**Nattapat Intarachumnum**

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**EDUCATION**

**Lehigh University**, Bethlehem, Pennsylvania Graduation year: 2022

B.S. Mechanical Engineering; Biotechnology minor

University High school, Irvine, California Graduated 2018

**RESEARCH AND WORK EXPERIENCE**

**A Low-Cost Point-of-Care Screening Device for Sickle Cell Anemia** May 2019 - Present

*Research Assistant at Lehigh University*

* Research cost-efficient metrologies to decrease the price of sick cell anemia detection in order to allow early detection and proper meditation for Sickle Cell Anemia in low-and-middle-income countries, specifically in Sierra Leone
* Quantify the intensity of dots developed on test strips utilizing the Image J program to quantify.
* Run the test strips; perform dialysis and beads conjugation. The device has been tested using purified HbA and HbS; HbA blood samples from a blood bank located in Bethlehem, PA.
* Discuss the progress, further plans, and future strategies during the weekly team meetings.
* The team has partnered with World Hope International (WHI) – Sierra Leone. In August 2019, the team travelled to Sierra Leone to test the device in the real field, and to justify the need for a Sickle Cell disease diagnosis device.

**Team member at Poke Me; Irvine, CA**  June 2019

Handle customer personalizes orders; ensure that ingredients are kept at certain temperature for the best quality; manage inventory of raw materials.

**Front Desk Assistant at Linderman Library; Lehigh University** August 2018

Assist the visitors of the library; monitor the return and loan of the books; pick up phone calls and contact

**LEADERSHIP EXPERIENCE**

**Thai Student Association; Lehigh University** September 2018 *Current position: President*

Found the club, along with 2 peers, to bring more diversity to campus and to share our unique culture; Oversee other executive boards; plan out events throughout the year; collaborate with other organizations on campus that promotes cultural inclusivity, such as ACS and SEAL

**Resident Assistant (Gryphon); Lehigh University** December 2019

Was selected to uphold the school’s mission of supporting residents in their personal, professional, and civic development; plan activities and gatherings within my assigned residential area; ensure the well-being of my residents through one-on-one personal conversations, “G-chat”; promote inclusivity within the community; enable residents to feel safe and supported.

**AWARDS**

**Finalist for the “2020 John Hopskins Healthcare Design Competition”** April 2020

* Lehigh Sickle Cell Diagnostics was one of the 12 teams selected among more than 225 applications from US & abroad, under “Global health issue” category invited to present our project. Our project proves that if successfully implemented, we would be able to positively impact lives of millions globally. I was one of the two speakers giving 15 minutes presentation and Q&A follow up session.

**SHE Scholarship**

**SHE Program, UCI Medical Center**  May 2017

* Through my essay submission and academic interests, I conveyed passion for health-related field and was selected. Top 20 Essay entrees out of 100 for best conveyed passion in health-related fields

**CAMPUS AND COMMUNITY INVOLVEMENT**

Akile Dance team; Lehigh University Student Scholar Institute (LUSSI); Asian Cultural Society (ACS); South East Asia at Lehigh (SEAL); Society of Scientists and Engineers (SASE); FIRST; the Gryphon Society

**ADDITIONAL SKILLS**

Language: Thai (C2), English (C2).

Software: Excel, Java, MATLAB, Arduino, ImageJ, SolidWorks; Powerpoint; Photography and video-editing.