ROY K. AARON, MD

Roy K. Aaron, M.D. is professor of orthopaedic surgery at Brown Medical School and director of the Brown/Providence VA Center for Restorative and Regenerative Medicine and the Brown Program for Recovery from Trauma. In these capacities, Dr. Aaron is coordinating the development of biological and prosthetic strategies for restoring function after limb trauma, including traumatic amputations. This is a multi-disciplinary effort united by the concept of the "biohybrid limb" which has as its long term goal maximizing biological functions (including neuromuscular control and sensation) and functional articulations (including endo and exoprostheses) with optimized human-prosthetic interfaces.

Dr. Aaron graduated from Lafayette College and SUNY Downstate Medical School. He did an internship in internal medicine at Albert Einstein College of Medicine in New York – Montefiore Hospital and a year of general surgery at the US Public Health Service Hospital, Staten Island, New York. Dr. Aaron then completed a surgical research fellowship at the National Institutes of Health, a residency in the Harvard Orthopaedic Program, and a fellowship in arthritis surgery at the Robert Brigham Hospital in Boston. He then returned to NIH for three years for research in cartilage biochemistry. His current research interests center the physiology of subchondral bone and cartilage in arthritis, and cartilage tissue engineering. The laboratory has been continuously funded for over 20 years by NIH, VA, foundation and industrial sources. His clinical interests include bone circulation and osteonecrosis, and arthroscopy and joint replacement for osteoarthritis.

Dr. Aaron has been on several national and international panels dealing with the treatment of osteonecrosis. He is on the editorial board of the Journal of Arthroplasty. Dr. Aaron is a recipient of a NIH Career Development Award and he has been a member of the NIH Study Section on Orthopaedics and Musculoskeletal Disease and the Committee on Research of the American Academy of Orthopaedic Surgeons. Dr. Aaron chaired the AAOS annual scientific symposium on "Physical Regulation of Skeletal Repair".

GUNNAR B.J. ANDERSSON, MD, PHD

Gunnar B.J. Andersson, MD, PhD is Professor and Chairman, Department of Orthopedic Surgery at Rush University Medical Center. Having been the Chairman for over ten years he has also been the Vice Dean for Surgical Sciences and Services, Senior Vice President of Medical Affairs and President of the Medical Staff, each for two year periods. Dr. Andersson received his M.D. from the University of Göteborg, Sweden, did his residency at Sahlgren University Hospital there and also obtained a Ph.D. in Medical Science at the University of Göteborg in 1974. After a fellowship at the London Hospital he joined the faculty at the University of Göteborg for 10 years. In 1985 he moved to the United States and Rush University Medical Center. His areas of interest are occupational orthopaedics and spine. Dr. Andersson is a member of numerous medical societies and committees, a past president of the Orthopaedic Research Society and the International Society for the Study of the Lumbar Spine, and current Chair of the Research Committee at the American Academy of Orthopaedic Surgeons. He just finished a four year period as a member of the Council of the National Institutes of Arthritis and Musculoskeletal and Skin Diseases at NIH. He has been a member of the US National Safety Council and on the Steering Committee of the National Research Council for the Workshop on Work Related Musculoskeletal Injuries. Dr. Andersson is a member of 15 editorial boards. He is a Deputy Editor for Spine, Editor-in-Chief of Contemporary Spine Surgery and an Associate Editor of Clinical Biomechanics. He is the author of over 220 original articles and over 145 books and book chapters. He was the Senior Editor of the AMA Guides to the Evaluation of Permanent Impairment, 5th Edition (2000).

VADM DONALD C. ARTHUR

Vice Admiral Arthur is the 35th Surgeon General of the Navy and Chief of the Navy's Bureau of Medicine and Surgery, beginning his tenure in August, 2004.

Vice Admiral Arthur, a native of Northampton, Massachusetts, entered naval service in 1974 and attained his Doctor of Medicine degree from the College of Medicine and Dentistry of New Jersey. After a surgical internship, he completed Navy training in Flight Surgery and Undersea Medicine. His additional operational qualifications include Surface Warfare Medical Department Officer, Saturation Diving Medical Officer, Hyperbaric (Recompression) Facility Operator, Radiation Health Officer, Navy-Marine Corps Parachutist & Jumpmaster, and he is qualified in submarines.

Vice Admiral Arthur's early naval service includes research in mixed gas saturation diving and cold weather medicine. He served in the Philippines as both a Flight Surgeon and Diving Medical Officer followed by duty as Senior Medical Officer in USS Kitty Hawk (CV-63). He completed his residency in emergency medicine and served as Head of Emergency Medicine at Naval Hospital San Diego. At the Naval Aerospace Medical Institute, he was Head of the Special Products Division. Following deployment to Southwest Asia with the Marine Corps Second Medical Battalion during Desert Shield/Storm, he served as Director of Medical Programs for the U.S. Marine Corps at Marine Corps Headquarters, Washington, D.C. He then served as Deputy Commander (Chief Operating Officer) of Naval Medical Center, San Diego and, subsequently, as Commanding Officer (Chief Executive Officer) of Naval Hospital Camp Lejeune, NC. In 1998, Vice Admiral Arthur returned to Washington, DC to serve as Assistant Chief for Health Care Operations, Navy Bureau of Medicine and Surgery. He held the positions of Deputy Surgeon General, Vice Chief (Chief Operating Officer) of the Navy's Bureau of Medicine and Surgery, and Chief of the Navy Medical Corps before assuming command of the National Naval Medical Center, Bethesda, Maryland in 2002.

Vice Admiral Arthur attained board certification in Emergency Medicine and Preventive Medicine (Aerospace) and is a Certified Healthcare Executive and Fellow in the American College of Healthcare Executives. He is a Fellow and Past President of the Aerospace Medical Association and member of the Alpha Omega Alpha Honor Medical Society. He was the 2002 recipient of the American College of Healthcare Executives' Federal Excellence in Healthcare Leadership Award and 2002 Association of Military Surgeons of the U.S. Outstanding Federal Healthcare Executive Award.

Vice Admiral Arthur has been awarded the Navy Distinguished Service Medal, four Legions of Merit, three Meritorious Service Medals, three Navy Commendation Medals, and a Navy and Marine Corps Achievement Medal in addition to unit, service, and campaign awards.

COL MARK R. BAGG, MD

Mark R. Bagg, MD, Colonel, U.S. Army Medical Corps, is the Orthopaedic Surgery Consultant to the Surgeon General, U.S. Army, and the Chairman of the Department of Orthopaedics and Rehabilitation at Brooke Army Medical Center (BAMC). Col. Bagg completed his orthopaedic surgery residency and a hand surgery fellowship at Walter Reed Army Medical Center in Washington, D.C. He served at Tripler Army Medical Center in Honolulu, Hawaii, for three years until 1996 when he moved to BAMC.

Col. Bagg has served in Iraq multiple times, where he performed surgeries and inspected the combat support hospitals in Baghdad, Mosul, Tikrit, Balad, and the Marine medical installations in Fallujah.

Col. Bagg is a Fellow of the American Academy of Orthopaedic Surgeons and a member of the American Society for Surgery of the Hand, the Texas Orthopaedic Association, and the San Antonio Orthopaedic Society.

MICHAEL J. BOSSE, MD

Michael J. Bosse, MD is the current President-elect of the Orthopaedic Tauma Association (OTA) and works as a full-time Orthopaedic Trauma surgeon at the Carolinas Medical Center in Charlotte, North Carolina. He graduated form the US Naval Academy and was sent by the Navy to medical school at the University of Maryland. Orthopaedic Residency training was completed at the Naval Medical Center, San Diego. This was followed by a Trauma fellowship at Shock Trauma, then a number of duty station as a Navy Surgeon. He served as the Chief of Orthopaedic Surgery aboard the USNS COMFORT during Desert Shield/Storm. He retired from the Navy Reserve as a Captain.

Dr. Bosse has a number of research interests – extremity trauma and pelvic injury are foremost. He was the Co-PI of the LEAP Study and received the Kappa Delta Award for that research in 2002. The LEAP Study team has numerous clinical and functional outcomes papers related to severe high-energy lower extremity trauma.

GAVIN WILLIAM BOWYER, FRCS (ORTH)

Gavin Bowyer, FRCS (ORTH) is currently a consultant in Trauma and Orthopaedics and Honorary Senior Lecturer at Southampton University Hospitals in the United Kingdom.

Gavin Bowyer was born in London, England in 1960. He graduated in medical sciences at Cambridge University in 1982 and went on to complete his clinical studies at Oxford University, graduating in 1985. Gavin joined the Army, and spent the early part of his training in surgical posts including plastic surgery, surgical oncology, general surgery as well as trauma & orthopaedic surgery in London and in Germany. He served with airborne forces and enjoyed military parachuting and aspects of delivering surgical care in austere environments. His career as a military orthopaedic surgeon included operational tours and deployments to Northern Ireland, South Georgia (sub-Antarctic), Bosnia, Croatia, Macedonia, Kosovo. He was also involved in the teaching and provision of war surgery for the International Committee of the Red Cross including work on the Afghan/Pakistan Border and in the West Bank and Gaza Strip.

Gavin undertook research into ballistic wounds, coupling experimental work with clinical experience on the Afghan border. He published on aspects of this work, and was later awarded a Hunterian Professorship by the Royal College of Surgeons of England for his work in this area. He produced a thesis for the Mastership in Surgery at Cambridge University, gaining this higher degree in 1998. He remained interested in medical care in adverse circumstances, gaining the diploma in Medical Care of Catastrophes, and co-editing the textbook "Conflict & Catastrophe Medicine".

Gavin spent a busy and rewarding year as a Fellow in Orthopaedic Traumatology at the Shock Trauma Center, Baltimore. This experience has shaped his further career, and as a consultant he has maintained a very strong interest in orthopaedic trauma, reconstructive limb surgery and the management of osteomyelitis and the complications of fractures to the limbs, pelvis and acetabulum. He teaches regularly on AO courses and has developed training courses for surgical trainees and operating department personnel. His elective surgery interest is foot and ankle surgery, with a mainly sports-based practice.

Gavin enjoys living on the south coast of England, taking advantage of the sailing and fishing opportunities that the area affords him and his family.

BARBARA D. BOYAN, PHD

Barbara D. Boyan, PhD joined the faculty of the Wallace H. Coulter Department of Biomedical Engineering at Georgia Tech and Emory University in Atlanta, Georgia in 2002 as the Price Gilbert, Jr. Chair in Tissue Engineering. She is also an adjunct professor in the Departments of Orthopaedics and Cell Biology at Emory University and she holds an adjunct professorship in Periodontics at the University of Texas Health Science Center at San Antonio. She is a Georgia Research Alliance Eminent Scholar and deputy director for research at the Georgia Tech-Emory Center for the Engineering of Living Tissue.

A recognized authority on bone mineralization, Dr. Boyan is among the leading researchers working in the area of bone and cartilage cell biology in the field of orthopedic and oral health. She came to Atlanta from the University of Texas Health Science Center at San Antonio, where she served as vice chair for research in the Department of Orthopedics, adjunct professor in the Department of Periodontics, director of the Center for Enhancement of the Biology-Biomaterial Interface, and professor of orthopedics and biochemistry. She is the founder of the Biomedical Development Corp., OsteoBiologics, Inc., both of which are in San Antonio, Texas, and Orthonics, Inc., in Atlanta. Recently, Dr. Boyan founded a new company, Spherigenics. Dr. Boyan is a member of the Board of Directors of Arthrocare, Inc.
Dr. Boyan's research interests involve the mechanism of action of hormones and growth factors in chondrocytes, which form cartilage, and osteoblasts, which are bone-forming cells; the role novel steroid hormone receptors in cancer malignancy; normal and pathologic calcification; tissue engineering; and response of cells to biomaterials.

The author of more than 320 peer-reviewed papers, reviews, and book chapters, Dr. Boyan holds eight U.S. and international patents. She received the 2002 Clemson Award for Contributions to the Literature from the Society for Biomaterials for her research into cell response to material surfaces such as those used in implants and tissue engineering. She is a past-president of the American Association for Dental Research, a member of the American Academy of Orthopaedic Surgeons, and a Fellow in the American Association for the Advancement of Science, as well as AIMBE. Dr. Boyan is also an honorary lifetime member of the Alpha Omega International Dental Fraternity. Her research has been funded by the National Institutes of Health, National Science Foundation and industry. She has served as chair of the Orthopaedic Device Panel for the FDA and is presently a member of the National Materials Advisory Board of the National Academies.

Dr. Boyan received her PhD in biology from Rice University in Houston, Texas, in 1974. She also holds a master's degree in comparative biochemistry and physiology and a bachelor's degree in biology, both from Rice University.

MARKO BUMBASIREVIC, MD, PHD

Marko Bumbasirevic, MD, PhD is a Professor of Orthopaedics and Traumatology at the University of Belgrade School of Medicine, and serves as the Director of the Institute for Orthopaedic Surgery and Traumatology at the University Clinical Center in Belgrade.

Dr. Bumbasirevic is a member of the Academy of Medical Sciences. He is also the Chief Coordinator of Yugoslav Association of Orthopaedic Surgery and Traumatology and president of Yugoslav Section for Hand Surgery and Microsurgery. He is a member of the National Committee of SICOT. Dr. Bumbasirevic is also a member of the Editorial Board of Current Orthopaedics, and Romanian Journal for Microsurgery, Associate Editor of Acta Orthopaedica Yugoslavica. He is a member of three international and two national professional societies and serves as a consultant in various arenas.

Dr. Bumbasirevic received his MD and PhD from the University of Belgrade School of Medicine, where he specialized in orthopaedics and traumatology. Dr. Bumbasirevic held a fellowship with the French Institute for Hand Surgery and Microsurgery in Paris, France.

ANDREW R. BURGESS, MD

Andrew R. Burgess, MD is Academic Chairman, Director of Trauma, Orthopaedic Faculty Practice at Orlando Regional Healthcare where he is active in orthopaedic medical education. Dr. Burgess spent 20 years on the faculty of the University of Maryland Medical System and left as Professor and Interim Chair in 2002. In addition, he has been a part of the John Hopkins part-time faculty, most recently as Professor, leaving Hopkins in June, 2004 for his current position at Orlando. Dr. Burgess received his M.D. from Albany Medical College, where he also did his residency. He did two fellowships, one at the R Adams Cowley Shock Trauma Center Maryland Institute for Emergency Medical Services system in Baltimore, Maryland and the other at AO Fellowship Kantonsspital in Chur, Switzerland. In 1983, he was appointed Assistant Professor of Surgery in Orthopaedic surgery at The University of Maryland School of Medicine. Dr. Burgess is a member of numerous medical societies and committees. His affiliations include the Motor Vehicle Safety Research Advisory Committee, The American College of Surgeons and the Orthopaedic Trauma Association where he also served as president in 1999. He has also received many honors and awards throughout his career. Most currently, he was named one of the best doctors in Orlando by Orlando Magazine. He has authored hundreds of articles and book chapters. Dr. Burgess is a nationally-recognized expert in orthopedic trauma who has been active in the research of motor vehicle design and how that design can protect or injure passengers in the event of an accident.

JASON H. CALHOUN, MD, FACS

Jason H. Calhoun, MD, FACS, serves as the Vernon Luck Sr. Distinguished Professor and Chairman of the Department of Orthopaedic Surgery at the University of Missouri-Columbia, leading the department's clinical, educational and research programs. He is founding member and past president of the Musculoskeletal Infection Society and the North American Association for the Study and Advancement of the Methods of Ilizarov. Dr. Calhoun earned his Bachelor of Arts in Philosophy from Union College in Schenectady, N.Y. in 1972, and a Master's degree in Electrical Engineering from the University of Louisville in 1976. He is a 1981 graduate of the University of Louisville Medical School and completed his residency at the University of Texas Medical Branch, Galveston, in 1986.

As chairman of Orthopaedic Surgery at Missouri, Dr. Calhoun leads a department that has doubled in size since his arrival in January 2004, adding specialists in trauma, pediatrics, sports medicine, spine care, upper extremity, and foot and ankle surgery. The department serves the Level One Trauma Service at University Hospital, the region's designated provider of trauma care.

Before coming to Missouri, Dr. Calhoun served as professor and chair of the Department of Orthopedics and Rehabilitation science at the University of Texas Medical Branch in Galveston, Texas, where he built its Osteomyelitis Clinic's international reputation in the treatment of bone and diabetic foot infections and difficult burn and leg deformities.

Dr. Calhoun is the author or co-author of more than 100 peer-reviewed journal articles and more than 50 book chapters, and is co-author of Musculoskeletal Infections (2005), Fractures of the Foot and Ankle (2005) and Application of the Ilizarov Method in Complex Foot and Ankle Disorders (2004). His research, publications, and presentations have been in classification systems, non-surgical treatment, surgical technique, antibiotic beads, Ilizarov Technique, biodegradables and antibiotics for musculoskeletal infections. His research has earned grant funding in excess of $2 million, and he holds three patents related to external fixation and antibiotic delivery.

He is a founding member and past president of the Musculoskeletal Infection Society and serves as chair of the Infection Committee of the American Academy of Orthopaedic Surgeons. Dr. Calhoun also currently serves as chairman of the Graduate Medical Education – Orthopaedic Residency Review Committee. He is certified by the American Board of Orthopaedic Surgery and is an examiner for the American Board of Orthopedic Surgery Oral Exam.

MATTHEW R. CAMUSO, MD

Matthew R. Camuso, MD is an orthopaedic trauma surgeon in the United States Navy. He did his undergraduate training at Princeton University and obtained his MD from Dartmouth Medical School. He completed internship and residency in orthopaedics at the University of Washington in Seattle. He received his advanced training in orthopaedic trauma as a fellow at Harborview Medical Center in Seattle. Dr. Camuso is currently is a member of the staff at the Navy Trauma Training Center at the LA County + USC Medical Center where he helps train surgeons, physicians, nurses and corpsmen how to manage orthopaedic trauma in an austere environment. He holds an appointment as Assistant Professor of Clinical Orthopaedics at the Keck School of Medicine.

DAVID B. CARMACK, MD, LT. COL, MC, USAFR

David B. Carmack, MD, Lt. Col., MC, USAFR entered the United States Air Force after completing his undergraduate degree in Physiology/ Anatomy at the University of California, Berkeley. He then attended the College of Physicians and Surgeons at Columbia University in New York, NY and graduated with this MD in 1992.

Interested in the field of trauma surgery, he did a general surgery internship at Wilford Hall USAF Medical Center in San Antonio, Texas from 1992-1993. During internship, he became focused on orthopaedic surgery, specifically the treatment of the acutely injured with orthopaedic injuries.

After internship, Dr. Carmack was assigned as a Flight Surgeon to the 313th Flight Test Squadron and the 149th Fighter Squadron, Kelly Air Force Base, Texas. He served two years as Chief, Flight Medicine at Kelly Air Force Base, 1993-1995. He was then selected for an orthopaedic surgery residency at Wilford Hall USAF Medical Center.

During his orthopaedic surgery residency, 1995-1999, Dr. Carmack became interested in orthopaedic trauma surgery. He authored research papers in the trauma field, including the biomechanics and the use of external fixators in the deployed military scenario. Additionally, he did research in the selection of entry portals in retrograde femoral nailing. He was selected by the Air Force for an orthopaedic trauma fellowship, and was subsequently selected for a fellowship position at Detroit Receiving Hospital, Detroit, MI under the mentorship of Roy Moed MD, Tracy Watson MD, Dave Karges DO, and Cathy Cramer MD. During his fellowship, 1999-2000, he became interested in the current challenges facing orthopaedics in limb salvage techniques and the use of external fixators as temporary stabilization devices and definitive stabilization devices for fractures and soft tissue injuries.

After completing his fellowship, Dr. Carmack was selected to lead the orthopaedic portion of the United States Military Joint Trauma Training Program at Ben Taub Hospital in Houston, TX. The goal of this program was to increase the readiness of our active duty attending level surgeons to deploy to care for our injured soldiers, marines, sailors, and airmen. By 2001, the number of personnel that needed to be trained in current trauma management practices exceeded the JTTC's capacity. Hence, each branch of the military elected to partner with a nationally/internationally recognized civilian trauma center. R Adams Cowley Shock Trauma Center in Baltimore, MD was selected by the USAF, and in May, 2001, Dr. Carmack was selected to lead the orthopaedic trauma portion of the USAF Center for Sustainment of Trauma and Readiness Skills (AF C-STARS). From 2001-2005, he lead the orthopaedic trauma surgery program for AF C-STARS, and served as a trauma attending for the R Adams Cowley Shock Trauma Center.

During Operation Enduring Freedom and Operation Iraqi Freedom, Dr. Carmack was temporarily assigned at Landstuhl U.S. Military Hospital in Germany, and then later at Al Udeid Air Base in Qatar. Additionally, he served as an orthopaedic trauma consultant at Walter Reed Army Hospital and Bethesda Naval Hospital in Washington D.C. from 2001-2005.

Dr. Carmack completed thirteen years of active duty, promoted to the rank of Lieutenant Colonel, and transitioned the US Air Force Reserve in 2005. He currently is the Medical Director of Orthopaedic Trauma, Eastern Maine Medical Center, Bangor, ME.

GEORGE CIERNY, III, MD

George Cierny, III, MD has been recognized as the first orthopaedic surgeon to apply the principles of oncologic surgery to managing infection in bone, soft tissue and joints. He is internationally renowned for his work in osteomyelitis and limb salvage in the realm of sepsis. Currently accepted treatment protocols are based on the two decade experience with the Cierny-Mader Staging System (1983), articulating treatment with the natural history of the disease.

Educationally, Dr. Cierny received his Bachelors Degree in Bio-Medical science at U.C. Berkley 1969, a Scholarship in experimental Pathology at U.C. Los Angeles 1971 and his Medical Degree at U.C. Los Angeles 1974. Postgraduate work included an Orthopaedic residency at U.T. Dallas 1979, a Musculoskeletal Oncology fellowship at U.FLA. Gainesville 1980 and Sabbatical research on the methods of Ilizarov Distraction Osteo-neogenesis, Lecco/Verona Italy 1990.

Subsequently, his orthopaedic career began with academic positions commenced with Assistant Professor at UT, Galveston 1980-85 and Professor of Orthopaedic Surgery at Emory University, Atlanta 1985-91. Since that time he has been a partner in private practice with Resurgens Orthopaedics at St. Joseph's Hospital in Atlanta, GA.

Dr. Cierny's Medical Society memberships incluce the Musculoskeletal Tumor Society, Musculoskeletal Infection Society (President 2000, 2007), European Bone and Joint Infection Society, ASAMI International, Undersea and Hyperbaric Medicine Society and the Limb Lengthening and Reconstruction Society (President 2007).

Dr. Cierny's research goals are to create a research-based practice in his home town of San Diego, where there are local resident family members. His wife, Dr. DiPasquale, is an orthopaedic surgeon with a specialty in trauma and osteomyelitis.

THOMAS G. CRABTREE, MD, FACS

LTC (Dr) Thomas G. Crabtree, MD, FACS is an active duty Army plastic and reconstructive surgeon at Tripler Army Medical Center in Honolulu, Hawaii. His surgical practice currently focuses on post traumatic and oncologic reconstruction. He also directs the largest federal Craniofacial Team in the Asia Pacific region. In addition to his plastic surgery responsibilities, Dr Crabtree served as the past medical director and is currently the senior medical advisor to the Center of Excellence in Disaster Management and Humanitarian Assistance of the US Pacific Command. In this capacity Dr Crabtree is responsible for brokering and executing myriad military medical and civil-military medical assistance efforts and programs throughout the Pacific Rim and mainland Asia. Combat tours include a rotation as a trauma surgeon with the United Nations Protection Forces in the former Yugoslavia and a just completed deployment as a trauma and plastic surgeon in Baghdad as part of Operation Iraqi Freedom. His military awards include the Bronze Star, Defense Meritorious Service Medal, Humanitarian Service Medal with 2 oak leaf clusters and multiple UN and Foreign Service decorations. He is past president of the Hawaii Plastic Surgery Society and served on the Board of Governors of the Hawaii Medical Association. He also serves in an advisory capacity on several non profit boards.