Wellesley College is a women’s college with a strong tradition of liberal arts education. Located outside Boston, Massachusetts, Wellesley’s 500-acre campus is home to 2,300 undergraduate students from 50 states and more than 60 countries. Wellesley’s distinguished alumnae include Mayling Soong (Madame Chiang Kai-shek) ’17, former Secretary of State Madeleine Albright ’59, Senator Hillary Rodham Clinton ’69, Space Shuttle pilot Colonel Pamela Melroy ’83, as well as writer/director Nora Ephron ’62, advice columnist Judith Martin ’59 (a.k.a. Miss Manners), and journalist Cokie Roberts ’64. The College’s mission is to provide an excellent liberal arts education to women who will make a difference in the world.

Some of Wellesley College’s enduring strengths throughout its long history have been a high-quality faculty and student body, a small enrollment allowing concern for the individual student, a commitment to the education of women, an underlying belief in service to society, a high level of alumnae interest and support, and a beautiful campus with easy access to Boston. The college also has a thriving degree program for women who are beyond the traditional undergraduate age.

Since 1875 Wellesley has had a strong record in educating women scientists. Wellesley’s academic program was designed to meet the highest standards, with a primary emphasis on English, Mathematics, the Physical Sciences, and the Classics. Wellesley’s physics laboratory for undergraduate instruction opened in 1878; it was the second such laboratory in the U.S., preceded only by MIT. Winifred Edgerton (class of 1883) earned a PhD in mathematics at Columbia University in 1886, the first woman to earn any degree at Columbia. Dorothy Weeks ’16 was the first woman to earn a doctorate in mathematics at MIT. Annie Jump Cannon (class of 1884) was the first woman awarded the National Academy of Sciences Henry Draper Medal, in 1931. In its 130-year history, Wellesley has had only 12 presidents, all women, two of whom were mathematicians. Alice Schafer, the second president of the Association for Women in Mathematics, was a faculty member at Wellesley until her retirement in 1980.

In an NSF study of graduate education, Wellesley ranked among the top 30 educational institutions nationally in the number of female baccalaureate degree recipients who went on to earn science and engineering doctorates for the years 1989-1993 (one of only two liberal arts colleges on the list). Roughly one-third of our science and math graduates go on to earn advanced degrees directly from college.

Wellesley’s mathematics department consists of 12 faculty members with a broad range of research interests in pure and applied mathematics. With between 10 and 20 math majors each year, the department offers personal attention, in advising and in small classes. Many students are double majors, combining mathematics with fields such as economics, English, classics and chemistry. Students enjoy extracurricular math department events such as regular teas, pizza lunches and ice cream socials, and Math Movie nights. Wellesley’s students not only have excelled at the William Lowell Putnam Competition but also have turned out in force for Wellesley’s in-house Math Games, an annual friendly team competition. The cross-registration program with MIT provides an opportunity for Wellesley College students to take graduate-level mathematics courses. In addition, Study Abroad programs are popular with math majors, including the Budapest Semesters in Mathematics. Students pursuing independent study and honors theses present their work in a variety of venues: in Science Center poster sessions, at the annual campus-wide Ruhlman Conference for student research, and at regional and national mathematics meetings.
Alumnae

Wellesley’s math majors have gone on to work in a broad spectrum of careers, including traditional ones such as college professor and high school teacher, actuary, and software designer. Many others have pursued careers not typically associated with mathematics, including physician, attorney, economist, financial analyst, architect, and dentist. Below we profile a few of our alumnae.

Katie Gottshall '03 reports that having a major in mathematics gave her a real edge in securing her job as a quantitative research associate at the financial consulting firm Cambridge Associates. “I use logic and problem solving skills that I developed as a math major every day, even though I don’t use most of the math I learned.” At Wellesley, Katie particularly enjoyed working with other students on problem sets. “It teaches you that there is more than one way to approach a problem, helps you to understand the material, makes you realize that you’re not the only one struggling to understand a concept and helps in developing friendships with your classmates.” Katie found that getting to know several of her professors well made her feel connected to the department and helped in her job search. Katie advises current students to “take classes with professors who teach in a way that you learn best,” and to “take courses that just sound interesting even if they aren’t required for the major—they may end up being useful to you later in life.”

Beth Pontius '03 arrived at Wellesley College knowing she wanted to pursue the pre-medical school track. She thought that math would be an interesting diversion from the multitude of science courses she was facing. Beth is currently a medical student at Baylor College of Medicine in Houston, Texas. She says, “In medicine, in pharmacology in particular, it’s very important to understand the mathematics behind the drugs you’re using, or biological processes you’re studying. Many students have trouble understanding these concepts, but for me it has come very easily.” In her junior year, Beth took time away from her pre-medicine courses to participate in the Budapest mathematics program. “I really enjoyed my semester in Budapest. I would highly recommend the program to any math major wanting to study abroad.” Her suggestion to current students: “Take a few courses and explore! You may find that a course you weren’t that interested in is one of your favorites!”

Christine Murashige '97 has worked as an analyst and a project manager for a real estate developer. She is currently enrolled in the MBA program at Duke University. As an undergraduate, Christine enjoyed the variety of courses that comprised her major in mathematics, with favorites including Number Theory and Non-Euclidean Geometry. She found that, beyond the course material, she learned a lot from the interactions that took place during class. Her advice to current math majors is to “keep your eyes open to all the opportunities that a math background can provide. Some of them (like real estate) may not be so obvious, but the quantitative skills you gain through the math curriculum definitely help!”

Carolyn Metzler '94 went directly to graduate school after finishing her undergraduate degree. She earned her PhD in applied mathematics at Johns Hopkins University in 2000 and had her first child while in graduate school. After finishing her doctorate she took a few years off and had two more children. Carolyn taught for a semester at Johns Hopkins and another semester at Washington College before starting a full time position as a mathematician at the Department of Defense. She reports, “I started off with the intention of becoming a professor, but my life changed and so did my goals. I decided not to pursue a tenure track position while I had small children. With a mathematics background, it was relatively easy to find a job and change careers.” Carolyn’s advice to students considering graduate school in applied mathematics is to take some computer science classes.

Christa Anderson '91 really enjoyed proofs as a math major at Wellesley. She always liked math “and thought it would be fun to have a major with typically small class sizes.” After college she went to law school and is now a litigation attorney in private practice. She says her math background “trained me to think in an organized fashion. It also is helpful because I am not intimidated by cases involving numerical reasoning.”
When she was a law student, Christa reported that her Real Analysis course was the best preparation for law school! She suggests that students interested in law combine math with a minor that stresses writing skills, because of the large amount of writing in legal work. She also recommends that students “call alums for insight or advice, as we really like to talk with students.”

Ellen Maycock ’72 is one of several Wellesley alumnae who are now mathematicians working in an academic environment. She is now a University Professor at DePauw University. She grew up in a family with “a high regard for mathematics” (her grandfather was a mathematician), and was a double major in mathematics and economics. She says “the encouragement I received from the mathematics department at Wellesley made a big difference” in finding her niche in mathematics, and cites Alice Schafer as being “a very important part of my time as a mathematics major.” Ellen earned her PhD at Purdue University. Her advice is that math “is a terrific undergraduate major, one that can open doors for almost any post-graduate plans.” She adds, “Follow your heart! Major in what you love—the rest will follow. Employers want to see someone really engaged and successful in a subject—not a subject chosen because it will be ‘smart’ for a career. Employers can train you in their business.”