

Lifetime Achievement Award

2001

Professor Hannah Steinberg

Hannah was born in Vienna but, while she was still a schoolgirl, her family sent her to England to escape the imminent war in Europe. Travelling alone on a Kindertransport train, she eventually arrived in London and was offered a home with a new family. After another evacuation, this time to Queen Anne's School in Caversham, she went on to Reading University to take a Certificate in Commerce. She spent a brief spell working in that area but it did not suit her at all and so she joined UCL to study for a degree in French. Since she was already fluent in that language, she decided to transfer to a course in Psychology instead. "Psychology was rather peculiar in those days, but it tried hard to be scientific", she says. "There was lots of line drawing and weighing things ... but it's much better now". She was taught by Cyril Burt, whom she remembers as a talented and effective teacher, and graduated with First Class honours. She was then awarded a University of London postgraduate studentship and, despite her protestations that she knew nothing about drugs, she was encouraged to join the Pharmacology Department by its then head, Frank Winton, whom she had met through their mutual interest in music. Winton suggested that she investigate the effects of nitrous oxide on memory, a study which she carried out in collaboration with Arthur Summerfield. Together, they showed that low doses of nitrous oxide or alcohol improved memory recall, a finding that attracted the attention of the media world-wide.

Later, working with Ruth Rushton, Hannah went on to become one of the first scientists to develop methods for studying the effects of drugs on animal behaviour and applied these techniques in research on the effects of drug combinations; this was another area that had not been tackled before. She started by investigating the effects of psychostimulants, combined with anxiolytic drugs, on rodent and human behaviour, a problem that was especially relevant in the era of 'purple hearts' which were widely (ab)used at the time. Despite intense scepticism and a good deal of ribbing from her colleagues at UCL, Gaddum persuaded her to persevere. Working with Michael Besser and Ruth Rushton, she went on to show that the combined effects of amphetamines and barbiturates produced behavioural changes that could not be predicted from the known effects of either drug alone. The unpredictable effects of drug combinations are still among her key research interests and her discovery that mice walk backwards, when they are given clenbuterol (once regarded as a potential antidepressant) and a benzodiazepine, is one of her most eccentric findings. Only now are we beginning to realise that Hannah was tapping into the effects of drug combinations on neuronal second messenger systems, or beyond, and that understanding the interactions of drugs with receptors is merely the first step in explaining their effects on behaviour.

She also published the first report on the impact of 'environment' on the long-term effects of drugs on rodent behaviour. Her Nature paper, showing that simple environmental changes (e.g., new cages, change of diet) were stressful to rodents, not only underpins much contemporary research but was a major influence in the formulation of current Home Office guidelines for animal husbandry. Moving on from this field, she undertook a study that compared self-administration of morphine by naïve and drug-experienced rats, this time working with Channi Kumar and Ian Stolerman. Her results challenged the orthodox view that experience of one type of psychotropic agent invariably increases vulnerability to dependence on another; this is still regarded as an important, but unresolved problem, in the field of drug dependence.

Hannah was appointed to a Readership in Psychopharmacology at UCL in 1962 (the first in the Western hemisphere) and then to a Professorship (another first) in 1970. During her long and distinguished career at UCL, she collaborated with many future members of the BAP, often when they were still students: we will all harbour special memories of that famous nitrous oxide practical class (which thrives to this day!). On her retirement, Hannah was awarded an Emeritus Professorship of the University of London but she then embarked on a new career as a Visiting Professor at the University of Middlesex where, in collaboration with Elizabeth Sykes, she is still busy pursuing her current research interests in the neuropsychology of physical exercise.

Hannah's other accolades are too numerous to mention in full but she is a Fellow of the British Psychological Society and has been Vice President (and is now an Emeritus Fellow) of the CINP as well as a Distinguished Affiliate of the American Psychological Association section in Psychopharmacology. In addition to all this, she has held many key posts governing teaching and research of psychology and psychopharmacology, including membership of MRC working parties on the Biochemistry and Pharmacology of Drug Dependence (1968 – 1973) and Biological Aspects of Drug Dependence (1971 – 1975). Finally, not only was she a founder member of the EBPS and ENCP, but she was also a member of Council of the BAP at its inception.

Hannah's distinguished contributions to Psychopharmacology and the BAP are to be acknowledged by a Lifetime Achievement Award at the forthcoming meeting of the BAP in Harrogate.