1. Gain a broad understanding of the biochemical principles that underlie all biological processes.

2. Become aware of the current limitations of the state of understanding of this discipline and the strategies that are required to advance the field.

3. Formulate and design new approaches that extend and apply biochemical principles beyond their current boundaries.

4. Explore career development opportunities in industry, government and academia to realize professional goals and paths.

5. Develop teaching and mentoring skills in both lecture and laboratory settings.

6. Foster professional and ethical conduct in the sciences, including but not limited to: exposition of the scientific method; ethical design of experimental protocols; reproducibility in science; professional behavior in industrial, government, and academic settings; documentation of scientific results; communication to other scientists and the public; peer review; and confidentiality.