FACULTY OF DENTISTRY

Amalgamated Dental Company Limited Gold Medal
to the most distinguished graduand of his year
Lello, Glenn Edward

Grant Smith Gold Medal
to the most distinguished graduand in Dental Prosthetics
Greenspan, Rodney Lou

Henry St. John Randell Bronze Medal of the Dental Association of South Africa
for conspicuous personal qualities combined with satisfactory academic attainment
Sher, Alvin Martin

Lester Brown Award
for merit in Maxillo-Facial and Oral Surgery
Kilburn, Harold Victor

Operative Dentistry Bronze Medal of the Dental Association of South Africa
Kilburn, Harold Victor

Orthodontics Bronze Medal of the Dental Association of South Africa
Bass, Selwyn Ivor

CITATION DELIVERED BY THE DEPUTY VICE-CHANCELLOR, PROFESSOR S. P. JACKSON, ON THE OCCASION OF THE CONFERMENT OF THE DEGREE OF DOCTOR OF SCIENCE, HONORIS CAUSA, ON SYDNEY BRENNER

In a passage in a recent book, John Livingston Lowes says, in rather a comforting way, that creative genius works through processes that are common to all of a kind, but then goes on to say that in some persons these processes are superlatively enhanced. Sydney Brenner is such a person.

He belongs to our kind, for he was born on the Witwatersrand and educated to the stage of his first degrees in science and medicine at Witwatersrand schools and in this university. From the very start he displayed qualities that predicted the distinction he has now gained in the world of learning. He entered the University in 1942 as a boy of 15. In 1944 he obtained a bachelor's degree in medical science and at the age of 19 the degree of Bachelor of Science with honours in histology. He was a master of science at 20, having undertaken a pioneer study, for South Africa, in mammalian cytogenetics.

For a boy of 16, the Medical School, in the year 1943, must have been an inspiring place. Raymond Dart, then at the height of his intellectual powers and having gained world recognition for his spectacular work on the origin of man in Africa, reigned in the Department of Anatomy. Joseph Gillman, Lawrence Wells, Christine Gilbert and the great Robert Broome adorned the Department at the same time. The Department of Physiology, whose permanent head was away on war service, was under Thomas Osborn, a young South African of great ability whose early death deprived us of a fine scholar. Philip Tobias came there as a student. It was a lively and stimulating place through which no young man passed without receiving warm encouragement to share the joys of research with a notably generous group of teachers. And then towards the end of 1945 the character of the student body changed. Older men came back from the war, rich in experience, earnest and dedicated. It would not have been surprising if young Sydney Brenner had found himself ill at ease in such a community. But nothing like this happened. Into the group young Sydney Brenner fitted well as a student both of science and medicine. He took part in the excavations at Makapansgat and Sterkfontein and was infected by the boundless enthusiasm and scientific originality of Joseph Gillman and his younger brother Theodore. Together the Gillmans and Brenner published three papers. By the time Sydney Brenner obtained his medical degree at the age of 21, he had already published nine scientific papers. Sheer ability, a wide range of interests and the capacity to speak fluently on many topics singled him out for leadership in this strange group of post-war students.

His contribution to student life was as notable as his academic performance. He excelled at everything he touched. Perhaps it must be conceded that today these student activities might be honoured more within the University than outside it. Brenner was President of the Students' Representative Council in the late 1940's. He was Director of Research of N.U.S.A.S. and in 1948 led a multidisciplinary student expedition to Ndabakazi Location in the Transkei in order to undertake ecological studies. And so, Mr Chancellor, Sydney Brenner reminds us that environmental science, the fashion of today, is older in the University than most of us think. Towards the end of the 1940's came those difficult years when the pressure on university freedoms and on N.U.S.A.S. began to increase. It should be recorded that in that time Sydney Brenner was a notable defender of academic freedom.

In his Oxford days in the Department of Anatomy, Brenner continued his early studies in cytogenetics by probing more deeply into the chemistry of cells and at the same time he expanded his own scientific training. His thesis presented

in 1954 for the degree of D.Phil. dealt with the physical chemistry of cell processes. This work soon led him on to studies of the genetic code.

After Oxford opportunities and recognition came fast. 1954 saw him in the United States on a Carnegie Corporation Fellowship. From 1954 to 1957 he accepted a lecturing post in the University of the Witwatersrand, where he renewed his association with his old colleague Joseph Gillman, who by then had become Professor of Physiology. But the inducements to return to Britain were too strong. He left the Witwatersrand to go to the Medical Research Council's Laboratory of Molecular Biology at Cambridge and to a fellowship of King's College, there to carry out work that has made him an international figure in the field of biological science. He has been one of a small group of scientists who have done much to establish the modern concept of the genetic code and of gene action. He has worked closely and published work jointly with Nobel laureates, F. Jacob of Paris and Crick of Cambridge, and with other leaders in the same field. Brenner has published more than 60 research papers and has come to be recognised as a world leader in this field.

Recognition and honours have come to him from Europe and America: the coveted Fellowship of the Royal Society of London in 1965; foreign honorary membership of the American Academy in the same year; the Carte-Wallace Lectureship at Princeton in 1966 and again in 1971; the honorary Doctorate of Science of Trinity College, Dublin, in 1967. In 1968 he was awarded the Warren Triennial Prize and in 1969 the William Bale Hardy Prize of the Cambridge Philosophical Society. Oxford invited him to deliver the John Wilfred Jenkinson memorial lecture in 1970 and in the same year he gave the Jean Weigle Memorial Lecture at the California Institute of Technology, and, as if this was not enough for one year, he received, as well, the Gregor Memorial Medal of the German Academy of Science.

Mr Chancellor, on the occasion of an academic homecoming in our jubilee year we add to the many honours Sydney Brenner has received. We are proud to do so because he was a member of our University first, and by adding his name to our roll of honorary graduates we honour ourselves and encourage all the young men of the same kind as Sydney Brenner who come here to join our University community.