

**CURRICULUM VITAE of
MICHAEL J. PAPPAS, Ph.D., P.E.
September 9, 2005**

BORN:

Moscow, Russia, December 14, 1932

EDUCATION:

B.S.M.E. New Jersey Institute of Technology 1959
M.S.M.E. New Jersey Institute of Technology 1964
Ph.D. Rutgers, The State University of NJ 1970

PRESENT POSITIONS:

President, Endotec Inc., a small manufacturer of orthopaedic implants since 1991,
Trustee, Biomedical Engineering Trust, an orthopaedic implant development firm since 1985,
Professor Emeritus, New Jersey Institute of Technology since 1990, and
Adjunct Associate Professor of Surgery, University of Medicine and Dentistry of NJ since 1973.

RECENT PAST POSITIONS:

Professor of Mechanical Engineering, New Jersey Institute of Technology since 1964-1990,
Acting Director, Center for Manufacturing Engineering Systems 1987-1990.

LICENSE:

New Jersey Professional Engineering License 14279

ACADEMIC EXPERIENCE:

Developed and taught graduate courses in; Computer Aided Design, Biomechanics of Human Structure and Motion, Analysis and Synthesis in Design, Analytical Methods in Machine Design, Advanced Mechanical Vibrations, and Dynamics of Machinery; and the undergraduate courses in Mechanical Systems Design I and II. Taught undergraduate courses in; Theory of Machines, Machine Design, Mechanical Vibrations, Design Synthesis, Mechanical Engineering Laboratory, Metallurgy, Metallography, Computer Programming and Numerical Analysis, Materials and Manufacturing Processes, Thermodynamics, Strength of Materials, and Statics and Dynamics.

Served as member and chairman of many academic committees, Design Area Course Supervisor, and Faculty Council Representative.

Active in research in; computer aided optimal design, structural design, and orthopaedic biomechanics. Host for Soviet and Chinese Young Faculty Scholars.

DESIGN EXPERIENCE:

Co-developer of; The New Jersey LCS Knee Replacement (sold by DePuy), New Jersey LCS Ankle Replacement (Endotec), N. J. Hip Replacement System (DePuy and Endotec), Self-Aligning Universal Acetabular Component (DePuy), Self-Positioning Universal Acetabular Component (Protek, Endotec), the N. J. Shoulder Replacement System (Endotec), NJ Finger Joint Replacement System (Endotec), Sound-Off gas powered horn series and fire alarm (Falcon Safety Products), exit door alarm (Detex), Lockheed Computing Register (Lockheed Electronics) and many other products.

Active as a design-engineering consultant while at NJIT, Formerly VP of Engineering, Originetics Inc., a small product design firm (1966-78). Sr. Design Engineer, Lockheed Electronics Corp. (1959-64). Sr. Design Draftsman for several job shops (1953-58)

MEMBER OF:

ASME, AIAA, NSPE, ASEE, AAUP, Society for Biomaterials

PUBLICATIONS AND PATENTS:

See attached lists

REFEREED PUBLICATIONS

Buechel, F.F. Sr., Buechel, F.F. Jr., Helbig T.E, D'Alessio J.D., Pappas, M.J., "Two-Twelve Year evaluation of cementless Buechel-Pappas Total Hip Arthroplasty. **Journal of Arthroplasty**, Vol. 19, No. 8 pp 1017-27, Dec 2004

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Pappas M.J., Makris, G., and Buechel, F.F., "Titanium Nitride Ceramic Film Against Polyethylene: a 48 Million Cycle Test", **Clinical Orthopaedics and Related Research**, No. 317, pp 64-70, August 1995.

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Buechel, F.F., and Pappas, M.J. "Survivorship and Clinical valuation of Cementless Meniscal Bearing Total Ankle Replacements", **Seminars in Arthroplasty**, Vol. 3, No. 1, January 1992.

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Cohen, M., Buechel, F.F., and Pappas, M.J., "Meniscal - Bearing Unicompartmental Knee Arthroplasty: An 11-Year Clinical Study", **Orthopaedic Review**, Vol. 20, No. 5, pp. 443-448, May 1991.

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Model for FDA Device Evaluation", **Orthopaedic Review**, Vol. 20, No. 1, pp. 50-55, January, 1991.

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Buechel, F.F. and Pappas, M.J., "Long-term Survivorship Analysis of Cruciate Sparing Vs-Cruciate Sacrificing Knee Prostheses Using Meniscal Bearings", **Clinical Orthopaedics and Related Research**, Vol. 260, Nov. 1990, pp 162-169.

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Nahavandi, A.N., and Pappas, M., " Power Optimization with Prescribed Thermal Pollution ", **Journal of the Power Division**, Proceedings of the ASCE, Vol. 97, No. PO3, July 1971, pp 631-647.

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In addition many reports, most of which are on the above papers, have been widely distributed.

PATENTS

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Pappas, M.J. **U.S. Patent No. 6,238,434 B1**, "Knee Joint Prosthesis with Spinout Prevention" May 29, 2001.

Pappas, M.J. **U.S. Patent No. 6,224,632**, "Prosthesis Fixturing Device" May 1, 2001

Pappas, M.J. **U.S. Patent No. 6,152,960**, "Femoral Component for Knee Endoprosthesis" November 28, 2000.

Hoffman, D.C. and Pappas, M.J. **U.S. Patent No. 6,132,466**, "Temporomandibular Prosthetic Joint", October 17, 2000.

Pappas, M.J. **U.S. Patent No. 6,047,425**, "Fixed Bearing Joint Endoprosthesis", June 13, 2000.

Pappas, M.J. **U.S. Patent No. 5,871,539**, "Fixed Bearing Joint Endoprosthesis", February 16, 1999.

Pappas, M.J. and Buechel, F.F. **U.S. Patent No. 5,868,797**, "Prosthesis Fixturing Device", February 9, 1999.

Buechel, F.F. and Pappas, M.J. **U.S. Patent No. 5,868,796**, "Prosthesis with Biologically Inert Wear Resistant Surface", February 9, 1999.

Buechel, F.F. and Pappas, M.J. **U.S. Patent No. 5,861,042**, "Prosthesis with Biologically Inert Wear Resistant Surface", January 19, 1999.

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Pappas, M.J.: **U.S. Patent No. 5,735,904**, "Spacer for Establishing Prosthetic Gap and Ligamentous Tension", April 7, 1998.

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Pappas, M.J.: **U.S. Patent No. 5,702,461**, "Prosthesis Fixturing Device", December 30, 1997.

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Pappas, M.J. and Buechel, F.F.: **U.S. Patent No. 5,462,548**, "Acetabular Reamer" October 31, 1995.

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Pappas, M., **U.S. Patent No. 3,637,999**, "A Variable Rate Computing and Recording Register", March, 1972.

Three design patents and many related foreign patents have been issued.

In addition several U.S. and foreign patents are now pending.