Learning in Three Dimensions

By Nicole Bruce ’17

T
wo years ago, John Donkersloot ’11 came to Hope College looking for a place that would allow him to pursue an education in his own way, as a three-dimensional person, committed to academics, athletics, and the arts. Given the large dimensions of his life, that desire is proving to be a tall—and exciting—order to fill. He is finding Hope the ideal fit for his varied interests, all the more because the desire is proving to be a tall—and exciting—choice. He had applied to nearby Hope more however, he became less sure, and the night before Hope’s deposit was due, he spent four hours deep in thought. When he emerged, he told his father, “I think I’m going to Hope,” and the next day drove from his room, he discovered for research, the rapport he found with faculty, and his growing interest in chemistry all led to his current academic track. Now, in the summer after his sophomore year, Donkersloot is studying the behavior of an organism called Giardia lamblia in order to learn more about how it modifies and expresses different genes. Under the supervision of Dr. Mike Pikaart, he is conducting original research funded by a Beckman Award, Hope’s most prestigious internally given science honor. The passion Donkersloot’s research throughout this summer, the upcoming academic year, and the future after that will be dedicated to the task at hand. As a pianist, he has already been featured in a variety of venues at Hope, including as a soloist during the all-department Musical Showcase presented at DeVos Hall in Grand Rapids in the spring.

Donkersloot is delighted when he experiences the same feeling in the chemistry lab—“A lot of the time, things go wrong, so it’s great when they go right”—and when practicing for the high jump, an event in which recently he was named an All-American. “I love the accomplishment you feel when you clear a height or have a good jump,” he said. “That’s what makes it worth it. You do all that training for one split second.”

He is willing to practice for the prestige of experiencing the perfect lab test, somata, or high jump, and when he considers his first two years at Hope College, he finds himself looking back on numerous people who encouraged him to set his educational course by those ideals.

“It’s a very self-directed thing here at Hope,” he said. “At this level, with those great people, I think that’s how it should be.”

Donkersloot says that he inherited his own work ethic from his dad, and believes that good work is never done in vain. “Sometimes it feels like it is, but if you’re then, putting forth effort and doing the right thing, you shouldn’t be surprised when you eventually do well.”

Musing on his next two years—and the years after that—he says that Hope has helped prepare him for the future he might imagine for himself. He plans to play the piano for life. He can funnel his tenacious curiosity into multiple outlets. His interest in medicine has expanded to include a fascination with chemistry, and his growing research experience will make him an excellent candidate for dual M.D./Ph.D programs. Yet Donkersloot is keen to show up for the present moment, take ownership of it, and wait for it to yield something.

“I’ve always known that this is my life, and it’s going to be what I make of it,” he said. “My parents and professors have laid the foundation—now I have to put in the work.”

As he began his senior year of high school, Donkersloot found that Division I and NAIA schools wanted the 6’7”, all-state high jumper—to join four track and field programs. And while he knew he wanted to compete, Donkersloot didn’t know where to go. As an accomplished pianist, he wondered how much time he could devote to his music if he participated in a Division I athletic program. Academically, he was becoming interested in chemistry, but not enough to determine his choice. He had applied to six colleges, more as a measure of prudence and to honor family ties—his grandmother (Emily Bookvoort ’47 Donkersloot) and father (Jim Donkersloot ’76) are alumni, and his brother (Steve Donkersloot ’10) was already a student—but Donkersloot had never actually imagined attending Hope himself. In the end, Donkersloot was resolved—or nearly so—to head out state on a track scholarship. As the deadline approached, however, he became less sure, and the night before Hope’s deposit was due, he spent four hours deep in thought. When he emerged from his room, he told his father, “I think I’m going to Hope,” and the next day drove to Holland, delivering the deposit during his lunch period.

It was a good choice. Once enrolled, he took a number of science classes required for the pre-med program, including one in general chemistry. Realizing that he enjoyed it, he took more courses and applied to conduct summer research with Dr. Mike Pikaart in the department of chemistry. The passion he discovered for research, the rapport he found with faculty, and his growing interest in chemistry all led to his current academic track. Now, in the summer after his sophomore year, Donkersloot is studying the behavior of an organism called Giardia lamblia in order to learn more about how it modifies and expresses different genes. Under the supervision of Dr. Pikaart, he is conducting original research funded by a Beckman Award, Hope’s most prestigious internally given science honor. The passion is awarded by the Arnold and Mabel Beckman Foundation to recognize undergraduates excellence in the sciences. It is supporting Donkersloot’s research throughout this summer, the upcoming academic year, and the summer of 2010.

Donkersloot enjoys the discovery and variety that accompany the work. On any given day, he might run a gel test, culture and analyze Giardia lamblia proteins, or develop a new experiment to compare the organism’s chemical language to that of other cells with DNA-packed nuclei. “Research is great. It’s logical—you can look at your results and make sense of them. It’s also hands-on. And you’re trying to figure something out with great people,” he explained, “so it’s fun.”

Dr. Pikaart believes that Donkersloot is an excellent collaborative partner because he sustains an irrepressible curiosity and couples it with a strong dedication to the task at hand. “John does things 100 percent. Regardless of the subject, he wants to know all there is to know about it and then some,” he said.

Donkersloot’s curiosity and self-driven approach aren’t exclusive to the lab. As a pianist, he has earned a spot in Hope’s Concerto/Aria competition, performed as a soloist in various concerts (including the annual DeVos Musical Showcase), and was chosen to participate in a master class with Russian pianist Yuri Honnen. Despite the accolades, however, he is not majoring or minoring in piano performance. Instead, he meets with Dr. Andrew Le, assistant professor of music, for lessons to help him improve what he calls “my big, big hobby.” Dr. Le stopped assigning music after his first year, and Donkersloot now proposes the pieces he finds intriguing. As a sophomore, he explored work by Sergei Rachmaninoff, whose long lines and unique harmonics caught his ear. This year he’d like to learn Schubert’s C-minor Sonata and Beethoven’s C-minor Variations. With each piece, he practices for the moment when the notes flow from the piano perfectly, unhindered by error or over-sensitivity. “When you get that tough passage right after playing it slowly so many times, all you can think is, ‘Yes! Yes!’ and let it fly,” he explained. “It’s a great feeling.”