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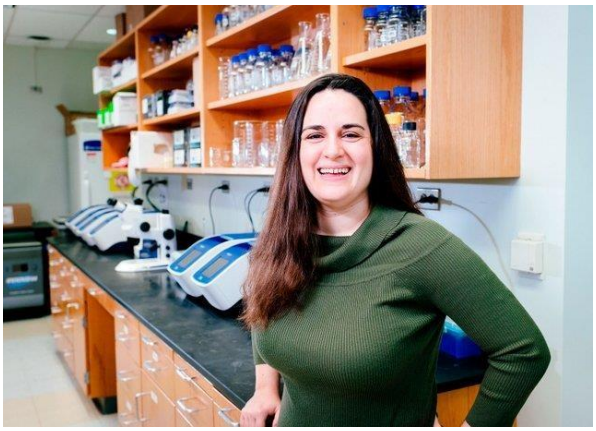
Neuroscientist finds supportive home at UAB, receives prestigious fellowship

by JESSE CHAMBERS October 29, 2020



Summer Thyme, a neuroscientist and assistant professor in UABâ€™s Department of Neurobiology,stands in her laboratory. Thyme in August was awarded a Klingenstein-Simons Fellowship, through which she seeks to generate new mutants for genes linked to childhood-onset schizophrenia.

Thyme enjoys a stroll with her son. The researcher and her family moved to Birmingham in 2019.

Summer Thyme, a recent Magic City transplant and an assistant professor in the Department of Neurobiology at UAB, went into the field of neuroscience with a clear purpose.

â€œI went into science specifically because of the potential to make a discovery that could affect millions of people,â€• Thyme said.

At UAB, where she joined the faculty in 2019 and runs her own independent lab in the Shelby Building, Thyme studies genes linked to neuropsychiatric disorders.

She seeks to decipher the molecular and developmental functions of these genes and is developing drug-screening approaches to identify potential therapeutics, according to the UAB School of Medicine News.

In August, Thyme got recognition and a big boost for her efforts.

She was awarded a Klingenstein-Simons Fellowship in neuroscience, becoming UABâ€™s first recipient of this prestigious fellowship. The fellowships are given to only about a dozen recipients each year in America.

They are among the nationâ€™s oldest and most significant fellowships for young investigators in neuroscience and are presented only to highly promising scientists in the first four years of their faculty positions.

The goal of the award is to advance cutting-edge investigations and to promote projects with higher risk but, potentially, higher rewards, according to the School of Medicine News.

That sort of approach is perfect for Thyme.

â€œIâ€™ve always been inclined to do science in this way,â€• Thyme said. â€œHigh-risk projects are not all that risky if you are committed to finding a way to reach your goal. Then they simply become high-reward with a potentially harder path to success than the more obvious projects.â€•

It’s a matter of being rigorous in ones methods and planning, she said.

Part of doing great science is finding ways to reduce the risk, planning the whole way through to find a way to reach the goal, and choosing to commit to a pathway that is feasible in a lifetime. Thyme said. One should not be afraid to take on a risky project that they are certain is the right way to go.

The goal of Thymes Klingenstein-Simons project is to develop new methods for finding effective treatments for neuropsychiatric disorders, including childhood-onset schizophrenia.

She seeks to generate new mutants for genes linked to childhood-onset schizophrenia, and her lab makes zebrafish models that harbor the exact genetic variants found in human patients, according to School of Medicine News.

A native of New Hampshire, Thyme holds bachelor degrees in biology and one in chemistry from Scripps College.

In 2012, she finished her Ph.D. in Seattle at the University of Washington, where she studied protein engineering and was a National Science Foundation Graduate Research Fellow.

She finished her postdoctoral fellowship in 2019 at Harvard University, where she was a Damon Runyon Postdoctoral Research Fellow and K99 recipient.

It was at Harvard where she learned to work with zebrafish and laid the groundwork for her proposed research on pathways regulated by genes associated with psychiatric disorders, according to School of Medicine News.

She and her husband moved to Birmingham in July 2019 and settled in Mountain Brook a few months later. The couple has a 19-month-old son.

We love it here so far, Thyme said. You can find my family at the Tot Lot, enjoying the amazing botanical gardens or taking walks on the Jemison Park trail.

The Birmingham area has all the benefits of a city, such as stores and restaurants, but without being crowded and stressful, she said.

Upon hearing she had been chosen for one of the coveted Klingenstein-Simons Fellowships, Thyme was excited, surprised and honored, she said.

The fellowship is special because it supports early career researchers taking on exciting and risky projects, she said.

Traditional funding from governmental sources tends to be risk-averse and requires a lot of the project to be completed to show feasibility, which can be challenging for a new professor, Thyme said.

Private funding, like she'll receive from Klingenstein Fund and the Simons Foundation, enables more exploratory research,Thyme said.

This opportunity also brings attention to my research and will help jumpstart my career, she said.

Thyme said that she is grateful to the Department of Neurobiology for being very supportive and giving her the freedom and resources to explore multiple projects in her first year on campus.

They provided everything I have needed to get my lab off the ground, she said. All the staff at UAB are always willing to help, which was especially valuable when I first arrived and was learning the ropes.

Multiple senior faculty have been providing mentoring and guidance, and every faculty member I've emailed has always responded immediately and been more than willing to help in any way they can, she said.

Thyme said that UAB is a great environment to do cutting-edge science and is rapidly rising among research-intensive universities.

The school now ranks 23rd in NIH funding and in the top 10 among public universities, she said.

It is also strongly committed to neuroscience research and has more than 200 faculty that are part of its comprehensive neuroscience center, Thyme said.

The young investigator is hopeful that her cutting-edge work at the university with childhoodonset schizophrenia could yield far-reaching dividends.

Studying this rare disease could provide insight into more common forms of the disorder where the underlying genes are less well-understood, Thyme said.

Schizophrenia affects about 1% of the population and other related disorders are also very common, she said.

If we can discover a treatment for these disorders that is even slightly better than what exists, that could relieve suffering for these patients, Thyme said.

Thyme and her team are also setting up new pipelines for drug discovery using a highthroughput animal model, the baby zebrafish, and building new computational methods for drug design, she said.

In addition, Thyme near the beginning of a promising career, should have no shortage of intriguing challenges ahead of her.

The brain is one of the most poorly understood organs, and it is clear that we need many decades of research in this area to make progress on treatments for brain disorders, she said.