

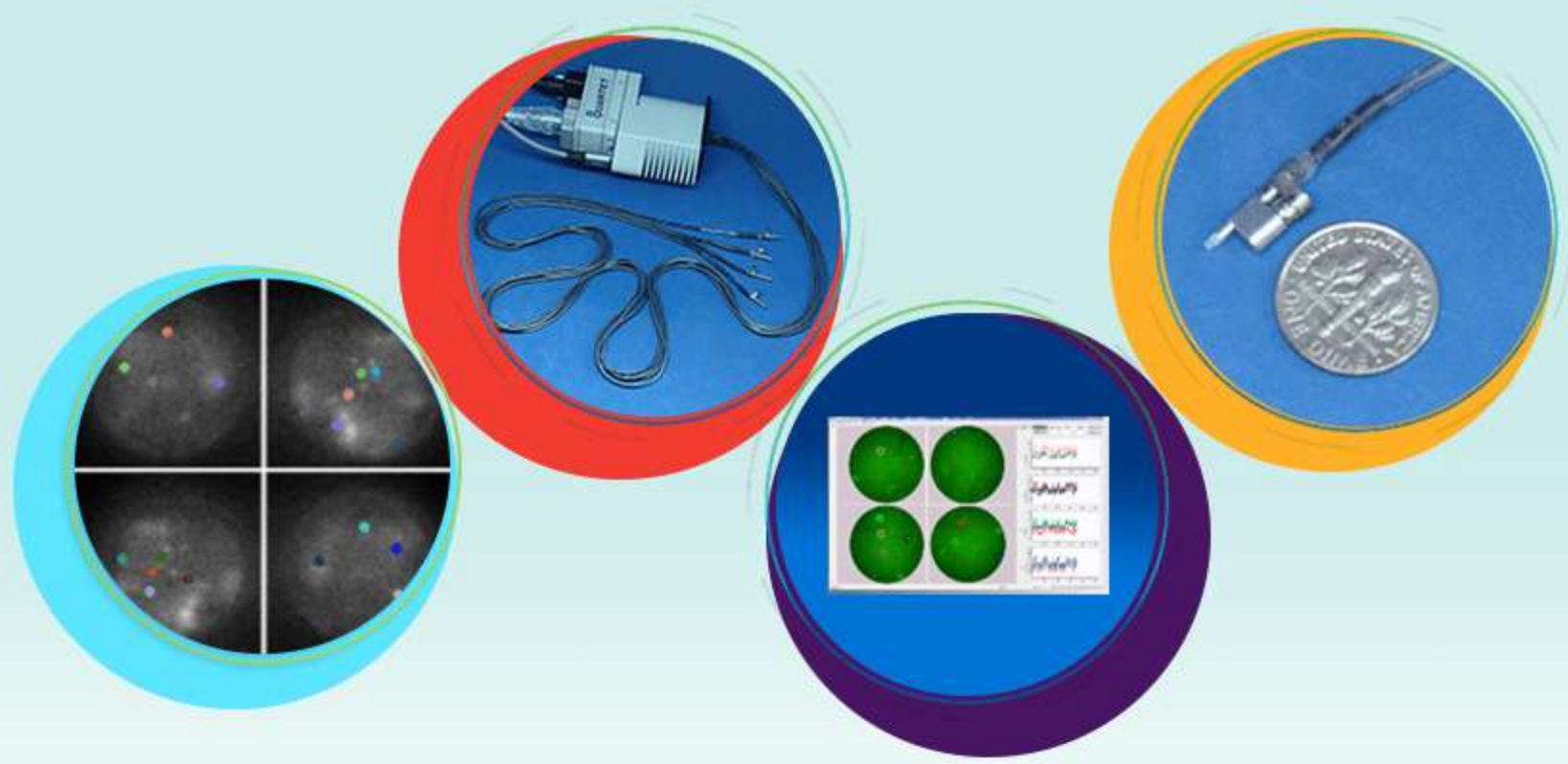
NEURONAL IMAGING MICROSCOPE – QUARTET

Empower functional brain imaging in the level of neuronal micro-circuits

NEUROSCIENCE

PRODUCT DESCRIPTION

Quartet refers to a miniature fluorescence microscope and data collection software package that is optimized for neuronal calcium imaging.



QUARTET SPECS

Fiber Bundles

Quartet makes use of four optical imaging fiber bundles that come with 4 flexible and lightweight lens connectors.

Bundle Specs

Each bundle includes 18000 single fibers, each of which is 7.5micron in diameter.

Hardware software system

The Quartet is a hardware-software system that allows a causal connection between neuronal short and long range circuitry & disease phenotype.

BENEFITS

Simultaneous imaging of multiple regions of both the brain and spinal cord in freely moving animals

Implantation in more than one animal allows simultaneous imaging of brains of multiple animals for social studies

Image neurons during behavioural experiments that require animal swimming

Capability of implantation at any angle enables imaging hard to reach brain areas, such as the olfactory bulb

Light and flexible probes allow performance of delicate memory and behaviour experiments with very minimal stress to the animal

Specially designed light connectors allow probe-lens connection with minimal stress to the animal

Design allows simultaneous imaging with EEG and fMRI

Connector design allows for simple focus adjustment that is maintained over weeks, for the duration of the experiment

Light and small microscope body allows placement of the microscope body anywhere, even hanging in mid-air (e.g. above the maze)

Long electric cables allow easy lab space management

APPLICATION AREAS



Social Experiments



Learning and Memory



Animal Swim Test



Long Duration Studies