Industry Insight From:

Matt Adams



Matt Adams, MSc. Research Scientist Intellisyn Inc.

Background

Matt grew up in Barrington, Nova Scotia.

He attended Dalhousie University in Halifax NS, graduating with a Bachelors degree in Chemistry in 2016 and a Master's degree in Chemistry in 2018.

He began working as a research scientist for Intellisyn Pharma Inc. later in 2018.

Intellisyn Inc.

Founded in 2011 Intellisyn is a contract research organization and drug discovery company.

Intellisyn's research scientists are experts in medicinal chemistry and develop custom drug synthesis procedures for pharmaceutical companies and researchers.

Much of Intellisyn's work, including Matt's work, is focused on developing drugs to treat neurodegenerative diseases.

Intellisyn Pharma Inc. is located in Montreal, Quebec.

Education

Matt pursued his Master's degree under the supervision of Dr. Alex Speed.

His thesis, The Synthesis and Catalytic ability of Diazaphospholenes, focused on developing achiral and chiral catalysts for their use in imine and conjugate reductions.

The products of these transformations are ubiquitous in many drugs including a monoamine oxidase inhibitor used in the treatment of Parkinson's disease.

Getting the Job

After graduating from Dalhousie University in May 2018 Matt was directed to a job opening at Intellisyn pharma Inc. by a friend he had worked with during his undergraduate.

Matt took advantage of an opening at the growing company in Montreal's booming research industry and began work in September 2018, less than 6 months after graduating with his MSc.

Critical skills that Matt believes helped him get hired are his broad synthetic chemistry "toolbox", his knowledge of many chemical reactions, and hard work ethic.

The Day-to-Day

Matt spends a lot of his time in the labs at Intellisyn, running reactions and attempting to synthesize the target molecules the company has been hired to design. He uses established procedures to modify core scaffolds and develops new techniques to access new and interesting architectures. Outside of the lab Matt is busy keeping meticulous lab notes, as well as trying to design new pathways to interesting targets.

He is motivated to learn all he can about medicinal chemistry and keeps updated on The Journal of Medicinal Chemistry, neurodegenerative diseases, and new developments in organic synthesis to inspire drug development.

In addition to lab work and research Matt meets with his team-mates and their clients on a weekly basis to keep updated on chemical targets and provide updates on progress with projects.

Skills

Among the skills that Matt says make him effective as a researcher are his time management skills. Matt says he keeps a rigerous schedule that allows him to balance life in lab and out of the lab at Intellisyn. Matt also says he has to be creative when coming up with new target molecules. By using his synthetic and medicinal chemistry knowledge he can quickly plan and execute attempts at synthesizing targets. Matt says you have to understand the context of your work. Approaching his synthetic projects from both a biologist's and chemist's perspective helps him identify and synthesize good target compounds. Matt's main goal and focus right now is to become a

Matt's main goal and focus right now is to become a better medicinal chemist, by studying what aspects of an organic molecule attribute a specific biological response, and how to modulate them to design better drug compounds.

What's Challenging?

There are some challenges working in the pharmaceutical industry. Because Matt is working at the cutting edge of research and medicinal chemistry there is often not a lot of scientific literature on his target compounds. This can sometimes make rapid problem solving a lot of effort.

Advice for Students

"Put forth a strong application and keep an open mind!"

Matt's advice for finding a job with your MSc is to first decide if and where you are willing to relocate to and apply for jobs that interests you in those areas. When searching for a job you have to see how your skills could apply to that company. Keep in mind, you may not be doing the specific chemistry you have done in school, but the things you learned from it will be applicable. Overall all a strong track record and work ethic will benefit your future endeavors.

Written by Bradley Davis, M.Sc. Traineee

