

## Hall of Fame

---

# The Paediatric Cardiology Hall of Fame – Michael John Tynan

Shakeel A. Qureshi

*Department of Congenital Heart Disease, Evelina Children's Hospital, Guy's & St Thomas Hospital Trust, London, United Kingdom*

**F**EW PEOPLE HAVE THE ABILITY TO BE HIGH achievers in their chosen profession, reaching the top, yet remain down to earth, level-headed, bring out the best in other individuals, encourage them to strive for improvements, generate a feeling of belonging to any continent, and at the same time understand the feelings and issues faced by people from developed and developing countries. As a person and a paediatric cardiologist, Michael Tynan (Fig. 1) is such an individual. It is for this reason that I relished the responsibility I was given to write this encomium. In doing so, I wanted to produce an account that did justice to all the qualities discussed above, which he possesses in abundance.

### Early days

Michael Tynan was born on 18 April, 1934, at St Thomas Hospital, London. His father, Jerry Tynan, was in the Royal Air Force at the time of his birth, subsequently becoming a Squadron Leader, having previously been in the Royal Dublin Fusiliers. Jerry met Mike's mother, Florence, in Lambeth, London, when he had transferred to the Air Force. She worked for the Trustees Savings Bank in Lambeth. They married in 1933 in London, and lived in Southwark, whilst Jerry was stationed at Uxbridge.

Mike had an early contact with hospitals, as he was a patient at the Evelina Hospital, later to become part of Guy's Hospital, for several weeks at the age of 9 months, being admitted with cervical lymphadenopathy. When his father was transferred to Cranwell, the family moved to Ruskington in Lincolnshire. Mike went to the local elementary school in 1939, at the age of 5 years, this of course being the year in which



**Figure 1.**  
*A recent portrait of our latest entrant to the Hall of Fame – Michael J. Tynan.*

the second world war broke out. His father was transferred to Cardington, near Bedford, and so Mike also moved, entering a school in Bedford. Fairly soon afterwards, the family moved to Skegness. Within a few days, his father was posted to Liverpool. Because of too many transfers, the family elected to move back to Bedford for the duration of the war. Apart from many memories of the war, Mike particularly remembers his father bringing home the sweet ration, to which he looked forward to as a special treat.

Between the ages of 8 (Fig. 2) and 18 years, Mike attended Bedford Modern School, a state school, which had been founded in 1566. He had passed the 11-plus

---

Correspondence to: Dr Shakeel A. Qureshi, Department of Congenital Heart Disease, Evelina Children's Hospital, Guy's & St Thomas Hospital Foundation Trust, Lambeth Palace Road, London SE1 7EH, United Kingdom. Tel: +44 207 188 4547; Fax: +44 207 188 4556; E-mail: Shakeel.Qureshi@gstt.nhs.uk

Accepted for publication 4 September 2006



**Figure 2.**  
*Mike at the age of 8 years in his boy-scout uniform.*

examination, thus making his schooling free. In 1947, at the age of 13 years, he also passed the entrance examination for the Royal Naval College, Dartmouth, but failed at the interview, and so he was rejected. At the age of 16 years, he obtained his School Certificate, which was equivalent to the General Certificate of Secondary Education examinations sat by current students in the United Kingdom. He had obtained enough credits to be exempted from the London Matriculation examination. At the age of 18 years, he took Advanced Level examinations in Biology, Physics, and Chemistry, but passed only Biology. Somehow, despite these potential setbacks, in 1952 he managed to gain entry into the London Hospital Medical College. Mike considers this to be due to a combination of factors: obtaining exemption from the London Matriculation examination, one Advanced Level, and his ability in rugby football! The first part of the medical studies for the degree of Bachelor of Medicine was taught at Queen Mary's College, London, where on November 5, 1952, he met his wife-to-be, Eirlys (Fig. 3).

He passed the first part of his examinations, but failed Anatomy in the second part, and had to re-sit the examination in order to move onto the third part of the qualifying examinations. Subsequently, his progress in medical school was less eventful. He married Eirlys on 1 January, 1958 and soon afterwards needed an appendicectomy, for what turned out to be a normal appendix! He passed the final examination, being awarded the degrees of Bachelor of Medicine and Surgery, in July, 1958. True to form, even this was eventful, as he had been told by the Medical



**Figure 3.**  
*Mike, whilst still a medical student, with his future wife, Eirlys.*

School that he had failed, but on the day the results were posted on the notice board, he saw that he had passed. He was pleased to pass the final examination, even though this was without any distinctions or honours. Not the stuff of which geniuses are made!

During his early years at the Medical School, he had been persuaded to take up boxing. He won his first bout in 1953, and was awarded the winner's prize of a Pyrex casserole dish. This was the only win in his boxing career, but in 1954 through 1955, he was part of the boxing team of the London Hospital Medical College, which won the London University Boxing Championship (Fig. 4).

Mike did not win a single bout, having been knocked out in the first round of his first match in the championships. Waking up 30 minutes later, and sitting in a ringside seat, with no recollection of having showered and dressed, he decided to retire from boxing. The only memento of this event is the team photograph, possibly the most embarrassing souvenir in his possession.

### Early postgraduate training

After graduation in 1958, his first post as House Officer in Surgery was at the Poplar Hospital, London, for 6 months. In this post, he obtained experience in controlling bleeding from the mouths of patients, who had had tonsillectomy operations. He remembers the salary as being a meagre £250 per year. His second post as House Officer was in Medicine, at the King George Hospital in Ilford, Essex. Then he accepted a post as House Officer in Paediatrics, again for 6 months, and undertaken at Princess Louise Hospital, Kensington, London (Fig. 5). In this hospital,



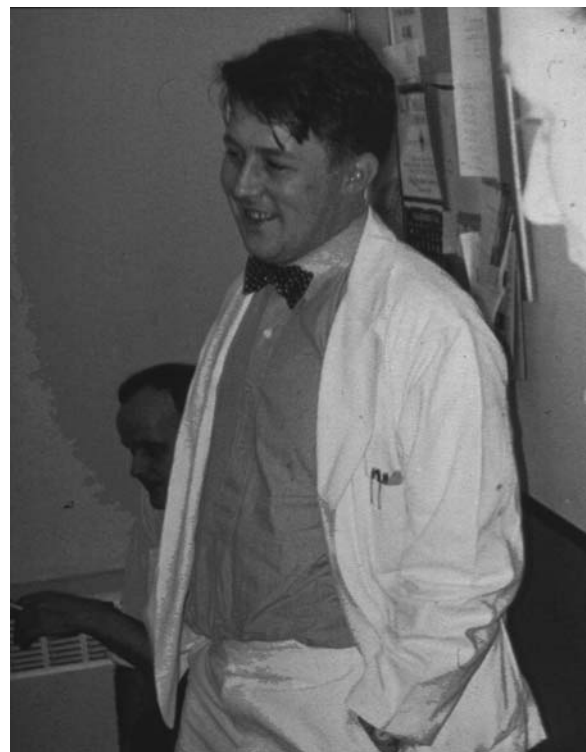
**Figure 4.**  
*Mike (highlighted) posing with the London Hospital Boxing Team, winners of the University Championship.*

he worked for a paediatrician called Ursula Shelley. He was more inspired, however, by an Australian Senior Registrar in Paediatrics, Bob Godfrey, who later became the Medical Superintendent of the Princess Margaret Hospital, in Perth, Australia. The impressive qualities of Bob Godfrey included being supportive, being a good teacher, and supervising very closely the junior doctors. These attributes clearly left a good impression on Mike.

During the period 1958 through 1959, Mike managed to avoid conscription in the Army, because of a history of childhood asthma, so he was considered unfit for military service. He decided to travel to the United States of America, after coming across an advertisement for a resident post at the Cornell University Infirmary, Ithaca, New York. He was accepted without an interview, and so sailed to New York, with Eirlys, on the Queen Elizabeth. He used the post at Cornell University as a means of getting into the United States of America. He worked as a Junior Resident there on a rotational basis for 1 year between August, 1960, and July, 1961. He then moved to Beverley Hospital and Boston Children's Hospital, as an Affiliated Resident, between July 1961 and July 1962, and then became a Senior Paediatric Resident. He replaced Ed Brett on the rotation as a Senior Resident for 6 months. Between January and July, 1962, he was a Teaching Fellow at Harvard University Medical School. It was during this time in the United States, that he met the world renowned Alex Nadas. Many years later, Alex Nadas fondly recalled, "Mike was undoubtedly one of the worst residents we ever had".

### Return to the United Kingdom

Having worked in United States of America for 2 years, Mike returned to the United Kingdom in 1962, having beforehand included a round-the-world



**Figure 5.**  
*The young Dr Tynan, aged 26 years, pictured as a junior paediatrician in the early part of his training.*

tour with Eirlys. This tour exemplified his desire for travel and adventure. During this tour, he developed a fascination with India, where he travelled on the local buses and trains and ate local foods, with their associated side-effects. On his return to the United Kingdom, he bought a car and drove to Exeter, where he worked between February, 1963, and February, 1964. During the drive, he accidentally came across Stonehenge, not having appreciated where it was. While working in Exeter, he attempted to pass the

examination for Membership of the Royal College of Physicians, then usually considered a pre-requisite for becoming a Consultant, and failed. He then worked between February, 1964, and March, 1965 at Westminster Hospital, where he developed his first genuine interest in paediatric cardiology. He remembers having to stay in the hospital, whenever the patients were operated upon by the famous surgeon, Charles Drew, who was already at that time using profound hypothermia for the surgical procedures. He remembers vividly one child, who had a repair of aortic coarctation. Before going home, during the rounds, he noticed that the underwater drain on this child was filling up rapidly. Accidentally, before the operation, he had ordered 8 pints of blood, which then came in very useful, as he transfused the child rapidly with the blood and telephoned Charles Drew to come in urgently. The child was rushed into the theatre and, on the way, the child, clutching a teddy bear, told Mike, "If I die, can you put the teddy bear in the coffin with me?" When all the blood had been used up for transfusion, plasma was used. Charles Drew quickly opened the chest and found a bleeding point. He placed a finger on this point for haemostasis and said to Mike, "I will keep my finger here whilst you get another couple of pints cross-matched", whereupon he placed a single stitch in the bleeding point, the bleeding stopped and the child survived.

Mike then participated in the Hammersmith course in Advanced Medicine in 1965, in order to help him pass the examination for Membership of the Royal College of Physicians. He also attempted examination for the old Edinburgh Membership of the Royal College of Physicians, but again failed comprehensively! He applied for several posts as medical Senior House Officer, but was unsuccessful, as he had spent so much time already in paediatric cardiology, and was now considered to be a specialist rather than a general paediatric trainee. He often wondered why he did not get these jobs, as he did not think of himself as a specialist at this stage, and thought that he was much better than the successful applicants. After the Hammersmith course, he was unemployed, so when Ian Anderson, Consultant Paediatrician, offered him a job of 6 months to catalogue the heart specimens at the Westminster Children's Hospital, and to work with Barbara Melhuish, he accepted. His first publication was a case report on pulmonary atresia and bilateral aortopulmonary collateral arteries, which was published in 1966. Then, in 1965, Gerald Graham, paediatric cardiologist at Great Ormond Street Children's Hospital, London, asked him to apply for the post of registrar in the Thoracic Unit. There was one other applicant. Having been asked to apply for the post, he was unsuccessful, as he had still not passed the examination for Membership of

the Royal College of Physicians! Some weeks later, however, he received another telephone call from Gerald Graham. The other doctor, who had been successfully appointed into the registrar post, had injured her back, and so Mike was asked if he could take up the post immediately. He accepted, and started on 1 January, 1966, working as a registrar until January, 1967. He attempted again, and this time passed, the first part of the examination to become a member of the Royal College of Physicians, but a lack of interest in subsequent examinations discouraged him from attempting the second part of the examination, and so he never became a fully fledged member of this august Royal College, being awarded membership, and then fellowship, many years later on the basis of a provision in the by-laws.

Mike feels that there were 3 crucial factors influencing his career around this time. These were, first, qualifying in medicine, and realising that it was all a very serious and competitive business; second, going to United States, and realising that anything was possible; and third, going to Great Ormond Street Children's Hospital, and realising the importance, if he was to compete on the world-wide stage, of the "numbers game", the pressure to publish, and the importance of statistics.

He worked at Great Ormond Street Children's Hospital from January, 1966, to September, 1971. After his second year as a registrar, he became a British Heart Foundation Fellow, in charge of studying babies with transposition. This involved performing balloon atrial septostomies on the babies, following them up in the out-patient clinics, and subsequently referring them for the Mustard operation. Ian Carr, also working at Great Ormond Street, had been the first person to measure the pulmonary arterial pressure in babies with transposed arterial trunks, and Mike soon followed, rapidly becoming adept at the technique. Because of the large caseload at Great Ormond Street, it was easy to carry out research, and so balloon atrial septostomy became the subject of the thesis he submitted for his Doctorate of Medicine. This was completed, and the doctorate awarded, in 1971.

By then, he had presented his first paper at the American Heart Association, specifically in 1968. During the next few years, he visited Philadelphia, Chicago, and Houston, meeting famous paediatric cardiologists such as William Rashkind, Bob Miller, and Dan McNamara. Indeed, Dan MacNamara invited Mike to visit Houston to give a talk and attend their case conference, at which the famous surgeon, Denton Cooley, was also present. He clearly remembers not being overawed, and arguing forcefully with all the doctors present at the case conference, including Denton Cooley, about the need to measure the pulmonary arterial pressure, which had not been

measured, and to determine the pulmonary vascular resistance, in a patient with transposition and ventricular septal defect. He argued with some trepidation, as he had only been a registrar for 2 years at that time! At all events, Dr Cooley cancelled the operation!

Mike subsequently spent more time in the United States of America, as attempts were being made to recruit him in various posts. He visited Miami, Yale, Houston, Boston, and Chicago, to name but a few places. He met people such as Bill Friedman, John Waldhausen, and Jim Gault. Jim Gault, who was the Chief at Hershey Pennsylvania, had been told "no one would touch Mike with a barge pole"! In spite of this, he was offered a position at Hershey. He was also offered posts by several chiefs at other institutions, including Bob Miller in Chicago. Because of so many offers, he was having difficulties in making a decision about his career. A consultant friend, Dr Pampiglione, in charge of the Department of Electroencephalography at Great Ormond Street, tried to offer advice. He asked Mike where his wife wanted to live in the future, to which Mike replied 'Great Britain', so Dr Pampiglione told Mike that the solution was clear! "Go to the United States, and you will have to find a new wife". Mike decided to stay in the United Kingdom.

### Progress in the United Kingdom

In 1970, Mike attended the World Congress of Cardiology, which was held in London, using the identity badge given to him by Bill Rashkind, with whom he had established excellent rapport, and developed a good friendship. During the Congress, an adult cardiologist from Newcastle-upon-Tyne, in the North of England, informed Mike of an upcoming vacancy as a consultant paediatric cardiologist in their centre. When the post was eventually advertised in 1971, Mike was invited to apply, but then he received a letter informing him that he had not been shortlisted! This was becoming a familiar story. Mike is probably the only person who has been asked to apply for 7 posts, of which he was not appointed in 5. He is possibly the only person to have been asked to apply for a post, been the only candidate, and not been offered the post!! With regard to the position in Newcastle, Richard Bonham-Carter, his chief at Great Ormond Street, intervened, and he was short-listed for interview. Mike was offered the post after a tough interview, on the condition that he obtained his Doctorate of Medicine, as he had no higher degree at that time. Mike obtained the necessary Doctorate of Medicine in June, 1971. The process of writing and submitting his thesis had been a traumatic experience, because in those days, many typing corrections had to be made. Mike hired a typewriter himself, and a patient and

long-suffering secretary typed and retyped the thesis many times. After submission of the thesis, he heard nothing for about 6 months. What did he do, waiting with baited breath for the result? No, he continued his research. The acceptance of the thesis arrived eventually, without any need for changes, and with no request for an oral examination, a remarkable achievement for the United Kingdom. Thus, he commenced his work as a consultant paediatric cardiologist in Newcastle in September, 1971. He was offered various pieces of advice, such as "if you keep your mouth shut for the first year in the post, the next 20 years will go smoothly" and "Be kind to a colleague". He acted on this advice, and it helped.

Soon after beginning his clinical work in Newcastle, he resumed his research, making studies using m-mode echocardiography, and obtaining support from the Medical Research Council of the United Kingdom for laboratory research, investigating whether or not the adenylyl-cyclase system in the hearts from newborn kittens had a process of maturation similar to that known to occur in the brains of rats. He was given laboratory space for this work, and successfully completed the project. On the strength of this work, he was invited to become a member of the Physiology Society. Then, towards the end of 1973, the British Heart Foundation advertised a newly endowed Professorial position at Great Ormond Street Hospital. He applied for this position, as did others, but no appointment was made. The post was re-advertised, and this time Mike did not re-apply. Nevertheless, he retained the ambition to obtain a Professorial position.

Mike enjoyed working in Newcastle. Stewart Hunter was already a Research Fellow there when Mike arrived. When Stewart's initial appointment came to a conclusion, Mike made it possible for him to join Jim Gault in Hershey, Pennsylvania, for a year. On Stewart's return from the Hershey, he was also appointed as consultant paediatric cardiologist in Newcastle. This appointment allowed Mike to spend more time on his research in the laboratory, whilst Stewart concentrated on echocardiography. Around this time, Bob Anderson, who had just started working at Brompton Hospital, began visiting Newcastle to look at specimens of hearts, and this resulted in collaborative work of historical importance regarding the Nomenclature used in Paediatric Cardiology. Numerous meetings amongst the interested clinicians to discuss this issue were organised by Mike during the years he spent in Newcastle.

As discussed, Mike retained his hopes of becoming appointed as Professor, hoping this could be arranged in Newcastle, but the opportunity did not materialise. Then, at the end of 1975, Philip Deverall, a consultant cardiac surgeon at Leeds (Fig. 6), and a good friend of Mike during the period spent training



**Figure 6.**  
*Mike, together with Philip Deverall (left) and Francis Fontan (centre) at a conference during the 1970s.*

at Great Ormond Street, asked Mike if he would consider moving to Guy's Hospital, in London, with the concept of the two of them jointly developing paediatric cardiology and paediatric cardiac surgery in that centre. This was an interesting challenge, as it gave him the stimulus to develop a unit. Thus, in 1976, Mike was interviewed and appointed into the position at Guy's Hospital, to work with Michael Joseph, and set up and develop the department along with an outreach network of clinical connections. Mike moved from Newcastle to Guy's Hospital in February, 1977. There was considerable political pressure to prevent this development, but despite fierce opposition, surgery for infants with congenital cardiac malformations started, with Philip Deverall moving from Leeds to Guy's Hospital in 1978. With the help of charitable grants, a unit for paediatric cardiac intensive care was established, with Mike leading the developments in echocardiography. Paediatric cardiac surgery started slowly, initially with older infants referred from the outreach clinics, and then progressed to younger infants and neonates. Michael Joseph, who worked also at Brompton Hospital, gradually moved more of his patients to the department at Guy's Hospital, thus increasing the workload.

### Progress in London

The move to Guy's Hospital, and the rapid developments in building the unit, provided the trigger Mike may have needed to think about innovations. He made it possible for Lindsay Allan to join his department to investigate prenatal diagnosis of congenital cardiac malformations, even though this possibility had been ridiculed by several of his peers in London. Lindsay, however, borrowed an ultrasound machine, and rapidly obtained images of fetal hearts.

On the back of this initial success, she obtained a Fellowship from the British Heart Foundation to correlate fetal echocardiographic images with pathological specimens, obtaining the necessary pathologic material in collaboration with Bob Anderson, and Jim Wilkinson at Liverpool (Fig. 7). The data from this project was presented by Lindsay at the First World Congress of Paediatric Cardiology, held in London in 1978. A paper was also published on this work, albeit without any references, as none were available at the time!

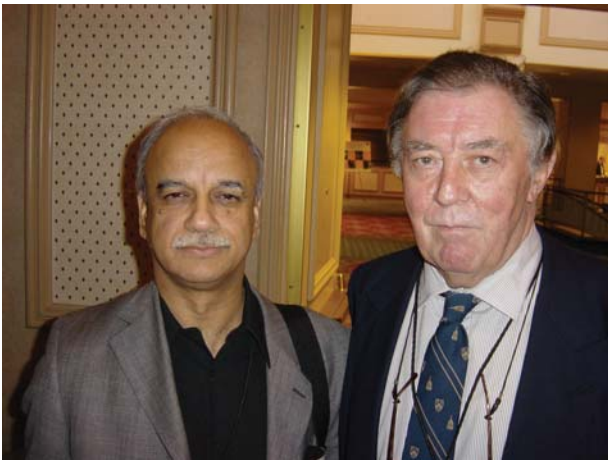
The department at Guy's Hospital then led in several new innovative developments in paediatric cardiology. Mike Tynan introduced to the United Kingdom the projections for angiography in the catheter laboratory developed by Mac Barger, providing better definition of the congenital cardiac lesions. With Lindsay Allan, he introduced balloon atrial septostomy under echocardiographic guidance, performing the procedure initially in the catheterisation laboratory, and later in the intensive care unit. In the meantime, Lindsay continued to develop diagnosis of fetal congenital heart defects. Later on, this led to an autonomous section of fetal cardiology within the department of paediatric cardiology at Guy's Hospital. Joined by a radiologist colleague, John Reidy, Mike introduced catheter closure of coronary arterial fistulas, and embolisation of other congenital cardiac defects. Then, around 1982 or 1983, Mike introduced balloon dilation of pulmonary valvar stenosis. Guy's Hospital was then the only unit in Europe undertaking this procedure, albeit that its usage spread rapidly. In 1982, Mike also achieved his long-standing ambition, being appointed as the Joseph Levy Professor of Paediatric Cardiology at Guy's Hospital.

### Progress as the Professor

In 1984, during a visit to the Armed Forces Institute of Cardiology, Rawalpindi, Pakistan, he met the then unknown Shakeel Qureshi, with whom he subsequently established a formidable partnership in interventional paediatric cardiology (Fig. 8). Although Shakeel was unknown at that time to Mike, he had been taught anatomy as a medical student by Bob Anderson. During the meeting of the World Congress at New York in 1984, Bill Rashkind approached Mike, asking him if he would be interested in closing patent arterial ducts using the Rashkind umbrella device. In early 1985, Mike travelled to Houston to observe Chuck Mullins performing such closures. Then, in late 1985, Mike, with Shakeel, closed the first arterial duct using the Rashkind device in the United Kingdom and Europe. By now, the techniques of balloon dilation for pulmonary and aortic valves, and embolisation of other congenital cardiac



**Figure 7.**  
*Mike in a heated debate over a drink with Jim Wilkinson.*



**Figure 8.**  
*The formidable team – Mike with Shakeel Qureshi.*

lesions, were progressing rapidly in the unit. His fame as a proponent of interventional catheterisation spread rapidly, and he travelled to various centres in Europe and the rest of the world, introducing the technique of ductal closure with the Rashkind umbrella.

Then, in 1987, at the invitation of the Ministry of Public Health, he travelled to Cuba, to develop the programme of prenatal detection of congenital cardiac disease. This stimulated the Cuban Government to establish a network of prenatal detection, and Mike was appointed an Advisor to the Ministry of Public Health of the Republic of Cuba. He made several visits over the years to Cuba, during one of which he enjoyed 2 hours of intensive exchange of views with Fidel Castro on the subject of the Cuban health service. Fidel gave Mike many gifts, including a large collection of Cohiba cigars, a briefcase, and a hand-bag made of alligator skin. On his return, at Heathrow Airport, he declared these goods to the customs officer. Asked

from where he had obtained them, Mike replied, "They are a present from Fidel Castro!" The bemused customs officer, acknowledging that this was the most far-fetched excuse he had been given during his working life, allowed Mike to proceed without paying any duty!

By the late 1980s, Lindsay Allan had collected considerable amount of data on aortic stenosis in the fetus, emphasising the poor outcome associated with this lesion. Mike and Lindsay decided, therefore, to attempt to dilate the aortic valve in the fetus. This was done in collaboration with the obstetrician, Daryl Maxwell, but the first attempt, using a balloon designed for use in coronary arteries, failed. At this time, Mike met Allen Tower, later to become President of NuMed Inc, who was seeking a new area for the development of balloon catheters. It was Allen who produced the first balloons, which were used in 3 subsequent procedures in fetuses with critical aortic stenosis. One of these patients is the longest survivor of fetal aortic valvoplasty in the world. From here, the collaboration with Allen Tower blossomed, leading to the development of a balloon specifically for use in paediatric cardiology, the Tyshak balloon, which is now used all over the world.

### Progress into the 1990s

By now, Mike had been joined at Guy's by Shakeel Qureshi, who had moved in 1988 from a consultant post in Liverpool. This partnership paid huge dividends in terms of the development of interventional catheterisation. They developed and introduced laser and radiofrequency valvotomy for pulmonary atresia, performing the first such procedure in the world in 1990. They also developed the technique of closing the patent arterial duct with controlled-release coils. Mike was instrumental in introducing closure of defects in the oval fossa in the United Kingdom and Europe using the Cardioseal device, and also established a European Registry of closure of the arterial duct by interventional techniques.

During the late 1980s and early 1990s, Mike had also been deeply involved with some of his other colleagues in London in producing a new Textbook of Paediatric Cardiology, which was to become one of the main reference books for the specialty. The period that followed, extending to the late 1990s, was a time of consolidating many old and new interventional techniques, and promoting their use in developing units. A good example of this fruitful collaboration is that established with the unit for paediatric cardiology in Warsaw, which is now one of the most active interventional centres in Europe.

During this period, Mike was invited to give many lectures, and attended many conferences all

around the world. Amongst these, he was invited in 1991 to give the Lela and Benjamin Gasul Memorial Lecture, at Cook County Children's Hospital, in Chicago, and in 1992, the 25th Edgar Mannheimer Lecture at the annual meeting of the Association for European Paediatric Cardiology, held that year in Berlin. He made many documentaries and educational programmes for the television. His contribution to the specialty was recognised by the conferral, in 1998, of the Outstanding Achievements Award at the Paediatric Interventional Cardiology Symposium in United States of America. He was the Chairman of the Working Group in Interventional Cardiology of the Association for European Paediatric Cardiology, when this was established, became a Fellow of the European Society of Cardiology, was appointed Vice President of the British Paediatric Cardiac Association in 1991, and became its President from 1993 through 1995. He was an Associate Editor of the International Journal of Cardiology from 1981 to 1992, Consulting Editor of the International Journal of Cardiology from 1992 onwards, International Consultant for Cardiology in the Young, Member of the Editorial Board of Modern Paediatric Cardiology, a monograph series published by Churchill Livingstone, Edinburgh, and Member of the Editorial Board of Progress in Paediatric Cardiology. He was a Member of the Research Funds Committee of the British Heart Foundation from 1978 until 1982, Member of the Executive Committee of the Registry for Valvuloplasty and Angioplasty in Congenital Cardiovascular Anomalies from 1984 until 1990, Member of the Fellowships Committee of the British Heart Foundation from 1986 until 1991, and Member of the Cardiology Committee of the Royal College of Physicians of London in 1994.

### What is Mike most proud of?

The period of his working life consisted of challenging, innovative and exciting years. Mike, through his collaborative work and attempts at pushing the frontiers, developed a large number of friends in the world of paediatric cardiology. The interventional era of the mid-1980s and 1990s was an exciting part of his career. Not only was there excitement in the new procedures, there was also the pleasure of developing a network of friends. He was one of the earliest to work with these friends in their own catheterisation laboratories around the world, leading to workshops in interventions in all parts of the world, thus taking the techniques to the local patients and clinicians. This further cemented friendships, which he values highly even now. Many patients continued to express their gratitude to him to this day, even though Mike is amazed at this, because many of these patients were the first to be subjected to new techniques, sort of guinea-pigs.

Mike is proud of having trained a large number of Fellows at Guy's Hospital from all parts of the world, who have gone on to develop the specialty in their own countries. He remembers these Fellows with affection and warmth, as they helped to develop a rigorous and critical approach to evaluation of all the interventional techniques. These fellows have gone on to better things themselves, and have continued to propagate the "Tynan school of training".

Mike feels proud of having been part of an explosion of the new technologies at a later stage of his career, for having helped to develop new approaches to medicine after the age of 50 years, and for having avoided suffering a burnout, something that worried him throughout his early career. He feels that, throughout his life, something new and influential happened at different stages of his career. These included the anatomical era, the abolition of the primitive investigation techniques, the detailed understanding of the anatomy and new imaging techniques, the development of interventions in paediatric cardiology, and analysis of techniques and results more critically than in the past. He is proud of having come into contact with his patients and their parents, and for having been allowed the privilege of helping them with their diseases. He says, "It is the disease that is the enemy, not colleagues".

Mike feels proud of the author of this article, as he feels that were it not for their joint collaboration, he would not have attempted the first laser pulmonary valvotomy in the world. Shakeel joining his department in 1988, provided the uplift Mike needed at that stage of his career, and went on to develop a formidable joint partnership and friendship, which is recognised around the world. Shakeel provided the supporting crutch and moral support in his later career. They had a lot of fun working together. Indeed, Mike remembers one Italian visitor to Guy's Hospital saying, "I have not been to a unit anywhere where there is no overt jealousy". Mike says, "The aim of education is to make people better than yourself quicker than it took you to get there". He cites the units in Warsaw and Gdansk in Poland as the best examples of this. He has had similar collaborations in many other countries, including the Netherlands, France, and Germany, to name but a few in Europe, and many in Asia, the Far East, and in South America.

Mike feels that Bill Rashkind was important in his life and was proud to be his friend. Bill became a supporter and a great friend, providing Mike with strength in the background. He helped push Mike onto the American scene in paediatric cardiology, and Mike became the only European in the first Arterial Duct Registry. As a result, Mike holds Bill in high esteem.



### What is Mike least proud of?

He feels least proud of the selfish pursuit of his career, having to make many personal sacrifices because of the desire to succeed, and he feels that he could have been a more humane and compassionate son, husband, and friend. Although he has lived his life to the full, he regrets getting old, although even in retirement he has continued to maintain contact with the specialty and friends by making educational videotapes and compact discs, and attending interventional meetings around the world.

### Retirement

Mike retired from the National Health Service in September 1999 (Fig. 9), having published 123 peer reviewed papers, 30 chapters, and many review articles. He was pleased to retire, because he felt that he retired at the right time, at the peak of his career, rather than seeing himself on the decline. A lavish retirement party was held for his retirement at the Victoria and Albert Museum in London, at which many famous paediatric cardiologists from around the world attended, as well as many of his former fellows, some of whom had by then become famous themselves.

Mike enjoyed smoking until well after retirement, although he has now given up smoking for over a year. He also loves good wines. Socialising has remained a strength for both Mike and Eirlys in retirement. Mike still travels a good deal to give lectures at various interventional meetings around the world, where he is still invited regularly.

Giving up smoking, however, recently proved disadvantageous to him. In July, 2006, Mike visited Cuba again, and once more was granted an interview with



**Figure 9.**  
*Mike at his retirement dinner.*

Fidel Castro about the Cuban health service (Figs. 10,11). At the end of this meeting, Fidel gave him a box of Cohiba cigars as a gift. Mike confessed that he had stopped smoking, upon which Fidel advised him to give the box to his enemy. Mike has kept the box!

Mike has had a tendency to hypochondriasis for much of his life. One of the best examples is cited by Francis Fontan (Fig. 6). Many years ago, Mike went to Bordeaux for a Teaching Course with Bob Anderson, and stayed at the small chateau owned by Francis in the wine country. Whilst there, Mike drove a hired car, which was obviously a left hand drive. As a result of several factors, he crashed the car into an oncoming car. Because he was wearing a seat belt, he had suffered a seat belt burn on his chest from the deceleration. He was taken to Francis's hospital for a chest x-ray. Probably as a joke, or perhaps to keep Mike fully informed, Francis gave him a paper that he had written on the treatment of transection of the aortic isthmus



**Figure 10.**  
*Mike meeting Fidel Castro in 2006.*



**Figure 11.**  
*Mike in conversation with Fidel Castro in 2006.*

due to deceleration injuries. Mike had a daily chest x-ray. Several days later, he felt faint and had to sit down in the middle of Bordeaux. Having remembered Francis's paper, Mike thought he had developed an aortic transection. So did Bob Anderson! Francis Fontan laughed!

## Conclusion

Throughout his career, Mike has thrived on challenges. I believe he would have achieved considerably less success had everything been handed to him on a plate. The fact that he struggled, and faced challenges, at times against the odds, was one of the main stimuluses for the achievements of his lifetime.

## Bibliography

### Publications

Joint editor: 'Paediatric Cardiology'. Churchill Livingstone, Edinburgh.

The first edition was published in 1987 and the second edition in 2002.

He has written 30 book chapters.

### The following is a list of Editorials he has written

Tynan M. Transposition of the great arteries. Leading Article *Brit Med J* 1976; 1: 1104.

Tynan M. Ebstein's anomaly. Leading article *Brit Med J* 1978; 1; 1303.

Tynan M, Anderson RH. Different lessons from the Darsee affair? *Int J Cardiol* 1984; 5; 9–11.

Anderson RH, Tynan M. The significance of describing separately connections, arterial relationships and infundibular morphology. Editorial Note: Complete Transposition. *Int J Cardiol* 1984; 5: 19–20.

Kastor JA, Anderson RH, Tynan M. Two years old (Editorial note). *Int J Cardiol* 1984; 5: 1–6.

Fry RL, Vlietstra RE, Anderson RH, Kuwae C, Tynan M. The problem of deception within medical science. *Int J Cardiol* 1988; 18: 123–124.

Anderson RH, Tynan M. Tetralogy of Fallot – a centennial review. *Int J Cardiol* 1988; 21: 219–232.

Tynan M. Paediatric cardiology in the first decade of the International Journal. *Int J Cardiol* 1991; 32: 143–148.

Tynan M. Paediatric cardiology: then and now. *Cardiol Young* 1991; 1: 3–10.

Tynan M. The ductus arteriosus and its closure (editorial). *N Engl J Med* 1993; 330: 1015.

### He has published 123 peer-reviewed papers, of which the most Important Published Works are

Tynan M, Gleeson JA. A case of pulmonary atresia with bronchial arteries arising from the subclavians. *Brit Heart J*, 28: 573–576, 1966. (*This was his first publication*)

Tynan M. Survival of infants with transposition of the great arteries following balloon atrial septostomy. *Lancet*, 1: 621–623, 1971. (*His first single author publication*)

Tynan M, Aberdeen E, Stark J. Tricuspid incompetence following the Mustard operation for transposition of the great arteries. *Circulation* 1972; 45 (Suppl I): I111–115.

Tynan M. Haemodynamic effects of balloon atrial septostomy in infants with transposition of the great arteries. *Brit Heart J* 1972; 34: 791–794.

Tynan M. Transposition of the great arteries: Changes in the circulation after birth. *Circulation* 1972; 46: 809–815. (*Quoted by Rudolph in his book*)

Tynan M, Reid DS, Hunter S, Ozme S, Kaye HH, Urquhart W, Davies P. Ejection phase indices of left ventricular performance in infants, children and adults. *Brit Heart J* 1975; 37: 196–202.

Davies P, Dewar J, Tynan M, Ward R. Post natal developmental changes in the length tension relationship of cat papillary muscles. *J Physiol* 1975; 253: 95–102.

Nassar BA, Horrobin D, Tynan M, Manku MS, Davies PA. Seasonal and sexual variations in the responsiveness of rabbit hearts to prolactin. *Endocrinology* 1975; 97: 1008–1011.

Sheridan DJ, Cullen MJ, Tynan M. Post natal ultra structural changes in the cat myocardium: a morphometric study. *Cardiovasc Res* 1977; 11: 536–540.

Tynan M, Becker AE, Macartney FJ, Quero-Jimenez M, Shinebourne EA, Anderson RH. The nomenclature and classification of congenital heart disease. *Brit Heart J* 1979; 41: 544–553.

Sheridan DJ, Cullen MJ, Tynan M. Qualitative and quantitative observations on ultrastructural changes during postnatal development in the cat myocardium. *J Mol Cell Cardiol* 1979; 11:1173–1181.

Allan LD, Tynan M, Campbell S, Wilkinson JL, Anderson RH. Echocardiographic and anatomical correlates in the fetus. *Brit Heart J* 1980; 44: 444–451. (*Fetal cardiology publication with no references*)

Allan LD, Leange R, Wainwright R, Joseph MC, Tynan M. Balloon atrial septostomy under two-dimensional echocardiographic control. *Brit Heart J* 1982; 47: 41–43.

Reidy JF, Baker EJ, Tynan M. Transcatheter occlusion of a Blalock Taussig shunt with a detachable balloon in a child. *Brit Heart J* 1983; 50: 101–103. (*First report of new intervention from Guy's Hospital*)

Tynan M, Baker EJ, Rohmer J, et al. Percutaneous balloon pulmonary valvuloplasty. *Brit Heart J* 1985; 53: 520–524.

Tynan M, Finlay JP, Fontes V, Hess J, Kan J. Balloon angioplasty for the treatment of native coarctation: results of valvoplasty and angioplasty of congenital anomalies registry. *Am J Cardiol* 1990; 65: 790–792.

Reidy JF, Tynan M, Qureshi SA. Embolisation of a complex coronary arteriovenous fistula in a 6 year old: case report. *Brit Heart J* 1990; 63: 246–248.

Maxwell DJ, Allan LD, Tynan M. Balloon aortic valvoplasty in the fetus: a report of two cases. *Br Heart J* 1991; 65: 256–258. (*First report of fetal cardiac intervention*)

Qureshi SA, Rosenthal E, Tynan M, Anjos R, Baker EJ. Transcatheter laser-assisted balloon pulmonary valve dilation pulmonic valve atresia. *Am J Cardiol* 1991, 67: 428–431.

Report of the European Registry (Tynan M). Transcatheter occlusion of persistent arterial duct. *Lancet* 1992, 340: 1062–1066.

Allan LD, Maxwell DJ, Carminati M, Tynan M. Survival after fetal aortic balloon valvoplasty. *Ultrasound Obstet Gynecol* 1995; 5: 90–91.

Magee AG, Brzezinska-Rajszyz G, Qureshi SA. Stent implantation for aortic coarctation and recoarctation. *Heart* 1999; 82: 600–606.

Johnson P, Maxwell DJ, Tynan MJ, Allan LD. Intracardiac pressures in the human fetus. *Heart* 2000; 84: 59–63.

Qureshi SA, Tynan M. Catheter closure of coronary artery fistulas. *J Interv Cardiol* 2001; 14: 299–307.

Tynan M. The murmur of the persistently patent arterial duct, or "The Colonel is going to a dance". *Cardiol Young* 2003 13: 559–562.

Kumar RK, Tynan M. Catheter interventions for congenital heart disease in third world countries. *Pediatr Cardiol* 2005; 26: 241–249.