Megathon participant guide

Joining the MEGATHON on Citizen Science Day 2019? Here's everything you need to know!

Getting ready

Stall Catchers fact sheet

Stall Catchers science

Email us at megathon@eyesonalz.com if you need any additional guidance or support!

Gettin	g ready
	Sign up here if you haven't yet.
	Checkout the SciStarter's event finder (SciStarter.org/citizen-science-day) to find megathon meetups happening in your area. If you can't find one or prefer to participate from home - no problem, the event is available online! You can also host your own meetup. Find the step-by-step instructions for that here .
	Register or sign in to Stall Catchers and check out the game ahead of time. Don't worry - it's easy to grasp, and we walk you through in the beginning!
	Check out the tutorial and other intro materials <u>here</u> .
	Participate in the Megathon on April 13, 1:30 to 3:30 PM EST (timezone converter here), and help us make a dent Alzheimer's research!
	optionally:
	Consider creating a team and inviting your friends, family and/or coworkers! Here's the instructions to create a team on Stall Catchers.
0	Spread the word about the Megathon on social media! You can use materials and media on SciStarter.org/citizen-science-day in your messaging. Use the #CitSciDay2019, #CitizenScience, and #Megathon hashtags, and tag @SciStarter and @EyesOnALZ.

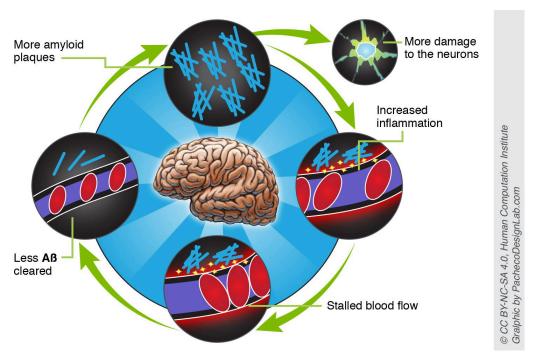
Stall Catchers fact sheet

- Stall Catchers is an online game that allows everyone to contribute to Alzheimer's research
- Anyone can play Stall Catchers from kids to their grandparents, no specific knowledge or scientific background is required
- In Stall Catchers players are helping researchers at Cornell University to analyze Alzheimer's research data - players themselves are not studied
- Stall Catchers participants help analyze movies of blood vessels in live mouse brains
- By viewing microscope-acquired movies of a live mouse brain, players are helping to find stalls blocked blood vessels in the brain where blood is not flowing
- **Don't be afraid to make mistakes!** We have methods in place to extract value from all your answers, right or wrong, so there is no way you can mess up the research

- Every contribution, large or small, helps researchers get closer to understanding the relationship between stalls and Alzheimer's disease. This fundamental understanding could lead to a potential - and first ever - treatment for Alzheimer's disease
- But to get to a treatment, many more research questions need to be answered. They cannot be answered fast enough if the researchers work on it alone, so need YOUR help!
- Stall Catchers is a chance for friends, families, caregivers & people living with Alzheimer's themselves to directly fight the disease that affects them and their loved ones

Stall Catchers science

- Vessel movies in Stall Catchers are generated from state-of-the-art two-photon microscope images
- Stalls have been demonstrated to occur in up to 2% of capillaries in AD-affected mice
- Stalls could be linked to ~30% reduced blood flow in the brain in AD patients
- Reversing stalls reduces AD symptoms in mice, including memory loss and mood changes
- One the ways stalls could drive AD is by reducing clearance of amyloid beta protein (Aβ) leading to accumulation of neurotoxic amyloid plaques



- Understanding the molecular mechanisms that drive stalls will help identify drugs that prevent or disrupt them without harming the organism
- Stall Catchers helps us look for the reasons behind stalls in the brains of mice, and test drugs that could prevent AD and/or reduce disease symptoms, at a much faster rate than in the lab
- Through Stall Catchers, we can test drugs that are already being used to treat other diseases, some of which could effectively reduce stalls, potentially enabling off-label use to treat Alzheimer's
- With the help of citizen scientists, we could reduce the time to discover Alzheimer's treatment targets from decades to just a few years

More Stall Catchers science resources can be found $\underline{\text{here}}.$