## Sample Gates Cambridge Scholarship Recommendation





March xx, 20xx

## To the Gates Committee:

I am delighted to recommend Janet Lerner for a Gates Award to study at Cambridge University. This application demonstrates the wondrous evolution of her development since beginning her public education at Mythic University. For, unlike most students, coming to college for Janet meant more than the usual adjustments faced by undergraduates: until Janet began her post-secondary school education, she had been exclusively home-schooled. I can vividly recall Janet appearing at my office door to ask about being in the honors program, then about whether it was okay for second- and third-semester students to take my honors composition class. She was shy, yet sure enough in her desire to be active in honors to take control of her education. Eventually, I would come to know Janet very well: from two classes, numerous honors and class trips (including one to Madrid), and various discussions about her future that ended in my suggesting she apply for the National Science Foundation Research Experience for Undergraduates (NSF-REU). She did apply for the NSF-REU, and, as a sophomore, participated in a physics program at Bucknell University in PA.

Janet is every teacher's idea of the ideal student: native intelligence combined with superb work habits; an excellent listener and thoughtful speaker; open-minded to all points of view yet with her own carefully considered opinions; highly motivated and an original thinker. Not, I suspect, what many intellectuals would expect from a child home-schooled in fundamentalist religious values, but true nevertheless.

In her work for me in first-year honors composition, she would uncomplainingly produce draft after draft—for while her ideas shimmered with profundity, they also needed structure, a way to be seen to best advantage. Janet's papers were always twice as long as every other students' in the class, and she was the only one who didn't need constant prodding to develop her ideas. In fact, she was one of the few whose papers needed cutting and pruning. Yet, first-year writing teachers rarely see much in the way of original thinking, so I had mixed feelings about curtailing Janet's ambitiousness and far-ranging creativity. Having read her poetry, I realized that English class was a place for her to express her multiple creativities. While she instinctively knew she could combine her scientific interests and knowledge in her poetry, her breakthrough in composition and literature came, to my mind, when she realized she could combine her interest in physics with her analytical reading of literature. When she did, an interesting thing happened: she became intently focused on the single idea she sought to develop; the structure of her argument revealed methodical organization; and her conclusions thus became certain, more difficult to refute. In short, she had transferred the discipline of her work in science to her writing about literature, and the effects were dazzling.

The next semester when Janet enrolled in my Arthurian literature class, she was writing graduate-level English papers. Her paper on the physics of the pendulum in a William Morris poem was so good, I suggested she present it at Mythic County's Undergraduate Research Conference. Professors in the audience came up to me afterward, full of praise for Janet's work.

As Janet dared in English, she has come to dare in her other choices: in her application to and involvement in the Bucknell NSF-REU in physics; in her summer work with the Biomaterials and Bionanotechnology Summer Institute funded by NSF and NIH. A technical and rapidly expanding field such as neurophysics requires students to think out of the box. If ever a student were capable of extraordinary achievement in such a field, Janet is it—precisely because she thinks out of so many boxes simultaneously. Janet's abilities extend from sophisticated mathematics to the clear articulation of computational problems and solutions; from high-level physics to the demonstration of concepts; from the smallest detail (or molecule, as she might say) to the biggest picture (or, the cosmos).

As a two-time former Fulbrighter and one who has participated in many programs for award winners, I am especially pleased to be an advocate for Janet's application. She will make a sterling ambassador for the Gates Cambridge Scholarship—through her multiple enthusiasms and talents, she will represent the best American higher education has to offer. Remarkably enough, she will likely surprise even those who already have high expectations for her.

I recommend her without reservation.

Sincerely,

Janet Teacher

Janet Teacher

Associate Professor of English
and Honors Coordinator

## **Sample Gates Cambridge Scholarship Recommendation**





October xx. 20xx

John is undoubtedly the most outstanding undergraduate student I have worked with in my 35-year teaching career. In his first year at Mythic University, he accomplished more in terms of research and service than most chemistry majors would hope to do in four years. Now a senior, John has given at least 15 oral or poster presentations describing his research and public outreach accomplishments. In all this, he has shown great intellectual prowess and energetic stamina. I am confident he will become a leader in his field and do this at a young age.

John has made the explicit decision to use his undergraduate experience to become familiar with as many modern analytical techniques as possible. The overall goal of his honors thesis research is to better understand the marine chemistry of the coral reef ecosystem and to find chemical indicators of the health of corals. He presented his initial results as a poster and won first prize in the Physical Sciences group at the annual Mythic University Undergraduate Research Fair. This work has since been presented in a book on corals published in Germany (*Steinkorallen im Aquarium*, Daniel Knop, NTV Verlag GmbH, Vol. 1, 45, 20xx). He also examined corals using scanning electron microscopy and set up a new AA instrument for doing strontium, magnesium and calcium analysis of corals. This work was presented at the Chemical Oceanography Gordon Research Conference in August of 20xx.

John was a student in two lab courses that I teach, an Honors Introductory Organic Chemistry lab in his fourth semester and an Advanced Organic and Inorganic Preparations lab course in his fifth. Both labs are project oriented and simulate a research environment in terms of evaluating the literature and designing experimental procedures. John was at the top of the class in both cases and consistently produced higher yields and purer products than any student who has ever done that particular experiment before. He has also been a teaching assistant in Honors General Chemistry Laboratory and Introductory Organic Laboratory.

John has come to realize that some of the most intriguing aspects of marine systems involve studies of biochemistry and molecular biology. Last year, we started working with a colleague in the Bioanalytical Mass Spectrometry Facility here at Mythic University where John spent considerable time learning how to isolate and sequence coral proteins using 2D gel electrophoresis, MALDI and ESI mass spectrometry. He wrote a superb undergraduate research proposal this fall and was awarded \$1000 to cover the costs of instrument time, gels and other supplies.

As a responsible mentor, I wanted to make sure that John gained experience that would help make him a leader in his chosen field of chemical oceanography. Therefore, I suggested he apply to do research at Woods Hole Oceanographic Institute and he received an NSF Undergraduate Research Fellowship to do this last summer. Working with Dr. Dan Repeta, he had a very productive summer, sampling colored dissolved organic matter in the waters of the Pacific and identifying some interesting xenobiotic substances in these extracts. Dr. Repeta plans to submit this work to *Nature* for publication and John may be first author!

## Letter of Recommendation for John Lerner, 2

Further, John loves to share his excitement for chemistry with others. For all four years, he has been the prime director/producer for the annual Halloween Chemistry "Magic" Show and did a fantastic job playing Harry Potter in this fall's popular production, "Halloween at Hogwarts."

It's hard to believe how much John has accomplished here at Mythic University, yet he maintains a relaxed manner, a great sense of humor, and he is always easy to work with. He is a true natural born scientist: a critical thinker, a careful observer, and a thorough recorder. It is evident that John is an exceptional individual. He is certainly the most talented, inspired and accomplished undergraduate I have known in my teaching career. I strongly recommend him for the Gates Cambridge Trust Scholarship.

Sincerely,
John Teacher
John Teacher, Ph.D.
Teaching Professor of Chemistry
Director, Organic Instructional Labs