Hi Reddit! My name is Michael Qiu and I’m the Library Relations Manager with ACS Publications. In my current job, I am responsible for developing our marketing, outreach, and engagement programs with librarians across the globe. Before coming to ACS in 2015, I was a Science & Engineering Librarian at the University of Southern California (USC) in Los Angeles, CA. I was the librarian for chemistry, chemical engineering, materials science, and petroleum engineering. Even though I no longer work in a library, I stay actively involved within the library community.

I received my Master in Library and Information Science (MLIS) from UCLA (Go Bruins!) and my BS in Chemistry from Iowa State University. I’m a native of Iowa, but have bounced between Los Angeles and Washington, DC, and now have finally settled in Milwaukee.

When I was an undergraduate I learned quickly the importance of the library and the librarians that help make everything that much easier. The library is a central hub of information and can be easily overlooked. Without the library and the science librarians at Iowa State, I would not have had someone to teach me how to search, retrieve, and properly use resources or had access to journals, ebooks, and databases like SciFinder. It really was this connection that helped me make the leap from chemistry to library and information science.

As a science undergraduate, library school does pose its challenges (there are no lab experiments and lots of writing), but I encourage everyone to not overlook this career path. There is a huge need for librarians with a science background. My time at ACS has also given me a chance to interact with PhD students through our ACS on Campus program and librarianship is an alternative career path many are unaware of.

Working as a librarian and in my current job, I have had the opportunity to interact with so many different people and learn so much. I hope this AMA gives you the opportunity to ask me a question that you think I can help answer, or even better, ask a question you don’t know who to turn to, after all, all librarians love a challenge.

I’m excited to answer any of your questions. Since I won’t be able to answer everyone’s questions, if I don’t answer have an opportunity to answer your question here, do not hesitate to reach out to me on Twitter @MichaelatACS or on LinkedIn.

I’ll be back at 12 noon ET (9am PT, 5pm UTC) to answer your questions.

ACS edit formatting

Edit: Good morning (or afternoon) Reddit! It's just about 11 am here in Milwaukee, so it's time to get answering questions. I'll be answering questions for the next hour, so keep the questions and comments coming in.

Edit: My hour has come and gone, but it doesn't mean the questions should stop. I've enjoyed this so much that I'll try and come back this afternoon to answer a few more questions. Otherwise, please do not hesitate to reach out to me via Twitter or Linkedin (see above). Thanks again to everyone!
It's a great question and I could probably spend the entire hour just answering this, but I'll try to keep it short and focused.

Putting my librarian hat on, in terms of open access and publishing, open access is here and is here to stay. Open access publishing requires a much different model than what we are traditionally familiar with. I think to varying levels of success, publishers are moving full steam ahead with open access. The issue is publishers, libraries, authors, funders, readers, etc. need a system that works for everyone involved. There's no right answer yet and I think the only way we get there is by ensuring open dialogue and conversation between these groups. I hope in the end we can find a model that works for all parties.

In my field at least, long-term academic positions are becoming harder and harder to find. Some of my colleagues in grad school have thought about getting a MLIS and trying to transition their MA or PhD down that pathway. What are the career potentials in library sciences for someone who has a specialized background? What kind of job opportunities and pay spectrums are there? Are there opportunities to collaborate and publish? And how fulfilling do you think it would be for someone who loves being in the field/lab?

firedrops

When I finished library school, there were a slew of science librarian, in particular chemistry librarian jobs available. Since then, I would say (anecdotal evidence) that there is always a constant flow of science librarian positions as well. I think just today I received two emails with postings for positions. You have to take into account that most of these jobs are academic, so you are subject to the hiring waves of colleges and universities. I would recommend checking out ALA Joblist (http://joblist.ala.org/) for what a librarian job post looks like.

I went to library school with my BS in Chemistry and needed to get an MLIS to become a librarian. Not all jobs require getting an MLIS, often a PhD can be a substitute for the MLIS, especially in science librarian position. The jury is still out in library circles about the PhD versus MLIS, but I like to remain neutral in that discussion. I have plenty of colleagues who are librarians who have excelled in their jobs with a PhD.

There are also resources for PhDs to gain skills to enter librarianship, CLIR Postdoctoral Fellowships (https://www.clir.org/fellowships/postdoc) are one such way.

As it was mentioned in a reply, yes, the pay is on an academic scale and if you are faculty member you will have to publish. Although, I would argue it does not have to be all library science. I have a colleague at a major research university who is still in the lab. It's possible.

Don't hesitate to reach out after the AMA directly to me if you have more questions!

Hello and thank you for being here to speak with us!

Library science is not a common route to take. What about this career path spoke to you?

How do you handle plagiarism when you find it in journal articles? What is the action plan?

Thank you again, your time is very appreciated.

FillsYourNiche

Hi! For me, I was struggling with the idea that a chemistry degree would potentially lead me to the lab where I would work on quality control or R&D. I love science and chemistry, but really wanted an
opportunity to work with people, students, researchers, etc. I looked for other opportunities/non-
traditional paths with my undergraduate degree. Whether it was the public library I grew up with, or the
academic library I had in college, libraries and librarians work the masses to provide resources,
educate, and engage with their users. Librarianship ended up being this opportunity for me to work
with people every day and know that I was helping to bring resources and information to people who
needed it.

In terms of plagiarism, we have an online submission system for all of our manuscripts that handles
various checks, including plagiarism. As for the specifics after that, our editorial teams would be the
expert in answering those questions. Feel free to reach out and I can get you a more detailed answer if
you interested.

Hi Michael! Thanks for doing the AMA. I have two questions.

1. Do you have any tips for scientists to stay abreast of developments in their field? I have an NCBI
keyword alert that emails me every week with a list of newly published articles containing those
words, but it's a bit clunky. Usually, only 10% of the articles are really related to what I do, and it's
time-consuming to read through all those abstracts to figure that out. Is there a better way?

2. I got my degrees at big universities that had subscriptions to pretty much every journal and never
had problems accessing articles, but now I work for a biotech startup that can't afford those
subscriptions. We can access older articles, and we have a membership with DeepDyve to be able
to "rent" certain other papers, but the most recent articles in the big journals are out of our reach.
Do you know of any cheap subscription schemes or legal ways for us to access these articles?

NerdWithoutACause

Thanks for your questions! For the first one, it really depends on your reading and research style. I've
worked with researchers and students who focus in on a certain subfield and know the journals they
need to keep in touch with. For them, eAlerts and table of contents (TOC) alerts for specific journals
are useful. Each publisher usually provides an option to sign up for email alerts and usually you do not
need to subscribe to the journal to sign up. For others, like yourself, the keyword alert is useful since
research can span across various journals and publishers. In that case, I think what you're doing is
right, but keyword searches always require TLC and should be often revisited to change the
parameters and maybe to add or exclude certain keywords. Boolean (AND, OR, NOT) can be your
best friend in these cases. There are also other platforms you can try, Google Scholar is always a
place to try as well. If you have subscriptions to Web of Science or Scopus, these can be useful as
well.

To answer your second question, it's a tough situation to be in. Honestly, there's no good answer. The
pay per view and rental models have grown in popularity recently because it does not corner you into a
certain publisher, but are naturally more expensive per use. One thing I can recommend is trying to
keep track of the publishers you are buying individual articles from or renting articles from and seeing if
you trend toward one or two publishers. You may be able to sign a small contract with a certain
publisher, saving your company some money, and then use the rental model to supplement your article
needs.

Thanks for joining us today!

If I can't find an article on a particular subject nor can my librarians, is it a safe assumption that such an
article doesn't exist?

Additionally, how well versed are librarians in searching for articles in foreign languages?
PHealthy

You can never be absolutely sure that there is no article in a certain topic area. Web of Science, Scopus, and databases like those have limitations as to the journals they index (they don't index everything). If you have worked with your librarian, tried different variations of your key terms, etc. I would say you have done your due diligence.

In terms of the foreign languages, most databases operate on English. Some publications, or at a minimum the indexing terms, are translated into English. This means you should able to still find foreign language works (in science) if you only search in English. Often you will find plenty of old works for chemistry in German and Russian. One of the strengths of working with a librarian is they often have a network of other librarians to get help with foreign languages or even better at universities, there are usually other subject librarians in the system that can help with other languages.

I personally only know some Chinese and a little bit of French and I don't think I ever used anything other than English to search for articles.

How would you recommend someone wrapping up a PhD in the sciences transition to such a career path? You also mentioned a considerable need for librarians with a science background. Could one expect to pick a city and find a job (assuming all educational requirements were met), or would one have to follow whatever job offers were given?

mynameismrguyperson

If you're interested in getting into librarianship, I would take advantage of your best resource at your institution and chat with your local librarians first. I've learned that networking is incredibly valuable and these librarians can help provide you the first insights and connections within the library community. Keep an eye out for job postings, I recommend the ALA JobList (http://joblist.ala.org/) and even signing up for library listservs/email lists. There are subject specific ones and general ones. Here's the main list for Chemical Information and where a lot of chemistry librarians post: http://www.indiana.edu/~cheminfo/network.html.

I would say no, you cannot pick a city and DEFINITELY find a job in that city. Most librarian jobs are academic, so there is the academic hiring cycle and just naturally who has openings that year. When I left library school, I interviewed for chemistry librarian jobs at six or seven different universities across the country from Washington to North Carolina, California to New Jersey, etc. The opportunities are out there, you just have to keep an eye out. And this was before LinkedIn became really big, so it's become even easier to keep track of these opportunities now.

Appreciate you doing this AMA Michael. Being in a hard science field myself, I understand firsthand the importance of publication, documentation, and preservation of scientific literature. My questions has to do with the updation (?) of literature databases from paper bound text issues, to paperless electronic issues. How large of an effort is being made to convert older pre-internet text publications into online electronic publications? Does this job fall on scientific librarians such as yourself? Is there any type of limit on how far back this type of updating goes?

Thanks again for doing this AMA!

Kayside

I would say most journal publishers are providing some type of digital archive or backfile of scanned articles from pre-digital days. These are usually offered in PDF and I know at ACS Publications if it's a little blurry or unreadable, we can rescan it.
But there are two other issues at play. One is preserving print. There is an inherent value in having print copies. For example, I once had a business student ask about tracking down advertising in trade journals. It seems like when magazines or journals are scanned, ads are sometimes left out. We were lucky enough to still have print copies of the magazine in our offsite storage to help serve the student's research need. Libraries are aware of the value of print and due to space constraints, we know not everyone can keep everything. There are movements to keep several print copies. Also, many library/university consortia have a system in place to share one or two copies of a certain print item so other libraries can clear shelves to make space. There are also plans in place to keep digital content available.

LOCKSS (lots of copies keeps stuff safe) based at Stanford does this [https://www.lockss.org/]; CLOCKSS [https://www.clockss.org/clockss/Home]; PORTICO [http://www.portico.org/digital-preservation/]

Two, what about books? I would argue that digitizing books has fallen behind. There have been huge pushes in scanning journals, but books often have been left behind. One thing overlooked is that the process to digitize and store that data is very expensive. I think Google Books and what they did originally at the University of Michigan several years ago has done a lot to bring these materials to light (and make what is no longer under copyright, freely available).

Hi Michael,

Thanks for posting your AMA. I'm also a librarian (as you can see by my username). Do you ever face issues with interacting with your target groups? How do you go about gaining their interest to work with you?

Thanks!

PlantLibrarian

Hi! It's always great to hear from a fellow librarian. I think back to my librarian days and yes, outreach was one of the hardest parts of my job. Even today, outreach is still a challenge.

One thing that helped me when I was a librarian was getting involved with my departments, faculty, and students. Learn their processes and how they operate. I learned pretty quickly that the library was in a position to help speed up and make some of their research processes faster, more efficient, and ultimately helped the researcher to do more. This ranged from alerts for new articles published in x area, making citation management software work for their needs, and one thing I really enjoyed being involved with was helping compile tenure dossiers regarding articles and publication data.

Libraries and librarians have a lot to offer, often it's just putting yourself out there so your user groups know about it.

Do you think the number of Science librarians has stalled because only about %10 of SLIS programs offer even one course on STEM resources or are there other larger contributing factors?

I attended one of the few that did and loved it, but there were only 2 of us on the STEM track --and the other went into Geospatial.

Additional, where do you typically publish you Sci LIS papers? I'm very conscious about making them available OA and I'm not really sure about good LIS journals for that.
I agree, it is a problem there are not enough courses to help encourage LIS students to get involved in STEM fields. I'm not sure how SLIS programs can fix that because who would be the expert to teach the class? I guess this is where adjuncts could make sense, but I have former colleagues who teach in MLIS programs online and I know it’s a lot of work. I know a lot of my colleagues who are in STEM subject/liaison librarians are incredibly busy and teaching an adjunct course might be a little bit much. My school did not have a single STEM librarian course, just one in academic librarianship. Although, we did have research methods courses that helps hone and challenge the more analytical side. I would be remiss if I didn't mention that Indiana University has an entire program LIS program geared for Chemical Information (http://www.soic.indiana.edu/graduate/degrees/information-library-science/dual-degrees/chemical-information-mlis.html). I know several great chemistry librarians who have come out of that program.

As for Science LIS journals, Issues in Science & Technology Librarianship comes to mind first: http://www.istl.org/. It is OA and is a quarterly publication of the Science & Technology Section of ACRL.

Edit: added URL