MIT & Georgia Tech Researchers Develop Robots That Can Reveal the ... http://bostinno.com/2012/05/07/mit-georgia-tech-researchers-develop-ro...
Many of the inner workings of the brain remain a mystery. Yet, researchers from MIT and Georgia Tech might have cracked the code — and with what else than robots?

Using a robotic arm guided by a cell-detecting computer algorithm, the team has discovered a way to identify and record neurons in the living mouse brain with better accuracy and speed than a human experimenter, according to MIT News.

Through the automated process, scientists could categorize the thousands of different cells in the brain, map how they connect and then discover how diseased cells vary from normal cells. Studying brain disorders, such as schizophrenia, autism and epilepsy, could become easier.

Ed Boyden, a member of MIT’s Media Lab and the McGovern Institute for Brain Research, told MIT News, “If we could really describe how diseases change molecules in specific cells within the living brain, it might enable better drug targets to be found.”

The robotic arm was able to lower a glass pipette into the brain of an anesthetized mouse with micrometer accuracy, leading the system to detect cells with 90 percent accuracy and establish a connection with the detected cells nearly 40 percent of the time.

Researchers are now beginning to classify the thousands of types of neurons found in the brain, and Boyden says this could be just the beginning, telling MIT News, “a robot like this could potentially be used to infuse drugs at targeted points in the brain, or to deliver gene therapy vectors.”

Although the image of a robot peeking around my brain slightly freaks me out, it’s clear we’re about to enter into a new era of robotics.

*Graphic Courtesy of the Boyden Lab/MIT News*

**Related Posts**
Banana Pianos & Alphabet Soup Keyboards:

The MIT Mobile Experience Laboratory:

MIT Provost L. Rafael Reif Named MIT's:

Higher Education Goes Hipster: A Look at 10:

1 Comment

1. Inside the Conversation
2. Login to post a comment

Latest Channel Posts

Join me for a Cosmopolitan: Sound Bites ...
Kathleen Poulos

User Experience: Breaking Down Walls, Bu...
Dana Doyle
Most Liked On Facebook

- It's Official: The Bike is the Fastest Way to Get Around...
  Recommend 192

- Eight Years Ago Today, Massachusetts Took Giant Step Toward...
  Recommend 82

- Spartan Race Comes to Fenway For Badass Obstacle Course on...
  Recommend 0

- Boston's Best Independent Radio Station, WFNX Bought By...
  Recommend 87

- Live Stream Bayern Munich v Chelsea: Watch Champions League...
  Recommend 58

Subscribe to BostInno

Like 5332 likes. Sign Up to see what your friends like.

Follow @bostinnovation 14.9K followers
Get the BostInno Newsletter

email address...  

**BostInno Calendar**

**Monday, May 21**

*Showing events after 5/21.*

*Look for earlier events*

**Tuesday, May 22**

2:00pm  MassTLC Cloud Pricing Bootcamp

6:00pm  Innovators Exchange: How Well

**Thursday, May 24**

7:00pm  May EdTechup: Demo Night

**Wednesday, May 30**

7:30pm  Boston Tech: Start-up Panel Discus

**Thursday, May 31**

7:00pm  May EdTechup: Demo Night

**Sunday, June 3**

8:00am  ProductCamp Boston

**Friday, June 8**

8:00am  Breakfast Seminar: Patient Engag

**WEEK MONTH**

<table>
<thead>
<tr>
<th>Week</th>
<th>Month</th>
</tr>
</thead>
</table>

**Most Discussed**

Infidelity By Neighborhood: Where Cheaters Live in Boston...

13 comments

Why Aren’t Salespeople Running Software Companies?...

11 comments

Throw On Your Reds & Get Ready for the Beach: Nantucket...

9 comments