

“Green” neuroscience scientists say time to revise research protocols

Ann Lam delicately places a laboratory slide holding a slice of brain from a living human onto a small platform in a room the size of a walk-in refrigerator. She closes a heavy door and turns to a row of computers to monitor her experiments.

She is using one of the world’s most sophisticated and powerful microscopes, the Stanford Synchrotron Radiation Lightsource, to learn about the distribution of metals in the brains of epilepsy patients. But she has another reason for being here as well.

Traditional techniques for staining brain tissue produce byproducts and waste that are hazardous to the environment. And often, this sort of research is performed on animals, something Lam insists on avoiding.

For Lam, those are important considerations. Indeed, scientists like her worry that neuroscience has become a dirty business. Too often, they say, labs are stocked with toxic chemicals, dangerous instruments and hapless animal subjects.

Funding often comes from the military, and some neuroscientists fear their findings may soon be applied in ways that they never intended, raising moral questions that are seldom addressed.

In 2012, Lam and Elan Ohayon, her husband, founded the [Green Neuroscience Laboratory](#) in a former industrial building in the Convoy District, an up-and-coming San Diego neighborhood. Solar panels rest on the roof, and a garden is lovingly tended on the second floor.

Lam and Ohayon refuse to experiment on animals, a mainstay of neuroscience research, and will not conduct research with military applications. At scientific conferences around the country, they have been urging scientists to stop clinging to dated notions of normalcy and deviance.

“Our dream is to create an educational training program in green neuroscience where people can really study ethics, philosophy and experimentation all at the same time,” she said.

Read full, original article: [Discovery, Guided by Morality](#)