MICHAEL J. NUTT Current home: 201 Whispering Brook Drive, Nicholasville, KY 40356 (suburb of Lexington, Kentucky) Cell phone: 901-603-3024 E-mail: mjnutt@hotmail.com

Born September 2, 1948 in Livermore, California Home: Dublin, California 1948-1961 Elementary school: Grades 1-7, Murray Elementary, Dublin, California 1955-1961 Home: Hayden Lake, Idaho 1962-1972 Elementary school: Grade 8, Hayden Lake Elementary, Hayden Lake, Idaho 1962 High School: Grade 9-12, I.H.M. Academy, Coeur d'Alene, Idaho 1963-1966 College: North Idaho College, Coeur d'Alene, Idaho – 1967-1969 - A.A. Engineering Technology Employment: Preliminary survey crew, U.S. Forest Service, Coeur d'Alene, Idaho – summers College: Montana State University, Bozeman, Montana – 1970-1972 - B.S. Mechanical Engineering Technology Work toward M.S. in Experimental Psychology. Employment: B&B Construction Co., Coeur d'Alene, Idaho –summers Crew Chief, Preliminary survey crew, U.S. Forest Service, Libby, Montana - summer Home: Seattle, Washington 1972-1975 Employment: Stack Steel, Seattle, Washington 1972-1975 Sales Representative 1972-1973 Heat Treat Metallurgist 1973-1975 College: University of Washington, Seattle, Washington - 1973-1974 - B.S. Metallurgical Engineering Home: Owensboro, Kentucky 1976-1977 Employment: General Electric Company, Microwave & Imaging Devices, Owensboro, Kentucky 1976-1977 Metallurgical Engineer 1976-1977 College: University of Evansville, Evansville, Indiana - 1977 Work toward M.S. in Engineering Management. Home: Portland, Oregon 1977-1987 Employment: Oregon Steel Mills, Division of Gilmore Steel Corp., Portland, Oregon 1977-1984 Metallurgical Engineer 1977-1979 Supervisor, Metallurgical Services 1979-1980 Plant Metallurgist 1980-1981 Manager, Metallurgical Services 1981-1984 Personal: married Dorothy Hayden Employment: Precision Castparts Corp., Portland, Oregon 1985-1986 Program Manager-Technology Modernization 1985-1986 Employment: TFA, Inc., Portland, Oregon 1986-1987 Sales Engineer 1986-1987 Home: Cordova, Tennessee 1987-2007 (suburb of Memphis, Tennessee) Employment: Wright Medical Technology, Inc. / Dow Corning Wright, Arlington, Tennessee 1987-1998 Plant Metallurgist 1987-1991 Manager, Metallurgical Services 1991-1992 Manager, Orthopedic Research Laboratories and Metallurgical Services 1992-1998 College: University of Arkansas, Fayetteville, Arkansas – 1991-1992 - M.S. Operations Management Employment: Spinal Innovations, Inc., Bartlett, Tennessee 1999 - 2004 Director, Materials Research 1999-2001 Director, Materials Research and Quality Assurance 2001-2004 Employment: Aesculap, Inc., Bartlett, Tennessee (acquired Spinal Innovations, Inc. in 2005) 2005 – 2007 General Manager 2005 - 2007

Home: Nicholasville, Kentucky 2007-present Employment: Intelligent Implant Systems, Charlotte, North Carolina 2007 - present Chief Operating Officer 2007 - present

## PROFESSIONAL

 American Society for Testing and Materials (ASTM International) 1977 - present Past-Chairman, F04.12, Subcommittee on Metallurgical Materials 2003 Leroy Wyman Award recipient 1998 M.O.S.E.S. Award recipient

American Society for Materials (ASM International) 1974 - present

## PUBLICATIONS

"The Application of Ti-15Mo Beta Titanium Alloy in High Strength Structural Orthopaedic Applications", Jablokov, V., Nutt, M., Richelsoph, M., and Freese, H., Symposium on Titanium, Niobium, Zirconium, and Tantalum for Medical and Surgical Applications, ASTM International, Washington, D.C., November 9, 2004.

"Stainless Steels for Medical and Surgical Applications", STP 1438, Gary L. Winters and Michael J. Nutt, editors, ASTM International, West Conshohocken, PA, 2003.

"Mechanical Performance of Mixed-Metal Taper Connections", Boggan, R.S., Carroll, M.C., Merkel, K.D., Nutt, M.J., Fifth World Biomaterials Congress, Toronto, Canada, 1996.

"The Effect of Thermal Process Treatment of Ti6Al4V on the Neck Strength of SLT Femoral Stems", R.S. Boggan, R.D. Paxson, M.E. Carroll and M.J. Nutt, Fourth World Biomaterials Congress, Berlin, Federal Republic of Germany, 1992.

"Scandinavian Lancers Ladle Injection System - Oregon Steel Mills Start-Up", W.J. Bottomley, M.J. Nutt, and V. Kumar, Iron and Steel Engineer, October 1980, pg. 36-40.

## TRAINING

A wide variety of industrial courses in:

- Management: business management, quality control management, management action, critical path techniques, supervision, interpersonal relationships, Teamworks, Just-In-Time manufacturing.
- Quality: ISO 9001 Quality System, Good Manufacturing Practices, statistical process control, liquid penetrant inspection, geometric dimensioning and tolerancing, medical device metrology and standards.
- Testing: elastic-plastic fracture toughness, fracture toughness and fatigue crack growth, wear test selection, fatigue of composites, multiaxial fatigue, fretting fatigue methods and equipment, biocompatibility of particulate implant materials, impact testing applications, medical device performance standards, characterization of polyethylenes, testing spinal implants, modular orthopedic implants, characterization of articular surfaces, performance of bone plates, evaluation of bone grafts and cements.
- Materials: microstructural control, gating and feeding investment castings, welding, wear, metallurgical technology, ladle arc furnace, ladle injection, medical applications of titanium and its alloys, stainless steels, titanium, niobium, zirconium, and tantalum, nanotechnology and medical device materials, surface contamination and cleaning, cleanliness of medical devices, alternative bearing surfaces in total joint replacement, selection and specification of materials.
- Analysis: fractography of modern engineering materials, fractography applications in failure analysis, Designated Investigator training, scanning electron microscopy and x-ray microanalysis, fracture mechanics, x-ray spectrometry fundamentals and advances.
- Safety: Emergency Response personnel certification training, 49 CFR Hazardous Material Handling & Transport certification training.