



A Citizen Science project to fight Alzheimer's

What: The Human Computation Institute (HCI) crowdsources Alzheimer's disease research for the <u>Schaffer–Nishimura Lab</u> at Cornell University. In October 2016, HCI launched its first citizen science game – **Stall Catchers** – which opens up Alzheimer's research to public participation. Stall Catchers is the first citizen science project where the public is directly engaged in analyzing Alzheimer's disease research data.

How: Stall Catchers (<u>stallcatchers.com</u>) uses data from the Schaffer-Nishimura Lab and integrates it into a gamified platform to crowdsource data analysis.

Who: The Stall Catchers project is led by the <u>Human Computation Institute</u>. As of August 2023, Stall Catchers has over **57,000** players. Stall Catchers has included collaborators from Schaffer-Nishimura Lab at Cornell University, Sebastian Seung's Laboratory at Princeton University, the stardust@home team at U.C. Berkeley, SciStarter.com, and WiredDifferently.

Stall Catchers

Stall Catchers (<u>stallcatchers.com</u>) is an online game that allows participants to look at movies of real blood vessels in mouse brains, and search for "stalls" – clogged capillaries where blood is no longer flowing. This laboratory research is approved by the Institutional Animal Care and Use Committee. By "catching stalls" participants build up their score, level up, compete in the game leaderboard, individually and in teams.

Everyone who participates contributes to Alzheimer's research and speeds up the search for an Alzheimer's cure. Stall Catchers players range from 8 to 88 years old. Stall Catchers exceeds the minimum required accuracy (99%) for determining flowing and stalled vessels, suggesting that Stall Catchers answers are as reliable as those of experts. Stall Catchers can be played by anyone, and any contribution, big or small, can make a difference.

ANIMAL WELFARE:

Stall Catchers analyzes Cornell University's Alzheimer's research data. This research is approved by the Institutional Animal Care and Use Committee, and the lab makes extensive efforts to minimize the pain and distress of the mice used in research, while simultaneously seeking to gain as much valuable data from each animal used.



In the press:

WIRED

PBS.

Searching for Lost Memories Under Thousands of Microscopes

EyesOnALZ - speeding up Alzheimer's research (PBS mini-documentary - 13 minutes)

Discover.



BioMed Central The Open Access Publisher <u>Stall Catchers: A Citizen Science Game to Combat</u> <u>Alzheimer's</u>

How The Global Hive Mind Is Teaming Up To Find A Cure For Alzheimer's

The Crowd: our newest weapon in the fight against Alzheimer's



<u>A pilot study investigating the effects of voluntary</u> exercise on capillary stalling and cerebral blood flow in the APP/PS1 mouse model of Alzheimer's disease

nature biotechnology

<u>Citizen science lures gamers into Sweden's Human</u> <u>Protein Atlas</u>

SCIENCE FRIDAY

How Citizen Science can speed up Alzheimer's research

Stall Catchers Megathon (30-second trailer)