Welcome to the eighth issue of Teaching the History and Social Aspects of Pharmacy. This newsletter is issued twice a year in an electronic format and distributed via email by Greg Higby, Executive Director of the American Institute of the History of Pharmacy (ghigby@mhub.facstaff.wisc.edu). The Newsletter also is posted on AIHP's website (www.aihp.org).

In this issue, the course materials section presents and describes exercises and assignments for students to explore drug experiences from the user’s perspective. A related exercise, on reviewing mass media accounts of drugs and drug use, was presented in the fourth issue of the THSAP newsletter. The fifth of Anne Marie Lane’s ongoing column on Remedies from Rare Books focuses on Native American material medica. In this issue, the first part covers late 16th through late 18th century accounts. In the Autumn 2005 issue, the second part will cover accounts from the early 19th to early 20th centuries.

IMPORTANT ANNOUNCEMENT: It is with great regret that I have decided to resign as Editor of THSAP after Issue #10 (Spring 2006). We are looking for a new Editor to assume this important position. If you are interested in becoming the next Editor of THSAP, please contact me or Greg Higby at AIHP. It is very important that this newsletter continue its existence and not enter a long-term hiatus as has happened before in its illustrious history. So please consider this invitation to support your colleagues by guiding the dissemination of course materials, articles, reviews, and other information that can benefit readers in terms of their teaching activities and even their scholarly pursuits.

I look forward to your comments and suggestions for improving the newsletter, and most importantly, your contributions. Enjoy and PLEASE NOTE MY NEW EMAIL ADDRESS.

Michael Montagne, School of Pharmacy, Massachusetts College of Pharmacy & Health Sciences (michael.montagne@bos.mcphs.edu)

Next Issue

The next issue of Teaching the History and Social Aspects of Pharmacy will be published during Autumn of 2005. The deadline for submitting materials for that issue is Sept 15, 2005. Please submit materials electronically in Word to: Mike Montagne at michael.montagne@bos.mcphs.edu  PLEASE NOTE NEW EMAIL ADDRESS. (Mass. College of Pharmacy & HS, 179 Longwood Ave., Boston MA 02115, USA; phone: 617-732-2995). Thank you for your participation.
Course Materials

EXPLORING DRUG EXPERIENCES FROM THE PERSPECTIVE OF THE USER

Assignment A: Self-Analysis (My Attitudes Toward…)

Attitudes (and values) are very important in understanding various aspects of beliefs and behaviors, especially when it comes to the use of drugs. You are asked to prepare a paper dealing with at least three (3) attitudes you hold regarding drugs, drug use, or drug users. You should:

1. Identify at least three of your own attitudes (be honest now) toward drugs and their use. You may focus on medical drug use, non-medical use, non-use, or any combination thereof. For example: "Most patients are non-compliant because they get no information about their drug therapy," or "Most non-prescription drugs are really just placebos," or "I can't stand people who get drunk because they act so obnoxiously."

2. Determine what conditions or experiences in your life might have led to the development of each of these attitudes. For example: "My parents never took their medications because their doctors and pharmacists never explained things to them," or "I remember a lot of people coming into my parents' pharmacy and complaining about the worthless medicines they had bought off the shelf," or "I can't stand drunks because my father is an alcoholic and he beat me up when I was little."

3. Speculate about how each one of your attitudes might affect your behavior as a drug counselor or educator, in your relationships with others, or in any situation where drugs and drug use is an important facet of your life. For example: "I want to counsel and provide information to almost every patient who comes into my pharmacy," or "I don't think I could work with or educate people who have alcohol problems because of my negative attitudes."

I am looking for some degree of insight into your attitudes and values, and how they affect your behavior in real life. This paper should not exceed, on average, four (4) pages. All papers will be treated as confidential information, and they will be read only by me and returned immediately to you.

Assignment B: Analysis of a Drug Experience

The nature and meaning of specific drug-taking experiences have a profound affect on drug users. It is the primary reason that people initiate and continue their drug taking. You are asked to identify and to analyze a particular drug-taking experience from your life, and to prepare a paper discussing it. If you have not experienced an interesting drug experience, then you may choose someone else's (though you will have to talk to them, interview them, about it; or you can work from a literary account of a drug experience).
1. Choose an interesting drug-taking experience from your own life; it can be medical or non-medical in nature (example: your first experience with alcohol, tobacco, marijuana, or other social-recreational drug; an unusual experience with a drug that produced effects, positive or negative, that you were not expecting; first experience with a new medication; experiences with nonprescription drugs or herbal remedies).

2. Describe with as much detail as possible the physical and mental effects (and any others, like behavioral or social) that occurred during your experience, placing each effect in the time-order in which they occurred, and your response to those effects. Also include information about dose, route of administration, other pharmaceutical factors, and the ritual and setting of use.

3. Speculate and discuss the pharmacological as well as the sociological aspects of this experience and what specific pharmaceutical factors and social factors influenced the effects that did occur.

I am looking for unique & interesting drug experiences, especially those to which you had a strong response (found it very positive, did not expect it and were surprised, found it negative), and as a result you definitely would or would not use the drug again, and you would have strong opinions about the drug in making recommendations to patients or other drug consumers. This assignment should not exceed four pages. YOUR PAPER WILL BE KEPT STRICTLY CONFIDENTIAL, READ ONLY BY ME, AND RETURNED TO YOU IMMEDIATELY.

Assignment C: Drug Use Interviews

[NOTE: Recent regulations regarding research on human subjects and informed consent require submission of this educational activity to an Institutional Review Board for their approval before students can undertake this assignment. Please refer to your IRB for details regarding the ethical aspects of students interviewing people about their drug use.]

In recognition of the importance of personal meaning and perceptions in drug taking behaviors and experiences, you are asked to interview at least five (5) other people about their use of drugs or medicines. The purpose is to gain a better understanding of a particular type of drug use, and to begin thinking about ways in which problems might develop, and how they can be prevented, limited, or solved. You should:

1. Choose 5 people (not just other pharmacy students or family members - go for variety; though to ask such personal questions, you will probably feel more comfortable if you know the people) and interview them on a particular aspect of drug use, a specific drug, an attitude or perception regarding a drug, or problems they have had with drugs.

2. In order to briefly interview each subject, you should prepare a structure to your interview (a series of questions) beforehand based upon your central theme. You may want to consider: 1) extent and patterns of use, 2) motivations and reasons for use, 3) the nature
and meaning of effects that are or are not experienced, and 4) problems that have developed as a result of drug use.

3. Compare and contrast the results of these interviews with your own prior knowledge, and prepare a brief report (not more than 4 pages) on what you have discovered.

Given the intent of this assignment, you should think first about a particular aspect of drugs, drug use, or drug use problems and what you would like to learn from other peoples' experiences.

Assignment D: History of a Drug’s Origin

History can teach us many lessons. The history of how a drug is discovered, developed, and used can predict much about its current and future use in society. Pick a specific drug (see appendix below for some examples) and research its history of development, initial and current use.

1. Identify and describe briefly the following aspects of the drug’s “early days.”
   a. who discovered it, when, and why?
   b. how was it discovered?
   c. what were the initial effects described from use?
   d. was the drug developed for commercial use and the marketplace (by whom and when)?

2. Describe briefly the initial patterns of use and compare to the current patterns of use of this drug.

Present the results of your investigation in no more than four (4) pages.

Assignment D Appendix

Specific Drugs with Interesting & Accessible Histories

Absinthe (an alcoholic beverage)
Amphetamines (dextroamphetamine, methamphetamine)
Anesthetic agents (nitrous oxide, ether, chloroform)
Aspirin (acetylsalicylic acid)
Barbiturates (barbital, secobarbital, phenobarbital)
Bendectin (no longer on market)
Caffeine
Coca, coca wines (Vin Mariani), or cocaine
Chlorpromazine (Thorazine)
Diazepam (Valium)
Fluoxetine (Prozac)
Heroin (diacetylmorphine)
Insulin
Methadone
Morphine
Nicotine (tobacco)
Oral contraceptives
Paclitaxel (Taxol)
Penicillin
Psychedelics/Hallucinogens:
   Ibogaine
   LSD (lysergic acid diethylamide)
   Mescaline (peyote)
   Methylenedioxymethamphetamine (Ecstasy)
   Psilocybin or Psilocin (magic mushrooms)
Quinine
Tamoxifen
Vioxx

-Michael Montagne
Michael.montagne@bos.mcphs.edu
**Please note new email address**

Special Column

REMEDIES FROM RARE BOOKS V

Anne Marie Lane
Rare Books Curator, Toppan Library,
American Heritage Center
University of Wyoming
Email: amlane@uwyo.edu

NATIVE AMERICAN MATERIA MEDICA, PART 1

INTRODUCTION:

Early European explorers in the New World, as well as later Americans of Old World
descent, recorded many different aspects about the lands and the indigenous peoples they
encountered. In these historical accounts, we can sometimes learn about ways that Native
Americans cared for their sick. Oftentimes, the colonizers themselves adopted aspects of
the local materia medica for similar medical needs. The Toppan Rare Books library is
fortunate to have a collection of original exploration, travel, and historical narrative
books from the sixteenth through early twentieth centuries. The selections for this two-
part article relate to Indians who lived in the East, Midwest, and West, and include some
fascinating sections related to their traditional remedies.
LATE SIXTEENTH / EARLY SEVENTEENTH CENTURY ACCOUNTS:

*Brevis Narratio Eorvm Qvae in Florida Americae Provicia*….  
Jacobo Le Moyne (Francoforti: Theodori De Bry), 1591  
(Part 2 of the thirteen-part “America” series in De Bry’s *Grands Voyages*)

Theodore De Bry was a Flemish entrepreneur who not only published exploration accounts, but also engraved their copperplate illustrations himself. However, since the library’s edition is printed in Latin, information related here about the one relevant image (adapted from a Jacques Le Moyne painting) is gleaned from Stefan Lorant’s 1946 book:

*The New World: The First Pictures of America*  
made by John White and Jacques Le Moyne and engraved by Theodore De Bry  
with contemporary narratives of the Huguenot Settlement in Florida, 1562-1565  
and the Virginia Colony, 1585-1590,  
edited and annotated by Stefan Lorant (N.Y.: Duell, Sloan, & Pearce), 1946

The particular area Le Moyne was recording (around St. John’s River) was part of an extended area called “Florida” at the time. In De Bry’s engraving of the Natives there, “How they treat their sick,” we see three ill men being assisted. One method involved bleeding (with the blood then drunk by nursing and pregnant women with the intention of making their milk better and their babies healthier). Another method was to place the person face downward over a fire of hot coals, onto which seeds were thrown to act as a purge. (Unfortunately, the types of seeds were not specified.) In the background, we see a woman giving dried tobacco leaves to a man smoking a long-handled pipe. Lorant’s English translation of De Bry’s caption of Le Moyne’s account (p.75) notes that the Indians smoked a plant that the Spaniards called “topaco;” and by that means, the Indians often cured infections.

Another first-hand account published in Lorant’s book is Thomas Hariot’s description of Roanoke Colony, “Virginia.” Roanoke Island is located off what is now North Carolina; the term “Virginia” was used at the time for the land stretching from “Florida” all the way up to Newfoundland. Hariot himself had published the account in 1588 (shortly after returning to England) with twenty-three of fellow-colonist John White’s watercolors, as *A Briefe and True Report of the New Found Land of Virginia*. It was then translated into Latin two years later as the first part of De Bry’s “America” series:

*Admiranda Narratio Fida Tamen, de Commodis et Incolarum Ritibus Virginiae*….  
Thoma Hariot (Francoforti: Theodori De Bry), 1590  
(Part 1 of the thirteen-part “America” series in De Bry’s *Grands Voyages*)

Lorant’s book includes, for the first time and in color, all of John White’s watercolors of his Roanoke Colony observations. The thirty-sixth page of these reproductions is a full-page painting of a milkweed plant, beside which White had written: “The hearbe which the Savages call wysauke, wherewith theie cure their wounds which they receive by the poysened arroes of their enemyes.” (This must, surely, be one of the first botanical
paintings of a New World medicinal herb. Unfortunately, a visual search through landscape details in De Bry’s engravings of scenes adapted from White’s paintings did not turn up any further depictions of his milkweed illustration.)

Interest in the New World was obviously of great popular interest at the time, and Hariot’s narrative was picked up for inclusion within the geographer Richard Hakluyt’s one-volume 1589 book about English exploration overall; and a little later within the final volume of his enlarged three-volume second edition (1598-1600) cited below.  

**The Third and Last Volume of the Voyages, Navigations, Traffiques, and Discoveries of the English Nation….Collected by Richard Hakluyt (Imprinted at London by George Bishop, Ralfe Newberie, and Robert Barker), Anno Dom. 1600**

Within Hakluyt’s printing of Thomas Hariot’s account of marketable commodities (pp. 268-269), several medicinal substances are mentioned:  

**Wapeih:** “A kind of earth so called by the naturall inhabitants, very like to Terra sigillata, and having bene refined, it hath bene found by some of our Physicians and Chyrurgians, to be of the same kind of vertue, and more effectuall. The inhabitants use it very much for the cure of sores and wounds: there is in divers places great plenty, and in some places of a blew sort.”  

**Sassafras:** “called by the inhabitant Winauk, a kind of wood of most pleasant and sweet smell, and of most rare vertues in physice for the cure of many diseases. It is found by experience to be far better and of more uses then the wood which is called Guaiacum or Lignum vitae. For the description, the manner of using, and the manifold vertues therof, I refer you to the booke of Monardes, translated and entituled in English, *The joyful newes from the West Indies.*”  

**Sweet gummes:** “of divers kinds, and many other Apothecary drugges, of which we will make speciall mention, when we shall receive it from such men of skill in that kinde, that in taking reasonable paines shal discover them more particularly then we have done, and then now I can made relation of, for want of the examples I had provided and gathered, and are now lost, with other things by casualty before mentioned.”  

We are, most unfortunately, unable to learn anymore about these “Apothecary drugges,” because in the previous paragraph about a “pearle” necklace of several thousand pearls gathered from the Natives, Hariot said that it would have been presented to her Majesty [Queen Elizabeth I] “had we not by casualty, and through extremity of a storme lost them, with many things els in coming away from the countrey.”  

Two very important plants survived that storm, because Lorant tells us (p.225) that when Hariot left the Roanoke Colony in 1586, he “carried with him his notes and two strange plants, one of which later became known as *tobacco*, the other as the *potato*. Reaching England, he delivered the plants to Raleigh and his manuscripts to the printer.”

Within Hakluyt’s printing of Hariot’s section about food and other commodities, he discussed (pp.271-272) this plant **tobacco** or “**uppowoc:**”  

“There is an herbe which is sowed apart by itselfe, and is called by the inhabitants Uppowoc: in the West Indies it hath divers names, according to the severall places and countreyes where it growth and is used: the Spanyards generally call it Tabacco. The leaves thereof being dried and brought into powder, they use to take the fume of smoake thereof, by sucking it thorow pipes made of clay, into their stomacke and head; from whence it purgeth superfluous fleame and other grosse humours, and openeth all the pores and passages of the body: by which meanes the use thereof not only preserveth the body from obstructions, but also (if any be, so that they have not bene of too long continuance) in short time breaketh them: whereby their bodies are notably preserved in health, and know not many grievous diseases, wherewithall we in England are often times afflicted.

We our selves, during the time we were there, used to sucke it after their manner, as also since our returne, and have found many rare and wonderfull experiments of the vertues thereof: of which the relation would require a volume by it selfe: the use of it by so many of late men and women of great calling, as els, and some learned Physicians, also, is sufficient witnesse.”

Captain John Smith arrived at Jamestown, in the modern state of Virginia, in 1607; and later published a number of books about his adventures. In this 1624 book, he included portions of Hariot’s account, and other early colonists, before his own narrative. In Smith’s section on “Commodities” (p.27) he noted the following:

**Wighsacan**: “as th’other [Tockawhoughe root] feedeth the body, so this cureth their hurts and diseases. It is a small root which they bruise and apply to the wound.”

**Pocones**: “a small root that groweth in the mountaines, which being dryed and beate in powder turneth red. And this they use for swellings, aches, anointing their joints, painting their heads and garments. They account it very precious, and of much worth.”

**Pellitory of Spaine, Sasafrage, and divers other simples**: “which the Apothecaries gathered, and commended to be good, and medicinable.”

Later, within his categories of “Their Phisicke” and “Their Chirurgery”(p.34), we learn that a large quantity of **Wighsacan** juice mixed with water was used as a violent purge every spring; and that sweat lodges were employed for dropsies, swellings, aches, and “such like diseases.”

**LATE EIGHTEENTH CENTURY:**
Jonathan Carver explored the area around Lake Superior and what is now Minnesota. The published results became “one of the most widely read travel and adventure books in that period,” and he also published a treatise on tobacco in 1779. In his Chapter XIV about the Indians “Of their Diseases, &c., (after first discussing sweat lodges for the most common disorder, pleurisy), he imparted an important fact about Native American use of materia medica. Referring to dropsy and paralytic complaints, he said (p.391):

“As a remedy for these as well as for fevers they make use of lotions and decoctions, composed of herbs, which the physicians know perfectly well how to compound and apply. But they never trust to medicines alone; they always have recourse likewise to some superstitious ceremonies, without which their patients would not think the physical preparations sufficiently powerful.”

He gave a specific example (pp.393) of such a natural remedy curing a trader with whom he was traveling. The man “complained of a violent gonorhroea with all its alarming symptoms,” but was helped when they reached a town of Winnebago Indians. The chief there prepared a decoction from the bark of prickly ash roots, “a tree scarcely known in England, but which grows in plenty throughout North America; by the use of which in a few days he was greatly recovered, and having received directions how to prepare it, in a fortnight after his departure from this place perceived that he was radically cured.” (Note how gracious that Winnebago chief was to share his decoction remedy for the trader’s future use.)

Within Chapter XIX, “Of the Trees, Shrubs, Roots, Herbs, Flowers, &c.” (pp.501-519), Carver included the following:

**Prickly Ash** (pp.506-507): “I have already mentioned one instance of its efficacy, and there is no doubt but that the decoction of it will expeditiously and radically remove all impurities of the blood.”

**Beech nut tree** (p.501): a decoction made of the leaves “is a certain and expeditious cure for wounds which arise from burning or scalding, as well as a restorative for those members that are nipped by the frost.”

**Sassafras** wood, bark, and roots: well known for their use in medicine.

**Winter Green bush** (p.510): “The Indians eat these berries, esteeming them very balsamic, and invigorating to the stomach. The people inhabiting the interior colonies steep both the sprigs and berries in beer to use it as a diet-drink for cleansing the blood from scorbatic disorders.”

**Fever Bush** (p.510): “A decoction of the buds or wood is an excellent febrifuge, and from this valuable property it receives its name. It is an ancient Indian remedy for all inflammatory complaints, and likewise much esteemed on the same account by the inhabitants of the interior parts of the colonies.”

**Sarsaparilla** (p.512): the bark of the roots was used in medicine as a gentle sudorific, and was “very powerful in attenuating the blood when impeded by gross humours.”

**Ginsang** [sic](p.513): Carver noted that although once thought only to grow in Korea, it
was lately discovered in North America.\textsuperscript{16} “In the eastern parts of Asia it bears a great price, being there considered as a panacea, and is the last refuge of the inhabitants in all disorders. When chewed it certainly is a great strengthener of the stomach.”

**Gold Thread** vine (pp.513-514): “It is also greatly esteemed both by the Indians and colonists as a remedy for any soreness in the mouth, but the taste of it is exquisitely bitter.”

**Devil’s Bit** (pp.514-515): “The Indians say that this was once an universal remedy for every disorder that human nature is incident to; but some of the evil spirits envying mankind the possession of so efficacious a medicine gave the root a bite, which deprived it of a great part of its virtue.”

**Blood Root** (p.515): “a strong emetic, but a very dangerous one.”

**Rattle Snake Plantain** (pp.516-5177): the Indians were convinced of “the power of this infallible antidote,” and “The leaves of this herb are more efficacious than any other part of it for the bite of the reptile from which it receives its name; and being chewed and applied immediately to the wound, and some of the juice swallowed, seldom fails of averting every dangerous symptom.”

**Poor Robin’s Plantain:** a good medicinal herb administered in fevers and internal weaknesses.

**Rock Liverwort** (p.517): “esteemed as an excellent remedy against declines.”

**Gargit or Skoke:** the roots acted as a powerful absorbent when applied to the hands and feet of a person afflicted with fever.

**Wake Robin** (p.519): the root was dried and grated into cold water, then taken internally for all complaints of the bowels; Carver felt that it was “beneficial to mankind.”

**The second half of this column, with Native American remedies from the early nineteenth and early twentieth centuries—and a conclusion—will be in the Fall 2005 issue of the Newsletter.**

**Footnotes:**

1 For conciseness, the botanical descriptions and geographical habitats of the plants will not be included here; nor will observations of healing ceremonies be related.

2 The “America” series began the De Bry family’s monumental work *Grands et Petits Voyages*, published in Frankfort, Germany, from 1590 through 1634. (After Theodore De Bry’s death in 1598, his widow, sons, and son-in-law Mathieu Merian finished up the engravings, published the remaining sections of the *Grands Voyages*, and added the *Petits Voyages.*)

3 It is obvious that De Bry, working in Germany, had never seen actual Native Americans, because he interpreted them to look more like Classical figures in the European painting style of the time. The detailed illustrations were engraved with the help of his sons Jean-Israel and Jean-Theodore, and also G. Veen.

4 Depicted in Plate XX, “Aegros curandiratio,” in De Bry’s 1591 book and on p. 75 of Lorant’s 1946 book. This is one of the forty-three engravings De Bry published of Jacques Le Moyne’s paintings, which illustrate Le Moyne’s narrative about “Florida.” This French artist had gone to the New World with French Huguenots in 1564 to map and record—but had to flee a year later when Spaniards massacred most of those colonists at Fort Caroline. He spent the rest of his life in England working as a painter, was associated with Sir Walter Raleigh, and was known by the English name of “James Morgues.”
Sir Walter Raleigh had sent his friend, the twenty-five year old mathematician Thomas Hariot to the first Roanake colony in 1585 as historian and surveyor; he returned to England with Sir Francis Drake a year later.

Lorant explains (p.182) that when De Bry went to London in 1588 to acquire Le Moyne’s paintings and narrative from his widow, the English scholar Richard Hakluyt persuaded him to start his series instead with John White’s images illustrating Hariot’s “Virginia.” This, thereby, gave the initial prominence in the publication to English exploration, rather than the earlier French exploration.

Sir Walter Raleigh had sent the artist John White (a friend of Richard Hakluyt) to the first English colony of Roanoke in 1585; like Hariot, he returned to England with Sir Francis Drake a year later. He then returned the next year for just a brief time as governor--and sole survivor--of the second, ill-fated Roanoke colony (where he became grandfather of the first English child born in the New World, Virginia Dare). The sixty-four watercolor originals he carried back in 1586 are now preserved in the British Museum.

There are no illustrations in this three-volume set.

These descriptions can be found transcribed into more readable modern English in Lorant, pp.236-238 (in Latin in De Bry, 1590, pp.8-9, 11).

That last part meant that it was sometimes blue in color.

In Lorant’s publication of Governor Ralph Lane’s account of the first Roanoke colonists getting ready to return to England (p.148), Governor Lane described how after the boats were loaded, a “mighty storm arose and continued for four days. Had it not been for the intervention of God and the foresight of the general [Sir Francis Drake], the entire fleet would have been driven ashore…Our newly gained ship was lost, together with the two captains and the most important part of our stores.” This is, presumably, the storm in which Hariot lost his samples of medicinal herbs.

Transcribed into modern English in Lorant, p.246 (in Latin in De Bry, 1590, pp.16-17).

The Toppan Library’s 1624 edition includes a frontispiece portrait of Pocahontas (Indian name: Matoaka; Christian name, Rebecca), who had saved Captain Smith’s life. This portrait shows her in English dress, in 1616, after her husband John Rolfe had taken her to England. Tragically, the New Encyclopaedia Britannica says that she died the next year of smallpox, while preparing to return home.

“Carver, Jonathan,” New Encyclopaedia Britannica (Micropaedia, 15th ed.)

“Carver, Jonathan,” Webster’s Biographical Dictionary (1st ed.). Sadly, the New Encyclopaedia Britannica article concludes by saying that Carver did not receive any financial reward for this popular book in his lifetime; and died a broken old man, buried in London’s potter’s field.

The Iroquois word “Garentoquen” is included under the entry for “Ginseng” in The Century Dictionary (1889), with its literal translation of the plant’s description being “legs and thighs separated.”

Announcements

International Congress on the History of Pharmacy
June 22-25, 2005, Edinburgh, Scotland

The biennial International Congress on the History of Pharmacy, scheduled for June 22 to 25, 2005, will be held in Edinburgh, Scotland. It is being organized by the British Society for the History of Pharmacy (www.bshp.org), under the aegis of the International Society for the History of Pharmacy. For registration forms and information, contact the Local Secretary, Peter Homan (peter.homan@lineone.net).
International Congress of History of Science  
July 24-30, 2005, Beijing, China

The next International Congress of History of Science will convene 24-30 July 2005 in Beijing, China. The central theme will be “Globalization and Diversity,” focusing historically on cross-cultural diffusion of science and technology, and its impact on the world today. The program includes plenary lectures, symposia, poster sessions, and volunteer papers in three sections, one of which is devoted to medical history, broadly defined. The Congress website is: http://2005bj.ihns.ac.cn. To e-mail the Congress Secretariat address: 2005bj@ihns.ac.cn.