Friends' Activities

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without any involvement or support from the few old-time publishing firms that are extant. As a result, Professor Bell finds himself doing considerable self-promotion, advertising, and selling. As he demonstrated at the presentation, part of the new way to publish is to be your own salesperson. Among his 21st century books are *Kill Her Again* (iUniverse, 2000) and the hot off the press *You've Got Blackmail.* He also has published online an historical fiction work called *Daughter of Lazarus* (iUniverse 2000) and a children's title, *The Case of the Lonely Grave,* also printed by iUniverse (2000).

Albert A. Bell, Jr., concluded his remarks with a number of anecdotes about the pleasures and perils of writing mysteries, his favorite mystery authors, and the art of writing well and accurately regardless of the genre. As the afternoon ended, a line of intrigued Friends were purchasing his books from George Hebben from the Athena Book Store.

The public activities of the Friends of the University Libraries at Western Michigan University for Fall 2001 culminated with the biannual book sale on November 14th and 15th. Hundreds of volumes are donated to the Libraries each year by faculty, emeriti, staff, and friends. After the books are reviewed by members of the Libraries' faculty and staff for possible addition to the main collection, the other items are "grist for the mill," that is, they are placed for sale at outrageously low prices. The second-floor Atrium is the marketplace with faculty and staff serving as salespersons. The funds from these sales are a mainstay of Friends' special purchases for the Libraries.

Gatherings

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Science Reference— The Ground Floor

By Linda Rolls,
Professor, Science Reference

Science is a first-rate piece of furniture for a man's upper chamber, if he has common sense on the ground floor.
Oliver Wendell Holmes

The Science Reference department of the University Libraries provides the essential interface between faculty, staff, and students and their access to academic research and information services in the sciences. Science is one of the most rapidly changing areas in academe, particularly in the area of information and the manner in which it is provided and utilized. The expertise of faculty librarians and staff who act as interpreters and analysts, provide instruction, and manage and evaluate collections is more critical than ever before. The evolution of the Internet and Web-based resources has revolutionized this process in amazing ways, from both the perspectives of the library patron and the library faculty. Databases can now be searched online from virtually anywhere that a computer with dial-up access exists, whether this is in the university library or elsewhere. Full text articles or other reference materials can be printed, downloaded, or e-mailed immediately. A researcher or scholar in the sciences can have a "science center" available on his/her desk whether that desk is a laptop on a plane, a home computer being utilized at 3:00 a.m., or found in a faculty office or laboratory across the continent and the world. However, the array of resources can be overwhelming to the uninitiated. The experienced faculty, staff and students of the Science Reference department of the University Libraries assist users in distinguishing among options, making appropriate choices, and using these resources to their full potential

Located on the lower level of Waldo Library, Science Reference is the key public service area in Waldo Library for science and technology. The collection contains the reference and research sources for the biological sciences, chemistry, geosciences, mathematics, physics, computer sciences, medicine and other health sciences, and engineering. There are three Library Faculty and two staff members in the department. The faculty members are Michael Buckner, Head of Science Reference; Barbara Cockrell; and Linda Rolls. The staff members are Richard Mehl, Science Reference Assistant and Mandy Formulo, Evening Supervisor. The Library Faculty members have background expertise in Biology and Environmental Sciences, Mathematics and Physics, and Physiology and Biochemistry: they especially serve the colleges of Arts and Sciences, Engineering and Applied Sciences, and Health and Human Services. Behind the scenes, the faculty and staff of Science Reference employ, train, and supervise the 12 to 15 students who also serve Science Reference and its patrons.

One of the primary missions of Science Reference is to support the University's goal to become research intensive and secure major outside funding/grants. This emphasis is particularly focused on the sciences since national and state funding has always been most extensive in the scientific/technological arena. To that end, there is recognition that, for most of the sciences, the article literature is of utmost importance. There has been a conscious effort to provide online access to the most important literature and article databases available. In the last three to five years, the Libraries has added all of the major databases in the sciences to its online offerings. A few of the databases provided in the sciences includes the following:

- **ScienceDirect** offers access to the Elsevier Science journal collection of over 1200 titles along with journals from a host of prestigious societies. The full text collection of over 1.5 million articles from 1995 to present covers a wide variety of subject areas and disciplines.
- The **ISI Web of Science,** which includes the Science Citation Index Expanded, is a multidisciplinary database, with searchable author abstracts, covering the journal literature of the sciences. Web of Science indexes more than 5,700 major journals across 164 scientific disciplines. One of the most important features of the database is that it allows the searching of the **cited references** of an author or **cited works**, which is a powerful tool for finding relevant and related research information. Searching for cited references has always been an extremely labor-intensive and time-consuming activity that can now be accomplished in a time span of minutes rather than hours or days. The ability to search for cited references is important in evaluating the quality of published literature as well as finding important published research in the sciences.
- One of the most significant databases for engineering researchers is **Ei Compendex Plus,** which provides extensive coverage and resources in engineering. The database provides access to bibliographic citations and abstracts to engineering and technical literature from over 2,600 journals, conference proceedings, conference papers, technical reports and monographs published worldwide. Moreover, the citations are also linked to the holdings of the University Libraries.

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Science Reference

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- An important database in the field of chemistry is **SciFinder Scholar's Chemical Abstracts.** Not only does the online source provide the most extensive indexing of the chemistry literature, it supplies abstracts of articles from more than 8,000 journals. Its coverage of chemistry includes chemical engineering, environmental science, pharmacology, medicine, and food science.
- In the area of Health and Medicine, the University Libraries' Web pages offer access to the **OVID** Nursing Collection, which supplies full text access to over thirty nursing journals. In the medical sciences, not only **MEDLINE** is available, but, in addition, **MDConsult** includes 35 medical reference texts, full-text articles from 50 journals, MEDLINE, clinical practice guidelines, patient education handouts, drug information, and current medical information.
- The Department of Mathematics and Statistics would be seriously hindered in its educational and research programs if the Libraries did not subscribe to **MathSciNet,** the premier database of the American Mathematical Society. This source covers "the world's mathematical literature since 1940," and is based on the prestigious *Mathematical Reviews* database. The comprehensive site indexes nearly 1800 journals, has links to 185,000 original articles, and is compiled from the expertise of over 10,000 reviewers. The main screen for MSN has a Quick Search line. Geographical providence and fields including author, title, institution, "Ref Author," and others can limit this search window. There is also a more elaborate Full Search option and several related databases such as journals. Many of the articles are available in full text, and there are multiple links to institution codes and addresses, mathematics subject classification, works by the reviewer, and other useful information.
- **GEOBASE** and **GeoRefS** are two core indexes accessible from FirstSearch that index worldwide literature on geography, geology, ecology, and related disciplines. GEOBASE has some 2,000 journals fully indexed with an additional 3,000 selectively indexed. The material includes books, monographs, conference proceedings, and reports as well as journal articles; the coverage is 1980 to date with monthly updates. GeoRefS has twice-monthly updates and covers over 25,000 sources about geology and other earth sciences with North American coverage dating back to 1785, and international coverage from 1933 to the present.

The preceding list IS selected; there are numerous other science and technology resources and services that may be found online and on the shelves of the ground floor. The Science Reference area also services all current periodicals and magazines, regardless of subject, that are received in Waldo Library. Also located on that floor are selected new books, excluding best sellers that are found at the Circulation/Reserves desk, and a service desk for newspapers and microforms.

Besides providing for the research and educational needs of faculty and students through recommending and assisting in the use of online offerings, the Library Faculty provides instruction in the utilization and assessment of online and other resources. Science reference faculty are actively involved in bibliographic instruction with instruction for individual classes offered through a variety of venues. The IME 102 technical communications class is required for all the Engineering College undergraduates. The class is also recommended for the Honors College science majors. Along with English 105 and Business Information Systems 142, this introductory class gives students the background they need to understand how advances in science and technology are communicated among specialists, and, in turn, communicated to the general public.

Students are taught how to access the scientific literature and how to begin to assess the quality and veracity of the information. Bibliographic instruction provides an opportunity for the Library Faculty to help students develop search strategies and learn about database structure in an immediate and relevant manner. Besides introductory sessions, instruction is also tailored to advanced and graduate classes across the three colleges mentioned earlier. And, of course, the Science Reference faculty provide one on one reference assistance at the science reference desk as well as respond to individual student research needs that arrive by e-mail, telephone, or through a knock on the door of an office.

In recognition of the fact that access to the University Libraries has become a 24/7 requisite for many library patrons, librarians in Science Reference have developed online subject gateways. The gateways, found at *http://www.wmich.edu/library/db/index.html,* provide guidance for faculty and students in physics, computer science, mathematics and statistics, chemistry, biological sciences, medicine and health, psychology, geosciences, and engineering. Because of the ever-changing nature of the Web and the continuous advances in science and technology, these Web pages are monitored and updated regularly. However, the role of the Library Faculty in Science Reference is not completely defined unless note is made of their liaison and collection development responsibilities. These include meeting with departmental faculty in the respective subject/discipline to determine research and teaching needs. Then the Library Faculty work to tailor the Libraries' collections, both print and online, to reflect these needs. Science Reference faculty also meet with new faculty, and attend departmental faculty meetings.

The depth and breadth of the University's programmatic and research strength in the sciences has been supported by the development of a strong Science Reference program and staff, significant scientific collections located on the lower level of the Libraries, and ever-expanding online access to the latest research data. In the context of the opening quotation, Science Reference strives to contribute to the "common sense" of science by providing instruction on the use and evaluation of scientific resources. Ultimately, as described above, Science Reference is the "ground floor" in the provision of resources to enhance and undergird the educational and research mission of the University Libraries and the University itself.

Science Reference: Standing: Amanda Formolo, Richard Mehl, Barbara Cockrell, Michael Buckner. Seated: Linda Rolls.