#### **CURRICULUM VITAE**

# Raymond F. McKenna, PT, PhD

#### Education:

Texas Woman's University Houston, Texas September 1992 – September 1996 Physical Therapy PhD, 1996

Stony Brook University Stony Brook, NY September 1989 – June 1991 Physical Therapy BS, 1991

Stony Brook University Stony Brook, NY January 1985 – June 1988 Mathematics MA, 1988

Stony Brook University Stony Brook, NY January 1981 – December 1984 Mathematics MA, 1984

# **Certifications:**

Certified Strength and Conditioning Specialist (CSCS), 1988

United States Weightlifting Federation Level I Coaching Certificate, 1988

New York State Teaching Certifications: Secondary Mathematics and Biology/General Science, 1988

New York State Coaching Certification, 1988

## **Employment and Positions Held:**

Clinical Associate Professor Department of Physical Therapy School of Health Technology and Management Stony Brook University Stony Brook, NY 11794-8201 January 2001 – present Manager
Gait and Motion Analysis Laboratory
St. Charles Hospital and Rehabilitation Center
Port Jefferson, New York 11777
September 1999 – December 2008

Assistant Professor Department of Physical Therapy New York Institute of Technology Old Westbury, NY January 1999 – December 2000

Medical Director Motion Diagnostics Laboratory Hauppauge, NY 11788 July 1997 – December 1998

Physical Therapist Richard Johnson Physical Therapy East Setauket, NY 11733 September 1996 - June 1997

Physical Therapist Ben-El Therapeutics Patchogue, New York 11772 November 1991- August 1992

Physical Therapist Stony Brook University Hospital Stony Brook, New York 11794 August 1991 – August 1992

# Peer Reviewed Publications:

McKenna RF., Sniffen J., Benz Scott L., Johnson R., Johnson L. (writing) Process and impact evaluation of a community-based comprehensive wellness program for childhood survivors of cancer and their families.

Sniffen J., McKenna RF., Benz Scott L., Johnson R., Johnson L. (writing) Using formative research to design a community-based comprehensive wellness program for childhood survivors of cancer and their families.

Lamberg, EM., McKenna, RF. Development of an After-School Wellness Club to Promote Physical Activity and Healthy Lifestyle. The Internet Journal of Allied Health Sciences and Practice. 9(1): 1-10, 2011.

Plack, M.M., Williams, S., Miller, D., Malik, F., Sniffen, J., Gilner, G., & McKenna, R. Collaboration between physical therapists and physical therapist assistants: Fostering the development of the preferred relationship within the classroom setting. *Journal of Physical Therapy Education*, 20(1): 3-13, 2006.

Plack, M.M., Driscoll, M., Blissett, S., McKenna, R., & Plack, T.P. A method for assessing reflective journal writing. *Journal of Allied Health*, 34(4): 199-208, 2005.

Douris, P., McKenna, RF., Madigan, K., Cesarski, B., Costiera, R., & Lu, M. Recovery of Maximal Isometric Grip Strength following Cold Immersion. *Journal of Strength and Conditioning Research*, 17(3): 509-513, 2003.

Liebler, E.J., Tufano-Coors, L., Douris, P., Makofsky, HW., McKenna, RF., Michels, C., & Rattray, S. The Effect of Thoracic Spine Mobilization on Lower Trapezius Strength Testing. Journal of Manual and Manipulative Therapy. 9(4): 207-212, 2001.

#### Peer Reviewed Scientific and Professional Presentations:

Gudesblatt, M, Lamberg E., McKenna R., Zarif M., Burke C., Gutman M., Bumstead B., Fafard L., Seidel C., Cruz L., Fahie S., Bohuslaw J., Riley S., Graffitti L.,and Muratori, L. (2010). Objective gait measures as markers for disease progression in Multiple Sclerosis, Accepted for the15th annual meeting of ACTRIMS, the Americas Committee for Treatment and Research in Multiple Sclerosis

Yirce, L., Lamberg, E., & McKenna, R. (2009) Move *Your Feet*!—An afterschool wellness club. Proceedings of the 2009 American Physical Therapy Association Combined Sections Meeting, LasVegas, NV.

McKenna, R., Sniffen, J., Johnson, R., Johnson, L., Benz-Scott, L., Block, P., Mattera, D., & Parker, R. (2008, October) *Play Fit – Stay Fit!: A Comprehensive Wellness Program for Childhood Survivors of Cancer and Their Families*. Proceedings of the 2008 American Public Health Association Annual Meeting and Exposition, SanDiego CA.

McKenna, R.F., Sniffen, J., Johnson, R., Mancini-Johnson, L., Benz-Scott, L., Block, P., Mattera, D., & Parker, R. (2008, February) *Play Fit-Stay Fit: A comprehensive community-based wellness program for childhood survivors of cancer.* Poster session presented at the Combined Sections Meeting of the American Physical Therapy Association, Nashville, TN.

Lamberg, E.M., & McKenna, R.F. (2008, February). *Using community input to develop an after school wellness club.* Poster session presented at the Combined Sections Meeting of the American Physical Therapy Association, Nashville, TN.

Streb, R., Demes, B. & McKenna, R. F. (2008, February) *Comparison of Movements in Subjects with Patellofemoral Pain Syndrome and Subjects without Knee Pain.* Poster session presented at the Combined Sections Meeting of the American Physical Therapy Association, Nashville, TN.

McKenna, R., Sniffen, J., Johnson, L., Johnson, R., & Benz-Scott, L. (2007, September) *Play Fit – Stay Fit! Year 1 of a Comprehensive Wellness Program for Childhood Survivors of Cancer and Their Families.* Poster session presented at the 2007 Lance Armstrong Foundation Community Program Conference, Austin, TX.

Streb, R., Demes, B., & McKenna, R. (2006, February) Lower limb movement strategies during select closed kinematic chain functional movements in patellofemoral pain syndrome and asymptomatic subjects. Poster session presented at the 2006 American Physical Therapy Association Combined Sections Meeting, San Diego, CA.

McKenna, R.F., Hasson, S., Pandya, A., & Maida, J. (1997, February) *Effect of Wrist Position on Dynamic Grip Strength and EMG Activity of the Forearm Flexors and Extensors*. Presented at the Annual Meeting of the Houston Society for Engineering in Medicine and Biology, University of Houston, Houston, TX.

McKenna, R.F., Pandya, A.K., Hasson, S.M., Aldridge, A.M. & Maida, J. (1995, August) Refinement of the Anthropometrics of a Human Computer Model - A Preliminary Step in Developing a New Tool for Measuring Function. Poster session presented at the World Congress of Physical Therapy Conference, Washington, D.C.

McKenna, R.F., Hasson, S., Pandya, A., Aldridge A., & Maida, J. (1995, February) *Integrating Anthropometry, Strength, and Motion Data into a Human Computer Model.*Presented at the Annual Meeting of the Houston Society for Engineering in Medicine and Biology, University of Houston, Houston, TX.

McKenna, R.F., Pandya, A.K., Aldridge, A.M., & Hasson, S.M. (1995, February) *Refinement of the Anthropometrics of a Human Computer Model - A Preliminary Step in Developing a New Tool for Measuring Function*. Poster session presented at the Combined Sections Meeting of the American Physical Therapy Association, Reno, NV.

McKenna, R.F., Chen, B., & Hasson, S.M. (1994, June) Reproducibility and Accuracy of Static and Dynamic Angle Measures with the Ariel Performance Analysis System (APAS™.) Poster session presented at the Joint American Physical Therapy Association/Canadian Physiotherapy Association, Toronto, Canada.

McKenna, R.F., Budd, E. Kinneman, C., & Rossi, M. (1993, June) Effect of Transverse versus Longitudinal Current Flow on Active Torque Production of the Quadriceps during Neuromuscular Electrical Stimulation. American Physical Therapy Association Scientific Meeting and Exposition, Cincinnati, Ohio.

#### Abstracts:

Yirce, L., Lamberg, E., & McKenna, R. (2009) Move *Your Feet*!—An afterschool wellness club. Proceedings of the 2009 American Physical Therapy Association Combined Sections Meeting, LasVegas, NV.

McKenna, R., Sniffen, J., Johnson, R., Johnson, L., Benz-Scott, L., Block, P., Mattera, D., & Parker, R. (2008, October) *Play Fit – Stay Fit!: A Comprehensive Wellness Program for Childhood Survivors of Cancer and Their Families.* Proceedings of the 2008 American Public Health Association Annual Meeting and Exposition, SanDiego CA.

Sniffen, J., McKenna, R., Johnson, L., Johnson, R., & Benz-Scott, L. (2008) Partnering to Design and Implement a Wellness Program for Children Surviving Cancer [Abstract]. Proceedings of the 2008 Society for Disability Studies Annual Meeting, New York, NY.

Streb, R., Demes, B., & McKenna, R. (2008) Comparison of Movements in Subjects with Patellofemoral Pain Syndrome and Subjects without Knee Pain [Abstract]. *Journal of Orthopedic Sports Physical Therapy*, 38(1): A40.

Lamberg, E.M., & McKenna, R.F. (2008) Developing a school based wellness club through community input [Abstract]. *Pediatric Physical Therapy*, 20(1).

McKenna, R.F., Sniffen, J., Johnson, R., Mancini-Johnson, L., Benz-Scott, L., Block, P., Mattera, D., & Parker, R. (2008) Play Fit-Stay Fit: A comprehensive community-based wellness program for childhood survivors of cancer [Abstract]. Proceedings of the 2008 American Physical Therapy Association Combined Sections Meeting, Nashville, TN.

- McKenna, R., Sniffen, J., Johnson, L., Johnson, R., & Benz-Scott, L. (2007) Play Fit Stay Fit! Year 1 of a Comprehensive Wellness Program for Childhood Survivors of Cancer and Their Families [Abstract]. Proceedings of the 2007 Lance Armstrong Foundation Community Program Conference, Austin, TX.
- Streb, R., & McKenna, R. (2006) Reliability of measurement of a VICON 370 motion analysis system during select functional tasks [Abstract]. http://www.ptjournal.org/abstracts/pt2006/AbsAuthIndex.cfm
- Streb, R., Demes, B., & McKenna, R. (2006) Lower limb movement strategies during select closed kinematic chain functional movements in patellofemoral pain syndrome and asymptomatic subjects [Abstract]. *Journal of Orthopedic Sports Physical Therapy*, 36(1): A60. Southard, V., McKenna, R., & Hill, J., (2005) An Intervention to Address Falls Efficacy: A Pilot Study [Abstract]. Proceedings of the 2005 American Physical Therapy Association Combined Sections Meeting, New Orleans, LA.
- Plack, M.M., Driscoll, M., Blissett, S., McKenna, R., & Plack, T.P., (2004) A method for assessing reflective journal writing [Abstract]. http://www.apta.org/AM/abstracts/pt2004/AbstractIntro04.cfm
- McKenna, R.F., Hasson, S.M., Pandya, A.K., & Maida, J.C. (1997) Effect of Wrist Position on Dynamic Grip Strength and EMG Activity of the Forearm Flexors and Extensors [Abstract]. Proceedings of 15th Annual Houston Conference of Biomedical Engineering Research, Houston, TX.
- Hasson, S.M., McKenna, R.F., Jansen, C., Chen, F., & Schieb, D. (1996) Single dose of analgesic and NSAID medication: Effect on muscle soreness and performance [Abstract]. Medicine & Science in Sports & Exercise, 28 (5) suppl: 154.
- Hasson, S.M., McKenna, R.F., Chen, F., Jansen, C., & Schieb, D. (1996) Effect of Muscle Damage on Indicies of Pain and Performance during Functional Tasks of Sit to Stand and Stand to Sit [Abstract]. Proceedings of 1996 American Physical Therapy Association Annual Scientific Meeting and Exposition. Minneapolis, MN.
- McKenna, R.F., Pandya, A.K., Aldridge, A.M., & Hasson, S.M. (1995) Refinement of the Anthropometrics of a Human Computer Model A Preliminary Step in Developing a New Tool for Measuring Function [Abstract]. Proceedings of the 12th International Congress of the World Congress of Physical Therapy. Washington, D.C.
- McKenna, R.F., Pandya, A.K., Hasson, S.M., Aldridge, A.M., & Maida, J.C. (1995) Integrating Anthropometry, Strength, and Motion Data into a Human Computer Model [Abstract]. Proceedings of the 13th Annual Houston Conference of Biomedical Engineering Research. Houston, TX.
- McKenna, R.F., Pandya, A.K., Aldridge, A.M., & Hasson, S.M. (1995) Refinement of the Anthropometrics of a Human Computer Model A Preliminary Step in Developing a New Tool for Measuring Function [Abstract]. *Journal of Orthopedic Sports Physical Therapy*, 21 (1): 62.
- McKenna, R.F., Chen, B., & Hasson, S. (1994) Reproducibility and Accuracy of Static and Dynamic Angle Measures with the Ariel Performance Analysis System (APAS)<sup>™</sup> [Abstract]. *Physical Therapy*, 74 (6) suppl: S55.
- Rossi, M.D., & McKenna, R.F. (1994) A comparison on the effects of simulated and real microgravity exposure on the musculoskeletal, nervous, and cardiovascular systems [Abstract]. *Physical Therapy*, 74 (6) suppl: S166.

McKenna, R.F., Budd, E., Kinneman, C., & Rossi, M. (1993) Effect of Transverse versus Longitudinal Current Flow on Active Torque Production of the Quadriceps during Neuromuscular Electrical Stimulation [Abstract]. *Physical Therapy*, 73 (6) suppl: S77.

### Non-Peer Reviewed Presentations

McKenna, R.F. & Fick P. (2008, March) *Special Needs Camps: Quantum Leaps! Innovative activities for campers with health challenges.* Invited presentation at the 2008 Tri-State Camp Conference, Atlantic City, NJ

# Funded/In Review Grant Activity

Lamberg E, McKenna R, and Werner M. Co-investigator. Use of vacuum assisted socket technology with transfemoral amputees: A pilot study to investigate the effect of brim height on kinematics, kinetics and comfort. \$17,885,. 2011-2012 Otto Bock Healthcare

McKenna R, Sniffen J, Johnson R, Johnson, L, and Benz Scott L. Principal Investigator. Play Fit – Stay Fit! – A wellness program for childhood survivors of cancer and their families. \$150,000, 2006-09 Lance Armstrong Foundation.

Lamberg E and McKenna R. Co-principal Investigator Move Your Feet! – A school-based wellness program. \$5,000,. 2006 W.K. Kellogg Foundation.

Sniffen J. and McKenna R. Co-principal Investigator.. Focus groups to develop a fitness/ wellness program for survivors of childhood cancers. \$1,900, 2006, W.K. Kellogg Foundation.

McKenna R. Principal Investigator. Quantifying Coordination between the Ankle and Knee during Normal Gait. Three-credits release time, 2000-01 NYIT-AAUP Research Grant Fund.

McKenna R. Principal Investigator. Analyzing the Lifting Mechanics of Two Different Groups Using Video Motion Analysis and SEMG. \$500 and three-credits release time, 1999-2000 NYIT-AAUP Research Grant Fund.

McKenna R. Principal Investigator. Investigation of Muscle Function during Dynamic Gripping Activities. \$15,000, 1995-96. Foundation for Physical Therapy Doctoral Research Award.

McKenna R. Principal Investigator. Validation of a Computer Program for Modeling a Reach Task in Patients with Shoulder Pathology. \$5,000, 1994-95 Foundation. for Physical Therapy Doctoral Research Award.

McKenna R. Athletic Orthopedic and Knee Center Doctoral Fellowship, \$5,000, 1994

McKenna R. National Institute on Disability and Rehabilitation Research Doctoral Fellowship, \$20,000/year, 1992-93.

### Research Activity

Program Evaluation of *Play Fit – Stay Fit!* September 2006 – present

Program Evaluation of Move Your Feet!

### Membership in Scientific/Professional Organizations

American Physical Therapy Association National Strength and Conditioning Association

# Professional Community Service

Program Director for *Play Fit-Stay Fit!* September 2006 - present

#### **Event Coordinator**

Organized fundraising events to raise awareness about pediatric cancer and raise money for the Stony Brook University Medical Center Sunrise Fund/Play Fit-Stay Fit!:

September 2010 - Help Tackle Pediatric Cancer II - Raised \$2,100

Attracted over 4,500 attendees

May 2010 - The BENCH 5K Run/Walk - Raised \$14,000

Attracted over 440 runners/walkers

September 2009 - Help Tackle Pediatric Cancer II - Raised \$3,500

Attracted over 5,700 attendees

May 2009 - The BENCH 5K Run/Walk - Raised \$7,000

Attracted over 220 runners/walkers

August 2008 – Help Tackle Pediatric Cancer I – Raised \$2,300

Attracted over 5,000 attendees

### Service to University/College/School

•	Organized a Stony Brook University Physical Therapy Alumni gathering at the 2011 APTA Combined Sections Meeting in New Orleans, LA.		
	Organized a Stony Brook University Physical Therapy Alumni gathering at the 2010 APTA Combined Sections Meeting in SanDiego, CA.		
9	Organized a Stony Brook University Physical Therapy Alumni gathering at the 2009 APTA Combined Sections Meeting in LasVegas, NV.		
2005 – present	Health Sciences Center. Library Committee.		
2002 – present	School of Health Technology and Management. Research and Directed Study Committee.		
2007 – 2008	Stony Brook University Alumni Association Board Member		
2004 – 2008 Athletic Director's Advisory Council			
2002 – present Department of Physical Therapy. Research Committee.			
2002 – present Department of Physical Therapy. Admissions Committee.			

### Service to Profession

Manuscript Reviewer for British Journal of Sports Medicine, 2006

Manuscript Reviewer Physiotherapy Theory and Practice, 2006

Abstract Reviewer for Gait and Clinical Movement Society, 2006

### **Honors and Awards**

2008 Stony Brook University Community Service and Service Learning Committee.

Outstanding Community Service Project Award. *Play Fit – Stay Fit!* 

## Continuing Education Attended

11/03/09 Children with Cancer & Blood Disorders "Go Back to School" Conference: A School Re-entry Program. Stony Brook University

02/10/09 PEDRO, Hooked on Evidence and the Future of Accessing Evidence APTA Combined Sections Meeting, Las Vegas, NV

02/10/09 The implication of sample size for evidence-based practice: What does power mean in the context of statistical and clinical significance.

APTA Combined Sections Meeting, Las Vegas, NV

02/11/09 Tips for Finding, Analyzing, and Applying Evidence to Practice APTA Combined Sections Meeting, Las Vegas, NV

11/03/07 Children with Cancer & Blood Disorders "Go Back to School" Conference: A School Re-entry Program. Stony Brook University

11/15/06 Children with Cancer & Blood Disorders "Go Back to School" Conference: A School Re-entry Program. Stony Brook University

01/03 Vicon Motion Systems – BodyBuilder Training Course

4/08-4/11/00 Clinical Gait Analysis: A Focus on Interpretation – Advanced Course

#### Current Teaching Responsibilities

HAY 5/0	Physical Therapy Case Studies I	Year 1 - Spring
HAY 552	Research Methods for Physical Therapists:	Year 2 - Fall
	Design and Statistics	
HAY 572	Physical Therapy Case Studies II	Year 2 - Spring
HAY 558	Evidence-Based Practice	Year 3 – Fall