

MUSIC IS LIFELINE

BY ANJUM NAYAR

Juno nominee Chris Donnelly's musical roots run deep at the University of Toronto.

Donnelly is a renowned jazz musician whose success is very much tied to the university. He studied music here and now teaches other music students here as well. His first album, recorded at U of T, was nominated for a Juno Award earlier this year.

"My relationship with U of T has always been positive because I could always do and pursue whatever I wanted here," said Donnelly, who is now on the faculty in the jazz performance division at the Faculty of Music. "There were always people that I could talk to here to nurture me."

"I was always studying music even before U of T," he noted.

In fact Donnelly says he's had music on the brain since he was in high school, when he was concurrently enrolled in a special music program at Humbler College.

"I tomorrow I woke up and I couldn't do music, I'd be pretty lost."

Today Donnelly has found his way in the world through music success. He is a Toronto-based pianist, composer and improviser known for his musicality and versatility. He did his undergraduate work in jazz performance, allowing him the opportunity to perform in master classes alongside top international musicians such as Kurt Elling, Lee Konitz and Rich Perry.

After completing his master's degree at U of T's Faculty of Music in 2007, he recorded his first album in Walter Hall. He has performed with numerous Canadian artists including Brad Turner, Heather Bambrick and Andrew Downing and has been on stage in concert halls throughout Toronto, such as Roy Thomson Hall, CBC's Glenn Gould Studio and the new Four Seasons Centre for the Performing Arts. Donnelly said he enjoys playing a solo piano repertoire consisting of originals, jazz standards and other compositions with cross-

genre qualities.

In 2008, Donnelly released his Juno-nominated debut album, *Solo*, with Alma Records, featuring a blend of original material and arrangements of jazz standards.

"I was in the company of such great Canadian talent, it's such an honour to have been nominated," he said at the time.

Professor **Russell Hartenberger**, dean of the Faculty of Music, isn't surprised by Donnelly's success.

"Chris in particular has such a positive attitude towards life and music-making that he's the kind of guy you want to make music with and have in any group and so I knew right off the bat that he was really an exceptional case," Hartenberger said.

Not only is Donnelly an excellent musician, he's a good teacher who believes there are key qualities that are important when teaching other students.

"I try to be as honest and non-judgmental as possible," Donnelly said. "Students know you're being genuine and they genuinely appreciate that."

Tyson Kerr, one of Donnelly's students couldn't agree more.

"He's very positive and knows what they need to work on, and so taking that active role in addressing the individual needs of a student for me is a really strong motivator," said Kerr.

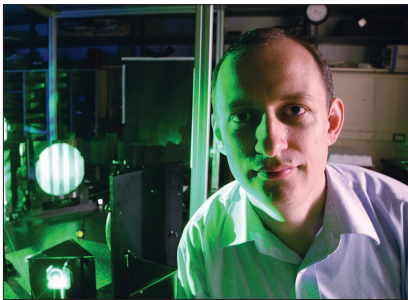
Donnelly said he hopes students will continue to be inspired through his teaching, learning not only about music but about tools for furthering their own learning.

"You don't give students all the answers, you show them a little crack in the door and sometimes you don't even show them how to open the door because if they are given all the information they're not going to be able to create a program for learning for themselves," Donnelly said. "I would say that the most important thing I could relay to my three students is that when they leave U of T, I want them to be able to teach themselves."



Juno nominee Chris Donnelly teaches at U of T's Faculty of Music. Watch him on video at <http://www.youtube.com/watch?v=qVfKneuzNU4>

New collaborative course teaches the art and science of holography



Professor Emanuel Istrate is illuminated with the light from holographic lasers; below, his image is reflected in a mirror used to generate holograms in the laboratory.

BY TAMMY THORNE

High-powered lasers, intricately mounted mirrors and a table that floats... It could be the set up for a magic show but it's actually a description of the holography lab nestled within the 4,000 square feet of laboratory space at U of T's Institute for Optical Sciences, housed at the McEwen Physical Laboratories.

Thanks to a unique partnership between the institute and the Ontario College of Art and Design, 15 OCAD students and 15 U of T students from all disciplines — including science, philosophy, semiotics and architecture — learned how to create holograms this spring. These students are the first in Canada to literally learn the art of holography in a scientific setting, a course called Holography for 3-D Visualization taught by Professor Emanuel Istrate.

The course was first offered in the spring of 2007 and became a collaboration with OCAD this year.

Essentially, holography is a technique that allows light scattered from an object to be recorded and later reconstructed to appear as if the object is in the same position as when it was recorded.

The image changes as the position of the viewer changes making the hologram appear

three dimensional. Holography is used for security purposes (such as the holographic stripe on Canadian paper money), in 3-D medical imaging, by archeologists who don't want to erode precious artifacts and as a precise measurement tool for engineers. Istrate said the most important future use of holography may be in data storage.

"When they record the hologram, it's like taking a photograph. Really what this plate with the photographic film does is act like a window with

memory," said Istrate, who teaches and co-ordinates the program. Besides the special holographic film, it is the physics of interference and diffraction that is behind the magic of holograms. Interference is when two wave forms interact.

Diffraction is when a wave encounters an object and bends around the object into the shadow region behind it.

"The physics of interference and diffraction works beautifully to create holographic images

but these phenomena are used in many other places as well. Our cell-phones must take interference into account

since radio waves and optic waves use the same principles. Diffraction can be used by two people with radios who are living on either side of a mountain — we can deflect those waves and send them to the other side of the mountain," explained Istrate, who did his PhD in electrical engineering at U of T.

Teaching holography using art as the medium makes it more accessible, Istrate said, and easier to teach. It helps students realize that "science is not threatening."

The course was a hit with artists and scientists alike. Istrate said it is the first time he's seen undergraduates ask to do more work after the course was over.

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PROFESSOR EMANUEL ISTRATE

