



April 2021

## Q&AI: Provost Margaret McFadden discusses the new Davis Institute for Artificial Intelligence and how the liberal arts can shape the future of AI

Laura Meader  
*Colby College*

Follow this and additional works at: <https://digitalcommons.colby.edu/colbymagazine>



Part of the [Engineering Commons](#)

---

### Recommended Citation

Meader, Laura (2021) "Q&AI: Provost Margaret McFadden discusses the new Davis Institute for Artificial Intelligence and how the liberal arts can shape the future of AI," *Colby Magazine*: Vol. 108 : Iss. 1 , Article 7.

Available at: <https://digitalcommons.colby.edu/colbymagazine/vol108/iss1/7>

This Feature is brought to you for free and open access by the Colby College Archives at Digital Commons @ Colby. It has been accepted for inclusion in Colby Magazine by an authorized editor of Digital Commons @ Colby.

# Q&A I

Provost Margaret McFadden discusses the new Davis Institute for Artificial Intelligence and how the liberal arts can shape the future of AI.

**Following the announcement in January of a \$30-million gift from the Davis family and trustee of its charitable foundation Andrew Davis '85, LL.D. '15 to establish the Davis Institute for Artificial Intelligence, the first of its kind at a liberal arts college, Provost and Dean of Faculty Margaret McFadden sat down with *Colby Magazine's* Laura Meader to better explain the institute and its developing academic program.**

## ■ What do you hope the Davis Institute will accomplish at Colby?

One of my colleagues said something that I thought was spot-on, which is that we want this institute to bring AI (artificial intelligence) to other fields across the curriculum and also want to bring other fields to AI.

We're thinking about how AI tools can advance faculty teaching and scholarship in really beneficial ways. We can help people build or learn to use these new tools that may allow them to ask and answer new kinds of research questions or teach in new ways. We want to make sure students have a strong grounding in this field that is transforming our society, as they work with faculty. And we're thinking about the ways that access to AI tools, and understanding of all the social and ethical impacts of these tools, will enable students to be prepared to go out into the world to solve problems, to raise essential ethical and social questions, and to envision ways to use these tools to bring a more just and equitable world into being. And we hope that as we figure

all this out, we will be able to share our knowledge with faculty and students from other liberal arts colleges.

### ■ How, then, do the liberal arts fit into this technology?

What we have at Colby is expertise in all the different disciplines, in the breadth of the liberal arts. AI raises so many questions about what it means to be human. It also raises enormous social and ethical and philosophical questions, and many fields have a lot to say about the issues that surround the use of AI technologies. We want to be sure our students have the technological skills they need, but also that they are learning to think about technology in varied contexts, using the interdisciplinary critical thinking skills that come from a broad and deep liberal arts education.

### ■ So not only computer scientists have a vested interest in the institute?

I just came off a call with the search committee for the founding director, and we had faculty committee members from English and philosophy and sociology and psychology and biology there with computer scientists. I think that's really what's exciting about this model—the diversity of places where AI could really be beneficial to research, teaching, and students' education.

### ■ Can you give me an example?

Megan Cook (associate professor of English) was talking about English professors and their interest in natural language processing, the ways computers

work with language. But she also talked about the ways that people in many humanities disciplines, including English, are somewhere between wanting to adopt these tools ... and being very concerned about the way AI has rolled out thus far. So it's remarkable that in literary studies you can train a machine to read thousands of books that you couldn't possibly ever read yourself. Imagine what we might learn from that. And then imagine doing that work at the same time you're analyzing and critiquing those tools and making sure that your students understand both the uses and potential misuses of the tools in context.

### ■ How would such a dataset be acquired?

Yes, it's a great question, and I think the institute is exactly the place to enable this kind of work. So maybe you're a faculty member and what you need to do is come to the institute and learn how to use these tools of textual analysis. Or maybe what you need is the institute to help you acquire a dataset of all the texts you want to analyze with machine learning. Or maybe the institute is the place where you can come together with colleagues with similar or related interests.

### ■ Together in what way?

I will say the thing that was most remarkable to me, and it's one of the things I love most about Colby, is every single person from the faculty who is talking about this initiative was excited about the possibilities of collaboration across disciplines. For example, Veronica Romero (assistant professor of psychology) works with children with

“

Questions of ethics have got to be at the heart of this institute, in a really fundamental way. And I think if we build that at the center, we will build something spectacular. Because computer scientists care about that just as much as philosophers or American studies professors or sociologists or biologists. Everybody has that in mind.

autism. And she's interested in the way children with autism speak. Could you use an AI tool to understand whether somebody had autism on the basis of the way they speak, as compared to other people who don't have autism? So is there a place where Megan Cook's interest in language and Vera Romero's interest in language could come together in some productive and exciting way?

**■ Colby is known for collaborative work, but does this have potential as we've never seen before?**

Absolutely. It's so exciting to think about the possibilities here because we're building something completely new. We do have this culture of cross-disciplinary work and strong interdisciplinary programs that have built up over decades—it's pretty much in the DNA of the place. But I also think we're starting to imagine whole new ways that people can collaborate.

**■ What about students?**

I think we all understand that artificial intelligence is transforming every aspect of society, and often in ways that are completely invisible to us. So, I think it's essential, if we're going to provide an exceptional liberal arts education, that we make sure that our students understand this incredibly powerful and potent set of tools. And understand the field. Because they're going to be people who are using these tools. They're going to be people who are in leadership roles. They're going to be people who are making decisions about how to solve problems.

Does everybody need to be an engineer? No. But does everybody need to understand conceptually what's going on and what its implications are? I think absolutely.

**■ So how and where will students encounter AI in their classes?**

My view is it will grow up organically, and it will emerge in the curriculum in ways that make sense. And it doesn't necessarily need to be part of every single department or program. But we want to make sure that students, as they sample through the curriculum, encounter these topics, whether it's an ethical or social or philosophical question, or making art with AI, or analyzing financial data with AI, or doing medical research with AI, or doing research on warming oceans with AI.

What will be clear is AI won't just be in the places where it will be obvious—computer science and data science, statistics, mathematics, some of the more quantitative fields. I think AI will emerge as important in fields that are much more humanistic and qualitative as well.

**■ As an American studies professor, how might you bring AI into your classroom?**

My area of study is popular culture and media studies. My work has always had a focus on the impact of mass media on our culture. I think a lot, for example, about the ways that social media algorithms can have enormously powerful and terribly unjust impacts on different groups of people. Think of the obvious examples of racially biased algorithms, or the misuse of facial recognition software to surveil or police people, or deep fake videos that

misrepresent reality very convincingly. And there are important questions about privacy, about who owns or has access to data about us and what they are doing with it. I would want to engage students on all these questions and help them imagine how we might create alternative uses for these technologies that would help bring a more just, inclusive, and equitable world into being.

■ **Is there any unifying thread that ties all of these ideas, these scholars, together?**

Questions of ethics have got to be at the heart of this institute, in a really fundamental way. I'm so pleased to see that, in the conversations that I've been a part of with faculty, that is very much on people's minds. And I think if we build that at the center, we will build something spectacular. Because computer scientists care about that just as much as philosophers or American studies professors or sociologists or biologists. Everybody has that in mind.

■ **That's one common denominator of being human, isn't it?**

Yes. And here we are with an institute that's going to be asking all these questions. What does it mean to be human? What does it mean to think? What is the difference between us and animals, the human and the artificial, the natural and the artificial? Those kinds of questions are going to be raised by the work done in this institute.

■ **By a lot of different people.**

With a lot of different perspectives. That gets to the question of who's doing this work. Diverse teams are documented to be more effective than homogeneous teams. What I love about the way this is unfolding, is that the real collaborative spirit that I think animates so much of the work at Colby is at the heart of this, and that collaborative spirit is partly about getting a lot of different perspectives and voices in the room.

■ **What's it like being a nexus at such a transformative time for the College?**

It's incredibly wonderful and exciting. The initiatives at the College right now that have huge energy—the arts, the Davis Institute, the Colby Labs, environmental humanities, and many others that are developing—are really transforming the experience of our students in profoundly important ways, and so much for the better. The faculty are doing such incredible work to build these programs, these structures. We already had an exceptional faculty providing an exceptional education. And so, these new initiatives are just building on areas of strength or opening up new areas of study that enable our faculty to keep growing, that enable our students to have opportunities that I think are going to be unmatched in many of our peer institutions.

I'm just so proud to be part of that and so proud of our faculty for their creativity and brilliance and willingness to build something new. It's really inspiring to see. For me, just to be able to be part of helping to create the conditions for that is actually a huge honor and privilege. And I just love doing it.



What we have at Colby is expertise in all the different disciplines, in the breadth of the liberal arts. AI raises so many questions about what it means to be human. We want to be sure our students have the technological skills they need, but also that they are learning to think about technology in varied contexts, using the interdisciplinary critical thinking skills that come from a broad and deep liberal arts education.