

Jean Dausset

Immunogeneticist whose discoveries helped make organ transplantation safer

In 1980 the steely determination of the French immunologist Jean Dausset won him the Nobel prize for physiology or medicine, which he shared with the US based immunologists Baruj Benacerraf and George Snell. The three were honoured “for their discoveries concerning genetically determined structures on the cell surface that regulate immunological reactions,” which led to improved chances of successful organ transplantation.

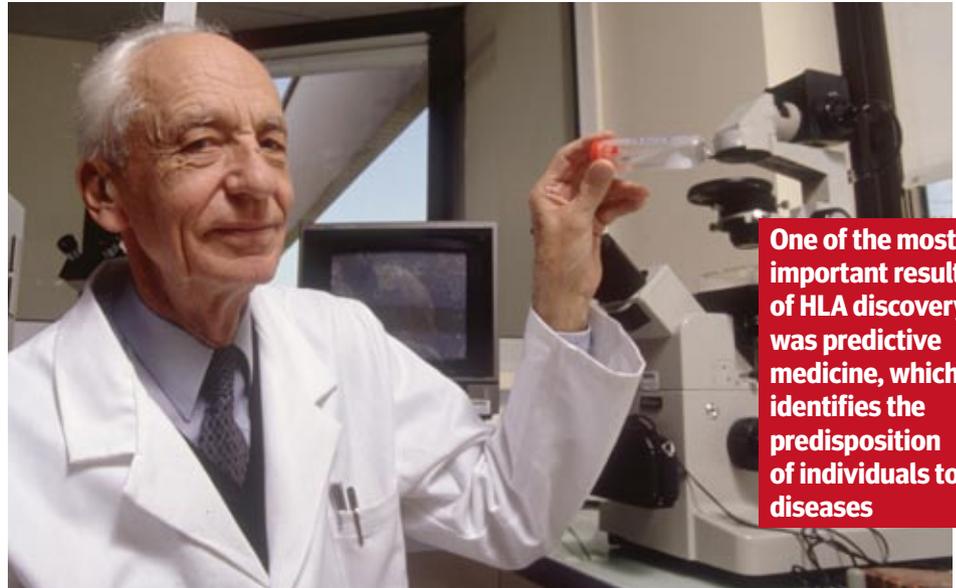
“He was a quiet person. Every time I spoke with him, he struck me as a gentleman,” says Luigi Luca Cavalli-Sforza, the population geneticist, now retired from Stanford University. But beyond that mild exterior was a blazing scientific curiosity that drove Dausset forward, always striving to better understand human immunology. “It was always go, go, go with him,” says Laurent Degos, who became a resident in 1967 under Dausset, who was head of immunology at Hôpital Saint-Louis in Paris, and now chairman of the French National Authority for Health.

Dausset’s contribution was his discovery in 1958 of the genetic system of cell surface markers, later known as HLA, standing for human leucocyte antigen. The antigens help the immune system to distinguish the body’s own cells from foreign cells. Dausset’s discovery meant that doctors could more easily match the cell types of organ donors and recipients, reducing the chances of rejection.

Before being named a winner in the autumn of 1980 Dausset was widely thought to be a leading candidate. Two days before the announcement he told staff that he had to fly to Montreal. Dr Degos says that shortly after hearing on the radio that Dausset had won, his boss telephoned. “I congratulated him and said, ‘Too bad you are not here.’ He said, ‘I am in Paris.’” Dr Degos chuckles, “He was waiting at home. He was anxious and did not want to see anybody. Then he came to the lab, and we drank champagne.”

HLA genes were also found to play a part in controlling immunity, leading to better understanding of autoimmune diseases, such as multiple sclerosis, and insulin dependent diabetes, as well as cancers and infectious diseases, such as HIV/AIDS.

Jean Baptiste Gabriel Joachim Dausset was born on 19 October 1916 in Toulouse. His father, an army captain, had sent his wife and their first three children there at the start of the first world war. The family



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returned to Paris when Jean was 11 years old.

After earning a bachelors degree in mathematics he began medical studies in the mid-1930s at the University of Paris. Before finishing he was drafted by the army in 1939, at the start of the second world war. After France’s defeat in 1940 he travelled to north Africa to join the Free French Forces as a doctor, an experience that would shape his future. He performed blood transfusions, his introduction to immunohaematology, and studied blood platelets.

He returned in 1944 to liberated Paris, finally earning his medical degree. In 1946, after completing his internship and residency at Paris hospitals, he began a research collaboration with Marcel Bessis, head of the National Blood Transfusion Centre in Paris.

The young doctor loved art. In the vibrant post-war Paris art scene he opened a gallery on Rue du Dragon, which became a top meeting spot for surrealist painters and writers. He had to leave his art gallery in 1948 after being selected by a medical exchange programme to spend time at the Children’s Hospital in Boston. He returned to Paris, where in 1958, as head of the transfusion centre’s immunohaematology laboratory, he described the genetics of HLA.

An advocate of research, Dausset saw weaknesses in the French system. In the late 1950s he became a key adviser to the National Educational Ministry to craft a new law to fundamentally reorganise France’s hospitals and stimulate medical research.

During the next two decades he held several teaching and research positions, including professor of haematology at the University of Paris, research director of immunogenetics of human transplantation at the French National Institute for Health and Medical

Research (INSERM), and chair of experimental medicine at the Collège de France. And he continued to unlock the secrets of HLA.

Dausset’s love of art combined with his fame for winning the Nobel prize caught the attention of a wealthy art collector, who bequeathed him valuable artworks to finance a research centre. In 1984 Dausset founded the Human Polymorphism Study Centre (CEPH), later renamed Foundation Jean Dausset-CEPH, which became a global centre that coordinated the first international collaboration for genome mapping.

Edgardo Carosella, research director at the French Atomic Energy Agency and head of the haematology department at the Hôpital Saint-Louis, began working for Dausset in 1976 and remained close professionally and personally until Dausset’s death. He notes that one of the most important results of HLA discovery was predictive medicine, which identifies the predisposition of individuals to diseases.

In the late 1990s Dausset collaborated with Dr Cavalli-Sforza in developing at CEPH the human genome diversity project, a widely used resource of DNA from world populations. Dr Carosella, also vice president of CEPH, says that his mentor never lost his curiosity and retired only in 2003 as CEPH president.

Dausset moved two years ago to Palma de Mallorca, with his wife, Rose Mayoral, a native of Spain. He also leaves their son and daughter.

Ned Stafford

Jean Dausset, founder of the French Human Polymorphism Study Centre (b Toulouse 1916; q Paris 1944), died 6 June 2009 from a pulmonary infection.

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Sidney Temple Armstrong



Former general practitioner Ballymena, Northern Ireland (b 1919; q Belfast 1946), d 7 November 2008. During the second world war Sidney Temple Armstrong mixed his studies with ARP duties. After house jobs, he worked at Otley General Infirmary in West Yorkshire, returning to settle in Ballymena at his father's request to become a general practitioner at the family home. A founding member of the Royal College of General Practitioners in Northern Ireland, he was also a dedicated member of the St John Ambulance Brigade, being made a serving brother in 1962. He retired in 1987. An enthusiastic and skilled driver, he enjoyed success in motor sport, including the Circuit of Ireland Rally in the 1950s and 1960s. He leaves a wife, Ethel; three children; and 11 grandchildren.

K J Armstrong

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Victor Stanley Brookes

Former consultant surgeon Queen Elizabeth Hospital, Birmingham (b 1920; q Birmingham 1943; FRCS), d 16 September 2008. Orphaned young, Victor Stanley Brookes won a scholarship to study medicine, graduating with first class honours and many prizes. After service in France with the Royal Army Medical Corps as captain, and specialist training, he was appointed consultant at Queen Elizabeth Hospital and paediatric thoracic surgeon at Birmingham Children's Hospital during 1955-6. From 1974 he focused on his upper gastrointestinal practice, publishing widely, and was appointed consultant surgeon to West Midlands Police. Active in many societies, he also became regional adviser on surgical training for the royal college.

Predeceased by his first wife, Rita, a daughter, and a grandson, he leaves his second wife, Moira, a son from his first marriage, and four grandchildren.

Richard Viney

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Robert Davies Cundall

Former general practitioner Harrogate (b 1924; q Cambridge/The London 1948; FRCS), d 25 May 2009. Robert Davies Cundall ("Bob") was born in China of missionary parents. He served as a Methodist missionary surgeon in Nigeria from 1953 to 1959, then entering general practice in Harrogate. When senior partner he made the practice a teaching practice, and was highly regarded as a meticulous clinician and a supportive colleague. Bob's Christian faith was central to his life, and he was a keen botanist, mycologist, and photographer. He leaves a wife, Monica; four children; and 10 grandchildren.

David Cundall

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John Alexander McConachie



Former general practitioner Lossiemouth, Morayshire (b 1921; q Aberdeen 1944; FRCPEd), died from aortic stenosis on 29 May 2009. After war service in the East, John Alexander McConachie held a joint general practice and dermatology appointment at Aberdeen Royal Infirmary, but from the early 1960s he was in fulltime practice in partnership with his wife, Margaret, at Lossiemouth on the Moray Firth. They gave the traditional personal service of the time, including delivering babies, and were the doctors to Gordonstoun School. In retirement John wrote three books, two on golf and one on the

first world war, which contributed greatly to the social history of north east Scotland. *The Student Soldiers* (1995) described how an Aberdeen University company was wiped out by 1915. He leaves Margaret, two children, and two grandchildren.

David Hamilton

Cite this as: *BMJ* 2009;339:b3000

Hugh Alexander McDonald

Former consultant surgeon Great Yarmouth and Gorleston General Hospital (b 1914; q Guy's Hospital, London, 1937; FRCSed, FRCS), d 28 March 2009. After general medical practice in London, Hugh Alexander McDonald was posted by the Emergency Medical Service to Great Yarmouth. In 1948 he was appointed the first fulltime consultant surgeon. Hugh practised every surgical specialty except otolaryngology and ophthalmology, excelling in gynaecology and obstetrics. He also became the hospital pathologist, carrying out postmortem examinations until the early 1970s. He devised an innovative lifesaving operation for people who had eaten putrescent fish, and an enhanced technique for partial or total gastrectomy. A gifted pianist, he would have liked to have been a conductor had he not been a surgeon. Predeceased by his two wives, he leaves three children from his first marriage.

Caroline Buddery

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Edward Hamilton Dalrymple Phillips



Former general practitioner Worcester Park, Surrey (b 1910; q Cambridge/St Bartholomew's Hospital, London, 1936; MA, DA), d 8 November 2008. Edward Hamilton Dalrymple Phillips ("Hamilton") settled in Worcester

Park soon after qualifying, serving the same community until 1973, except during the second world war. On the outbreak of hostilities, he volunteered for the Royal Army Medical Corps and was posted to a hospital ship. Later he joined the advance through Italy, and was mentioned twice in dispatches. Before demobilisation, he gained experience in anaesthesia at a military hospital, and after the war continued sessional work in hospitals and offered a dental anaesthesia service. In retirement he created and maintained a heathland garden at Farnham. Predeceased by his wife, Deryn, he leaves three children and four grandchildren.

J D S McCutchan

H L Phillips

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Salih Yassin Salih



Professor of medicine University of Khartoum (b 1942; q Khartoum 1968; MD, DCMT, FRCP), d 27 April 2009. A humble man, Salih Yassin Salih advocated medical education, and was an inspiring teacher and medical writer. After his first jobs in Khartoum, he trained with distinction in Bristol and London on a scholarship. Appointed lecturer in medicine in Khartoum in 1973, he became professor of medicine in 1982—the youngest at the time. His many contributions included being dean of the medical school, co-founding the Sudanese society of gastroenterology, and leading the Sudan Association of Physicians. He was the first and only physician to publish textbooks on the practice of internal medicine in Sudan: *Yassin's Medical Rounds, Skills and Knowledge* and *Yassin's Medical Diagnosis*. He leaves a wife, Amal, and four children.

Ibrahim Fahal

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