

**RICHARD L. WIXSON, M.D.**  
**CURRICULUM VITAE**

**EDUCATION:**

B.A., 1968  
M.D., 1972  
Northwestern University  
University of Wisconsin

**INTERNSHIPS AND RESIDENCIES:**

July, 1972 - June, 1973  
July, 1973 - October, 1973  
July, 1974 - June, 1977  
July, 1976 - December, 1976  
**Medical Internship**  
Henry Ford Hospital, Detroit, Michigan  
**Medical Residency**  
Henry Ford Hospital, Detroit, Michigan  
**Orthopaedic Residency**  
Henry Ford Hospital, Detroit, Michigan  
**Chief Resident, Orthopaedics**  
Henry Ford Hospital, Detroit, Michigan

**POST RESIDENCY TRAINING:**

July, 1977 - December, 1977  
January, 1978 - June, 1978  
**Clinical Fellow in Orthopaedics, Hip and Knee Reconstruction**  
Massachusetts General Hospital, Boston, Massachusetts  
**Senior House Officer, Department of Orthopaedic Surgery**  
New England Baptist Hospital, Boston, Massachusetts

**SIGNIFICANT EMPLOYMENT:**

November, 1973 - June, 1974  
**Plant Physician, Chrysler Hamtramck Assembly Plant**  
Hamtramck, Michigan

**ACADEMIC APPOINTMENTS:**

1978 - 1982  
1979  
1982 - 1989  
1984  
1989  
1993  
1995  
2000  
**Instructor, Department of Orthopaedic Surgery**  
Northwestern University Medical School, Chicago, Illinois  
**Medical Advisor, BioEngineering Section, Rehabilitation Engineering**  
Northwestern University Medical School  
**Assistant Professor, Department of Orthopaedic Surgery**  
Northwestern University Medical School  
**Adjunct Professor, Department of Biological Materials**  
Northwestern University Dental School  
**Associate Professor of Clinical Orthopaedics**  
Northwestern University Medical School  
**Adjunct Professor, Department of Basic and Behavioral Sciences**  
Div. of Biological Materials, Northwestern University Dental School  
**Professor of Clinical Orthopaedics**  
Northwestern University Medical School  
**Clinical Professor of Basic and Behavioral Sciences**  
Northwestern University Dental School

**SOCIETY MEMBERSHIPS:**

1978  
1978  
1978  
1981  
1981  
1982  
1982  
1982  
1983  
1983  
1986  
1991  
American Medical Association  
Illinois State Medical Society  
Chicago Medical Society  
Chicago Orthopaedic Society  
Orthopaedic Research Society  
American Academy of Orthopaedic Surgeons  
American Rheumatism Association  
Mid-America Orthopaedic Association  
The Society for Biomaterials  
Illinois Orthopaedic Society  
Clinical Orthopaedic Society  
American Association of Hip and Knee Surgeons

**LICENSURE AND CERTIFICATION:**

July, 1973	State of Wisconsin	License Number 18335
August, 1973	State of Michigan	License Number 32724
July, 1977	State of Massachusetts	License Number 41341
September, 1978	State of Illinois	License Number 36-566781
September, 1979	Diplomate, American Board of Orthopaedic Surgery	

**PATENTS:**

October, 1990	Orthopedic Cement Mixer	No. 4,981,647
May, 1995	Bone Cement Mixing and Loading Apparatus	No. 5,415,474
April, 1996	Orthopedic Implant with Self-Reinforced Mantle	No. 5,507,814
April, 1997	Femoral Resection Instrumentation Including Three-Dimensional Jig and Method of Use	No. 5,624,444
October, 1997	Methods of Making Self-Reinforced Composition of Amorphous Thermoplastics	No. 5,679,299
June 17, 1999	Bone Cement and Method of Preparation	No. NU-9439

**COMMITTEE ASSIGNMENTS:**

1979 - 1981	<b>Utilization Review Committee</b> Northwestern Memorial Hospital
1979 - 2004	<b>Director, Journal Club</b> , Department of Orthopaedic Surgery Northwestern University Medical School
1982 - 1984	<b>Research Committee</b> Northwestern Memorial Hospital
1990 - 1992	<b>Research Committee</b> Northwestern Memorial Hospital
1982 - 1984	<b>Education Committee, Department of Orthopaedic Surgery</b> Northwestern University Medical School
1983 - 2009	<b>Chairman, Resident Research Committee, Dept. of Orthopaedic Surgery</b> , Northwestern University Medical School
1983 - 1984	<b>State Co-Chairman</b> Orthopaedic Research and Education Foundation Development Campaign
1983 - 1985	<b>DRG Liaison Committee</b> Northwestern Memorial Hospital
1984 - 1985	<b>Laser Advisory Committee</b> Northwestern Memorial Hospital
1984 - 1989	<b>Joint Nurse/Physician Practice Committees</b> Northwestern Memorial Hospital
1985 - 1986	<b>Biomedical Engineering of the Research Strategic Planning Task Force</b> , Northwestern University Medical School
1988 - Present	<b>Transfusion Medicine Committee</b> Northwestern Memorial Hospital
1988	<b>Diagnostic &amp; Therapeutic Technology Assessment Panel</b> American Medical Association
1989 - 2005	<b>Medical Record Committee</b> Northwestern Memorial Hospital
1989 - 1999	<b>Editorial Board</b> The Journal of Arthroplasty
1993 - 2004	<b>Coding Committee</b> American Association of Hip and Knee Surgeons
1994 - 1999	<b>Reviewing Committee</b> Journal of the American Academy of Orthopaedic Surgeons

1994- 2004	<b>CPT Coding Committee</b> American Academy of Orthopaedic Surgeons
1994-1995	<b>Chairman, Coding Committee</b> American Association of Hip and Knee Surgeons
1996-1999	<b>Treasurer-Secretary</b> Illinois Orthopaedic Society
1997- 2004	<b>AAOS Representative</b> American Medical Association CPT Advisory Committee
2000	<b>Course Director and Moderator</b> Midwest Clinical Conference Berkheiser Memorial Lecture
2000 - Present	<b>Board of Directors</b> Northwestern Memorial Hospital
2000-2003	<b>Chairman, Coding Committee</b> American Association of Hip and Knee Surgeons
2001 – Present	<b>Professional Standards Committee, Board of Directors</b> Northwestern Memorial Hospital
2003-2005	<b>Board of Directors</b> American Association of Hip and Knee Surgeons

#### **FULL LENGTH PUBLISHED ARTICLES IN REFEREED JOURNALS**

1. Chandler, H.P., Reineck, F.T., Wixson, R.L., McCarthy, J.C.: Total hip replacement in patients younger than thirty years old. *J Bone Joint Surgery*, 63A (9): 1426, 1981.
2. Hendrix, R., Wixson, R.L., Rana, N.A., Rogers, L.F.: Arthrography after total hip arthroplasty: a modified technique used in the diagnosis of pain. *Radiology*, 148, 647, 1983.
3. Farracone, J.L., Wixson, R.L., Lautenschlager, E.P.: The effects of admixture on the strengths of conventional and low-viscosity bone cements. *J Orthopaedic Research*, 1:4, 1984.
4. Lewis, J.L., Askew, M.J. Wixson, R.L., Drasmer, G.M., Tarr, R.R.: The influence of prosthetic stem stiffness and of a calcar collar on stresses in the proximal end of the femur with a cemented femoral component. *J Bone Joint Surgery*, 66A (2): 280, 1984.
5. Askew, M.J., Steege, J.W., Lewis, J.L., Ranieri, J.R., Wixson, R.L.: Effect of cement pressure and bone strength on polymethylmethacrylate fixation. *J Orthopaedic Research*, 1(4): 412, 1984.
6. Wixson, R.L., Lautenschlager, E.P., Novak, M.A.: Vacuum mixing of acrylic bone cement. *J Arthroplasty*, 2(2): 141, 1987.
7. Branson, P.J., Steege, J.W., Wixson, R.L., Lewis, J.L., Stulberg, S.D.: Rigidity of initial fixation with uncemented tibial knee implants. *J Arthroplasty*, 4(1): 21, 1989.
8. Wixson, R.L., Elasky, N., Lewis, J.L.: Cancellous bone material properties in osteoarthritic and rheumatoid total knee patients. *J Orthopaedic Research*, 7(6): 855, 1989.
9. Stulberg, S.D., Stulberg, B.N., Wixson, R.L.: The rationale, design, characteristics and preliminary results of a primary custom total hip prosthesis. *Clinical Orthopaedics Related Research*, 249:79, 1989.
10. Wixson, R.L., Stulberg, S.D., Mehlhoff, M.: The results of cemented, uncemented and hybrid total hips at two to four years: correlation of clinical and radiographic results. *J Bone Joint Surgery*, 73A (2): 257, 1991.

11. Menis, D.L., Gilbert, J.L., Wixson, R.L., Lautenschlager, E.P.: Four-point bend fatigue of Simplex-P and the Simplex-P/bone interface. *Northwestern Dental Research*, 3 (1): 18-9, 1991 Fall.
12. Menis, K.L., Gilbert, J.L., Wixson, R.L., Lautenschlager, E.P.: Uniaxial tensile fatigue of two dental acrylics and Simplex-P bone cement. *Northwestern Dental Research*, 3 (1): 16-7, 1991 Fall.
13. Menis, K.L., Gilbert, J.L., Wixson, R.L., Lautenschlager, E.P.: Fracture and fracture toughness of the Simplex-P cement/bone interface. *Northwestern Dental Research*, 3(1): 15, 1991 Fall.
14. Gilbert, J.L., Bloomfeld, R.S., Lautenschlager, E.P., Wixson, R.L.: A computer based biomechanical analysis of the three dimensional motion of cementless hip prostheses. *J Biomechanics*, 25(4): 329, 1992.
15. Wixson, R.L.: Do we need to vacuum mix or centrifuge cement? *Clinical Orthopaedics Related Research*, 285:84-90, 1992.
16. Menis, K.L., Gilbert, J.L., Wixson, R.L., Lautenschlager, E.P.: Effect of starting notch diameter on fracture toughness. *Northwestern Dental Research*. 3 (2): 24-5, 1992 Summer
17. Feng, E.L., Stulberg, S.D., Wixson, R.L.: Progressive subluxation and polystyrene wear in total knee replacements with flat articular surfaces. *Clinical Orthopaedics Related Research*, 299:60-72, 1994.
18. Wixson, R.L., Kwaan, H.C., Spies, S.M., Zimmer, A.M.: Reinfusion of post-operative wound drainage in total joint replacement: Red blood cell survival and coagulopathy risk. *J Arthroplasty*, Vol 9(4): 351-358, 1994.
19. Delp, S.L., Komattu, A.V., Kocmond, J.H., Wixson, R.L.: Superior displacement of the hip in total joint replacement: Effects of prosthetic neck length, neck-stem angle and anteversion angle on the moment-generating capacity of the muscles. *J Orthopaedic Research*, Vol 12(6), 860-870, 1994.
20. Kolettis, G.T., Wixson, R.L., Peruzzi, W.T., Blake, M.J., Wardell, S., Stulberg, S. D.: Safety of one-stage bilateral total knee arthroplasty. *Clinical Orthopaedics Related Research*, 309:102-109, 1994.
21. Karneszis, T.A., Stulberg, S. David, Wixson, R.L., Reilly, Phillip: The Hemostatic effect of desmopressin on patients who had total joint arthroplasty, *J Bone Joint Surgery*, 76A: 1545-50, 1994.
22. Fragen, R.J., Stulberg, S.David, Wixson, R.L., Glisson, Dr., Librojo.: The effect of keterolac tromethamine on postoperative bleeding and analgesic requirements after total knee arthroplasty. *J Bone Joint Surgery*, 77A: 998-1002, 1995.
23. Delp, S.L., Komattu, A.V., Kocmond, J.H., Wixson, R.L.: How superior placement of the joint center in total hip arthroplasty affects the abductor muscles. *Clinical Orthopaedics Related Research*, 328: 137-146, 1996.
24. Anderson, J., Wixson, R.L., Chang, R., Tsai, Davis, Stulberg, S. David.: Functional outcome and patient satisfaction in total knee patients over the age of seventy-five. *J Arthroplasty*, Vol 11(7): 831-840, 1996.
25. Wixson, R.L., Stulberg, S.D., Puri, L.: Maintenance of proximal bone mass with an uncemented femoral stem. *Journal of Arthroplasty*, 12(4):365-72, 1997.
26. Hasenwinkel, J.M., Lautenschlager, E.P., Wixson, R.L., Gilbert, J.L.: A novel high-viscosity two solution acrylic bone cement: Effect of chemical composition on properties. *Journal of Biomedical Materials Research*, October Vol 47(1), 36-45, 1999.
27. Stern, S.H., Wixson, R.L., O'Connor, D.: Evaluation of the safety and efficacy of Enoxaparin and Warfarin in prevention of deep vein thrombosis after total knee arthroplasty. *J Arthroplasty*, February Vol 15(2), 153-158, 2000.

28. Billote, D.B., Adboue, A.G., Wixson, R.L.: Comparison of acute normovolemic hemodilution and preoperative autologous blood donation in clinical practice.(comment). *Journal of Clinical Anesthesia*, 12 (1):31-5, 2000 February
29. Polymerization shrinkage of bone cement: A potential major source of porosity. *Journal of Biomedical Materials Research* 52 (1): 210-8, 2000 October
30. Billote, D.B., Glisson, Silas N., Green, D., Wixson, R.L.: Efficacy of preoperative autologous blood donation: Analysis of blood loss and transfusion practice in total hip replacement. *Journal of Clinical Anesthesia*, November Vol 12:537-542, 2000
31. Lombardi, A.V., Mallory, T.H., Alexiades, M.M, Cuckler, J.M, Faris, P.M., Kenneth A.J., Keating, M.E, Nelson, C.L, Ranawat, C.T., Williams, J., Wixson, R.L., Hartman, J.F., Capps, S.G., Kefauver, C.A. RN: Short-Term Results of the M<sup>2</sup>-Taper Metal-on-Metal Articulation. December Vol.16, No.8, Suppl 1, 2001
32. Hasenwinkel, J.M., Lautenschlager, E.P., Wixson, R.L. and Gilbert, J.L.: Effect of initiation chemistry on the fracture toughness, fatigue strength, and residual monomer content of a novel high-viscosity, two-solution acrylic bone cement. *Journal of Biomedical Materials Research*, vol. 59, no. 3, 411-421 (March 2002)
33. Puri, L., Wixson, R.L., Stern, S.H., Kohli, J., Hendrix, R.W., and Stulberg, S.D.: Use of helical computed tomography for the assessment of acetabular osteolysis after total hip arthroplasty. *Journal of Bone and Joint Surgery* April Vol.84A, No.4, 609-614, 2002
34. Billotte, D.B., Glisson, S.N., Green, D., Wixson, R.L.: A prospective, randomized study of preoperative autologous donation for hip replacement surgery. *Journal of Bone & Joint Surgery – American* Volume 84-A (8): 1299-304, 2002 August
35. Till, M., Wixson, R.L., Pertel, P.E.: Linezolid treatment for osteomyelitis due to vancomycin-resistant *Enterococcus faecium*. *Clinical Infectious Diseases* 34 (10): 1412-4, 2002 May 15.
36. Stulberg, S.D., Wixson, R.L., Adams, A.D. Hendrix, R.W., Bernfield, J.B.: Monitoring pelvic osteolysis following hip replacement surgery: an algorithm for surveillance. *Journal of Bone & Joint Surgery – American* Volume 84-A Suppl. 2:115-22, 2002
37. Weaver, F.M., Hughes, S.L., Almagor, O., Wixson, R.L., Manheim, L., Fulton, B., and Singer, R.: Comparison of two home care protocols for total joint replacement. *Journal of the American Geriatrics Society*, 51:523-528, 2003
38. Weaver, F.M., Hynes, D., Hopkinson, W., Wixson, R.L., Khuri, S., Daley, J. and Henderson, W.G.: Preoperative risks and outcomes of hip and knee arthroplasty in the Veterans Health Administration. *The Journal of Arthroplasty*, vol. 18, no. 6, 693-708, 2003
39. Wixson R.L., MacDonald, M.A.: Total Hip Arthroplasty through a minimal posterior approach using imageless computer-assisted hip navigation, *The Journal of Arthroplasty*, vol. 20, 6 supp 3, 51-56, 2005
40. Kim, S., Wixson, R.L., Hernandez, J., MacDonald M.A.: Computer Assisted Navigation in Total Knee Replacement: Improved Coronal Alignment. *Journal of Arthroplasty*, vol. 20, 6 supp 3, 123-131, 2005
41. Little, B.S., Wixson, R.L., Stulberg, S.D.: Total Hip Arthroplasty with the Porous Coated Anatomic (PCA) Hip Prosthesis: Results at Eleven to Eighteen Years, *Journal of Arthroplasty* 21(3):338-43, 2006 Apr
42. Puri L., Lapinski B. Wixson RL. Lynch J. Hendrix R. Stulberg SD. Computed Tomographic Follow-Up Evaluation of Operative Intervention for Periacetabular Lysis. *Journal of Arthroplasty*. 21(6 Suppl 2):78-82, 2006 Sep.

43. Wixson, R.L.: Computer-Assisted Total Hip Navigation. AAOS Instructional Course Lectures, Volume 57 2008
44. Lin F., Lim D., Wixson, R.L., Milos S., Hendrix, R.W., Makhous, M.: Validation of a computer navigation system and a CT method for determination of the orientation of implanted acetabular cup in total hip arthroplasty: A cadaver study, *Clinical Biomechanics* 23 (2008) 1004-1011

#### **FULL LENGTH ARTICLES IN NON-REFEREED JOURNALS:**

1. Wixson, R.L.: Joint reconstruction in the aged, Chapter VIII, Topics in geriatric rehabilitation, January and April 1989.
2. Menis, D.L., Gilbert, J.L., Wixson, R.L., Lautenschlager, E.P.: Fracture and fracture toughness of the simplex-p cement\bone interface. *Northwestern Dental Research*, 3(1): 15, 1991
3. Menis, D.L., Gilbert, J.L., Wixson, R.L., Lautenschlager, E.P.: Uniaxial tensile fatigue of two dental acrylics and simplex-p bone cement. *Northwestern Dental Research*, 3(1): 15, 1991
4. Menis, D.L., Gilbert, J.L., Wixson, R.L., Lautenschlager, E.P.: Four-point bend fatigue of simplex-p and the simplex-p/bone interface. *Northwestern Dental Research*, 3(1): 15, 1991

#### **BOOK CHAPTERS:**

1. Wixson, R.L., Lautenschlager, E.P.: Methyl Methacrylate. In The Adult Hip, Editors Callaghan, J.J., Rosenberg, A.G., Rubash H.E., Lippincott-Raven, Philadelphia, 1998.
2. Wixson, R.L.: Ultrasonic Cement Removal. In Revision Total Hip Arthroplasty, Editors Bono, J.V., McCarthy, J.C., Thornhill, T.S., Bierbaum, B.E., Turner, R.H., Springer-Verlag, Heidelberg, 1999
3. Wixson, R.L.: In Navigation and Robotics in Total Joint and Spine Surgery, Editors Stiehl, J.B., Konermann, W.H., Haaker, R.G., Springer-Verlag, Heidelberg, 2004.
4. Wixson, R.L.: Posterior Approach with Minimal Invasive Surgery Utilizing Hip Navigation. In Minimally Invasive Total Joint Arthroplasty, Editors Hozack, W.J., Krismer, M., Nogler, M., Bonutti, P. M., Rachbauer, F., Schaffer, J.L., Donnelly, W.J., 2004

#### **ABSTRACTS:**

1. Wixson, R.L., Chandler, H.P., Reineck, F.T.: Total hip replacement in patients under the age of thirty. 44th Annual Meeting American Academy of Orthopaedic Surgeons, 1978
2. Wixson, R.L., Schock, C., Mathews, T., Parfitt, M.: The presence of osteomalacia in fractures of the hip. *Transactions 24th Annual Meeting Orthopaedic Research Society*, 3:128, 1978
3. Lewis, J.L., Wixson, R.L., Jasty, M., Lew, W.D.: Functioning of the anterior cruciate in surface replacement total knee prosthesis. *Transactions 26th Annual Meeting Orthopaedic Research Society*, 5:306, 1980
4. Lewis, J.L., Jasty, M., Schafer, M., Wixson, R.L.: Functional load directions for the two bands of the anterior cruciate ligament. *Transactions 26th Annual Meeting Orthopaedic Research Society*, 5:307, 1980
5. Lewis, J.L., Kramer, G., Wixson, R.L., Askew, M.J.: Calcar loading by titanium total hip stems. *Transactions 27th Annual Meeting Orthopaedic Research Society*, 6:75, 1981

6. Steege, J.W., Askew, M.J., Ranieri, J.R., Serlett, J., Wixson, R.L.: Cement pressure and bone strength effects on ppma fixation of joint implants. Transaction 29th Annual Meeting Orthopaedic Research Society, 8:229, 1983
7. Ferracane, J.L., Wixson, R.L., Lautenschlager, E.P.: The effects of fat admixture on the strengths of conventional and low viscosity bone cements. Transaction 29th Annual Meeting Orthopaedic Research Society, 8:359, 1983
8. Askew, M.J., Steege, J.W., Lewis, J.L., Raneri, J.R. Serletti, J., Wixson, R.L.: Bone strength effects on pressurized ppma. Transactions 9th Annual Meeting Society for Biomaterials, 6:36, 1983
9. Demarest, V.A., Lautenschlager, E.P., Wixson R.L.: Vacuum mixing of acrylic bone cement. Transactions 9th Annual Meeting Society for Biomaterials, 6:37, 1983
10. Zand, M.S., Santare, M., Lewis, J.L., Wixson, R.L.: Bone cement pressure distribution during insertion of posted tibial components. Transactions 30th Annual Meeting Orthopaedic Research Society, 9:60, 1984
11. Askew, M.J., Lewkowicz, S.C., Lewis, J.L. Hanmer, R.S., Wixson, R.L.: Three-dimensional analysis of the surface replacement hip prosthesis. Transactions 30th Annual Meeting Orthopaedic Research Society, 9:294, 1984
12. Wixson, R.L., Elasky, N., Lewis, J., Klinenberg, E., Vanderby, R., Hanmer, R.: Bone remodeling around an ingrowth implant: animal and finite element models. Transactions 31st Annual Meeting Orthopaedic Research Society, 10:93, 1985
13. Lewis, J.L., Nicola, T., Clech, J.P., Steege, J.W., Wixson, R.L.: Failure processes at the cancellous bone ppma interface. Transactions 31st Annual Meeting Orthopaedic Research Society, 10:144, 1985
14. Wixson, R.L., Lautenschlager, E.P., Novak, M.: Vacuum mixing of methylmethacrylate bone cement. Transactions 31st Annual Meeting Orthopaedic Research Society, 10:327, 1985
15. Lautenschlager, E.P., Wixson, R.L., Novak, N.A.: Fatigue and fracture toughness of simplex-p. Transactions 32nd Annual Meeting Orthopaedic Research Society, 11:118, 1986
16. Steege, J.W., Polizos, T., Lewis, J.L., Wixson, R.L.: Failure mechanisms in ppma around loaded tibial components. Transactions 32nd Annual Meeting Orthopaedic Research Society, 11:355, 1986
17. Wixson, R.L., Elasky, N., Lewis, J.L.: Mechanical properties of proximal tibial cancellous bone in artificial knees. Transactions 33rd Annual Meeting Orthopaedic Research Society, 12:50, 1987
18. Steege, J.W., Lewis, J.L. Keer, L.M., Wixson, R.L.: Crack propagation at the bone cement interface. Transactions 33rd Annual Meeting Orthopaedic Research Society, 12:54, 1987
19. Hamati, F.I., Wixson, R.L., Novak, M.A., Lautenschlager, E.P.: The effect of notching of simplex-p on the fatigue lives of regular vs vacuum-mixed specimens. Transactions 33rd Annual Meeting Orthopaedic Research Society, 12:226, 1987
20. Branson, P.J., Steege, J., Wixson, R.L., Stulberg, S.D.: Rigidity of initial fixation in non-cemented total knee tibial components. Transactions 33rd Annual Meeting Orthopaedic Research Society, 12:293, 1987
21. Wixson, R.L., Stulberg, S.D., Mehlhoff, M.: Results of cemented, uncemented and hybrid total hip replacements at two to four years. 55th Annual Meeting American Academy of Orthopaedic Surgeons, paper 192, 1988.
22. Wixson, R.L., Stulberg, S.D., Mehlhoff, M.: Results of cemented, uncemented and hybrid total hip replacements at two to four years. Mid-American Orthopaedic Association Annual Meeting, 1988

23. Wixson, R.L., Gilbert, J., Bloomfeld, R.: Micromotion in custom designed femoral implants. 2nd Annual Symposium on Custom-Made Prostheses, 1989
24. Menis, D.L., Wixson, R.L., Lautenschlager, E.P.: Fatigue of two dental acrylics and simplex-p bone cement. Transactions 15th Annual Meeting Society for Biomaterials 12:51, 1989
25. Menis, D.L., Wixson, R.L., Gilbert, J.L., Lautenschlager, E.P.: Effect of vacuum mixing on interfacial bone cement fracture toughness. Transactions 16th Annual Meeting Society for Biomaterials, 13:67, 1991
26. Wixson, R.L., Gilbert, J.L., Bloomfeld, R.S., Lautenschlager, E.P., Stulberg, S.D.: Migration and micromotion of custom and pca cementless prostheses in matched cadaveric femurs. 3rd Annual Symposium on Custom-Made Prostheses, 1990
27. Howard, P., Gruen, M.S., Stulberg, S.D., Wixson, R.L., Stulberg, B.N.: Femoral bone response associated with three types of non-cemented total hip replacement vs a cemented total hip replacement. 3rd Annual Symposium on Custom-Made Prostheses, 1990
28. Stulberg, S.D., Howard, P., Wixson, R.L., Stulberg, B.N.: Bone remodeling changes following total hip replacement: custom vs. off the shelf. 3rd Annual Symposium on Custom-Made Prostheses, 1990
29. Wixson, R.L., Bloomfeld, R., Gilbert, J., Stulberg, S.D.: Comparison study of micromotion between anatomic and custom hip femoral component designs. 58th Annual Meeting American Academy of Orthopaedic Surgeons, paper 40, 1991.
30. Gilbert, J.L., Bloomfeld, R.S., Lautenschlager, E.P., Stulberg, S.D., Wixson, R.L.: An in-vitro investigation of the migration and micromotion of custom and off-the-shelf cementless prostheses. Transactions 37th Annual Meeting Orthopaedic Research Society, 16:543, 1991
31. Wixson, R.L., Gilbert, J.S., Stulberg, S.D.: Relationship of custom femoral design to radiographic and actual fit. 4th Annual International Symposium on Custom Prostheses, 1991
32. Stulberg, B., Eberle, R. Bargar, W., Kilgus, D., Kiralti, J., Stulberg, S, Wixson R.L.: Early results on a multi-center study of dxa analysis of proximal femoral remodeling around endoprotheses. 4th Annual International Symposium on Custom Prostheses, 1991
33. Stulberg, S., Wixson, R., Howard, P.: Partially porous coated vs. completely HA coated custom-made press-fit thr: the importance of the ingrowth surface. 4th Annual International Symposium on Custom Prostheses, 1991
34. Stulberg, B.N., Buly, R.L., Howard, P.L., Stulberg, S.D., Wixson, R.L.: Porous coated anatomic acetabular failure: incidence and modes of failure in uncemented total hip arthroplasty. 59th Annual Meeting American Academy of Orthopaedic Surgeons, paper 282, 1992.
35. Wixson, R.L.: Do we need to vacuum mix or centrifuge cement? Definitely yes. 20th Open Scientific Meeting Hip Society, 1992.
36. Wixson, R.L.: The use of custom designed femoral implants in revision surgery: Analysis of failures. Fifth Annual International Symposium on Custom Prostheses, 1992
37. Astion, D.J., Stulberg, B.N., Rimnac, C.M., Stulberg, S.D., Wixson, R.L. Wright, T.M.: Observations from failed PCA acetabular components. Transactions, Society for Biomaterials, Implant Retrieval Symposium, 15:18, 1992

38. Wixson, R.L., Stulberg, S.D., Howard, P., Puri, L.: Clinical and Radiographic results at five to nine years of cemented, ingrowth and hybrid total hips. Second Annual Meeting Association for Arthritic Hip and Knee Surgery, paper 31, 1992
39. Delp, S.L., Komattu, A.V., Wixson, R.L.: Superior displacement of the hip center in total hip arthroplasty: Effects of trochanteric advancement and increasing prosthetic neck length on the moment-generating capacity of the muscles. Transactions, 39th Annual Meeting of the Orthopaedic Research Society, 18.2:435, 1993
40. Feng, E., Stulberg, S.D., Wixson, R.L.: Progressive subluxation and polyethylene wear in total knee replacements with flat articular surfaces. Scientific Meeting of the Knee Society, February, 1993.
41. Wixson, R.L., Stulberg, S.D., Howard, P., Puri, L.: Comparison of cemented, in-growth and hybrid total hips at five to nine years. 11th Annual Meeting of the Mid-American Orthopaedic Association, April 1993.

Note – Abstracts not added to CV after 1993.

#### **SCIENTIFIC EXHIBITS:**

1. Hendrix, R., Wixson, R.L., Rogers, L.F., Rana, N.A.: Diagnosing a loose prosthetic hip component: an improved technique. 49th Annual Meeting American Academy of Orthopaedic Surgeons, New Orleans, Louisiana, 1982
2. Wixson, R.L., Elasky, N., Lewis, J.L., Klinenberg, R. Vanderby, R., Hanmer, R.: Bone remodeling around an ingrowth implant: animal and finite models. 31st Annual Meeting Orthopaedic Research Society, Las Vegas, Nevada, January 1985.
3. Wixson, R.L., Lautenschlager, E.P., Novak, M.: Vacuum mixing of polymethylmethacrylate. 52nd Annual Meeting American Academy of Orthopaedic Surgeons, Las Vegas, Nevada, January 1985.
4. Lautenschlager, E.P., Wixson, R.L., Novak, M.: Fatigue and fracture toughness of simplex-p. 32nd Annual Meeting Orthopaedic Research Society, New Orleans, Louisiana, January 1986.
5. Steege, J.W., Polizos, T., Lewis, J.L., Wixson, R.L.: Failure Mechanisms in ppma around loaded tibial components. 32nd Annual Meeting Orthopaedic Research Society, New Orleans, Louisiana, January 1986.
6. Hamati, F.I., Wixson, R.L., Novak, M.A., Lautenschlager, E.P.: The effect of notching of simplex-p cement on the fatigue lives of regular vs. vacuum-mixed specimens. 33rd Annual Meeting Orthopaedic Research Society, San Francisco, California, January 1987.
7. Wixson, R.L. Stulberg, S.D., Mehlhoff, M.: Results of cemented, uncemented and hybrid total hips at two to four years. 55th Annual Meeting American Academy of Orthopaedic Surgeons, Atlanta, Georgia, February 1988.
8. Wixson, R.L. Stulberg, S.D., Mehlhoff, A comparison of the bone remodeling and radiographic changes between cemented and uncemented total hip replacements. 56th Annual Meeting American Academy of Orthopaedic Surgeons, Las Vegas, Nevada, February 1989.
9. Gilbert, J.L., Bloomfield, R.S., Lautenschlager, E.P., Wixson, R.L.: An in-vitro investigation of the migration and micromotion of custom and off-the-shelf cementless prostheses. 37th Annual Meeting Orthopaedic Research Society, Anaheim, California, March 1991.
10. Delp, S.L., Komattu, A.V., Wixson, R.L.: Superior displacement of the hip center in total hip arthroplasty: Effects of trochanteric advancement and increasing prosthetic neck length on the moment-generating capacity of the muscles. 39th Annual Meeting of the Orthopaedic Research Society, San Francisco, California, February 1993.

11. Feng, E., Stulberg, S. D., Wixson, R.L.: Progressive Subluxation and polyethylene wear in total knee replacement with flat articular surfaces. 60th Annual Meeting of the American Academy of Orthopaedic Surgeons, San Francisco, California, February 1993
12. Karnezis, T.A., Stulberg, S.D., Wixson, R.L., Reilly, P.: The hemostatic effects of desmopressin in total joint arthroplasty: a double blind randomized trial. 61st Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, Louisiana, February 1994.
13. Wixson, R.L., Stulberg, S.D., VanFlandern, G., Puri, L. Maintenance of proximal bone mass with a proximally porous coated, closed fitting, uncemented femoral hip prosthesis: Analysis with DEXA and radiographs. 62nd Annual Meeting American Academy of Orthopaedic Surgeons, Orlando, Florida, February, 1995
14. Wixson, R.L., Stulberg, S.D., Adams, A.D., Hendrix, R. W., Bernfield, J.B. Monitoring Pelvic Osteolysis Following Total Hip Replacement Surgery: An Algorithm for Surveillance. 2002 Annual Meeting American Academy of Orthopaedic Surgeons Dallas, Texas February 2002.
15. Glynn, J., Leung, N., Stulberg, S.D., Brander, V., Wixson, R.L., and Adams, A. Acetabular osteolysis in association with patient-specific femoral implants: radiographic analysis at 6 years. American Academy of Orthopedic Surgeons, New Orleans, Feb 5-9, 2003.

**SCIENTIFIC PRESENTATIONS:**

1. Wixson, R.L., Chandler, H.P.: Long-term follow-up of total hip replacement in the arthrodesed hip. Otto AuFranc Course-Scientific Meeting, Boston, Massachusetts, September 1978.
2. Wixson, R.L., Chandler, H.P.: Conversion of the arthrodesed hip to total hip replacement, a four to seven year follow up. C.L. Mitchell Society, Children's Memorial Hospital, Chicago, Illinois, November, 1978.
3. Wixson, R.L.: Classifications of total knee replacements. Sixth Summer Institute, American Academy of Orthopaedic Surgeons, Chicago, 1980.
4. Wixson, R.L.: Total joint arthroplasty and work rehabilitation. Joint Conference on Occupational Health, Chicago, Illinois, September 1982.
5. Wixson, R.L.: Kinematic knee replacements. Scientific Assembly of the National Medical Association Annual Convention, Chicago, Illinois, 1983
6. Stulberg, S.D., Wixson, R.L., Mackel, A.: The pca hip: early experience. Illinois Orthopaedic Society, St. Charles, Illinois, October 1984.
7. Wixson, R.L. Lautenschlager, E.P., Novak, M: Vacuum mixing of methylmethacrylate bone cement. 31st Annual Meeting Orthopaedic Research Society, Las Vegas, Nevada, January 1985.
8. Wixson, R.L.: Bone remodeling around a hip surface replacement: animal and finite models. Summer Meeting, The Hip Society, Chicago, Illinois, August 1985.
9. Wixson, R.L.: Cemented total hip arthroplasty. Annual Meeting, Illinois Orthopaedic Society, Lincolnshire, Illinois, September 1985.
10. Wixson, R.L.: Current uses of acrylic bone cement in orthopaedic surgery. 38th Annual Conference on Engineering in Medicine and Biology Chicago, Illinois, September 1985

11. Wixson, R.L.: Vacuum mixing of bone cement at total hip replacement: cement vs. cementless, round two. Harvard Medical School Post-Graduate Course, Cambridge, Massachusetts, October 1985.
12. Wixson, R.L. : Hip fractures in the elderly. A lesson in caring, a Geriatric Symposium, Christ Hospital, Oak Lawn, Illinois, October, 1985.
13. Novak, M.A., Wixson, R.L. (co-speaker), Lautenschlager, E.P.: Vacuum mixing of acrylic for provisional dentures. American Association for Dental Research, Washington D.C., March 1986.
14. Wixson, R.L.: Optimized fixation-cemented total knee replacement. Total Knee Replacement Workshop, Harvard Medical School, Cambridge, Massachusetts, May 1986.
15. Wixson, R.L.: Total hip revision arthroplasty comparison of cemented and uncemented complications. Illinois Orthopaedic Society Meeting, Springfield, Illinois, September 1986.
16. Wixson, R.L., Elasky, N., Lewis, J.: Mechanical properties of proximal tibial cancellous bone in arthritic knees. 33rd Annual Meeting Orthopaedic Research Society, San Francisco, California, January 1987.
17. Wixson, R.L.: Non-cemented total hip arthroplasty. The Bone Interface Workshop III: Animal Models of Biological Fixation, Orthopaedic Research Society, Phoenix, Arizona, March 1987.
18. Wixson, R.L.: Cementless revision of total hip with and without allograft. 75th Annual Diamond Jubilee Orthopaedic Society Meeting in conjunction with the Illinois Orthopaedic Society Meeting, Chicago, Illinois, 1987.
19. Wixson, R.L. (co-speaker), Stulberg, S.D.: Biological response to uncemented porous total knee. 75th Annual Diamond Jubilee Orthopaedic Society Meeting in conjunction with the Illinois Orthopaedic Society Meeting, Chicago, Illinois, 1987.
20. Wixson, R.L., Stulberg, S.D., Mehlhoff, M.: Clinical results of cemented, uncemented and hybrid total hip arthroplasty at two to four years. 55th Annual Meeting American Academy of Orthopaedic Surgeons, Atlanta, Georgia, February 1988.
21. Wixson, R.L., Stulberg, S.D., Mehlhoff, M.: Clinical results of cemented, uncemented and hybrid total hip arthroplasty at two to four years. Annual Meeting Mid American Orthopaedic Association, Tucson, Arizona, March 1988.
22. Wixson, R.L.: Contemporary cement technique. Contemporary Concepts in Total Joint Replacement, University of Michigan Medical School, Bermuda, April 1989.
23. Wixson, R.L.: Symposium on revision hip arthroplasty. Missouri State Orthopaedic Association, Osage Beach, Missouri, June 1989.
24. Wixson, R.L., Gilbert, J.S., Bloomfield, R.: Micromotion in custom designed femoral implants. 2nd Annual International Symposium on Custom-Made Prostheses, Chicago, Illinois October 1989.
25. Wixson, R.L.: Clinical use and laboratory evaluation of custom implants. Otto AuFranc Society Meeting, Boston, Massachusetts, October 1989.
26. Wixson, R.L.: Cement use in total knee replacement. University of Washington Course, Sun Valley, Idaho, December 1990.

27. Wixson, R.L.: Blood conservation in total joint surgery; Comparison of micromotion between pca and custom hips; Radiographic evaluation of bone remodeling at common problems in reconstructive surgery of the hip and knee. American Academy of Orthopaedic Surgeons Courses, Chicago, Illinois, May, 1990.
28. Wixson, R.L., Gilbert, J.L., Bloomfeld, R.S., Lautenschlager, E.P., Stulberg, S.D.: Migration and micromotion of the custom and pca cementless prostheses in matched cadaveric femurs. Third Annual International Symposium on Custom-Made Prostheses, Nice, France, October 1990.
29. Wixson, R.L., Bloomfeld, R.S., Gilbert, J., Stulberg, S.D.: Comparison study of micromotion between anatomic and custom hip femoral component designs. 58th Annual Meeting American Academy of Orthopaedic Surgeons, Anaheim, California, March 1991.
30. Wixson, R.L.: Better cement and techniques. Total Knee Replacement-1991, Boston, Massachusetts, April 1991.
31. Wixson, R.L.: Total knee replacement and cement techniques. New England Orthopaedic Society, Lake George, New York, June 1991.
32. Wixson, R.L.: The impact and consideration of dental procedures on patients with artificial joints. Research and Education Foundation of the American Association of Endodontists, Chicago, Illinois, September 1991.
33. Wixson, R.L., Gilbert, J., Stulberg, S.D.: Relationship of custom femoral stem design to radiographic and actual fit. 4th Annual International Symposium on Custom Prostheses, San Francisco, California, October 1991.
34. Wixson, R.L.: Do we need to vacuum mix or centrifuge cement? Definitely yes. 20th Open Scientific Meeting Hip Society, Washington, D.C., February 1992.
35. Wixson, R.L.: The use of custom designed femoral implants in revision surgery: Analysis of failures. Fifth Annual International Symposium on Custom Prostheses, Windsor, England, October 1992.
36. Wixson, R.L.: Evaluation of early remodeling around a custom femoral implant with DEXA. Fifth Annual International Symposium on Custom Prostheses, Windsor, England, October 1992.
37. Wixson R.L., Stulberg, S.D., Howard, P., Puri, L.: Clinical and Radiographic results at five to nine years of cemented, ingrowth and hybrid total hips. Second Annual Meeting Association for Arthritic Hip and Knee Surgery, Dallas, Texas, November 1992.
38. Feng, E., Stulberg, S.D., Wixson, R.L.: Progressive subluxation and polyethylene wear in total knee replacements with flat articular surfaces. Scientific Meeting of the Knee Society, San Francisco, California, February 1993.
39. Wixson, R.L.: Evaluation of bone remodeling around a proximal hydroxyapatite coated custom prosthesis with DEXA. Chicago Total Joint Arthroplasty Seminar, Biomet Instructional Course, Chicago, Illinois, April 1993.
40. Wixson, R.L., Stulberg, S.D., Howard, P., Puri, L.: Comparison of cemented, in-growth and hybrid total hips at five to nine years. 11th Annual Meeting of the Mid-American Orthopaedic Association, Hilton Head, South Carolina, April 1993.
41. Wixson, R.L.: The use of modular and custom components in femoral revision surgery. American Academy of Orthopaedic Surgeons Tutorial Course, May 1993
42. Anderson, J., Wixson, R.L., Chang, R.B., Tsai, D., Stulberg, S.D.: Functional outcome and patient satisfaction in total knee patients over the age of seventy-five. 61st Annual Meeting of American Academy of Orthopaedic Surgeons, New Orleans, Louisiana, February 1994.

43. Kolettis, G.T., Wixson, R.L., Peruzzi, W.T., Blake, M.J., Wardell, S., Stulberg, S.D.: Safety of one-stage bilateral total knee arthroplasty. Scientific Meeting of the Knee Society, New Orleans, Louisiana, February 1994.
44. Wixson, R.L., Maintenance of femoral bone mass with a proximally porous coated, custom designed, uncemented hip prosthesis: Analysis with DEXA. 7th Annual International Symposium on Custom-Made Prosthesis, Rome, Italy, October 1994.
45. Wixson, R.L., Stern, S.H., O'Connor, D.: Evaluation of the safety and efficacy of enoxaparin and warfarin for prevention of deep-vein thrombosis following total knee arthroplasty. 7th Annual Fall Meeting of the American Association of Hip and Knee Surgeons, Dallas, Texas, November 1997.
46. Brander, V., Stulberg, S.D., Wixson, R.L., Puri L.: The impact of activity on outcome after custom Total Hip Arthroplasty. Eleventh Annual Symposium of the International Society for Technology in Arthroplasty, Marseille, France, 1998
47. Bevard, B., Dalton, H.L., Brander, V., Rhee, J., Fuller, S., Stulberg, S.D., Wixson, R.L., Puri L.: The impact of strength, flexibility activity on outcome after custom Total Hip Arthroplasty. Academy of Physical Medicine and Rehabilitation, Seattle, 1998
48. Bevard, B., Dalton, H.L., Brander, V., Rhee, J., Fuller, S., Stulberg, S.D., Wixson, R.L., Puri L.: The impact of strength, flexibility activity on outcome after custom Total Hip Arthroplasty. Association of Academic Physiatrists, Orlando, 1999
49. Wixson, Richard L.: CPT Coding and Documentation Guidelines for Orthopedic Surgeons. American Association of Orthopedic Surgeons, Anaheim, 1999.
50. Wixson, R.L.: Diagnosis and Current Management of Avascular Necrosis. Chicago Medical Society, Midwest Clinical Conference, Chicago, 1999
51. Hasenwinkel, J., Lautenschlager, E., Wixson, R.L., Gilbert, J.: A Novel High Viscosity PMMA Solution Bone Cement: Effect of Chemical Composition on Properties. Orthopaedic Research Society, Anaheim Convention Center, Anaheim, 1999
52. Wixson, R.L.: Cost-Effective Blood Product Use. Excellence in Joint Replacement VI, Rehabilitation Institute of Chicago, Chicago, 1999
53. Wixson, R.L.: Organizing an Integrated Outcomes Database. Excellence in Joint Replacement VI, Rehabilitation Institute of Chicago, Chicago, 1999
54. Wixson, R.L., Billote, D., Green, D.: Efficacy of Preoperative Autologous Donation in Total Hip Replacement A Randomized Controlled Study, Ninth Annual Meeting of the American Association of Hip and Surgeons, DFW Hilton Executive Conference Center, Dallas, 1999.
55. Wixson, R.L.: Orthopaedic Surgery Visiting Professor at the Total Joint Conference at Michigan State University Kalamazoo Center for Medical Studies, October 20, 2000.
56. Wixson, R.L. Design Rationale and Results with a Polished Tapered Cemented Femoral Stem. Total Hip and Knee Arthroplasty: Tools, Techniques, and Controversies. Regal Knickerbocker Hotel, Chicago, May 4-5, 2001.
57. Wixson, R.L. Evaluation of Peri-Acetabular Osteolysis. Total Hip and Knee Arthroplasty: Tools, Techniques, and Controversies. Regal Knickerbocker Hotel, Chicago, May 4-5, 2001.

58. Little, B.E., Leung, N., Glynn, J. Wixson, R.L., Stulberg, S.D., Brander, V. PCA Femoral and Acetabular Ingrowth Hip Arthroplasty: Long-Term Results Fixation, Wear, and Osteolysis in Primary Total Hip. 2002 Annual Meeting American Academy of Orthopaedic Surgeons Dallas, Texas February 2002.
59. Anderson, D.R., Stulberg, S. D., Wixson, R.L., Adams, A., Myo, G., Brander, V., and Bernfield, J.B.: Acetabular shells with screws increase the risk of osteolysis following total hip replacement: a CT based study. American Academy of Orthopedic Surgeons, New Orleans, Feb 5-9, 2003.
60. Wixson, R.L. The Use of Navigation with Extramedullary Instrumentation Surgical Choices and Innovations in Hip and Knee Reconstruction Pinehurst, North Carolina, April 10-12, 2003.
61. Wixson, R.L. Complications with Minimal Approaches. Surgical Choices and Innovations in Hip and Knee Reconstruction. Pinehurst, North Carolina, April 10-12, 2003.
62. Wixson, R.L. Image Free THA-Stryker, Annual Computer Assisted Orthopedic Surgery, Chicago, June 18, 2004.
63. Wixson, R.L., MacDonald, M.A., Imageless Computer Navigated Total Hip Replacement with a Limited Posterior Approach, Annual Computer Assisted Orthopedic Surgery, Chicago, June 18, 2004.
64. S.Kim, Wixson, R.L., Computer Assisted Navigation in Total Knee Replacement – Improved Coronal Alignment, AAHKS, Dallas, November 5-7, 2004.
65. Wixson, R.L., MacDonald, M.A., Total Hip Arthroplasty through a Minimal posterior Approach Using Computer Assisted Hip Navigation, AAHKS, Dallas, November 5-7, 2004.
66. Wixson, R.L., Minimally Invasive (MIS) with Computer Navigation Total Knee and Hip Arthroplasty, Lecture at Department of Orthopaedics and Traumatology, Queen Mary Hospital, The University of Hong Kong, Hong Kong November 19, 2004.
67. Wixson, R.L., Joint Reconstructive Surgery-Total Knee Replacement, The First Symposium on Automation and Computer Aided Orthopaedic Surgery, Hong Kong, November 20-21, 2004.
68. Wixson, R.L., Joint Reconstructive Surgery: Minimally Invasive Surgery (MIS) and Total Joint Replacements, The First Symposium on Automation and Computer Aided Orthopaedic Surgery, Hong Kong, November 20-21, 2004.
69. Wixson, R.L., MacDonald, M.A., Total Hip Arthroplasty Through a Minimal Posterior Approach Using Computer Assisted Hip Navigation, AAOS, Washington, DC, February 23-27, 2005.
70. Wixson, R.L., Are All Femoral Component Designs Applicable to Minimally Invasive Surgery? Fourth Symposium on Joint Preserving and Minimally Invasive Surgery of the Hip, Los Angeles, California June 10-12, 2005