When Mount Holyoke first opened its doors, we raised some eyebrows. This was the first institution in the world to offer women the same level of rigorous academics that men received at colleges like Harvard and Yale. That prospect was radical.

This coming year, the College celebrates its 175th anniversary. We still stand out: Mount Holyoke is known globally for educating women of influence. Here, students are challenged to think boldly, seek challenges, and continue our legacy of making history.
Meet the Class of 2015

Hometown: Portland, Oregon

21ST CENTURY SCHOLAR

Likely major: It could be anything from neuroscience to film studies to international relations. At the moment, psychology is most likely.

Quotation: "The most wasted of all days is one without laughter." —ee cummings

Research experience: I spent a summer as a research assistant at the National Center for Rehabilitative Auditory Research in Portland. I learned the process of turning an idea into a grant, a grant into a study, and how a study can make a difference in people’s lives.

Making music: I studied trumpet then my middle school music teacher encouraged me to consider the trombone. She pointed out how few trombone players there are and that even fewer of them are female. Thankfully, I later took her advice.

Favorite jazz song: The first that comes to mind is Duke Ellington’s “Moon over Cuba” but that may have something to do with the fact that it is a wonderful trombone feature.

To-do list: Hike Machu Picchu, go zip lining in Brazil, take a ski tour around America, skydive out of a plane, and eat authentic thin crust pizza in Italy

Why MHC: Initially, the location, size, and academics attracted me. I also loved the idea of a consortium of schools. However, the real reason I chose Mount Holyoke is the people. I love how open minded the campus is.

Hometown: Amherst, Massachusetts

Tackling challenges: I’ve learned to just dive in. Whether I’m starting my least favorite type of workout, a paper I can’t seem to make work, or a challenging social situation, I start before I have a chance to dread it. I hate to lose as much as I love to win, as a result, I trust I will see the payoff of my hard work.

Russian Wrestler: Dan Gable was a wrestler who wanted an Olympic Gold, but knew he would have to beat a Russian powerhouse to get it. When Gable hit a hard workout, he would picture his Russian rival doing a harder workout. That kept him motivated. I first learned this concept at a preseason Ultimate workout my sophomore year. We picked someone we aspired to play like to be our own Russian Wrestler. This strategy has gotten me through grueling training sessions and helped me focus on my goals.

Ultimate Frisbee: I play Ultimate for the physical prowess it demands. Games are fast-paced, intense, physical, and competitive, and people are expected to be in great athletic shape. I also play Ultimate for the camaraderie and sportsmanship I find in Ultimate—and I’ve played a lot of sports.

Why MHC:
1. I wanted a change in scenery, in people, in everything.
2. I fell in love with the equestrian program.
3. I wanted the completely new experience of a women’s college.
4. I saw what alumnae do with their lives.

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"Your welcome letter found me all engrossed in the history of Sulfuric Acid!!!!!!" The excited chemistry student was the 17-year-old Emily Dickinson, writing to her brother, Austin, from Mount Holyoke. She was two weeks into her second term, February 17, 1848, and her teacher was Mary Lyon herself, a trained chemist, during her final year of teaching at the innovative school she had founded 11 years earlier. Dickinson’s textbook was Silliman’s Chemistry, as she called it, by the pioneering Yale scientist Benjamin Silliman, a friend and associate of Lyon’s own mentor, the Amherst geologist Edward Hitchcock. Dickinson was getting the best scientific education money could buy, and she was excited about it.

It’s worth reflecting on what exactly Dickinson drew from her education at Mount Holyoke. Like other small colleges in the region, including Amherst and Yale, Mount Holyoke was beginning its momentous shift from its narrowly religious beginnings to an engagement with what we now recognize as the liberal arts. In her letters home, Dickinson proudly listed her subjects of study: chemistry, physiology, algebra, astronomy, rhetoric (lots of Alexander Pope), and so on. She also practiced the piano, as she put it, “only one hour a day.”

Engaging with such a rich offering of study, Dickinson gained a highly sophisticated sense of the complexity of the modern world. She was fully aware, for example, of the growing tension between religious explanations of the world and newer, more scientific ideas, culminating in the debate over Charles Darwin’s theory of evolution. “Faith is a fine invention / When gentlemen can see,” she later wrote wryly, “But microscopes are prudent / In an emergency.” In her great poems, she often found metaphors in recent scientific discoveries. Recently, in a course I teach on Dickinson’s year at Mount Holyoke, in which all participants pursue original research in the Mount Holyoke Archives and Special Collections, Alice Obar ’12 explored Dickinson’s excitement about the newly isolated element iodine, with its rich purple color. Iodine entered her poetry—or stained it, one might say—in her description of the sunset as “harrowing iodine.”

What most strikes a reader today in Dickinson’s letters home from Mount Holyoke is not her discomfort with religious strictures, though there is certainly some of that late in her time at the school. Instead, it is her dawning excitement about her expanding intellectual horizons in the classroom. “Miss Lyon is raising her standard of scholarship a good deal,” she wrote proudly. Meeting that high standard made Dickinson feel that her own words, her own emerging and powerful voice, mattered. That’s the voice we hear in her letter about the thrill of sulfuric acid.

Dickinson increasingly learned, as she put it in one of her greatest poems, to dwell in possibility: “I dwell in Possibility / A fairer house than Prose.” In doing so, she found a new name for poetry, but also a new name for a liberal arts education, as valuable for an ambitious young woman in 1848 as it is today.

Christopher Benfey is the Mellon Professor of English and interim Dean of Faculty. He is a prolific critic, essayist, and author whose current research concerns New England literary and visual culture during the Gilded Age.
In a corner lab on the lower level of Shattuck Hall, a group of student researchers spent the summer exploring ways to fuel the future. Formally known as the Next Generation Solar Cell Fabrication and Characterization Laboratory, this brand-new, one-of-a-kind facility was designed by Alexi Arango, assistant professor of physics, to create third-generation solar cells. These cells, which use unconventional semiconducting materials, have the potential to yield solar energy systems that are dramatically more efficient and considerably cheaper to produce.

When Sri Lalithya Uppalapati ’14 arrived at Mount Holyoke from India last fall, she enrolled in a first-year seminar on renewable energy taught by Arango. The class convinced her of the need to rethink technology and how energy is used. “That’s what Professor Arango’s lab is trying to do—and I wanted to be part of it,” she said.

This summer, Uppalapati joined Arango’s team as a participant in the Howard Hughes Medical Research Institute (HHMI), a competitive program that provides aspiring scientists with lab experience and mentoring early in their academic careers. “I have always wanted to be a physicist,” she said. “I chose Mount Holyoke because it offered an environment where being a woman scientist is the norm. Even the College’s founder, Mary Lyon, was a chemist.”

Likewise, the other students on Arango’s research team are physics majors, but not exclusively. Sophia Weeks ’13 is a physics and philosophy double major from Portland, Oregon. She began working in the lab after taking an introductory course on electromagnetism and circuits with Arango. “When I heard about his research, I thought, ‘Ah, solar cells—that’s going to change the world,’ ” said Weeks. She adds, “The idea of light becoming voltage also appeals to me in a philosophical way. I expect my philosophy studies to help me theorize once I get into quantum and relativity theories.”

Arango’s team, which also included Kanchi Gashaw ’13 and Maggie Stevens ’14, assisted with every aspect of the lab’s construction. In addition to calibrating sophisticated equipment, they created and modified solar cell designs using three-dimensional CAD software. Along the way, the team read research studies on electron behavior in quantum dots, molecular dyes, and other unconventional semiconductors.

“I’m all about clean energy, and the physics of quantum dot technology really interests me,” said Weeks. “I feel like I lucked out getting a spot as a researcher in Professor Arango’s lab.”

Both in the classroom and the lab, Arango is—according to Uppalapati—“a perfect liberal arts teacher.” She explained, “His specialty is physics but he connects it to other disciplines. He puts what we are learning in a larger context and challenges us to consider environmental, economic, and political realities across the globe.”

Emily Tansey ’13, a physics major and environmental science minor from Malverne, New York, agrees that Arango is a remarkable teacher and mentor. Tansey worked in Arango’s lab throughout the spring semester and spent the summer researching proton exchange fuel cells—a green storage method—at the Colorado School of

**Best of the Best in Physics**

- **Alyssa McKenna ’12**: Goldwater Scholarship
- **Abbey Goldman ’10**: Fulbright Research Grant, Israel
- **Kathryn Greenberg ’09**: Gates Scholarship, Cambridge; National Science Foundation Graduate Fellowship, Harvard

Recent alumnae are pursuing graduate studies in physics at: Harvard, MIT, Yale, Stanford, and University of Michigan

For 175 years, women have come to Mount Holyoke in pursuit of opportunity and excellence. That’s our legacy; it’s what we do. Here’s an example of how...
Mines. “Professor Arango is definitely an expert about solar energy technology,” she said. “We’re getting an immersion in everything from the engineering of a solar cell to the economic feasibility of photovoltaics.”

Phoebe Tengdin ’13, another member of Arango’s team, also spent her summer in Colorado. Tengdin conducted research in space physics at Colorado University Boulder through the National Science Foundation’s REU (Research Experiences for Undergraduates) program. Her particular project analyzed electron density measurements from satellite data to better understand the magnetic field around the earth. “Although this topic is unrelated to the work that I do in Professor Arango’s lab, having a background in different fields of physics will serve me well. Physics is a diverse subject. Delving into multiple research projects as an undergraduate helps me better define my interests.”

Looking ahead, Arango’s student researchers not only see the limitless potential of solar cells but also the bright light of possibilities. “Women in physics are a minority,” Uppalapati acknowledges. “Mount Holyoke gives me confidence that when I go into a workplace, my capabilities will speak for themselves.” said Uppalapati. “It’s a great place to become a scientist.”

ALEXI ARANGO | ASSISTANT PROFESSOR OF PHYSICS
Research Area: Third-Generation Solar Cells
Education: Ph.D, Massachusetts Institute of Technology; B.S., University of California, Santa Cruz
Joined MHC: 2010

THE BASIC IDEA:
Current solar cells and present technology are perfectly adequate. The potential, however, of some new semiconducting materials to further solar energy’s impact is extremely alluring. In my lab, we’re using them to create solar cells that are easy to manufacture and can be implemented in innovative ways. Molecular dyes, for example, could potentially allow us to print solar cells on large fabrics to make a football field-size solar module that, when rolled off the edge of a skyscraper, creates an instantaneous solar power plant. We’re also experimenting with quantum dots, which are tiny spheres of semiconductor that are only a few tens of atoms in diameter.

THE CONTEXT:
During the past decade, there has been an explosion in the number of solar cells installed worldwide and it will continue until it becomes difficult both to find space to put the solar cells and to keep up with manufacturing demand. That’s exactly why we’re taking a long-term view—this research envisions the solar landscape in ten to twenty years.

THE LAB:
When I left MIT, my colleagues were a bit jealous that Mount Holyoke students would have access to this type of facility. I don’t think any other research institution in the country has a lab quite like this. I designed it solely for creating and testing solar cells. The lab features a glove box that has state-of-the-art ability to spin-coat, thermally evaporate, and deposit materials. A team of student researchers helped with every aspect of the lab’s construction.

THE ADVANTAGES:
The solar cell industry is rapidly expanding and few scientists have been trained in solar cell physics. To enter a graduate program already knowing so much about this science and having experience with such sophisticated equipment will put Mount Holyoke students a big step ahead. They’re also gaining tremendous skills that can transfer to a range of technology fields. For example, we are using complicated CAD software to design parts of the equipment; it’s industry standard for manufacturing. I remind students that with these skills, they could design a car that actually could be built.

THE MATTER OF GENDER:
As an undergraduate, I was mentored in experimental physics by a female scientist. It’s always been my experience that women do science, but that is not true statistically. I came to Mount Holyoke because it’s a fantastic opportunity to work with smart women and encourage their aspirations. I also believe that some of the fundamental imbalances of our times, such as ecological destruction and risky behavior in financial sectors, can be traced back to gender and ethnic inequalities among our leadership. Mount Holyoke is helping right that by offering women the preparation and confidence to lead.

For more on physics at MHC: YouTube/mountholyokecollege.
**Affording Excellence**

**FACTS AND TIPS FROM STUDENT FINANCIAL SERVICES**

We know that choosing a college is, first and foremost, about finding the right fit. When a student finds the college that fits her intellect and personality, she’s positioned to thrive, both academically and personally. And that, of course, is what every parent wants for his or her child.

It’s very possible that Mount Holyoke College, with its first-rate academics and inspiring community, will turn out to be the right fit for your daughter. Should that be the case, we want you to know that we have a great deal of experience working with parents whose daughters have fallen in love with this remarkable institution. We want to help make Mount Holyoke affordable for you.

Our office is called Student Financial Services (SFS). We’re the ones who handle all aspects of financing an MHC education, from reviewing financial aid applications to counseling students and parents about financing plans. SFS is a resource for all students, whether or not they’ve applied for financial aid. We appreciate that each student’s financial situation is different, and our efforts are directed toward helping families find the financing plan that’s right for them.

As an introduction to SFS, we’ve put together a short—but important—list of facts and tips for parents whose children are embarking on the college admission process.

1. **A Mount Holyoke education is affordable.** Through a combination of need-based aid, merit awards, and judicious disbursement of federal and state loans, we have made Mount Holyoke an investment families can afford. Currently, around 70% of Mount Holyoke students receive need-based financial aid.

2. **Begin by utilizing the Net Price Calculator (NPC).** By using Mount Holyoke’s NPC, you will get an estimate of the family contribution and what financial aid could be available for your daughter based on the income and assets of your family. While no Net Price Calculator can guarantee financial aid results, we do incorporate both need-based and merit-based estimates for students from all economic backgrounds to best approximate results.

3. **Apply for need-based aid.** To apply for need-based aid, submit the College Board PROFILE by the application deadline. We also require the Free Application for Federal Student Aid (FAFSA) for domestic students, but we use the PROFILE to determine institutional eligibility. You don’t need to apply for merit-based aid—Admission reviews everyone for eligibility—but if there’s a chance you’ll have eligibility for need-based aid, please apply.

4. **Ask questions.** Many questions are answered on our website and in our videos (www.mtholyoke.edu/sfs/), but we encourage you to ask us whatever is on your mind. Whether you need further explanation about how we determine family contribution or have questions specific to your situation, we’re here to provide information.

5. **Make us part of your campus visit.** SFS is located on the lower level of Skinner Hall, Room 16. Our office hours are 8:30 AM—5:00 PM, Monday–Friday. Call us at 413-538-2291, 9:00 AM—4:00 PM weekdays.

6. **Let us know about special circumstances.** If there have been significant changes in income since you completed the PROFILE, or if you have special circumstances that impact the availability of household income, such as longer term loss of income, significant unreimbursed medical expenses or support for elderly relatives outside the household, we will review those circumstances to see if there is an impact on the calculated family contribution.

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**Parent Chat | We’re taking your questions!**

**Wednesday, November 9, 7:30–9:00 PM [Eastern Time] at www.mtholyoke.edu/go/chat**

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**Financial Aid Terms Explained**

- **Assets:** Your family’s financial worth, including real estate, businesses, stocks, bonds, and cash savings.
- **Income:** Income used to calculate financial need includes all taxed and untaxed income.
- **College Board PROFILE:** The financial aid application used to determine institutional eligibility for need-based aid.
- **Expected Family Contribution (EFC):** The amount calculated by a federally mandated formula using information provided on the FAFSA to determine eligibility for federal aid.
- **Total Family Contribution (TFC):** The amount calculated by an institutional formula using information provided on the PROFILE to determine eligibility for institutional aid.
- **Calculated Financial need:** The difference between college costs and your Total Family Contribution (TFC).
- **Financial Aid Online:** A tool students can use to learn about their financial aid application, including the status of documents or their financial aid package. It also includes links to applications and forms. Financial Aid Online is separate from Mount Holyoke’s Student Information System (ISIS); we encourage students to share the log-in to Financial Aid Online with parents or guardians who are helping with the aid application process.
- **Grant:** Financial aid that does not have to be repaid. Eligibility is usually based on calculated financial need.
- **Financial Aid Package/Financial Aid Award:** The total financial aid offer that a college makes to a student. It consists of one or more types of aid such as grants, loans, and work-study.
- **Scholarship and Merit Awards:** An award given on the basis of grades or other academic achievement rather than financial need. It does not have to be repaid.
- **Student Loans:** Loans in the student’s name, generally deferred until the student is no longer enrolled at least half time. Subsidized student loans are interest free while the student is enrolled at least half time. Unsubsidized loans accrue interest while the student is enrolled.
- **Work-study:** Part-time jobs, either on or off campus, that allow students to earn money for college expenses.
Meet the Class of 2015

**Meet the Class of 2015: Poorna Swamne**

**Hometown:** Bangalore, India

**Career aspiration:** Not set in stone. A teacher once told me, ‘The things that you want to do most in life will take you by surprise.’ Delving into different experiences—books, lectures, internships, fieldwork—is my way of waiting to be surprised.

**Recent theatre experience:** This summer I worked with a theatre project called Fewer Emergencies, doing production work and acting. I loved running around to the remotest markets in the city to source production materials, building sets till the wee hours of the morning, and simply standing onstage, suspended in performance before an audience.

**Photography and documentary filmmaking:** When I made my first film (a documentary on music in Bangalore), I found that I could understand people’s tales from their point of view and also retell them memory. That feeling of being involved and detached at the same time draws me to the camera again and again. Photography and film are also an adventure of sorts—there is an uncertainty and a thrill in capturing a moment before it is no more.

**On processing honey:** I’ve had hands-on experience in processing and packaging honey with two different NGOs—Keystone (based in the state of Tamil Nadu) and Kaigal Education and Environment Programme or KEEP (based in the state of Andhra Pradesh). Honey collection is a sustainable and important source of income for many tribal people. In fact, their traditional methods of honey collection are so sustainable they do not harm bee populations and are carried out in tandem with the seasons and phases of the moon. I also ate the best honey I have ever tasted—straight from the honeycomb!

**What I’m reading:** River of Smoke, by Amitav Ghosh. It’s a historical novel about the opium trade in nineteenth-century Asia. I am really enjoying the read, and the fact that he is coming to the Odyssey Bookshop in October [just across the street from campus] is making me doubly excited!

**Likely major:** Possibly neuroscience; definitely premed. I don’t want to close off my mind to other possibilities that also might spark my interest.

**Recent internship:** For the past eight months, I’ve worked at the J. David Gladstone Institute of Cardiovascular Disease at University of California, San Francisco researching micro genetics of congenital heart disease. I’m studying fruit flies to detect what protein structures directly correlate to heart failure.

**Most delicious summer:** When I visited my family and friends last summer in France, I decided to learn French pastry from the best by enrolling in the Cordon Bleu of Paris. For weeks I took the Metro to the 15th arrondissement to study the secrets of classic French delicacies. Learning to cook in French with top chefs was truly a treat!

**On trying new things:** In high school, I decided to step outside of my comfort zone and try a new club that would both teach and excite me. The Cosmic Ray Club did just that [they built a sub-atomic particle detector]. Also, I’ve always been a reluctant runner, and track and field was a sport that I never imagined I would do. So I joined the team and ended up loving to run!

**Riding lessons:** All I wanted to do when I was younger was spend time with my horses, ride, and show on the California circuit. After nine years spent with these giant animals, I gained a sense of confidence that has helped me to muscle through difficult and embarrassing times (such as falling off in front of many spectators) both within the sport and in my daily life.

CONTINUED FROM PAGE 2
The 2012 Princeton Review says Mount Holyoke offers one of the best undergraduate classroom experiences in the country on one of the most beautiful campuses.

Julie Salamon’s new biography of Wendy Wasserstein ’71, Wendy and the Lost Boys, is receiving critical acclaim across the country for its insight into the late playwright’s life.

Lila Khan’s ’10 art was exhibited this summer with veteran artist Humeira Ghamari’s work in Islamabad, Pakistan.

John Stomberg, former deputy director and chief curator of the Williams College Museum of Art, became director of the MHC Art Museum on August 1.

Inspired after meeting the CEO of Dress for Success, Scarlett Montenegro ’14 is organizing a campus Dress for Success event featuring career attire and advice.

MHC President Lynn Pasquerella threw out the first pitch on July 7 at Fenway Park. She was joined by former crew captain Emily Carol ’11.

In August, the U.S. State Department called on Holly Hanson, Professor of History and African and African American Studies, to discuss the volatile political situation in Uganda.

Lindsay Scats ’11 won the Cacchione Cup at the 2010 Intercollegiate Horse Show Association’s Nationals: the highest individual accolade bestowed by the IHSA. The Colorado native attends the Stanford University Medical School.

Meredith Monk (above right), hailed as a “magician of the voice” and “one of America’s coolest composers,” was MHC’s 2011 Leading Woman in the Arts guest artist-in-residence. Watch a video of her workshop, “Dancing Voice, Singing Body” on the MHC YouTube Channel.

Fulbright winner Casey Brienza ’03, a doctoral student in sociology at the University of Cambridge, penned a commentary on a study of violence in cartoons for the U.K.’s Telegraph.

Diana Katz ’12, a film studies major and art history minor, spent her summer working as an intern at the Weissman Preservation Center of the Harvard Film Archive. Katz describes the summer as “an extraordinary learning experience.” In addition to developing impressive film preservation skills, she attended the Northeast Historic Film Symposium where, she says, “I met many industry professionals and professors who I look forward to contacting for my own research.”