

Finding New Ways for Chemical Syntheses Linh Tram, Biochemistry, 2020

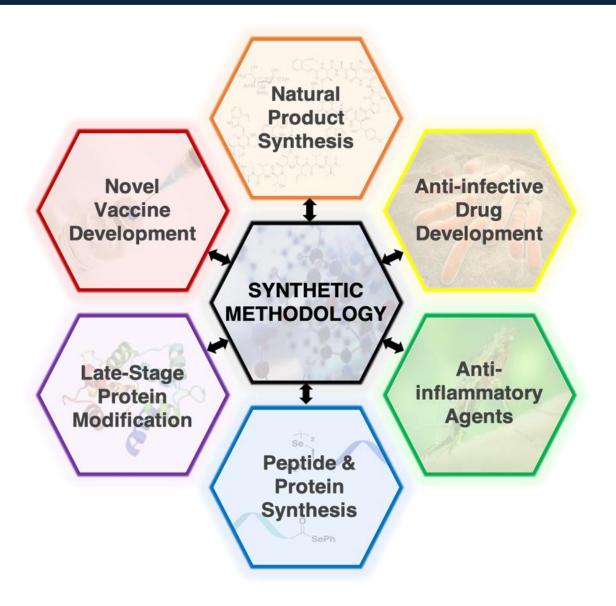
Intellectual Achievement

SUMMARY

The experience includes the experiments conducted since January 2019 at the University of Texas at San Antonio in Dr. Michael Doyle's laboratory.

The theme of the research group is methodology development, which aims to discover, optimize, and explain novel chemical reactions. The majority of my work includes substrate syntheses and condition screenings to optimize a potential reaction.

My goal for working in the lab is
to develop my chemical
techniques, which includes sample
analyses. The existing instruments
can provide us a means to "see"
substance at the molecular level.
This could be translated to
analyzing complex biological
samples.



SPICES

The activity embodies "Intellectual Achievement", which is obtained via conducting experiments in a laboratory setting to characterize novel chemical reactions

HERBS

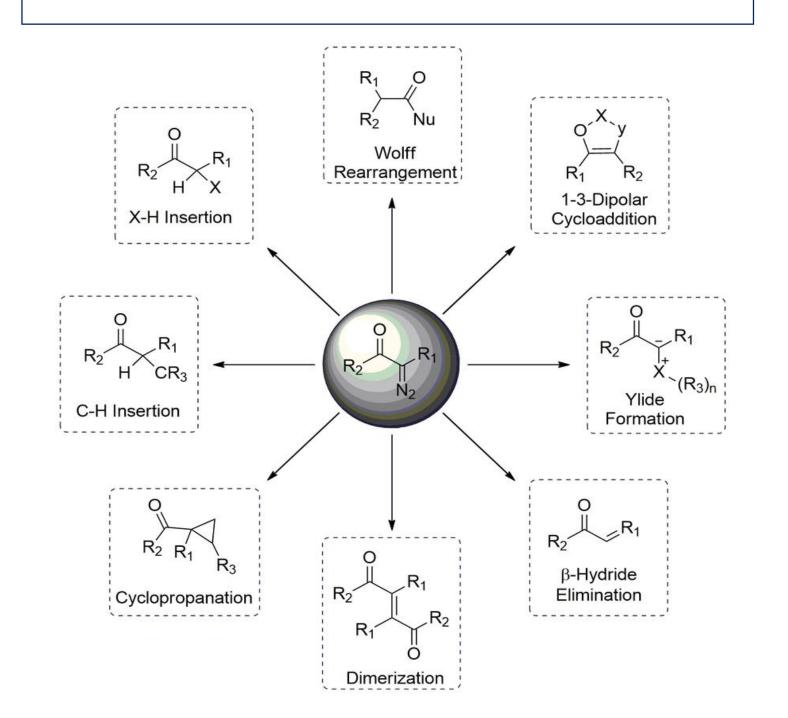
The experience embodies
"Resilience" in HERBS.
Conducting research helps me
build resilience to tackle the
unknowns

LEARNING OUTCOMES

One major learning outcome of this experience is "Decision Making". I was able to perform experiments independently while also communicate with other team members.

Another learning outcome is "Adaptability and Resilience".

Encountering setbacks such as failed reactions is an expected and frequent phenomenon; and the research training has taught me be comfortable with such events.



IMPACT

Methodology development is a research field with various translational applications.

Personally, the experience has helped me developed my chemical techniques, which is invaluable for the field of chemical biology. Instead of ordering chemicals from other laboratories, chemical biologists can synthesize and use the molecules directly, which enhances research efficiency.

ADVICE

Curious about a research lab but too intimidated by all the jargons? Do not be afraid to approach a professor to ask them about their research!