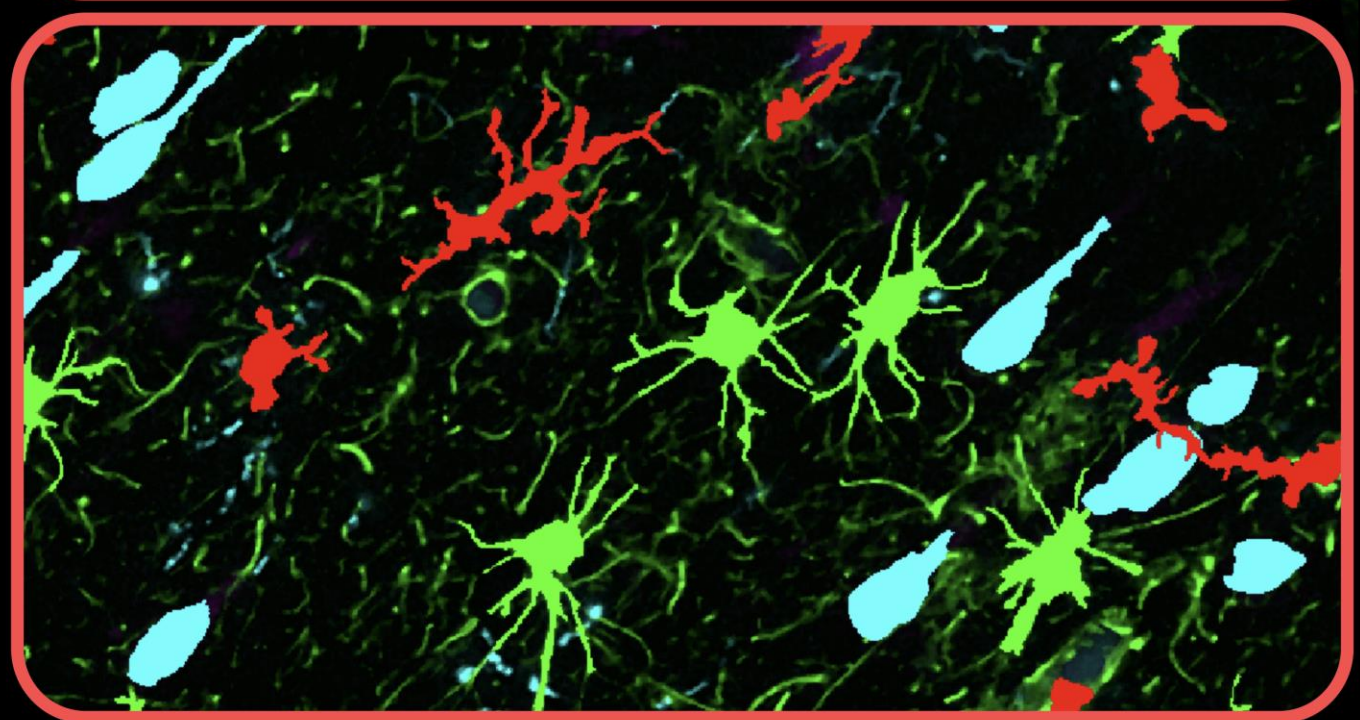
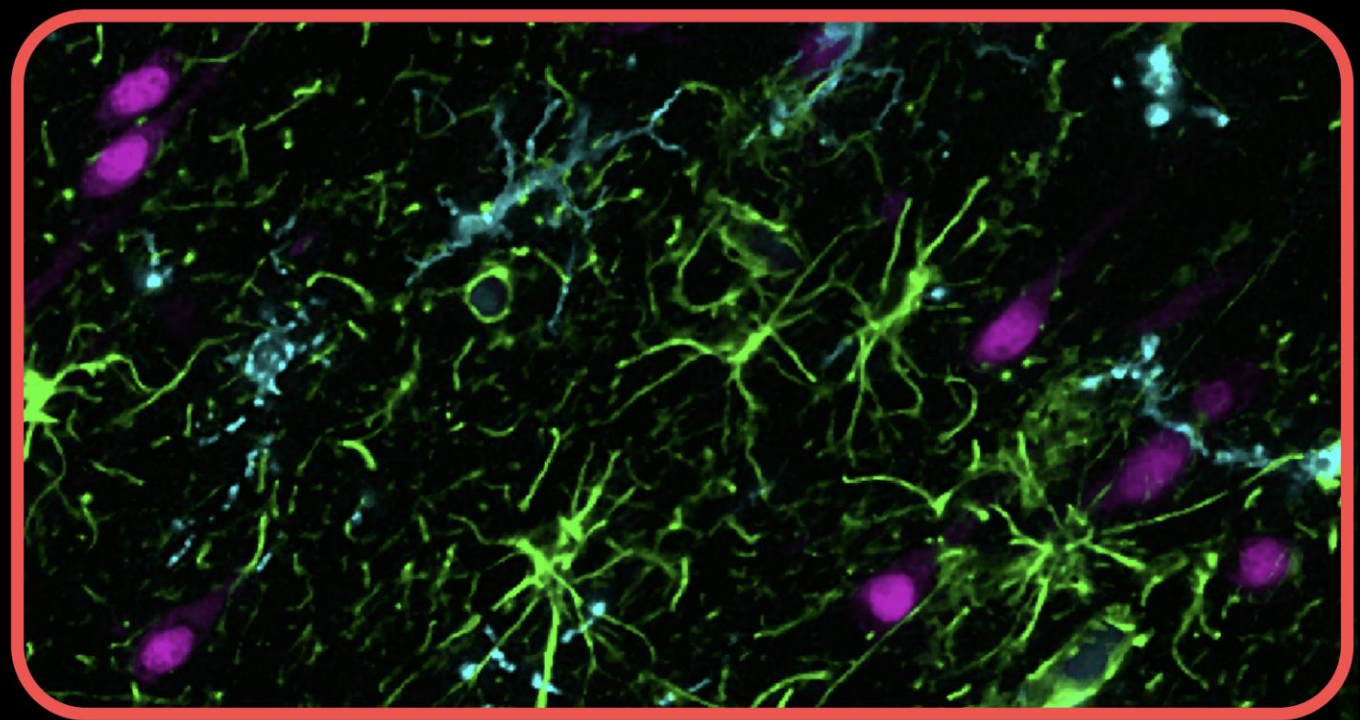
How do they change in gene and protein expression?

Which cell types collocate with plaques?

NeuN segmentation

GFAP segmentation

IBA1 segmentation



Quantify neuropathological features like plaques and lewy bodies

Markers:

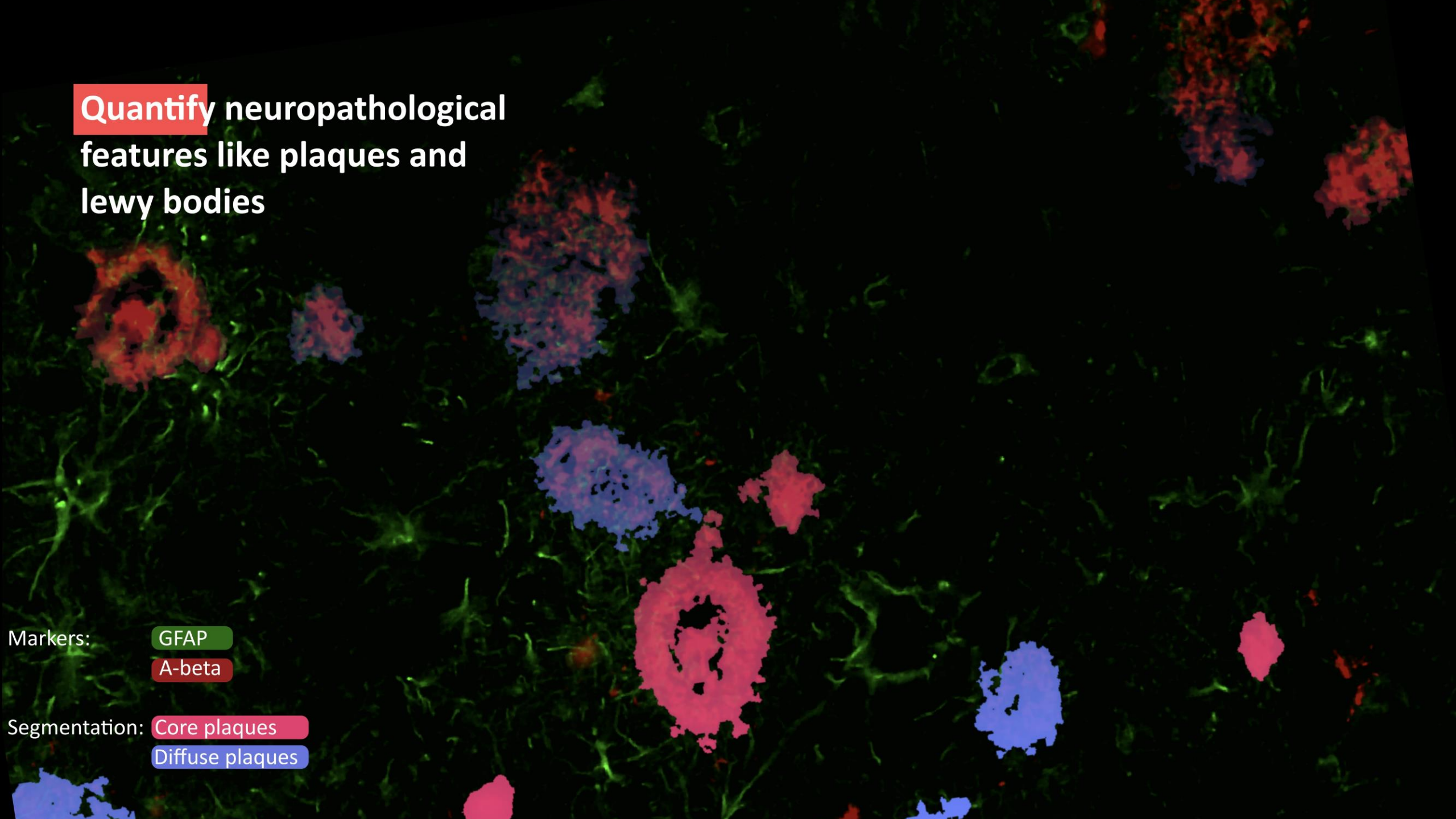
GFAP

A-beta

Segmentation:

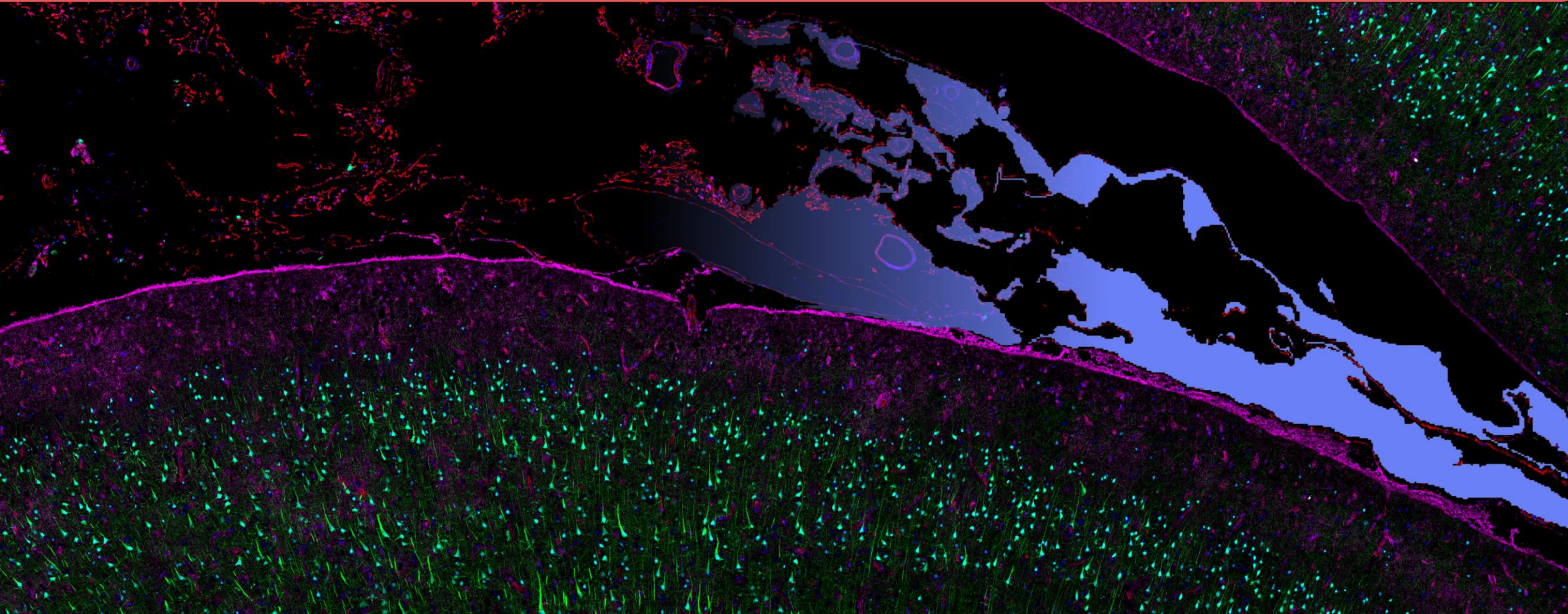
Core plaques

Diffuse plaques



Leptomeninges

Segmentation of the leptomeninges allows you to uncover the leptomeningeal arteries for detection of cerebral amyloid angiopathy.



Testimonials



Super responsive

The ariadne.ai team was always there to handle our custom requests quickly and with great scientific rigor. Their neuron and glia segmentation is fantastic.



Dr. Bahareh Ajami

Assistant Professor
Oregon Health and Science University



Great segmentation

Their neuron and glia segmentation is the best I've seen yet.



Dr. Oliver Braubach

Director of RD
Canopy Biosciences



Beautiful segmentation

Ariadne.ai has repeatedly and consistently produced beautiful, top-notch segmentations on the 3D data we generated.



Dr. C. Shan Xu

Professor of Cellular & Molecular Physiology
Yale School of Medicine



Scientifically excellent

They supported our lab's immuno-oncology work from start to finish. We had some challenging data for them, and they tuned their registration and segmentation to handle it perfectly.



Dr. Ferdinando Pucci

Assistant Professor
Oregon Health and Science University