HISTORY OF MEDICINE ON TEACHING ROUNDS: WHY IT MATTERS AND HOW TO DO IT

Pediatric Academic Societies, Boston
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Tonse Raju has no conflicts of interest to declare.
Introduction

- HOM topics into teaching can enhance student attention and retention.

- Teaching medical history can be a rich experience.

- It can be fun, too.

- Reasons one finds difficult to incorporate HOM:
  - No time
  - Unfamiliarity with resources
  - Methods for conducting research in medical history.
Session Objectives

- Learn the advantages of incorporating medical history and biography
  - Daily rounds
  - Student and resident lectures
  - Seminars and grand-round talks, etc.

- How to find and use medical history sources?

- How each of us utilized medical history for teaching
The Workshop Structure

- Introduction
  - Tonse Raju

- Don’t Know Much about History of Pediatrics
  - Jeff Baker

- Surfing the Web: History of Medicine Resources
  - Tonse Raju & Rusty Heckaman

- History of Medicine: Putting it into Action
  - Lawrence Gartner
  - Tonse Raju

- Conclusions
The Session is Informal, and the Faculty is Friendly...

- **Jeffery Baker, MD, PhD.**
  - Professor of Pediatrics, Director, History of Medicine Program, Duke University School of Medicine

- **Lawrence Gartner, MD**
  - Professor of Pediatrics, University of Chicago

- **Rusty Heckaman, Curator, AAP History Center**

- **Tonse Raju, MD (NIH).**
  - Medical Officer, NICHD, NIH

Dr. Baker is the chair of the AAP’s Historical Archival Advisory Committee, Drs. Gartner and Raju are members, and Mr. Heckaman is the manager of HAAC.
Thank you...

Let us enjoy the session...
TALK 2
SEARCHING FOR HISTORICAL MATERIALS

Tonse N.K. Raju, MD
Rusty Heckaman
Sky is the limit. . .

- **World Wide Web**
  - AAP Pediatric Center Launching
  - Using Pub-Med
    - Oxygen toxicity and retinopathy of prematurity
  - Neonatology on the Web: *Diversion* page
  - History of Vaccines.org
    - Polio

- **Medical History Interest Groups**
  - Listserve: *Caduceus-L*

- **National Library of Medicine**
Images from the History of Medicine (IHM) provides access to nearly 70,000 images in the collections of the History of Medicine Division (HMD) of the U.S. National Library of Medicine (NLM).

The collection includes portraits, photographs, caricatures, genre scenes, posters, and graphic art illustrating the social and historical aspects of medicine dated from the 15th to 21st century.

The records from the Images from the History of Medicine database are also searchable in LocatorPlus.

The purpose of the IHM database is to assist users in finding and viewing visual material for private study, scholarship, and research. This site contains some materials that may be protected by copyright, trademark, or other intellectual property laws. It is the responsibility of the user to determine whether any of these laws apply to their intended use of the material and to obtain any necessary permission beforehand.
Explore History

NLM historical collections of material related to health and disease are among the richest in the world and originate in all time periods and cultures. Our collections include rare books and manuscripts, historical prints and photographs, and historical films and videos.

You can learn about these collections through a variety of online resources, including:

- NLM's Digital Collections: experience a variety of digitized books and videos
- Profiles in Science®: explore rich archival collections of leaders in biomedical research, clinical medicine, and public health
- Turning the Pages: touch, turn, and explore in visual and intellectual depth the pages of virtual rare books; and the many exhibitions of NLM's award-winning exhibition program
- Images from the History of Medicine: view nearly 70,000 images in the collections of NLM
- Medicine in the Americas: read full-text digital medical Americana

Additionally, NLM historians and curators create specialized Web sites about a myriad of historical topics. Read about African Americans in Civil War medicine, cholera, Harry Potter and Renaissance science, magic, and medicine, public health posters, medieval manuscripts and early printed books, and more.

Recent Historical Exhibitions

You can also explore history through exhibitions of NLM's award-winning exhibition program. Visit our upcoming exhibition on the subject of Native Peoples' Concepts of Health and Illness when it opens in Fall 2011. Learn about those and many more previous exhibits online:
Pros and Cons of Wikipedia

- **Pros**
  - It is popular, and is easy to do a search
  - Good source for cross references, and web links (not necessarily the best source)

- **Cons:**
  - It is constantly evolving
  - You never know who was the last person that edited it, and if the new information has been verified for accuracy.
  - Always check the source reference
  - Verify the accuracy from more than one source.
  - Copyright issues
Use them with Caution... 

**Pros:**
- Quick and easy access
- Most are “user friendly”
- Crosslinks to other sites (probably the most important)
- Interaction with the site managers

**Cons**
- Accuracy, accuracy, accuracy of information!!!
- Knowing which site is better than the other
- Copyright issues
Let’s search the web... 

- AAP History Center 
- Pub-Med 
- National Library of Medicine
Talk 3

How I use History of Medicine for Teaching
How I use History of Medicine for Teaching

- Ward rounds
  - Stories of eponyms (people, conditions, syndromes)
  - Stories related to the patient’s diagnosis, investigation or treatment
    - RDS, antenatal steroid, and Sir Graham Liggins
  - Serendipitous discoveries
  - Student’s assignment: a 2-minute talk on next day’s rounds

- Student lectures, Grand round talks
  - Topic-related background history as introduction
The General Approach

- “How” and “why” of discoveries/inventions
  - What led one to think of the problem, how one went about searching for answer to it?

- Historical mistakes, serendipities
  - Penicillin
  - EDRF—and a technician’s poor technique
  - Culture of *Helicobacter pylori* on an Ester weekend

- Probably less interesting
  - Chronology—it is important, but connecting datelines
  - The “what if” question: *E.g., Cleopatra’s Nose*
How I use History of Medicine for Teaching

- Tell stories: e.g., stories of eponyms
  - Down syndrome
  - Apgar score
  - Student’s t test
  - Moro’s response

- Origin of medical words
  - Temporal region
  - Malaria
  - Artery
Read the original Paper!!
The t-statistics was introduced in 1908 by William Sealy Gosset, a chemist working for the Guinness brewery in Dublin, Ireland. ("Student" was his penname.)

In 1866 John Langdon Down, the British physician described a syndrome and called it Mongolism; which was later properly changed to Down Syndrome.

In 1855 Theodor Escherichia, a German pediatrician, discovered E. Coli in the faeces and called it Bacterium coli commune, because it is found in healthy colon.
Stories Behind the Words

- **Temporal**: related to time
  - The ravage of time is shown first in the temporal region; graying and/or balding

- **Malaria**: "bad air"
  - Air around stagnant water smelled bad, also breading ground for mosquitoes

- **Artery**: “Air I carry”
  - Because at autopsy, arteries were empty, but veins had blood, Galen taught that arteries carried air, which mixed in the heart
175 years of NLM!

In 1836, the library of the US Army Surgeon General was a small collection of medical books on a single shelf. Today, the National Library of Medicine is the world's largest biomedical library, with over 17 million items in more than 150 languages. But this unique institution is about much more than books.

NLM's information services and research programs serve the world by supporting scientific discovery, clinical research, education, health care delivery, public health response and the empowerment of people to improve their personal health. Displayed are the milestones leading from that modest shelf of books to a 21st century facility committed to the innovative use of computing and communications, to enhance effective public access to understanding and discovery in human health.

United States National Library of Medicine
1836-2011

1836 - 1956

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<tr>
<th>Date</th>
<th>Details</th>
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<tbody>
<tr>
<td>1836</td>
<td>The <em>Library of the Office of the Surgeon General of the Army</em> (the present National Library of Medicine) established in Washington, DC.</td>
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<td>1865</td>
<td>John Shaw Billings, MD, 27-year–old lieutenant colonel, pathologist and bibliophile, assigned to supervise the Surgeon General's Library, which he developed into a national resource of biomedical literature. He would remain in that post until 1895.</td>
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Thank you