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Chief Technology Officer  
Orthocare Innovations, LLC  
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Clinical Associate Professor  
Department of Rehabilitation Medicine  
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Journal of Prosthetics and Orthotics  
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**1. Personal Data:**

Place of Birth: Seattle, Washington, USA

Data of Birth: April 17, 1963

Citizenship: USA

**2. Education:**

Doctor of Philosophy, (Biomedical Engineering), The Hong Kong Polytechnic University, Department of Health Technology and Informatics, Hong Kong, 2005

Master of Public Health, (Health Economics) University of Washington, School of Public Health and Community Medicine, Seattle, 1997

Bachelor of Science, (Prosthetics & Orthotics) University of Washington, Department of Rehabilitation Medicine, School of Medicine, Seattle, 1986

**3. Postgraduate Training:**

Prosthetics and Orthotics Preceptorship, University College London, Bioengineering Centre, Queen Mary Hospital, London, England 1986

**4. Faculty Positions Held:**

Clinical Associate Professor, University of Washington, Department of Rehabilitation Medicine, 2007-

Associate Professor, Department of Health Technology and Informatics, The Hong Kong Polytechnic University, 2003 –2005

Assistant Professor, Rehabilitation Engineering Centre, The Hong Kong Polytechnic University, 2000 - 2003

Visiting Scholar, Rehabilitation Engineering Centre, The Hong Kong Polytechnic University, 1997-1999

Clinical Instructor, University of Washington, Department of Orthopaedics, 1994 – 2000

Clinical Instructor, University of Washington, Department of Rehabilitation Medicine, 1987 - 2000

**5. Professional Positions Held:**

Chief Technology Officer, Orthocare Innovations LLC, October 2007 to Present

Editor-In-Chief, Journal of Prosthetics and Orthotics, July 2008 to Present

Director of Research, CYMA Corporation, September 2005- September 2007

Core Investigator, Program Studies in Technology for the Elderly and Disabled (TED) The Hong Kong Jockey Club Charities, 2003 – September 2005

Investigator, Rehabilitation Engineering Research Center "Improved Technology Access for Land Mine Survivors" National Institute for Disability and Rehabilitation Research, US Department of Education, 1998 - 2000.

Core Investigator, VA Rehabilitation Research and Development Center for Excellence in Amputation, Prosthetics, and Limb Loss Prevention, US Department of Veterans Affairs, 1997 to 2000

Director, Prosthetics Research Study, Pacific Northwest Research Foundation, Seattle, Washington. 1993 - 2000

Technical Director, Prosthetics Research Center, Orthopedics Institute, Ministry of Labour and Social Affairs, Hanoi, Socialist Republic of Vietnam. 1989 -1996.

Research Prosthetist, Prosthetics Research Study, Pacific Northwest Research Foundation, Seattle, Washington. September 1986 - 1993

## **6. Honors:**

United States National Rehabilitation Week "Special Award for Achievement in Helping The Disabled" (Team Award sponsored by Allied Services), 1994

American Academy of Orthotists and Prosthetists Writing Award, 1986

## **7. Board Certification:**

American Board Certified Prosthetist #CP1629, 1987 - Present

## **8. Current License to Practice:**

State of Washington Licensed Prosthetist #P00000194, 2000 - Present

## **9. Professional Organizations:**

International Society for Prosthetics and Orthotics (Past Member, Board of Directors, US National Member Society)

American Academy of Orthotists and Prosthetists

## **10. Teaching Responsibilities.**

Applied Prosthetics and Orthotics, Research Methods, Rehab 427, University of Washington, 2008

Cost-Effectiveness in Health Technology, REC597 & REC 445, 2005, 100% of teaching responsibilities

Transfemoral Prosthetics, REC 435-436, 1997, 2000-2005, 100% of teaching of responsibilities for lecture and labs.

Transfemoral Prosthetics, REC 430-439, 1997, 2000-2005, 100% of teaching responsibilities for lecture and lab.

Orthopedics, Trauma and Rehabilitation, REC 432, 2004 100% organizer of medical seminar series for allied health students.

Upper Limb Prosthetics, REC 438, 2000-2003, Lecture and lab.

The Bionic Human, REC 200, 2004-2005, Lecturer in Prosthetics

P&O Clinical Attachment, REC353-456, 2000-2005, Supervised 16 students per year in clinical attachments with local hospitals.

Advanced Methods in Prosthetics and Orthotics, REC 479, 1997-2001 100% of teaching responsibilities for lecture and lab in elective course on Computer Aided Design for Prosthetics.

Lower Limb I, Transfemoral Prosthetics, Rehab 420 , University of Washington 1997-1998, 50% of teaching responsibilities for lecture and lab.

### **11. Editorial Responsibilities:**

Editor-In-Chief, Journal of Prosthetics and Orthotics, July 2008- Present

Editor, Journal of Prosthetics and Orthotics, September 2007-July 2008

### **12. Special National Responsibilities:**

Member, Defense Health Board, Subcommittee for the Care of Individuals with Amputations and Functional Limb Loss, Office of the Secretary of Defense, US Department of Defense. General Frederick Franks, Chairman. 2008-present.

Chairman, Scientific Program of the 11th World Congress of the International Society for Prosthetics and Orthotics. 2000 - 2004

Rehabilitation Engineering Research Center Reviewer, Application of Technology for Children with Orthopedic Disabilities, Los Amigos Research and Education Institute, US Department of Education, 1999.

Prosthetics and Orthotics Outcome Measures Committee, American Academy of Orthotists and Prosthetists, 1997-1998

National Automation Research Group, US Department of Veterans Affairs, 1988 - 1990

NIH Special Study Section For Rehabilitation, National Institutes of Health. Bethesda, Maryland. 1991- 1999

### **13. Special Local Responsibilities:**

Human Subjects IRB Member, Faculty of Health and Social Sciences, The Hong Kong Polytechnic University, 2001 - 2003.

Faculty Senate Member, The Hong Kong Polytechnic University, 2000 - 2005.

Research and Development Advisory Board Member, Macle hose Rehabilitation Centre, Sandy Bay, Hong Kong, 2001 to 2005

Research Advisor, Kowloon Hospital Department of Prosthetics and Orthotics, Kowloon, Hong Kong, 2001 – 2004

Division Head Search Committee, Department of Rehabilitation Medicine, University of Washington, 1995-1996

Board Of Directors, Prosthetics Outreach Foundation, Seattle, Washington, 1990 - 2002

Research Animal Care Committee, Pacific Northwest Research Foundation, Seattle, Washington. 1990 - 1997

Faculty Search Committee, Department of Rehabilitation Medicine, University of Washington 1989 - 1990

### **14. Research Funding:**

*Prosthetics Research Study: Clinical and Laboratory Study of Amputation Surgery and Rehabilitation*, US Department of Veterans Affairs, 1993-96, \$2,173,016, Co-PIs: D Boone, G Reiber, D Smith.

*Computer Assisted Design of Therapeutic Footwear for Diabetic Individuals with Insensitive Feet*, Nike Corporation. (SIBCR-REI-03), 1993-94 \$46,589, Co-PIs: D Boone, G Reiber, D Smith

*Development of Foot Scanning Device*, Nike Corporation, 1994-95, \$68,000, Co-PIs: D Boone, G Reiber, D Smith

*Assessment of the Effectiveness of Fabricated Insoles: A Pilot Project*: US Department of Veterans Affairs 1995-96, \$48,900, Co-PIs: D Boone, G Reiber, D Smith

*Development of Prostheses and Services in Vietnam*, US Agency for International Development, The Hemingway Foundation 1993-1996, >\$1,000,000, E Burgess, D Boone

*Quantification of Prosthetic Treatment Outcomes*, US Department of Veterans Affairs, Grant #A2122R, 1997-98, \$207,500, Co-PIs: D Boone, D Smith.

*Investigation of Dynamic Prosthetic Function: Flexibility*, US Department of Veterans Affairs, Grant# A2130R Funding- 1997-98, \$131,205, Co-PIs: D Boone, D Smith.

Development and Pilot Testing of Plantar Ulcer Healing Boot, Dept. of Veterans Affairs, RR&D - A2120R Funding – 1997-98, \$39,233 Co-PIs: D Boone, D Smith.

*Prosthetics Research Studies Contract*, Rehabilitation Engineering Research Center on Improved Technology Access for Landmine Survivors, National Institute for Disability and Rehabilitation Research, Dept. of Education, 1998-2003, \$271,228 - PI: D Boone

*Advanced Biofidelic Lower Extremity (ABLE) Prosthesis* NIH, National Center for Medical Rehabilitation Research - Grant 1 R01 HD 38933-01 PI: M White, Subcontract 00-594 with Prosthetic Research Study, PI, David Boone (2000): \$174,200;

*An Investigation of Prosthesis Malalignment in Transibial Prostheses*, The Hong Kong Polytechnic University, Intramural Research Funds, 2001-2003 HK\$50,000, PI D Boone

*TED: Technology for the Elderly and Disabled*: The Jockey Club Charities, HK\$27,390,000 Funding 2002 – 2005 D Boone, M Zhang (Co-P.I.s for Bioengineering Improvements for Prosthetics)

*Computerized Prosthetic Alignment System, CompAS* NIH, National Center for Medical Rehabilitation Research Grant #R44HD047119: 2005-07, \$800,000, PI D Boone.

*Robotic Prosthesis Alignment System: RoboPAL* NIH, National Center for Medical Rehabilitation Research Grant #R43HD055709 and R44HD055709, 2007-2010, \$848,985 PI D Boone.

*TAMI: Technology Assisted Management of Incontinence*: NIH, National Institute for Nursing Research Grant #R44NR008479, 2008-10, \$764,582, PI D Boone.

*Revolutionizing Prosthetics 2009* – Department of Defense, Defense Advanced Research Projects Agency Primary Contractor: Johns Hopkins University Applied Physics Laboratory, 2008-2010, Contract \$605,000, PI D Boone.

*Research, Education, Science and Technology for Orthopedic Rehabilitation and Economic Development* - EDGE Policy Board, 2008-2010, Grant \$1,600,000, PI D Boone.

## 15. **Bibliography:**

### a) **Manuscripts in Referred Journals:**

BOONE DA, COLEMAN KL. Use of a Step Activity Monitor in Determining Outcomes, *J Prosth Orth*, 18(1S):86-92, 2006.

BOONE DA, COLEMAN KL. Use of the Prosthesis Evaluation Questionnaire. *J Prosth Orth*, 18(1S):68-79, 2006.

LEE WCC, ZHANG M; BOONE D; CONTOYANNIS B . Finite-element analysis to determine effect of monolimb flexibility on structural strength and interaction between residual limb and prosthetic socket. *J Rehabil Res Dev*. 41 (6A,) November/December: 775 — 786 2004.

COLEMAN KL, BOONE DA, LAING LS, MATHEWS DE, SMITH DG. Quantification of Prosthetic Outcomes: Elastomeric Gel Liner with Locking Pin Suspension versus Polyethylene Foam Liner with Neoprene Sleeve Suspension. *J Rehabil Res Dev*, Jul;41(4):591-602, 2004.

SMITH DG, DUMHOLDT E, COLEMAN KL, del AGUILA MA, BOONE DA. Ambulatory activity in men with diabetes: relationship between self-reported and real-world performance-based measures, ., *J Rehabil Res Dev*., 41 (4): 571-579 JUL-AUG 2004.

TSUNG BYS, ZHANG M, FAN YB, BOONE DA, Quantitative Comparison of Plantar Foot Shapes Under Different Weight Bearing Conditions., *J Rehabil Res Dev*. Nov-Dec;40(6):517-526, 2003.

MACKO RF, HAEBNER E, SHAUGHNESSY M, COLEMAN KL, BOONE DA, SMITH GV, SILVER KH: Portable Microprocessor-Based Ambulatory Activity Monitoring in Hemiparetic Stroke Patients., *Medicine and Science in Sports and Exercise*, 34 (3): 394-399 Mar 2002.

COLEMAN KL, BOONE DA, SMITH DG, CZERNIECKI JM, Effect of Trans-Tibial Prosthesis Pylon Flexibility on Ground Reaction Forces During Gait. *Prosthetics and Orthotics International* 25 195-201, 2001.

MAK AF, ZHANG M, BOONE DA. State-of-the-art research in lower-limb prosthetic biomechanics-socket interface: a review. *J Rehabil Res Dev*. Mar-Apr;38(2):161-74, 2001.

FERGASON JR, BOONE DA: Custom Design in Lower Limb Prosthetics for Athletic Activity, *Phys Med Rehabil Clin N Am* Aug;11(3):681-99, 2000

BJORNSON KF, SONG K, COLEMAN K, BOONE D. (2000) Application of the Step Activity Monitor to Define Normal Levels in Children. *Developmental Medicine and Child Neurology* 42(83):23, 2000.

LEGRO MW, REIBER G, del AGUILA M, AJAX MJ, BOONE DA, LARSEN JA, SMITH DG, SANGEORZAN B: Issues of importance reported by persons with lower limb amputations and prostheses. J Rehabil Res Dev, Vol 36, No3, 155-163, 1999.

SMITH DG, EHDE D, LEGRO MW, REIBER GE, DEL AGUILA M, BOONE DA: Phantom Limb, Residual Limb, and Back Pain After Lower Extremity Amputations, Clin Orthop Relat Res, Vol 361, 29-38, 1999.

COLEMAN KL, SMITH DG, BOONE DA, JOSEPH AW, DEL AGUILA MA: Step Activity Monitor: Long-Term, Continuous Recording of Ambulatory Function. J Rehabil Res Dev, Vol 36, No1, 8-18,1999.

LEGRO MW, REIBER G, SMITH DG, DEL AGUILA M, LARSEN J, BOONE DA: Prosthesis Evaluation Questionnaire for persons with lower limb amputations: assessing prosthesis-related quality of life. Arch Phys Med Rehabil, 79(8):931-938, 1998.

JOSEPH AW, BOONE DA, MATHEWS DE, LAING LS, SMITH DG. Lessons Learned from a Successful Experience in Technology Transfer, Technology and Disability, Vol 7, No1/2, 77-84, 1997.

REIBER GE, SMITH DG, BOONE DA, DEL AGUILA M., BORCHERS RE, MATHEWS D, JOSEPH AW, COLEMANESSET KC, BURGESS EM: Design and Pilot Testing of the DAV/Seattle Footwear System for Diabetic Patients with Foot Insensitivity. J Rehab Res Dev, Vol 34 No 1, 1-8, January 1997.

SMITH DG, HORN P, MALCHOW D, BOONE DA, REIBER GE, HANSEN ST: Prosthetic History and Functional Outcome of the Isolated Traumatic Below-Knee Amputee. Journal of Trauma: Injury, Infection, and Critical Care, Vol 38, No 1, 44-47, 1995.

BORCHERS RE, BOONE DA, JOSEPH AW, SMITH DG, REIBER GE: Numerical Comparison of 3-D Shapes: Application to the Insensate Foot, Journal of Prosthetics and Orthotics, Vol 7, No 1, 29--34, Winter 1995.

BOONE DA, HARLAN JS, BURGESS EM: Automated Fabrication of Mobility Aids: Review of the AFMA Process and DVA/Seattle ShapeMaker Software Design, Journal of Rehabilitation Research and Development Vol 31, No 1, 42-49 1994.

SMITH DG, BOONE DA, HARLAN JS, FORSGREN SM, BURGESS EM. Automated Prosthetics Fabrication in the Developing World: The Experimental Prosthetics Center in Hanoi, Vietnam. Loyola University Orthopedic Journal , Vol 2, pp 49-60, 1993.

MATHEWS DE; BURGESS EM, BOONE DA: The All Terrain Foot, Journal of Prosthetics and Orthotics, Vol 5, No 1, p. 29-30, January 1993.

HOUSTON VL, BURGESS EM, CHILDRESS DS, LEHNEIS HR, MASON CP, GARBARINI MA, LABLANC KP, BOONE DA, CHAN RB, HARLAN JH, BRNCICK MD: Automated Fabrication of Mobility Aids (AFMA): Below-Knee CASD/CAM Testing and Evaluation Program Results, Journal of Rehabilitation Research and Development, Vol 29, No 4, 78-124, Fall 1992.

SANDERS JE, DALY CH, BOONE DA, DONALDSON T: An Angular Alignment Measurement Device For Prosthetic Fitting. Prosthetics and Orthotics International , Vol. 14, pp.143-144, 1990.

BOONE DA, BURGESS EM: Automated Fabrication of Mobility Aids: Clinical Demonstration of the UCL Computer Aided Socket Design System. Journal of Prosthetics and Orthotics, Vol. 1, No. 3, pp. 187 - 190, April 1989.

SIDLES JA, BOONE DA, HARLAN JS, BURGESS EM: Rectification Maps: A New Method for Describing Residual Limb and Socket Shapes. Journal of Prosthetics and Orthotics, Vol. 1, No. 3, pp. 149 - 153, April 1989.

AHMAD S, BOONE DA, HALL DA, COLE JJ, DENNIS MB: An Animal Model For Fungal Peritonitis: Evaluation of Therapeutic Options, American Journal of Kidney Diseases, Vol. VII, No. 2 pp. 153-156, February, 1986.

**b) Book chapters:**

BOONE DA: Community Service Learning In: Leung TP and Taplin M eds. Innovations in Professional Education: Practices and Reflections, 1st Edition, Singapore: Prentice Hall , 231-244, 2007.

FERGASON J, BOONE DA: Prosthetics For Sports and Leisure In: SMITH DG Atlas of Prosthetics, 4th Edition: American Academy of Orthopaedic Surgeons, 2004.

BURGESS EM, BOONE DA: Amputation In: MOREY BF Ed The Elbow and It's Disorders, 3<sup>rd</sup> Edition, Philadelphia: WB Saunders , 772-780, 2000.

BURGESS EM, BOONE DA, GOLD JT. Amputations and Prosthetics, IN: DEE R, HURST LC, GRUBER MA, KOTTMEIER SA, eds. Principles of Orthopaedic Practice, 2nd edition, New York: McGraw-Hill, 345-376, 1997.

**c) Published books, theses, patents, videos, software, etc.:**

MACOMBER B, BOONE D, Method for Aligning a Prosthesis, U.S. Patent Pending ,Application No. 11/853,711, Filed September 11, 2006

MACOMBER B, BOONE D, BECK J, Lower-Limb Prosthesis Force and Moment Transducer, U.S. Patent Pending, Application No. 11/853,707 , Filed September 11, 2006

BOONE DA: Investigation of Socket Reactions from Transtibial Prosthetic Malalignment [Doctoral Dissertation]: Department of Health Technology and Informatics, The Hong Kong Polytechnic University, 2005, pps. 346.

BOONE DA, LAING LS, COLEMAN KC, MATHEWS DE, BURGESS EM: Management of Lower Extremity Amputations CD-ROM [Contains original text: BURGESS EM, ROMANO RL, ZETTL JH. The Management of Lower Extremity Amputations, Veterans Administration, 1969]. Prosthetics Research Study, Seattle, WA, 1998.

BORCHERS RE, KILGORE BJ, ROSENTHAL ED, BOONE DA, BIRDWELL K: Object Imaging Device and Method Using Line Striping. USA Patent No. 5,753,931, 1998. (Licensed to Nike Inc.)

BOONE DA: The Impact Of Automated Fabrication of Limb Prostheses in The Socialist Republic of Vietnam [Masters Thesis] Seattle: Public Health and Community Medicine, University of Washington, 1997, pps. 168.

SMITH DG, JOSEPH AW, BOONE DA, BORCHERS RE, BURGESS EM. Gait Activity Monitor, USA Patent No 5,485,402, January 1996.

BOONE DA, FOX C, FUSCO C, CHO W, RUSS B. Diabetes Information Kiosk [electronic database, data from American Diabetes Association], Diabetes Education Seattle VA Medical Center (Distributor), July 1995.

BOONE DA, MATSEN FA. Knowledge Key: Arthritis Information Kiosk [electronic patient information system for the US Arthritis Foundation], University of Washington Bone and Joint Center (Distributor), December, 1994.

HARLAN JS, BOONE DA: ShapeMaker [computer aided design program for rehabilitation aids], Hanger Orthopaedic Group, Bethesda, MD (Distributor), 1990.

BOONE DA, CRAWFORD HV: Computer Aided Socket Design - System Manual, *Bioengineering Centre of University College London*, England, 1986

BOONE DA, SAMSON EI: You and Your Prosthesis - A Guide For The Upper Extremity Amputee, *American Academy of Orthotists and Prosthetists*, Alexandria, Virginia, 1986.

**d) Abstracts:**

BOONE DA, Analyse de rentabilité de soins ortho prosthétique [French], séminaire sur la formation des équipes de consultation orthopédique sur les outils de gestion , Fédération Africaine des Techniciens Orthoprothésistes (FATO), Saly, Sénégal. 20 au 24 juin 2005

BOONE DA, Coûts de cycle de vie de réadaptation [French], séminaire sur la formation des équipes de consultation orthopédique sur les outils de gestion , Fédération Africaine des Techniciens Orthoprothésistes (FATO), Saly, Sénégal. 20 au 24 juin 2005

BOONE DA, ZHANG M, Determination of Prosthetic Malalignment by Fuzzy-Logic Algorithm, Proceedings of the 11th World Congress of the International Society for Prosthetics and Orthotics, Hong Kong, 1-6 Aug 2004, pp363.

BOONE DA, Computerized Prosthesis Alignment Instrument, Proceedings of the 11th World Congress of the International Society for Prosthetics and Orthotics, Hong Kong, 1-6 Aug 2004, pp322.

BOONE DA, Outreach Teaching and Learning Experiences in "Leprosy Villages" in Southern China, Proceedings of the 11th World Congress of the International Society for Prosthetics and Orthotics, Hong Kong, 1-6 Aug 2004,, pp197.

CHAN PY, BOONE DA, ZHANG M, Appropriate Prosthetic Bioengineering for Low-Income Countries, Proceedings of the 11th World Congress of the International Society for Prosthetics and Orthotics, Hong Kong, 1-6 Aug 2004, p. 334

BOONE DA, Ip M, Chan Y, Ho M, Baseline for Evidence Based Practice in Prosthetics Service, 11th World Congress of the International Society for Prosthetics and Orthotics, Hong Kong, 1-6 Aug 2004, pp166.

LEE WCC, Zhang M, Boone DA, Effect of shank flexibility of trans-tibial prosthesis on interface stress between residual limb and prosthetic socket, 11th World Congress of the International Society for Prosthetics and Orthotics, Hong Kong, 1-6 Aug 2004, pp302.

COLEMAN K, Beck J, Laing L, Boone D, Macomber B, Austin R. Step Activity Monitor: a tool for research and clinical measurement of ambulatory activity, 6th Annual NIH SBIR/STTR Conference, Baltimore, MD., 22-23, June 23-24, 2004.

BOONE DA, ZHANG M, WONG MS, Relating Alignment Induced Biomechanical Changes to Sensations of Optimal Prosthetic Alignment, In FMBE Proceedings Vol. 4, World Congress on Medical Physics and Biomedical Engineering (WC2003), Sydney, Australia, August 24-29 2003.

COLEMAN K, Boone D, Smith DG, Laing L, Mathews D, Czernecki J. Cross-over trial comparing Alpha and Pelite Liners.. Proceedings of the 28th AAOP Annual Meeting and Scientific Symposium, Orlando, FL USA, March 20-23, 2002.

BOONE DA, Lipsky DM, Smith WK, CASANOVA H. Measuring Actual Costs And Effectiveness of Prosthetic Services In A Developing Nation, The 10th World Congress of the International Society for Prosthetics and Orthotics. Glasgow, Scotland, MO12.2, July 2-6 2001.

BECK JC, Boone DA, SMITH DG Flexibility Preference of Trans-tibial Amputees, The 10th World Congress of the International Society for Prosthetics and Orthotics. Glasgow, Scotland, TO9.3, July 2-6 2001.

COLEMAN K, Boone DA, Smith DG, Laing L, Mathews D. Relative influence of changing the prosthetic foot vs. the socket suspension system on ambulatory activity and patient satisfaction, The 10th World Congress of the International Society for Prosthetics and Orthotics. Glasgow, Scotland, TO6-2, July 2-6 2001.

BECK JC, Boone DA CASANOVA H. Development of a Simple Prosthetic Alignment Method for Transtibial Amputees, The 10th World Congress of the International Society for Prosthetics and Orthotics. Glasgow, Scotland, TO9.1, July 2-6 2001.

COLEMAN K, Boone D, Smith DG, Laing L. Distinctive differences in duration and rate profile of amputation between populations with transtibial amputation with diabetes, and without impairment, The 10th World Congress of the International Society for Prosthetics and Orthotics. Glasgow, Scotland, TH011.2, July 2-6 2001.

LAING L, Coleman K, Boone D, Smith DG. What is important for prosthesis satisfaction? The 10th World Congress of the International Society for Prosthetics and Orthotics. Glasgow, Scotland, THP2.2, July 2-8 2001.

COLEMAN K, Boone D, Smith DG, Laing L. Progress following elective trans-tibial amputation: one year of continuous ambulatory monitoring. A Case Study., The 10th World Congress of the International Society for Prosthetics and Orthotics. Glasgow, Scotland, ThO11-5, July 2-8 2001.

COLEMAN K, Boone D, Smith DG, Laing L, Mathews D, Czernecki J. Crossover trial comparing Alpha liner with pelite liner for trans-tibial prostheses using ambulatory activity and questionnaire responses, The 10th World Congress of the International Society for Prosthetics and Orthotics. Glasgow, Scotland, WO5-5, July 2-6 2001.

COLEMAN KL, BOONE DA, LAING LS, MATHEWS DE, CZERNIECKI JM, SANGEORZAN BJ. Quantification of Prosthetic Treatment Outcomes - Elastomeric Liner & Locking Pin Suspension vs Pelite Liner & Neoprene Sleeve Suspension Second National Department of Veterans Affairs Rehabilitation Research and Development Conference Proceedings. Arlington, VA, 100, February 20-22, 2000.

BECK JC, BOONE DA, SMITH DG. Lower Limb Prosthetic Flexibility: A Biomechanical Study of Preference and Parameters Second National Department of Veterans Affairs Rehabilitation Research and Development Conference Proceedings. Arlington, VA, 98, February 20-22, 2000.

MACKO RF, HEUBER E, SHAUGHNESSY M, BOONE DA, COLEMAN KL, SMITH GV, SILVER KHC, GARDNER AW: Portable Ambulatory and Activity Monitoring in Hemiparetic Stroke Patients. Second National Department of Veterans Affairs Rehabilitation Research and Development Conference Proceedings, Arlington, VA, 208, February 20-22, 2000.

MCCORMACK A, KU G, BOONE D, CING R, TENCER A, SANGEORZAN B: Effect of Custom Orthosis on Hindfoot Kinematics. Second National Department of Veterans Affairs Rehabilitation Research and Development Conference Proceedings, Arlington, VA, 113, February 20-22, 2000.

BOONE DA, SMITH DG: Clinical and Laboratory Study of Amputation Surgery and Rehabilitation, Journal of Rehabilitation Research and Development Services: Rehabilitation R&D Progress Reports 1997, Vol 35, 2-3, 1998.

COLEMAN KL, BOONE DA, SMITH DG, MATHEWS DE, LAING LS: Quantification of Prosthetic Outcome: FlexWalk-II Foot vs. SACH Foot. Proceedings 1st National Meeting Rehabilitation Research and Development Service, Washington, D.C., 197, October 1-3 1998.

REIBER GE, BOONE DA, SMITH DG: Rehabilitation: Advances in Prosthesis Manufacture. In: Akazawa Y, Kuzuya H, King H, eds. The Second International Conference on Health Technology in the Field of Diabetes, Kyoto, Japan, Nov 4-5, 1994, WHO Collaborating Centre for Diabetes Treatment and Education, 81-84, 1998.

COLEMAN KL, BOONE DA, SMITH DG: Step Activity Monitor: A Tool for Functional Evaluation and Assessment of Rehabilitation Outcome. Proceedings 1st National Meeting Rehabilitation Research and Development Service, Washington, D.C., 54, October 1-3 1998.

BOONE DA, LAING LS, COLEMAN KL, BURGESS EM, SMITH DG, MATHEWS DE: Multimedia Amputee Rehabilitation Team Training. Proceedings 1st National Meeting Rehabilitation Research and Development Service, Washington, D.C., 53, October 1-3 1998.

BOONE D, LIPSKY D: A Computer Simulation of the Economics of Prosthetic Care Service. In: Soede M, Verbout AJ, Swart M, eds. IXth World Congress of the International Society for Prosthetics and Orthotics, Amsterdam, The Netherlands, 772-773, June 28-July 3 1998.

LAING LS, COLEMAN KL, SMITH DG, BOONE DA, LEGRO MW: Quantifying Multi-Dimensional Perspectives on a Change in Prosthetic Feet: A Use of the Prosthesis Evaluation Questionnaire. In: Soede M, Verbout AJ, Swart M, eds. IXth World Congress of the International Society for Prosthetics and Orthotics, Amsterdam, The Netherlands, 732-734, June 28-July 3 1998.

COLEMAN KL, DEL AGUILA MA, BOONE DA, SMITH DG: Self-Selected Walking Velocity as a Measure of Function: Relationship to Real World Ambulatory Activity of Diabetics. In: Soede M, Verbout AJ, Swart M, eds. IXth World Congress of the International Society for Prosthetics and Orthotic, Amsterdam, The Netherlands, 371-373, June 28-July 3 1998.

COLEMAN KL, BOONE DA, SMITH DG, MATHEWS DE, LAING LS: Functional Outcome Assessment Using Objective Measures of Patient Satisfaction and Gait Activity: A Comparison of 2 Feet. In: Soede M, Verbout AJ, Swart M, eds. IXth World Congress of the International Society for Prosthetics and Orthotics, Amsterdam, The Netherlands, 690-692, June 28-July 3 1998.

SMITH DG, COLEMAN KL, BOONE DA: Improved Activity Following Elective Trans-Tibial Amputation for Pain: Outcome Assessment by Long-Term Activity Monitoring (A Case Report). In: Soede M, Verbout AJ, Swart M, eds. IXth World Congress of the International Society for Prosthetics and Orthotics, Amsterdam, The Netherlands, 728-730, June 28-July 3 1998.

SMITH DG, EHDE DM, LEGRO M, BOONE DA: Pain and Sensations in the Phantom Limb, Residual Limb, and Back Reported by Persons with Lower Extremity Amputations. In: Soede M, Verbout AJ, Swart M, eds. IXth World Congress of the International Society for Prosthetics and Orthotics, Amsterdam, The Netherlands, 629-632, June 28-July 3 1998.

BECK J, BOONE D: Improved Measurement Information: Texture Mapping in O&P CAD/CAM. In: Soede M, Verbout AJ, Swart M, eds. IXth World Congress of the International Society for Prosthetics and Orthotics, Amsterdam, The Netherlands, 90-92, June 28-July 3 1998.

BOONE DA, URBAN ND, SMITH DG, BURGESS EM, MATHEWS DE, COLEMAN KL: Use of CAD/CAM for Prosthetic Services in the Developing World. In: Soede M, Verbout AJ, Swart M, eds. IXth World Congress of the International Society for Prosthetics and Orthotics, Amsterdam, The Netherlands, 74-76, June 28-July 3 1998.

SMITH DG, COLEMAN KL, DEL AGUILA MA, BOONE DA: Functional Ambulation of Geriatric Male Diabetics: Correlation of Step Count Based Gait Assessment with the SF-36. Proceedings of the 65th Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, LA, March 19-23 1998.

WHITE M, JACOBSON D, BOONE D, BECK J, COLEMAN K: Development of a Proof-of-concept Design for a Lower Extremity Advanced Prosthesis (LEAP) [Research Report, National Institutes of Health]: SPARTA, Inc. San Diego, CA and Prosthetics Research Study Seattle, WA, June 23, 1997.

LEGRO MW, REIBER GE, SMITH DG, DEL AGUILA M, LARSEN J, BOONE D: A Prosthesis Evaluation Questionnaire (PEQOL). Association for Health Services Research 14th Annual Meeting, Chicago IL, June 15-17, 1997.

BOONE D, SMITH D: CAD/CAM and the Pedorthic Management of the Diabetic Foot. . In: Boenick U, Näder M, eds International Symposium: CAD/CAM Systems in Pedorthics, Prosthetics & Orthotics, Nuremberg, Germany, 50-51, May 4-5, 1997.

BOONE D, BURGESS E, MATHEWS D: The Application of CAD/CAM in the Developing World. . In: Boenick U, Näder M, eds International Symposium: CAD/CAM Systems in Pedorthics, Prosthetics & Orthotics, Nuremberg, Germany, 74-75, May 4-5, 1997.

BOONE D, MATHEWS D: Errors in Use of Electromechanical Cast Digitizers for CAD/CAM. In: Boenick U, Näder M, eds. International Symposium: CAD/CAM Systems in Pedorthics, Prosthetics & Orthotics, Nuremberg, Germany, 192-195, May 4-5, 1997.

BECK JC, JOSEPH A, BOONE DA, SMITH DG: Prosthesis Force Transducer: Real Time, Continuous Remote Measurement of Force and Moment. In: Berke GM, Langdon SD, eds. Proceedings of the 23rd AAOP Annual Meeting & Scientific Symposium, San Francisco, CA., 41-42, March 12-15 1997.

SMITH DG, BOONE DA, COLEMAN K, LEGRO M: Outcome Assessment in Prosthetics and Orthotics. In: Berke GM, Langdon SD, eds. Proceedings of the 23rd AAOP Annual Meeting & Scientific Symposium, San Francisco, CA, 27-30, March 12-15 1997.

MATHEWS D, BOONE D: Custom CAD/CAM Cosmesis. In: Berke GM, Langdon SD, eds. Proceedings of the 23rd AAOP Annual Meeting & Scientific Symposium, San Francisco, CA, 21-22, March 12-15 1997.

BOONE D, MATHEWS D, SMITH D: Computer Aided Design and Fabrication of Partial Foot Prostheses. In: Berke GM, Langdon SD, eds. Proceedings of the 23rd AAOP Annual Meeting & Scientific Symposium, San Francisco, CA, 19, March 12-15 1997.

BOONE DA: Extending CAD/CAM: Tips and Techniques [CAD/CAM Instructional Course]. In: Berke GM, Langdon SD, eds. Proceedings of the 23rd AAOP Annual Meeting & Scientific Symposium, San Francisco, CA., 18, March 12-15 1997.

BOONE DA, REIBER GE, SMITH DG: Clinical and Laboratory Study of Amputation Surgery and Rehabilitation, J Rehabil Res Dev Annual Supplement: Rehabilitation R&D Progress Reports, Vol 34, 15-17, 1997.

BOONE DA. Prosthetics Outreach Foundation Programme Evaluation of Automated Fabrication of Limb Prostheses in Vietnam, Report of the ISPO Consensus Conference on Appropriate Prosthetic Technology for Developing Countries, Phnom Penh, Cambodia, June 5-10, 1995, 95-105, 1996.

REIBER GE, BOONE DA. Assessment of the Effectiveness of Fabricated Insoles: A Pilot Study, Rehabilitation R&D Progress Reports [1995], Vol 33, 213, 1996.

BOONE DA, JOSEPH A, MATHEWS DE. Laboratory Evaluation of Two Models of Electromechanical Cast Digitizers for Automated Fabrication of Mobility Aids" [Report to Department of Veterans Affairs] Electronic Publication Prosthetics Research Study, Seattle, WA, 1996.

BOONE D. Prosthetics Research: The Road Always Under Construction. In Motion , Vol 6 No 5, 24-26, October 1996.

BOONE DA, MATHEWS D, BURGESS EM, SMITH DG. The PRS Above-Knee Prosthetic Socket Design for CAD/CAM. Journal of Proceedings American Academy of Orthotists & Prosthetists 21st Annual Meeting & Scientific Symposium, New Orleans, LA, 61-62, March 21-25, 1995.

BORCHERS R, COLEMANESSET K, CZERNIECKI J, BOONE D, GITTER A. The Effects of Shank Stiffness on the Loading of Prosthetic Components. Abstracts of the International Society for Prosthetics and Orthotics 8th World Congress, Melbourne, Australia, p 41, April 3-7, 1995.

COLEMANESSET KC, SMITH DG, JOSEPH AW, BORCHERS RE, BOONE DA, MACOMBER G. Gait Activity Monitor: A Device for Objectively Evaluating the Functional Outcome of Prosthetic, Orthotic or Medical Treatment. Abstracts of the International Society for Prosthetics and Orthotics 8th World Congress, Melbourne, Australia, p 74, April 3-7, 1995.

BOONE DA. Principles of Automating Prosthesis Production in Developing Countries. Abstracts of the International Society for Prosthetics and Orthotics 8th World Congress, Melbourne, Australia, p 91, April 3-7, 1995.

BOONE DA. The CAD/CAM Experience: Indications for Clinical Care and Technical Practice. Abstracts of the International Society for Prosthetics and Orthotics 8th World Congress, Melbourne, Australia, p 234, April 3-7, 1995.

BOONE D, BORCHERS R, SMITH DG. Computer Aided Design and Fabrication of Prostheses After Partial Calcanectomy: A Case Study. Abstracts of the International Society for Prosthetics and Orthotics 8th World Congress, Melbourne, Australia, p 124, April 3-7, 1995.

BOONE DA. Program Evaluation of Automated Fabrication of Limb Prostheses in Vietnam, Report of the ISPO Consensus Conference on Appropriate Prosthetic Technology in Developing Countries, Phnom Penh, Cambodia, June 5-10, 1995.

BOONE DA, JOSEPH AW, MATHEWS DE, SMITH DG. Interactive Computer Video: A Training Tool for Dynamic Prosthetic Alignment, RESNA '95 18th Annual Conference, Vancouver Canada, 416-418, June 9-14, 1995.

JOSEPH AW, BOONE DA, MATHEWS DE, SMITH DG. CAD/CAM for Prosthetics: Successful Technology Transfer, RESNA '95 18th Annual Conference, Vancouver Canada, 220-222, June 9-14, 1995.

COLEMANESSET KL, SMITH DG, JOSEPH AW, BOONE DA, MACOMBER G. Gait Activity Monitor for Long-Term Measurement of Ambulatory Function, RESNA '95 18th Annual Conference, Vancouver, Canada, 168-170, June 9-14, 1995.

BOONE DA, REIBER GE, SMITH DG. Clinical and Laboratory Study of Amputation Surgery and Rehabilitation, Rehabilitation Research and Development Progress Reports, Vol 32, 10-11, June 1995.

SMITH DG, BOONE DA, BORCHERS B, MATHEWS DE, BOONE I, REIBER GE. Evaluation of Five Methods Used to Quantify the External Geometry of the Foot (Abstract) Proceedings of the American Orthopaedic Foot and Ankle Society, New Orleans, Louisiana February 1994.

BOONE DA, JOSEPH AJ, BORCHERS RE: Top Secret Developments for CAD/CAM. Proceedings of 20th Annual Meeting and Scientific Symposium of the American Academy of Orthotists and Prosthetists, Nashville, TN, March 1994.

BOONE D, JOSEPH A, SMITH D, MATHEWS D, REIBER G: Gait Analysis and Dynamic Alignment Training with Interactive Computer Video. Proceedings of 20th Annual Meeting and Scientific Symposium of the American Academy of Orthotists and Prosthetists, Nashville, TN, March 1994.

JOSEPH A, BORCHERS R, SMITH D, BOONE D: Gait Activity Monitor: A Device for Objective Evaluation of Prosthetic Function, Proceedings of 20th Annual Meeting and Scientific Symposium of the American Academy of Orthotists and Prosthetists Nashville, TN, March 1994.

BORCHERS R, BOONE D, SMITH D, REIBER G: A Quantitative Method for the Comparison of 3-D Foot Shapes, Proceedings of 20th Annual Meeting and Scientific Symposium of the American Academy of Orthotists and Prosthetists Nashville, TN, March 1994.

BORCHERS R, BOONE D, SMITH D, REIBER G: CAD Improvements to the Design of Custom Orthotics and Footwear, Proceedings of 20th Annual Meeting and Scientific Symposium of the American Academy of Orthotists and Prosthetists Nashville, TN, March 1994.

JOSEPH A, BOONE D, MATHEWS D: Training and Preparing Staff for CAD P&O, Proceedings of 20th Annual Meeting and Scientific Symposium of the American Academy of Orthotists and Prosthetists, Nashville, TN, March 1994.

SMITH DG, HORN P, MALCHOW D, BOONE DA, HANSEN ST: Abstract of Prosthetic History and Functional Outcome of the Isolated Traumatic Below-Knee Amputee. Proceedings of AAOS Meeting, San Francisco. February, 1993.

BOONE DA, BURGESS EM, SMITH DG, and HARLAN JS: Automated Fabrication of Mobility Aids, Improving Custom Body Supports with the DVA/AFMA System. Proceedings, First North American Regional Conference of Rehabilitation International, pp 59-65, Atlanta, Georgia October 1993.

BOONE DA, BURGESS EM, SMITH DG, and AULIE, AL. The DVA/SEATTLE Prosthetic Limb System User-Centered Design for Improved Mobility and Comfort. Proceedings, First North American Regional Conference of Rehabilitation International, pp 124-128, Atlanta, Georgia October 1993.

BOONE DA. The VA/Seattle Limb System: Development and Early Results. Proceedings American Academy of Orthopedic Surgeons National Assembly, Anaheim California. March, 1991.

BURGESS EM, SANDERS JE, DALY CH, BOONE DA: Normal and Shear Stresses on a Residual Limb in a Prosthetic Socket, Rehabilitation R&D Progress Reports, Vol 29. pp 34-35, 1992.

BURGESS EM, BOONE DA, AULIE AL, HARLAN JS, SMITH DG, FORSGREN SM: The VA/ Seattle Prosthetic Limb System: Development and Early Result. Proceedings ISPO VII World Congress, Chicago, 1992.

BOONE DA, HARLAN JE: Considerations for Computer Interface Design for Prosthetics and Orthotics: A User's Perspective, Proceedings ISPO VII World Congress, Chicago, p 157, 1992.

SANDERS JE, DALY CH, BURGESS EM, BOONE DA: An Important Prosthetic Socket Design Consideration Determined from Interface Shear Stress Measurement Proceedings ISPO VII World Congress, Chicago, p.392, 1992.

SANDERS JE, DALY CH, BURGESS EM, BOONE DA: Interface Mechanics: Effect of Alignment Change, Proceedings ISPO VII World Congress, Chicago, p. 370, 1992.

LOI LD, BOONE DA, BURGESS EM, LOC DH, Automated Fabrication of Prostheses in the Third World, Proceedings ISPO VII World Congress, Chicago, p 417. 1992.

LOI LD, BOONE DA, BURGESS EM, LOC DH. Prosthetics in the Third World: The Vietnam Experience. Proceedings ISPO VII World Congress, Chicago, p 448. 1992.

SANDERS JE, DALY CH, BOONE DA: Stresses on a Residual Limb Inside a Prosthetic Socket During Walking, AOPA Almanac 40 (10), p79, 1991.

SANDERS JE, BOONE DA, DALY CH: The Residual Limb/Prosthetic Socket Interface: Normal Stress and Shear Stress, RESNA Annual Conference (Washington, D.C.), 13, pp234-235, 1990.

BOONE DA: Computer Assisted Teaching of Prosthetic Design Methods. Proceedings ISPO VI World Congress, Kobe Japan, 222, November, 1989.

BOONE DA: Mathematical Techniques for Comparing Residual Limb and Socket Shape. Proceedings ISPO VI World Congress, Kobe Japan. 82, November, 1989.

BOONE DA, BURGESS EM, LYONS DI: Remote Automated Fabrication of Mobility Aids, Proceedings ISPO VI World Congress, Kobe Japan. 269, November, 1989.

SIDLES JA, HARLAN JS, BOONE DB, BURGESS EM, DAVIES RM and MATSEN FA: A Quantitative Comparison of Amputee Stump and Socket Shapes. Proceedings 35th Annual Meeting, Orthopaedic Research Society, February 6-9, 1988.

BOONE, DA The AFMA Project: Clinical Results. Report of the ISPO Workshop on CAD/CAM in Prosthetics and Orthotics, 30-32, Seattle, WA., June 8-12, 1988.

