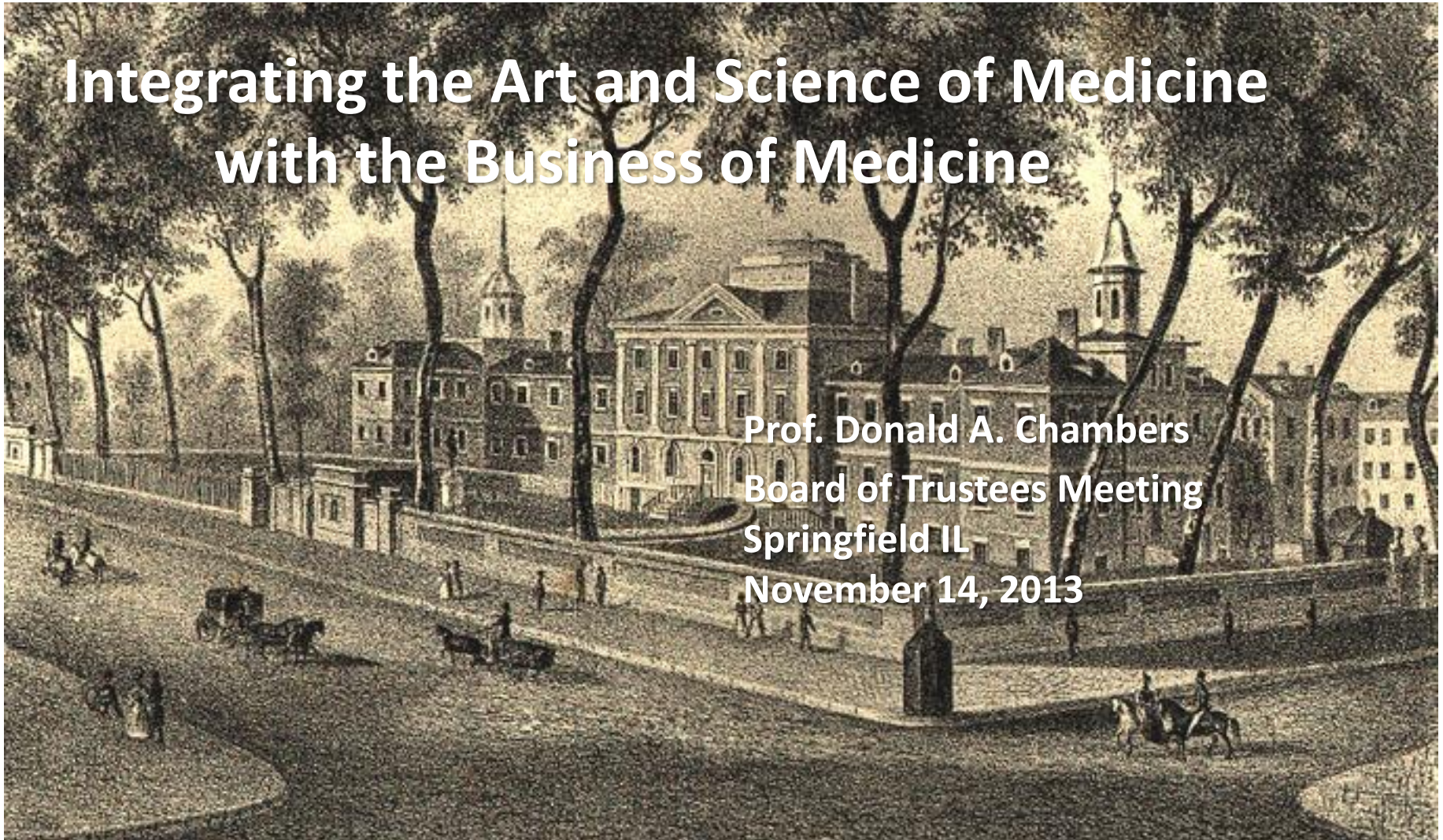


Integrating the Art and Science of Medicine with the Business of Medicine

Prof. Donald A. Chambers
Board of Trustees Meeting
Springfield IL
November 14, 2013



Agenda

- I. Origins of Modern Medical Education:
Osler, Flexner, and Peabody
- II. Four Paradigms of Medicine
- III. Educating Physicians for Today and Tomorrow:
 - a. GPEP Report
 - b. AAMC/HHMI Report
- IV. The University of Illinois and Medical Education

Three Principles Defining Modern Medical Education

William Osler: “Medicine is an art based on science.”

Abraham Flexner: “Effective medical education must be done within the university.”

Francis Weld Peabody: “Caring for the patient is caring about the patient.”

The Four Paradigms of Medicine

1. Alleviate Suffering
2. Do No Harm
3. Medicine is an Uncertain Science.
4. Cells, Tissues, Organs and Organisms Obey the Laws of Chemical Equilibrium (Homeostasis) and Bioregulation Involves Signaling Coupled to information Flow. When these Rules are Violated, Pathology Ensues.

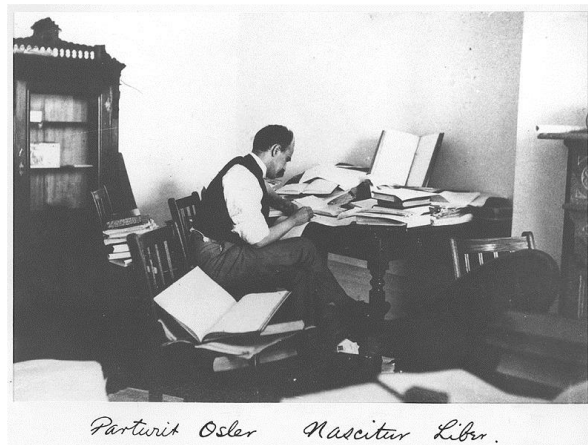
Sir William Osler (1849-1919)

Most influential physician of the 20th century

Pathologist, physician, educator, bibliophile, historian, and classicist

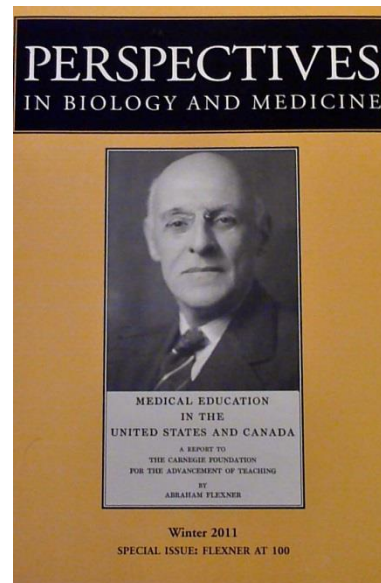
Brought science into clinical practice

- A. The Principles and Practice of Clinical Medicine, 1892
- B. Postmortems and Pathology – The Scientific Basis of Clinical Medicine
- C. Ward rounds, bedside teaching, clinical-pathological conferences
- D. Aequinimitas: The patient/physician relationship



Abraham Flexner (1866-1959) and The Flexner Report (1910)

- American educator, commissioned by the Carnegie Foundation to assess American medical schools
- Used Hopkins as a standard, visited and rated 155 medical schools
- Established the university as a base for medical education
- Determined the medical curriculum: 2 years basic science, 2 years clinical subjects
- Argued for full-time medical faculty
- By 1920, 50 medical schools closed, leaving 81 medical schools operative in North America

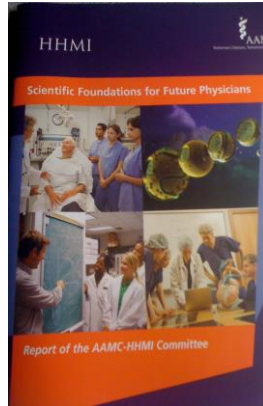


The General Professional Education of the Physician
and College Preparation for Medicine (GPEP) AAMC, 1984

1. Preprofessional education – develop analytic and diagnostic skills and instill humanistic values to promote respect and concern for patients
2. Encourage broad-based undergraduate education; the value of liberal arts
3. Pedagogy – emphasis on critical thinking and problem-based learning in small groups rather than traditional lectures
4. Clinical clerkships reinforce humanism and the patient/physician relationship as a goal
5. Education as a professional goal of the medical faculty should be appreciated and rewarded

The Flexner Report Revisited

Scientific Foundations for Future Physicians: AAMC/HHMI, 2009



- Endorses the conclusions of the GPEP Report
- Medical education is a continuum for life:
 - University premedical education →
 - Undergraduate medical education (UGME) →
 - Postgraduate medical education (PGME) →
 - Continuing medical education (CME)

All stages of medical education need to relate to the integration of information with the aim of producing a “competent physician”

Suggested Changes in Medical Education

- Enhanced pre-medical education in sociology, psychology and behavioral sciences including health politics
- Revised MCAT exam (NEJM 366:1265, 2012)
- Elimination of Steps 1&2 USMLE exams
- New USMLE exam at the end of M-3 year
- Optional 4th year

The Beginnings of an Integrated Pre-medical – Medical Curriculum:
The GPPA Medicine Program at UIC

Four Pre-medical Didactic Discussion Courses:

- Medicine as a Profession
- The Evolution of Medicine
- Health Policy and Public Health
- The Art and Science of Medicine

UIC has a Comprehensive Academic Health Sciences Center that Must Intercalate with the Rest of the University



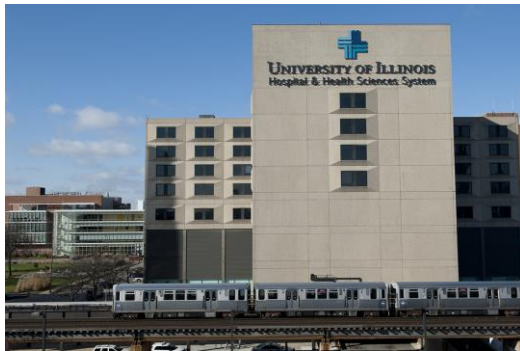
Pharmacy



Nursing



Dentistry



Hospital



Medicine



Public Health



Applied Health Sciences



East Campus

Conclusions

- UIC contains all the ingredients to be at the forefront of academic medical centers in the state, the nation and the world
- Developing the appropriate effective infrastructure is critical to achieving a “brilliant future”