# The Aims of Medical Education

Harisios Boudoulas, MD, Dr, Dr Hon Professor, Honorary Professor Academician (an. mem.)

# The Goal of the Physician

Maintain or restore human health (prevention, diagnosis, treatment of diseases or injuries, relief of suffering)

- Knowledge
- Competence to apply the knowledge to the patient
- Medical Ethics

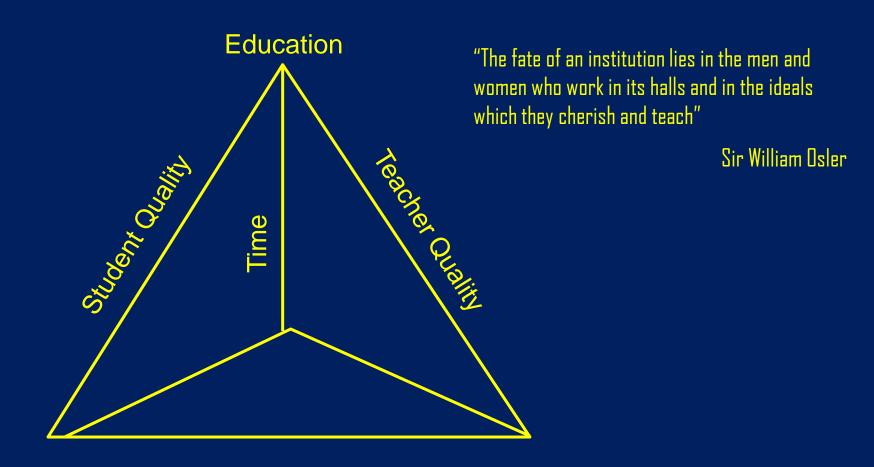
## Physician: Some Characteristics

- Capacity to absorb a mass of facts
- Knows the human body: how each cell works; how cells work together to produce a human being; how disease disrupts normal function
- Capacity to communicate effectively with peoplepatients
- Effectively uses the knowledge to evaluate the patient fast and to act decisively
- Psychological stability
- High ethical standards

# Education – Definition

Education in the largest sense is any act or experience that has a formative effect on the mind, character or physical ability of an individual.

#### The Quality of the Student and the Teacher in Education



## **Teacher of Medicine**

"A teacher affects eternity; he can never tell where his influence stops". Henry B Adams

- To be a teacher of medicine is one of civilization's highest callings
- The teacher should provide an example of intense personal integrity and a constant example of what it takes to be a great physician

## Student of Medicine

"Never regard study as a duty, but as the enviable apportunity to learn..." Albert Einstein

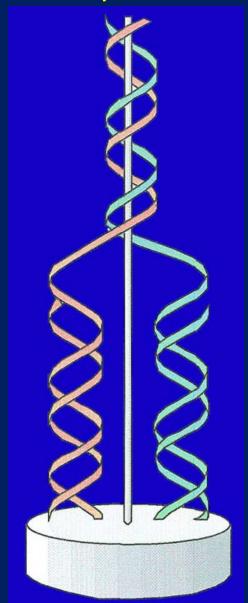
- The future of medicine will depend not only on the advances in medical science and technology but mostly on humanistic values of the physician
- Intense program of training with attention to detail, integrity, honesty, responsibility and dedication to the sick
- Excellence is transmitted from mentor only to reactive student

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Medical Training; An Overview
(Students, Residence, Fellows)
   Graduation from College
           Examination-interview
   Medical School
   National Boards (Step I, all basic sciences)
   National Boards (Step II, all clinical sciences)
   Medical Degree Diploma
   Internship
   National Boards (Step III, clinical)
          Letters-interview
   Specialty (sub-specialty)
   National Boards
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## **Hospital and Medical School**

- Must provide high quality education
- Evaluation is needed on regular intervals
   (e.g. every five years) to assess qualifications

#### Physician



Science/Technology

Clinical Experience

#### Basic Mechanisms and Thinking should be Emphasized

"Education with inert ideas is not only useless; it is, above all things, harmful..."

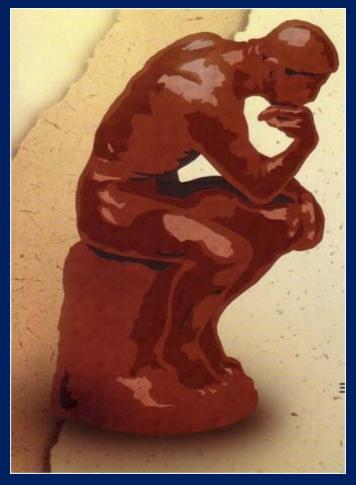
Alfred North Whitehead

Factors (n)	Probabilities (2 <sup>n-1</sup> )
5	31
10	1,023
20	1,048,575
50	1,000,000,000,000,000,000,000,000,999

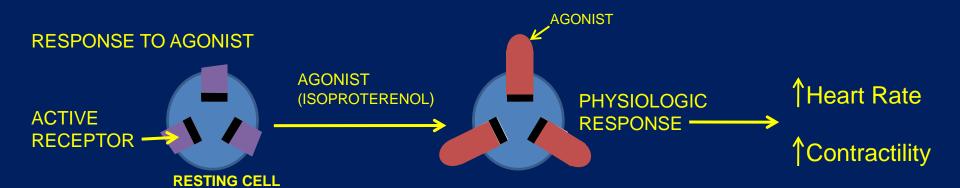
"The Master said, He who learns but does not think, is lost. He who thinks but does not learn is in great danger!"

Confucius "Αυτός που μαθαίνει αλλά δε σκέπτεται έχει χαθεί. Αυτός που σκέπτεται αλλά δε μαθαίνει κινδυνεύει!"

Κομφούκιος



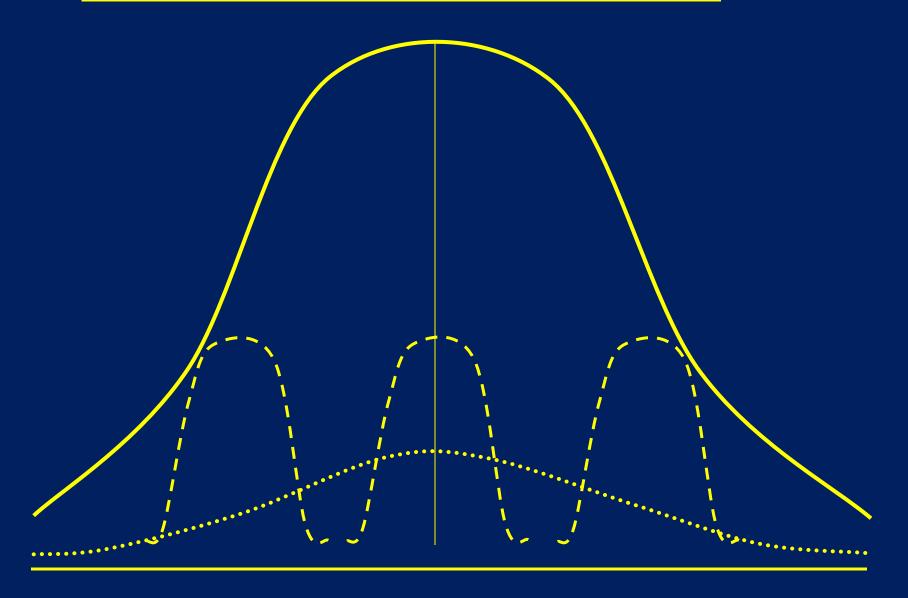
#### β-adrenergic Receptors



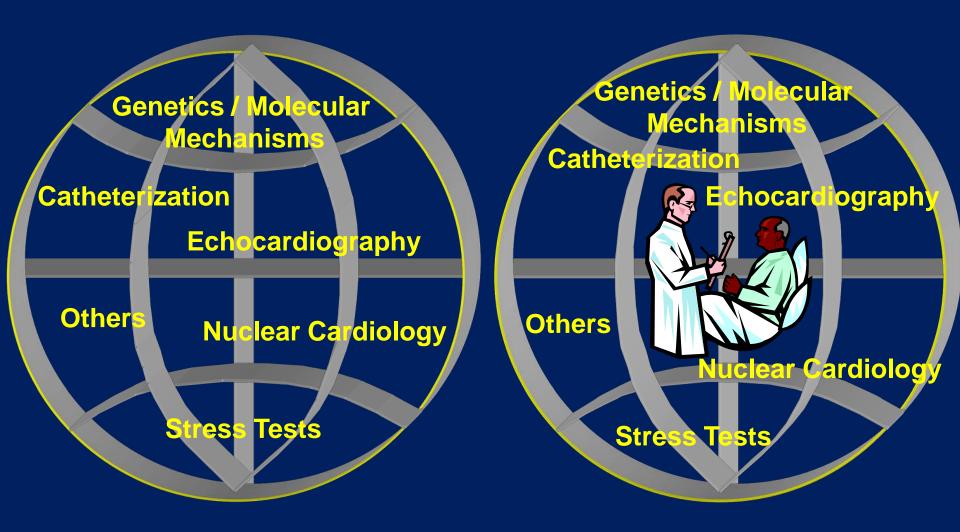
# The Quality of Medical Care for an Individual Patient is Related to the Clinician's Decision and Action



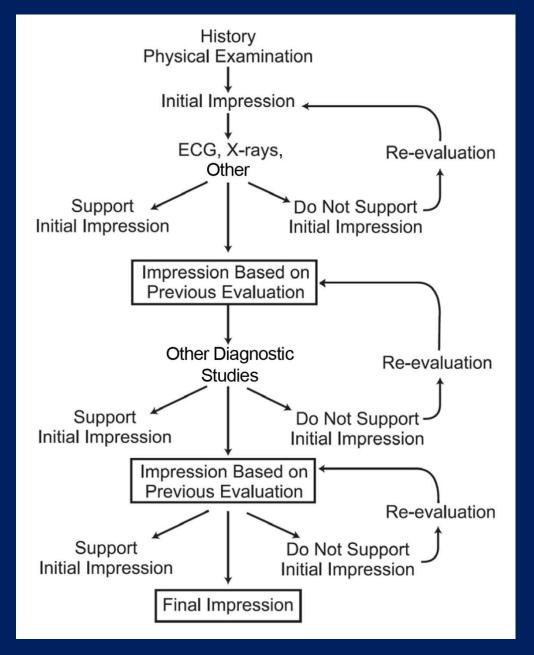
### From the Disease to the Individual Patient



#### Do not lose contact with the patient.

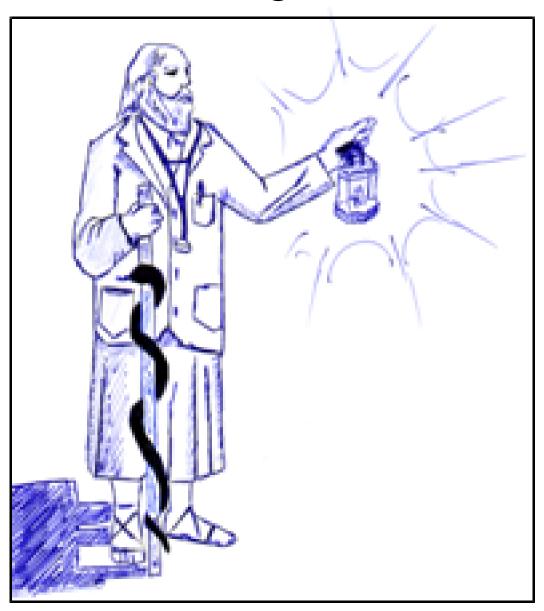


#### **Diagnostic Process - Self Assessment**

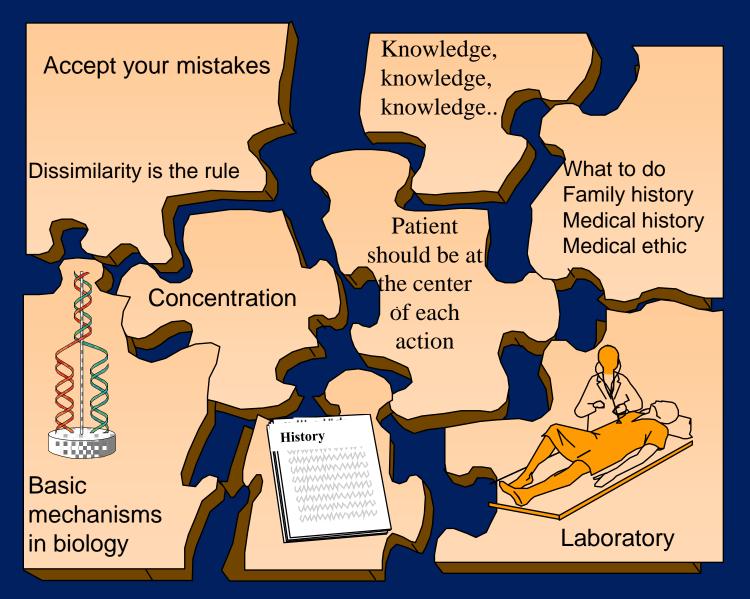


Wooley CF, Sparks EA, Olsen S, Boudoulas H. A cardiovascular teaching laboratory; The master class in ambulatory teaching. *Hell J Cardiol* 2008; 48: 7-16

# **Diogenes**



# How to Achieve Your Goal: <u>A Mosaic Approach</u>

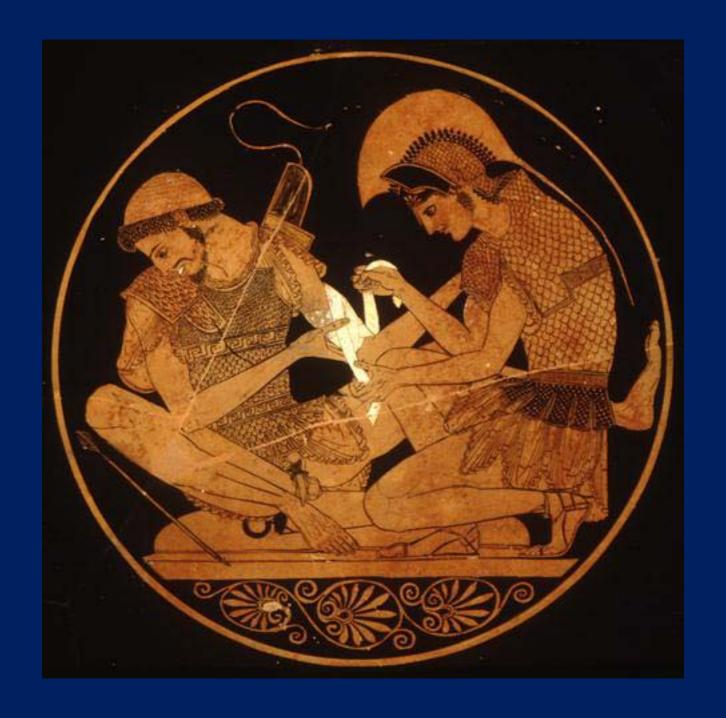


# "Errare Humanum Est*"*

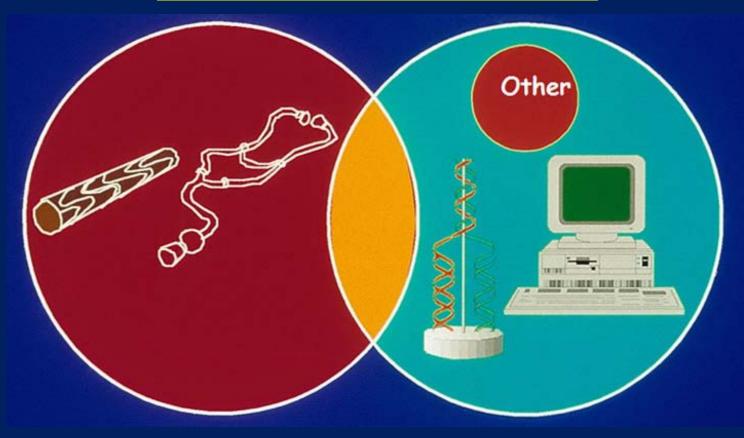
«Τούτον τον ιατρόν ισχυρώς επαινέσουσιν τον σμικρόν αμαρτάνοντα»

Ιπποκράτης

«Το δις εξαμαρτείν ούκ ανδρός σοφού»



### The Care of the Patient



Το μυστικό της ιατρικής περίθαλψης είναι η φροντίδα για τον ασθενή

"...the secret of the care of the patient is in caring for the patient."

# ΙΗΤΡΟΣ ΓΑΡ ΑΝΗΡ ΠΟΛΛΩΝ ΑΝΤΑΞΙΟΣ ΑΛΛΩΝ Ιπποκράτης

"if a doctor's life may not be a divine vocation, then no life is a vocation and nothing is divine"

Stephen Paget - Confessio Media

«εάν η ζωή του Ιατρού δεν μπορεί να είναι θεϊκό λειτούργημα, τότε καμία ζωή δεν είναι λειτούργημα και τίποτα δεν είναι θεϊκό»

ΓΗΡΑΣΚΩ Δ΄ΑΙΕΙ ΠΟΛΛΑ ΔΙΔΑΣΚΟΜΕΝΟΣ Σόλων

### CONTINUOUS EDUCATION

Ο ΒΙΟΣ ΒΡΑΧΥΣ Η ΤΕΧΝΗ ΜΑΚΡΗ Ιπποκράτης

#### The Evolution of Medicine and the Physician

Molecular Mechanisms, Systems Biology

Genetics, Proteomics, Bioinformatics

**Imaging Techniques** 

Pathophysiologic Mechanism (cardiac catheterization)

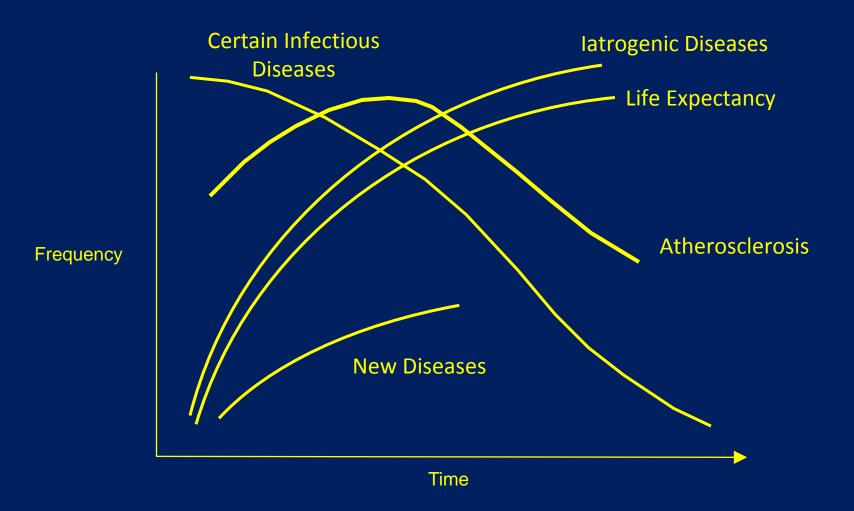
Biochemistry – Hematology Labs

Clinical Picture – Pathology Correlation

Clinical Observation

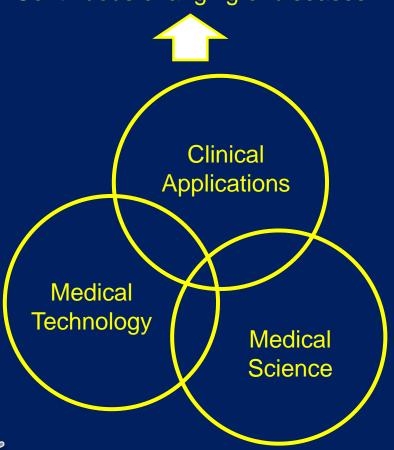
Time

# Metamorphosis of Diseases



# The Continuous Evolution of Medicine and the Constant Role of the Physician

Continuous changing of diseases



The Physician must follow the evolution of medicine





#### **The Aims of Medical Education**



#### The Superior Physician

He is skeptical toward the data of his own profession, welcomes discoveries which upset his previous hypothesis, and still animated by human sympathy and understanding.

Alfred North Whitehead, Dialoges (Lucien Price) 1954

