

At a Crossroads: Pixar researcher puts interdisciplinary research on center stage

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The University of Maine prides itself on its interdisciplinary approach to education. But more often than not, a divide is apparent between the disciplines: Engineers over here, art students over there, with science somewhere in between.

But now, with the efforts of the departments of New Media, Art, Engineering and the Sciences, those distinct lines are beginning to blur.

Thanks to a visit on March 21 from Tony DeRose, Senior Scientist and lead of the Research Group at Pixar Animation Studios, students were treated to an encouraging talk about the importance of interdisciplinary education and research.

“I’m hoping what we get out of it at UMaine is the recognition that interdisciplinary is great and we can all work together, and get inspired by some of the things Pixar has done and have it happen here,” Kate Dickerson, a research associate for the Margaret Chase Smith Policy Center at UMaine and director of the Maine Science Festival, said. “He used to be in a campus setting and now he’s at Pixar Animation Studios. It’s just this great story that he’s able to tell.”

DeRose, whose work primarily deals with creative problem solving using engineering, artistic and scientific models, was the headlining speaker of the Maine Science Festival, a three-day festival in Bangor highlighting the importance of science in everyday situations this past weekend.

“The talk at the Maine Science Festival is really to start to tell the story about how the math and science students are learning in middle school and high school classrooms, for instance, are being used all the time at Pixar for a creative benefit,” DeRose said. “So, really trying to answer the question, ‘When am I even going to need this stuff?’”

Students at the University have found out when they’ll need that “stuff.” Several students presented their interdisciplinary research to DeRose and an executive committee at a luncheon on Friday, March 21.

Jill Pelto, an art and earth science student, was one of them. Her proposed research will integrate art as a model for mapping climate change.

“I’m looking to really integrate the arts and sciences and the work that we’re doing over in the Climate Change Institute on campus, and show the importance of these changing ecosystems and the way that they’re changing in response to climate change, and how you can use art to communicate that and express that,” Pelto said.

Other students are using three-dimensional models to improve the quality of life.

“I’m really integrating the aspects of portability, versatility, and interactivity in furniture design,” Ryan Wahle, a new media student said at the luncheon.

Wahle, who is working on a hexagonal-shaped device that at the touch of a button can transform into either a table or chair, is excited to work with and get feedback from industry professionals like DeRose.

“I think it’s important to definitely get different viewpoints on my project from various professionals in different fields and I think that will be very beneficial in developing this,” Wahle said.

“[This is] a way to tell a story together and research different things together because they bring different perspectives and different ideas, and you get bigger answers that way,” Dickerson said, discussing the importance of interdisciplinary research.

As for DeRose, he is pleased this kind of progress is underway at a university typically off-the-radar of companies like Pixar.

“UMaine isn’t a school we deal with a lot,” he said. “I’m already seeing things that are really sparking a lot of ideas in my mind, particularly around the degree to which maker spaces and multidisciplinary shops are really taking hold around campus. It’s really exciting.”