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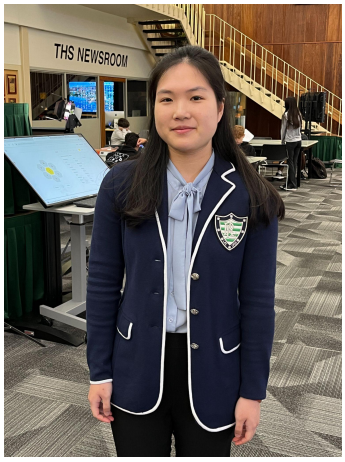
News Release

Tenafly High School Senior and Budding Scientist Now a Co-Author in Molecular Biology

Cindy Pyo is on a quest to help others through science

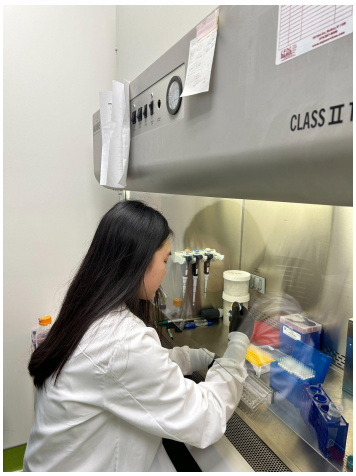
Tenafly, NJ – October 25, 2023 – Subin (Cindy) Pyo, a Tenafly High School senior, is now a co-author for a book chapter based on her research entitled "Modeling Notch Activity and Lineage Decisions Using Intestinal Organoids" in *Intestinal Differentiated Cells, Methods and Protocols in Molecular Biology* (Springer Protocol, Humana Press, 2023). The Cheng Lab, Columbia Stem Cell Initiative team of chapter authors consists of two graduate students and Chia-Wei Cheng, Ph.D., Principal Investigator and Cindy's mentor.

Ms. Aparna Subramaniam, Tenafly Public Schools science research teacher commented, "This is such a great achievement for any professional scientist, let alone a budding scientist in high school. I am extremely proud of Cindy."



About Subin (Cindy) Pyo, Tenafly High School Senior:
As one of the original members of Cheng Lab, 18 year old Cindy travels to Columbia University Irving Medical Center (NYC) nearly every day, after school, since her sophomore year, courtesy of her mother's driving. She secured her spot in this lab by ambitiously sending out cold calls to university professors. Today, she is the senior member of a lab team who spend their days researching intestinal stem cells and its response to dietary changes in hopes of identifying new therapeutic strategies for treating cancer, diabetes, and gastrointestinal diseases. For this specific book chapter, the lab team focused on using intestinal organoids as a tool to study Notch activity in intestinal lineage decisions. Notch activity is a key pathway that signals intestinal stem cell self-renewal and differentiation. Their research queried - how can we use organoids to understand the mechanism of Notch signaling and its impact on intestinal cell fate? "In research, there's always more to follow, but this is an example protocol that shows how to use intestinal organoids to study Notch activity in intestinal lineage decisions," noted Pyo.

Cindy Pyo's family moved from South Korea to Tenafly when she was 13. In her "free" time, she enjoys playing the violin - an instrument she has played since she was 8 years old. As an accomplished violinist, she takes part in various competitions and is currently an officer of the Chamber Music Club. "I love going on tours during the holiday season where we visit local seniors and they sing carols with us. It's amazing how we connect through music".



Last year, Cindy was the winner of the Regeneron Biomedical Science Award at the Terra North Jersey STEM Fair. In college, she plans to study tissue engineering and regenerative medicine, and wants to pursue a dual degree (PhD/MD) where she can continue her research while fulfilling a dream of helping the under-privileged via the medical field. Noting that today's healthcare system has imbalances based upon cultural or language barriers, or physical access to care, Cindy commented, "My goal is to help create an equal healthcare system where everyone - no matter where they live - can get their bodies checked at an early stage."

Cindy Pyo is a bright, ambitious young woman, who is deeply appreciative of everyone who supports the pursuit of her dreams. This includes her lab team, her Tenafly science teachers, and mostly, her mom.

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