

2. Language for controlling and interfacing with chemistry (the goal/my current working framework)



- Language can enable <u>abstract</u>, <u>functional</u>, and <u>compositional</u> control over complex properties when designing novel molecules.
- 2. Language can serve as a "bridge" between modalities
 - (e.g., cellular pathways and drugs).

Language is a glue between data types, robots, and people.

- 3. Tool-enabled language models hold promise for chemical reasoning and even directing laboratory experiments.
- 4. Language makes chemistry AI more accessible.

Language has been developed as the method by and for humans to abstractly reason about the world. In much the same way that science often relies on natural phenomenon (e.g., penicillin) for innovation, we can rely on natural linguistic phenomenon for abstraction and connection.