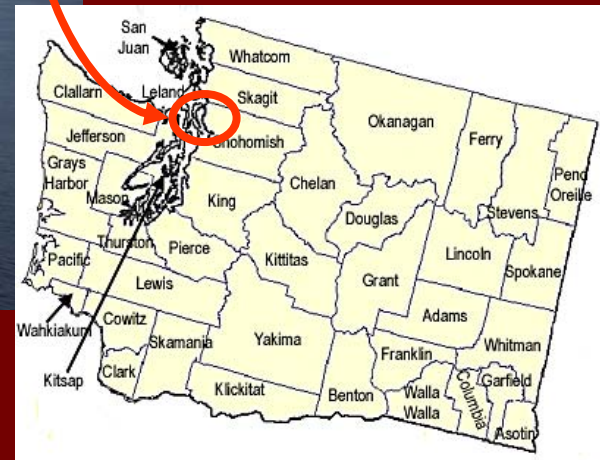
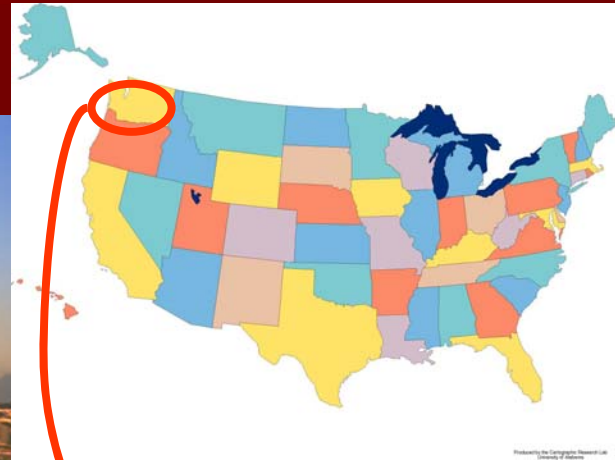


A Lifelong Learning Plan for Emergency Medicine

Robert Russell, MD, FACEP
Fulbright Senior Lecturer
Acil TIP
KTU
Trabzon, Turkey

My Home is Everett, Washington, USA



Who am I?

- Fulbright Senior Lecturer
In Emergency Medicine
At Karadeniz Teknik Universitesi
Trabzon
- I am old!

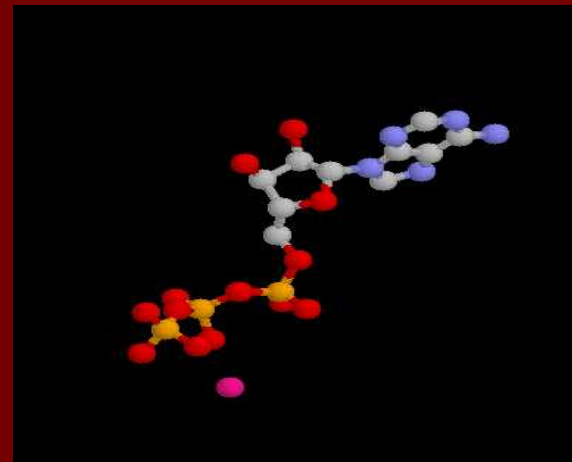
Who am I?

- Emergency Physician specialist for the last 27 years
- I practice at a community hospital in the city of Everett which is a secondary referral center for three counties in Washington State
- In the emergency department we see about 70,000 patients a year
- I am a board certified in emergency medicine. I first certified in 1984 and recertified in 1994 and in 2004

Why do we need a
lifelong learning plan?

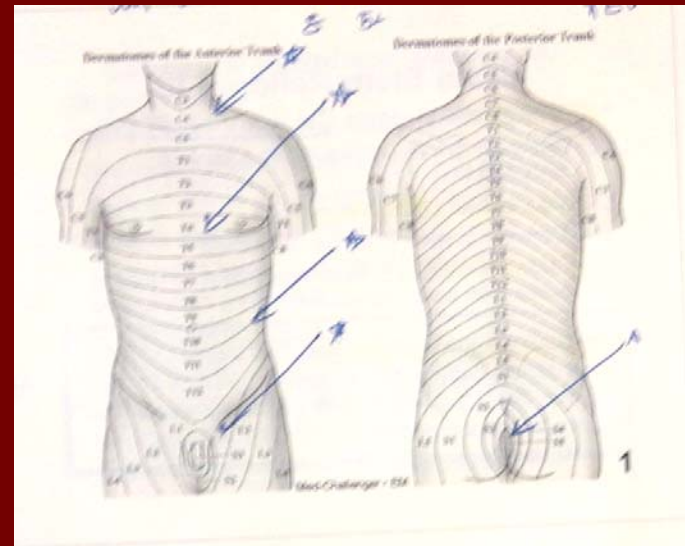
We Have a Vast Specialty

- We are experts on the first hour of everything
- We have a specialty in breadth
- As well as a specialty in depth



We Forget

- We require constant review
- How many times did you learn the sensory dermatomes?
- How many times did you forget the sensory dermatomes?



Emergency Medicine Changes Rapidly

- New since I began the practice of emergency medicine
 - CT scans
 - MRI
 - HIV/AIDS
 - Third generation cephalosporins
 - Angioplasty and stent in acute myocardial infarction
 - Ultrasound by emergency physicians
 - And much more



We Get Busy

- Life is so full and busy.
 - Family
 - Friends
 - Work
- Without a plan, learning will not happen



Learning Adds To Our Joy to Life!

- We care about being the best physician possible
- We care about the quality of care we deliver
- It is refreshing to learn new things. It helps us to avoid burn out
- It benefits our patients
- It benefits our fellow physicians
- It benefits our specialty

In a Residency Our Learning is Planned by Someone Else

- In a residency there is a planned learning sequence. All the core topics will be covered automatically.



In Practice, No One Will Plan Our Learning For Us

- In practice only we determine what you need to learn next
- In practice we must do all the planning and learning ourselves.



What Do We need For Our Plan?

- How do we organize the material?
- What types of material to we need to study and review?
- What is our goal?
- Then work our plan

How Can We Organize What We Learn?

- I will share with you the best advise I have ever been given for studying medicine

Robert:

Here is an old pic from about 1970-5 era (I was about 40)

That's the best I can do.

Robert Berg is the one who taught us all the binder method of keeping notes from all sources in such a way as to insure frequent review and avoid ever-expanding files. I used it for nearly 40 years. I did not use it for topics in my specialty (hepatology), where I needed more detail and thus accumulated a huge collection of 5X7 cards, abstracting each article I read. I eventually had 6 drawers of these abstracts!

Have a nice time in Turkey.

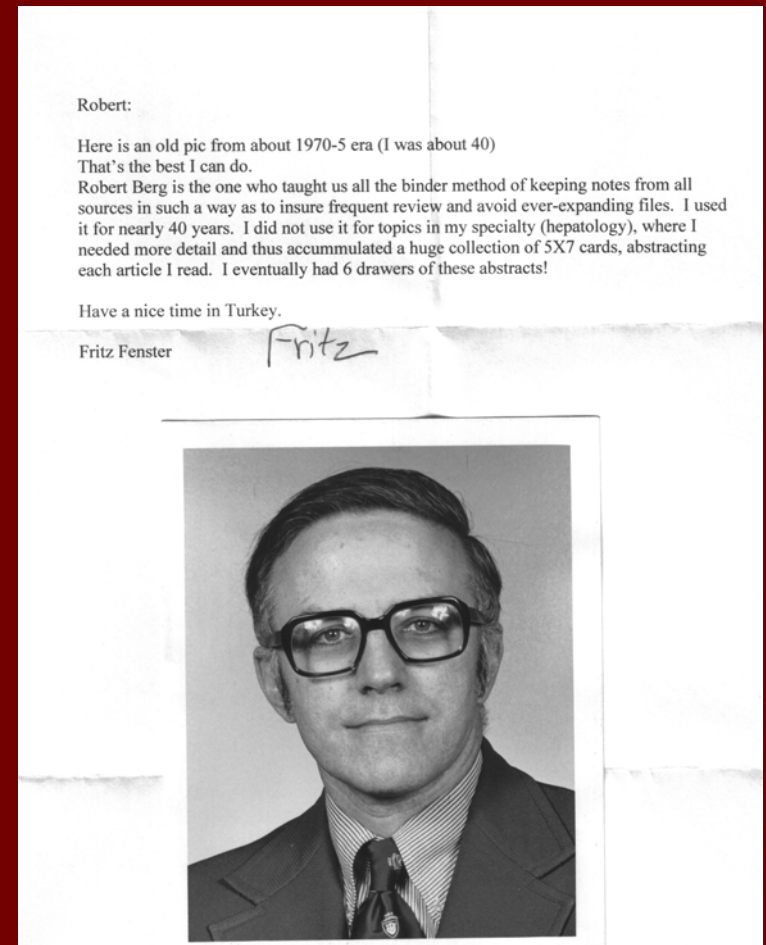
Fritz Fenster

Fritz



The Best Advice I Got For Studying Medicine - Organization

- L. Fredric Fenster, MD
1975
- Gastroenterology attending
- Virginia Mason Medical Center
- My professor when I was a resident
- He got this system from his professor, Dr Robert Berg of Harvard Medical School – Pulmonary Medicine



A Letter from my professor

The Best Advice I Got For Studying Medicine - Organization

- Make our own personal “textbook” of medicine
- In our case a textbook of emergency medicine
- Two type written pages or hand written pages for each subject
- Constantly revised by you

Robert:

Here is an old pic from about 1970-5 era (I was about 40)

That's the best I can do.

Robert Berg is the one who taught us all the binder method of keeping notes from all sources in such a way as to insure frequent review and avoid ever-expanding files. I used it for nearly 40 years. I did not use it for topics in my specialty (hepatology), where I needed more detail and thus accumulated a huge collection of 5X7 cards, abstracting each article I read. I eventually had 6 drawers of these abstracts!

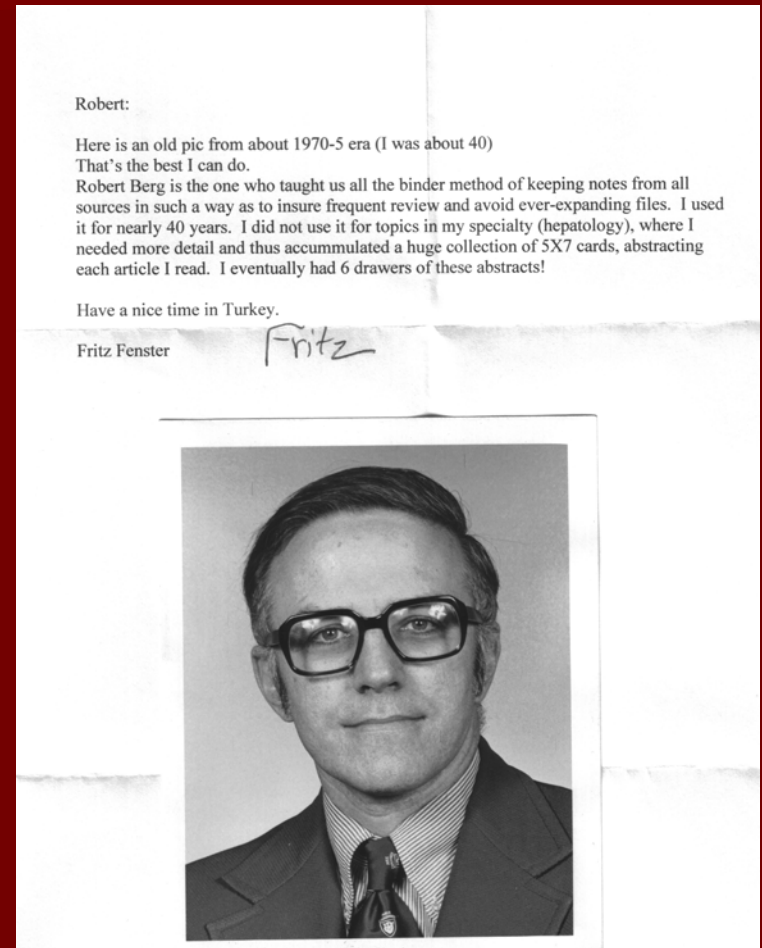
Have a nice time in Turkey.

Fritz Fenster



The Best Advice I Got For Studying Medicine - Organization

- Premise: If you know well everything on two type written pages on every disease pertinent to your specialty, you will know more than 90% of practitioners [and you will serve your patients well]



Your Personal Emergency Medicine Textbook

- When you read, attend a class, or lecture write what you learn on a page.
- Allow 2 type written pages per subject/disease
- Number the page with the corresponding chapter number in the table of contents of Tintinelli or the textbook of your choice.
This organizes your notes

Your Personal Emergency Medicine Textbook

- File your new information in a note book or in a computer file under the corresponding chapter number
- When you have read a chapter, and several papers then two pages will be full. After that, review the pages, remove outdated information, remove information that is too basic and incorporate the new information

What is the Value of Making Your Own Textbook?

There are already plenty of good textbooks of emergency medicine. Why make another one?

- I helps me remember the information
- It helps me review the information
- It helps me organize what I have learned
- It helps me plan What I have studied and what I have not studied?

An Example

- A patient with a severe soft tissue infection presented to our ED



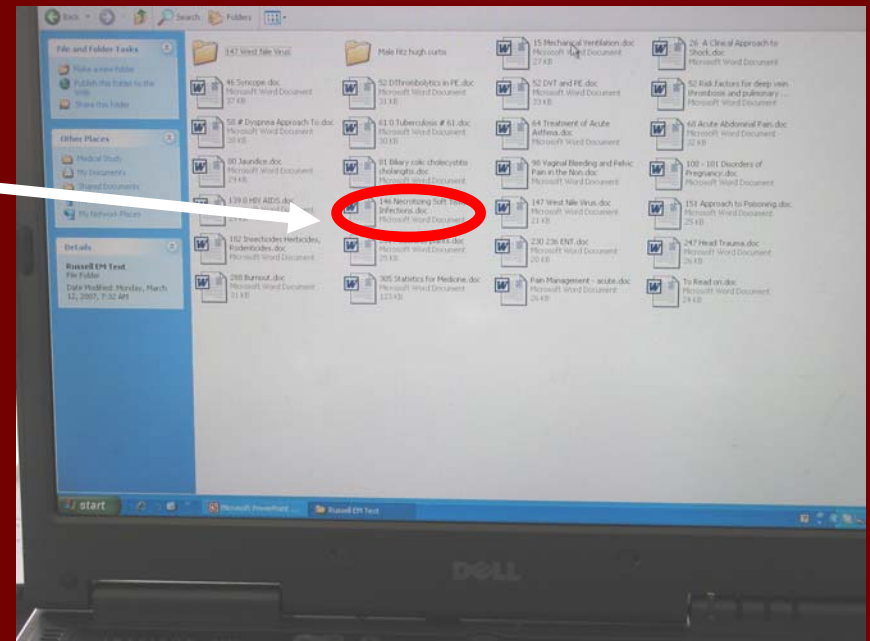
An Example

- I wanted to learn more about necrotizing soft tissue infections
- I made a "Word File" and saved it as "146 Necrotizing Soft Tissue Infections"

I read and re-read Tintinelli and made the following two pages of notes

Example

- The next time I read about necrotizing soft tissue infections, I will go to my file
- I will review the old information
- I will add the new information
- I will reorganize and delete obsolete information



What Material do I Study?

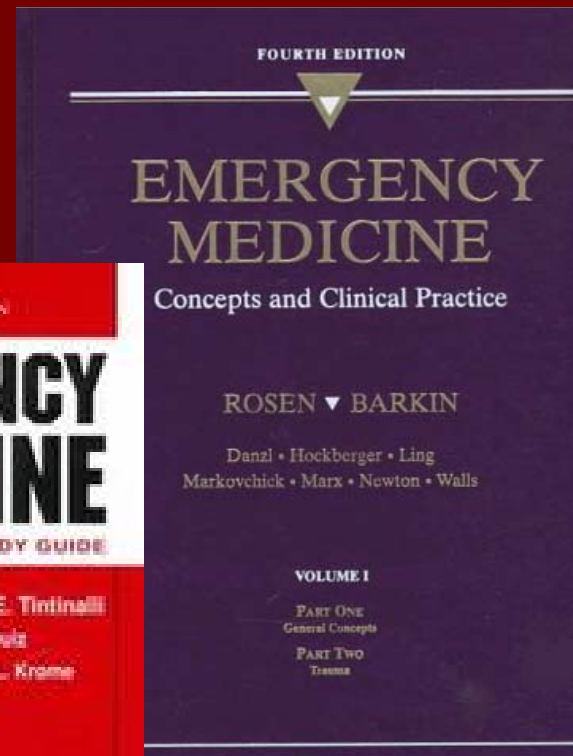
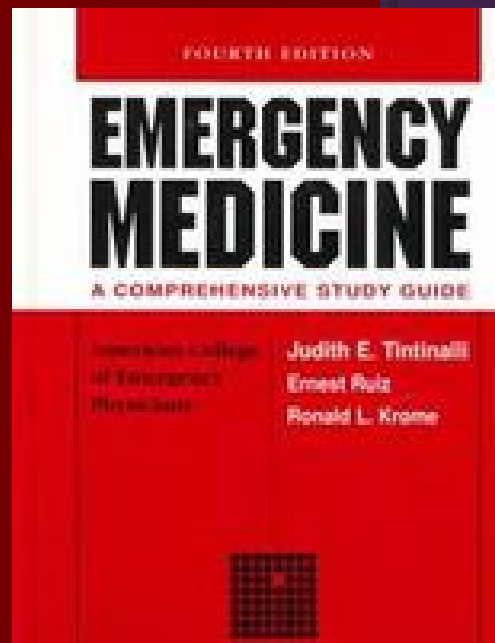
- The note book is one way to answer the question "How do I organize my study?"
- Another question is "What sort of material do I study?"

What Different Types of Material Do We need to Study

- Review core knowledge
- Acquire new knowledge and skills

Systematic Review of Core Knowledge

- The basic text books of Emergency Medicine



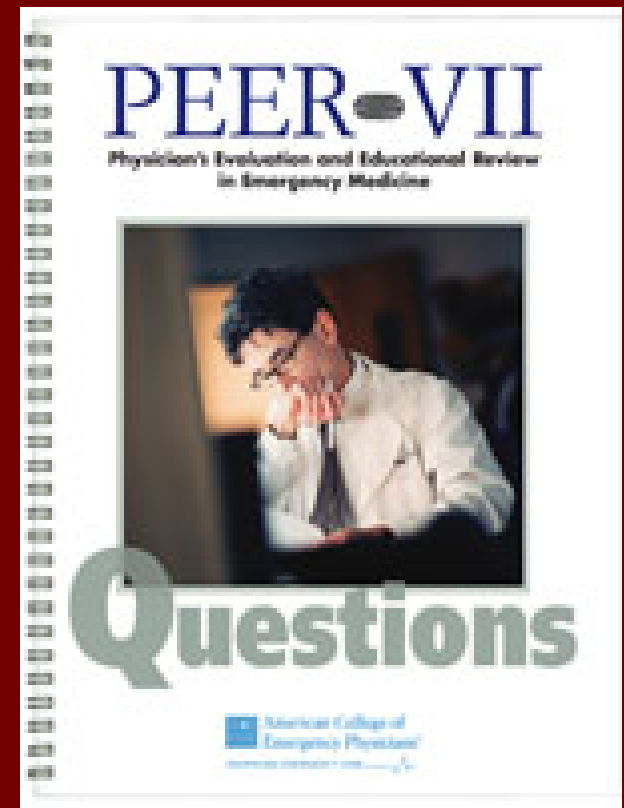
Systematic Review of Core Knowledge



- **Model of the Clinical Practice of Emergency Medicine**
- **What every emergency specialist should know**
- [http://www.acep.org/NR/rdonl
yres/B52D53C0-627A-481D-
985E-
2ACFCB244126/0/model_of_cli
nic_practem_0107.pdf](http://www.acep.org/NR/rdonl
yres/B52D53C0-627A-481D-
985E-
2ACFCB244126/0/model_of_cli
nic_practem_0107.pdf)

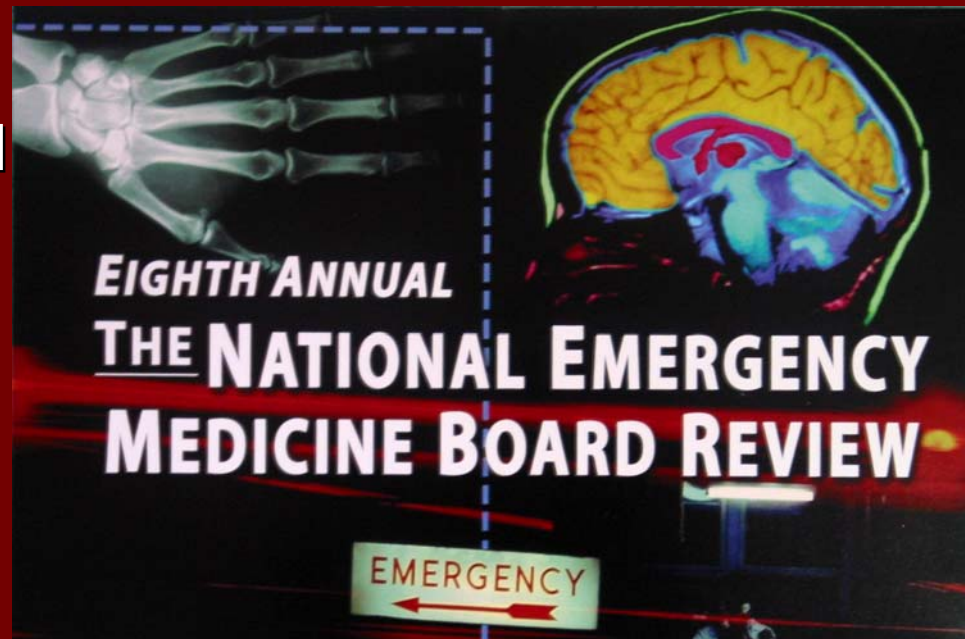
Systematic Review of Core Knowledge

- Peer – Self Study Test
- Hundreds of questions and answers covering all areas of emergency medicine
- <http://www2.acep.org/bookstore/index.cfm?go=product.detail&id=10353>



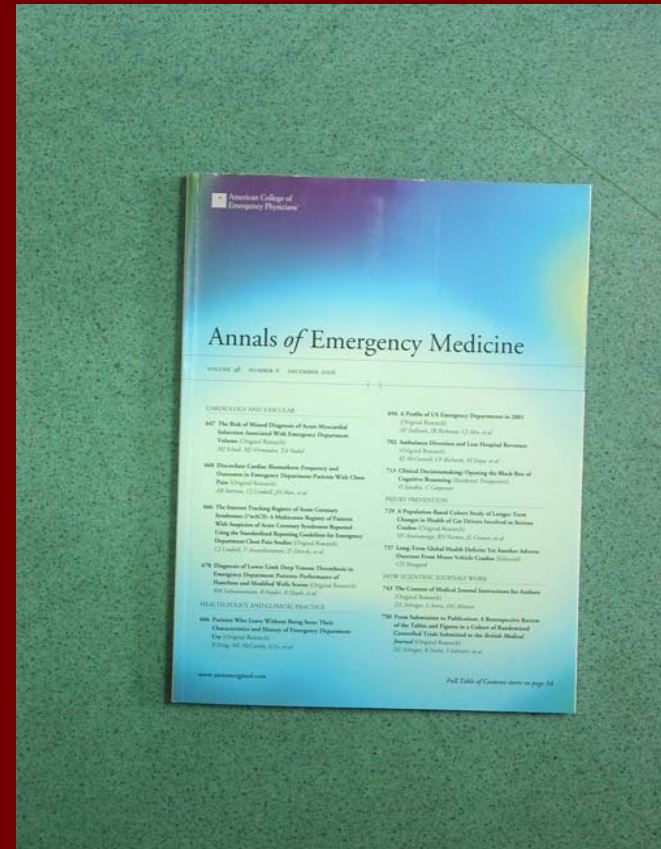
Systematic Review of Basic Knowledge

- “Board Review Courses”
- Very good 40 hours of instruction in 4 days
- Covers all of the “basics” of emergency medicine
- Best done in person. Also available as notebook and CD by mail order
- <http://ccme.org/>



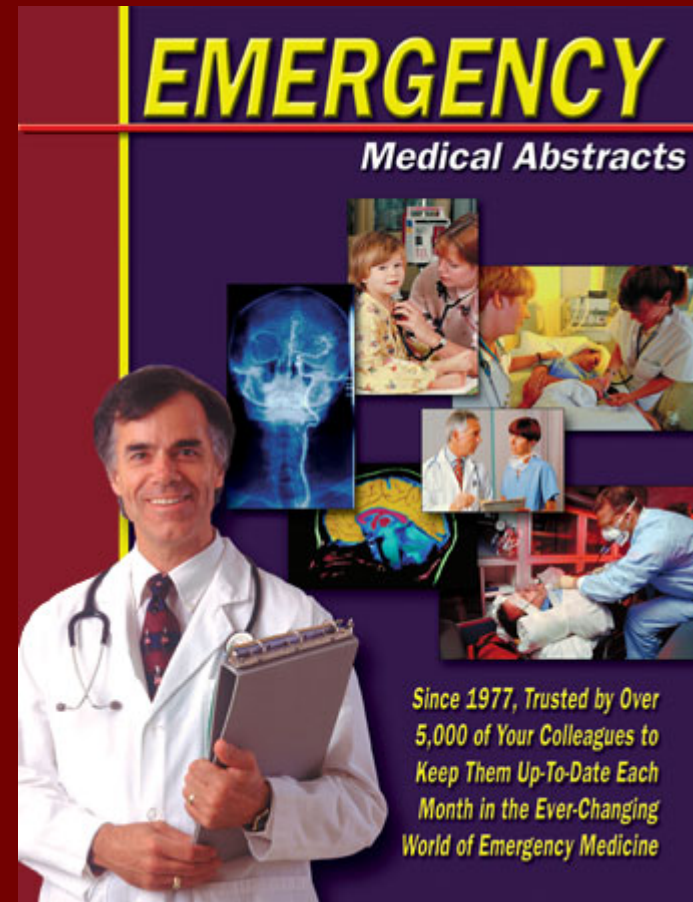
New Developments and Very Detailed Information

■ Journals



New Developments and Very Detailed Information

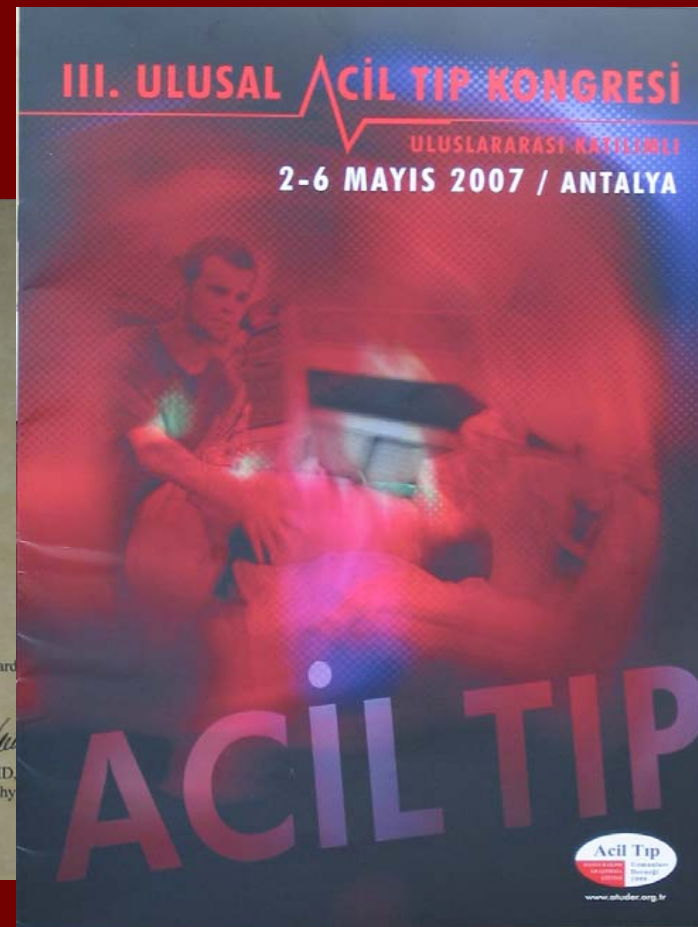
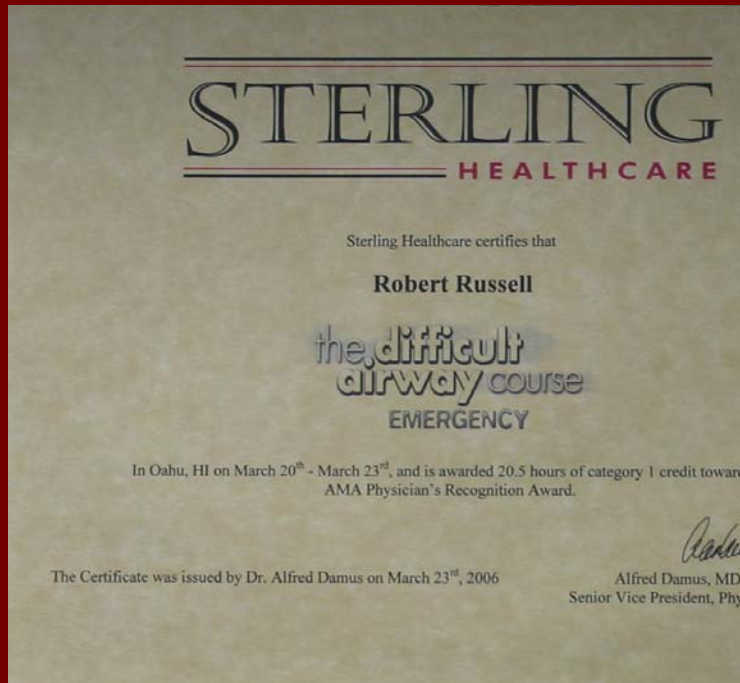
- Journal Review Services
- 40 journal articles each month from hundreds of journals
- Written abstracts and
- Also discussed on CD or audio cassette by two experienced specialists in an entertaining and informal style
- Database of past articles available going back over 10 years



■ <http://ccme.org/>

New Developments and Very Detailed Information

■ Courses



ABEM Readings – 2005

- ABEM reading are like a book club for emergency physicians
- There are 20 key articles selected by the American Board of Emergency Medicine every year
- All board certified emergency physicians read the same 20 articles and take an online test every year in order to continue board certification

ABEM Readings – 2005

Selections from Nervous System Disorders and Toxicologic Disorders

- deGans J, van de Beek D. Dexamethasone in adults with bacterial meningitis. *N Eng J Med*. Nov 2002;347:1549-1556.
- Hasbun R, Abrahams J, Jekel J, et al. Computed tomography of the head before lumbar puncture in adults with suspected meningitis. *N Engl J Med*. Dec 2001;345:1727-1733.
- Lewandowski C, Barsan W. Treatment of acute ischemic stroke. *Ann Emerg Med*. Feb 2001;37:202-216.
- Schutzman SA, Greenes DS. Pediatric minor head trauma. *Ann of Emerg Med*. Jan 2001; 37:65-74.
- Warden CR, Zibulewsky J, Mace S, et al. Evaluation and management of febrile seizures in the out-of-hospital and emergency department settings. *Ann Emerg Med*. Feb 2003;41:215-222.

ABEM Readings - 2005

- **Content Area 17. Toxicologic Disorders**
Blackburn P, Vissers R. Pharmacology of emergency department pain management and conscious sedation. *Emerg Med Clin N Am.* Nov 2000;18:803-826. (Note: The content of this reading also relates to Content Area 19, Procedures and Skills.) *The referenced tables within the article, Table 1 and Table 2, are currently undergoing maintenance and are unavailable.
- Brent J, McMartin K, Phillips S, et al. Fomepizole for the treatment of methanol poisoning. *N Engl J Med.* Feb 2001;344:424-429.
- Kosten TR, O'Connor PG. Management of drug and alcohol withdrawal. *N Engl J Med.* May 2003;348:1786-1794.
- Mason PE, Kerns WP II. Gamma hydroxybutyric acid (GHB) intoxication. *Acad Emerg Med.* July 2002;9:730-739. (Note: This reading is available in its entirety to ABEM diplomates by logging on to EMCC Online.)
- Shannon M. Ingestion of toxic substances by children. *N Engl J Med.* Jan 2000;342:186-191.
- **Selections from the Remainder of the Listing of Conditions and Components**
The Model of the Clinical Practice of Emergency Medicine
- **Content Area 1. Signs, Symptoms, and Presentations**
Goldman B. Vertigo and dizziness. Tintinalli JE, et al (eds): Emergency Medicine, A Comprehensive Study Guide, ed 6, 2004, pp 1400-1409. (Note: The content of this reading also relates to Content Area 12, Nervous System Disorders. This reference has been updated from the 5th edition of this text, 3/30/2005.)
- Kapoor WN. Syncope. *N Engl J Med.* Dec 2000;343:1856-1862.

ABEM Readings - 2005

- **Content Area 3. Cardiovascular Disorders**
Andersen HR, Nielsen TT, Rasmussen K, et al. A comparison of coronary angioplasty with fibrinolytic therapy in acute myocardial infarction. *N Engl J Med*. August 2003;349:733-742.
- Young JB, Publication Committee for the VMAC Investigators. Intravenous nesiritide vs nitroglycerin for treatment of decompensated congestive heart failure: a randomized controlled trial. *JAMA*. March 2002;287:1531-1540.
- Zimetbaum PJ, Josephson ME. Use of the electrocardiogram in acute myocardial infarction. *N Engl J Med*. March 2003;348:933-940.
- **Content Area 10. Systemic Infectious Disorders**
Petersen LR, Marfin AA, Gubler DJ. West Nile virus. *JAMA*. July 2003;290:524-528.
- **Content Area 16. Thoracic-Respiratory Disorders**
McIntosh K. Community-acquired pneumonia in children. *N Engl J Med*. Feb 2002;346:429-436.
- **Content Area 18. Traumatic Disorders**
Bulloch B, Neto G, Plint A, et al. Validation of the Ottawa knee rule in children: a multicenter study. *Ann Emerg Med*. July 2003;42:48-55.
- **Content Area 19. Procedures and Skills**
Hollander JE, Singer AJ. Laceration management. *Ann Emerg Med*. Sept 1999;34:356-367.
- Melanson SW, Heller MB. Principles of emergency department sonography. Tintinalli JE, et al (eds): Emergency Medicine, A Comprehensive Study Guide, ed 6, 2004, pp 1870-1878. (Note: This reference has been updated from the 5th edition of this text, 3/30/2005.)

Set A Goal

- It is up to you. What will it be?
 - Personal text book of emergency medicine?
 - Read all of Tintinalli every three years?
 - Study one subject a week?
 - Review ACEP core curriculum?
 - Make my own approach to each chief complaint?
 - ABEM readings?
 - PEER self test?
 - A combination?

- Organize your study
- Gather your materials
- Set a goal
- Work your plan. Study every week

The Future of life long learning in Turkey?

- National Emergency Medicine Boards?
 - Tests are a good way to motivate study
 - Standardizes knowledge base
 - Standardizes and improves care
- Certification and recertification requirement? Perhaps every 10 years?
 - Encourages ongoing study and learning
 - It is a lot of work but a good idea

The Future?

- Required continuing medical education?
 - In the US, the State of Washington requires that I participate in 50 hours of continuing medical education per year for me to keep my medical license.
 - Encourages ongoing learning

What is in your future?

- Life long learning notebook? A national board review course in Turkey?
 - Ultrasound Course?
 - Advanced Airway Class?
 - Procedures Class?
 - ABEM readings?
-
- Make plan
 - Work your plan.

Live, work, and learn with joy!
Thank you!

