Atlas of cognition: Comprehensive inventory of brain cells in development

Looking for brain parts is driven by more than curiosity. Before the generations-long endeavor of deciphering the brain can proceed, neuroscientists need to first identify its multitude of component parts and then figure out what each one does.

Called the Brain Initiative Cell Census Network (BICCN), the group comprises the efforts of many labs, spearheaded by the Allen Institute for Brain Science, in Seattle.

Their findings, described in 17 papers taking over [a recent edition of] Nature, represent a resource that will accelerate efforts to understand brain function, and provide insight into brain diseases and disorders.

The project used the widest range of tools for probing brain cells ever brought to bear in a single, coordinated effort.

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The data sets, curated by a part of the consortium called the BRAIN Cell Data Center (BCDC), are publicly available.

“This is helping to standardize the field. It’s going to be a foundational cell-type classification reference, much like the human genome for genetics,” [project coordinator Ed] Lein says.

He hopes this will allow researchers to move past a very basic task in brain science, the debating of definitions.

This is an excerpt. Read the original post here.