

# Steven F. Siconolfi, Ph.D., FACSM

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## Career Highlights

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- Seventeen years in higher education, 13 years as a senior administrator, in liberal arts, comprehensive and research institutions that were under private or public control.
  - Nine years as research scientist/manager at the Johnson Space Center / Life Sciences Division
    - \* Awarded two US Patents while at NASA
  - Successful fundraiser from private (gifts and endowments) and government sources (grants and congressional appropriations) while Dean.
  - Experience at branding schools and institutions
  - Successfully doubled the student applications and increased yield rates by 5%
  - Established leadership using a consensus style in higher education and government service (NASA)
  - Developed a net-revenue model that compares the profitability (\$/Faculty FTE or profit margin) among departments
  - Developed international exchange agreements in China, Finland, Sweden and with Beijing Olympic Committee
  - Developed multiple diversity programs in health care
  - Helped create new curricular programs at the undergraduate, graduate and professional levels
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## Education

Institution	Degree Year	Field of Study
Springfield College, Springfield, MA	BS 74	Physical Education
Springfield College, Springfield, MA	MS 76	Exercise Physiology
Kent State University, Kent, OH	Ph.D. 82	Exercise Physiology

### *Leadership Training*

- NASA's Leadership training program to prepare for transition to senior scientist level. 1992
- Ithaca College's Leadership Training 2003-04
- Millennium Leadership Initiative, American Association of State Colleges and Universities – June 2009

### *Administrative Philosophy*

Administrators are facilitators, not gate keepers. We evaluate new ideas for merit and their relationship to institution mission and vision. Facilitating administrators then try to find resources (new or reallocated) to fund an approved project. Administrators work with faculty and staff to create shared visions, goals, and suggested implementation strategy.

### **Ithaca College (Current Position)**

2002- Present: Dean, School of Health Sciences and Human Performance, Ithaca College, Ithaca, NY 14850

2002- Present Professor, Department of Health Promotion and Physical Education, Ithaca College, Ithaca, NY 14850

- Ithaca is a private, comprehensive Master I College that has been in the top 10 of the north for 12+ consecutive years.
- The School of Health Sciences and Human Performance has 7 departments and 18 undergraduate degree programs, with nine degrees commonly found in schools of liberal arts and science.
- HSHP has over 1200 undergraduates and ~ 300 graduate students.

## *Roles-Responsibilities and Outcomes at Ithaca*

### Public Relations and Development

- Co-Chair of national task force (Association of Schools of Allied Health Professions) to develop a brand for allied health. (2008-Current)
- Created “The Dean’s Update” tour. This brought the accomplishments of the school to the alumni and others. We also used the tour to provide new opportunities for alumni to connect with the college. This was the first step in re-building relationships from a separated alumni group (Ithaca College). Annual giving rose from \$40K to over \$80K per year.
- Participated in lobbying efforts (2003-2005) in Washington DC to get the Allied Health Re-Investment Act to committee and hopefully to the floor for a vote.

### Enrollment Management

- The School of Health Sciences and Human Performance had a greater than 60-70% increase in applications (Fall 2008/09) compared to Fall 2003.
- Freshmen enrollment increase of 38% with a yield of 27% for Fall 2007 and 40% with a 25% yield for Fall 2009.

### Budget and Finance

- Member of the Ithaca College Budget Committee 2002 – Present.
- Developed a net-revenue model that compares the profitability (\$/Faculty FTE or profit margin) among departments.
- Administer the budget for the School of Health Sciences and Human Performance (~\$8M).
- Achieved a 4% budget reduction by improving class efficiencies (reducing the number of sections without violating pedagogical seat count), reducing administrative reassign time, not filling a vacant position, and reduction of non-salary operating budgets.

### Diversity

- Developed the Discover Careers in Health, Sport and Leisure Competition that is run through a partnership with the Bio-Science and Health Careers High School (7-12) in Rochester, NY. The goal is to provide the inner city student with exposure to a variety of allied health professions. In 2007-08, over 400 inner city high school students participated in the program.
- Developed the HealthQuest summer camp program with Central NY Area Health Council. Rural students have the opportunity to explore different careers in Health, Sport, and Leisure. This camp is partially funded by an ongoing grant from Excellus Blue Cross Blue Shield.

### International Programming

- Developed student and faculty exchange relationships with four Chinese universities (Beijing, Chengdu, Changzhu Medical College, and Hong Kong).
- Developed student and faculty exchange relationships with HAMK University (Finland).
- Developed student and faculty exchange relationships with Jonshoping University (Sweden).
- Developed an MOU with the Beijing 2008 Olympic Committee to take 22 Ithaca College students as official volunteers with the Olympic News Service.
- Invited to speak on developing international agreements at the 4<sup>th</sup> Annual Presidential Symposium on Sport, Beijing, China, October 2008.

### Curricular Development

- Provided the leadership for new undergraduate degrees (2) and graduate degrees (3) at Ithaca College and accomplished this **without** new resources by encouraging departments to restructure their core curriculums.
- Helped foster a collaborative environment to create a core program in health. Three different majors currently share the core. This provided the resources to create two graduate programs within the department (Ithaca College).

## Faculty

- Facilitated recruitment and hiring of faculty and staff.
- Faculty development through mentoring of faculty by helping to establish professional plans (including new teaching methods and research plans), seminars on scholarly and grant writing, and an open door policy to discuss the challenges of teaching a diverse student population.
- In cooperation with Chairs, we developed an annual salary merit system for faculty that was based on creating separate evaluations for teaching, research, and service.
- Established a faculty and staff development fund to promote teaching, scholarship and advancement of skill sets.

## Accreditation, Assessing Student Learning and General Education

- Chair of the Tracking of Student Learning Outcomes Task Force at Ithaca College (2007-2008). We developed a tracking model and definitions for expected learning and curricular outcomes that were acceptable to members from schools of Humanities and Sciences, Business, Communication, Music, and Health Sciences and Human Performance.
- Experience with the Middle States Accreditation of Ithaca College (2008).
- Experience with accreditation at Ithaca College for Athletic Training, Occupational Therapy, Physical Therapy, Speech-Language Pathology, and Therapeutic Recreation, Regents Accreditation for Teacher Education (NY).
- Codification of the HSHP General Education Program that reflect four areas of literacy.
- Implementation of assessment of the student learning of the HSHP General Education Program.

## Strategic Planning & Facility Development

- Member of the Planning and Priority Committee at Ithaca College. This committee was responsible for monitoring the implementation of the college's institutional (strategic) plan. The committee also determined the areas of focus that are passed to the budget committee each year.
- Worked to secure a permanent location for the school's campus in Rochester, NY (\$5M in renovations).
- Helped the School of Health Sciences and Human Performance finish the strategic plan and secured its adoption in 2003. Annual goals and objectives are taken from this plan. The plan was completed one year ahead of schedule. A new plan is being developed.

## Research Initiatives

- Increased NIH funding from 0 grants to 3 by removing barriers common at teaching institutions (Ithaca). This was also followed by an increase in non-federal, external funding.

## College Wide Task Forces

- Chair of the Tracking of Student Learning Outcomes Task Force (2007-2008).
- Chair of the Transfer Task Force. The task force analyzed the "transfer climate" at Ithaca and developed a plan to make Ithaca more transfer friendly.
- Chair of the Peer and Aspirant standards task force. The task force developed a methodology that created the list of peer and aspirant institutions. Members included faculty and staff from across the college.
- Voting member for the Ithaca College Athletic Hall of Fame (student affairs). 2002 – Present.

## **Wayne State University (Doctoral Extensive University, Detroit, MI)**

- 1999-02 Interim Deputy Dean for Health Sciences and Research, Eugene Applebaum College of Pharmacy and Health Sciences, Wayne State University, Detroit, MI 48202 (Name change October 1, 2001)
- 1997-02 Associate Dean for Research and Graduate Studies, College of Pharmacy and Allied Health Professions, Wayne State University, Detroit, MI 48202
- 1997-02 Associate Professor of Physical Therapy, Wayne State University, Detroit, MI
- 1999-02 Adjunct Professor of Occupational Therapy, Wayne State University, Detroit, MI

### *Roles-Responsibilities and Outcome at WSU*

#### Public Relations & Development

- Secured letters of support from four US congressman and two US Senators for an appropriation bill. We were awarded \$440K that will support technology that brings tele-medicine and distance education together for training of nurses as anesthetists.
- Assisted in the cultivation of donors for the \$16M capital campaign for the new building. Awarded \$500K from the Kresge Foundation Science Initiative.
- Authored a Public Broadcast Station (PBS) special (20 minutes) on my research program; Adeli/Penguin Russian space suit for use in therapy. A syndicated nation reporter is doing a follow-up story.

#### Budget

- Developed the College of Pharmacy & Allied Health Professions' annual budget (~\$10M annually) FY2001, FY2002.
- Negotiated the only new faculty positions (2) at WSU for FY2001.
- Working with the department chairs to obtain special requests for specific programs.

#### Strategic Planning & Facilities Development

- Directed strategic planning for the College of Pharmacy & Allied Health Professions.
- Member of WSU's strategic planning group. Authored the strategic directions for the "Engaged University" (partnering and institutional development) and one of the major objectives for "Experiential Learning."
- College's liaison with the design-build team for a \$64M, 270,000 sq. ft. new teaching and research building. Building completed on time.
- Helped secure a \$2M, NIH construction grant to build out 40 wet laboratory modules in the new teaching and research building.

#### Accreditation

- Experience with accreditation for WSU Physical Therapy, Physician Assistants, and Occupational and Environmental Health Sciences.

#### Curricular Development and Informational Technology

- Helped developed new degree/certificate programs, with department WSU chairs, in Anesthesia, Clinical Lab Sciences, Occupational & Environmental Health Sciences, Occupational Therapy, and Mortuary Science.
- Obtained outside financing and lead the development of web-based and multimedia teaching stations for WSU.
- Developed the Patient Simulator Lab for use in WSU's Anesthesia, Pharmacy, and Physician Assistant educational programs.
- Supporting WSU's College of Education's Exercise Physiology Program.
- Leading and supervising the information technology group at the college (WSU) that has a goal to become a "laptop college." This program will ensure that students can fully use this tool in their personal and professional endeavors and continue student centered learning throughout their lifetime.

- Developed new College Web site at WSU (with professional designer and department representatives).

#### Research Administration

- Research Administrator (40-50 grants ~\$2.5-\$3M annually) for an active research faculty.
- Negotiated a research agreement (9/99 - 4/01) between the College of Pharmacy & Allied Health Professions and the Institute of Biomedical Problems (Ministry of Science and Technology) Moscow, Russia.

#### **NASA Johnson Space Center, Houston, TX 1988-97**

- NASA Research Physiologist: **Tenure 1989, Promoted to GS-14** (senior scientist level 1992), (1995-97) Technical Monitor/Lead Research Scientist of the Neuromuscular Research Lab, (1988-1995) Technical Monitor/Lead Research Scientist in Body Composition, Energy Metabolism and Pulmonary Function for the Exercise Physiology Lab.
- Contracting staff of 3 Ph.D., 4 M.S. and one clerical
- Coordinated the research program for the Neuromuscular Laboratory in NASA's Neuroscience Laboratories at request of NASA.
- Contracting staff of 1 Ph.D. 1 MS.
- Grant Reviewer for NASA's Small Business Innovative Research (SBRI) program.

#### NASA Principal Investigator

- 1995-1997 "Evaluation Of Skeletal Muscle Performance And Characteristics." NASA-Mir Science Project # E630. Continuation of Shuttle-Mir Project. (\$857,000). AIBS Peer Review.
- 1994-1995 "Aerobic Capacity Using Graded Cycle Ergometry". Shuttle-Mir Science Project # 321. This project evaluated the current Russian countermeasure program. Completed on Mir 18 (\$260,000). AIBS Peer Review.
- 1994-1995 "Evaluation Of Skeletal Muscle Performance And Characteristics." Shuttle-Mir Science Project # 411. Completed on Mir 18 (\$162,988). AIBS Peer Review.
- 1989-1995 "The Effects Of Space Flight On Aerobic And Anaerobic Capacity: the role of body composition." This investigation evaluated exercise energy metabolism and body composition (Total body water, blood volume, protein, mineral and water masses) before and after Shuttle flights. Crewmembers serve as non-exercise controls or perform exercise on a treadmill, rower, or cycle ergometer. (~\$207,000 per year relative to the number of shuttle flights Total of ~\$1,242,000). NASA Peer Review.
- 1989 "Effects of 7-days of Bed rest on Muscle Strength and Morphology." (\$180,000). NASA Peer Review.
- 1989-1991 New Body Composition Techniques for Various G-fields. Center Director's Discretionary Funds (1989-1991 ~\$120,000). NASA Peer Review. (See Patents).

#### NASA Co-investigator

- 1995-1998 "Bone Mineral Loss and Recovery after Shuttle/Mir Flights." Principal Investigator is Dr. Linda Shackelford. NASA-Mir Science Program.
- 1996-1997 "How Muscle Stiffness May Affect Strength During Physical Rehabilitation." Principle Investigator is Dr. Sandra Lemoine, Shenandoah University.

#### Patents

- A soft-sided air displacement body volumometer. US Patent # 5,948,977. This device measures body volume using Boyle's Law in a "sleeping bag" like container. NASA Tech Brief 1996. Center Director's Discretionary Funds (1989-1991 ~\$120,000).
- A body fluids monitor. US Patent # 6,125,297. This device measures total body water, extracellular fluid volume and blood volumes (total and plasma volume) using new bioelectrical response spectroscopy methodologies. Center Director's Discretionary Funds (1989-1991 ~\$120,000).
- Space Act Agreement with Aphillion, Inc. Agreement covers the transfer of exercise prescription

and test analysis software program for their commercialization effort. Software program scores: any sub-maximal aerobic exercise test, body composition analysis with circumferential measures, back flexibility, exercise history, and writes a progressive 8 week aerobic exercise prescription.

### NASA Initiatives

- Member of the Mars initiative working group at JSC-NASA in 1990s. The team explored what were the limitations to going to Mars and possible solutions.
- Member of the Space Station development and negotiation team (helped developed the contractual language for sharing information relative to science and countermeasures)
- Assisted in writing and evaluating the US-Russian medical agreement for the International Space Station.
- Member of the Return to the Moon initiative working group at JSC- NASA in 1990's. The team explored what were the limitations to going to Moon and possible solutions.

### **Other Academic Appointments**

- 1989-97 Adjunct Professor of Exercise Physiology, Health and Human Performance University of Houston Clear Lake, Houston, TX 77058
- 1985-88 Associate Professor of Exercise Physiology, Exercise Physiology Section Movement Sciences Laboratory, Springfield College, Springfield, MA 01109
- 1984-85 Visiting Assistant Professor of Exercise Physiology, Purdue University, West Lafayette, IN
- 1983-84 Adjunct, Assistant Professor of Physical Education, Human Performance Lab, University of Rhode Island, Kingston, RI
- 1979-80 Teaching Fellow at Kent State University, Kent, OH
- 1974-75 Laboratory Instructor for Physiology of Exercise at Springfield College.

### **Other Research Appointments**

- 1980-84 Exercise Physiologist and Director, Human Performance Lab, Department of Cardiology, The Memorial Hospital, Pawtucket, RI 02860
- 1974-75 Research Fellow, Exercise Physiology Lab, Springfield College, Springfield, MA 01109

### **Professional & Board Appointments**

- 2005-Present Board Member for the Central New York Area Health Council. The health council is an advocacy group that helps funds programs and projects to promote the health careers to young middle school and high school students. Served on the Futures Working group and Program committee.
- 2003-2008 Board / Associate Board Member for the Fransizka Racker Centers. A center whose mission is working with the disabled from birth through adult life. Served on the Community Relations (Development) committee.
- 1987-88 &  
1996-Present Exercise Physiology Consultant, National YMCA Certification Programs in Fitness.
- 1977-80 Basic Coordinator of the Fitness KSU Program (an adult physical fitness program). Kent State University, Kent, OH
- 1977-80 Instructor at YMCA Physical Fitness Specialist Workshop at Kent State University, Kent, OH
- 1975-77 Physical and Fitness Director, Hamilton YMCA, Hamilton, OH

### **Professional Organizations**

- Member of Phi Kappa Phi: Oldest and largest national collegiate honor society dedicated to the recognition and promotion of academic excellence in all disciplines.
- Fellow, American College of Sports Medicine.
- Member, Association of Schools for Allied Health Professions

- Member, American Association of Health, Physical Education, Recreation and Dance
- Former Associate Fellow in Epidemiology, American Heart Association.
- Former Member, Aerospace Medical Association
- Former Member, National Colleges and Universities Research Administrators.

## Grants, Projects, Professional Service

### Grant Review Committees

- Grant Reviewer for NASA's Small Business Innovative Research (SBRI) program.
- Grant Reviewer for NASA's Scientific Merit Review Committee.

### NIH Principal Investigator (at Springfield College)

- 1987-1988 "Activity or Fitness: Impact on Blood Pressure in Elderly." National Institute on Aging (\$49,899). Completed at Springfield College. Springfield, MA.
- 1980-1984 Laboratory Development Grants from NIH, awarded and administered by the Pawtucket, Memorial Hospital, Pawtucket, RI. (~\$20,000).

### American College of Sports Medicine

- 2007-2009 President of the Mid-Atlantic Regional Chapter of the American College of Sports Medicine.
- 2005-2006 Board Member of the Mid-Atlantic Regional Chapter of the American College of Sports Medicine.
- 1986-1988 Board Member of the New England Regional Chapter of the American College of Sports Medicine.

### Journal Boards and Reviewer

- Editorial Board Member of the International Journal of Health Care Management.
- Editorial Board Member: ACSM' Journal of Health and Fitness (2002-2004)
- Journal of Applied Physiology
- Medicine and Science in Sports and Exercise
- Aviation, Space and Environmental Medicine
- Pediatrics Exercise Physiology
- Journal of Gerontology
- Research Quarterly

## Publications By Research Areas: Epidemiology, Neuromuscular, Cardiovascular-Respiratory, Aerobic-Anaerobic Metabolism, Body Composition.

### Peer Reviewed Journal Publications

These publications have been cited in over 400 other peer-reviewed articles (Science Citation Index).

### Epidemiology

**Siconolfi, S.F., Cullinane, E.M., Carleton, R. A., Thompson, P.D.** A modification of the Astrand-Rhyming protocol to estimate VO<sub>2</sub>max for use in epidemiologic studies. *Medicine and Science in Sports and Exercise*. 1982; 14:335-338.

**Siconolfi, S.F., Lasater, T.M., McKinlay, S., Boggia, P., Carleton, R.A.** Physical fitness and blood pressure: The role of age. *American Journal of Epidemiology*. 1985; 122:452-457.

**Siconolfi, S.F., Garber, C.E, Lasater, T.M., Carleton, R.A.** A simple, valid step test for assessing VO<sub>2</sub>max in epidemiologic studies. *American Journal of Epidemiology*. 1985; 121:382-390.

**Siconolfi**, S.F., Lasater, T.M., Snow, R.C., Carleton, R.A. Self-reported physical activity compared with maximal oxygen uptake. *American Journal of Epidemiology*. 1985; 122:101-105.

### Neuromuscular

Gretebeck, R.J., S.F. **Siconolfi**, B. Rice, H.W. Lane. Physical performance is maintained in women consuming only foods used on the US Space Shuttle. *Aviat. Space Environ. Med.* 1994, 65:1036-1040.

Hayes, J.C., J.J. McBrine, M.L. Roper, S.F. **Siconolfi**, B.A. Harris. Effect of Space Shuttle flight on isokinetic skeletal muscle strength. *J. Appl. Physiol.* 1998 (Final review, one reviewer accepted, one with changes).

Caruso J, Hamill J, Yamauchi M, Mercado D, Cook T, Higginson B, O'Meara S, Elias J, **Siconolfi S**. Albuterol aids resistance exercise in reducing unloading-induced ankle extensor strength losses. *J Appl Physiol*. 2005 May;98(5):1705-11.

### Cardiovascular-Respiratory

Thompson PD; Conrad S; **Siconolfi S**; Cullinane E; Wincze J. The use of a cardiovascular risk factor self-change project to teach behavioral medicine to medical students. *J Med Educ* 1982 Sep;57(9):724-6

Cullinane E; **Siconolfi S**; Saritelli A; Thompson PD. Acute decrease in serum triglycerides with exercise: is there a threshold for an exercise effect? *Metabolism* 1982 Aug; 31(8):844-7

**Siconolfi**, S.F., Carleton, R.A., Elder, J.P., Bouchard, P.A. Hypotension after exercise and relaxation. *Clinical Sports Medicine*, ed. Robert C. Cantu. Collamore Press, Lexington, MA, 1983, chpt 11.

**Siconolfi**, S.F., Garber, C.E, McGhee, J.R. Increased exercise tolerance in cardiac patients without peripheral resistance changes. *Journal of Cardiac Rehabilitation*. 1984; 4:391-394.

**Siconolfi**, S.F., Garber, C.E, Baptist, G.D., Cooper, F.S., Carleton, R.A. Circulatory effects of mental stress during exercise in cardiac patients. *Clinical Cardiology*. 1984; 7:441-444.

McGhee JR; **Siconolfi SF**; Carleton RA; Bouchard P. Improving physical fitness of coronary disease patients on beta-blocking therapy. *J Am Osteopath Assoc* 1985 May;85(5):318-21.

**Siconolfi**, S.F., Lasater, T.M., Elder, J.P., Garber, C.E., Carleton, R.A. Normal blood pressure reactivity to mental stress in borderline hypertensive patients. *Journal of Cardiovascular and Pulmonary Rehabilitation*. 1986; 6:383-398.

Rowland TW; Delaney BC; **Siconolfi SF**. 'Athlete's heart' in prepubertal children. *Pediatrics* 1987 May;79(5):800-4.

Rowlands, T.W., Delaney, B.C., **Siconolfi**, S.F. The athletes heart in pre-pubital children. *Pediatrics*. 1987; 79:800-804.

Heller GV; Garber CE; Connolly MJ; Allen-Rowlands CF; **Siconolfi SF**; Gann DS; Carleton RA. Plasma beta-endorphin levels in silent myocardial ischemia induced by exercise. *Am J Cardiol* 1987 Apr 1;59(8):735-9.

**Siconolfi, S.F.**, Charles, J.B. The effects of in-flight treadmill exercise on postflight orthostatic tolerance. World Space Congress, #IAF/IAA-92-0890, Washington, D.C., August, 1992.

**Siconolfi, S.F.**, Charles, J.B., Moore, Jr., A.D., Barrows, L.H. Comparing the effects of two in-flight aerobic exercise protocols on standing heart rates and VO<sub>2</sub>peak before and after space flight. *J. Clin Pharm.* 34:590-595, 1994.

Moore AD Jr, Charles JB, Lee SM, **Siconolfi SF**, Greenisen MC. Does bed rest produce changes in orthostatic function comparable to those induced by space flight? *Acta Astronaut.* 1994 Jul;33:57-67.

**Siconolfi, S.F.**, J.B. Charles, A.D. Moore, J.H. Gilbert, S.S. Suire. Effects of different inflight exercise modalities and fitness on post space flight orthostatic heart rates. Submitted for review *Med. Sci. Sports. Exer.* 1998.

### Aerobic/Anaerobic

Cullinane EM; **Siconolfi S**; Carleton RA; Thompson PD. Modification of the Astrand- Rhyning sub-maximal bicycle test for estimating VO<sub>2</sub>max of inactive men and women [letter]. *Med Sci Sports Exerc* 1988 Jun;20(3):317-8.

Gardner AW; Poehlman ET; Sedlock DA; Corrigan DL; **Siconolfi S**. A longitudinal study of energy expenditure in males during steady-state exercise. *J Gerontol* 1988 Jan;43(1):B22-5.

Rowland TW; Staab JS; Unnithan VB; Rambusch JM; **Siconolfi SF**. Mechanical efficiency during cycling in prepubertal and adult males. *Int J Sports Med* 1990 Dec;11(6):452-5

Pratt, W.M., S.F. **Siconolfi**, L. Webster, J.C. Hayes, A. D. Mazzocca, B.A. Harris. A comparison between computer-controlled and set work rate exercise based on target heart rate. *Aviat. Space Environ. Med.* 1991, 62:899-902.

Staab JS; Agnew JW; **Siconolfi SF**. Metabolic and performance responses to uphill and downhill running in distance runners. *Med Sci Sports Exerc* 1992 Jan;24(1):124-7.

Rowland TW; Rambusch JM; Staab JS; Unnithan VB; **Siconolfi SF**. Accuracy of physical working capacity (PWC170) in estimating aerobic fitness in children. *J Sports Med Phys Fitness* 1993 Jun;33(2):184-8.

Lane, H.W., Rice, B., Kloeris, V., Frye, S., **Siconolfi, S.F.**, Spector, E.R., Gretebeck, R.J. Energy intake, body weight, and lean body mass are maintained in health active women consuming a space shuttle diet. *J. Amer. Diet. Assoc.* 94:87-88, 1994.

**Siconolfi, S.F.**, S.L. Lemoine. Graded exercise testing for space flight. *Aviat. Space Environ. Med.* 1995, 66:435-439.

Bishop, P.A., S.M.C. Lee, J.J. McBryne, S.F. **Siconolfi**, M.C. Greenisen. Validation and evaluation of a lightweight portable device for measuring VO<sub>2</sub>. Am. Ind. Hyg. Assoc. 1995, 56:50-54.

### Body Composition

Sinning, W.E., Dolny, D., Cunningham, L., Racaniello, A., **Siconolfi**, S.F., Sholes, J. Validity of "generalized" equations for body composition analysis in male athletes. Medicine and Science in Sports and Exercise. 1985; 17:124-130.

**Siconolfi**, S.F., R. J. Gretebeck, and W.W. Wong. Assessing Total Body Mineral, Bone Mineral Content, and Total Body Protein from Total Body Water and Body Density. J. Appl. Physiol. 1995, 79:1837-1843.

**Siconolfi**, S.F., M.L. Nusynowitz, Sheril S. Suire, Alan D. Moore, Jr. Assessing Blood And Plasma Volumes Using Bioelectrical Response Spectroscopy. Med. Sci. Sport Ex. 28(12): 1510-1516, 1996.

**Siconolfi**, S.F., R. J. Gretebeck, W. W. Wong, R. A. Pietrzyk, and S. S. Suire. Assessing Total Body and Extracellular Water from Bioelectrical Response Spectroscopy. J. Appl. Physiol. 82(2): 704-710, 1997.

**Siconolfi** SF; Gretebeck RJ; Wong WW; Moore SS; Gilbert JH 3rd. Determining bone and total body mineral content from body density and bioelectrical response spectroscopy. J Appl Physiol. 85(4):1578-82, 1998.

**Siconolfi SF**: Dupler T: Quantifying Exercise Induced Dehydration. RTO MEETING PROCEEDINGS MP-HFM-086. Papers presented at the RTO Human Factors and Medicine Panel (HFM) Specialists' Meeting held in Boston, United States, 10-11 December 2003. Proceedings published June 2004.

### *Panel Presentation*

**Siconolfi**, S.F. Exercise Science: Its role in long duration space flight. Aviat. Space Environ. Med. 1990, 61:476.

**Siconolfi**, S.F. "Meet the Experts: Exercise in Space." Annual Meeting of the American College of Sports Medicine. 2006.

### *Abstracts*

#### Neuromuscular

**Siconolfi**, S.F.; Mazzocca, A.D.; Barrows, L.H.; Hays, R.D.; Harris, B.A. Effects of bed rest on reaction, movement and task times. Aviat. Space Environ. Med., 1990; 61(5): 449.

Fujii, M.D., M.C. Greenisen, S. F. **Siconolfi**, B.A., Harris. Neuromuscular activity after seven days of bed rest. FASEB J. 1990, 4:A568.

Hayes JL, Roper ML, Mazzocca AD, McBrine JJ, Barrows LH, Harris BA, **Siconolfi** SF. Eccentric and concentric muscle performance following 7 days of simulated weightlessness. *Med. Sci. Sports Exerc.* 1990; 22(2):S72.

Hayes, J.C., M.L. Roper, A.D. Mazzocca, J.B. Charles, S.F. **Siconolfi**. Effects of simulated weightlessness on postural muscle performance. *Aviat. Space Environ. Med.* 1990, 64:502.

Hays, R.D., A.D. Mazzocca, M. Rashid, S.F. **Siconolfi**. Reliability of a "Shuttle" reaction timer. *Aviat. Space Environ. Med.* 1990, 64:486.

Kear, K.T., J.C. Hayes, A.D. Mazzocca, M.L. Roper, L.H. Barrows, B.A. Harris, S.F. **Siconolfi**. The effects of bed rest on the relationship among strength and endurance

measures of the quadriceps and hamstrings. *Med. Sci. Sports Exerc.* 1990, 22: S11. Kear, K.T., J.C. Hayes, B.A. Harris, S.F. **Siconolfi**. Muscle endurance, strength, and leg volume changes after seven days of bed rest. *FASEB J.* 1990, 4: A568.

Mazzocca AD, Hayes JC, Roper ML, McBrine JJ, Barrows LH, Harris BA, **Siconolfi** SF. Muscular endurance and strength following 7 days of bed rest. *Med. Sci in Sports and Exer.* 1990; 22:S74.

McBrine JJ, Mazzaocca AD, Hayes JC, Roper ML, Barrows LH, Harris BA, **Siconolfi** SF. Adjusting VO<sub>2</sub>max for decrements in strength following 7 days of bed rest. *Med. Sci. Sports Exerc.* 1990; 22(2):S11.

Roper, M.L., A.D. Mazzocca, J.C. Hayes, L.H. Barrows, B.A. Harris, S. F. **Siconolfi**. The effects of muscle strength on movement and task times after 7 days of bed rest. *Med. Sci. Sports Exerc.* 1990, 22: S117.

Hayes JL, Roper ML, McBrine JJ, Mazzocca AD, **Siconolfi** SF. Evaluation of skeletal muscle endurance following space flight. *Med. Sci. Sports Exerc.* 1991; 23(4):S23.

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