

# Spinogenix Lands \$4M in New Federal Grants

## BIOPHARMA: NIH, DoD Fund Alzheimer's, ALS Drug Development

■ By JENNIFER KASTNER

Clinical-stage biopharma firm Spinogenix has been awarded an additional \$4 million in various federal funds to continue its development of drugs aimed at targeting severe neurodegenerative conditions.

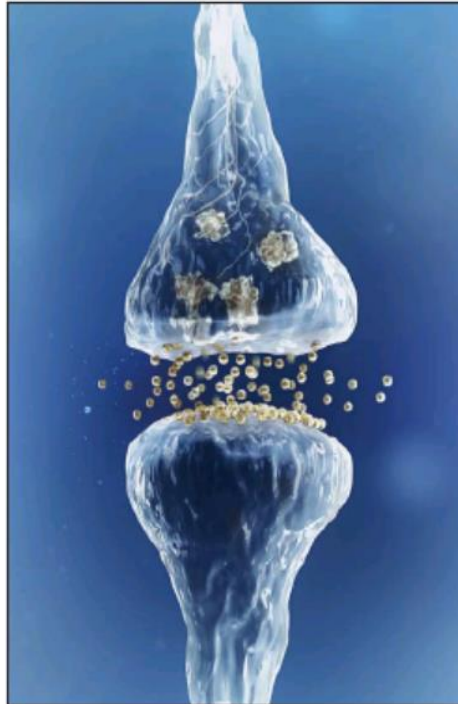
"The grants, which are awarded after a rigorous peer review process, show that the novel technology being developed by Spinogenix to treat neurodegenerative diseases is being recognized as a promising novel and highly differentiated approach," said Spinogenix Founder and CEO Dr. Stella Sarraf, Ph.D.



Dr. Stella Sarraf, PhD  
Founder & CEO  
Spinogenix

The La Jolla-based company was awarded a new grant in late September for nearly \$1 million from the U.S. Department of Defense's (DoD) Congressionally Directed Medical Research Programs (CDMRP). The fund will enable Spinogenix to advance its studies into the safety and effectiveness of what's called SPG302 – a new, potentially regenerative drug for Amyotrophic Lateral Sclerosis (ALS), also commonly known as Lou Gehrig's Disease. This award adds to previous funding from the DoD, now totaling \$1.6 million in contributions.

"Spinogenix chose ALS as our lead indication due to the serious unmet medical need. ALS is a devastating orphan disease with a survival time of only two to five years. The



**Spinogenix's drugs regenerate synapses – specialized junctions between neurons mediating electrochemical communication. Neurons can have many thousands of synapses, which are lost in an early and progressive way in neurodegenerative diseases.** Photo courtesy Spinogenix

approved treatments available today are marginally effective," added Sarraf.

### Restoring Memory Function

Spinogenix's SPG302 is a once-a-day tablet that induces an increase in synapses, the key connections between neurons that allow people to think, plan, remember and control motor functions – faculties that are diminished

in neurodegenerative diseases like ALS.

"It is the loss of synapses that is the main cause of memory loss and dementia in neurodegenerative diseases," Sarraf said. "Regenerating lost synapses helps restore memory function."

This new DoD grant will build upon the progress made since Spinogenix's first DoD grant in 2021, which was awarded in collaboration with the Barrow Neurological Institute and USC Keck School of Medicine to study the effects of SPG302 in ALS animal models and human stem cells from both ALS patients and healthy volunteers.

"Spinogenix has developed a platform of [novel small molecules] that have the unique ability to trigger the formation of new glutamatergic synapses. The rationale for advancing these drugs in ALS is exceptionally strong. It is increasingly recognized with the ALS field that an early and progressive loss of glutamatergic synapses is a key driver of motor and cognitive deficits," said Dr. Justin Ichida, associate professor of stem cell biology and regenerative medicine at USC Keck School of Medicine. "I am also aware of the exciting results from the published studies of SPG302 in a model of cervical spinal cord injury, where SPG302 greatly improved the recovery of respiratory function; these data suggest the SPG302 may improve respiratory function in ALS."

### Support from NIH

Earlier in September, the company was also awarded \$3 million from the National Institutes



Dr. Justin Ichida  
Associate Professor  
of Stem Cell Biology  
and Regenerative  
Medicine  
USC Keck School of  
Medicine

of Health (NIH) to continue its development of SPG302 as the first synaptic regenerative therapy in Alzheimer's Disease. Spinogenix says the loss of synapses happens early in Alzheimer's and is a major driver of progressive impaired memory and cognition.

According to The Alzheimer's Association, more than 6 million Americans are living with Alzheimer's and by 2050 this number is projected to rise to nearly 13 million. One in three seniors dies with Alzheimer's or another dementia, killing more than breast cancer and prostate cancer combined.

The new grant adds to a previous NIH award toward research, bringing the total to \$3.3 million. In total, Spinogenix has received close to \$5 million from both the NIH and DoD.

In July, the company launched its first phase 1 human clinical studies for SPG302 in Australia, with results expected in the first half of 2024. ■

### Spinogenix



**FOUNDED:** 2016

**FOUNDER & CEO:** Dr. Stella Sarraf, PhD

**HEADQUARTERS:** La Jolla

**EMPLOYEES:** 21

**BUSINESS:** biopharma

**VALUATION:** undisclosed

**WEBSITE:** [spinogenix.com](http://spinogenix.com)

**CONTACT:** [info@spinogenix.com](mailto:info@spinogenix.com)

**NOTABLE:** Spinogenix is reportedly the first company to put a synapse regenerating therapeutic into the clinic for ALS (or any neurodegenerative disease).