



## Meet Andrei Ursu: A 2018 Milton Safenowitz Postdoctoral Fellow

Our [Milton Safenowitz Postdoctoral Fellowship Program](#) continues to support young scientists and is the only program of its kind specifically funding early ALS postdoctoral fellows.

The awards were founded in memory of Mr. Safenowitz by the Safenowitz family – through The ALS Association Greater New York Chapter. The program encourages young scientists to enter and, importantly, to remain in the ALS field.

We are proud that 76 percent of the postdoctoral fellows we fund go on to start their own labs to continue studying ALS and mentor other young ALS researchers. The rest of our Safenowitz fellowship program graduates go on to careers in the biomedical industry, nonprofits, and medical writing, with many still staying in the ALS space.

This year, we are supporting five new postdoctoral fellows out of a highly competitive applicant pool. Over the next few weeks, we will highlight each fellow – their dedication and unique contributions to ALS research, as well as their interests outside of the lab.

We recently talked with Dr. Andrei Ursu from The Scripps Research Institute (Florida Campus) to learn about his unique research project focused on targeting the most common form of genetically inherited ALS, known as c9ALS, with rationally designed lead medicines.

**Andrei Ursu, Ph.D.**

**The Scripps Research Institute – Jupiter, Florida**

**Mentor: Dr. Matthew D. Disney**

**Project: Alleviation of pathological mechanisms of genetically defined ALS by small molecules targeting RNA G4C2 repeat expansions**



***Why did you choose to focus on ALS research?***

A series of events led me to focus on ALS research. Initially, the [ALS] Ice Bucket Challenge awakened my interest into exploring the underlying pathological mechanisms of ALS. Checking the most recent literature at that time led me to a series of breakthroughs in the field.

It was one such study that directed me to the Disney Lab at The Scripps Research Institute (Florida Campus) that I am currently part of. Right after my initial ALS research proposal was accepted for funding, I was contacted by an ALS patient from Austria [who] completely changed my views about this terrible disease.

This further confirmed that choosing this research area was the right decision.

***What do you like about working in the ALS research field?***

Tackling ALS involves a highly interdisciplinary effort involving clinicians, biologists, and chemists. As a trained chemist highly interested in targeting disease biology with small molecules, I was extremely enthusiastic to be part of an interdisciplinary team trying to bring an original and meaningful contribution to this research area.

***What are the goals of your funded research project?***

The proposed research project funded by The ALS Association is dedicated towards targeting the most common form of genetically inherited ALS, known as c9ALS, with rationally designed lead medicines. Multiple lines of evidence have shown that long stretches of hexanucleotide RNA repeat expansions trigger the pathological mechanisms of c9ALS leading to neurodegeneration.

The Disney Lab has designed small molecules that can strongly interact with the disease-causing RNA of c9ALS, thus alleviating its toxic effects. We are continuing along these lines by taking an interdisciplinary

approach to identify efficient strategies to yield bioactive compounds that can slow or even stop neurodegeneration.

Ultimately, we aim at generating safe candidates that can be tested in animal models.

***How might your work impact the ALS community?***

Our research is working towards identifying the best solutions to deliver safe and efficient therapeutic interventions that can be translated to actual treatments in the nearest future. We hope that our research efforts will provide viable treatment solutions [for] ALS patients.

***Millions of people took the ALS Ice Bucket Challenge during the summer of 2014 – almost five years ago. Did you?***

How could I not be part of the ALS Ice Bucket Challenge? Its social impact was extremely powerful across the entire world. At that time, I was a graduate student in Germany and, together with some colleagues and group leaders, we were part of this viral worldwide challenge.

***It is often said that ALS is one of the most complex diseases to understand. Yet, you go to work every day to tackle the challenges of your research. What gives you hope that there will someday be a world without ALS?***

Without exception, I am surveying the recently published studies on ALS that report novel insights that deepen the community's understanding of the emergence and progression of this complex disease.

That being said, we are currently experiencing rapid technological advancements, where scientific breakthroughs are reported daily across various disciplines. These consistent advances and the focus on interdisciplinary collaborations with these experts, facilitated by organizations such as The ALS Association, give me hope that ALS therapeutics can be rapidly developed to potentially rid the world of ALS.



***What is something unique about you?***

My sister is 10 minutes older than I am. We are twins!

***What do you like to do when you aren't in the lab?***

I enjoy spending my spare time in nature, taking long walks in the numerous national parks and wildlife sanctuaries across Florida. Exploring these beautiful and peaceful places helps me disconnect from work and recharge my batteries for the week to come.

***Is there anything else you'd like to add?***

I would like to sincerely thank all the people involved in and supporting the efforts of The ALS Association, especially the Safenowitz family. [The Association] is more than a simple organization and represents a very resourceful platform that brings together the ALS patients, the general public, and actively involved scientists across various disciplines sharing a common goal. Thank you [to] The ALS Association family for the support and for the great work on increasing the awareness of ALS.

***Where can people get more details about your research project?***

The research directions and the newest results from the Disney Lab at The Scripps Research Institute (Florida Campus) can be accessed by clicking [here](#).