

Pioneers of Hand Surgery

Hand surgery comprises a body of knowledge that is relatively new. It was developed and has been disseminated through the work and contributions of many great individuals who stem from a variety of disciplines. Recognizing the contributions of these people appropriately is difficult. We have listed the names of those Pioneers who appear in our literature; the purpose of these presentations is to recognize while they are alive the people who have spent their lives to further our specialty.

The Federation considers it entirely appropriate that official praise and commendation be extended to our Pioneers in grateful recognition of their truly exemplary

record of contributions to the field of hand surgery and to people everywhere. This occasion provides us an opportunity to recognize these gentlemen who by their wealth of discoveries have advanced Hand Surgery and vastly improved the lives of thousands of people the world over.

The Council of the International Federation of Societies for Surgery of the Hand has reviewed and discussed a list of these important people, and takes great pleasure in presenting them to you. To recognize a Pioneer for his great contributions enriches all of us.

Alfred B. Swanson, MD

The Giants of Hand Surgery

XVIth Century

Ambroise Paré, Felix Wurtz

XVIIth Century

François G. de Lapeyronie, Bernhard S. Albinus, Pieter Camper

XVIIIth Century

William Heberden, Roland Martin, Dominique J. Larrey, Sir Astley Paston Cooper, Abraham Colles, Sir Charles Bell, Baron Guillaume Dupuytren, Jacques Delpech

XIXth Century

Ernest Weber, Guillaume B.A. Duchenne, George F. Stromeyer, F. Guermontprez, Charles P. Denonvilliers, William J. Little, William Adams, William E. Horner, Theodore Schwann, Filippo Pacini, Wenzel L. Gruber, Sir James Paget, Augustus Volney Waller, Carl von Langer, P.C. Hughier, Alfred B. Garrod, Archibald E. Garrod, Alfred Poland, John R. Wolfe, Karl T. Thiersch, Johann F. A. von Eschmarch, Bernhard von Langenbeck, Henry A. Martin, Silas W. Mitchell, Georg Meissner, Richard von Volkmann, Louis Xavier E. Ollier, Felix

J.C. Guyon, Johann F. Horner, Friedrich D. von Recklinghausen, Maurice Raynaud, Louis A. Ranvier, John Cleland, Edward H. Bennett, Wilhelm H. Erb, Francesco Parona, Jacques L. Reverdin, Friedrich S. Merkel, Otto W. Madelung, Carl Nicoladoni, Otto Sprengel, Santiago Ramón y Cajal, Eduard A. Albert, Pierre Marie, Charles E. Beevor, Henri François Secretan, Sir Robert Jones, Hugh Owen Thomas, Augusta Klumpe, Harold J. Stiles, Erich Lexer

XXth Century

Eugene Apert, Fritz de Quervain, Harvey W. Cushing, Fritz Lange, O. Vulpius, Konrad Biesalski, George C. Perthes, Robert Kienböck, Allen B. Kanel, Vladimir P. Filatov, William Darrach, Jules Froment, Arthur Steindler, Martin Kirschner, Jules Tinel, Sterling Bunnell, Harold D. Gillies, Leo Mayer, Ricardo Finochietto, Archibald H. McIndoe, Herbert Seddon, Fenton Braithwaite, Otto Hilgenfeldt, Frederick Wood-Jones, Sumner L. Koch, Michael L. Mason, Harvey S. Allen, Henry C. Marble, Hugh Auchincloss, Condict W. Cutler, Jr., Arthur Barsky, Emanuel B. Kaplan, Augusto Bonola, A.R. Wakefield, T. Skoog, R. Guy Pulvertaft.

Acknowledged Pioneers

The Third International Congress Tokyo, Japan, November 3, 1986*

Professor Tamikazu Amako, Joseph H. Boyes, MD, Paul W. Brand, CBE, FRCS, Martin Entin, MD, Mario Gonzalez-Ulloa, MD, Marc Iselin, MD, Professor Johan M. F. Landsmeer, J. William Littler, MD, Professor Erik Moberg, Sir Benjamin Rank, H. Graham Stack, FRCS, Sir Sidney Sunderland, Professor Raoul Tubiana, Kauko J. Vainio, MD, Professor Claude Verdan, **J Hand Surg* 1989; 14A(Part 2):342–346

Robert E. Carroll, MD

Dr. Carroll is well known for his efforts in teaching hand surgery in the United States and abroad. He established one of the early formal training programs for hand surgery in the United States. During his career he has visited and taught in many countries. More than 150 physicians from throughout the world have received training as Visiting Fellows with him in New York City.

Graduating in medicine from Yale University, he received training in general surgery and orthopaedic surgery at the Massachusetts General Hospital in Boston, where he came under the tutelage of Henry C. Marble. For a brief period of time he taught at the Harvard Medical School. Following service in the Pacific theater during World War II, he moved to New York City. A year was spent studying with Sterling Bunnell in San Francisco and with Sumner L. Koch, Michael L. Mason, and Harvey S. Allen in Chicago. Returning to The New York Orthopaedic Hospital, a division of Columbia-Presbyterian Medical Center, he established the Division of Hand Surgery. He remained its Chief until 1986. During this tenure, Dr. Carroll helped develop the use of silicone tendons for hand surgery reconstruction. The Hand Service is known for its large experience with congenital hand deformities, tumors, and muscle transplantation.

Dr. Carroll has been honored by membership in the Hand Societies of 16 countries. He was consultant to the United States Navy, United States Air Force, the Veterans Administration, and the United States Public Health Service during his years of active practice. He has been President of the Association of Bone and Joint Surgeons. He was one of the founders and subsequently a President of the New York Society for Surgery of the Hand, as well as a Vice President of the American Society for Surgery of the Hand.

At the present time Dr. Carroll serves as Professor of Clinical Orthopaedic Surgery, Emeritus, at Columbia University and Consultant in Hand Surgery (Orthopaedics) at the Columbia-Presbyterian Medical Center in New York City.

The Fifth International Congress Paris, France, May 25, 1992

Robert E. Carroll, MD, Professor Nils Carstam, Raymond M. Curtis, MD, Adrian E. Flatt, MChir, FRCS, FACS. S. Benjamin Fowler, MD, J. Leonard Goldner, MD, Luis Gómez Correa, MD, Harold E. Kleinert, MD, Douglas W. Lamb, MB, FRCS, Ed, Professor Jenó Manninger, Daniel C. Riordan, MD, Professor Kauko Solonen, Professor Kenya Tsuge

Professor Nils Carstam, MD

Dr. Carstam, a native of Växjö, Sweden, graduated from the University of Lund Medical School. He trained in general surgery at the University of Lund from 1942 to 1949. He was first introduced to hand surgery by Erik Moberg in 1949. He came to the United States in 1950 to study hand surgery under Sterling Bunnell in San Francisco and Sumner Koch, Michael Mason, and Harvey Allen in Chicago. He continued his hand surgery studies with his many colleagues from the American Society for Surgery of the Hand and the British Hand Club. He worked with Graham Stack on a Hand Surgery Bibliography prior to the institution of Medline.

In 1951, he was a Founding Member and Secretary of the Scandinavian Club for Hand Surgery, which was initiated by Erik Moberg. Dr. Carstam later succeeded Dr. Moberg as President. He became Head of the Section of Hand Surgery of the Department of General Surgery at the University Hospital, Malmö, Sweden, in 1951. His graduation thesis, "The Effect of Cortisone on the Formation of Tendon Adhesions and Tendon Healing—an Experimental Investigation in the Rabbit," was presented in 1953. Dr. Carstam became Associate Professor in Hand Surgery at the University of Lund in 1954. In 1962, he became the Head of the first separate Department of Hand Surgery organized in Scandinavia, at the University of Malmö.

Dr. Carstam has been very involved in the organization of hand surgery in Sweden, where it became a recognized specialty in 1969. He was the Scandinavian delegate to the constitutional meeting of the International Federation of Societies for Surgery of the Hand held in Chicago in 1966 and served on several of its committees.

Dr. Carstam was appointed Honorary Professor by the Swedish Government in 1980, Honorary Member of the American Society for Surgery of the Hand in 1971, and of the British Society for Surgery of the Hand in 1982.

Now retired from his hospital position, Dr. Carstam continues to be actively involved in private practice of hand surgery at the Malmö General Hospital in Sweden.

Raymond M. Curtis, MD

Dr. Curtis was born and raised in Missouri. He started medical school at the University of Missouri and later transferred to New York University, where he received his MD in 1939. He then completed a residency in general surgery at Union Memorial Hospital in Baltimore, Maryland.

Following his residency, he served as a Major in the United States Army Medical Corps and came under the tutelage of Sterling Bunnell, the Civilian Consultant in Hand Surgery for the Armed Services, at Letterman Hospital in San Francisco. Upon his discharge from the army in 1947, he returned to Baltimore to the private practice of hand and upper extremity surgery.

During his career he became a renowned teacher and practitioner and was instrumental in developing techniques for the rehabilitation of the stiff hand. He founded the Raymond Curtis Hand Center at Union Memorial Hospital in Baltimore and began the Hand Fellowship program at that institution as Chief of the Division of Hand Surgery. He was Associate Professor of Plastic Surgery and Orthopaedic Surgery at The Johns Hopkins University School of Medicine.

Throughout his career he worked diligently to train U.S. Army hand surgeons for the Department of the Army, working with the Hand Fellowship program at the Walter Reed Army Medical Center, Bethesda, Maryland.

Dr. Curtis received a Merit Service Award from the U.S. Army in 1947, a Citation for Outstanding Service from the President's Committee on Employment of Physically Handicapped in 1955, and an Award of Merit from the Governor's Committee (Maryland) to Promote Employment of the Physically Handicapped in 1955.

Dr. Curtis served as Secretary-Treasurer (1964–1968), Vice President (1968–1970) and President of The American Society for Surgery of the Hand (1970–1971). He was the Sumner L. Koch Lecturer in Chicago in 1969.

Raymond M. Curtis died peacefully on October 10, 1994. He retired from the practice of hand surgery in 1982 but his influence continues on the people whose lives he touched.

Adrian E. Flatt, MA, MD, M Chir, FRCS, FACS

Dr. Flatt was born and educated in England, obtaining his degrees from Cambridge University. His was trained under Sir Reginald Watson Jones in orthopaedics and Professor Pomfret Kilner in plastic surgery. He served the Royal Air Force as a surgeon and was promoted to Squadron Leader (1949–1950). He was appointed Surgeon-in-Charge to all armed forces in Ceylon at the RAF Services Hospital and was a Visiting Consultant to RAF Stations in Ceylon, Malaya, Indochina, and Hong Kong.

Dr. Flatt trained in hand surgery under William J. Littler and Daniel Riordan while on a Fulbright Scholarship in the United States. He later emigrated to the United States when invited by the University of Iowa, where he started a hand surgery fellowship in 1961. During his 22 years in Iowa as Professor of Orthopaedics and Professor of Anatomy, he developed a department that contributed many innovative concepts to both clinical and basic biomechanical research. For the latter, he received the Kappa Delta Award "for outstanding orthopaedic research" from the American Academy of Orthopaedic Surgeons in 1972. After leaving Iowa, he spent 3 years as Clinical Professor of Orthopaedics at Yale University, and from 1982 to 1992 he was Chairman of Orthopaedics at Baylor University Medical Center in Dallas. Throughout his career he has taught anatomy and has trained 50 hand surgeons from 14 countries.

He is a founding member of The Second Hand Club, which later evolved to be the British Society for Surgery of the Hand. He has been Consultant in Hand Surgery to the Surgeon General, United States Air Force. After serving on many committees of the American Society for Surgery of the Hand, he served as President in 1976. *The Journal of Hand Surgery* was founded during his presidency and he was its Editor in Chief from 1980 to 1990. He is a Corresponding Editor for the *Journal of Hand Surgery* (British Volume). He was appointed Hunterian Professor of the Royal College of Surgeons in 1962 and Watson Jones Memorial Lecturer in 1986. He lectured in many universities and has received many honors, including Honorary Memberships in Le Groupe d'Etude de la Main, the British Society for Surgery of the Hand, the Venezuelan Hand Society, and the British Association of Plastic Surgeons.

Dr. Flatt is working on revisions of his textbooks, *The Care of Minor Hand Injuries*, *Care of the Arthritic Hand*, and *The Care of Congenital Hand Anomalies*, and plans to return to teaching anatomy.

S. Benjamin Fowler, MD

Dr. Fowler received his premedical education at Vanderbilt University in his native town of Nashville, Tennessee. He graduated from the University of Tennessee School of Medicine, Memphis, in 1937, and did his internship at the Nashville General Hospital. After completing his orthopaedic residency at the Orthopaedic Hospital of Los Angeles, he entered the military.

A true pioneer in hand surgery, Dr. Fowler was in the original group of United States Army Medical Corps Hand Surgeons organized by Sterling Bunnell to treat hand casualties at centers of regional specialization during World War II. While in the United States Army, Major S.B. Fowler was appointed Assistant Chief of Orthopaedic Surgery and Chief of Surgery of the Hand at

Newton D. Baker General Hospital, Martinsburg, West Virginia (1943–1946) and Chief of Orthopaedic Surgery and of Surgery of the Hand at Valley Forge Hospital, Phoenixville, Pennsylvania (1946–1947). While at Valley Forge, he devised a resection arthroplasty method to obtain motion at the metacarpophalangeal joint in cases of ankylosis resulting from direct trauma. The Fowler arthroplasty later gained popularity for the rheumatoid arthritic hand.

In 1945, Dr. Fowler participated with four other military surgeons (J.H. Boyes, R.L. Payne, Jr., D.T. Shaw, and G. Webster) in the basic planning meeting to formulate the American Society for Surgery of the Hand. He became Founding Member and President of the Society (1955). Dr. Fowler was Founding Member of the American Orthopaedic Foot and Ankle Society and President of the Clinical Orthopaedic Society (1965–1966), the American Academy of Orthopaedic Surgeons (1969–1970), Nashville Surgical Society, and Vice President of the American Board of Orthopaedic Surgery (1962–1963).

Dr. Fowler was Associate Editor of the *Journal of Bone and Joint Surgery* (1957–1960), Chairman of the Section on Orthopaedic Surgery of the Southern Medical Association (1955), Chairman of the Ad Hoc Committee of the Food and Drug Administration to study methyl methacrylate (1971), and member of the Secretary's Commission on Medical Malpractice (1972). Dr. Fowler was Medical Director of the Baptist Hospital Rehabilitation Center (1986–1988) and Clinical Professor of Orthopaedic Surgery and Rehabilitation at the Vanderbilt University School of Medicine. He has trained a number of orthopaedic and hand surgeons from several countries in the world, and many of his students have become heads of departments.

J. Leonard Goldner, MD

A native of Omaha, Nebraska, Dr. Goldner received a BA from the University of Minnesota in 1939, and his BS and MD from the University of Nebraska in 1943. He served as a Lieutenant Junior Grade in the United States Navy from 1944 to 1946. He was married to Eunice Kensinger, known as "Ken," on June 3, 1944, and they have two sons, Richard and Steven. Dr. Goldner received his orthopaedic residency training at Duke University Medical Center, Durham, North Carolina (1946–1950) and has been on the Duke Orthopaedic Surgery staff since that time. In 1955, he was selected by the American Orthopaedic Association to tour England and France as an ABC Exchange Fellow. Dr. Goldner served as Chief of the Division of Orthopaedic Surgery at Duke from 1967 through 1984, and was awarded the Distinguished James B. Duke Professorship in 1979.

An internationally recognized orthopaedic surgeon, Dr. Goldner has dedicated his life to teaching orthopaedic

surgery principles. He is especially known for his expertise in the management of cerebral palsy, children's foot deformities, and management of hand, upper extremity, spinal, and pain problems. He has had the unique distinction of serving as President of the American Society for Surgery of the Hand (1969) and the American Orthopaedic Foot and Ankle Society (1979).

He has also served as President of the Southern Medical Association and was President of the American Orthopaedic Association in 1988. In 1967, he was awarded the Physician of the Year Award by the Governor of North Carolina. In 1981, Dr. Goldner received the Distinguished Civilian Service Award from the Secretary of the Army and was honored in ceremonies at Fort Bragg, North Carolina. He has been visiting professor and lecturer at many universities throughout the world, and has over 200 publications to his credit. Dr. Goldner retired from active practice in 1988.

Luis Gómez Correa, MD

Dr. Gómez graduated from the University of Mexico Medical School in 1943 and trained in general surgery, traumatology, and plastic surgery. While appointed surgeon to the slaughter houses of Mexico, he was exposed to many hand trauma cases and developed a keen interest in this field. Starting in 1953, he studied hand surgery under the direction of Mario Gonzalez Ulloa and many visiting professors, including J. William Littler, Michael L. Mason, W.L. White, Bob Chase, Sylvester Carter, Earle Peacock, Eugene Kilgore, and others. Dr. Gómez was appointed general surgeon and plastic surgeon at the La Raza General Hospital (1958) where he took care of severe trauma cases and performed his first successful hand replantation in 1967.

Dr. Gómez played a crucial role in the dissemination of knowledge of hand surgery through Mexico, Central America, and the Caribbean. In association with the Department of Labor Medicine of the Mexican Social Security, he organized a series of hand trauma courses that have been held since 1961 in most major cities of Mexico. He also conducted hand surgery courses throughout most Latin American countries. Dr. Gómez was appointed Professor of Plastic Surgery at La Raza Hospital in 1968 and at the University of Mexico in 1971. He served as Consultant in plastic and hand surgery for the emergency hospitals of Mexico City (1974 to 1976) and has been working as a full-time hand surgeon at the Hospital 20 de Noviembre since 1977.

In 1980, the University of Mexico officially recognized a 1-year hand surgery training program for surgeons who have completed their plastic, general, or orthopaedic surgery residencies. Dr. Gómez, as director, has trained 52 hand surgeons through this program. In cooperation with Luis Badell from Caracas, Venezuela,

he founded the Caribbean Society for Surgery of the Hand in 1968. In 1976, he organized the first Panamerican Congress for Hand Surgery in Mexico City. Dr. Gómez has authored a number of publications on hand trauma and has translated into Spanish a series of hand surgery videotapes made available by the American Society for Surgery of the Hand.

Dr. Gómez was President of the Mexican Society of Plastic Surgeons (1959–1962) and became Honorary Member of the American Society for Surgery of the Hand in 1975. He received the Gold Medal from the Mexican Social Security (1969), was nominated Emeritus Member of the Mexican Academy of Surgeons (1991) and honored as Pioneer Professor by the International Federation of Ibero Latin American Societies of Plastic Surgery.

Harold E. Kleinert, MD

A tireless worker, Dr. Kleinert has distinguished himself in patient care, teaching, and research in all aspects of hand surgery and microsurgery. He helped pioneer the development of microsurgery and microinstruments as applied to specific problems of the hand. His work in primary surgical treatment of flexor tendon injuries transformed treatment of these injuries. He established one of the early hand surgery fellowship programs, where more than 600 surgeons from over 40 countries have been trained; many have become leaders in their fields or heads of their own hand surgery programs in the United States and abroad.

Dr. Kleinert was born in Sunburst, Montana and graduated from Temple University Medical School in Philadelphia in 1946. His internship and residency programs at Grace Hospital in Detroit were the beginning of his interests in the challenging problems of hand and vascular surgery. Moving to Louisville in 1953, he helped establish the University of Louisville School of Medicine's first animal surgical research facility and a hand surgery clinic. In 1960, the Christine Kleinert Fellowship in Hand Surgery Program was begun. Dr. Kleinert has traveled to most countries in the world as a Visiting Professor or Guest Lecturer and has more than 170 publications to his credit.

In 1973, Dr. Kleinert visited China as a member of the American Replantation Mission. In 1976, he served as President of the American Society for Surgery of the Hand. Among his awards and honors are the Scientific Achievement Award from the American Medical Association (1980), the Honorary Award Medal from the American Association of Plastic Surgeons (1980), and the Distinguished Alumni Scientific Achievement Award in Surgery from Temple University School of Medicine (1987). He gave the Sterling Bunnell Memorial Lecture (1978), the Scudder Oration on Trauma at the American College of Surgeons 67th Annual Clinical Congress

(1981), and the Founder Lecture of the American Society for Reconstructive Microsurgery (1986).

Since 1973 he has been a National Consultant in Hand Surgery to the Surgeon General, United States Air Force. He is a retired Colonel of the Kentucky Air National Guard. Dr. Kleinert is currently Clinical Professor of Surgery at the University of Louisville and at Indiana University-Purdue University.

Douglas W. Lamb, MB, FRCS Ed

Mr. Lamb, a native of Edinburgh, Scotland, received his MB and ChB from the University of Edinburgh. He was a Surgeon Lieutenant in the Royal Navy from 1945 to 1947 and became Fellow of the Royal College of Surgeons of Edinburgh in 1948. Following 2 years of general surgery training at the Western General Hospital, Edinburgh, he completed his orthopaedic surgery training at the University of Edinburgh, Royal Infirmary and Princess Margaret Rose Orthopaedic Hospital (1950–1960), where he later served as a Consultant Orthopaedic Surgeon (1960–1988). In 1959, he did an orthopaedic surgery fellowship at the Rancho Los Amigos Orthopaedic Hospital and a hand surgery fellowship with Dr. Joseph Boyes in Los Angeles, California.

Mr. Lamb's appointments with the British Society for Surgery of the Hand have included Founder Member (1969), Honorary Secretary (1969 to 1976), President (1976 to 1977), Member of Council (1978 to 1992), Chairman of the Education and Training Committee (1986 to 1991), and Delegate to the International Federation of Societies for Surgery of the Hand. He has chaired the IFSSH Committees on Rehabilitation—Prosthetics/Orthotics (1979 to 1989) and on Congenital Abnormalities (1979 to 1992), and is Past-President of this prestigious society (1989–1992). Mr. Lamb has been a member of the Overseas Examination Teams to Malaysia, Burma, Hong Kong, and Saudi Arabia. He has served the Royal College of Surgeons of Edinburgh as Member of Council (1978 to 1988), Director of Overseas Doctors Training Scheme (1988 to 1990), and examiner in anatomy, surgery and orthopaedic surgery.

Mr. Lamb is a fellow of the British Orthopaedic Association and Honorary Member of the American, French, South African, and Scandinavian Societies for Surgery of the Hand. His impressive career as a hand surgeon, organizer, educator, and author has included appointments as Chairman of the Editorial Board of the Upper Limb and Hand Series (Churchill Livingstone), and member of the Editorial Committees of *The Journal of Hand Surgery* (British Volume) and of the International Medical Society of Paraplegia.

He has organized the Annual Instructional Course in Surgery of the Hand at the Princess Margaret Rose Orthopaedic Hospital for the past 15 years. He gave the

Founder Lecture of the American Society for Surgery of the Hand (1975), the Charles Bell Lecture (1981), and the Mason Brown Memorial Lecture (1983) at the Royal College of Surgeons, Edinburgh, and the Hugh Owen Thomas Lecture at the University of Liverpool (1984). He received the Farguharson Award for Teaching Anatomy from the Royal College of Surgeons (1984) and the Lawrence Poole Prize for Rehabilitation from the University of Edinburgh (1983). Mr. Lamb has published a number of books on the practice of hand surgery, including paralysis, trauma, flexor tendon injuries, and upper limb deficiencies in children.

Professor Jenó Manninger, MD

Following his graduation from the Medical University of Pécs, Hungary (1942), Professor Manninger specialized in pathology, general surgery and traumatology. He studied hand surgery with Jorg Bohler in Linz, Austria (1959), and with Marc Iselin in Paris (1965). He earned a World Health Organization Scholarship to further his hand surgery studies in the United Kingdom under the direction of H. Graham Stack, R. Guy Pulvertaft, and A.R. Parkes (1967).

Professor Manninger dedicated his career to the development of hand surgery in Hungary. He worked at the National Institute of Traumatology in Budapest from 1948 to 1989, where he was appointed Professor of Traumatology Surgery (1972), and later Chairman of the Traumatology Surgery Department and Director of the Institute (1978–1989). He established the first Department for Surgery of the Hand in Hungary (1959), which was one of the first to evolve in the old eastern European nations. In 1962, he organized a series of 3-week Hand Surgery courses, which he directed yearly at the Institute for 25 years. These courses offer simultaneous translation and to this day are heavily attended by surgeons from neighboring European countries.

Professor Manninger was President of the Section for Surgery of the Hand of the Hungarian Society for Traumatology (1978–1986) and President of the Society (1986–1991). He has published 160 articles in scientific journals and chapters in four textbooks. He is a member of the Hungarian Societies for Surgery, Traumatology Surgery and Hand Surgery, of the German and French Societies for Surgery of the Hand and of the Austrian Society for Traumatology Surgery.

Professor Daniel C. Riordan, MD

Dr. Riordan, clinician professor and author in orthopaedic and hand surgery, has earned recognition for his scientific and humanitarian work in the care of crippled children, patients with leprosy, and arthritic problems in the hand and upper extremity. He pioneered new surgical procedures for hand reconstruction, including

tendon transfers for the paralyzed hand, finger transposition, and resection arthroplasty of the metacarpophalangeal joint.

A native of Vallejo, California, he completed his Medical Doctorate and 1 year of residency in general surgery and orthopaedic surgery at Stanford University School of Medicine, Palo Alto. Dr. Riordan served in the U.S. Army Medical Corps at Valley Forge General Hospital, Phoenixville, Pennsylvania, in the Orthopaedic and Hand Surgery Service under the guidance of Sterling Bunnell (1945 to 1947). He did a preceptorship in Nashville with George Carpenter and S. Benjamin Fowler and went to New York City where he was Resident and Instructor in Orthopaedic Surgery at New York Hospital, Cornell Medical Center (1948–1949).

Dr. Riordan became interested in the care of patients with Hansen's disease at the United States Public Health Service Hospital in Carville, Louisiana, where he did his landmark work and innovative procedures for the paralytic hand. In New Orleans, he was on the Staff of the Southern Baptist Hospital and Touro Infirmary, Senior Visiting Surgeon at the Charity Hospital and Orthopaedic Consultant in Hand Surgery at the U.S.P.H.S. Hospital. Always interested in giving crippled children a brighter future, Dr. Riordan worked with children in New Orleans and in Shreveport through the Handicapped Children's and Shriner's Program. He established a Hand Clinic at the Shriner's Hospital for Crippled Children in Shreveport, which became a major referral center.

Dr. Riordan was Professor of Clinical Orthopaedics at Tulane University and Louisiana State University Schools of Medicine, and trained more than 85 orthopaedic residents. He has authored numerous publications and videotapes, and has lectured in nearly every country of the world. He performed surgery in India, Africa, and South America. He was the United States' Representative to the World Health Organization for Rehabilitation of Leprosy in India (1960) and Visiting Professor in Hand Surgery at the University of Witwatersrand in Johannesburg, South Africa (1970, 1972). He was National Consultant in Hand Surgery for the Surgeon General of the Air Force for over 15 years, and taught at military bases in Europe, Japan, and Vietnam.

Dr. Riordan was an American Orthopaedic Association Traveling Fellow to England in 1955. His memberships include the American Society for Surgery of the Hand (President, 1960), Southern Medical Association (Orthopaedic Chairman, 1960), New Orleans Graduate Medical Assembly (President, 1974), Louisiana Orthopaedic Association (President, 1969), Russel Hibbs Society (President, 1972), American Academy of Orthopaedic Surgeons, and American Orthopaedic Association. He gave the Sterling Bunnell (1966) and the Sumner L. Koch (1968) Memorial Lectures, and received the President's Citation for Meritorious Service on Employment of the Handicapped for the State of

Louisiana (1967) and the Orleans Paris Medical Society Outstanding Physician Award (1990). Dr. Riordan has retired from private practice, but remains committed to his medical work as a consultant and author.

Professor Kauko A. Solonen, MD

Dr. Solonen graduated from the Helsinki University Medical School in 1948, where he completed his specialty training in general and orthopaedic surgery and did 2 years of training in pediatric surgery. In 1955 and 1956, he was a U.N. Fellow in Amputation Surgery and Prosthetics, and studied at several centers in the United States and the United Kingdom. He planned the rehabilitation and prosthetic services for the war veterans with amputations in Finland and helped establish the Rehabilitation Center (Kaskisaari, Helsinki) in 1957, where he remained Chief until 1980. Dr. Solonen was Lecturer and Assistant Professor (1959), and Associate Professor (1960 to 1968) at the Helsinki University Clinic for Orthopaedics and Traumatology. In 1964, Dr. Solonen was a Fulbright Fellow in Hand Surgery with Leonard Goldner at Duke University in Durham, North Carolina. He further studied hand surgery at the New York Hospital for Joint Diseases, under the tutelage of Emanuel B. Kaplan. He studied with a number of hand surgeons around the world including Hanno Milesi in Austria and Alfred B. Swanson in Grand Rapids, Michigan.

Dr. Solonen is the father of modern hand surgery in Finland. In 1963, he established the first Department of Hand Surgery in Finland at the Helsinki University Clinic for Orthopaedics and Traumatology, and was head of the department until 1968. He introduced the use of microsurgical techniques for orthopaedic surgery, traumatology, and hand surgery in 1968. He founded the Department of Hand Surgery at the Orthopaedic Hospital of the Invalid Foundation in Helsinki in 1970, and remained Chief of the department until 1984; he was also appointed Head and Surgeon-in-Chief from 1979 to 1984. He was a Founder Member and first President of the Finnish Society for Surgery of the Hand, which was established in 1977. He remained president of the Society until 1984. Dr. Solonen's efforts resulted in the recognition of hand surgery as a specialty in Finland in 1978. He has helped introduce modern shoulder surgery in Finland and became Honorary Member of the European Society for Surgery of the Shoulder and Elbow in 1987. During his energetic career, he trained most of the hand surgeons in Finland.

Dr. Solonen was the Finnish delegate to SICOT from 1980 to 1985, and is Honorary Member of the Finnish and Scandinavian Societies for Surgery of the Hand and of the Finnish Orthopaedic Association. He serves as a member of the editorial board of Finnish hand surgery and orthopaedic journals. Dr. Solonen, a dedicated teacher and lecturer, has published more than 200 scientific articles in various journals and textbooks.

Professor Kenya Tsuge, MD

Professor Tsuge has devoted his career to hand surgery for more than 30 years, treating nearly 10,000 patients and teaching his hand fellows and orthopaedic residents. He has been actively involved in clinical and basic science research covering topics such as congenital malformations, tendon repair and transfers, nerve repair and rheumatoid arthritis.

Born in Okayama, Japan, Professor Tsuge graduated from the Okayama Medical School in 1945, where he became Lecturer (1953) and then Associate Professor (1954). He worked as Dr. Joseph Posch's Hand Fellow at Wayne State University in Detroit in 1958 and 1959. In 1964, he was elected Professor and Chairman of the Department of Orthopaedic Surgery of the Hiroshima University School of Medicine. Professor Tsuge served as President of the Japanese Society of Surgery of the Hand in 1969. He delivered the Founder Lecture, "Treatment of the Established Volkmann's Contracture," at the 28th Meeting of the American Society for Surgery of the Hand (Las Vegas, 1973) and became Honorary Member of the Society. He has been Honorary Member of the South African Society for Surgery of the Hand since 1981.

In 1985, Professor Tsuge was nominated Chairman of the Hiroshima Prefectural Rehabilitation Center, Professor Emeritus of the Hiroshima University, Honorary Member of the Japanese Society for Surgery of the Hand and of the Japanese Orthopaedic Association.

Professor Tsuge authored a Japanese textbook, *Principles and Practices of Hand Surgery* (1965), which is in its fifth edition and has been read by most Japanese hand surgeons. His *Comprehensive Atlas of Hand Surgery* was first published in 1984. The second edition of this textbook was released in 1986 and was translated into English, Italian, German, and Chinese. Emeritus Professor Kenya Tsuge remains active as Chairman of the Rehabilitation Center and teacher of his skills and knowledge.