

Raschke, G. K., & Letarte, K. M. (2003). Opportunity knocks: the demand for minority science & technology librarians. [Winds of change \(Boulder, Colo.\)](#), 18(4), 34-37.

Opportunity Knocks: The Demand for Minority Science & Technology Librarians

By Greg Raschke and Karen Letarte

What can you do with an undergraduate degree in engineering or one of the sciences if you don't want to work for industry? Consider a career in science and technology librarianship!

Information Growth and Librarian Shortages

The explosive growth of information in science and engineering combined with evolution of the World Wide Web as an information sharing and retrieval tool has opened unprecedented opportunities for science and engineering librarians. Scholars need increasingly sophisticated tools to filter the growing number of journals, research articles, patents, and web pages available in their respective fields of inquiry. The physicist— who once relied on a handful of journals, a few trusted colleagues, and a shelf full of books— now must search millions of citations to locate relevant information. Rather than decreasing the need for trained professionals, information technology has increased the need for librarians who can provide interpersonal assistance, help filter information through purchasing decisions, and develop sophisticated online research tools. Combine that with the fact that academic librarians will be retiring in record numbers over the next ten years, and you have a strong demand with too small a supply.

Although the recession and ongoing jobless recovery have partially eased the immediate labor crunch in libraries the overall market remains strong. In addition, the need for qualified science and engineering librarians is ongoing, consistent, and powerful. Qualified individuals step into a competitive market where an information professional's ability to work with scientists and engineers is highly prized. Simple supply and demand continues to drive the market because libraries and graduate schools cannot produce enough qualified individuals to meet the need for sci-tech librarians. The difficulty many libraries have experienced in recruiting minorities is compounded in sci-tech libraries by the general shortage of sci-tech specialists. The result is increased professional opportunity and compensation options for minority librarians qualified or willing to obtain qualifications to work with scientists and engineers. Once someone gains experience working with scientists and engineers, the demand for their services only increases, and that can be leveraged into increased pay and opportunity. Honora Nerz, a former engineer who is now head of the Burlington Textiles Library at North Carolina State University, states, "Librarianship is a career where engineers are marketable, a special commodity, and have a chance to stand out in the crowd." Nerz goes on to point out that, "Engineers and scientists are trained problem solvers and critical thinkers, two critical skills for librarians."

In addition to a strong job market, scholarships, and increasing compensation, sci-tech librarianship offers a number of other opportunities for interested minorities. Chief among those is a high level of job satisfaction and the ability to engage scientists and engineers in the pursuit of knowledge while providing critical information resources that drive the advance of scientific inquiry. Where else can someone provide assistance for a biomedical scientist exploring cures for cancer, a physicist exploring the origins of the universe, and an environmental engineer developing alternative energy sources but in a library? Scientists tend to have time-critical needs for discreet chunks of specific data. One of the most exciting aspects of librarianship is efficiently meeting those needs and receiving their gratitude. Outreach is a critical component of meeting the information needs of scientists and engineers. Suzanne Weiner, head of Collection Management at the North Carolina State University Libraries says, “Those with good communication skills who thrive on interpersonal interaction and are interested in moving beyond the walls of the library, whether physically or electronically, and engaging scholars will thrive as a sci-tech librarian.” Sci-tech librarians can pursue a diverse set of career paths that include digital and systems librarianship, where information technology skills and innovation are prized; collection development and management, where knowledge of disciplines and the ability to interact with scholars to understand their needs are essential; reference and information service, where the ability to solve problems and communicate are key; and cataloging, where analytical patience and precision are rewarded.

The fundamental challenge of being a science and engineering librarian is understanding the community of users. Scientists and engineers seek, process, and apply information in distinctive ways that create unique demands for libraries. Connecting a unique base of users to an ever-expanding universe of sci-tech information is the most exciting part of science and engineering librarianship. According to Weiner, “Anyone with a willingness to learn the information seeking habits of scientists and engineers and an interest in helping libraries connect scientists and engineers to the information they need has a bright future as a librarian.”

The Value of Diversity in Librarianship

The demand for minority science and technology librarians is evidenced by a number of academic library recruitment and fellowship programs aimed at that group. Fellowship programs at North Carolina State University, Auburn, and Cornell aim to recruit those with sci-tech backgrounds and/or minorities to the profession.¹ Initiatives such as Spectrum from the American Library Association and Knowledge River from the University of Arizona provide financial aid and scholarship opportunities for minorities entering librarianship.

The library profession today is a recognized leader in recruiting for diversity through exciting programs such as the Spectrum Initiative and Knowledge River. Libraries have pushed hard for diversity because they recognize that the quality of service they can offer to their diverse user communities is dependent on a diverse and representative workforce. Tracie Hall, director of the American Library Association’s Office of Diversity says “It is imperative that we understand the importance of diversity and inclusion in the field of

librarianship. If libraries are to continue to be relevant to the needs of their constituencies, which are increasingly more dynamic and culturally complex, then the breadth and depth of the experiences librarians bring to the table must increase. Today's librarians must not only be adept navigators of information and technology, they must also be culturally competent, able to provide meaningful service in a multi-cultural, multi-lingual world.”

Libraries Need You

It is particularly important to increase the number of Native American librarians. According to the American Library Association, Native Americans are the most underrepresented group in the field, making up only 0.57% of librarians in academic libraries. Yet Native American communities face some of the most difficult challenges with respect to access to technology, information, and education. Expertise in using information resources and technology can significantly improve community life. Advocates skilled in negotiating the complex information landscape can be powerful resources, whether they remain in the community or not. As Tracie Hall reminds us, “If we accept the unspoken but pervasive idea that it is “okay” for underrepresented groups to opt out of studies or careers in science and engineering, then we are colluding in the widening of social, economic and technological chasms. We are saying it is okay to be left behind. And in the twenty-first century we must call out that kind of passivity as unacceptable.”

The Spectrum Initiative

Since 1997, the American Library Association has been committed to providing scholarships for library school students from diverse backgrounds through the Spectrum Initiative. Spectrum awards qualified full or part-time students \$5,000 to study at an ALA-accredited library school. Spectrum’s initial goal was to double the number of diverse students in graduate library and information studies programs. Since 1998, over 200 students from traditionally underrepresented groups have received scholarships and leadership training. In 1999 Spectrum scholar Ida Martinez, now a librarian in Cornell University’s prestigious Library Fellows program, chose a career in academic libraries quite deliberately. Martinez had been working in a university setting for a number of years and wanted “not just a job, but a career, though not one as a professor or administrator.” Martinez was extremely positive about her experience in the Spectrum program, stating that her participation has been “nothing but an advantage—I wish there were a stronger word!” A cornerstone of the Spectrum experience is participation at the Leadership Institute, held in conjunction with the American Library Association’s Annual Conference, which exposes scholars to leaders in the field and introduces them to a range of key issues, including diversity. For Martinez, Spectrum is “so much more than just a scholarship, it has affected my whole outlook on the profession.” For more information about Spectrum, see

http://www.ala.org/Content/NavigationMenu/Our_Association/Offices/Diversity3/Spectrum_Initiative/Spectrum_Initiative.htm

Knowledge River

The University of Arizona's Knowledge River Program is the first program of its kind, an interdisciplinary graduate library education program specifically designed for Native Americans and Hispanics that respects their cultural and linguistic perspectives. Knowledge River aims to address the full spectrum of digital divide problems facing these communities—partnering with scholars from such diverse areas as information policy, language, culture, and high tech industry—to empower graduates as information seekers and creators. Knowledge River's scholars receive a tuition waiver and stipends of up to \$12,000, and graduate with a master's degree in information resources and library science. Knowledge River's founding partners include the University of Arizona School of Information Resources and Library Science (SIRLS), University of Arizona Libraries, the Arizona State Museum, and the Tucson-Pima Public Library, as well as the university's American Indian Studies Department and Mexican American Studies & Research Center. Knowledge River was launched in fall 2002 with a class of 24 students, including 7 Native Americans and 17 Hispanics. The program's website offers further information, including application procedures: <http://knowledgeriver.arizona.edu/>

Selecting A Graduate Program and Getting Admitted

Opportunities for science and engineering students abound in academic libraries. Programs such as Spectrum and Knowledge River attest to the field's strong need for qualified individuals from diverse backgrounds. This could all add up to the perfect career for you. What do you need to do to become a librarian? Professional positions in librarianship require an American Library Association-accredited master's degree in library and information studies. Institutions offering ALA-accredited programs are listed at

http://staging.ala.org/Content/NavigationMenu/Our_Association/Offices/Accreditation1/lisdir/LIS_Directory.htm. Most programs require a bachelor's degree and a GPA of at least 3.0. Many programs require the Graduate Record Examination (GRE) as well.

The American Library Association's web pages offer tips on choosing a program <http://staging.ala.org/Template.cfm?Section=lisdir&Template=/ContentManagement/ContentDisplay.cfm&ContentID=26473>.

ALA's Office for Human Resource Development and Recruitment

http://www.ala.org/Content/NavigationMenu/Our_Association/Offices/Human_Resource_Development_and_Recruitment/Human_Resource_Development_and_Recruitment.htm

also provides helpful advice on scholarships and funding.

¹ Those interested in reviewing available residency and internship programs in academic libraries can search at: <http://db.arl.org/residencies/review.html>.