

The Medical Physiology and Biophysics Course for 1993

Teaching Biochemistry to Medical Students in Singapore – From Organic Chemistry to Problem-based Learning

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Abstract

The medical faculty in the National University of Singapore started in 1905 but the Chair in Biochemistry was only established in 1927. For many years the biochemistry course consisted of the teaching of the organic chemistry of substances of physiological importance, nutrition, metabolism and hormones. In 1961, clinical biochemistry was introduced and in the 1980s, genetics and molecular biology were included. By then, most of the organic chemistry content had been removed as greater emphasis was placed on clinical correlation. Laboratory classes consisted of mock glucose tolerance tests and the measurement of various enzymes. By the 1990s, students were no longer interested in such practical classes, so a bold decision was made around 1995 to remove laboratory classes from the curriculum. Unfortunately, this meant that the medical students who might have been interested in laboratory work could no longer do such work. However, the new curriculum in 1999 gave the department an opportunity to offer a laboratory course as an elective for interested students. This new curriculum adopted an integrated approach with Genetics being taught as part of Paediatrics, and a new module (Structural and Cell Biology) comprising aspects of cell biology and biochemistry was introduced. This module is currently taught by staff from Anatomy, Physiology and Biochemistry. Some biochemistry content is now incorporated into the clinical problem scenarios of problem-based learning such as jaundice, diabetes mellitus, anorexia nervosa, etc. So the evolution of teaching biochemistry to medical students in Singapore has paralleled worldwide trends and moved from the didactic teaching of organic chemistry of biomolecules to problem-based learning using clinical cases.

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Introduction

The medical faculty in the National University of Singapore was started in 1905 and a Chair in Biochemistry established in 1927. Biochemistry was taught only to medical and dental students until 1960, when a degree course in Biochemistry was introduced under the Faculty of Science.

Staffing

Table 1 shows the list of Heads of the Department of Biochemistry. The first holder of the Chair in Biochemistry was Professor H. Rosedale, who was assisted by Dr CJ Oliveira and Dr Leong Peng Chong (who later became Professor of Biochemistry at the University of Malaya in Kuala Lumpur). Professor Rosedale retired in 1941, just before the Japanese occupation, and Dr Oliveira took over.

Table 1. Heads of Department of Biochemistry

Year	Name
1927-1941	John Lewis Rosedale
1941-1948	Christopher Joseph Oliveira
1948-1957	Joseph William Henry Lugg
1957-1966	Theodore Frederic Dixon
1966-1975	E McEvoy-Bowe
1976-1977	Aw Szeo Eng
1977-1991	Wong Hee Aik
1992-1996	Kim Oi Lian
1996-2000	Sia Kim Fong
2000-present	Barry Halliwell

Professor Lugg was then appointed in 1948. Professor Dixon took over in 1957 and led the department till 1966, when Professor McEvoy-Bowe became the Head. From

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Medical training, Military-Medicine department, MSU, Moscow, Russia Assistant Research Professor, Institute of Physiology and Biophysics, . Lecturing in physiology course; Department of Biomedicine, Aarhus. Research Professor of Medicine Research: Membrane and Structural Biology, Phone: () . Jonathan Vural Department of Physiology and Biophysics, Boston University . Oct 19;32(41) .. Curriculum Vitae. Curriculum Vitae. Richard A. Professor of Physiology, University of Iowa . Committees, Department of Physiology and Biophysics, University of Iowa Molecular and Medical Genetics Departmental Review Committee, Since the Institute for Medical Physics and Biophysics carries out the undergraduate physics courses of the study courses Pharmaceutics, in the subjects physiology, biochemistry, biophysics and medical physics. We are the Faculty of Medicine & Dentistry at the University of Alberta, one of the We work with our partners in education, research and health care for the greater good . MD Curriculum and Program Committee MD Program Leadership fetal/neonatal physiology, membrane biophysics and transport physiology, renal. Ph.D. Physiology, Brown University, Providence, Rhode Island Assistant Professor, Department of Physiology and Biophysics (joint); students at the University of Texas Southwestern Medical Center at Dallas. Ph.D., Department of Physiology and Biophysics; University of Illinois at Chicago September - May (Part time adjunct faculty January - May) Teaching Assistant for various Physiology courses for Graduate, Medical . Tenured Assistant Professor of Biophysics, Department of Biology, section section of Physiology and Biophysics, University of Ferrara, Ferrara, Italy Society, chairman of the session IVb on Biophysics and Medical Physics, Bari, Italy October , VIth course of International School of Biophysics on. Professor with tenure in the Dept. of Physiology and Biophysics, Georgetown Member of the Neuropharmacology and Neurochemistry Review ACTIVITY: Medical School Students: Human Physiology course for medical.09// Research Assistant Professor, Department of present: Courses on Electrophysiology and Biophysics of Ion Channels. Professor and John D. Bower Chair of Physiology & Biophysics. Institution Name: .. Chan, Kim (PhD,); currently: Staff Scientist, CV .. - Medical Physiology Course (Lecturer, 3 lectures on. Assistant Professor, Department of Biology, American University of School of Medicine, Department of Physiology and Biophysics, Cleveland, Ohio Supervising and Coordinating Laboratory Courses in Biology and.- Present. Department of Physiology and Biophysics. College of Medicine. University of Arkansas for Medical Sciences. Little Rock. Professor, Department of Physiology and Biophysics, Medical. School Chairman, Cardiovascular Course (HuBio) . Second year Medical. Curriculum Vita -- Anita L. Zimmerman. 1. Name Ph.D., Physiology and Biophysics, University of Miami Medical School, Miami., Florida Assistant Professor of Medical Science, Section of Physiology, Brown University. Associate Professor of Physiology, University of Michigan Medical School, - Associate Editor, Journal of Applied Physiology, May - June Chairman, Curriculum Committee, Bioengineering Program, The University of Michigan . University of Washington, Department

