

Subject: \$1,000 Entrance Scholarship Opportunity – Department of Chemistry and Biochemistry, University of Windsor, 2026

Dear Prospective Students,

Congratulations on your acceptance into the Department of Chemistry and Biochemistry at the University of Windsor! We are thrilled to welcome you to our academic community.

To recognize the scientific curiosity and writing excellence of our incoming class, the Department is pleased to announce the **Entrance Scholarship in Chemistry and Biochemistry**, valued at \$1,000. This scholarship is awarded to one student entering the first year of our Chemistry, Biochemistry, or Biochemistry (Pharmacy Stream) programs.

The Challenge: Scientific Essay

To be considered for this award, candidates must submit an original scientific essay (not exceeding 1,000 words) on a topic of their choice within the fields of Chemistry or Biochemistry.

While the choice of topic is open, the selection committee highly encourages essays that explore **practical or regionally relevant** applications of science. Competitive entries will go beyond a general summary and provide a critical analysis of how chemistry or biochemistry impacts a specific real-world issue.

Possible themes to consider:

- **Local Agriculture & Greenhouse Science:** The chemistry of hydroponic nutrient solutions, the biochemistry of plant–pest interactions, or advanced soil science within the Windsor–Essex and Leamington agricultural sectors.
- **Environmental Chemistry & Limnology:** The biochemistry of the Great Lakes ecosystem, the chemical mechanisms of phosphorus runoff and algal blooms, or the molecular basis of local water purification technologies.
- **Industrial Innovation & Materials:** Chemical advancements in the automotive sector, the development of sustainable polymers, or the molecular science of green energy (e.g., hydrogen fuel cells or battery chemistry) within Ontario’s manufacturing hub.
- **Health & Clinical Science:** The molecular mechanisms of a therapeutic, vaccine, or diagnostic tool relevant to the Windsor–Essex health system (e.g., oncology research related to local demographics or public health surveillance at our unique international border gateway).
- **“Everyday” Molecular Analysis:** A deep-dive technical explanation of a chemical process or biochemical pathway encountered in daily life, provided it includes a rigorous analysis of the underlying molecular interactions.

Note: This is an academic essay competition. Personal statements, biographies, or study plans will not be considered for this award.

Submission Guidelines

Deadline: Sunday, June 1, 2026, by 5:00 PM (EST)

Format: Microsoft Word (.docx) or Adobe Acrobat (.pdf)

Style: Times New Roman, Size 12, Single-spaced, 1" margins on all sides. A 1,000-word essay should fit into approximately two pages with these settings.

Header: Include your full name, intended program, and UWindsor Student ID in the document header.

Citations: If you include reference citations, a bibliography is required using the Journal of Biological Chemistry (JBC) style (see the attached "Style Guide"). The bibliography does not count toward the 1,000-word limit.

Generative AI Policy

The Department recognizes that generative AI (e.g., ChatGPT, Gemini) can be a helpful tool for brainstorming and grammatical refinement. However, the scientific analysis, core arguments, and technical explanations must be your own original work.

Requirement: If AI tools were used during the drafting process, include a brief "AI Disclosure Statement" at the end of your essay (e.g., "AI (state which tool and model) was used for initial brainstorming and grammar checking; all scientific content and analysis are original.") This statement does not count into the word limit.

Ranking Criteria

- **Scientific Accuracy & Technical Depth (30%)** – Correct use of nomenclature and depth of molecular understanding.
- **Contextual Application (30%)** – Ability to connect the science to a specific real-world or regional application.
- **Critical Analysis & Writing Quality (30%)** – Clarity of argument and logical flow of the essay.
- **Adherence to Guidelines (10%)** – Correct formatting and JBC citation style.

How to Apply

Please email your submission to ChemBioHead@uwindsor.ca with the subject line: **"Entrance Scholarship Essay: [Your Name]"**

We look forward to reading your work and wish you the best of luck in your first year!

Undergraduate Committee
Department of Chemistry and Biochemistry
University of Windsor

March 2026

JBC Citation Style Guide

The *Journal of Biological Chemistry* uses a numbered citation system. References are numbered consecutively in the order they appear in the text.

In-text: Use a number in parentheses: "...as seen in recent studies (1)."

Journal article: Author, A. B., and Author, C. D. (Year) Title of article. *Abbr. J. Title* **Volume**, page range.

- Example: Smith, J. D., and Doe, R. A. (2024) Molecular dynamics of CDK2. *J. Biol. Chem.* **299**, 1024–1035.

Book: Author, A. B. (Year) *Title of Book*, Publisher, City.

Note for Reference Management Software:

If you have multiple citations, you may use free reference management software such as Zotero. Search for "Journal of Biological Chemistry" in the Zotero Style Manager to automate your formatting.