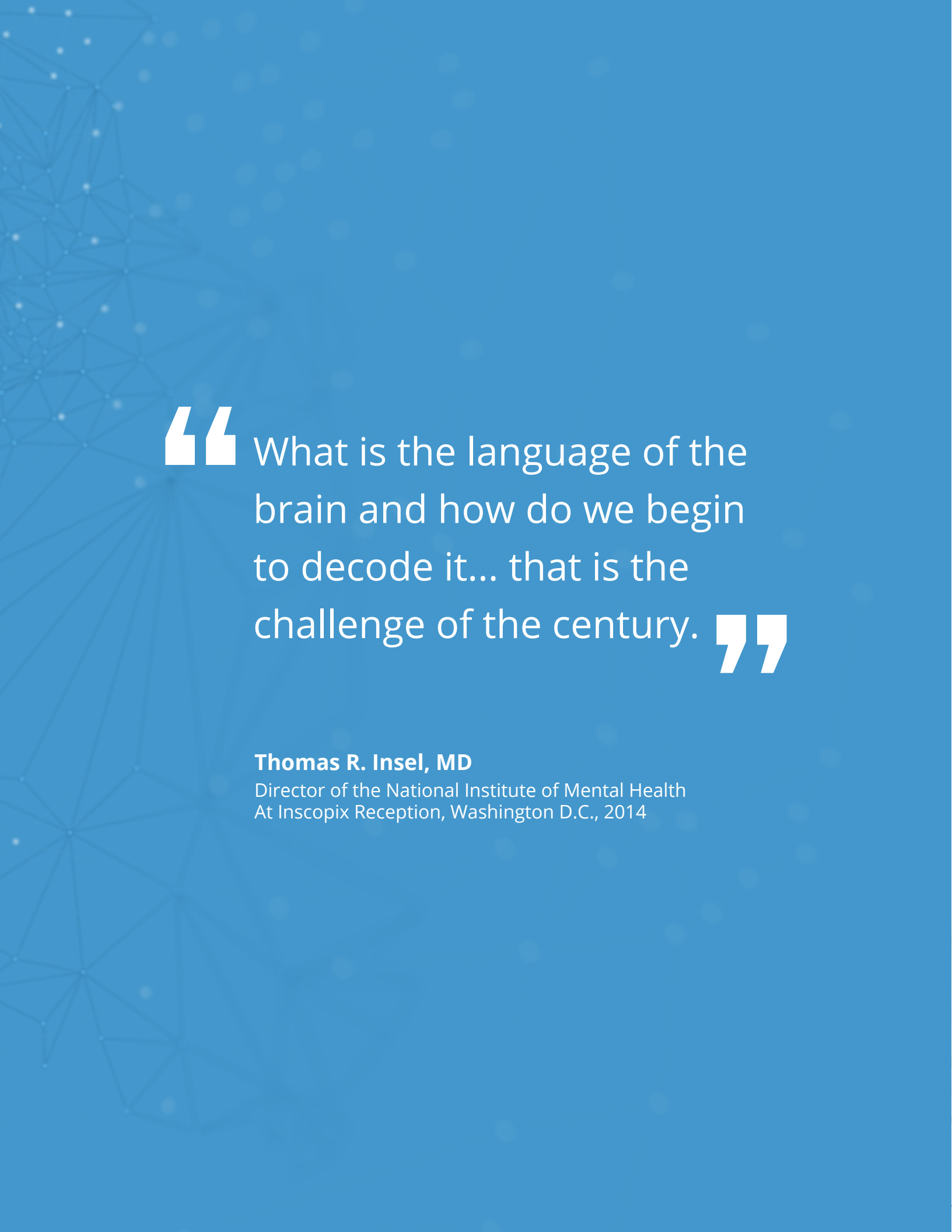


A close-up photograph of a person's hand holding a small, glowing blue brain. Overlaid on the brain is a complex white neural network diagram, consisting of numerous small circles (nodes) connected by thin lines. The background is dark and out of focus.

# Real-time brain mapping



“What is the language of the brain and how do we begin to decode it... that is the challenge of the century.”

**Thomas R. Insel, MD**

Director of the National Institute of Mental Health  
At Inscopix Reception, Washington D.C., 2014

# Unlocking the mysteries of the brain

Today's researchers recognize that neural circuits are the key to understanding how the brain works. There is a critical need for new technologies that bridge the longstanding gap between mapping activity in a few individual neurons and measuring gross activity in brain regions.

That's why Inscopix was born. For the first time ever, you can image and interpret fluctuating patterns of electrical and chemical signals flowing through populations of interconnected nerve cells during natural behavior. It's all about understanding how the brain gives rise to thoughts, actions, perception, and emotions.

Join our global community of neuroscientists to understand the neural circuit basis of brain function and malfunction.

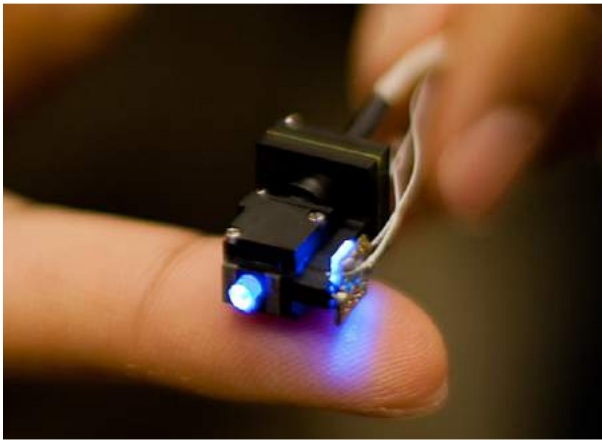
Uncover the mysteries of the brain hidden in the patterns of neural circuit dynamics.

**Find deeper insights.**



# nVista – tiny microscope, big insights

**nVista's core miniature microscope technology lets you see the big picture. Discover how neural circuits shape behavior and gain deeper insights.**

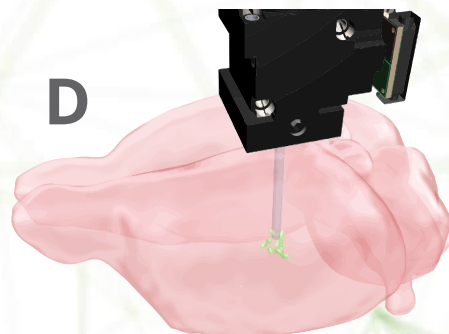
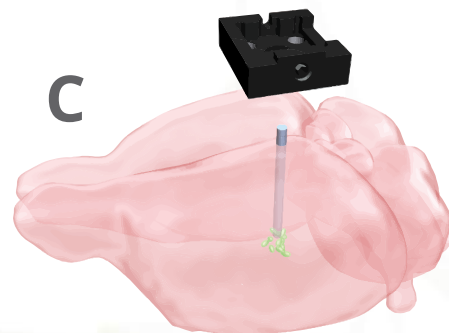
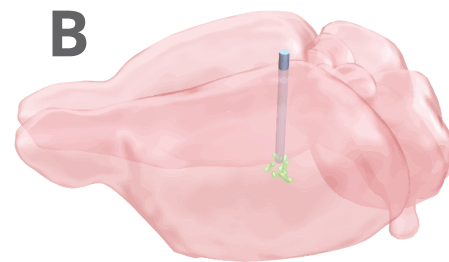
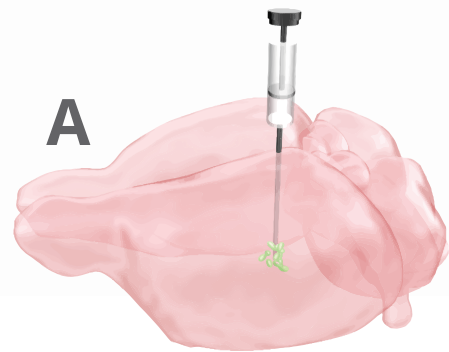


## **nVista workflow is simple**

Introduce and express neural activity indicator in target brain region (**A**).  
Implant a lens probe (**B**) and install the nVista baseplate docking system (**C**).  
Attach and detach the microscope as your experimental needs require (**D**).

## **Conduct longitudinal studies**

Perform chronic imaging studies in freely behaving subjects. Image the same population of cells in the same subject for days, or even weeks.



## Study multiple behaviors

Incorporate behavioral paradigms that suit your experiments, including:

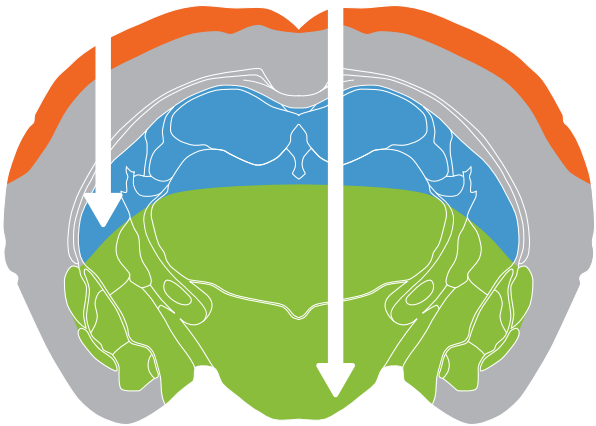
- spatial navigation
- social interaction
- operant conditioning
- motor learning

## Capture more data

Target, visualize and record population-scale neural activity with cellular resolution in pre-determined cell types. Capture the activity of over 1,000 neurons simultaneously in one field of view using an awake, behaving subject.

## Extend your reach

Image most brain areas, including deep brain structures and surface brain regions. Use fast genetically-encoded  $\text{Ca}^{2+}$  indicators to tailor your observations to the most relevant cell populations.



	INSCOPIX NVISTA	Electrode Arrays	Two-Photon	fMRI/PET
Large-Scale Neural Dynamics	✓			
Cellular Resolution	✓	✓	✓	
Cell Type Specificity	✓		✓	
Longitudinal Studies of Same Cells	✓	✓	✓	
Deep Brain Regions	✓	✓	✓	✓
Freely Behaving Subjects	✓	✓		

“ The technology is truly transformative, and has allowed us to precisely monitor cellular activity dynamics in ways that were not previously possible. ”

**Garret Stuber, PhD**  
University of North Carolina at Chapel Hill

# Mosaic – turning your data into insights, faster.

**Do you have imaging data, but aren't sure what to do next? Mosaic software features 20+ apps designed to help you derive deeper insights from nVista videos of large-scale circuit dynamics.**

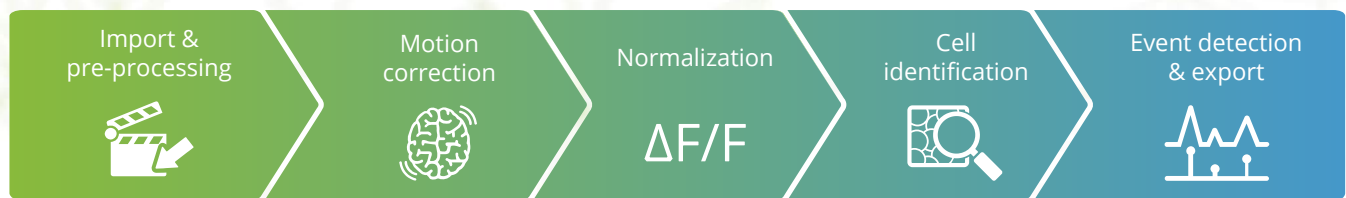
## Access data, your way

Find an analytics solution that matches your level of scripting expertise. Interact with your data through Mosaic's GUI or plug in your own scripts to automate the data processing workflow.

## Streamline data analysis

Normalize your images, identify your cells, extract their temporal dynamics and generate experimental conclusions—fast.

This robust analysis suite sets the foundation to standardize your workflow.



“ The Inscopix software for data analysis is amazing and makes our life much easier. ”

**Nikita Rudinskiy, PhD**  
Massachusetts General Hospital

# Exploring next generation neuroscience, together.

**When you push the boundaries of neuroscience, you're likely to run into some biological, experimental and analytical challenges. Our expert scientists are ready to help you overcome any hurdles you may encounter — from experimental set up to publishing.**

## Training

We lay the foundations for your next breakthrough with detailed protocols, guides and videos for experimental success. We offer in-person training workshops, including live experimental procedures at the Inscopix Lab.

## Support

At Inscopix, scientists help scientists. Find solutions to biological, experimental, and analytical challenges with support staff who have experience at the bench.

## Community

Join a global community of neuroscientists who seek new methods of investigating the brain. Discuss your interests and exchange expertise with like-minded labs and researchers.



**My experience with the Inscopix support team has been fantastic... I have always received a quick and thoughtful evaluation of my problem.**



**Antoine Besnard, PhD**  
Massachusetts General Hospital





**Our solutions are designed to help you map neural circuit dynamics and ultimately advance the understanding of the human brain.**

We care about the quality of your data, the impact of your research, and the direction of your field, because we're right there with you in the pursuit of neuroscientific knowledge.

**So lets find deeper insights, together.**

Join the community of next generation neuroscientists at [www.inscopix.com](http://www.inscopix.com).

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Not For Use in Diagnostic Procedures.

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