

Born 30/3/36 in Lindridge Road, Marsh Hill, Stockland Green Erdington, Birmingham to Kathleen Vivien/ne Oakden and Frank Evans. Frank's family had emigrated to the Black Country. His brothers worked at the Chance Glass-works in Smethwick. Reputedly a breech home birth and been awkward ever since!

Earliest memories being pushed in a buggy around Erdington, repeated visits to our GP to have impetigo scabs removed and painted with gentian violet; a boil on the neck being cleared out with a copper sulphate crystal (all pre antibiotics); enjoying the air raids in the Anderton Shelter at the bottom of our garden and watching the neighbours and our parents playing cards; watching the local munitions factory burn after the raids (?ICI Kynochs); throwing stones at the factory at the bottom of the sandpit nearby.

Primary School at the bottom of the hill at Marsh Hill Primary School. Was caned frequently for talking in class and given the job of ringing the school bell! No striking memory of primary school apart from a visit from an orchestra (?CBSO). Sister – Vivienne Anne Evans born in 1944.

Took scholarship exam (11+) to King Edwards Aston and came top. Father moved from GEC Aston to The Brush Electrical Engineering Co. in Loughborough and we followed in the dreadful winter of 1947 to a frozen house (81 Beacon Rd Loughborough). Scholarship transferred to Loughborough Grammar School. Enjoyed being in the A stream apart from Latin under Mrs Mulcahy ("Moocow")! Physics and woodwork liked best.

Was commandeered by House (S) Master to run in a cross-country race and beat the House champions! Thereafter had to run for the House and became School Mile Champion in my last year - the year the 4 minute mile was broken by Roger Bannister. I had to mark out the school playing field in order to train, timed with an alarm clock – the only time-piece available with a second hand. (Running with a mechanical wrist watch gave spurious readings!).

Joined the ATC and won Flying Scholarship for PPL on Tiger Moths at Sywell airdrome, Northants.

Hobbies were electrics, encouraged by my Father (Draughtsman-designer of electrical switchgear), building crystal sets, radios etc, and microbiology (of pond-life, having been given a microscope and Ralph Buchsbaum's *Animals without backbones*).

In Sixth Form, could not decide between biology and physics/maths as required, so sat both at schol A level. Had to teach ourselves calculus and exponentials because relegated to "Maths for Biologists" class taught by welsh rugger international who did not understand calculus ("don't ask questions")

Gained State Scholarship and Birmingham University Open Scholarship. (Was not allowed by Left-wing Biology Master to sit for Oxbridge). Was told that if I wanted to study microbiology I needed to do Medicine, so did!

Up to Birmingham Medical School in 1954, living in digs in Springfield Road, Kings Heath, about 2 miles from the Medical School in Edgbaston - about half an hour by bike. Managed to scatter arm bones from my skeleton (anatomy first year) over the road in a hurry, giving elderly gentleman who kindly picked them up a scare. Enjoyed dissecting table and getting to know fellow students.

Joined Christian Union and became Secretary in third year. Also member of the IVF Student Committee as Midland Representative. Had to organize and chair the Midlands Terminal Conferences. Joined University Air Squadron, flying DeHavilland Chipmunks

out of Castle Bromwich Airodrome. Resigned my commission in third year in order to give time for intercalated BSc and Secretary of the CU.

At end of second year (Physiology), gained Scholarship for intercalated BSc in Physiology. Captivated by neurophysiology (Ian Whitfield) because of the application of electronics. Gained 1st class BSc.

Hated clinical years after the rigour of the BSc and with the endless standing around on the wards. Suspected I would fail surgery, so crammed for it all final year and gained a Distinction!

Refused offer of a Professorial Surgical House Job in the QE, and instead went for job with Peter Bevan (later Prof) at Dudley Rd Hospital with excellent teaching and hands-on surgical experience (appendicectomies etc). First House Job with J D Blainey at the General Hospital in Blrmingham Town Centre – wonderful Mess and atmosphere. Was House Physician to the newly formed artificial kidney unit – the first in the Midlands. Very long hours!

At the end of House Jobs received an invitation from Ian Whitfield to join a newly established Neurocommunications Research Unit (NRU) in the Medical School. Having been encouraged to take surgery as a career, agonized over the choice but accepted the NRU job. Developed a microdrive for administering drugs to cells in the cochlear nucleus (Ian had a thing against iontophoresis), but main project was recording neurones in the auditory cortex of unanaesthetized cats for the PhD.

During PhD, courted Diana, after working together in starting and running a CMF for clinical medical students and a Broads Sailing Cruise – the Snarks, with Diana as Quartermaster and me as Commodore. When proposing, knew two things about her – she could not cook but could sail, the former easier to rectify cf. the latter! Married on July 20th 1963 at the Barn Methodist Church, Patcham, Brighton. Lived in an upstairs flat in Edgbaston, Birmingham. Nicola was born – at the hands of Diana's boss, the Prof of Obstetrics – in July 1964. Baptized at St Johns Church Harborne.

Decided that hearing was too complex and needed to study neuronal function in a simple system like the spinal cord, so became Visiting Research Fellow in the Spinal Neurophysiology Unit under K Frank and P G Nelson at NIH, Maryland, USA in 1965-7. Sailed on the QE to the US during a very cold spell and a NY dock strike.

Apart from a few “we hate America” days when we ran out of money and information, had two superb years eventually living in an apartment (2442 Ross Rd, Silver Spring) in a Jewish neighbourhood in Silver Spring, Maryland, with great friends at home and in the Lab. Eventually set up a hearing lab in the Spinal Cord Section, Laboratory of Neurophysiology, Building 10, NIH. Learned to programme one of the first 5 LINC computers in the USA, and applied it to recording from single cells in the cochlear nucleus. Jonathan was born in September, 1965. Members of the St Paul's United Methodist Church off E-W Highway.

Met Professor Donald MacKay who was setting up the Department of Communication at the University of Keele and agreed to set up a neurophysiology lab there under a MRC Group Grant. Arrived in Keele in 1967 after a rough crossing in the QM. Lived in a council house on the Keele campus before buying a nice house in the University Housing Association Springpool (No. 13 – had to move out into a caravan while building errors were rectified!).

Became members of the Keele Chapel, including being Secretary of the Chapel Committee. Lectured in the University Foundation Year Course; tutored Physics, Computer Science and Biology students in Final Year Projects, also ENT surgeons in research projects. On Donald Mackay's retirement, became Head of the Department of Communication of Neuroscience and then Dean of Natural Sciences, meeting Princess Margaret – then Chancellor – in medical fund-raising activities.

As a member of the British Society of Audiology (BSA) committee, organized annual Short Papers Meetings designed to bring together scientific experts in the disparate fields in Audiology, especially physiology and psychophysics (see history).

Enjoyed Keele's musical programmes including singing in the Chapel Choir. Became Chairman of the SCR and started the termly programme of coach trips to Symphony Hall Birmingham for CBSO concerts under Simon Rattle.

Took over Explorers Cruise from Revd Alan Caldwell originally in Maldon, Essex and ultimately alternating between the Scottish Western Isles and Cornwall. Often extended the Cruise to a second week taking in the Outer Hebrides or the Channel Isles. Participation cut short by heart attack (on Anna's Birthday!) successfully dealt with by the then new science of stents, several weeks after the event. Discovered had Barretts Oesophagus and was referred to Addenbrookes Hospital Cambridge for their newly established programme of endoscopic treatment to avoid oesophagectomy for cancer. Became a member of the newly-formed North Staffs Gideon Branch and transferred to the Suffolk East Branch in 2001. Secretary, Treasurer, Chair. In 1992 bought flat in newly restored Granary (next door to iconic Tide Mill) on the River Deben in Woodbridge, having discovered it sailing up the Deben on one of the Explorers Cruises in the '70s. In 1995, bought *Twinkler*, oldest sailing Hillyard (built in 1922) and explored the Deben, Orwell, Stour, Essex and Suffolk rivers up to Lowestoft, including the Southern Broads.

Retired in 2001 to the Granary, Woodbridge, (having added a second flat and basement/workshop). Joined St Johns Church and ran the Church Alpha Course 2000-2006. Bought *Ragged Robin III*, 6 ton Hillyard yacht originally owned by Arthur Ransome in 1951-2 (*Lottie Blossom 1*). Many cruises abroad including France, Netherlands, Germany and Denmark. In 2014, bought *Unicorn*, a Hampton Safari 25 on the Norfolk Broads. In 2018 trucked her to Ely on the Great Ouse. Explored the Cam to Cambridge, the Great Ouse to Bedford and the tributary rivers and Lodes. In 2019, cruised the Middle Levels to Peterborough and the Nene to Northampton. In 2020, before and during lockdown explored the Great Ouse and the Nene. In 2021, (Still under Covid precautions), trucked her to Oxford Cruisers on the Thames below Lechlade. Explored Thames from Lechlade to Teddington and back to Caversham, Reading. Trucked her to Wroxham back on the Broads and drove her to Waters Edge, Horning, our new family holiday bungalow and mooring. Sale on Waters Edge completed in August (9th 2021).

July 2023: celebrated 60th Wedding Anniversary on board *Southern Comfort* from Horning with 36 guests.

Woodbridge Cruising Club: Committee Member, Treasurer, Commodore (2005-7).

Treasurer of *Maritime Woodbridge*: 2007-2018

Member of the Arthur-Ransome Society (TARS), 2000-, Trustee 2006-2019, Treasurer 2007-2017; Acting Assistant Membership Secretary, Webadmin. Hon Vice President 2019-. Member of TARS Eastern Region Committee; Secretary, Treasurer.

PCC St Johns Church, Woodbridge 200? – 2019. Woodbridge Deanery Synod, 200?-2019.

Gave addresses at Funerals of Ian Whitfield (boss) ,Terry Williams (My first Technician) of NRU, Bill Ainsworth and Pat Wilson (colleagues at Keele).

Website: www.tedevans.net: cruises, articles on science and faith etc.

Education and Degrees:

1948-1954: Loughborough Grammar School

1957: B.Sc. Hons. Class I, University of Birmingham (Physiology)

1960: M.B., Ch.B., University of Birmingham (Medicine)

1965: Ph.D., University of Birmingham (Physiology)

1988: D.Sc., University of Birmingham (Physiology).

Positions Held:

1960-1961: House Physician to United Birmingham Hospitals' Artificial Kidney Unit at General Hospital, Birmingham.

1961: House Surgeon, Dudley Road Hospital, Birmingham.

1961-64: University Research Fellow, Neurocommunications Research Unit, Birmingham.

1965-67: Visiting Associate, Section of Spinal Cord, Laboratory of Neurophysiology, National Institute for Neurological Diseases and Blindness, National Institutes of Health, Bethesda, Md., U.S.A.

1967-73: Senior Research Fellow, M.R.C. Group, Department of Communication, University of Keele, Staffs.

Feb.-Apr. 1972: Acting Head, Department of Communication, University of Keele.

1973-78: Reader, Department of Communication & Neuroscience, University of Keele.

1978: Member of DHSS Committee investigating USA experiments and recommending that the UK adopt cochlear implants in 1978 and 1982.

1978-: Professor of Auditory Physiology, University of Keele.

1982-93: Head, Department of Communication and Neuroscience, University of Keele.

1984-7: Chairman, Board of Natural Sciences, University of Keele (= Science Dean).

Organized BSA Annual Short Paper Meetings in Experimental Studies of Hearing and Hearing Loss: 1976-2000.

Honours and Awards:

1954: State Scholarship; University Open Entrance Scholarship, University of Birmingham.

1956: University Special Scholarship (entry into Hons. Physiology School).

1960: Distinction in Surgery.

1969: British Council Interchange Fellowship (to Max Planck Institute of Psychiatry, Munich).

1973: Thomas Sim Littler Prize for 1973 of British Society of Audiology.

1977: Elected Fellow of Acoustical Society of America.

1978: Personal Chair in Auditory Physiology, University of Keele.

1978: Sandoz Lecturer, Institute of Neurology, Queen Square, London.

1979: Elected member of the Collegium Oto-Rhino-Laryngologicum Amicitiae Sacrum.

1979: Eleventh Fairey Lecturer, University of Southampton.

1982: Elected Fellow of the Institute of Acoustics.

1984: Norman Gamble Prize in Otology of the Royal Society of Medicine.

1984: Halliburton Lecturer, King's College, London.

1984: Watson-Williams Memorial Lecturer, University of Bristol.

1985: Elected Member of the Royal College of Physicians of London.
1985: Sandoz Lecturer, Institute of Neurology, Queen Square, London.
1987: Fifth Knowles Annual Lecturer, University of Southampton.
1989: The James Yearsley Medal of the Royal Society of Medicine, and the 35th James Yearsley Lecturer.
1989: Elected Fellow of the Royal College of Physicians of London.
1991: Sandoz Lecturer, Institute of Neurology, Queen Square, London.
1992: The J.S. Macrae Medal and Lecturer in Otolaryngology and Audiology of the Royal Victoria Hospital, Belfast.
1994: The Rayleigh Gold Medal, Institute of Acoustics.

Membership of Professional Societies:

Acoustical Society of America (Elected 1967; Fellow 1977)

Physiological Society (Elected 1968)

International Brain Research Organization (Elected 1968)

International Society of Audiology (Elected 1974)

Fellow, Acoustical Society of America: 1977

British Society of Audiology Council

Brain Research Association

Collegium Oto-Rhino-Laryngologicum Amicitiae Sacrum (Elected 1979)

Institute of Acoustics (Elected Fellow in 1982)

Royal College of Physicians of London (Elected Fellow, 1989)

European Neuroscience Association

Otorhinolaryngological Research Society

Past and Present Membership of National/International Committees and Editorships:

Co-Editor, *Experimental Brain Research*, 1973-85.

Member of Council of British Society of Audiology, 1975-85.

Member, Medical Research Council Neurobiology and Mental Health Board, 1977-1981.

Member, U.S. National Research Council Committee on Hearing, Bioacoustics and Biomechanics.

Member of Editorial Board of *Hearing Research*, 1977-1989.

Member of Scientific Committee, Project Ear Foundation, 1979-.

Member, Board of Management, *British Journal of Audiology*, 1980-86.

Member of the Scientific Advisory Committee, Institute of Sound & Vibration Research, Southampton University, 1980-86.

Member, Medical Research Council Hearing Research Committee, 1979-93

Member, Medical Research Advisory Subcommittee on Sensory Aids for the Hearing Impaired, 1979-93.

Chairman, CIBA Symposium on Tinnitus, 1981.

Chairman, Medical Research Council Hearing Research Committee, 1985-93.

Chairman, Medical Research Council Working Party on Recruitment, Training and Prospects in Hearing Research, 1986-93.

Member, Editorial Board of *European Journal of Neuroscience*, 1988-94

Member, Scientific Management Committee of Menieres Society of Great Britain.

Member, SERC Science Board Image Interpretation Initiative Panel, 1988-1993

Chairman, British Society of Audiology, 1998-2000.

Publications

198 publications in the field of hearing, tinnitus and hearing loss, from the points of view of physiology, psychophysics, cochlear implants and computational modelling. These include:

First recordings from single fibres in the cochlear nerve in the UK; demonstration of physiological vulnerability of cochlear tuning – ('first' and 'second cochlear filter'); first demonstration that psychophysical frequency selectivity was largely determined at cochlear nerve level; demonstration in patients that cochlear hearing loss involved deterioration in frequency selectivity; animal model of tinnitus; coding of complex sounds in the peripheral and central auditory system; distribution and nature of inhibition in the cochlear nucleus; coding, including temporal, in cochlear implants; computational models of cochlea/cochlear nerve and nucleus.

2022: 5000 citations reached.

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Evans, E. F. & Nelson, P. G. (1968). An intranuclear pathway to the dorsal division of the cochlear nucleus of the cat. *J. Physiol.*, 196, 76-78P.

Evans, E. F. (1968). Cortical representation. In: *Hearing Mechanisms in Vertebrates: A.V.S. de Reuck and J. Knight eds., J. & A. Churchill, London, 272-287.*

Evans, E. F. (1968). Upper and lower levels of the auditory system: a contrast of structure and function. In: *Neural Networks: E.F. Caianiello ed., Springer-Verlag, Berlin, 24-33.*

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- Evans, E. F. (1971). Does frequency sharpening occur in the cochlea?. *Proc. 25th Internat. Cong. of the Internat. Union of Physiol. Sciences*, 9, 167-167.
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