Video Article

eScience Symposium Reflections from Christopher Erdmann: Redefining the Librarian’s Role in eScience

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Abstract

Christopher Erdmann, Head Librarian, Wolbach Library, Harvard Smithsonian Center for Astrophysics, shares his multiple experiences at the University of Massachusetts and New England Area Librarian eScience Symposium, as well as current challenges he sees for data science librarians. Christopher presented on a panel at the Eighth Annual eScience Symposium discussing the “future of data science” from a librarian’s perspective. See the video of this panel presentation on the 2016 eScience Symposium website.

My name is Christopher Erdmann. I'm the Head Librarian of the Harvard Smithsonian Center for Astrophysics. Actually, I'm the Head of the Harvard College Observatory Library and the Smithsonian Astrophysical Observatory Library.

Describe your previous involvement with the eScience Symposium

I attended my first symposium in 2010, and ever since then I've attended all of them. I think it's a great resource for the community. So, I haven't missed a symposium yet. I've had a poster at the symposium before. My group has done a poster. I've judged some posters. I've also participated in various other ways.

Why have you accepted to present at this symposium?

I really appreciate the symposiums. When I was asked to participate on the panel, it was an honor, and it was a subject area that I was very interested in — professional development in

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data science for practicing librarians. And it's a subject that's near and dear to me. I spent a lot of time running programs to upgrade the skills of librarians in this area.

Describe the value you experienced from the eScience Symposium

So, I think there was definitely a theme of sorts for continuous development, [that librarians are] not really getting settled because there's so much changing, and you really have to keep learning. You need to be an active learner and continue throughout your career. That was one of the bigger points. Also, I also brought up the fact that this work is really hard and that I would like to see more managers’ design learning into the projects that they have in libraries.

Margaret [Henderson]¹ said something that I thought was really a good point: She had an opportunity to attend a program, and she made the time for it. She found a way to get funding for it and really applied herself in that program. And she expressed how that was one of the most important decisions she had taken in her career.

And I think those kinds of carpe-diem moments, you need to seize the day whenever you have an opportunity to grow. And it's actually something that I always try to do with my own staff; I'm always sending them messages saying, "Have you seen this conference? Have you seen this one? This might be a great opportunity for you," and bringing it to their attention. This is a way for you to grow.

So, that was something I really think resonated with me. The other thing I've heard was this message about trying to find the time to learn, that you really need to sometimes learn outside of the library. But, again, I come back to the point we need to do a better job of finding learning opportunities in libraries for our staff because we tend to get stuck in the daily grind. And there's so much going on that we need to be exposed to. That's one of the points that I think maybe was important to that group too.

Describe the potential value of this information for library students

I had the opportunity when I was in library school, between my first and second year when I worked at the United Nations. I took a chance, like Margaret. I took a chance, and I went off to Geneva, and I — actually, that was a loss. I spent a lot of my student loan money on that trip.

But, it was an excellent opportunity to work with researchers, work in an embedded library, and really learn the tools of the trade. It was important too because it gave me an idea of what the world is like and it gives you an opportunity to really figure out what you want to do when you get out of library school.

So, take those chances and really learn. I really feel that what we do here [at the CfA Library] interweaves into the current library coursework. So, I often talk to one of our students about how she's learning something and how what we're doing in the library is applying to the theoretical and then the applied. And we're doing the applied part of the training.

But, when I first started here, we hired Harvard students, and that's changed now. So, we now

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¹ Margaret Henderson, Director of Research Data Services, Virginia Commonwealth University Libraries, also served as a panelist on the "Future of Data Science: Library Practitioners" panel at the eScience Symposium.
hire only Simmons Library School students, and a great partnership that I've had is with Rong Tang\textsuperscript{1}, one of the professors. I'm constantly hearing from her about some of the more promising library school students that are coming through [Simmons].

And we've done some excellent usability studies with Rong about the NASA Astrophysics Data Systems (http://ads.harvard.edu). So, that's been a way for me to find out about new library-school students that could participate in our programs. And I think it's just great to have students in our staff. One thing with our students is that they're almost considered like staff. They're not students. They're actually working on projects that are important to the observatory.

So, they really feel like members of the staff; but it may take time. We have some new students that just joined us, and it's overwhelming. There's a lot to learn. And I think afterwards, they start settling in once they know that we believe in them, that it's okay for them to take these risks and other things like that, to really have the opportunity to learn while they're working too. That's another interesting thing.

I think a lot of times people feel guilty that they're actually learning while they're on the job. But, here, it's allowed. It's necessary. It's necessary, or else we'll never be able to do the services that we want to.

Describe the relationship of the Wolbach Library with the greater Harvard community

The Wolbach Library is, again, it's two libraries, actually, in one. I'm the glue that holds the library together. We have Smithsonian Library staff, and we have Harvard Library staff. And so, on one side, we have about 350 PhDs on the Smithsonian side, Smithsonian Astrophysical Observatory. Most of the Smithsonian is down in DC, but we're a Cambridge location.

And then on the other side, we have the Harvard College Observatory. We have the Astronomy Department, and there are about 100 PhDs. The Astronomy Department at the Harvard College Observatory has graduate students mostly. We cater to graduate students and up, so [really, not many] undergraduates come up here. However, our library is actually a public library on the Smithsonian side, so, we actually serve the greater community.

We have people from all over the world come here to use our collection or to take advantage of our expertise. We also have become sort of a world library, and that's actually in our mission statement that by servicing the Center for Astrophysics (CFA), we actually serve the global astronomy community. People from all over the world come here because this is a world-leading institution in astrophysics.

So, it's a strange thing. We are a world service because we also host NASA Astrophysics Data Systems in our library, and we have a lot of projects with them. And a lot of what we do is to not only help our own people, but helps other groups.

About a month or two ago, we hosted a meeting in this space with astronomers, most of which were not from here, to work on a project to give credit to informal astronomy communications.

\textsuperscript{1} Rong Tang, Associate Professor, School of Library and Information Science, Simmons College, served as a panelist on the "Future of Data Science: Library Educators" panel at the eScience Symposium.
So, the easier way to say that is blogs so that they can actually get credit. They can cite. They can discover that information in the Astrophysics Data Systems.

So, that's just one example. We work with the whole community here in different ways, and it's exciting. I think every day we kind of have a different project.

**Describe a challenge you've experienced as a librarian and how the eScience Symposium has helped you respond to this challenge**

I think that the biggest challenge I had was when I arrived here, was that many members of the community didn't quite understand why they needed a library anymore. They weren't coming into the library as often as they used to, and instead they felt like they were getting a lot of their material online.

So, where was the value in the library? And that was one of the challenges I think I faced when initially I got here. I heard the library was very Victorian and may not understand some of the needs that we have now. And so, the hard part has been trying to change that opinion of us and demonstrate the value. And so, one of the areas that I think we've focused on is — which is very similar to what another group is doing called, Software Carpentry ([http://software-carpentry.org](http://software-carpentry.org)), focusing on this area of how do we help astrophysicists become more efficient in the way they do things?

And that ranges all the way from collaborative writing to sharing data. For lack of a better term, I call it “schol [scholarly] data” now because I think they're so interlinked with each other. Everyone says data services or scholarly communication. They're really intertwined. It's really the library services, what we always provided in the past. But, now there are new tools out there that we need to upgrade [to] and understand, and we also need to upgrade our own skills to understand these tools so that we can hook into them as a library and do some of the things we normally used to do, which is to help preserve this work and make it discoverable.

I always thought there were [unnecessary] barriers between departments; I had initial conversations where a scientist would come up and say, "You probably don't know what my need might be or what I'm talking about." And then I would say, "Try me." And then we'd start talking, and [we would] have this amazing [conversation].

It's like, wow, the librarian knows databases. The librarian knows this and that. And it would just dovetail into other things. So, I had relationships grow that way. Alternatively, we've done a lot of announcements to this community about training programs and other services.

And so, people would come down, and the same kind of thing [would happen]. Normally, [they] wouldn't come to the library, but you've been sending these messages. And now, you may know something. It's been really blossoming. We've been iterating on all this work and just sort of growing our services to the point now where we just recently had a meeting where our library committee was very excited about an advanced research center and the term 'library' sort of morphing into that, where they view the library as something like [a data service].

But, in general, I think what I've appreciated — really appreciated about the Symposia and the community, is that very fact, [that there is this] community of being able to actually reach
out to colleagues. Initially, and I think it may still be the case, but the data librarians often feel isolated and don't feel like they have colleagues to talk to about certain challenges.

And I think that community has been a great resource for reaching out to others and meeting others you normally wouldn't normally meet and just asking them questions — difficult questions that you have.

I remember one symposium in particular, where someone from the NSF [National Science Foundation] was speaking, and I got a lot of information out of that. It was one of the reviewers, and I even had a conversation with her afterwards about improving sort of the review process and the workflows and how data management plans could be done better. And I would normally never have that interaction if it wasn't for the symposiums and the community.

It's a little bit controversial. I always found it is — I am not sure why it is, but one thing I would hope would happen for future symposiums or what would happen in our community in general is that we start having conversations with people in the open humanities and digital humanities, and the data sciences, and really bring these groups together, because I think we have similar challenges. And I think it would be helpful to be able to have a broader conversation with these groups.

**How have you benefited from attending the eScience Symposium, specifically with regard to your role as a head librarian?**

As a Head Librarian, I'm never too busy to come to the symposiums or to participate in the e-science community. Since more and more of the library's services are going in this direction, it's an opportunity to learn from others and really hear about some of the new services that other libraries are trying out and implementing.

So, I never have too much time to participate in this community. I think it's a valuable resource. And I remember putting it in my calendar, it's happening on this day, and blocking it off, and being committed to that. In fact, it was very funny. One of my staff was supposed to be at the eScience Symposium, my Assistant Head Librarian, and she went to Electronic Resources and Libraries [conference].

But, she really also wanted to come to the symposium. She writes for the portal for the blog. So, she really wanted to participate, and we couldn't split our time efficiently. So, she had to go to the other conference, and I went to this one. And we shared. Once we got back, we shared with each other. "What did you learn?" "What did you learn?" I know my Assistant Head Librarian was very excited to also participate.

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