BILKENT UNIVERSITY

unam - INSTITUTE of MATERIALS SCIENCE & NANOTECHNOLOGY

FACULTY OF SCIENCE

MATERIALS SCIENCE and NANOTECHNOLOGY GRADUATE PROGRAM SEMINAR

"Genome projects, human genetics & nanobiotechnology"

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Centuries of scientific discoveries, advances in innovative technologies and sophistication in clinical trials have culminated in dramatic developments in curing and alleviating human disease. In the history of science, once in every few decades or centuries a landmark scientific advancement revolutionizes medical care. Sequencing of the human genome is one such scientific achievement, which is fueled by the quantum leaps in nanotechnology and bioinformatics approaches. In line with these developments, scientifically advanced countries are implementing research programs and legislative measures to prepare their societies for the "genomic science and genomic medicine" era. Further improvements in sequencing technologies and data analysis methods, along with cost reductions will make personalized medicine a reality in the next couple of years. Major challenges that lie ahead include "generating highly annotated human genome sequence data", "translating human genomic research into clinical practice", "implementation and service delivery through the national health systems", "computational use of medical and genomic data", "assessing and addressing ethical, social and legal issues", "training, education and workforce planning", "standardization and harmonization of genetics services" and "public engagement". How we can prepare for such a future at Bilkent will be the central discussion point of the talk.

Date : February 26, 2009 (Friday)
Time : 15:40
Place : Faculty of Science Building, A Block, Seminar Room (SA 240)
Tea will be served after the seminar