Double Duty

As more Rochester students expand their studies to include a second and sometimes a third—major or degree, we ask a few members of the Class of 2010 why they went that extra step.

By Kathleen McGarvey Photographs by Adam Fenster

> OMETIMES THE BEST CHOICE YOU CAN make is to make no choice at all. So say some freshly minted Rochester graduates who decided to pursue not one major but two or three ... or even more than one degree.

"Freedom is the hallmark of our curriculum, and students often find that they have the time to concentrate in more than one area if they want to," says Suzanne Jagel O'Brien '59, associate dean of the College.

This spring, more than 170 undergraduates graduated with double majors, and more than 70 received two or more degrees.

Here are a few of those students and the paths they've taken.





🛚 Marika Harada

Tsukuba City, Japan ► Majors: Chemistry and Religion

Science and religion are often pitted against each other as mutually exclusive ways of thinking, but for Marika Harada, they're of a piece.

When she arrived at Rochester as a freshman, Harada was certain she'd be majoring in the sciences, but she didn't expect to add a religion major. Then she started taking courses on Hinduism "out of curiosity."

The philosophy behind the religion intrigued her, Harada says, adding that the appeal took her by surprise because she hadn't grown up with religion. But she followed a trail that she set for herself and "took courses according to what interested me."

And while the classes she chose tended to examine Eastern religions, she stepped into fresh territory again this year when she wrote her senior thesis for her religion major on Mayan ritual.

At the same time, Harada has also been absorbed by the study of chemistry, serving as a teaching assistant in organic chemistry and spending two summers working in research laboratories, first at the University of Pennsylvania, and then at the Lawrence Berkeley National Laboratory in California.

"I really like working in the labs," she says. "It's cool to experiment with what you've learned."

Harada sees herself as simultaneously a scientist and a humanist. "I appreciate both sides," she says. "It's challenging, but interesting, to bring these fields together."

Science and religion may share a commitment to seeking truth, she says, but they conceive of truth differently.

"Finding truth from a religious perspective is more about finding what's true for you. There can be different kinds of truth. And the circumstances of science and religion are so different."

Now that she has graduated from Rochester, Harada is headed back to the Berkeley lab for a year. She plans to apply to medical schools.

"My curiosity about religion's not going to stop," she says. "Studying medicine, it's important to understand each patient's background, and religion could be an important part of that."



Chase Hermsen

Bayville, N.J. ► Majors: Computer Science, Japanese, and Linguistics

You could say that Chase Hermsen and computers are old friends. "My dad worked for Apple, and I learned to program before my age was in the double digits," he says. "It was a natural for me" to opt for a major in computer science.

His interest in languages, in contrast, was something he stumbled upon as a high school student at a Japanese language immersion camp in Minnesota.

At Rochester, he encountered the more systematic study of language that is linguistics, and ultimately Hermsen found himself with a triple major.

His curiosity fueled his course selection. "I didn't take more classes than I was going to anyway. This way, I was applying every class to a major."

His three areas of study brought illuminating convergences: one

semester, three of his courses were examining the concept of the sentence diagram—breaking down the sentence to analyze how it conveys meaning—each from its own particular perspective.

The exploration of a concept through the lens of three fields simultaneously gave him greater insight into the assumptions and goals of each one, he says.

Now Hermsen, who also earned a certificate in literary translation in the College's new literary translation program, is poised to enter the field of computational linguistics—a field that's involved "anytime languages meet computers." (He cites automated telephone customer support as one familiar example.) "It ties two of my majors together." He'll enter a master's program at the University of Washington this fall.

His years at Rochester were rich ones, Hermsen says. Despite the rigors of completing three majors, "I'm not a workaholic."

At Washington, he plans to find time for some of the leisure activities he enjoyed on the River Campus: hanging out with friends, juggling, and practicing "the hobby of finding new hobbies."

Dale McElhone

Tuckahoe, N.J. ➤ Degrees: BM, Applied Music; BS, Applied Mathematics; BA, Physics

When Dale McElhone attended graduation ceremonies in May, he collected not one degree, but three: a bachelor of science in applied mathematics, a bachelor of arts in physics, and a bachelor of music from the Eastman School in applied music for saxophone performance.

"I feel like people who want to do dual degrees are generally the organized type," says McElhone, with perhaps a touch of understatement. He completed his music degree in four years and spent an additional year completing requirements for his other two degrees.

"It's been an ideal situation because it allowed me to pursue everything at the same time, to try everything and see where it took me."

It has taken him interesting places: London's Royal College of Music, where he studied saxophone and harpsichord; the research laboratory of Mark Bocko, a professor of electrical and computer engineering; the stages of the Eastman School, where he studied under Chien-Kwan Lin, an assistant professor of saxophone who "made me the musician I am today"; and soon, the campus of Penn State, where McElhone will pursue a graduate degree in acoustics.

With Bocko, who is conducting research on digital signal processing technology in music, McElhone has worked to find ways to recreate electronically all the things a musician can do with a saxophone. What began as a summer research project grew, and Bocko "gave me an awesome opportunity with this research," he says.

McElhone's not sure where the study of acoustics will take him, but he's willing to follow his curiosity. He's interested in concrete issues surrounding sound, like how to direct airport noise away from neighborhoods. Physics gets pretty abstract, he says, and he likes problems he can wrap his hands around.

His dad's a carpenter, and he can see some of the same inclinations in himself. "Picking up a saxophone-a machine you make music with-has always fascinated me."

He and his father are working on plans to build a harpsichord themselves, and ultimately McElhone says he may decide to try his hand at designing speakers, or musical instruments.

"I like the idea of being able to figure things out."





Amanda Case

McLean, Va. ▶ Majors: Microbiology and Russian

Talk for a while with Amanda Case and you realize that she's a person who appreciates small things.

She was always interested in animals, she says, but when she came to Rochester and began her biology studies, her focus narrowed.

"Once I was taking classes, I realized I wanted to take it down to the basics, to the single cell.

"I like how microbiology focuses on the beginning, on how life started. You see how our body systems relate to microbiology."

At the same time that Case was probing the building blocks of life, she was also exploring an entire culture with her dual major in Russian.

Again, it was smallness that appealed. She responded to the intimacy of the program, she says. "I liked that I could get to know every faculty member."

She strengthened her bonds with other Russian majors during the program's summer trip to Saint Petersburg, Moscow, and Novgorod.

"I think having the Russian major has helped me in microbiology because I can think more 'out of the box,'" says Case, who was also a four-year starter in field hockey and lacrosse and was named all-Liberty League in both sports during her senior year. Facing the challenges of finding her footing in a new language and culture "has given me a more open mind when solving things."

As a microbiology major, Case did independent research, working in the lab of Mingtao Zeng, an adjunct professor of microbiology and immunology who is pursuing a botulism vaccine.

She loved having the chance to see how scientists develop ideas, she says. "You hear about how they do these things, but to actually see it was really fun."

While she enjoys research, Case prefers to pursue a clinical path, and she'll spend next year volunteering in a hospital in her home state of Virginia to get additional hands-on experience before applying to medical school.

And she takes satisfaction in her experience at Rochester, straddling the humanities and the sciences.

"You get the best of both worlds."

Nicholas Hamlin

Ipswich, Mass. ► Majors: Mechanical Engineering and History

When Nicholas Hamlin was a high school student looking at colleges, the ease of coordinating two fields of study was a "major factor" in his ultimate decision to attend Rochester.

Before even beginning college, he'd already developed some prowess at historical research: He and a team of fellow students won the National History Day Contest, a historical research competition entered by more than half a million high school students each year, for a documentary they made on the ice industry in 19th-century New England.

But he also relished the challenges of engineering—and he didn't want to abandon the study of either one. Rochester, he says, made it not just feasible but comparatively simple to pursue both.

"It was much easier than I thought it would have been" to accommodate both majors in his schedule, he says.

"Being a mechanical engineer has made me a better historian, and being a historian has made me a better mechanical engineer," he says. In both cases, you're trying to solve a problem. Doing both has led me to approach problems in a slightly different way than the major alone would have led me to do-and I think that's beneficial."

Hamlin continued to broaden his perspective during his just-completed Take Five year. He examined ethnomusicology, with courses in anthropology, linguistics, and music. Music, he says, is another long-held interest for him, and he was a member of the Midnight Ramblers, directing the group for two years.

"The Midnight Ramblers has been an important part of my education." He credits his participation with teaching him "leadership, and all sorts of random things you wouldn't necessarily think would be associated with a music group," from tour management to music technology to accounting.

Now Hamlin is considering graduate school, perhaps with an eye toward a career in international development, something he says could bring his love of engineering and history together. He's one of the students who established the new chapter of Engineers without Borders at the University.

He's cautious about being overly focused on any one goal, however; following his instincts has worked well for him so far.

"Most of the things I decided to do here at Rochester weren't intentional," he says. "I just thought they were cool."





Alyea Canada

Dublin, Ohio > Majors: Film & Media Studies and Comparative Literature

After spending the past four years absorbed in film and media studies as well as comparative literature, "I can't watch anything now without analyzing it," says Alyea Canada.

Her critical acumen may get in the way of spending an evening unwinding in front of the TV, but it's made her an astute reader of everything from international classics of screen and page to contemporary pop culture phenomena.

Canada began at Rochester by plunging into the unknown.

"I decided to start college learning about a country I didn't learn about in high school," she says—and so she began taking courses on Russia through the Department of Modern Languages and Cultures.

While her study didn't turn into a Russian major-Canada opted to minor in Russian-it did give her a keen interest in culture, and how it relates to the act of storytelling.

Through her film and media studies major, she learned about Russian films, as well as those of France, Germany, and Britain. Instead of concentrating on individual directors or genres, she focused on national cinematic traditions. "It was surprising to me how much crosscultural influence there is," she says.

At the undergraduate research conference sponsored by the Department of Modern Languages and Cultures in the spring, she presented her senior project for comparative literature, an examination of the relation between Joseph Conrad's *Heart of Darkness* and Francis Ford Coppola's film adaptation, *Apocalypse Now*.

Canada says she's interested in how national film traditions can challenge "official" accounts of history.

"I think the key" to cultural analysis "is getting a solid understanding of history," she says. "You need to know the historical context."

Canada took her interest in cultural expression out of the classroom, too, as a member of Radiance Dance Theatre—she has danced since she was three—and UR Concerts, the student group that brings musical acts to campus.

Now that she has graduated, Canada is considering whether she'd like to begin working or continue her studies in graduate school. In either case, she appreciates having been able to develop her interests in both film and literature.

"It's good to know that if you're really torn between two areas, you don't have to choose."