## PRESENTATION OF AN INSTITUTE GOLD MEDAL TO PROFESSOR SIDNEY BENJAMIN

[The Institute of Actuaries, 28 October 1985]

The President (Professor P. G. Moore): After taking his degree at Cambridge, Sidney Benjamin joined the Prudential, becoming a Fellow of the Institute in 1957. Shortly after that he left the Prudential to join Ferranti Computers, but after a few years with them he moved on to the consulting firm of Bacon and Woodrow where he has remained ever since. He has been extremely active in Institute affairs, having served on Council with the statutory breaks for over 20 years. He has always been a staunch defender of the concept of professionalism, but his greatest contribution to Council has been his Chairmanship of the Research Committee, where he has done so much to stimulate research by a generation of members of the profession.

Over these years he has published some dozen papers of his own, half in our journal, half in the various Congress volumes, as well as two papers in the Students' Society Journal. The subject matter of his papers has ranged widely with earlier papers involving the use of computers on various kinds of actuarial work and some applications of the theory of games, whilst later papers have looked at areas such as maturity guarantees, solvency, profitability in insurance, and the uses to which control theory can be put in actuarial work. The work which he has done on simulation methods in particular have been regarded worldwide as pioneering in the insights that they have produced. His early familiarity with computers led to his running the Students' Society programming courses over many years during which some 200 Fellows attended.

In 1965 he became very involved with the infamous Vehicle and General collapse, and the interest that he generated at that time into the way in which actuarial methods could be applied in the general insurance field was, to a considerable extent, responsible later for the entry of the Institute into this field in its education and examination system.

It is perhaps a further measure of the man in his pioneering and stimulating work that he is so widely known across the world. In the United States he has been for some years a member of the Society of Actuaries Research Committee, and he has spoken at many of the regular meetings of the Society. Not surprisingly he is a Fellow of the British Computer Society, and also of the Royal Statistical Society where he has served a term on their Council and also as Chairman of their General Applications Section. He has developed close links in recent years with the actuarial research work that has been carried out at the City University.

Sidney, you have done a great deal to enhance the profession of actuary, and it gives me therefore great pleasure, acting with the authority of the Institute's Council, to award you this Gold Medal in recognition of your achievements.

**Professor S. Benjamin:** There are about 1,500 active Fellows of the Institute in the U.K. I will return to that number later, but for the moment I would like to point out that a very high proportion of that number would be sharing in this Gold Medal if all those who have helped the Research Committee over the last twenty years or so were to receive their part.

When I think of those who volunteered, and in some cases were volunteered, to join working parties, to organize and speak at Study Groups, at work shops and seminars and to give special talks and to write explanatory articles; to develop work to the standard of published notes and papers to sessional meetings; to give direct help to younger men taking a special research subject and so on, I feel like giving the general vote of thanks which is spelt out at every Institute Annual General Meeting, and ends up by thanking everyone including the Institute's permanent staff. It all leads me to one piece of self flattery, I must have a nice smile; but I don't think it was primarily the smile which brought forth such willing and constructive help from so many. It was the acceptance that every person is a debtor to his profession, and that debt becomes urgent when the profession is very small in number.

These few minutes give me a golden opportunity to pay my thanks publicly to those actuaries of the previous generation who gave me my early encouragement. A younger person cannot really pay back to his elders, he can only pass help and encouragement on to the next generation. I was unbelievably lucky to come under Frank Redington's wing at the start of my actuarial life. When he saw that I was producing research work he gave me the encouragement in private conversations which set me on this path. He also made me very aware of the Institute, and when as a student I joined an Institute working party on computers, Ken Usherwood sent me back to Cambridge to learn programming, and that in turn led to the Student Society's full scale programming course which as you know ran through most of the 1960s decade.

My first paper to the Institute was a joint paper with my immediate boss Charles Bennett, as a result of working on a practical problem inside the office. Like most actuaries I need a practical problem to drive me into research. I can't prove it but I would guess that the Sessional Meetings Committee rearranged the whole programme that session; the result was that I presented my first paper on the same day, and at the same meeting as I received my fellowship certificate and I suppose that from that day on I was irretrievably married to the Institute's activities. So you can understand my enormous pleasure at Gordon Bayley being with me today; as he said he was scrutineer of my first paper as a sole author and he gave me an example of how to use criticism as a positive encouragement to a new idea, which as a frequent scrutineer I have tried to follow ever since.

I would like to return to my early remark that there are about 1,500 active members of the Institute in the U.K.; it is a small number and this poses our profession several problems in organizing our education. Those problems have been fairly well aired by Bill Truckell, and the result has been the development of greater full-time effort allocated to teaching, increasing the level of professiona-

lism and bringing in the universities as an integral part of the re-structuring to let them teach what they can teach best. What is not well known outside Council, is that Bill Truckell has also been working with me, to change the organization of Institute research along the same lines. We now have a formal network of contacts between offices, and we have some experienced fellows in full-time research in the Universities; they are helping the profession to tackle practical problems of a research nature where progress would otherwise be very slow or non-existent because of the amount of work involved. The idea is that they will often be helping a research working party of actuaries from commercial and professional employment.

We are a small profession; we acknowledge amongst ourselves that we need to help each other and we have the tradition of doing so, even when in commercial competition. We can usefully think of ourselves as one consulting firm, probably about the size of one large firm of accountants.

President, your theme in your period of Presidency is that we should organize ourselves so that we can prepare for outside changes in the economic, social and technical environment and perhaps even influence them beforehand, rather than merely react to them as they overtake us. If we are to do that, then we shall need more full-time background help to do the necessary research for the profession.

In a consulting firm, besides the scattered research which arises from day to day client work, how much of the firm's income should be allocated to full-time research projects? I suggest something like 2% might be a typical figure, that doesn't sound very large. If I halve the figure and translate it into 15 full-time qualified actuaries, or so, with support facilities, and say £250 per year as research subscription from every active Fellow in the U.K. does it then sound too large? I think the profession, which has always been good at arithmetic, will have to face this particular arithmetic; otherwise other professions, other institutes, and other bodies will advance their statements on actuarial matters faster than this learned body. On the evidence so far they may not do it well and they may leave us a trail of intellectual garbage which could be difficult to sweep up.

I implied earlier that I was married to the Institute, I have quite literally two other sets of partners. They are the partners in my firm who have always allowed me the freedom to allocate time, sometimes a great deal of time and resources to Institute affairs; they have never challenged my discretion even when it has been to their cost and on occasions to their commercial disadvantage. Of course my most important partner by far is my wife, who as you know is very appropriately called Goldie; she has acted both officially and unofficially on behalf of the Institute as hostess to actuaries and their families from home and overseas, especially from overseas, on countless occasions over the last 25 years. When that large group of Japanese actuaries came here for lectures, on their last day I telephoned her and gave her a full three hours warning that I wanted to bring four of them and their wives home to dinner and she quietly agreed. Actually the quiet was a quiet of unbelief. It is with a sense of almost unbelief that we both see today's happening and President, ladies and gentlemen, thank you for the very, very great honour you do me.