

Newsletter of the Archivists and Librarians in the History of the Health Sciences

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## A JOINT ARCHIVES/RECORDS MANAGEMENT PROGRAM AT AN ACADEMIC HEALTH CENTER

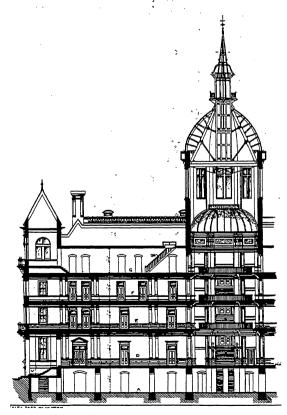
While I will try to address general concerns of an archival program at an academic health center, this paper will be based mostly on experiences at the Johns Hopkins Medical Institutions. It is important to note that Johns Hopkins is a private institution, and therefore not subject to some of the same constraints as a public institution.

I would like to start with a brief definition of an academic health center. According to the Association of Academic Health Centers, an academic health center includes a teaching hospital, a medical school, and at least one other health education program--which could either be a school or college (such as a school of nursing or dentistry), or an educational program within the hospital or medical school (such as a program for radiology technicians, or physician assistants). The Johns Hopkins Medical Institutions consist of a teaching hospital, a school of medicine, a school of nursing, and a school of public health. The Hospital and the University are separate corporations with overlapping Boards of Trustees. This is a common model of an academic health center.

Next, I'll discuss some of the records found at an academic health center. Of course, there are the records common to any academic setting, such as student records and personnel records. Fortunately, there are regulations in place which govern the retention and use of such records, and any records management program should be aware of those regulations and work with the appropriate offices on campus. More problematic are the vast amounts of unregulated administrative records, departmental patient records, and the records of scientific research.

We need to be aware of the characteristics of these records. One is the vast quantity of documentation. Tied to this is the introduction of new record formats and media. Innovations in technology have led to an expansion of formats and the introduction of new media, thus enlarging the documentation base. Technology has transformed the means of communication, thus facilitating rapid exchange and dissemination of information. One issue to be addressed is the fragility of some of the media, particularly machine-readable records.

Another characteristic of records at academic health centers is built-in redundancy. The same evidence might be recorded in different places in different formats. For example, a body of evidence



From: John Shaw Billings' Description of the Johns Hopkins Hospital, 1890, Plate 10.

surrounding a diagnostic decision might include case histories, test reports, photographs, radiological images, recorded descriptions of gross pathological specimens, and related physical specimens from the patient.

A fourth characteristic of these records is their multi-dimensionality. The data and information have the potential to be used on a number of different levels for a wide variety of studies. Patient records and research records, in particular, are often used for purposes other than the one for which they were originally created. Archives and records management programs should facilitate the secondary use of this data.

Now I'd like to turn our attention to what is being done and what can be done about records management at academic health centers. In 1987 Nancy McCall and I conducted "The National Records Survey of Academic Medical Centers." The survey was sent to 125 teaching hospitals; there were 78 respondents. We asked about the existence and extent of archives and records management programs, practices and policies governing patient records, and the extent to which computers were being used to manage medical information. Survey results indicated that many different types of management practices exist for contemporary records at academic health centers. The term "records management" applies largely to the management of administrative records. Systems also exist to manage specific types of records, such as

patient records, pathology records, laboratory records, radiological records, and so on. Records management programs range from the formal and highly structured to the informal and unsystematic. Some programs are centralized to serve the overall institution, while others are decentralized and serve specific areas. Institutions that are federally or state controlled are more likely to have formal centralized programs, because in most government-run institutions, records management is mandated by law--Public Records Acts, Sunshine Laws, etc. Private institutions are able to have a more laissez-faire attitude toward records management.

When formal programs are in place at private institutions, they tend to be loosely structured and decentralized. In cases where no formal programs exist, contemporary records are managed in an ad hoc manner by individual departments or divisions. Because many accreditation requirements and regulatory requirements carry stipulations about the retention and disposition of specific records, a reactive form of records management is practiced at many private institutions, usually at the departmental level.

Decentralization is an important characteristic of the academic health center. This is especially so at private institutions, but I suspect that this is a trend at public institutions as well. With decentralization comes territoriality. The departments bring in grant money, design research projects and

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curricula, and make major decisions on a departmental level. The more powerful department heads can, in fact (even if not on paper), wield more control than the Dean of the Medical School. As archivists we need to be aware of the political dynamics of our institutions.

Conventional records management wisdom calls for a highly centralized, all inclusive program. In a decentralized setting such as an academic health center, this approach is unfeasible. Moreover, most institutions, in practice, find it financially and administratively difficult to support centralized and broadly inclusive programs in either records or information management. However, with a smart records management program, you can make decentralization work for you.

This is done by decentralizing the records management program. In this model, the departments and divisions of an academic health center can assume greater responsibility for the administration of their own records. For instance, research units would bear primary responsibility for the administration of research documentation, clinical units would bear primary responsibility for clinical documentation, and so on. Policy should be formulated at the central administrative level, with the input of the records creators and users.

Probably the most important principle about running a records management or archival program at an academic health center is interaction with the records creators. This cannot be said often enough. Making records management decisions or archival appraisal decisions in a vacuum will result in a program that few will use. It is necessary to talk to records creators on all levels of the institution: Deans and CEOs, department directors, administrators, secretarial staff, lab staff, physicians, researchers. These discussions should also include other "stakeholders" in the information flow, e.g. records administrators, computer personnel, systems developers, legal counsel.

In the Hopkins model we convened a series of committees, one for each division of the Medical Institutions, to develop records management guidelines. The committees were appointed by the CEOs of each institution, i.e. the President of the Hospital and the Deans of the Schools of Medicine, Nursing, and Public Health. It is important to have the backing of the central administration. Although the committees had different names in different divisions, their mission was the same: to draft records management guidelines and policy. The committee membership represented various "stakehold-

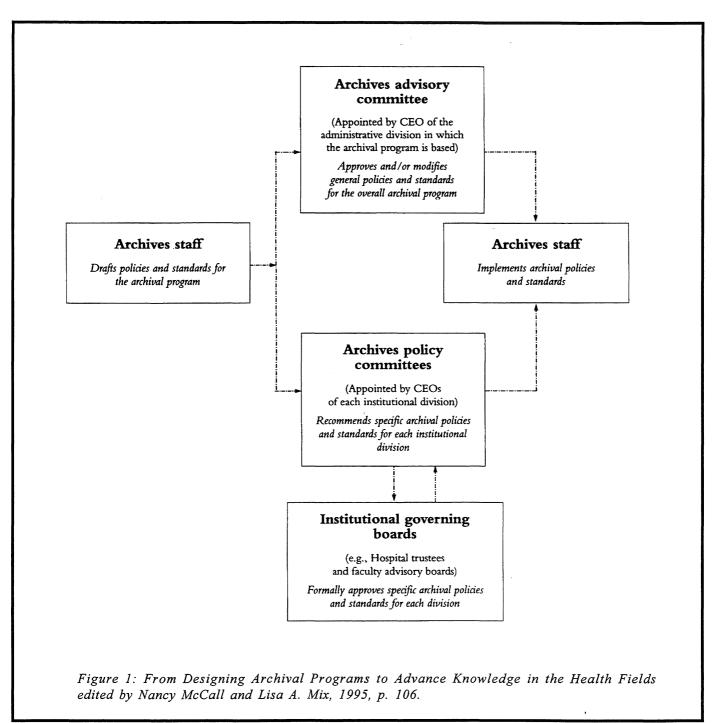
ers": the chair was usually an Associate Dean or a department director; other members included faculty, librarians, senior administrative staff, secretarial staff, and members of the Archives staff. Documents drafted by the committees were submitted to the governing board of the division in question for final approval. (See figure 1)

In this way, each division of the Medical Institutions was able to formulate its own guidelines. This has worked well because each division has its own concerns, its own needs, its own way of doing things, and these differ between divisions. The decentralized model accommodates many different types of systems for records and information management.

Allocating the responsibility for control of contemporary records to the institutional components that generate them can lead to more effective management of the records. You should, wherever possible, make use of existing systems. At academic health centers, the success of record-keeping systems that evolve in the workplace can be attributed to the involvement of personnel who best understand the record-keeping objectives. In-house systems tend to be especially responsive in areas regarding access, retrieval, and use. On the other hand, records management systems that are imported into (or imposed upon) the workplace are not as responsive to department-specific needs. Institutions should not waste resources in an attempt to alter and normalize records systems that are smoothly functioning and serving them well. Instead, they should seek to adopt the effective systems that have evolved in individual workplaces as examples for other departments with similar types of records to follow. Use what's already working and build on it.

An important consideration in the design of record-keeping systems at academic health centers is usability. The best models for record keeping in the health fields are largely user-driven, and records systems that are often used must, of necessity, be user friendly. Specific considerations for access and retrieval, and controls for quality of information content, are usually incorporated into the basic design. These systems also make provisions for the physical and intellectual management of the records.

This is another area in which decentralization can work for you: coping with the volume of records and the scarcity of space. Again I will bring up a Hopkins example. In our School of Hygiene and Public Health, many of the departments had rented



storage space at an offsite warehouse. The records at the warehouse were a topic addressed by the records management committee for the School. The solution reached was that the departments would continue to rent the space and have control over the records, while the archives, through the records management program, would manage access, retrieval, and records scheduling. Archives staff worked with staff from each department to inventory the records, put them in archival storage containers, and determine scheduling and access terms. This shared responsibility makes optimum use of the resources at hand.

As technology has introduced processes that enable large collections of data in electronic media, new appraisal issues have arisen for archival and records management programs. Because of the technology and expertise required to maintain electronic records, archival programs will not be able to assume a major custodial role for electronic records in general and databases in particular. Although archival and records management programs must make provisions for the selection and preservation of electronic media and research data, they will have to balance their choices within the larger context of their other acquisition priorities.

Records managers and archivists should collaborate with computer and subject experts to devise appraisal strategies for the data contained in electronic records. Archival programs should ultimately function as resources for information about their institution's electronic record systems. Rather than take on the responsibility for the large scale maintenance of electronic record systems, they should serve as a clearinghouse for information about these systems.

The same approach holds for large sets of research data, whether or not these data are in electronic form. While there are circumstances in which archival and records management programs may have to accession sets of research data, an archives should not attempt to take on the research functions of a data center unless it is well equipped to do so. Again, archives and records management programs should attempt to serve as resources for information about the databases rather than take on custody of the databases themselves.

The model presented here more or less assumes that the archives and the records management program are part of the same operation, or that the records management program is part of the overall archival program (or vice versa). While it is not absolutely necessary for archives and records management to be run out of the same office, the two programs need to collaborate closely. Never before have these two disciplines been so constrained to set limits and to make critical choices about the nature and extent of their accessions. Joining forces to develop policies and procedures will assist both programs in meeting this challenge.

In archival theory and practice, records management has traditionally functioned as the staging process in which the fate of institutional records is decided. Scheduling records has largely served as a deferral process that preserves records until a final decision can be reached about their retention or disposition. Conventional records management programs have usually made provisional schedules for archival retention and then passed the final decisions on to the administrators of archival programs. As a result, records languish for years in a state of institutional purgatory until their statutes of limitation expire, at which time they are reassessed to determine their archival value.

Institutions in the health fields can no longer afford to wait so long before making decisions about contemporary records. Instead, a rigorous and accelerated form of decision making is needed to hasten the appraisal and accession processes both in

records centers and in archival repositories. Cooperation between archival programs and records management programs enables both to function more coherently and to meet their institutional needs and objectives more effectively.

#### RECOMMENDED READING

Krizack, Joan, ed. 1994. Documentation Planning for the U.S. Health Care System. Baltimore: Johns Hopkins University Press. Describes in detail the different types of institutions that make up the U.S. health care system, and covers the archival concerns of each type of institution. This book just won SAA's Leland Prize.

McCall, Nancy, and Lisa A. Mix, eds. 1995. Designing Archival Programs to Advance Knowledge in the Health Fields. Baltimore: Johns Hopkins University Press. Discusses issues and concerns necessary to running an archival program at an academic health center.

Lisa A. Mix
The Johns Hopkins
Medical Institutions

[Editors' note: Originally presented on 1 September 1995 at the 59th annual meeting of the Society of American Archivists held in Washington, D.C.]

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### PRESIDENT'S MESSAGE

The National Library of Medicine's (NLM) appointment of a Chief of the History of Medicine Division (HMD) brings a positive conclusion to a lengthy search which was prolonged by a freeze in government hiring. The choice of Elizabeth Fee, a professor and historian of public health, reconfirms NLM's commitment to outstanding leadership for the Division. The selection of a prominent scholar who understands and appreciates the research needs of students and historians is very wise one.

In this time of downsizing and competition for limited fiscal resources, the challenge for Ms. Fee, indeed, is very great. Her leadership and choices for the future of HMD will impact not only NLM but also history of health sciences libraries and archives around the nation.

ALHHS members now have an obligation to communicate with Dr. Fee the need for HMD's services and collections. As we learn to become more effective advocates for our own collections, we must also voice support to HMD for the research needs of our local constituencies. In addition, we can take a more active role in promoting HMD's resources and services to regional and state medical history societies, physician-historians, and students; announcements at meetings and articles in newsletters will help build support for the Division's contributions to scholarship in the history of the health sciences.

I am very pleased to report that prior to taking on responsibilities at NLM, Ms. Fee joined ALHHS. She also accepted our invitation to participate in the next annual meeting and to present a report on the status of HMD and its projects. In response to a letter of congratulations from the Association, Ms. Fee wrote:

I hope that I will be able to help maintain and strengthen the HMD in what may well be difficult times for many federal agencies and institutions. I trust I will be able to call upon you and other members of ALHHS for your advice, suggestions, and support. I expect to be an advocate for the collections, services, and staff of the HMD and also to represent the interest and expectations of the larger community of scholars, historians, librarians, archivists, and students of the history of medicine and public health.

Ms. Fee agreed to be interviewed by John Parascandola, former HMD Chief, for an article to be published in the next issue of *The Watermark*.

ALHHS offers the new Chief of HMD our strong support and encouragement.

As the result of increasing costs for overseas mailings, the Steering Committee approved a resolution adding a six dollar surcharge to dues of members who live outside the United States and Canada. The change was necessitated by first class mailing expenses for *The Watermark*, which exceed two dollars an issue for overseas postage, as well as the cost for dues notices, dues reminders, meeting announcements, and elections. The surcharge becomes effective with 1996 dues notices which will be mailed in November

Steering Committee officers and chairs are participating in an electronic planning exercise using the Internet to identify critical issues for the Association, how best to serve members, and possible projects for the future. Watch for a summary of the results in this column the next time *The Watermark* arrives in your mailbox.

Barbara Smith Irwin University of Medicine and

### WHO NEEDS HISTORY?

In an era when technology advances and changes with lightning speed, what is the value of history? This question is of great importance to all who need, use, and appreciate literature and knowledge. It is a vital issue to health sciences librarians and the people who use their libraries. Many young people in the biomedical sciences consider that whatever is available on the computer will be sufficient for their needs. Since the MEDLINE database goes back to 1966, that becomes their boundary. Why pursue anything published earlier, for it must be searched manually and surely cannot be relevant.

Arthur M. Silverstein, in the preface to his History of Immunology, relates that the single event that "triggered" his serious entry into the study of history was his receipt of a manuscript from a leading journal. The paper was an elegant study of an important problem, but "one that Paul Ehrlich had reported on eighty years earlier!" Clearly, in order to build the future, it is essential to know the past. There are compelling reasons to study the past, reasons that benefit the practitioner as well ass the scientist. Studying the past reveals general trends, traces the progress of medicine, and points out the errors and controversies along the way.

Reading history can show how illness affects patients and how society reacts to disease, and thus can help counteract the dehumanizing atmosphere that technology brings to medicine. Understanding the past helps broaden one's viewpoint, enriches one's perspective, and provides the counterbalance to the idea that only what solves today's problem is worth knowing.

Collecting resources in the history of medicine, including the rare book treasures of the past, archives, artifacts, pictures, manuscripts, etc., adds great depth to a library. Making these materials available to students, practitioners, historians, and scholars opens the door to learning, to scholarship, to publishing. With the great interest in information today, it would seem to be an anomaly to find that support for history-of-medicine collections and services in our libraries is waning. Budgets for historical resources are being cut, staff services curtailed. Knowledgeable history-of-medicine librarians are being replaced by individuals with no background or training in history. The idea that only the new or the machine-readable information is necessary is both false and shortsighted. History librarians in our medical libraries have collected, protected, and made available the record of human struggle with health and disease and the false starts and the great strides of biomedical science. These same librarians will be called upon in the future to preserve and protect the electronic resources of today. History-of-medicine librarians are among the most skilled, resourceful, and scholarly practitioners in librarianship. With the support of their institutions they can continue to make significant contributions to the education and practices of those in the health professions. In the "Information Age," how can we let this vital part of our information heritage, the basis on which we build our future, be diminished or eliminated?

> Lucretia W. McClure Librarian Emerita University of Rochester Medical Center

### Endnotes

1. Silverstein, A. M. A History of Immunology. San Diego, California: Academic Press, 1989.

[Editors' note: Originally published in <u>Academic Medicine</u> volume 70, nomber 6, June 1995, pp. 461-2. Reprinted with permission of <u>Academic Medicine.</u>]

### FROM THE EDITORS

While driving home from the 59th annual meeting of the Society of American Archivists held over Labor Day weekend in Washington, D.C., we noticed the lengthening shadows signaling that the days were growing progressively shorter and that Fall was around the corner. The SAA Annual Meeting provided us another opportunity to meet with our ALHHS colleagues. The program included numerous sessions featuring ALHHS speakers and topics related to the history of the health sciences. In addition to the regular program sessions we attended the Science, Technology, and Health Care Roundtable co-chaired by Steve Wagner whom many of you will remember from our last ALHHS meeting in Pittsburgh. The Roundtable sponsored a very successful session on archives and records management in health care settings. Lisa Mix's presentation is the cover story for this issue.

New ALHHS member Judy Chelnick led a group of four ALHHSers on a behind-the-scenes tour of the National Museum of American History. We got to see many of the artifacts in the medical sciences section and took the opportunity to view the new "Science in American Life" exhibit. After taking in a spectacular panorama of our nation's capital from the rooftop terrace of the Museum, we joined John Parascandola for dinner at a particularly appropriate venue, La Tomate. John received cherry tomatoes from all dinner guests. The tomato-related decor of the restaurant provided us with many opportunities to capture John on film with his favorite fruit.

Once again we enjoyed summer reunions with many of you who traveled to Charlottesville for the 1995 Rare Book School. This issue includes reports of some of the many courses offered in this program. Our lobbying efforts on behalf of a course in the history of the health sciences have achieved the desired effect. An introductory level course on history of medicine curatorship is in the planning stage for the 1996 Rare Book School and plans are also underway for a second, more advanced course in the future.

Taking our cue from summer reruns, we have chosen to reprint a number of articles in this issue. We felt the information presented in these contributions, which originally appeared in disparate publications, was of such importance that it should be reprinted in *The Watermark*. Although many of you have ready access to the journal *Academic Medicine*, we nevertheless sought permission from

the publishers to reprint Lucretia McClure's thoughtful letter to the editor succinctly outlining the importance of history, medical history collections, and their knowledgeable caretakers because we believe this message is of such significance it should also appear in the primary publication for our specialized profession.

The coming of Fall marks a new academic year for us and the students we teach. Joan attended a pre-conference workshop on planning new and remodeled archival facilities at SAA as Jodi was starting another year teaching "Archival and Historical Administration" at Virginia Commonwealth University. If you have recently attended a continuing education course or workshop, please consider The Watermark as an appropriate forum to report on your experience. Since 1995 is a special year for commemorative anniversaries in the history of the health sciences, including the centennials for Louis Pasteur and Wilhelm Roentgen's discovery of X-Rays, we hope you will report the activities of your institutions to us or to Elaine Challacombe, Ex Libris Editor.

We continue to receive compliments on the Summer issue of *The Watermark*. We had hoped it would be a special one to commemorate the twenty years of ALHHS and your comments confirmed this. This success would have been possible without the cooperation of so many of you.

Joan Echtenkamp Klein Jodi Koste

### RARE BOOK SCHOOL 1995

In this, my initial exposure to Rare Book School, I attended "History of the Printed Book in the West," taught by Martin Antonetti, Librar-

ian of the Grolier Club. This is an excellent choice for a first Rare Book School course. My library school, like many others these days, offered lots of experience in online searching and the Internet, but no courses on printing and the book. As a new rare book librarian, I had much to learn. The course offered a wonderful combination of slide lectures, discussion, videos, and hands-on experiences. We were treated to an overview of manuscript books, papermaking, bookmaking, type faces, bindings, illustrations, descriptive bibliography, and the social history of the book trade.

The lectures were supplemented and reinforced by several class trips to the University of Virginia Library's Special Collections. Moreover, we got to ink the plate and print a sheet on a wooden printing press; we handled punches, sorts, molding devices, and holding sticks; we held old paper to the light to look for watermarks and chain lines; we examined a packet of old prints under a loupe to try to distinguish woodcuts, engravings, etchings, and lithographs; and we researched and presented a bibliographical description of a rare book to the class. Mr. Antonetti was exceedingly knowledgeable, very well prepared, and a delightful teacher. The week in Charlottesville was completely exhausting -- I felt like I was programmed from 8 a.m. to 8 p.m. -- but a superb experience.

> Toby Appel Cushing/Whitney Medical Library, Yale University







As a third time repeater at Rare Book School having taken four courses, I believe I have only scratched the surface. However, as I continue to scratch, hopefully I will make that great breakthrough which will mark me as a true academic. Not only has each of the courses at Rare Book School been thoroughly educational, but the exercise has been delightful in every way.

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My experience as a modest collector prior to 1992 when I became associated with Pickering & Chatto was limited, but since then, my interest has grown and matured. Going to Rare Book School is playing "catch up" and I am running very fast!

Congratulations to Terry Belanger and his staff for their creative approach and interesting course presentations.

William M. Lese Pickering & Chatto Antiquarian Booksellers







I must confess: I am an RBS recidivist, a repeat attender. This year's class, "Book Illustration to 1890" taught by Terry Belanger, was thoroughly enjoyable. The combination of a wonderfully cohesive class and a very knowledgeable instructor can't be beat. Actually producing and printing two types of etchings, as well as cutting and printing a linoleum block, provided me with a unique appreciation for the craftsmanship involved in book illustration. I will never again look at the tiny white lozenges between the black lines of a woodblock print the same way. In class and in lab sessions we examined hundreds of examples of illustrations drawn from the large Book Arts Press collection. By the end of the week one of my classmates, either more skilled in identifying illustration type than I or more creative, was seeing stipple engraving in ceiling acoustical tiles

It was a wonderfully grueling and gruelingly wonderful week! After my first year I learned never to take vacation BEFORE attending Rare Book School. I now always try to slip away after the course for some much-needed R & R. The weeks at RBS are some of the most draining, yet exhilarating I have ever experienced.

Although I enjoyed the classes I took while RBS was in residence at Columbia University, I continue to be personally grateful that Terry et al have moved to Charlottesville. I now have additional opportunities every summer to see friends and colleagues whom I normally only see once a year or once every two or three years, as well as meet new people with similar interests. I take every opportunity to lure RBS students over to the Health Sciences Library to see my collections. Since the program runs for four or five weeks and my class only lasts for one, I also have the unfair advantage of

attending some of the evening lectures not having come straight from an arduous day of RBSing.

Joan Echtenkamp Klein University of Virginia Health Sciences Center







I have just returned from two weeks of intensive courses at Rare Book School 95. This was my first year in attendance and I was impressed by how well organized the school was and how smoothly the weeks went by. Classes were for five days from 8:30 a.m. to 5:00 p.m. (with time for breaks, of course, which were spent networking and getting to know fellow schoolmates).

My first class, "Introduction to Rare Book Librarianship," covered the definition of a "rare book"; the nature and purpose of special collections; the organization of the collections and the staff necessary to maintain them; the acquisition, cataloguing, and housing of special collections; the preparation of exhibits. It was a good general overview of the problems involved with special collections in libraries, and each member of the class was encouraged to share his or her experiences.

My second class was "Rare Book Cataloging", which described what to do with the material once it had been acquired. We studied in detail Descriptive Cataloging of Rare Books and learned how to determine formats and collations. The importance of a written policy for cataloguing rare books and/or special collections was stressed. I returned to the Clendening History of Medicine Library with many new ideas and possible solutions to some of the problems I have encountered. Being the only cataloguer and working on a retrospective conversion project involving many old and rare items, I found both courses invaluable.

The weather in Virginia in the summer was hot and humid, but the local restaurants had delicious food. (I was introduced to the eggplant sandwich.)

The opportunity to meet others working in special collections and having similar interests was stimulating. I hope to be able to return for some of the other classes in future years.

Barbara Stephens University of Kansas Medical Center THE LAWRENCE BERKELEY
LABORATORY ARCHIVES AND
RECORDS OFFICE'S ROLE IN
THE U.S. DEPARTMENT OF
ENERGY'S HUMAN RADIATION
EXPERIMENT RECORDS
SEARCH AND RETRIEVAL
PROJECT

Openness: A Cultural Shift Without an open and thorough examination of the record, the revelation that the government conducted secret experiments on its own people has the potential to increase distrust of government more than anything since Watergate or the war in Vietnam. But the fresh winds of truth from [the Department of Energy] could help to reverse the long decline of confidence in the government and in democratic processes. --Russell Watson<sup>1</sup>

On 8 November 1993 I received a phone call from Albuquerque Tribune writer Eileen Welsome. She had been researching a 1940s issue with the assistance of the Lawrence Berkeley Laboratory (LBL) Archives and Records Office periodically for several months. She said that she had completed her research, the article was ready to go to press, and that the attorneys from the Albuquerque Tribune were going to confront U.S. Secretary of Energy Hazel O'Leary with the findings. I had a sense that Welsome's research was very significant and very sensitive because she elected not to disclose the essence of her topic. We talked for several minutes about the pending release of her investigative reporting. I clearly remember telling Welsome to "be careful." She asked me what I meant. I said obliquely: "Remember who you are dealing with. This is the former Atomic Energy Commission." I had read accounts about those who have challenged the U.S. Department of Energy (DOE) and the reported lengths the DOE went to discredit its detractors.2

As Bernard Shaw stated in a CNN special entitled "America's Nuclear Shame," the DOE is the "long shadowy part of the Federal Government. Its main job is to manage this nation's nuclear interest." During the Cold War, the department had unprecedented powers to operate in secret. It used the cloak of secrecy "to protect not only its operations, but also its power and influence--at almost any cost." Welsome was definitely calling into ques-

tion, if not preparing to humiliate publicly, that operation.

I worried about what was to transpire. Using past organizational actions as a guide, I thought that the Secretary was likely to let Welsome's story run and then die its own quick media death. I fully anticipated that if a press officer responded it would be with the perfunctory: "The U.S. Department of Energy neither confirms nor denies the story." I hoped Welsome would not be harmed or professionally besmirched.

When Welsome and I ended our conversation, I was full of adrenaline. I dashed off to the University of California, Berkeley to teach my archives and records management class. I told the students that something potentially very significant was about to be released to the public, and it would draw heavily from archives and records. Since classes were soon to be over, I advised them to watch their newspapers.

On 15, 16, and 17 November 1993 the *Albuquerque Tribune* ran a 44-page, Sunday magazinestyle article entitled, "The Plutonium Story." The editor's leading paragraph stated:

Some compare it to the Nazi war atrocities. Others say it had to be done to understand the dangers of a powerful new element that launched the Atomic Age. Eighteen ordinary people were injected with plutonium without their informed consent, and their names have been kept hidden. Until now.<sup>3</sup>

In the ensuing weeks Welsome's research sounded a bell that rang loudly across the nation, especially in Washington, D.C.

Two and a half weeks later, on 4 December 1993, unbeknownst to the nation but later recounted by the head of the Department of Energy Declassification Office, Secretary O'Leary gathered her 35 most senior executives within the Department of Energy in a room around a large conference table in preparation for a major press briefing. She made a personal statement about how shocked she was to learn about the eighteen people who had been injected with plutonium as a part of the Manhattan Engineering District's effort to learn about the effects of the newly discovered element on human metabolism. Secretary O'Leary asked each executive present to state if they were aware of the experiments, when they had learned of the experiments, and why they had not come forward with the information. Roger Heusser, head of the DOE Office of Declassification, said the meeting

was full of emotion and, when he recalled it three months later to a group of historians, he could not hold back the tears.<sup>4</sup>

On 7 December 1993, three weeks after the Welsome article was published, the Secretary of Energy proved to be far different than her predecessors. Secretary O'Leary conducted a press conference to disclose that there had been 204 secret nuclear tests since 1945, including 18 carried out during the Reagan and Bush presidencies. She went on to disclose that DOE facilities held 33.5 metric tons of stockpiled plutonium. This information alone required O'Leary to struggle with the Pentagon through seventeen drafts before she was allowed to make the announcements. She also made known a plan to allocate resources to declassify 32 million pages of documents that spanned the history of the Cold War. All three announcements were bold and stunned the media. Activists had been struggling for years to obtain information from the DOE. Even Congress had tried to obtain information but had failed.

Then Secretary O'Leary dropped the bombshell that set off an unanticipated firestorm. She said, "I am saddened and appalled to learn that individuals unwittingly were injected with plutonium as a part of the Manhattan Engineering District's nuclear worker protection research." Secretary O'Leary was referring to Eileen Welsome's research where she recounted the history of a project where eighteen people were injected with plutonium, most of whom appeared not to have known that they were the subject of experiments. Welsome had successfully researched and disclosed the identities of five of the research subjects; their personal stories were most gripping. Secretary O'Leary also said she wanted to "right the wrongs" of those experimented on and stated that she would commit resources from the Department of Energy to research, find, and make available all the department's information on the human plutonium injections as well as all other human radiation experiments.5

Such was the official beginning of the most intense, exhilarating, emotionally draining, and rewarding project I have participated in during my twenty years as an archivist and records manager. Welsome went into temporary seclusion, obtained a book contract to expand her research, and in April 1994, she was feted with a Pulitzer Prize and the George Polk Award for her investigative reporting.

The Lawrence Berkeley Laboratory Archives and Records Office, which customarily runs at a fevered pitch, was catapulted into finding and sharing what it had on the plutonium injections and human radiation experiments. The Lawrence Berkeley Laboratory (LBL) had long referred to itself as the "birthplace of nuclear medicine." The Laboratory was about to pay a high price for that title. We were also the home institution to one of the most controversial scientists Welsome referred to in her article. For years researchers had been trying to obtain more information on Dr. Joseph G. Hamilton, and noted historians had conveyed to us in Archives and Records Office that this man typified the image of the "mad scientist" who was more devoted to the possibilities of his research than to the value and comfort of patients or human subjects. It was Hamilton who served as principal investigator on the team that injected three people with plutonium at the University of California Medical Center, later named the University of California, San Francisco. In time, the LBL Human Radiation Experiment research team would prove that the plutonium injections were only a small part of Dr. Hamilton's career.8

In addition to researching specific information regarding nuclear medicine, the Secretary of Energy was calling for something that every archivist feels in his/her bones--she wanted the DOE (formerly the Atomic Energy Commission and the Manhattan Engineering District) to be open with the American people about what this agency did with its public trust. Secretary O'Leary has said in many public appearances that the DOE has to stop being at war with its citizens and must rebuild the public's confidence in this 19 billion dollar a year enterprise by giving the public a full accounting of its past. Secretary O'Leary labeled this her "Openness Initiative".

President Clinton was so impressed with O'Leary's bold steps that he formed the Interagency Working Group made up of the cabinet level heads from federal agencies that had sponsored human radiation experiments. Those agencies included the Department of Energy, Department of Veterans Affairs, Department of Health and Human Services, the Central Intelligence Agency, National Aeronautics Space Administration (NASA), the Department of Defense, the Attorney General, and the Director of the Office of Management and Budget. President Clinton then issued an executive order creating an independent Presidential Advisory Committee on Human Radiation Experiments (ACHRE). The Advisory Committee is comprised of distinguished ethicists, physicians, scientists, lawyers, and a citizen member. The Advisory Committee reports to the Interagency Working Group. The Advisory Committee's charter directed them

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to evaluate whether: 1) there was a clear medical purpose for the experiments; 2) appropriate medical follow-up was conducted, and 3) the experiments' design and administration adequately met ethical and scientific standards, including standards of informed consent.9

Secretary O'Leary created the Office of Human Radiation Experiments to lead, plan, and oversee DOE's 20,000 employees and 140,000 contractors in their search for pertinent records. Special Counsel and Director Ellyn Weiss was appointed to head the office. Fortuitously, the U.S. Department of Energy drew on the leadership and professional guidance of William G. LeFurgy and Eleanor Melamed. Both individuals are superbly trained archivists and seasoned professionals who had worked at the National Archives for several years and within the last three years transferred to the U.S. Department of Energy. LeFurgy and Melamed lead the effort to write what came to be titled "Guidance for Records Inventory and Retrieval Concerning Human Radiation Experiments". The abbreviated title became The Guidance Document.10

The Guidance Document outlined the scope of the project; gave priorities on what was to be researched, inventoried, and described; and delineated what was to occur when significant documents were found on human radiation experiments. The document instructed readers on the importance of maintaining and capturing the context of information. Other details such as how the most relevant documents were to be photocopied, and how

provenance information was to be added to the photocopy while assuring that all original documents remained in original order where they could be further researched if necessary were also included. The Guidance Document attempted to inform non-archivists how to conduct a records inventory and how to describe records series. The document advocated and outlined a procedure for expediting declassification of pertinent national security documents. Emphasis was also placed on the urgent need to be thorough and responsive to Freedom of Information Act requests.

The purpose of the records inventory and document search was to locate records that substantiate human radiation experi-

ments between the years 1944 and 1974. All federal agencies, including the Department of Energy, were to use the following statement as their scope of work:

Experiments on individuals involving intentional exposure to ionizing radiation (excluding routine clinical procedures) and experiments involving intentional environmental releases of radiation that were designed to test human health effects of ionizing radiation or were designed to test the extent of human exposure to ionizing radiation.<sup>11</sup>

As someone who has read and tried to implement thirty years worth of DOE and predecessor agency records directives, I can testify that this was an unusually direct, logical, and comprehensive set of instructions issued by DOE headquarters. An archivist, historian, or records manager could read the guidance, understand its intent, and design a plan of work with milestones. That is exactly what the LBL Archives and Records Office did.

Instead of proceeding chronologically, I will direct my remarks toward telling you what was required of and accomplished by the Lawrence Berkeley Laboratory Archives and Records Office. The following is a list detailing milestones and accomplishments:

• The Lawrence Berkeley Laboratory Director created a Human Radiation Experiment

Records Search and Retrieval Project Committee that included: the Life Sciences Division Deputy Director; the Laboratory's Planning and Development Office Director; the Environment, Health and Safety Division Deputy Director; the Laboratory Legal Counsel; and the Archivist and Records Manager. This committee was responsible to the Laboratory Director for the complete cooperation and compliance of the Laboratory with Secretary O'Leary's initiative. It was important that the Committee include people from diverse parts of the Laboratory, such as upper management, the division head from the division where the records originated, the head of the Laboratory's human subjects · review panel, Legal Counsel, and the Public Information Officer. A team approach was critical to addressing all the concerns in an initiative as far-reaching as this. Openness is important and must be handled in a balanced, thoughtful way.

- Laboratory Archivist and Records Manager wrote a plan on how the Laboratory would respond to the U.S. Department of Energy regarding what records were to be researched, described, inventoried, and made available to the public.
- Every unit at LBL took the equivalent of a 1% budget cut to fund this records search and retrieval project. LBL spent \$237,000 for this phase of the work.<sup>12</sup>
- LBL increased the Archives and Records Office staff from four full-time employees to seventeen.
- We inventoried 3,132 cubic feet of LBL records pertinent to human radiation experiments.
- We researched 1,068 cubic feet of records in greater depth than the records series level.
- We released 216,800 pages of documentation to the public.
- We microfilmed 36,000 pages of Dr. Joseph G. Hamilton's records.
- We answered two major and three minor Freedom of Information Act Requests.
- We conducted eight oral histories with key individuals involved with human radiation experiments at Lawrence Berkeley Laboratory.

Finally, DOE stated that LBL had had the largest and most complex research task of all DOE facilities and had conducted a model records search and retrieval effort.<sup>13</sup>

In July 1994, the Lawrence Berkeley Laboratory HRE project underwent a thorough twoand-a-half day review. Planning, decision making, and its completed as well as projected deliverables were examined. The Department of Energy's Office of Human Radiation Experiments (OHRE) Special Counsel and Director announced that because LBL had done a superb job in planning, recruiting, training, and organizing professional archivists, because the quality of records series descriptions was so good, and because the selected key documents showed a thorough understanding of what the DOE was trying to accomplish, the LBL group would work as an extension to the DOE Office of Human Radiation Experiments. The Laboratory was pleased to be recognized by headquarters and immediately gave their approval. The OHRE leadership and I negotiated a budget, evaluated competing priorities, and agreed on deliverables with specific timeframes. From 1 October 1994 to 28 April 1995, we served as an adjunct to the DOE while simultaneously maintaining our functions as the Archives and Records Office.

I would like to show by means of example what this research project entailed. The purpose of sharing this list is to illustrate the many different aspects that are all a part of producing coherent research and realizing DOE's Openness Initiative. As an adjunct to the DOE OHRE, in what we call Phase II, we accomplished the following:

- Because of the successful work completed by the LBL Archives and Records Office at LBL, the Presidential Advisory Committee for Human Radiation Experiments named University of California (North) as one of its two in-depth sites for records reviews.
- We researched, inventoried, and described pertinent records at the University of California, San Francisco; the University of California, Office of the President; the University of California, Berkeley; and the University of California, Los Angeles.
- We served as the liaison between the DOE Office of Human Radiation Experiments (DOEOHRE) and the University of California contacts regarding the human radiation experiments research.

- We wrote records series descriptions for 88 collections or records series.
- We researched, reviewed, and described over 990 linear feet of records.
- We released 10,800 pages of documentation to the public.
- We assisted the DOE Office of Human Radiation Experiments in completing its oral history project by conducting interviews, coordinating the transcription of oral histories, and audit checking the transcripts.
- We researched and wrote experiment synopses with citations for DOE-sponsored human radiation experiments conducted at LBL, UCSF, and UCLA.
- We conducted extensive historical research for the DOE Office of Human Radiation Experiments and the Presidential Advisory Committee on Human Radiation Experiments on specific issues and topics.
- We assisted DOE by traveling to the Hanford Site, including searching and writing 22 records series descriptions for 125 cubic feet of records.
- We assisted DOE by traveling to the Idaho National Engineering Laboratory, including researching and writing 21 records series descriptions for 164 cubic feet of records.
- We wrote a site history that placed LBL's extensive bio-medical research program in historical context, published in the Human Radiation Experiments: The Department of Energy Roadmap to the Story and the Records. 14
- We conducted extensive database research on national bibliographic utilities to locate related collections of records on human radiation experiments throughout archives and special collection repositories nationally. We shared the findings with historians at a DOE sponsored conference.
- We supported the DOE Office of Human Radiation Experiments Case Management Office in substantiating experiments on individuals.
- We researched and advised the DOE-OHRE on revising DOE rules on balancing the public's right to know and the individual's right to privacy. The focus was on allowing the scholarly

- community access to records in order to test adequately hypotheses about the disproportionate use of vulnerable populations in scientific research.
- We conducted workshops for the newly hired members of the DOR Office of Human Radiation Experiments staff on how to inventory and describe records series and how to conduct oral history interviews.

This list of activities and accomplishments gives you an overview of what we have accomplished this past year. I would also like to take this opportunity to share with you some of the major accomplishments of the Department of Energy, Office of Human Radiation Experiments.

- The Office of Human Radiation Experiments produced a superb guide entitled Human Radiation Experiments: The Department of Energy Roadmap to the Story and the Records. This guide gives an overview of the enormous project that involved the review of the Department of Energy's 3.2 million cubic feet of records. It provides a narrative summary of the major Department of Energy facilities associated with human radiation experiments, the most important records series found at each site, and a description of individual human radiation experiments.
- The Department of Energy's Office of Human Radiation Experiments then contracted with the Coordination and Information Center (CIC) in Las Vegas to provide access to photocopies of the full text of the significant documents. These documents are being keyword indexed and made available to the public. Furthermore, the CIC is scanning these significant documents and sharing them, full-text, on the Internet.<sup>15</sup>
- The Department of Energy's Office of Human Radiation Experiments also worked closely with the Office of Declassification. Thousands of pages of documents related to human radiation experiments were promptly identified and declassified. Those pages will be indexed and made available to the public through another Internet site named Opennet.<sup>16</sup>
- Knowing the tremendous historical value of the records that were being identified, described, and made available to the public, the Office of Human Radiation Experiments sponsored a symposium for approximately twenty distin-

guished historians of science, social welfare history, medicine, and twentieth-century political and diplomatic history to assess DOE's activities and to give DOE information as to where they might improve their project design and make historically valuable records more accessible to scholars. This symposium was planned for 9 November 1994 so that the project had enough character to be thoroughly reviewed, but was still flexible enough to implement suggestions for improvement.

- The OHRE has also set out on an ambitious oral history project. More than thirty key scientists and high level executives who participated in decision making relating to human radiation experiments have been interviewed. These interviews are to augment the contemporaneous record as to who designed the experiments, what approvals were sought and obtained, and what the merits of the research were. The oral history transcripts are open to the public and will be available on the Internet as well as through the Center for Information Coordination, the DOE History Office, and the National Archives.
- According to a commitment made to Senator John Glenn, the OHRE conducted eleven Quality Check audits of major information sites to assure that they conducted a fair and reasonable search for records pertinent to Human Radiation Experiments. Each site received a final evaluation and uncompleted tasks continue to be monitored by the DOE-OHRE.<sup>17</sup>

There are a myriad of perplexing issues that the nation's human radiation experiments raise, some of which include:

• How an institutional archives and records office responds to a nationally recognized initiative that is perceived potentially to injure the reputation of the parent institution and the prestige of the community that it serves.

- How archivists process the emotions that accompany reviewing the records of human radiation experiments.
- How negligence in the care of the nation's records complicates finding pertinent documentary materials.
- How the nation's reliance on senior clerks and non-professionals for archives and records management tasks impedes the building of effective archives and records management programs capable of maintaining and retrieving information.
- How esoteric and misunderstood historical research, archives, and records management are to non-archivists.
- How individual perspectives, professional training, political orientation, and social class frame paradigms and perceptions to the exclusion of other information.
- How the mainstream broadcast and print media rarely reported the Human Radiation Experiments issues in a knowledgeable and accurate manner.
- How the public does not respond to questionable government-sponsored human subject use and scientific activities unless the story is cast in human interest terms complete with name, family, and community information.
- From a social history perspective, the U.S. has been and continues to be mistrustful of how medical advances are achieved and has an abiding attachment to the myth of the mad scientist.
- How the scientific community fears the public has become so radiation-phobic that the public will not take advantage of, or support for, nuclear medical research.
  - How the concept of protecting the patient's confidentiality by withholding deceased patient medical information inhibited the public's right to know the extent of governmentsponsored human radiation experiments.
  - How the desired scientific data was obtained disproportionately from individuals who were least able



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to refuse care and attention of physicians and scientists. Subjects studied included the poor, children, mentally ill, or disabled, and the elderly, as well as prisoners, indigent pregnant women, ethnic minorities, and terminally ill patients.

- How the construct of informed consent is a relatively new apparatus in our society.
- How one understands and reconstructs the professional ethics of a certain time period and evaluates whether a group of people or an individual adhered to those ethical standards or whether those individuals should be held accountable based on current standards.
- How the public should allow time for historians to review and analyze the mass information that has recently been released. A set of issues as complex as government-sponsored human radiation experiments over a fifty year time period, during the Cold War, will require years of painstaking historical scholarship.
- How an archivist and records manager programmatically responds to such a prominent initiative while maintaining the current archival work. Regular tasks includes assisting records liaison officers, accessioning over 350 cubic feet a month, transferring records to the National Archives, assisting divisions and groups with records when a prominent scientist in the group dies, and responding a multitude of small tasks.

I regret that space will not permit my covering these issues.

In closing I would like to say how much this project has meant to me. I want to thank Laboratory management for their support. Against their better judgment, they have fought their natural instincts to protect and hold onto information and participated in the "Openness Initiative."

I want to say what an honor it has been to work with the extraordinarily talented people who became the LBL Archives and Records Office Human Radiation Records Search and Retrieval Team. They are: Trina Baker, Anna Berge, Nong Chen, Jeannie Cuevas, Ross Decker, Perry Hall, Karen Holmes, Mary Hones, Bonnie Kapus, Roberto Landazuri, Mi-Young Lee, Andrea Mugnier, Gary Novak, Caroline Orozco, John Stoner, and Susan Storch.

I have witnessed all of these individuals take on very difficult challenges, study the issues, learn what they needed to, and use their intellectual powers to accomplish extraordinary tasks. I have the greatest respect for these individuals, and I want to tell you and them what an honor it has been for me to have worked with them.

This project has drawn on every aspect of training, knowledge, and experience I have accumulated. It has been the professional challenge of my life. It is also a project that resonates with every professional tenant that I espouse, every political, social, spiritual, and personal value that I hold dear. I know that this team has played a key role in assisting the U.S. Department of Energy in changing the course of its fifty year history. Even if a more conservative, less compassionate tide sweeps the country, this HRE team, and the current DOE-OHRE, has released enough information to stir investigators, journalists, historians, epidemiologists, and public policy makers for decades to come. It will take years for the information to be digested. I also have faith that the 226,800 documents the LBL released to the public in the course of this project will prompt researchers to request additional information from those who did not release as much as we did.

Did we get it all? No. As talented as everyone is, and as hard as everyone worked, we know we did not find every relevant document, but this was not the goal. The goal was to gain intellectual control on relevant records. The future will bring added interest and research to the work that we have been a part of.

Have we made a difference? Yes. I have no doubt that this has been the golden age of openness of information for the U.S. Department of Energy. I am most grateful to have lived to see this day. What I have been a part of has surpassed my deepest wishes for the Department of Energy.

Is the U.S. Department of Energy a federal department that promotes citizen access to information? Changing a bureaucracy this deeply entrenched in secrecy is an enormous undertaking. The Department of Energy leadership has made a valiant attempt to institutionalize the Openness Initiative. Yet ultimately we know that the change must be reinforced by the next administration, Congress, the President, and ultimately the citizens of the United States. It is too early to say if Openness will become an enduring tenant of the Department of Energy.

I would like to close by telling you that my work with the U.S. Department of Energy's Human Radiation Records Search and Retrieval Project has made me think back to the time when I was 19 years old in 1974. I had just started my first archives job, while an undergraduate in history and political science. While I learned the fundamentals of archives work, I listened and watched as the Judiciary Committee weighed evidence, records, and testimony, in order to judge and possibly impeach the President of the United States. Daily I saw and heard the dramatic impact that records--evidence, if you will--were having. In my heart I knew that records were making a crucial difference. My intuition told me that being an archivist had extraordinary potential for bringing the truth forward, holding people and institutions accountable, and making a positive contribution to people's lives. Experience after experience over the course of my twenty years as an archivist has confirmed this intuition. The Human Radiation Experiment Records Search and Retrieval Project has proven to me in a most poignant way how we archivists can assist others in understanding crucial events that have occurred to the subjects of the experiments and to the nation.

#### Endnotes

- 1. Russell Watson, et. al., "America's Nuclear Secrets," Newsweek, December 27, 1993, p. 15.
- 2.Bernard Shaw, "America's Nuclear Shame," CNN Special, July 3, 1994, Transcript #351, page 1 and 7.
- 3. Eileen Welsome, "The Plutonium Experiment," Albuquerque (New Mexico) Tribune, November 15-17, 1993, parts 1-3.
- 4.Roger Heusser, "The Department of Energy's Openness Initiative," Society for the History of Science and Technology, March 17, 1993, Sacramento, California.
- 5.Russell Watson, et. al., "America's Nuclear Secrets," Newsweek, December 27, 1993, pp. 14-18; Stephen Budiansky, Erica E. Goode, and Ted Gest, "The Cold War Experiments," U.S. News and World Report 116 no. 3 (January 24, 1994): 32-37; Geoffrey Sea, "The Radiation Story No One Would Touch," Columbia Journalism Review 32, no. 6 (March-April, 1994): 37-41; Debra D. Durocher, "Radiation Redux," American Journalism Review 16, no. 2 (March, 1994): 34-38 writes:

Then came Hazel O'Leary's December 7 press

conference. O'Leary had originally scheduled the conference to announce that she was going to declassify many of the department's records. She also planned to reveal that the government had conducted 204 secret underground nuclear tests over a 45-year period.

The Tribune series landed on O'Leary's desk before the press conference, thanks to her environmental counsel and chief of staff, Dan W. Reicher. An anti-nuclear activist at the Natural Resources Defense Council in the 1980s, Reicher told his boss about the stories, and O'Leary took note. She decided to mention the plutonium experiment during the press conference and pledge to release information on nearly 800 other subjects of radiation tests. [Arthur] Kranish [editor and publisher of Science Trends | says the timing was a fortuitous coincidence: The Tribune series happened to fit nicely in her agenda. It hit at the right time to sort of support O'Leary's declassification plans. Even so, O'Leary didn't say much about the experiments. The Tribune had assigned its Washington correspondent, Karen MacPherson, to attend O'Leary's announcement. "The experiments were a very small part of her presentation," MacPherson says. "She sort of glossed over them. It was lucky for us it was a press conference. It wasn't until other reporters heard what I was asking that they started to pay attention." Reporters perked up during the question-and-answer period when MacPherson asked the energy secretary for more information about the plutonium experiment. O'Leary's responded that the experiment wasn't the focus of her presentation and that reporters could follow up after the conference. Over the next few days, the story was picked up by the network evening news casts and featured on the front pages of the New York Times and Los Angeles Times. It was finally news. Arjun Makhijani and Bette-Jane Crigger, "Energy Enters and Guilty Plea," Bulletin of the Atomic Scientists 50, no. 2 (March-April, 1994): 18-30 write:

After the press conference, the Energy Department set up a "hotline" to hear from people who might have information about the experiments or who felt they might have been exposed to radiation in an experiment. Very quickly the number of operators required to staff the hotline rose to more than 30, with calls running as high as 700 per hour.

- 6.Zofia Smardz, "The Payoff for a Whistle-Blower," Working Woman, June 1994, p. 16.
- 7.M. C. Pirruccello and C.A. Tobias, editors, Biological and Medical Research with Accelerated Heavy Ions at the Bevalac, 1977-1980, with Intro-

duction and Overview by Edward Alpen (Berkeley, California: Lawrence Berkeley Laboratory, [1980], p. 3, LBL No. 11220; Donner Laboratory, Fifty Years of Progress, 1937-1987 (Berkeley, California: Lawrence Berkeley Laboratory and the University of California, Berkeley, 1987), p. 6; Public Information Department, Tellspin, Berkeley, California: Lawrence Berkeley Laboratory, 1989 (Video).

8. Gregg Herken and James David, "Doctors of Death," New York Times, January 13, 1994, p. A21, New York Times, December 28, 1993; Dan Stober, "Buchenwald Touch," Sacramento Bee, February 27, 1994, p. F1; Arjun Makhijani and Bette-Jane Crigger, "Energy Enters and Guilty Plea," Bulletin of the Atomic Scientists 50, no. 2 (March-April, 1994): 18-30 writes:

At the time of the Manhattan Project, Joseph G. Hamilton, an assistant professor of medicine at the University of California's Radiation Laboratory, proposed contaminating water supplies with radioactive isotopes in order to poison large numbers of people.

In 1950, Hamilton proposed an experiment in which health human volunteers would inhale near-lethal doses of radioactive aerosols. He seems not to have found either approval or volunteers, but he continued to pursue the matter, recommending in 1952 that the radiological warfare program continue to develop as rapidly as possible. (Yet it was Hamilton who said in 1950 in a secret memo that the human experiments could be construed as having a little of the Buchenwald touch.) In any event, the people who were exposed to radiation from the weapon-related tests that were carried out were apparently not of scientific interest to researchers, and no follow-up studies were conducted in most cases.

9.U.S., General Accounting Office, Testimony Before the Committee on Governmental Affairs, U.S. Senate, Health and Safety on the "Status of Federal Efforts to Disclose Cold War Radiation Involving Humans," December 1, 1994 (GAO/T-RCED-95-40): 3.

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11.U.S., President, Executive Order 12891, "Advisory Committee on Human Radiation Experiments," Weekly Compilation of Presidential Documents 30, no. 3 (January 24, 1994): 111-114; U.S.

General Accounting Office, Testimony before the Committee on Governmental Affairs, U.S. Senate, Health and Safety on the "Status of Federal Efforts to Disclose Cold War Radiation Involving Humans," Dec. 1, 1994 (GAO/T- RCED-95-40): 3.

12. Ken Groves and Michael Yesley, "The Los Alamos National Laboratory Report to the Advisory Committee on Human Radiation Experiments," October 12-13, 1994, San Francisco, California.

13.U.S., Department of Energy, Office of Human Radiation Experiments, Lawrence Berkeley Laboratory Site Quality Check Visit, Apr. 3-7, 1995, p. 1

14.U.S., Department of Energy, Human Radiation Experiments: The Department of Energy Roadmap to the Story and the Records, DOE/EH-0445 (February, 1995.) Copies of the book are available from the U.S. Department of Commerce, Technology Administration, National Technical Information Service, Springfield, VA 22161, (703) 487-4650.

15. The Department of Energy, Office of Human Radiation Experiment, Internet Site address is http://www.ohre.doe.gov.

16. The Department of Energy Opennet Internet Site address for declassified documents is http://www.doe.gov/html/osti/opennet.

17.Roger Anders, OHRE Site Quality Check Process, Office of Human Radiation Experiments Staff and Field Conference, February 14-15, 1995, Washington, D.C.; United States General Accounting Office, Testimony Before the Committee on Governmental Affairs, U.S. Senate, Health and Safety on the "Status of Federal Efforts to Disclose Cold War Radiation Involving Humans," December 1, 1994 (GAO/T-RCED-95-40): 5-6.

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[Editors' Note: This article is based on the author's keynote address at the annual meeting of the Society of California Archivists (Oakland, CA, 28 April 1995) and her presentation at the 59th annual meeting of the Society of American Archivists (Washington, D.C., 2 September 1995). It was previously printed in Architext: Newsletter of the Science, Technology, and Health Care Roundtable of the Society of American Archivists v. 5 number 1 August 1995, pp. 22-31 and is reprinted here by permission of the editor and author.]

### THE BENJAMIN COLLECTION

The letters flowed back and forth revealing the world of the serious and knowledgeable collector, a world characterized by comity and love of books.

In 1962 Dr. and Mrs. John A. Benjamin made an unexpected gift to the UCLA Biomedical Library of over 700 rare books and manuscripts, including nineteen incunabula and over a hundred sixteenth-century works. In 1989 the Benjamins presented the History & Special Collections Division with another gift -- a collection of correspondence documenting the building of Dr. Benjamin's superb collection.

John A. Benjamin received his B.A. degree from UCLA in 1930, his M.D. from Johns Hopkins in 1934, and went on to specialize in urology. His fascination with the history of his specialty, and with medicine in general, led him into serious study as evidenced by his writings and his membership in various historical societies. It also led to the skillful and painstaking building of a memorable collection.

Urology, an ancient part of the practice of medicine, forms the core of Benjamin's collection. But beyond its core strengths, the collection also embraces prized first editions of epochal works in the history of medicine, physiology, mathematics, and astronomy -- great editions of such classic works as those of Vesalius, Harvey, Bright, Addison, Euclid, Newton, Copernicus, and Kepler. The Benjamin collection spans the centuries from the fourteenth to the twentieth; it enriches the historical collection at UCLA with books and manuscript immeasurably. It is the core around which the rare book collection coalesced and took form. It attracted other collections and support, both scholarly and financial.



The more recent gift, the collection of correspondence, consists almost entirely of letters received by Dr. Benjamin from the various booksellers with whom he dealt while building his collection. The letters reveal the world of the serious and knowledgeable collector and provide a fascinating insight into how a finely honed collection is built. They also reveal a slice of the world characterized by comity and love of books.

Reading one half of a correspondence is similar to listening to a person talking on the telephone. It is clear what the tone of the conversation is and certainly if the talk goes on long enough, it is possible to discern the topic. By reading these received letters and Dr. Benjamin's annotations in the margins, a clear picture is formed. The correspondence and the collection building began in earnest in 1942, the year in which he received a full-time appointment in Urology at the University of Rochester School of Medicine and Dentistry.

From 1942 to the mid-1950s, Dr. Benjamin corresponded regularly with six different antiquarian booksellers and bought books from all of them. These booksellers, Henry Schuman, New York, F. Thomas Heller, New York, E. Weil, London, Emil Offenbacher, New York, Raphael King, London, and Herbert Reichner, New York, provided Dr. Benjamin with many of the rarest books in the collection. He obviously sent them want lists and they in turn offered him interesting items as they found them.

The letters flowed back and forth, almost always about books but tucked into them is the evidence of personal concern; congratulations are rendered; Season's Greetings are appreciated; salutations on the birth of children are extended. And always books are described, offered and bought or rejected; at times the condition of the world creeps in and a context for the collecting is provided.

From Henry Schuman in a letter dated 18 September 1942: "I am pleased that you found the Simon book satisfactory. I shall to my best to trace a copy of Rayer's *Traite des Maladies des Reins* for you, but with the Continent out of the picture as the most likely source of supply, it is quite uncertain as to when a copy may turn up. I shall certainly let you know promptly when one does." Over the years, Shuman found and sold many works to Benjamin, mostly on subjects related to urology: stones and how to operate for them, uroscopy, kidney functions and diseases, and anatomical works. Schuman and Benjamin corresponded for over twenty-five years.

The greatest books require the least discussion amongst the knowledgeable. With satisfied succinctness, F. Thomas Heller wrote in a letter of 10 October 1949: "I have great pleasure in quoting the following: Vesalius (Andreas) De humani corporis fabrica. Basel, Oporinus, 1543. Folio. Substantially bound in half pigskin (pigskin back with five raised bands, pigskin corners.) 6 ll., 663 pp., 18 ll. With woodcut title-page (disscection scene). Full-page woodcut portrait. 23 full-page woodcuts, 200 smaller woodcuts, representing skeleton, anatomical representations, instruments, all by Stephan van Calcar. Seven large and numerous smaller woodcut initials...This copy is priced at \$1,645..." This is followed by a letter dated 16 November 1949: "Needless to say that I was delighted to learn that you were so well pleased with your first Vesalius. If I may add a personal remark: strange as it may seem one feels sometimes sorry for having to part with such a fine book, but this is amply compensated by the satsifaction of having given to a discerning collector the pleasure of having the books on his shelves." Dr. Benjamin bought many important works from Heller such as William Harvey's De motu cordis, 1628 and Nicolaus Copernicus' De revolutionibus orbium coelestium, 1543.

The E. Weil, London, correspondence file began in late 1943. From E. Weil in a letter of 16 November 1945: "I have just now returned from my first trip to the Continent: France and Switzerland. It was an interesting journey which I made to find out about books left in these countries. The French have not sold much during the war and I saw some interesting things...I saw one early and desirable English book on urine, but I found it much too dear; prices in France are simply fantastic in many cases." On subsequent trips Weil was more successful. He reported in a letter of 5 April 1946: "The other day I saw a most charming early French urine book, certainly extremely rare, in gothic type, but so far the owner was not willing to part with it..."; On 17 May 1946 he wrote: "I enclose also the full title La cure medicine contre la pierre et la gravelle...Paris, 1538 of the early French urine book; unfortunately the owner of it has not yet made a price for it and I am afraid it will be a rather expensive book. It is very well preserved in a modern French morocco binding." Then on 28 June 1946: "...I have just despatched to you the small French urine book of 1538...It is certainly a precious little vol. and of considerable rarity." Although much of Dr. Benjamin's correspondence seemed to have been with New York and London booksellers, he also bought from Zeitlin and VerBrugge in Los Angeles. This relationship started later in

Benjamin's collecting career and the earliest evidence of buying dates from 1963. From Jake Zeitlin came one of the most famous books in science: Sir Isaac Newton's *Principia*, London, 1686. According to the Zeitlin description this particular copy, first issue, first edition, "...is probably the finest copy of Newton's *Principia* likely to appear on the market. The only other copy in boards, uncut, of which we have any knowledge, is that in the library of Newton's College at Cambridge, Trinity College." And in a letter to Benjamin dated 22 November 1965 Zeitlin reiterates "There is not another copy in the world like this..."

It is clear that Benjamin bought a significant number of books from five or six dealers. However, he wasn't limited just to these; he perused other antiquarian dealers' catalogues and bought from them as well. As an expert in his field, he knew what he wanted. As a scholar, he was always open to new ideas and suggestions. The booksellers recognized and appreciated his knowledge and acumen and he in turn recognized and relied on their expertise.

For well over a quarter of a century, John Benjamin in collaboration with his booksellers built his superb library which became The John A. Benjamin Collection of Medical History at UCLA.

John Benjamin died 25 December 1992 in Glendale. He is survived by his wife, Mae Benjamin and their four children.

Katharine E.S. Donahue Lousie Darling Biomedical Library, UCLA

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THE WANDERING CELSUS OR HOW A BOOK IS TAKEN APART, AND HOW A BOOK IS PUT BACK TOGETHER, SORT OF

Books are printed and sent out into the world. As books are acquired by people, they are marked or personalized by the owner. Not only do people add to books but they substract parts from them as well. This is the on-going story of such a book.

In 1478 the first medical encyclopedia of antiquity was printed. Titled De Medicina, it was written by the Roman, Celsus, who lived and worked from 14-37 A.D. Little is known of Celsus and it is not even known if he was a physician. His work, however, survived and was known through manuscripts in the Middle Ages. Renaissance scholars discovered him and his style, which was considered pure and elegant, was appealing to them. Thus it was that De Medicina was printed by Nicolaus Laurentii in Florence in 1478.

Hartmann Schedel (1440-1514) was a Nuremberg physician and bibliophile. He is remembered for his great history of the world, Liber Cronicarum, (Nuremberg Chronicle) printed in 1493. As a bibliophile and a physician, Schedel probably considered Celsus' De Medicina an essential addition to his library and so he acquired it. As with many books in his collection, he had De Medicina rubricated throughout with red initial letters. The incipit leaf and colophon leaf received more attention from the rubricator and were personalized with Schedel's diagram and his initials. After Schedel's death his library, including the Celsus, went to his nephew who in turn sold it to Duke Albrecht V (1550-1579) of Bulgaria. The Duke's library became the core of the Bayerische Staatbibliothek. It is not known when Schedel's copy of Celsus was deaccessioned as a duplicate from the library, but it is thought to have happened sometime in the nineteenth century.

**有空间的现在分词有效的变换的变换的变换的变换的** The book and the library parted company and the book went back into the world. It may be in this time that Schedel's ownership of the Celsus proved more interesting to someone than the book as a whole. Perhaps with an eye to autograph collectors or collectors of important incunable leaves, someone removed the incipit, colophon, and two exemplar text leaves. The book and the leaves went their separate and often obscure ways. In 1960, the four leaves from the Schedel Celsus came to the UCLA Biomedical Library with the John A. Benjamin Collection of Medical History. Benjamin, a great and discerning collector, bought a complete 1478 De Medicina in 1949 from Ernst Weil, a London bookseller. In 1953 Weil sold the four Schedel leaves to Benjamin, probably as a complement to his not-sorichly-rubricated copy. The incomplete Schedel copy of the Celsus went to the New York Academy of Medicine in 1928.

In 1992 while doing research around the country for an exhibit titled "100 Books Famous in Medicine," Dr. Haskell Norman discovered that both UCLA and the New York Academy owned parts of the same book. Once the connection was made and verified, it became clear that the leaves owned by UCLA should be joined with the rest of the book at the New York Academy of Medicine..

And it was done. UCLA presented its leaves to the New York Academy of Medicine as a gift. Unfortunately for this otherwise sanguine tale, the book is still not complete; one of the four leaves -indeed, the incipit leaf -- is missing. Sometime between 1965 and 1985, the incipit leaf went astray and has yet to be found.

> Katharine Donahue Louise Darling Biomedical Library, UCLA

## ENCODING STANDARD FOR ELECTRONIC FINDING AIDS

### A report by the Bentley Team for Encoded Archival Description Development

Comments about this report and the attachments to it should be sent to the FINDAID listserv: FINDAID@library.berkeley.edu. Subscrip-tions to the listserv should be sent to LISTSERV@library.berkeley.edu.

### PROGRESS REPORT

### The Berkeley Project, 1993-95

Nearly two years ago, the Library at the University of California at Berkeley received funds from the Department of Education to investigate the desirability and feasibility of developing an encoding standard for electronic versions of archival finding aids. The study was inspired by a recognition that archival repositories wished to expand and enhance network access to information about their holdings beyond that available in MARC catalogue records, and that efforts to do so would likely be more successful if they were coordinated and standards-based.

In consultation with several archivists who had expressed an interest in the Berkeley Project, principal investigator, Daniel Pitti, identified a number of requirements that would need to be satisfied by any technique used to deliver expanded and enhanced archival description to network users. These include the ability to present extensive and interrelated descriptive information typically found in archival finding aids, the ability to preserve the hierarchical relationships that exist between levels of descriptive detail, the ability to represent descriptive information that is inherited by one hierarchical level from another, the ability to navigate within a hierarchical information architecture, and the ability to conduct element-specific indexing and retrieval.

Candidate techniques considered by the Berkeley investigation included Gopher presentation of ASCII data, HTML (Hypertext Markup Language) tagging of data, MARC tagging of information, and tagging of text in conformance with SGML (Standard Generalized Markup Language). The latter technique, an international standard (ISO 8879), emerged from the analysis as being able to meet all of the functional requirements of archival

finding aids, and as being supported by a large and growing number of software products that run on a variety of platforms. Based on these results, Pitti and his colleagues at Berkeley elected to test the use of SGML in encoding archival finding aids.

Standard Generalized Markup Language is a set of rules for defining and expressing the logical structure of documents, and thereby enabling software products to control the searching, retrieval, and structured display of those documents. The rules are applied in the form of codes (or tags) that can be embedded in an electronic document to identify and establish relationships among component parts. Because consistent tagging of like documents is key to successful electronic processing of them, SGML encourages such consistency by introducing the concept of a document type definition (or DTD). A DTD prescribes the ordered set of SGML tags available for encoding the parts of each example in a class of similar documents. Archival finding aids, which share similar parts and structure, form a class of documents for which a DTD can be developed.

Pitti undertook development of a finding aids DTD by analyzing numerous examples forwarded to Berkeley by archivists who had responded to requests for cooperation. He found the greatest similarities in structure among those finding aids commonly referred to as inventories and registers; these structural similarities delineated the model finding aid that formed the basis of his draft DTD. The March 1995 version of the Berkeley Finding Aid Project (BFAP) DTD defined a class of documents that, in general, consist of an optional title page, the description of a unit of archival material, and optional back matter. A title page conforming to the draft DTD could comprise any of a number of taggable elements, such as repository or finding aid type. A DTD-conformant unit description could comprise a brief description of the unit (incorporating taggable elements analogous to those of a MARC catalogue record), a longer narrative description of the unit and any segregable parts (incorporating such taggable elements as title, dates, and scope and content), and formatted container lists.

As the BFAP DTD took shape, it was tested in the encoding of electronic finding aids. By March 1995, a critical mass of encoding had been achieved, and the results (involving nearly 200 finding aids from 15 repositories) were shared with a group of 50 archivists and manuscript librarians invited to a Finding Aids Conference jointly sponsored by the

Library of the University of California at Berkeley and the Commission on Preservation and Access. Conference attendees observed that SGML encoding of local and networked online finding aids could simplify, improve, and expand access to archival collections by making it possible to link catalog records to finding aids, by enabling searches among pools of networked finding aids, and by allowing keyword retrieval to locate folders or items previously buried in container lists. Attendees encouraged Pitti to pursue adoption of the approach as a standard by the archival profession.

### The Bentley Fellowship Program, July 1995

Hoping to strengthen the case for professionwide adoption of a BFAP-like, SGML-based encoding standard, Pitti sought the assistance of a team of experts in archival descriptive standards augmented by an expert in SGML encoding techniques (note 1) who could collaborate in a critique and refinement of the BFAP approach. Successful application was made to the Bentley Library Research Fellowship Program (note 2) for a weeklong meeting of Team Pitti in Ann Arbor, Michigan, in July 1995. The team agreed to collaborate in the production of 1) finding aid encoding standard design principles; 2) a revised finding aid data model; 3) a revised finding aid document type definition; 4) finding aid encoding guidelines and examples; and 5) an article describing the team's understanding of the structure and content of finding aids.

Team Pitti reached early agreement on the principles that would underlie their design of an encoding standard. These principles (designated the Ann Arbor Accords) are reproduced at the end of this progress report. With the Accords in mind, the Bentley group proceeded to review the structure of the document to be encoded. They agreed that at the most basic level, a finding aid document consists of two segments: a segment that provides information about the finding aid itself (its title, compiler, compilation date) and a segment that provides information about a body of archival material (a collection, a record group, or a series). Following the example of the Text Encoding Initiative (TEI), the group designated the former segment the "header." Within the latter (or finding aid) segment two types of information may be presented: 1) hierarchically organized information that describes a unit of records or papers along with its component parts or divisions and 2) adjunct information that may not directly describe records or papers but that, nevertheless,

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facilitates their use by researchers (e.g, a bibliography). The hierarchy of descriptive information, reflecting archival principles of arrangement, generally begins with a summary of the whole and proceeds to delineation of the parts as a set of contextual views. Descriptions of the parts inherit information from descriptions of the whole.

Agreement on this overall structure enabled Team Pitti to evaluate the encoded elements that had been incorporated in the BFAP model. Those elements that survived the evaluation process formed two categories: elements that would be tagged at specific, predictable points in the description of units or component parts (descriptive elements) and those elements that could be tagged anywhere within the document (generic elements). Examples of the former include the elements "title" and "extent" encoded with a specific relationship to one another within the description of a unit or one of its component parts. Examples of the latter include the elements "link" or "name" that might appear anywhere. Generic elements usually are embedded within a descriptive element. The team agreed that when elements have a close analog in the TEI guidelines, the element name and, when appropriate, the element content model should be taken from those guidelines.

SGML provides for the association of attributes with encoded elements, and Team Pitti concluded that the finding aid DTD should take full advantage of this possibility. Attributes provide an optional opportunity to make an element more specific. A small set of basic elements can be expanded through attributes in lieu of creating a large set of specific elements. For example, an attribute associated with the personal name element can specify the role of the person as creator or collector, sender or recipient. By combining descriptive and generic elements with attributes in a simplified document structure, the Bentley group was able to distill from the BFAP model the essential finding aid tag library. Within a few days of the week-long Bentley meeting, Pitti began to recast the accords reached in Ann Arbor into a revised data model and finding aid DTD (named EAD, or Encoded Archival Description). An overview of the early results of that drafting process are provided here following the statement of the Ann Arbor Accords. Anyone familiar with the earlier model will see that the key changes introduced in Ann Arbor are: 1) the separation of information about the finding aid into a header; 2) the distinction between the hierarchically presented unit description information and adjunct information; and 3) the replacement of the BFAP model's collection divisions and materials lists with the more open-ended concepts of recursive "component description" and a "display group" element to bind pieces of text for display in tabular form.

Team Pitti emphasized the importance of documentation, such as a tag library and application guidelines, to make the DTD viable. Such documentation should be "friendly" enough to enable users barely acquainted with SGML to apply the DTD both routinely and intermittently in their work. While the team focused on elements to ease conversion of traditional finding aids, it also reached for SGML techniques that could begin to improve the delivery of register and inventory information, particularly in an online environment. The team speculated about future possibilities, involving attachment of online "help" scripts to explain descriptive practice as reflected in finding aids, links to central glossaries and shared administrative histories, and presentation of new views that might transform hierarchical data into archival family trees.

Among the topics discussed by the Bentley group were several associated with prospects for profession-wide adoption and maintenance of an encoding standard for finding aids. Recognizing that successful development of the DTD will require the participation of a broad community of archivists and

archives users, the group planned to circulate widely both the Ann Arbor Accords and the revised data model based upon them. The 1995 annual meeting of the Society of American Archivists provided an excellent forum for presentation of concepts and ideas. The Society's Committee on Archival Information Exchange (CAIE) agreed to assume some responsibility for involving interested archivists by establishing a Working Group on the Encoded Archival Description DTD. Much still needs to be discussed. The tension remains, for example, between moving quickly to automate a traditional tool for some immediate retrieval gains and waiting until user surveys indicate what finding aid information is most needed in an online setting. With CAIE's help, however, it seems certain that a viable DTD for archival description can be developed, that it can be adopted as a professional standard, and that a process for maintaining it can be assured. The latter assurance is needed if the encoding standard is to evolve to meet the challenges presented by future finding aids.

Note 1: Members of the Bentley Team for Encoded Archival Description Development assembled by Daniel Pitti to analyze and evaluate the Berkeley work were Steven J. DeRose, Electronic Book Technologies; Jackie Dooley, University of California, Irvine; Michael J. Fox, Minnesota Historical Society; Steven Hensen, Duke University; Kris Kiesling, Harry Ransom Humanities Research Center; Janice Ruth, Library of Congress; Sharon Thibodeau, National Archives and Records Administration; and Helena Zinkham, Library of Congress.

Note 2: The Bentley Fellowship Program is funded by the Andrew W. Mellon Foundation, the Division of Preservation and Access of the National Endowment for the Humanities, and the Bentley Historical Library.

# ANN ARBOR ACCORDS: PRINCIPLES AND CRITERIA FOR AN SGML DOCUMENT TYPE DEFINITION (DTD) FOR FINDING AIDS

This document defines principles and criteria for designing, developing, and maintaining an SGML-based encoding scheme for archive and library finding aids.

#### Definitions and Parameters

1. Although the term finding aid traditionally encompasses a wide variety of tools to describe, control, and provide access to archives and manuscript

collections, this encoding standard is primarily for inventories and registers. Its design, however, does not preclude further development to accommodate other types of finding aids, such as repository guides.

- 2. The standard accommodates registers and inventories of any length describing the full range of archival holdings, including textual and electronic documents, visual materials, and sound recordings.
- 3. The encoding standard permits both the creation of new finding aids and the conversion of existing ones from print, word processing, and database formats. While conversion of existing guides may require minor revisions in content or rearrangement of information, the need for extensive editing has been mini-mized.

### General Principles

- 4. The information in finding aids describes, controls, and provides access to other information, and thus is not an end in itself. Finding aids are not objects of study but rather tools leading to such objects.
- 5. Although the encoding scheme does not define or prescribe intellectual content for finding aids, it does define content designation. It identifies the essential data elements within finding aids and establishes codes and conventions necessary for capturing and distinguishing information within those elements for future action or manipulation. While there are certain elements that ought to appear in any finding aid, various intellectual and economic factors influence the depth and detail of analysis employed. Taking this into consideration, the encoding scheme is designed with a minimum of required elements, but allows for progressively more detailed and specific levels of description as desired.
- 6. The standard preserves and enhances the current functionality of existing registers and inventories. It identifies and provides markup for finding aid components that support the following functions: description, control, navigation, indexing, and online and print presentation. If an identifiable component does not support one of these functions, then specific markup for it is not provided. The terms description and control refer not only to original source materials but also to digital representations and surrogates.

- 7. The standard is intended to facilitate interchange and portability. It will increase the intelligibility of finding aids within and across institutions, permit the sharing of identical data in two or more finding aids, and assist in the creation of union databases. It will also ensure that machinereadable finding aids will endure changing hardware and software platforms because they will be based on a platform-independent standard.
- 8. The needs of public users, curatorial and reference staff, and finding aid authors were given priority in the standard's design, with the result that any burden of implementation will be assumed by those users most able to shoulder the responsibility, namely DTD developers, style-sheet authors, and technical staff in support of other applications. The designers sought to create a DTD that can be easily mastered and incorporated into routine finding aid production by staff possessing only a minimal knowledge of SGML.

#### Structural Features

- 9. The encoding scheme is based on Standard Generalized Markup Language (SGML: ISO 8879) in the form of a document type definition (DTD), hereafter referred to as the "Encoded Archival Description" or "EAD" DTD.
- 10. Related or complementary standards, such as the Text Encoding Initiative (TEI) Guidelines for Electronic Text Encoding and Interchange and the USMARC formats, will be consulted and employed as appropriate. The data model includes a finding aid header which is similar to the TEI header, and TEI naming conventions and tag structures will be utilized whenever feasible. With respect to USMARC, the encoding standard recognizes the interrelationship between catalogue records and finding aids, and it provides for the use of a MARC equivalency attribute for those finding aid elements matching USMARC fields.
- 11. The encoding standard consists of two parts: an SGML-compliant DTD and detailed application guidelines containing extensive examples of encoded finding aids.
- 12. To ensure broad application of the standard, neutral language was used in building the data model. Words such as collection, archives, series, fonds, etc. were replaced with generic terms like unit and component that are not specific to any individual setting or institution.

#### Control and Maintenance

13. Control and maintenance of the DTD will be provided by a national institution working in concert with the national and international archival communities and assisted in an advisory capacity by other interested groups of users.

### ENCODED ARCHIVAL DESCRIPTION (EAD) OVERVIEW

The following is an overview of the EAD document structure presented in outline form. It is divided into the following four parts:

- I. Encoded Archival Description (EAD)
  Overview
- II. Unit Description (UD) Overview
- III. Component Description (CD) Overview
- IV. Adjunct Descriptive Data (ADD) Overview

Elements of description are enclosed in angle brackets, e.g., processing>. Within each part, subelements are indented under the element that contains them. Elements at the same level share the same indentation.

### Part I. Encoded Archival Description (EAD) Overview

 $\langle EAD \rangle$ 

<EADheader> (one)

Provides descriptive identification of the encoded archival description or finding aid.

<archivalDesc> (archival description (or the finding aid itself)) (one)

<UD> (unit description) (one or more "views")

There are three possible views:

- (1) a descriptive overview or introduction which generally includes a formal brief description of the unit followed by descriptive prose sections (chronology/biography/history; scope and content; administrative information; etc.);
- (2) an analytic overview (or what is frequently called a series description); and
- (3) an in-depth analytic view (or what is frequently called a container list).

Views 2 and 3 can be combined. The same structure (unit description or UD) is used for all three views. The type of view is determined by what elements in the strucuture are employed and emphasized, the quantity of information supplied, and the use of display groups for tabular presentation of the data.

<ADD> (adjunct descriptive data) (none or one or more)

### Part II. Unit Description (UD) Overview

<UD> (unit description)

```
<did> (descriptive identification) (one)
   <titleUnit> (unit title)
   <originator> (originator or source of the
   unit being described)
   <extent>
   <dateUnit> (attributes: datetype = bulk |
   inclusive)
   <repository>
   <idUnit> (unit identification)
   <note> (general multipurpose note)
<adminInfo> (administrative information)
   <acquisition>
       <acqSource> (acquisition source)
       <donProc> (donation procedure)
       <donorInfo> (donor information)
       <donor>
       ovenance>
   cpreferCite> (preferred citation)
   cessing>
   <reproduction>
   <restrictAccess> (restrictions on access)
              (chronology/history/biography/
<br/>
<br/>
diogHist>
agency history)
   <chronoList> (chronological list)
<scopeContent> scope and content
<controlAccess> (controlled access)
   <persName>
   <orgName>
   <famName>
   <placeName>
   <subject>
   <genrePhyschar>
   <ODD> (other descriptive data) (none or
   one or more)
   <CD> (component description: recursive
   model) (none or
                       one or more)
```

<CD1> ... <CD12> (component description:

enumerative model) (none or one or more)

OR;

### Part III. Component Description (CD) Overview

<CD> (component description: recursive model)

### Option 1:

The same essential content model as UD followed by an embedded: <CD>

OR;

### Option 2:

The elements in the DID and the other elements at the same level as the DID distributed in up to twelve display groups to enable display in columns.

<DG1> - <DG12> [Comment: the number 12 is arbitrary; subject to change]

Followed by an optional:

<CD>

<CD1> ... <CD12> (component description: enumerative model)

The model of the <CD1> ... <CD12> is essentially the same as <CD> except substitute <CD2> - <CD12> for the embedded <CD>s through twelve levels of analysis.] [Comment: the number 12 is arbitrary; subject to change]

### Part IV. Adjunct Descriptive Data (ADD) Overview

<ADD> (adjunct descriptive data)

<index>

<br/>
<br/>
dibliography>

<relatedMaterial>

<separationList>

<filePlan>

<ODD> [for ADD element that is not one of the above]

### PRESERVATION, PRESERVING ACCESS, AND GIVING WITH GRACE: SOME MUSINGS FROM BALTIMORE

I've had a few, so to speak, professional experiences lately that strike me as appropriate for reporting in this column. One involves a physician's assistant living about twenty miles from the NLM and about fifty miles from Hopkins; another involves a retired medical illustrator; and the final one a charming and rather wealthy old physician and his wife.

The physician's assistant, who works out of his home in Prince George's County, Maryland, devotes himself full-time to a single-issue educational organization concerned with a birth defect that afflicts his young daughter. He had found a citation to a seventeenth-century source that he couldn't identify, so, sure enough, he called up the Welch Library at Johns Hopkins. After all, doesn't U.S. New and World Report say that Hopkins is the best hospital in the country? It must also have the best medical library. Makes sense, no? Well . . . My colleagues downstairs quickly referred him to me, for what turned out to be a simple question -- at least for someone with a modicum of expertise in history of science or rare book librarianship. It is nice to have some of us around, from time to time. This man thought he was looking for a book, but in fact, he needed a two-page article with an illustration from the Philosophical Transactions. All he really needed was to get hold of someone who recognized the abbreviation "Phil. Trans." and who had easy access to the reprint edition. Because I have a good deal of discretion in such matters, I was able to pull the volume for this fellow, confirm his citation, and save him the trouble of going to the NLM by faxing him the article. This man is a health care professional with no institutional affiliation and little free time, who's pretty naive about libraries and how they function, but who needs to make regular use of them. Very little of his research takes him to historical collections, and he has no idea of the relationship between special collections and large science libraries. He had been to the NLM, but was put off by the size of the place, and the wait he faced to see the material he requested. My fax saved him at least half a day. What would he have done if Hopkins absolutely prohibited me from helping anyone not affiliated with the University or the Hospital? And how much more uncomfortable would he be at the NLM if the federal government

should impose further staff cuts? What use would the electronic superhighway be to him, if he doesn't know where to start looking for information, and if he's cut off from ready access to friendly experts (which includes all of us in ALHHS)? He's doing beneficent work on his own, without an organization to provide help. I long for the days when public institutions (both government and non-profit) understood that certain things were not commodities, and that universities and hospitals were not supposed to function as businesses. Information, education, and health care should all be readily available with the consumer not having to worry about the costs (up to a reasonable limit, of course).

Story no. 2. In late August I had the chance to meet Ranice W. Crosby,

director emerita of the Hopkins Department of Art as Applied to Medicine. Ms. Crosby was one of Max Broedel's last students, and is the co-author of the 1991 delightful biography of the esteemed medical illustrator. I had been commissioned by the American National Biography to write a thousand-word sketch of Broedel's life, and went over to talk with her and to look at the archive of Broedel's papers and art work that she maintains. She showed me one drawing from around 1915 and exclaimed that a researcher had recently told her that it remains absolutely the best depiction of this particular pathological condition. Of course, few people have the opportunity, or the real need, to see the original drawing or watercolor, because the book or journal in which it was reproduced still exists. Aha! But does it still exist? and for how long? I told Ms. Crosby of how historians and history librarians need to fight for retention and preservation of "old stuff" because it's the stuff that history is made of. But my interaction with her reminded me of how much the raw material of history can still be of relevance to the practitioner and scientist. And this goes for pictures as well as text. For the sake of our collections -- and probably for the sake of better science and better patient care -- we need to convince library directors and the professional constituency of our libraries that publications of decades past have more than historical relevance.

A final anecdote. With a rare book dealer and another medical history curator, about a month ago I went out to a suburban retirement community to meet a Hopkins graduate of 1935, who had some valuable books collected by his father (of the first



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Hopkins class, 1897), that he wanted to start distributing before his own death. His wife told us of how they gave a few books to an auction house, and were astounded to find that one of those books fetched them more than twenty thousand dollars. "That made up our minds," she said, "no more auctions. We're just going to give these books to your libraries." Later I asked my companions why they thought a good price at auction would provoke these people to give their books away. They both replied that they had been struck by the same thing, and couldn't understand it either. It took the three us a few minutes of brainstorming before we recognized the obvious -- or what would have been obvious in an earlier day before "looking out for number one" became an esteemed cultural value. These people are old and near death, and their children and grandchildren are well-set. They want to clean up their affairs before they die. Therefore, when they discover that they're sitting on something of greater value than they anticipated, the way to go is not the easy path of selling it off -- but rather, since there is evidence of rarity, to make sure that their other valuables go to repositories that will presumably provide public access. I guess they're just very old and old-fashioned.

I used to think I was a radical. The world's changed, not me. Now I'm a peculiar sort of conservative -- old-fashioned like old Dr. and Mrs. H.

Ed Morman The Johns Hopkins Medical Institutions

### **NEW MEMBERS**



#### Welcome to:

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### **ALHHS NEWS**

#### LAST CALL FOR PAPERS FOR ALHHS 1996

ALHHS Members are invited to submit absracts for the program portion of the annual meeting in Buffalo on 8 May 1996. The program will consist of contributed papers, each 15 minutes in length, with time alloted for an introduction and questions. Appropriate topics would deal specifically with archival and library-related issues, such as the solution to a problem in the collection (handling of audiovisual materials); a special project (documenting the AIDS epidemic); a process (setting up digital scanning); policies (video filming in special collections rooms) library exhibits, preservation (especially practical repairs and care of books); the librarian/bookseller relationship; guides to collection development; and works-in-progress.

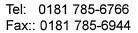
Abstracts must be typed, doubled-spaced, and should not exceed 500 words in length. They should contain a statement of purpose, major points, and a conclusion. Please include the author's name, the institutional affiliation, preferred mailing address, and both work and home telephone numbers. Deadline for receipt of abstracts is 15 October 1995. Please submit to the Program Committee Chair: Suzanne Porter, DUMC LIbrary, Box 3702, Durham, North Carolina 27701; FAX (919) 681-7599; E-MAIL porte004@mc.duke.edu.

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### 1996 AWARD FOR OUTSTANDING ACHIEVEMENT IN MEDICAL HISTORICAL CURATORSHIP

The Awards Committee of the Archivists and Librarians in the History of the Health Sciences (ALHHS) is seeking nominations for its Curatorship Award which will be presented at the ALHHS annual meeting in Buffalo, New York in May 1996. Nominees should have demonstrated exceptional achievement in archival/rare book administration. Examples of such achievement might include innovative use of automation, an outstanding exhibition catalogue, or an especially effective response to a disaster. Nominees must be members of the ALHHS. Deadline for nomination is 31 October 1995. Send nominations with descriptions of achievement(s) being recognized to: Philip M. Teigen, History of Medicine Division, National Library of Medicine, 8600 Rockville Pike, Bethesda, Maryland 20895. Fax: 301/402-0872. Email: Phil\_Teigen@nih.gov.

### FROM THE 'NET

The Wellcome Institute Library has acquired a collection of 35 health education posters issued by various branches of the British government from the 1940s to the 1960s (or perhaps 1970s; none of them is explicitly dated). Most of them come from the studio of the artists who produced them,

Reginald Mount and Eileen Evans. Eleven of them are anti-smoking propaganda. One of these mentions a film on lung cancer being introduced by Mr Enoch Powell, who was Minister of Health 1960-1963. It was interesting to consider these hard-hitting works in the light of the recent symposium "Ashes to ashes: the history of smoking and health", held at the Wellcome Institute in April 1995 by the History of Twentieth Century Medicine Group, with an associated exhibition of the same title.

The other posters are appeals for blood donations, advertisements for the immunisation of children against infectious diseases, and on venereal diseases. They are all catalogued in the Wellcome Institute Library Database and Catalogue (WILDCat) which is available on the Internet at the address telnet wihm.ucl.ac.uk. A list of the posters is also available from the undersigned. Copy photographs will soon be available for about 5 pounds sterling each; as the originals are in copyright, only one copy may be supplied to any one person, for private study only.

(CADUCEUS-L 4:12 7 July 1995)

Nancy McCall and Lisa Mix (The Johns Hopkins Medical Institutions), and Anne Gilliland-Swetland (UCLA), under the auspices of the Research Fellowship Program for the Study of Modern Archives at the Bentley Historical Library, University of Michigan, are engaged in a research project to develop models for the digitization of, and online access to historical patient information and laboratory research data. They are developing case studies using patient records of the Brady Urological Institute of The Johns Hopkins Hospital (1915-1975) and Curt Richter's experimental data from the Psychobiology Laboratory of the Johns Hopkins University School of Medicine (1920-1975).

Working documents for this research will be made available as they are developed on the World Wide Web at the URL given below, and the researchers would greatly appreciate any comments/feedback from archivists, clinicians, historians of medicine, or anyone else who is interested in this project: http://http2.sils.umich.edu/HCHS/RESEARCH/Projects.html.

(CADUCEUS-L 4:13 11 July 1995)

In the recent issue of Journal of Medical Biography volume 3 number 2, May 1995 is an article and cover photo of Daniel Drake, MD. In 1819, Drake founded the 10th oldest medical school in the US, Medical College of Ohio. Later the name was changed to the University of Cincinnati College of Medicine. The article is written by Richard W. Vilter, MD, a member of the Cincinnati Medical Heritage Center Advisory Board. It is entitled, "Daniel Drake MD (1785-1852): pioneer teacher, author, medical and social entrepreneur of the USA." Drake was a very dynamic and often controversial figure in the Midwest. I think you will enjoy reading of the physician that Flexner described as "a frontiersman of the mind." (CADUCEUS-L 4:15 17 July 1995)

The International Hippocratic Foundation of Kos (IHFK) announces that the Island of Kos in Greece, the birthplace of Hippocrates, will be the location of the next International Congress on the History of Medicine, 2 to 8 September 1996. The Congress will be preceded by the first International Medical Olympiad, 31 August to 2 September, an international meeting to recur, by decision of the International Society for the History of Medicine, every four years on the island of Kos; the Olympiad will be organized by the International Hippocratic Foundation of Kos. The purpose of the International Olympiad meetings will be to provide a forum in a historically stimulating environment for the study, exploration, and discussion of aspects

of History, Culture, Philosophy, Ethics, Trends, and Policies of Medicine in a continuously changing social climate and needs.

For information: IFHK, c/o Prof. Spiros Marketos, 20 Patr.Ioakim. 106 75, Athens, Greece or C.B. Moschos, M.D., UMDNJ-New Jersey Medical School, 185 South Orange Ave., Newark, NJ 07103; (201) 982-4735; FAX (201) 669-2745. (CADUCEUS-L 4:19 27 July 1995)

### MELLON WORKSHOPS FOR ARCHIVAL PROFESSIONALS

The American Philosophical Society Library is pleased to announce two free workshops for archivists, curators, special collections librarians, and other interested professionals to be conducted at the Library, 105 S. Fifth Street, Philadelphia, PA 19106. Although the workshops are free, space is limited, and pre-enrollment is required. Preregistration is required by Monday, 9 October. First come, first served.

## WORKSHOP 1: THE STATE OF COPYRIGHT LAW FOR UNPUBLISHED MATERIALS Tuesday, 24 October, 1:30 pm - 5 pm

The workshop will be led by New York attorney Mark Fowler, of the firm Satterly, Stephens, Burke & Burke. Fowler litigated such copyright disputes as the J. D. Salinger, L. Ron Hubbard, and Richard Wright cases. Fowler is an expert on copyright law and his casework has resulted in landmark decisions on the fair use doctrine.

# WORKSHOP 2: THE ON-LINE ENVIRONMENT OF SCIENTIFIC AND ACADEMIC COMMUNICATION: PRESERVATION IMPLICATIONS Tuesday, 14 November, 1:30 pm - 5 pm

The workshop will be conducted by Thomas J. Ruller of the New York State Archives and Records Administration. Ruller has given numerous electronics records workshops for the Society of American Archivists and other professional organizations, and is a rising authority on archival issues of digital communication.

To Register contact: Dr. Martin L. Levitt, Temple University, 105 S. 5TH Street, Philadelphia, PA 19106-3386; (215) 440-3403; FAX (215) 440-3423; E-MAIL 110253@VM.TEMPLE.EDU. (ARCHIVES-L 23 August 1995)

CADUCEUS-L members might be interested to know about the Alcohol and Temperance History Group's (ATHG) journal, *The Social History of Alcohol Review (SHAR)*. For over a decade, SHAR has provided ATHG's international membership--comprising historians, sociologists, and other interested scholars--with timely book reviews, re-

view essays, citations/abstracts, and other items of interest relating to current historical scholarship on alcohol use, alcohol-related problems, alcohol production, temperance movements, and social controls relating to alcohol.

Also of note: Selected papers presented at the ATHG's 1993 International Congress are currently being published in a special issue of *Historie Social/Social History* and two special issues of *Contemporary Drug Problems*. All three issues, or two of the three, may be obtained as a package offer from ATHG.

For information on ATHG, SHAR, and the package journal offer, contact: Ron Roizen, Executive Secretary, ATHG, rroizen@ix.netcom.com (CADUCEUS-L 4:20 1 August 1995)

The 35th International Congress on the History of Medicine will meet on Island of Cos, 2-8 September 1996. According to the preliminary announcement, deadline for submission of abstracts and early registration fee is 15 February 1996. The themes of the Congress include medicines in ancient civilizations, origin and influence of Hippocratic medicine, the school of medicine in Alexandria, history of hospitals, and varia. The official languages of the Congress are English and French. For further information and preliminary registration form, please contact: ITCO, International Travel & Congress Organizers, 33 Nikis Street, 105 57 Athens, Greece; (301) 331-0037 or 331-0038; FAX (301) 322-7608 (Please note that here 301 is country and city code for Greece and Athens, and not the area code for Maryland!) (CADUCEUS-L 4:20 1 August 1995)

The FDA History Office has prepared "A Guide to Resources on the History of the Food and Drug Administration," an illustrated pamphlet that presents brief background on the development of the agency, core primary and secondary published sources on FDA, relevant unpublished collections, and some information about the FDA History Office. The document is not available in a machine-readable format, but we'll be happy to mail a pamphlet to anyone interested if you send your name and address to John Swann (jswann@fdaem.ssw. dhhs.gov), FDA History Office, HFC-24, Room 13-515600 Fishers Lane, Rockville, MD 20857 (CADUCEUS-L 4:21 2 August 1995)

DISPUTED TOBACCO DOCUMENTS GO ON PUBLIC DISPLAY IN UCSF ARCHIVES AND SPECIAL COLLECTIONS AND VIA INTERNET FOLLOWING CALIFORNIA SUPREME COURT RULING

Hundreds of tobacco industry documents removed from the Universtiy of California, San Francisco (UCSF) Library nearly six months ago when the Brown & Williamson Tobacco Company filed a legal challenge are available for review in the UCSF Archives & Special Collections and as electronic documents on the internet following a 29 June California Supreme Court ruling.

The Supreme Court rejected the tobacco company's request that the court prohibit UCSF from releasing the documents. "This decision clears the way for the University to make available to the public and to scholars these very important and historical papers," said University attorney Christopher M. Patti.

The material primarily concerns tobacco industry research conducted up to 30 years ago on the addictive nature of nicotine and other health effects of tobacco smoke. The papers demonstrate that the tobacco company recognized the addictive nature of nicotine well before the general scientific community understood it, according to Stanton Glantz, PhD, UCSF professor of medicine and an authority on the effects of tobacco smoke and the politics surrounding the tobacco industry. In order to provide the widest possible access to the material, the UCSF Archives & Special Collections has made electronic versions of the documents available on the internet. The documents are available at the following World Wide Web URL:http:// www.library.ucsf.edu/tobacco

The collection will also be available on CD-ROM. Individuals interested in reviewing the paper documents must call the Archives and Special Collections desk at (415) 476-8112 to make an appointment.

Glantz received the documents in May 1994 in an unsolicited package which contained only the pseudonym "Mr. Butts" and no address of the sender. The documents were transferred to the UCSF Archives & Special Collections to become part of an existing Tobacco Control Archives.

On 17 February 1995, a Superior Court hearing was conducted in response to a request for a temporary restraining order by Brown & Williamson. Over the objections of attorneys for Brown & Williamson, the University was allowed to retain possession of the documents with the stipulation that the material remain in a "secure locked vault, safe or room where access is limited" to counsel for the University and counsel for the tobacco company.

San Francisco Superior Court Judge Stuart Pollak ruled on 25 May 1995 that UCSF could release the documents to the public, citing a "strong public interest" in making the documents available. The Court of Appeal refused on 23 June to extend

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a temporary restraining order preventing the release of the documents while it hears the appeal of the lower court's ruling. With its ruling on 29 June the California Supreme Court also has refused to prevent the release of the papers during the appeal.

The UCSF Library Tobacco Control Archives (TCA) project places special emphasis on Proposition 99, the California anti-tobacco health education initiative approved in 1989. The archival effort will document the emergence of the non-smokers' rights movement, the Proposition 99 campaign effort, implementation of the legislation, and judicial challenges to the proposition. TCA will collect materials relating to other nonsmoking legislative initiatives, including other California propositions and "Proposition 99 Clones" in other states. In addition, TCA will collect the following categories of materials: papers and records of individuals and organizations active in the nonsmoking movement, political campaigns, or involved in scholarly research of health effects of tobacco use; tobacco control investigating issues in general; and the tobacco industry in specific.

(CADUCEUS-L 4:25 14 August 1995)

MEDICAL OBITUARIES: American Physicians' Biographical Notices in Selected Medical Journals before 1907, compiled by Lisabeth M. Holloway et al, originally published by Garland in 1981, will again be available in January, 1996, reset with minor corrections in format. To the prefatory matter has been added an article: "A List of Graduating Classes at American Medical Colleges before 1907," by Lisabeth M. Holloway, revised from its original publication in The Watermark, Vol V, Nos 1 & 2, July & October, 1981.

Pre-publication prices for print and CD-ROM versions are available. For further information, please contact: Lisabeth M. Holloway, Route #7, Meadowridge #29, Boone, NC 28607-9727; (704) 265-3257.

(CADUCEUS-L 4:32 7 September 1995)

### Wanted!

Individual interested in compiling the "From the 'Net" column.

No experience neccessary but access to the Internet is a must.

If you are interested in joining

The Watermark team, please
contact: Joan Echtenkamp

Klein or Jodi Koste.

### PASTEUR CENTENNIAL



Louis Pasteur 1822-1895

This year marks the centennial of the death of Louis Pasteur, whose work revolutionized science and medicine. In recognition of this milestone, UNESCO has designated 1995 as the "Year of Louis Pasteur" throughout the world. The Pasteur Foundation in New York has organized a series of commemorative lectures, films, and a traveling exposition to take place throughout the year in the United States, efforts which are supported by the Florence Gould Foundation. The Pasteur Foundation is the U.S. affiliate of the Institut Pasteur. For almost a decade, this not-for-profit organization has worked to introduce the research conducted at the Institut Pasteur to the American public and to develop exchanges between Pasteurien and American scientists.

The bilingual traveling exhibit is composed of 25 panels (fifteen are color panels and ten are textual). The color panels are as follows:

- 1. Louis Pasteur
- 2. 1847: From crystallography to molecular asymmetry
- 3. 1862: Research on fermentation and spontaneous generation
- 4. 1863: Study of fermentation and wine diseases

- 5. 1865: Study of silkworm diseases
- 6. 1871: Study of fermentation and the conservation of beer
- 7. 1877: Research on infectious diseases afflicting man and animal
- 8. & 9. 1885: Treatment and prevention of rabies
- 10. The Institut Pasteur
- 11. Fame
- 12. & 13. Pasteur and the United States
- 14. Scientific Exchanges with the United States
- 15. A History of Friendship

The film, a brand new documentary, produced especially for "The Year of Louis Pasteur", examines his work from an historical perspective, situating him in the context of the history of science and demonstrating his work's importance today. Also available are two videos geared for children ages eight to twelve.

An extensive calendar of the up-coming American events is available from Caitlin Hawke, Director of Development, Pasteur Foundation, 767 Fifth Avenue, Suite 2806, New York, NY, 10153-0119; (212) 752-2050; FAX (212) 752-2084.

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### **EX LIBRIS**

(by Elaine Challacombe)

#### Main Entries

Congratulations to Steve Wagner who began 18 September as the Librarian for the History of Science Collections at the University of Oklahoma, Norman. Many will remember Steve from his special brand of cordiality in Pittsburgh where he has been director of archives and records for the Oncology Nursing Society for the past four years. He is looking forward to working with the collection in Oklahoma which holds some of the best material in the history of science. Watch the next Watermark for an article by Steve on the library he will now call home. See the New Member section for Steve's new address.

Elizabeth Fee began as head of the History of Medicine Division of the NLM on 5 September. Elizabeth comes to the NLM from Johns Hopkins University, School of Public Health where she was professor of History and Health Policy. Elizabeth has authored many works in the history of public health including works on AIDS, lead poisoning, and a history of the School of Public Health at Johns Hopkins. She was also responsible for programs on health policy in Washington D.C. and Baltimore. We wish her the best as she begins her new role in the history of medicine. The next issue of *The Watermark* will include an interview with Elizabeth conducted by John Parascandola.

Barbara Irwin has brought the following to the attention of the editors: Linda Ordogh has recently been announced as co-winner of the 1995 William Harris Arnold and Gertrude Weld Arnold Prize at Harvard University, Boston, MA. The Arnold Prize, established in 1941 in the Department of English at Harvard University, is awarded to the student who submits the most perceptive essay on the true spirit of book collecting. Linda is presently completing her masters' degree in the history of science at Harvard.

Alice Dreger, co-presenter of the memorable papers on hermaphrodites in Pittsburgh, is beginning a one-year position in the History of Science and Technology Department, University of Minnesota. Because of her focus in the history of medicine, Alice will occupy an office in the Wangensteen Historical Library with Elaine Challacombe and can be reached by writing to the Wangensteen.

Elizabeth Y. Newsom submits the following: The Waring History Library of the Medical University of South Carolina is in the process of publishing a new work in the history of South Carolina medicine by Dr. Charles S. Bryan. The work is entitled Theodore Brevard Hayne: Last Martyr of Yellow Fever. Hayne was the son of long-time South Carolina public health officer, Dr. James Adams Hayne (1872-1953), and his entire life was devoted to finding the cause of yellow fever, and bringing about its eradication. His work took him to various locations in the U.S. as well as Panama and finally to Africa where, at the age of thirtytwo, he became the last of six Rockefeller Foundation researchers to die of yellow fever. A vaccine was developed the following year.

Hayne's life and work are revealed through a series of letters written to and by him while he was away from his family and friends, as well as reminiscences of those who knew him. The book is a touching tribute to a dedicated South Carolinian physician who was willing to risk the very real danger of exposure in the quest for knowledge about yellow fever. The book is expected to come out 1 January 1996.

Ed Morman has reported news of the restoration of Jenner's portrait. The Johns Hopkins Institute of the History of Medicine is pleased to announce that their portrait of Edward Jenner has been returned to its proper place, and in much better shape than is was before it left. They are happy to have the portrait back well in advance of the bicentennial of the 1798 publication of Jenner's An Inquiry into the Causes and Effects of the Variolae Vaccinae, a Disease ... Known by the Name of Cowpox. The portrait, painted from life in 1801, and acknowledged as the authoritative depiction of Jenner, was used as the basis of a frequently-reproduced engraving before it disappeared from sight shortly after Jenner's death. When it reappeared around 1930, it was purchased by Dr. Henry Barton Jacobs, a collector of Jenneriana and a major benefactor of the Hopkins Institute. Because its early nineteenth-century frame was falling apart, Johns Hopkins recently contracted to have both the frame and painting restored. The conservator removed the varnish, cleaned the surface, touched up the painting, and revarnished it. The frame was also reinforced and repaired. The portrait is now on display in the Institute lobby on the third floor of the Welch Library Building. Jacob's other Jenner-related gifts to Hopkins include about a hundred manuscript letters (the second largest Jenner collection in the world), and a premier collection of books on smallpox inoculation and vaccination that includes a number of very rare eighteenth century items.

The Thomas Jefferson University Archives has been developing its on-line Archival Image Library, and plans to unveil it for public browsing and research on the World-Wide Web this fall. Peter Nelson reports that historically significant images, including photographs and drawings from a collection of over 10,000 items, are being systematically scanned and made accessible in a searchable database that will be unveiled on Jeffline, the university's campus-wide information system. (Watch for upcoming announcements or check the Jeffline World-Wide Web page at http:// aisr.lib.tju.edu!). The main objective is to provide free remote access to documentary picture resources by using the graphical capabilities of the Web and its various browsers to display surrogate images; researchers interested in acquiring highquality reproductions of the images can then contact the archives.

For further information about the University Archives Image Library Project at Jefferson contact: **Peter Nelson**, Thomas Jefferson University Archives, Scott Library, 1020 Walnut Street, Philadelphia, PA 19107; (215) 955-7769; E-MAIL nelson@jeflin.tju.edu

The health sciences librarians and information professionals from the Big Ten universities and the University of Chicago (the CIC, or Committee on Institutional Cooperation) are building HealthWeb, a tool to facilitate access to health-related electronic information resources found on the Internet. HealthWeb is a collaborative effort to present a collection of selected and evaluated resources rather than an exhaustive index of health-related information. It will provide an integrated interface to the selected resources.

The development of HealthWeb is the responsibility of five subgroups, each with its own charge. In addition, each CIC health sciences library will concentrate on disciplines in which it and its institution excels. Elaine Challacombe will be responsible for developing the history of medicine component as part of the University of Minnesota's commitment to the project. Those wishing to have their home pages included should contact Elaine Challacombe (612) 626-6881; E-MAIL e-chal@ maroon.tc.umn.edu. If you have further questions or comments about HealthWeb, you may e-mail the communications representative at HealthWeb @umich.edu.

Susan Storch and Robin Chandler of the library at University of California San Francisco have been coping with the aftermath of their announcement of availability of documents relating to the tobacco industry. (See CADUCEUS-L, 4:25 for a detailed account of the collection and the related disputes -- reprinted in "From the 'Net" in this issue.) The UCSF Archives and Special Collections house documents sent anonymously to Stanton Glantz, UCSF faculty in Biostatistics and Cardiology, papers which document tobacco industry research from up to 30 years ago. The California Supreme Court cleared the way for public access to the collection.

The Archives and Special Collections staff have made the documents available both in-house and online through the World Wide Web (http://www.library.ucsf.edu/tobacco). The collection will also be available on CDRom.

Special Collections staff have received many communications of support as well as threats and messages of concern from the professional community. Issues such as copyright, privacy, and trust conflict with the information community's mission to allow access to information.

The Bakken Library and Museum offers visiting research fellowships for the purpose of facilitating research in its collections of books, journals, manuscripts, prints, and instruments. The focus of the Bakken's collections is on the history of electricity and magnetism and their applications in the life sciences and medicine. Related materials include mesmerism and animal magnetism, nineteenth-century ephemera concerning alternative electromedical therapies, miscellaneous scientists' letters, and trade catalogues. The instruments include electrostatic generators, magneto-electric generators, induction coils, physiological instruments, recording devices, and accessories.

The fellowship is a maximum of \$1,3000 and is to be used for travel, subsistence, and other direct costs of conducting research at The Bakken. The minimum period of residence is one week. The grants are open to all researchers. The deadline for applications for 1996 is 1 March 1996. For application guidelines and further information, please contact: David J. Rhees, Executive Director, The Bakken Library and Museum, 3537 Avenue So., Minneapolis, MN 55416; (612) 927-6508; FAX (612) 927-7265.

Smithsonian Institution Libraries Dibner Library Resident Scholar Program offers two short-term study grants for 1996 with stipends of \$1,500/month for a term of one to three months to do research in the Dibner Library of the History of Sci-

ence and Technology and other library collections of the Smithsonian. Historians, librarians, doctoral students, and other scholars are invited to apply. Scholars are expected to be in residence at the Smithsonian Institution. The Dibner Library contains fifteenth to twentieth-century books and manuscripts, specializing in the physical and applied sciences and technologies. Strengths include electronics, civil and mechanical engineering, chemical industries, textiles and ceramics, military history, instrumentation, and also microscopy, pharmacy, and modern physics. The Libraries' collection of 300,000 trade catalogues, which document progress in American agriculture, industry, and manufacture, contain much primary source material for the history of technology.

Deadline for applications: 1 December 1995. For application materials, write to Dibner Library Resident Scholar Program, Smithsonian Institution Libraries, NHB 24mz, Mail Stop 154, Washington, D.C. 20560; Tel: (202)357-3054, or send e-mail via Internet to LIBEM048@SIVM.SI.EDU.

The Society of American Archivists' 1995 Waldo Gifford Leland Prize for writing of superior excellence and usefulness in the field of archival history, theory, or practice has been awarded to **Joan D. Krizack** for *Documentation Planning for the U.S. Health Care System*. Established in 1959 and conferred annually, the Leland Prize is named for one of America's archival pioneers and SAA's second president. Krizack received the award on 31 August 1995 at the SAA annual meeting in Washington, D.C.

Documentation Planning for the U.S. Health Care System provides a systematic analysis of the functions and complex interactions among the institutions and organizations that comprise the health care system in the United States. It offers a holistic model from which to establish procedures and make decisions about selecting materials of individual institutions for preservation. The practicality of such a theoretical construct was attested to in its nomination by individuals who found in it the inspiration for dealing with the daunting challenge posed by records of an AIDS service organization. A notable quality of the book is the skillful blending of the chapters, by Paul G. Anderson, James G. Carson, Peter B. Hirtle, James J. Kopp, Nancy McCall, and Lisa A. Mix, into a balanced, consistent, seamless presentation.

Joan D. Krizack is the university archivist and head of special collections at Northeastern University in Boston. *Documentation Planning for the U.S. Health Care System* (Baltimore: The Johns Hopkins University Press, 1994), 260 pp., cloth, is available from SAA for \$43.50, plus \$6.25 shipping/handling.

For more information, contact the Society of American Archivists, 600 S. Federal, Suite 504, Chicago IL 60605, (312) 922-0140.

The recipient of the Society of American Archivists' Distinguished Service Award for 1995 is the Alan Mason Chesney Medical Archives at Johns Hopkins University. Established in 1964, this award recognizes outstanding accomplishment and is one of SAA's highest honors. It was awarded to the Chesney Archives at 31 August 1995 at the SAA annual meeting in Washington, D.C.

The SAA awards committee noted that "outstanding archival repositories...tend to share two qualities: excellent collections that are actually used and professional leadership of the staff." The staff at the Chesney Archives has contributed to archival theory and practice most notably by tackling the conflict between the privacy rights of patients and the use of medical records for research (which can help future patients). It has established an innovative review board for research projects and enlisted medical experts in the appraisal process, and is investigating the legal and technical aspects of digitizing medical data. It has just published Designing Archival Programs to Advance Knowledge in the Health Fields and staff has contributed to numerous other publications.

Founded in 1978, the Chesney Archives has expanded its user constituency well beyond medical historians to include researchers in medicine, public health, nursing, biology, sociology, anthropology, engineering, and many other fields. This enables and encourages other medical archives to expand their user bases as well. By investigating issues for which the lone medical arranger does not have time, Chesney archivists help such archivists serve their constituencies. Chesney staff have exhibited resourcefulness and ingenuity in producing numerous publications -- brochures, finding aids, posters, a book of portraits and exhibitions which have helped attract support and use.

The Chesney archives has proved to various funding agencies that medical archives merit support and has inspired medical historians to support archives in their own institutions. Finally, Chesney itself is an outstanding archives documenting the historic and complex Johns Hopkins Medical institutions as well as a manuscript repository documenting the history of medicine more generally. Congratulations to Nancy McCall and her staff.

#### Exhibits

Beth White shares the following: An exhibit highlighting the accomplishments of the

Atomic Bomb Casualty Commission (ABCC) is mounted in the library of the Houston Academy of Medicine-Texas Medical Center Library. The exhibit highlights the events and people associated with the ABCC and illustrates the unique collaboration between Japan and the United States which led to scientific achievements that would not have been possible in any other context. This binational program was founded in 1947 to investigate the effects of A-bomb radiation on human health and was reorganized in 1975 as the Radiation Effects Research Foundation (RERF).

The efforts of the ABCC and RERF physicians and scientists resulted in hundreds of presentations and thousands of technical reports and articles in professional journals. The results obtained from the continuing study of individuals exposed at Hiroshima and Nagasaki have given the world its largest base of information with which to understand and protect against the effects of radiation and have provided information that has guided national and international organizations in assessing the potential health risks that are associated with radiation exposure. The individual and collective research efforts of ABCC scientists over the past five decades have resulted in a scientific accomplishment of the first order.

The exhibit will be available until 1 November 1995 and includes photographs, maps, manuscripts, reports, books, and artifacts from the Library's extensive ABCC Collections. Individuals interested in using the collections, in learning more about them, or in obtaining a copy of the exhibit poster (\$10.00 plus tax) should contact Margaret A. Irwin, Coordinator for the ABCC Collections, in the Library's Historical Research Center. (713) 799-7141 or E-MAIL: Margaretl@library.tmc. edu.

A new exhibit entitled "It's Alive! The Science and Myth of Frankenstein" opened at the Bakken Library and Museum in Minneapolis on 9 September and will be on display through 31 August 1996. It features, in addition to the first and later editions of Mary Shelley's book, works by members of her literary circle at the time she composed her classic horror story (1816-1818), relevant scientific books of that era, a replication of Victor Frankenstein's laboratory that includes props from local productions by the Guthrie Theater and the Minnesota Opera of "Frankenstein", and a selection of scientific instruments and medical devices related to the show's theme. For further information about the exhibit or its accompanying programs, Elizabeth Ihrig directs you to contact David Rhees, Director, The Bakken, 3537 Zenith

Avenue South, Minneapolis, MN 55416; (612) 927-6508; E-MAIL drhess@aol.com.

In recognition of the Year of Louis Pasteur, Moody Medical Library, The University of Texas Medical Branch at Galveston, has prepared an exhibit, "Celebrating the Year of Louis Pasteur". Featured are items from the Truman G. Blocker, Jr. History of Medicine Collections' important Pasteur Collection, which chronicle the French scientist's accomplishments in agriculture, chemistry, and medicine.

Of special interest in the display are books on diseases of wine and silkworms, and rabies; autographed reprints, and manuscripts. Moody Medical Library owns a large number of reprints of Pasteur and his collaborators, and eleven Pasteur manuscripts. Also included is an 1860 Nacet et Fils microscope from the Library's Microscope Collection, which may have been used by Pasteur in his study of silkworm diseases. For more information contact Inci A. Bowman, Ph.D., Curator, Blocker Collections, Moody Medical Library, The University of Texas Medical Branch, Galveston, TX 77550-1035; (409) 772-2397; E-MAIL IBowman@ Beach.UTMB.edu.

The History of Medicine Division of the National Library of Medicine will have a new exhibit opening in September, entitled "Allopaths, Maharajas, and Vaidyas; Nizams, Jams, and Hakims: Medical Pluralism in the Princely States of India." Drawing from material in the collections of Kenneth X. Robbins, M.D. and NLM, the exhibit will focus on medical practices and royal patronage in the hundreds of Indian states ruled by princes until the time of Indian and Pakistani independence. The exhibit examines the interaction and co-existence of Western allopathic and homeopathic medical systems with the indigenous Ayurvedic, Siddha, and Unani systems, along with other traditional and religious healing practices.

The exhibit will be on display in the main lobby of the National Library of Medicine (NIH Building 38), in Bethesda, Maryland from 15 September to 31 December 1995. For more information, contact: Stephen Greenberg, History of Medicine, Division, National Library of Medicine, Bethesda, MD 20894; (301) 496-5405; E-MAIL hmdref@nlm.nih.gov.

Joan Echtenkamp Klein reports that to commemorate the centennials for both Louis Pasteur and Wilhelm Roentgen, the University of Virginia Health Sciences Library will host the traveling exhibits, "Louis Pasteur: His Life and Work",

2-27 October 1995 and "A Century of Medical Radiology, 1895-1995", 30 October - 4 December 1995.

#### Calendar

The first Fall presentation in the 1995/96 History of the Health Sciences Lecture Series sponsored by the University of Virginia Health Sciences Library will be "The Legacy of Louis Pasteur" by Professor Claude Hannoun of the Institut Pasteur in Paris, 26 October 1995. The Fall meeting of the University of Virginia History of the Health Sciences Club on 18 October 1995 will feature a panel presentation on the history of radiology at the University of Virginia Health Sciences Center. For further information about these activities or to be added to the mailing list, please contact Joan Echtenkamp Klein at the addresses shown on the back page of The Watermark.

The Francis C. Wood Institute for the History of Medicine of the College of Physicians of Philadelphia announces its Fall 1995 History of Medicine Seminar Schedule. Seminars are held at the College of Physicians at 19 South 22nd Street from 12 p.m. until 2:00 p.m. 5 October Lisa Herschback, M.A., Harvard University, "Prosthetic Reconstructions: Making the industry, Re-Making the Body, Modeling the Nation"; 12 October Stephen M. Robertson, M.A., Rutgers University, "Signs, Marks, and Private Parts: The Medical Jurisprudence of Rape, 1823-1940"; 19 October Maarten Ulter, Ph.D., University of Alabama, "Is Amputation Necessary? A Great Debate in Surgery"; 2 November Peter L. Allen, Ph.D., Pomona College, "'The Very Means': Sin, the Body, and Veneral Disease"; 9 November Adrienne W. Berney, M.A., University of Delaware, "Breast Blood and Uterine Milk: Medical Perceptions of Reproductive Affinity, 1870-1920"; 16 November Jennifer J. Connor, Ph.D., University of Toronto, "Awakening a Spirit of Inquiry: The Reform Impulse of Thomsonian Medical Liberature in the Canadas"; 30 November Jodi Koste, M.A., Virginia Commonwealth University, Tompkins-McCaw Library and Joan Echtenkamp Klein, M.S.L.S., University of Virginia Health Sciences Center, Claude Moore Health Sciences Library, "Antebellum Virginia and the Magnet of the Philadelphia Medical Establishment: 'Canker" or Boon?"; 7 December Walter J. Lear, M.D., Institute of Social Medicine and Community Health, "Post-War Medicine as Proposed by Visionary Young Physicians and Medical Students Fifty Years Ago"; 14 December Eugene S. Flamm, M.D., University of Pennsylvania, "The Neurosurgeon in the Eighteenth Century".

This seminar series is supported by a grant from the Benjamin and Mary Siddons Measey Foundation. For more information contact Monique Bourque at the Wood Institute (215) 536-3737.



The Watermark is issued quarterly to members of Archivists and Librarians in the History of Health Sciences and is edited by Joan Echtenkamp Klein and Jodi Koste with production advice from Susan Deihl of Media Production Services, Virginia Commonwealth University.

Membership information may be otained from Elizabeth Ihrig, ALHHS Secretary/Treasurer, Bakken Library of Electricity, 3537 Zenith Avenue, South, Minneapolis, MN 55416; (612) 927-6508; FAX (612) 927-7265; E-MAIL eihrig@aol.com.

Production deadlines are 1 December, 1 March, 1 June, and 1 September.

Submissions may be sent to: Joan Echtenkamp Klein, Historical Collections, The Claude Moore Health Sciences Library, Box 234, University of Virginia Health Sciences Center, Charlottesville, VA 22908; (804) 924-0052; FAX (804) 924-0379; E-MAIL jre@virginia.edu or Jodi Koste, Special Collections and Archives, Tompkins-McCaw Library, Box 980582, Richmond, VA 23298-0582; (804) 828-9898; FAX (804) 828-6089; E-MAIL jkoste@gems.vcu.edu.

Submissions for Ex Libris should be sent to: Elaine M. Challacombe, Wangensteen Historical Library, Bio-Medical Library--Diehl Hall, 505 Essex Street, SE, Minneapolis, MN 55455; (612) 626-6881; FAX (612) 626-2454; E-MAIL e-chal@maroon.tc.umn.edu.