*Curriculum Vitae*

**Frederick S. Southwick, M.D.**

Professor of Medicine

University of Florida College of Medicine

***Home Address:*** 6362 NW 41st Ave

 Gainesville, FL 32606

***Office Address:*** Division of Infectious Diseases

 Department of Medicine

 Box 100277, Health Science Center

 University of Florida College of Medicine

 Gainesville, Florida 32610-0277

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***Education:***1964-68 **B.A. Yale University**

1968-73 **M.D. Columbia College of Physicians and**

 **Surgeons**

***Postgraduate Training and Fellowship Appointments:***

 1973 **Research Assistant** (Infectious Diseases) with Dr. Paul

 Beeson, (Feb-June) Nuffield Department of Medicine,

 Radcliffe Infirmary, Oxford, England

 1973-74 **Intern in Medicine,** Boston City Hospital, Boston, MA

 1974-75 **Junior Assistant Resident,** Internal Medicine, Boston City
 Hospital, Boston, MA

 1975-76 **Senior Assistant Resident,** Internal Medicine,

 Massachusetts General Hospital, Boston, MA

 1976-77 **Chief Resident,** Internal Medicine, Boston City Hospital,

 Boston, MA

 1977-78 **Clinical Infectious Disease Fellow,** Massachusetts
 General Hospital

 1977-80 **Infectious Disease Research Fellow,** (Protein

 Biochemistry), Massachusetts General Hospital

***Faculty Appointments:***

1980-82 **Instructor in Medicine,** Harvard Medical School,

 Boston, MA

1982-85 **Assistant Professor of Medicine**, Harvard Medical School,

 Boston

 1985-90 **Assistant Professor of Medicine**, University of

 Pennsylvania, School of Medicine

 1987-91 **Adjunct Assistant Professor of Clinical Pharmacology**

 Philadelphia College of Pharmacy and Science

 1988-91 **Member of Cell Biology Graduate Group**, U. of Penn.

(***Faculty Appointments continued)***

 1990-91 **Tenured Associate Professor of Medicine**, University of

 Pennsylvania School of Medicine

 1991- **Professor of Medicine and Chief of Infectious Diseases,**

 University of Florida College of Medicine

 1991- **Affiliate Professor of Biochemistry and Molecular**

 **Biology**, University of Florida College of Medicine

1. **Affiliate Professor of Molecular Genetics and Microbiology,** University of Florida College of Medicine

 1994- **Tenured Professor of Medicine**, University of Florida

 College of Medicine

 2015- Elected to **Faculty Senate**

***Hospital and Administrative Appointments:***

 1984-85 **Director of Infectious Disease Outpatient Service**,

 Massachusetts General Hospital

 1981-85 **Infectious Disease Attending and Consultant**,

 Massachusetts General Hospital

 1985-91 **Infectious Disease Attending,** Hospital of the University of

 Pennsylvania

 1991-2010 **Chief of Infectious Diseases**, and Fellowship Training
 director University of Florida College

 of Medicine

 1992-98 **Member**, Shands Hospital Finance Committee

 1994-96 **Member**, Board of Directors, State Communications

 Company

 1997-07 **Vice-Chairman of Medicine for Research** 2010**-**14 **Quality Projects Manager** for the Senior Vice President for
 Health Affairs UF & Shands Healthcare System

2014-2016 **Fellowship Training Director Infectious Disease**

2017- **Director of Quality and Safety in Patient Care**, Division of
 Hospitalist Medicine

***Specialty Certification:***

 **American Board of Internal Medicine, Internal Medicine**

 **American Board of Internal Medicine, Infectious Diseases**

**Certified Professional in Patient Safety,** <http://bcert.me/saqyivuu>

***Licensure:*** **Florida,** ME 0064085 5/91- present

***Awards, Honors, and Membership in Honorary Societies:***

 **Dean's List,** Yale Varsity Letters: Football, Lacrosse,

 Wrestling (captain), Book and Snake Senior Society

 **International Fellow of Columbia University**,

 **Edward J. Noble Foundation Leadership grant** (covered the

 full cost of Medical School)

 **Muscular Dystrophy Research Fellowship Award**

 **National Research Service Award,** National Institute of Health

 **Elected, American Society for Clinical Investigation**

 **Elected, John P. Morgan Society,** University of Pennsylvania

 **Elected, Philadelphia College of Physicians**

 **Honorary Degree, University of Pennsylvania** (awarded to

 all Univ. of Pennsylvania tenured faculty)

 **Elected, Association of American Physicians**

 **Elected, American Clinical and Climatological Association**

1998 **Faculty Research Prize for Clinical Science,** University of
 Florida College of Medicine (1-2 recipients/year)

1. **Professors’ Excellence Award,** University of Florida
2. **Maxwell Finland Lecturer, National Infectious Disease Society of America Annual Award**

2001 **Elected** **Outstanding Division in the Department of
Medicine,** Department of Medicine House Staff

1. **University of Florida Research Foundation Award for
 distinguished research accomplishments**
2. **Teaching Excellence Award,** Dept. Medicine House Staff
3. **Elected Fellow of the American College of Medicine**

**2006 Theodore E. Woodward Award** for the best paper presented at the
 American Clinical and Climatological Association annual meeting

**2007 Exemplary Teacher Award,** University of Florida

**2008** Selected for **Who’s Who in America**

**2009 Exemplary Teacher Award,** University of Florida

**2010-11 Advanced Leadership Initiative Fellow,** The Harvard Business
 School

**2013 University of Florida Research Foundation Award for
 distinguished research accomplishments**

***Memberships in Professional and Scientific Societies:***

 **American Clinical and Climatological Association**

 **American College of Physicians**

 **American Society for Cell Biology**

 **American Society for Clinical Investigation**

 **American Society of Hematology**

 **American Society of Microbiology**

 **Association of American Physicians**

 **Infectious Disease Society of America**

***Editorial Positions:***

 **Editorial Board:** Associate Editor *Journal of Infectious Diseases
 American Journal of Medicine*

**Frequent Ad Hoc** Reviewer for: *J*. *Cell Biol., Molec. Biol. Cell, J. Clin.*

 *Invest., N. Engl. J. Med., Ann. Intern. Med., Blood, Am. J. Med., J.*

 *Leukocyte Biol, Cell Motility and the Cytoskeleton, Biochemistry,*

 *J. Immunology, Infect. & Immun., Clin. Infect. Dis.*

***Study Sections:***

 **Ad hoc Reviewer,** NIH Bacteriology and Mycology 1 Study Section

 (November,1993)

 **Ad hoc Reviewer,** NIH Hematology I Study Section (1994-1995)

 **Member,** NIH Special Study Section on RFA Nutrition and Immune

 Function (March, 1995)

 **Permanent Member ,** NIH Hematology I Study Section ( 1996-1998).

 **NIH Board of Scientific Counselors** ,Warren G. Magnuson ClinicalCenter. (1998- 2002)

**Ad hoc Reviewer**, NIH Erythrocyte and Leukocyte Biology Study section (June 2003)

**Ad hoc Reviewer**, NIH Innate Immunity Study section (June 2004)

**Chairman NIH Board of Scientific Counselors,** Warren G. Magnuson Clinical Center (2003-2009)

**NIH Board of Scientific Counselors,** Warren G. Magnuson Clinical Center (2018- )

***Principal Investigator:***

 **"Regulation of actin filament formation in phagocytes".** National Institute of Health, RO1-AI23262 Grant, Direct Costs $250,000/year

 Grant period: 8/1/2006-7/31/2012, Funded since 1981

 **"Listeria uses host cell actin to spread cell to cell".** National Institute of

 Health, RO1-AI34276 grant, Direct Costs: $225,000/year.

 Grant period: 7/1/2010 - 6/30/2015, Funded since 1993

 **“Anthrax Toxins impair neutrophil actin-based motility”** National Institute of Health, RO1-AI64891, Direct Costs 225,000 (1st Year)

 Grant period: 8/1/2006-7/31/2011,

***Training Grants:***

**Robert Wood Johnson Minority Faculty Development Program**

Mentor for Dr. Clarence Young

 $ 300,000 Grant period: 7/1/88 - 6/30/92

 **NIH Infectious Disease Training Grant, Assistant Training Director**

 **$**1,000,000 Grant Period: 10/2008-10/2013

***Academic Committees:***

 **New Pathway Project in General Medical Education**,

 Harvard Medical School

 **Medical House Officers Education Committee,** Hospital of

 the University of Pennsylvania

 **Cell Biology Graduate Group Admissions Committee,**

University of Pennsylvania

 **House Officer Selection Committee**, Dept. of Medicine,

 University of Pennsylvania

 **Faculty Search Committee for Muscle Institute**, University

 of Pennsylvania

 **M.D/Ph.D.** **Program Admissions Committee**, University of

 Pennsylvania School of Medicine

 **House Officer Advisory Committee,** University of Florida **House Officer Selection Committee**, University of Florida **Search Committee for Chief of Hematology-Oncology,**

 Department of Medicine, University of Florida

 **Search Committee for Chief of Pulmonary**, Department of

 Medicine, University of Florida

 **Faculty Research Advisory Board member**

 **Chairman, Search Committee for Chief of Gastroenterology**

 **Search Committee for the Chairman of Surgery**

 **University Wide Tenure and Promotion Committee**

  **Search Committee Hematology/Oncology Chief**

  **Medical School Admissions**

 **Organizer of University of Florida, Department of Medicine
 Research Retreat**, 160 Scientific Abstracts presented

 **Chairman National 2nd Year Infectious Disease Curriculum
 Committee, IDSA (Infectious Disease Society of America)**

  **Chairman of the Resistant Pathogen Taskforce,
 Shands Healthcare System**

***Major Teaching and Clinical Responsibility***

Developed the Clinical Microbiological Case based Conferences for Second YearMedical School students

Former Lecturer, Graduate Course in Cell Biology

Director and Creator of the UF Coursera Open Online Course – Fixing Healthcare Delivery , 1st offered beginning September 2014 (>30,000 students, 150 Countries)

Director and Creator 3rd & 4th year elective “Fixing Healthcare Delivery” 2015 to the present

Director and Creator of UF Cousera Open Online Course – Fixing Healthcare Delivery 2.0: Advanced Lean offered beginning August 2017

Infectious Diseases Attending Rounds at Shands and the VAMC

(1.5 months/year, 1980-2015)

General Medicine Ward Attending at Shands (1.5 months/year 1978-present)

### Trainees

Dr. Mark DiNubile, Postdoctoral Research Fellow

 Present position – Investigator, Merck & Co.

Dr. P.J. Brennan, Postdoctoral Research Fellow

 Present position - Professor of Medicine, University of
 Pennsylvania School of Medicine

Dr. Clarence Young, Postdoctoral Research Fellow

 Present Position - Vice President for Clinical Research, Glaxo Smith Kline

Dr. Gussiou Dabiri – Ph.D. graduate student

 Present Position - Office of Research Affairs, Glaxo, Smith, Kline

Dr. Noel Maun – M.D/Ph.D. student

 Present Position – Hematology-Oncology Specialist, Tampa, FL

Dr. William Zeile – Ph.D graduate student

 Present Position -Assistant Professor, University of Florida College of
 Medicine

Schefal Parik, Masters Degree student

 Present Position – New products Division, Biogen, Boston, MA

Dr. Laura Larson – Postdoctoral Research Fellow –
 Present Position - Infectious Disease Consultant, Atlanta, GA

Andrea A. Roebuck, Master Degree –
 Present position: completing her degree in patent law,

 University of Florida College of Law

Dr. Russell During –Ph.D. graduate student

Present Position: Assistant Professor Physician Assistant Program, University of Florida

Dr. Ellen Bishai – Ph.D. graduate student

 Present Position: Veterinary student, University of Pennsylvania

Dr. Sarah Szarowicz – Ph.D. graduate student

 Present Position: Postdoctoral Fellow, Army Medical Research Institute of Infectious Diseases at Fort Detrick, MD

Kassidy Chauncey – Ph.D. graduate student, thesis completed, graduation 4/24/12

***Lectures and Visiting Professorships by Invitation:***

April, 1989 "How do phagocytes regulate actin filament assembly?" European Society of Clinical Investigation, Athens, Greece, Chairman of the session on "Chemotaxis and the role of contractile proteins"

May, 1990 Chairman for Session on PMN adhesion, receptors, cytoskeleton and motility, International Phagocyte Workshop, Washington, D.C.

April 1992 Chairman of the Infectious Disease Subspecialty sessions, National AFCR, ASCI, AAP meetings, Baltimore, MD

Aug. 1992 "Actin assembly is necessary and likely to provide the propulsive force for *Listeria* intracellular movement" Gordon Conference, Motile and Contractile Systems, Plymouth, New Hampshire

 Dec. 1992 Visiting Professor Vanderbilt University Medical Center

April, 1993 "Higher intracellular gelsolin content results in longer actin filament rocket tails and more rapid intracellular movement of *Listeria monocytogenes* in transfected 3T3 Fibroblasts" Cold Spring Harbor Laboratories Symposia on *The Cytoskeleton and Cell Function*

Dec. 1993 "Leukocyte Motility: The Orchestration of Multiple Actin Regulatory Proteins." Plenary Session International Congress on the Regulation of Leukocyte Production and Immune Function Sydney, Australia

Jan. 1994 "Regulation of actin assembly in nonmuscle cells: Lessons learned from Listeria" Keystone Symposium on Bacterial Pathogenesis,
Santa Fe, New Mexico

April, 1994 Meet the Professors, National meeting of the American College of Physicians: Topics: Bacterial Meningitis, CNS Infections in AIDS, and Bacterial Sinusitis

April, 1994 Visiting Professor University of Maryland Medical School

July, 1994 "Uncoupling of *Listeria*-actin based motility by oligoproline peptides" Gordon Conference: Motile and Contractile Systems, Plymouth, New Hampshire

March, 1995" CNS Infection in AIDS" Keynote Speaker, Watson Clinic Internal Medicine Symposium, Lakeland, FL

April, 1995 "Gain of function mutations of the actin capping protein, Cap G" Cold Spring Harbor Laboratories Symposia on *The Cytoskeleton and Cell Function*

June 1995 Visiting Professor, University of Pittsburgh School of Medicine

May, 1996 "Listeriosis: Intracellular Mechanisms of Disease" Keynote speaker, Florida Infectious Disease Society Annual Meeting

February, 1997 Visiting Professor, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA

March, 1997 “Intracellular Pathogenesis of Shigella” One of four keynote speakers for Symposium on Infectious Diseases, Zurich, Switzerland

March, 1997 “The role of oligoproline sequences in the Shigella intracellular movement and cell-to-cell spread” Lecturer, Pasteur Institute, Paris, France

March, 1997 “Shigellosis and Listeriosis: Intracellular life cycles can explain many unique clinical manifestations.” Visiting Professor, Hospital Cantonal, Geneva, Switzerand.

May, 1997 “Medical care from the patients perspective”. Society of General Internal Medicine, Conference on Professionalism. Washington D.C.

November, 1997 Visiting Professor, University of Alabama Birmingham

December, 1997 Visiting Professor, University of Miami, Miami, FL

March, 1998 Visiting Professor, University of Virginia, Charlottesville, VA

March, 1998 Visiting Professor, University of Pennsylvania, Philadelphia, PA

May, 1998 “Listeria and Shigella intracellular pathogenesis: The Generation of Actin Based Motors for Cell-to-Cell Spread, European Society of Cell Biology, Sicily, Italy.

December, 1998 “Actin-based Vaccinia Locomotion in Host Cells Involves ABM-1 and ABM-2 Sequence Recognition. American Society for Cell Biology Annual meeting. San Francisco, CA

November, 1999 “Intracellular pathogenesis of Listeriosis” Infectious Disease Association, Plenary lecture, Annual meeting, Philadelphia, PA

May-September, 2000 Visiting Professor, Division of Infectious Diseases, Hospital Cantonal, University of Geneva, Geneva Switzerland.

October, 2002 – Visiting Professor, University of Colorado School of Medicine
Denver, CO

September , 2004 “Calcium regulation of Listeria Actin-based Motility – University of Geneva, Geneva, Switzerland

June, 2005 “Role of phosphoinositides in Listeria intracellular Motility”. Invited speaker, Phagocyte Gordon Conference, New London, CT

October, 2005 “Listeriosis” University of California, San Diego, CA

July, 2006 “Listeria: Lessons learned from an intracellular pathogen”, and Visiting Professor, Brown University, Providence, RI

October, 2007 Bacillus Anthracis: Why is this infection so deadly?

 Medical College of Georgia, Augusta, GA

October 2009 Visiting Professor, University of Kentucky – Wild Cat Rounds Using Athletic Principles to Improve Multidisciplinary Rounds

October 2010 Visiting Professor, University of Pennsylvania, Pennsylvania Hospital. “A Harvard Business Student Perspective on Teamwork in Medicine”.

December, 2011, Visiting Professor, University of Alabama Birmingham – Baptist Hospital “Gatorounds, Converting Medical Groups into Medical Teams”

June, 2012 Plenary Speaker American College of Physicians, Alabama
annual meeting “Teamwork in Medicine”

March, 2013 Dinner Speaker Advanced Leadership Healthcare Think Tank
“What Our Founding Father Samuel Adams can teach us about improving health care.”

September 2014 Medical Grand Rounds University of California San Diego Department of Medicine “Medical Mistakes: Why to they happen and how do we prevent them.”

September, 2014 Great Teachers Grand Rounds Series, NIH Clinical Center
“Medical Mistakes: Why do they happen, and how can we prevent them?

June, 2015 TeamStepps National Meeting Denver, CO, Adapting TeamStepps to unique environments; Using Athletic Principles to Improve Hospital Multidisciplinary Rounds.

October 2015 Kickoff of a multidisciplinary rounding initiative at Grady Memorial Hospital, Atlanta Georgia“Applying Athletic Principles to Multidisciplinary Rounds”

March 2016 Yale University, New Haven. Symposium on Improving Healthcare Quality “Keeping Score: How the Rothman Index can be applied to assess Multidisciplinary Teamwork in Healthcare”

September 2016 Aspen Institute, Aspen Colorado, Conference on Ethical Healthcare Leadership. “The Challenge of Leading Effective Multidisciplinary Health Care Teams”

June, 2017 TeamSTEPPS National Conference, Cleveland, Ohio “What Our Founding Father Samuel Adams Can Teach Us About Implementing TeamSTEPPS”

***Authored Books:***

**Southwick, F.S.** and Schooley, R.T. *Key References in Infectious Diseases: An Annotated Guide.* New York: Churchill Livingston,1982

**Southwick, F.S.** *Infectious Diseases in 30 days.* New York: McGraw-Hill, March 2003.

**Southwick, F.**S. *Infectious Disease Quick Glance,* New York: McGraw-Hill, September 2004

**Southwick, F. S.** *Critically Ill: A 5-Point Plan to Cure Healthcare Delivery - A toolkit for nurses and others who aspire to transform care in our hospitals and clinics.* Carlsbad, CA: No Limits Publishing Group, June, 2012

**Southwick, F.S. editor,** Carol Kauffman, Richard Wenzel, A.W. Karchmer and Bernard Hirschel Associate Editors – Clinical Decision Support: Infectious Diseases – A full online decision support program for Infectious Diseases, 2017

**Southwick,** F.S. Infectious Diseases: A Clinical Short Course, Lange Series, New York: McGraw-Hill, 4th edition, revised 2020

***Book Chapters:***

**Southwick,** **F.S.** Intracranial suppuration. In *Infectious Diseases,* Fifth Edition, Editors P. Hoeprich, C. Jordan, A. Ronald, 1994.

**Southwick, F.S**. Septic Thrombophlebitis of Major Dural Sinuses. *Current Topics in Infectious Diseases,* Volume 15, edit. Remington, J. and Swartz, M.N., 1995.

**Southwick, F.S.**, and Swartz, M.N. Septic Dural Sinus and Cortical Vein Thrombophlebitis. In: *Neurosurgery.* Wilkins, RH, Rengachary, S, eds. New York: McGraw-Hill. 1995

Zeile, W.L., Purich, D.L. and **Southwick, F.S.** Video microscopy: protocols for examining the actin-based motility of Listeria, Shigella, Vaccinia and lanthanum-induced endosomes. In *Cytoskeleton: signaling and cell regulation*, editors Carraway, K.L. and Carraway, C.A.C. Oxford University Press 2000

**Southwick, F.S.** Gram positive rods. *ACP Medicine* Editor, Dale, D. and Federman, D. 2005, updated 2010

**Southwick, F.S.** The Actin Cytoskeleton: Regulation of Actin Filament Assembly and Disassembly in *Cellular Microbiology*, Editors: Cossart, P. Boquet, P., Normark, S., and Rappuloli, R. ASM Press 2005

**Southwick F.S**. Listeria invasion and spread in nonprofessional phagocytes in *Phagocytosis of Bacteria and Bacterial Pathogenicity*, Editors Ernst, J.D. , and Stendahl, O, Campbridge Press 2006

**Southwick, F.S**. Brain Abscess: Pathogenesis and clinical manifestations in *Uptodate* 12/01/2006

**Southwick, F.S.** Brain Abscess: Diagnosis and Treatment in *Uptodate*, 5/1/2017

**Southwick, F.S**. Septic Dural Sinus Thrombosis in *Uptodate*, 5/1/2017

**Southwick, F.S.** Nocardiosis *Cecil Medicine*, Editor Goldman, L. Saunders, Elsevier, 2019

***Papers:***

**Southwick, F.S.,** Crelin, E.S.: The development of sexual dimorphism in transplanted mouse pelvises. *Yale J. Biol. Med.* 41:444-447, 1969.

**Southwick, F.S,** [Carr H.S](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Search&itool=pubmed_Abstract&term=%22Carr+HS%22%5BAuthor%5D)., [Carden G.A. 3rd](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Search&itool=pubmed_Abstract&term=%22Carden+GA+3rd%22%5BAuthor%5D), [D'Alisa R.M](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Search&itool=pubmed_Abstract&term=%22D%27Alisa+RM%22%5BAuthor%5D)., [Rosenkranz H.S](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Search&itool=pubmed_Abstract&term=%22Rosenkranz+HS%22%5BAuthor%5D). The effect of acridine orange on the growth of Escherichia coli. *J. Bact.*110:439-441, 1972

**Southwick, F.S.,** Durack, D.T.: Chemotherapy of Experimental streptococcal endocarditis. Part III. Failure of a bacteristatic agent (tetracycline) in prophylaxis, *J. Clin. Path.* 27:261-264, 1974

Goldman, L., Caldera, D.L., **Southwick, F.S.**, et al.: Cardiac risk factors and complications in non-cardiac surgery. *Medicine* 57:359-370, 1978

Goldman, L., Caldera, D.L., Nussbaum, S.R., **Southwick, F.S.**, et al.: Multifactorial index of cardiac risk in nor-cardiac surgical procedures. *N. Engl. J. Med.* 297:847-850, 1977

**Southwick, F.S.,** Dalglish, P.H.: Recovery after prolonged hypothermic asystole. *JAMA* 243:1250-1253, 1980

Simon, H.B., **Southwick, F.S.,** Moellering, R.C. Jr., Sherman, E.: Hemophilus Influenzae in hospitalized adults: Current Perspectives. *Am. J. Med.* 69:219-226, 1980

Crowley, C.A., Curnutte, J.T., Rosen, R.E., Andre-Schwartz, J., Gallin,J.I., Klempner, M., Snyderman, R., **Southwick, F.S.**, Stossel, T.P., Babior, B.M.: An inherited abnormality of neutrophil adhesion. Its genetic transmission and its association with a missing protein. *N. Engl. J. Med.* 302:1163-1168, 1980

**Southwick, F.S.,** Stossel, T.P.: Isolation of an inhibitor of actin polymerization from human polymorphonuclear leukocytes. *J. Biol. Chem.* 256:3030-3036, 1981

Lew, P.D., **Southwick, F.S.,** Stossel T.P., Whitin, J.C., Simons, E., Cohen, J.H.: A variant of chronic granulomatous disease: deficient oxidative metabolism due to a low affinity NADPH oxidase. *N. Engl. J. Med.* 305:1329-1333, 1981

**Southwick, F.S.**, Hartwig, J.H.: Acumentin, a protein in macrophages which caps the "pointed" end of actin filaments. *Nature* 297:303-307, 1982

**Southwick, F.S.,** Tatsumi, N., Stossel, T.P.: Acumentin, an actin modulating protein of rabbit pulmonary macrophages. *Biochemistry* 22:6321-6326, 1982

Lew, P.D., **Southwick, F.S**., Montgomery, W.W., Weber, A.L., Baker, A.S.: Sphenoid Sinusitis: A Review of 30 Cases. *N. Engl. J. Med.* 309:1149-1154, 1983

**Southwick, F.S.**, and Stossel, T.P.: Contractile Proteins in Leukocyte Function. *Seminars in Hematology,* 20:305-321, 1983

Spiegel, J.E., Beardsley, D.S., **Southwick, F.S**., Lux, S.E.: An Analogue of the erythroid membrane skeletal protein 4.1 in non-erythroid cells. *J. Cell Biol.* 99:886-893, 1984

Stossel, T.P., Hartwig, J.H., Yin, H.L., **Southwick,** F.S., Zaner, K.S.: The Motor of Leukocytes. *Fed. Proc.* 43:2760-2763, 1984

DiNubile, M.J., **Southwick, F.S.:** Effects of macrophage profilin on actin in the presence and absence of acumentin and gelsolin, proteins which block the opposite ends of actin filaments. *J. Biol. Chem.* 260:7402-7409, 1985

**Southwick, F.S.** Regulation of phagocyte movement. In the Inflammatory Process: An Introduction to the Study of Cellular and Humoral Aspects (2ndedition). PerVenge, ed. Uppsala, Sweden. 1985.

Stossel T.P., Chaponnier, C., Ezzel, R., Hartwig, J.H., Jamney, P., Kwietkowsky, D., Smith, D.B., **Southwick, F.S.**, Yin, H., Zaner, K.S.: Nonmuscle Actin Binding Proteins. *Annual Reviews of Cell Biology* 1 :353402, 1985

**Southwick, F.S.**, Richardson, E.P. Jr., Swartz, M.N.: Septic thrombosis of the dural venous sinuses. *Medicine* 65:82-106, 1986

**Southwick,** **F.S.**, DiNubile, M.J.: Rabbit aleveolar macrophages contain a Calcium-sensitive, 41,000 dalton protein which reversibly blocks the "barbed" ends of actin filaments but does not sever them. *J. Biol. Chem.* 261:14191-14195, 1986

**Southwick, F.S**., Stossel, T.P. Phagocytosis. In the *Manual of Clinical Laboratory Immunology* (third edition) Rose NR, Friedman H, Fahey JL, eds. Washington, D.C.; American Society of Microbiology, pg 326-331, 1986

Shalit, M., Dabiri, G.A., **Southwick, F.S.**: Platelet-activating factor both stimulates and "Primes" human polymorphonuclear leukocyte actin filament assembly. *Blood* 70:1921-1927, 1987

**Southwick, F.S**., and van der Meer, J.W.M.: Recurrent cystitis and bladder mass in two adults with chronic granulomatous disease. *Ann Intern. Med.* 109:118-121, 1988

**Southwick, F.S**., Dabiri G.A., Stossel, T.P.: Neutrophil actin dysfunction (NAD) is a genetic disorder associated with partial impairment of neutrophil actin assembly in three family members. *J. Clin. Invest.* 82:1525-1531, 1988

DiNubile, M.J., **Southwick, F.S.** Contractile Proteins in Leukocytes. *Methods of Enzymology.* 162:246-271, 1988.

**Southwick, F.S.**, Howard, T.H., Holbrook, T., Anderson, D.C., Stossel T.P., and Arnaout, M.A.: The relationship between CR3 deficiency and neutrophil actin assembly. *Blood* 73:1973-1979, 1989.

**Southwick, F.S.**, Dabiri, G.A., Paschetto, M., and Zigmond, S.H. Polymorphonuclear leukocyte adherence induces actin polymerization by a transduction pathway which differs from chemotactic agents. *J.* *Cell Biol.* 109:1561-1569, 1989

Young, C.L.**, Southwick, F.S.**, and Weber, A. Kinetics of a 41 kilodalton macrophage capping protein with actin: Promotion of nucleation during prolongation of the lag period. *Biochemistry* 29:2232-2240, 1990

DiNubile, M. J., Boom, W. H., **Southwick, F.S.**, Septic Cortical Thrombophlebitis. *J. Infect. Dis.* 161:1216-1120, 1990

**Southwick, F.S.** and Young, C.L. The actin released from profilin-actin complexes is insufficient to account for the increase in F-actin in chemoattractant stimulated polymorphonuclear leukocytes. *J. Cell Biol.* 110:1965-1973, 1990

Dabiri, G.A., Sanger, J.M., Portnoy, D.A., **Southwick, F.S.** *Listeria monocytogenes* moves rapidly through the host cell cytoplasm by inducing directional actin assembly. *Proc. Natl. Acad. Sci. USA* 87:6068-6072, 1990

Brennan, P.J., Zigmond, S.H., Schreiber, A.D., Smith, E.R., and **Southwick, F.S.** Binding of IgG containing immune complexes to human neutrophil FcgRII and FcgRIII induces actin polymerization by a pertussis toxin-insensitive transduction pathway. *J.* *Immunol.* 146:4282-4288, 1991

Pike, M.C., Costello, K. and **Southwick, F.S.** Stimulation of human polymorphonuclear leukocyte phosphatidylinositol-4-phosphate kinase by Con A and FMLP is calcium independent: correlation with maintenance of actin assembly. *J.* *Immunol.* 147:2270-2275, 1991

Sanger, J.M., Mittal, B., **Southwick, F.S.**, Sanger, J.W. Intracellular motility and actin polymerization induced by *Listeria monocytogenes* in infected cells. In: EMSA, Bailey GW (Ed.), *Proceedings of the 49th Annual Meeting of the Electron Microscopy Society of America,* San Francisco, CA, pg 166-167, 1991.

Dabiri G.A., Young, C.L., Rosenbloom, J., and **Southwick, F.S.** Molecular cloning of human macrophage capping protein cDNA: A unique member of the gelsolin/villin family expressed primarily in macrophages. *J. Biol. Chem.* 267:16545-16552, 1992.

Sanger, J.M., Sanger, J.W., and **Southwick, F.S.** Host cell actin assembly is necessary and likely to provide the propulsive force for the intracellular movement of *Listeria monocytogenes. Infect. and Immun.* 60(9):3609-3619, 1992.

Durand, M.L. Calderwood, S.B., Weber, D.J., Miller, S.I., **Southwick, F.S.** , Caviness, V.S., Swartz, M. N. Acute bacterial meningitis in adults: A review of 493 episodes. *N. Engl. J. Med.* 328(1):21-28, 1993.

**Southwick, F.S.** Who was caring for Mary? *Ann. Intern. Med.* 118:146-148, 1993.

Harris, M.C., Shalit, M., and **Southwick, F.S.** Diminished actin polymerization by neutrophils from newborn infants. *Ped. Res.* 33:27-31, 1993.

Young, C.L., Feierstein, A, and **Southwick, F.S.** Calcium regulation of actin filament capping and monomer binding by macrophage capping protein. *J. Biol. Chem.* 269:13997-14002, 1994

**Southwick, F.S.** and Purich, D.L. Arrest of *Listeria* movement in host cells by a bacterial ActA analogue: Implications for actin-based motility. *Proc. Natl. Acad. Sci. USA* 91:5168-5172, 1994

Mishra, V., Henske, E.P., Kwiatkowski D.J., and **Southwick, F.S.** The human actin-regulatory protein Cap G: Gene structure and chromosome location. *Genomics* 23, 560-565, 1994.

**Southwick, F.S**. and Purich, D.L. Dynamic remodeling of the actin cytoskeleton: Lessons learned from *Listeria* locomotion. *BioEssays* 16(12):885-891, 1994.

**Southwick, F.S.** and Purich, D.L. Inhibition of *Listeria* Locomotion by Mosquito Oostatic Factor, a Natural Oligoproline Peptide Uncoupler of Profilin Action. *Infect. and Immun.* 63(1):182-190, 1995

**Southwick, F.S**. Gain-of-Function Mutations Conferring Actin-severing Activity to Human Macrophage Cap G. *J. Biol. Chem.* 270(1):45-48, 1995

Sanger, J.M., Mittal, B, **Southwick, F.S.,** and Sanger, J.W. *Listeria monocytogenes* Intracellular Migration: Inhibition by Profilin, Vitamin D-Binding Protein and DNase I. *Cell Motility and the Cytoskeleton* 30:38-49, 1995.

**Southwick, F.S.** and Purich, D.L. Mechanisms of Disease: Intracellular pathogenesis of Listeriosis. *N. Engl. J. Med.* 334:770-776, 1996

Zeile, W.L., Purich, D.L., and **Southwick, F.S.** Recognition of two classes of oligoproline sequences in profilin-mediated acceleration of actin-based *Shigella* motility. *J. Cell Biol.*  133:49-59, 1996

Maun, N.A., Speicher, D.W., DiNubile, M.J. and **Southwick, F.S.** Purification and Properties of a Ca2+-Independent Barbed-end Actin Filament Capping Protein, CapZ, from Human Polymorphonuclear Leukocytes. *Biochemistry* 35:3518-3524, 1996

Purich, D. L. and **Southwick, F.S**. ABM-1 and ABM-2 homology sequences: consensus docking sites for actin-based motility defined by oligoproline regions in Listeria ActA surface protein and human VASP.  *Biochem Biophys Res Commun* 231:686-91, 1997

Laine, R.O., Zeile, W.L., Kang, F., Purich, D.L., and **Southwick, F.S.** Vinculin Proteolysis unmasks an ActA homologue for Actin-based *Shigella* Motility, *J. Cell Biol.* 138:1255-1264, 1997

Kang, F., Laine, R.O., Bubb, M.R., **Southwick, F.S,** andPurich, D.L. Profilin interactions with the Gly-Pro-Pro-Pro-Pro-Pro sequences of Vasodilator-Stimulated Phosphoprotein (VASP): Implications for Actin-Based Listeria Motility.*Biochemistry* 36:8384-8392, 1997

Laine, R.O., Phaneuf, K.L, Kwiatkowski, D.A., Azuma, T. and **Southwick, F.S.** Gelsolin, a barbed-end actin capping and filament severing protein, enhances Listeria actin-based motility in host cells. *Infection and Immunity*. 66:3775-3782, 1998

Zeile, W.L., Condit, R.C., Lewis, J.I., Purich, D.L., and **Southwick, F.S.** Vaccinia locomotion in host cells: Evidence for the universal involvement of actin-based motility sequences ABM-1 and ABM-2. *Proc. Natl. Acad. Sci*. USA, 95:13917-13922, 1998

Purich, D.L. and **Southwick, F.S.** Actin-Based motility of the intracellular pathogen Listeria monocytogenes: Assessing the inhibitory specificity of ABM-1 peptide analogues. *Mol. Cell Biol. Res. Comm*. 1:176-181, 1999

Purich D. L. and **Southwick, F.S** . Energetics of nucleotide hydrolysis in polymer assembly/disassembly: the cases of actin and tubulin. *Methods Enzymol* 308:93-111, 1999

Kang, F., Purich, D.L. and **Southwick, F.S.**  Profilin promotes barbed-end actin filament assembly without lowering the critical concentration. *J. Biol. Chem.*274:36963-36972, 1999

**Southwick, F.S.**, Adamson, E.D. and Purich, D.L. Shigella actin-based motility in the presence of truncated vinculin. *Cell Motil. Cytoskeleton* 45:272-278, 2000

**Southwick, F.S.** Gelsolin and ADF/cofilin enhance the actin dynamics of motile cells. Commentary. *Proc. Natl. Acad. Sci*. 97:6936-6938, 2000

Witke, W**.** , Li, W., Kwiatkowski, D.J, and. **Southwick, F.S** Loss of CapG, a calcium sensitive actin filament barbed end capping protein, profoundly impairs macrophage receptor mediated ruffling, phagocytosis, and vesicular rocketing. *J. Cell Biol.* 154:775-804, 2001

Snapper, S.B., Takeshima, F., Rosen, F.S. Anton, I., Thomas, S., Liu, C-H., Nguyen, D. Keliin, C., Fraser, H., Dudley, D., Geha, R., Purich, D.L., **Southwick, F.S.**, Bronson, R. Goldberg, M.B., Hartwig, J.H, and Alt, F.W. N-WASP-deficiency reveals distinct pathways for cell surface projections and actin-based motility of intracellular microorganisms. *Nature Cell Biol.*3:897-904, 2001

Tchernev, V.T., Mansfield, T.A., Giot, L., Kumar, A.M. Nandabalan, K., Li, Y., Mishra, V.S., Detter, J.C., Rothberg, J.M., Wallace, M.R., **Southwick, F.S.**, Kingsmore, S.F. The Chediak-Higashi protein interacts with SNARE complex and signal transduction proteins. *Molecular Medicine* 8:56-64, 2002.

Zhang, F., **Southwick, F.S**., Purich D.L. Phagosome actin-based motility *Cell Motility and Cytoskeleton* 53:81-88, 2002

Dickinson, R.B., **Southwick, F.S**. and Purich DL A direct-transfer polymerization model explains how the multiple profilin-binding sites in the actoclampin motor promote rapid actin-based motility. Arch Biochem Biophys, Oct 15;406(2):296-301, 2002

Falet H, Hoffmeister KM, Neujahr R, Italiano JE Jr, Stossel TP, **Southwick FS**, Hartwig JH. I mportance of free actin filament barbed ends for Arp2/3 complex function in platelets and fibroblasts. Proc Natl Acad Sci U S A. Dec 24;99(26):16782-7, 2002

**Southwick, F.S.** , Li, W., Zhang, F., Zeile, W.L. and Purich, D.L. Actin based endosome and phagosome rocketing in macrophages: Activation by the secretagogue antagonist lanthanum and zinc. *Cell Motility and Cytoskeleton* 54:41-55, 2003

Bubb, M.R., Yarmola E.G., Gibson, B.G., and **Southwick F.S.** Depolymerization of actin filaments by profilin: Effects of profilin on capping protein function. *J Biol Chem*. 278:24629-35, 2003

Parikh SS, Litherland SA, Clare-Salzler MJ, Li W, Gulig PA**, Southwick FS.** CapG(-/-) mice have specific host defense defects that render them more susceptible than CapG(+/+) mice to Listeria monocytogenes infection but not to Salmonella enterica serovar Typhimurium infection. *Infect. Immun*. 71(11):6582-90, 2003.

Larson, L., Arnaudeau, S. , Gibson, B. , Li, W. , Krause, R. , Hao, B. , Bamburg, J.R., Lew, D.P. , Demaurex, N. and **Southwick**. **F.** Gelsolin mediates calcium-dependent disassembly of Listeria actin tails. *Proc Natl Acad Sci U S A*. 102:1921-6, 2005

Sidhu, G.S., W. Li, N. Laryngakis, E. Bishai, T. Balla, and **F.S. Southwick**. Phosphoinositide-3-kinase is required for intracellular *Listeria monocytogenes* actin-based motility and filopod formation. *J Biol Chem*. 280:11379-86, 2005

During, R. L. , Li, W., Hao, B., Koenig, J. M., Stephens, D. S, Quinn­, C. P. and **Southwick, F.S..** Anthrax Toxins Paralyze Neutrophil Actin-based Motility**.** *J. Infect Dis.* 192:837-845, 2005

Zhang, Y., Vorobiev, S.M., Gibson, B.G., Hao, B., Sidhu, G.S., Mishra, V.S Yarmola, E.G., Bubb. M.R., Almo, S.C. and **Southwick, F.S**. A CapG Gain-of-function Mutant Reveals Critical Structural and Functional Determinants for Actin Filament Severing. *EMBO J.* 25: 4458-67, 2006

**Southwick, F.S.** Spare me the PowerPoint, bring back the medical textbook. Transactions of the American Clinical and Climatological Association, 118: 115–122, 2007

# During, R.A, Gibson, B.G., Li, W., Bishai, E.A, Sidhu, G.S., Landry, J., and Southwick, F. S. Anthrax Lethal Toxin Paralyzes Actin-based Motility by Blocking Hsp27 Phosphorylation. *EMBO J.* 26:2240-50, 2007

Archibald, L.K., Shapiro, J., Pass, A. , Rand, K., and **Southwick, F.S**. Methicillin-resistant *Staphylococcus aureus* Infection in a College Football Team: Risk Factors Outside the Locker Room and Playing Field. *Infect. Control and Hosp. Epidemiol*, 29:450-452, 2008

Szarowicz, S., During, R.L., Li, W., Quinn, C.P., Tang, W-J., and **Southwick, F.S.** *Bacillus anthracis* Edema Toxin Impairs Neutrophil Actin-based Motility. *Infect. Immun.* 77:2455-64, 2009

**Southwick, F.** and Spear S**.** Who was caring for Mary Revisited: A call for all academic physicians caring for patients to focus on systems and quality improvement. *Acad. Med.* 84:1648-50, 2009

**Southwick, F.**, Katona, P., Kauffman, C. Monroe, S, Pirofski, L-A, Del Rio, C., Gallis, H. and Dismukes. IDSA Guidelines for Improving the Teaching of Preclinical Medical Microbiology and Infectious Diseases. *Acad. Med.* 85:19-22, 2010

Miggins M, Hasan A, Hohmann S, **Southwick F,** Casella G, et al. The potential influence of common viral infections diagnosed during hospitalization among critically ill patients in the United States. *PloS one* 6: e18890., 2011

Chauncey KM, Szarowicz SE, Sidhu GS, During RL, **Southwick FS** Anthrax Lethal and Edema Toxins Fail to Directly Impair Human Platelet Function. *Journal of Infectious Diseases* 205: 453-357, 2012

Chauncey, KM, MC.Lopez, G Sidhu1, S E Szarowicz, HV Baker,, C Quinn and **FS Southwick.** *Bacillus anthracis* Lethal Toxin Induces Broad Transcriptional Responses in Human Peripheral Monocytes. *BMC Immunology* 13: 33-58, 2012

Bharwani, AM., Harris, GC, and **Southwick, FS.** A Business School Perspective on Medical Interprofessional Rounds: Transforming Rounding Groups into Rounding Teams. *Acad. Med.* 87: 1768-1771, 2012

Bishai, EA, Sidhu, GS, Li, W, Dhillon, J, Bohil, AB, Cheney, RE, Hartwig, JH and **Southwick, FS**. Myosin-X facilitates Shigella-induced membrane protrusions and cell-to-cell spread**.** *Cellular Micro*. 15:353-67, 2013

**Southwick F**., M. Lewis, D. Treloar, K. Cherabuddi, N. Radakrishnan, R. Leverence, X. Hand, and L. Cottler, Applying athletic principles to medical rounds to improve teaching and patient care. *Acad. Med.* 89:1018-1023, 2014

Sharma, K., E.M. Goss, E.R. Dickstein, M.D. Smith, J.A. Johnson, **F.S. Southwick**, and A.H. van Bruggen. Exserohilum rostratum: characterization of a cross-kingdom pathogen of plants and humans. *PloS one.* 9e10891, 2014

**Southwick, F**., C. Nicole, and J. Hallisy. A patient initiated voluntary online survey of adverse medical events: The perspective of 696 Injured Patients and Families. *BMJ Quality and Safety* 24:620-629, 2015 (Chosen as one of top 10 papers for 2015, BMJ Quality and Safety)

**Southwick, F.** The Lazy Leukocyte Revisited. *Blood* 128:2112-2113, 2016

**Southwick, F.S.** and S. M. Southwick. The loss of a sense of control as a major contributor to burnout: A neuropsychiatric pathway to prevention and recovery*. JAMA Psychiatry* 2018 75(7):665-666

Giardina TD, Haskell H, Menon S, Hallisy J, **Southwick FS**, Sarkar U, et al. Learning From Patients' Experiences Related To Diagnostic Errors Is Essential For Progress In Patient Safety. Health Aff (Millwood). 2018;37(11):1821-7.

Radhakrishnan NS, Singh H, **Southwick FS**. Teaching novice clinicians how to reduce diagnostic waste and errors by applying the Toyota Production System. *Diagnosis (Berl).* 2019;6(2):179-185

Kolla BP, Oesterle T, Gold M, **Southwick F**, Rummans T. Infectious diseases occurring in the context of substance use disorders: A concise review. J Neurol Sci. 2020;411:116719.

Southwick SM, **Southwick FS**. The Loss of Social Connectedness as a Major Contributor to Physician Burnout: Applying Organizational and Teamwork Principles for Prevention and Recovery. JAMA Psychiatry. 2020.

***Selected Abstracts***

**Southwick, F.S.**, Dabiri, G.: Human neutrophil adherence is associated with a persistent rise in F-actin content. *Clin. Res.* 35:491A, 1987.

**Southwick, F.S.**, Weber, A., Rosenbaum, H., Young, C., Mooseker, M.: The capping constant of 41K, an actin binding protein from macrophages. *J Cell Biol.* 1987.

Weber, A., **Southwick, F.S.**, Young, C., Rosenbaum, H., Mooseker, M.: Profilin sequesters G-actin more weakly from the barbed than the pointed filament end. *Biophys. Journal.* 53: 27a, 1988

Young, C.L., Schloff, M., **Southwick, F.S.** Profilin function in human polymorphonuclear leukocytes (PMN). *Clin.Res.* 36: 583a, 1988.

Brennan, P.J., Zigmond S. H., Schreiber A.D., **Southwick, F.S.** IgG immune complex binding to the Fc receptor 2 induces actin filament assembly in human polymorphonulcear leukocytes (PMN). *J.Cell. Biol.* 107:452a, 1988

**Southwick, F.S.**, Dabiri G.A., Portnoy D. Intracellular growth of hemolysin positive *Listeria Monocytogenes is* associated with localized macrophage actin filament assembly. *Clin. Res.* 37:567A, 1989

Brennan, P.J., Zigmond S.H., Schreiber, A.D., **Southwick, F.S.** IgG Immune complexes induce actin filament assembly in human polymorphonuclear leukocytes (PMN) *Clin.Res.* 37:561A,1989

**Southwick, F.S.** and Young, C.L. Chemoattractant stimulation dissociates profilin-actin complexes in human polymorphonulcear leukocytes. J. *Cell Biol.* 109: 348a, 1989.

Young, C.L., Dabiri, G.A., and **Southwick, F.S.** Macrophage Capping Protein (MCP) is homologous to the aminoterminal half of gelsolin and is expressed in nearly all mammalian cells. J. *Cell Biol.* 111: 161a, 1990.

Sanger, J.M., Mittal,B., **Southwick, F.S.** and Sanger, J.W. Analysis of intracellular motility and actin polymerization induced by *Listeria monocytogenes* in PtK2 Cells. J. *Cell Biol.* 111:415a, 1990

Sanger, J.M.,**Southwick, F.S.** and Sanger, J.W. Intracellular propulsion of *Listeria* inside PtK2 cells is coupled to actin polymerization. J. *Cell Biol .* 111 :390a, 1990

Young, C.L., Dabiri, G.A., **Southwick, F.S.** Macrophage capping protein: a Ca2+-sensitive regulator of actin filament assembly in phagocytes. Clin.Res.39:352A, 1991

DiNubile, M.J., Smith, E.R., **Southwick, F.S.** Supernatants from *Listeria Monocytogenes* increase the rate of actin polymerization in macrophage extracts. *Clin Res.39:223A,* 1991

**Southwick, F.S.**, Sanger, J.M. and Sanger J.W. Host cell actin provides the propulsive force for the intracellular movement of *Listeria monocytogenes. Clin. Res.39:352A,* 1991

Young, C.L., Weber, *A.,* **Southwick F.S.** Macrophage capping protein: structure-function analysis of its regulation by calcium. J. *Cell Biol.* 115:327a, 1991

Dabiri G.A*.,* Young, C.L., and **Southwick, F.S.** Macropohage capping protein: *A* unique member of the gelsolin-villin family which is upregulated in macrophages. *Clin.Res.40:335A,* 1992

Sanger, J.M, Ashton, F.T., **Southwick, F.S.** and Sanger, J.W. Time-lapse video microscopy of the actin-based *Listeria* movement in host cell cytoplasm.J.Cell *Biol.* 115:369a, 1991

Young, C.L. **Southwick F.S.** Macrophage capping protein:barbed end capping and monomer binding require different Ca++concentrations. *Mol.Biol.Cell* 3 (supplement): 153a, 1992

Phaneuf, K.L., Cunningham C.C., **Southwick, F.S.** Higher intracellular gelsolin content is associated with longer *Listeria monocytogenes*induced actin projections in transfected 3T3 fibroblasts. *Mol.Biol.Cell* 3 (supplement): 97a, 1992

Dabiri, G.A., Young, C.L., **Southwick, F.S**. Macrophage capping protein: A unique member of the gelsolin-villin family which is upregulated in macrophages. *Clin. Res.,* 40(2):335a, 1992.

Mishra, V.S., and **Southwick, F.S.** Cloning of the human gene for macrophage capping protein. *Mole. Biol. Cell* 4 (supplement): 1488a, 1993.

Phaneuf, K.L., Cunningham, C.C., and **Southwick, F.S.** Higher intracellular gelsolin content results in longer actin filament rocket tails and more rapid intracellular movement of *Listeria monocytogenes-In* transfected 3T3 fibroblasts. *Cytoskeleton and Cell Function,* 13a,1993.

Maun, N.A., Speicher, D.W., and **Southwick,** F.S. Human polymorphonuclear leukocyte (PMN) annexin VI is a barbed end actin filament capping protein. Presented at the *33rd Annual American Society for Cell Biology meetings,* New Orleans, December,1993.

Maun, N.A., Speicher, D.W., and **Southwick, F.S.** Human polymorphonuclear leukocyte (PMN) annexin VI is a barbed end actin filament capping protein which is developmentally regulated in HL-60 cells. Presented at the American Federation of Clinical Research National Meetings, Baltimore, Maryland, May, 1994

Zeile, W.L., Purich, D.L., and **Southwick, F.S.** Intracellular motility of *Shigella Flexneri* in host cells is blocked by microinjection of a synthetic acta oligoproline peptide. *Mole. Biol. Cell* 5 (supplement): 136a, 1994.

Kowalski, R.J., **Southwick, F.S.**, and Purich, D.L. Influence of the second oligoproline sequence in *Listeria* ActA protein on profilin-medicated actin ADP-ATP exchange.Mole. *Biol. Cell* 5 (supplement): 158a, 1994.

Mishra, V.S. and **Southwick, F.S.** Identification of a clone containing the 5' upstream region of the gene encoding for the human actin-binding protein Cap G. *Mole. Biol. Cell* 5 (supplement): 396a, 1994.

**Southwick, F.S.** Gain of function mutations conferring actin-severing activity to human Cap *G.Mole. Biol. Cell* 5 (supplement): 397a, 1994.

**Southwick, F.S.** and Bubb, M.R. Human macrophage CapG: Characterization of gain-of-function mutants with actin-severing activity. Cold Spring Harbor Symposium. *The Cytoskeleton and Cell Function.* 17,1995

**Southwick, F.S.** Fang, KK., Pissaro, PP.A, Bubb, M.R., and Purich, D.L. *Listeria monocytogenes* rockets through the cytoplasm of host cells and spreads from cell to cell by usurping the cell's actin regulatory proteins VASP and Profilin, *Clin. Res.* (accepted for oral presentation, May 1996)

**Southwick, F.S.**, Laine, R.O., Zeile, W., Kang, F. and Purich, D.L. Vinculin proteolysis: A molecular switch for Actin Based Motility of Shigella. Mol. Biol. Cell 7 (Supplement):380a, 1996.

Purich, D.A., Kang, F., Laine, R.O., Bubb, M.R., and **Southwick, F.S.** Mechanism of actin-based listeria motility: interaction of profilin with VASP’s GPPPPP repeat sequences. *Mol. Biol. Cell* 7(Supplement):378a, 1996.

**Southwick, F.S**., E.D. Adamson, and D.L. Purich.  Role of Vinculin in Shigella Actin-Based Motility in 5.51 and 229 Vinculin-Deficient Host Cells. *Molec. Biol Cell* 8 (Supplement), 1997

**Southwick, F.S.,** J.E. Heuser, M.C. Beckerle, P. Shen and D.L. Purich. Actin-Based Endosomal Rocketing Involves Zyxin, VASP, and Profilin. *Molec. Biol. Cell* 8 (Supplement), 1997

Maun, N.A., Ernst, J., and **Southwick, F.S.** Purification of annexin VI from human leukocytes, intracellular localization in human neutrophils and monocytes, and differential expression during HL-60 differentiation. Blood. 1997

Zeile, W.L., Condit, R.C., Purich, D.L., and **Southwick, F.S**., Actin-based Vaccinia Locomotion in Host Cells Involves ABM-1 and ABM-2 Sequence Recognition. Molec. Biol. Cell, Dec 1998

**Southwick, F.S.**, Li, W., Kwiatkowski, D.J., and Witke, W. The actin based motile functions ruffling, phagocytosis and endosomal rocketing are impaired in mouse macrophages lacking CapG. Molec. Biol Cell, Dec. 1999

Purich, D.L., Kang, F., and **Southwick, F.S.** Profilin promotes barbed-end actin filament assembly without lowering the critical concentration. Molec. Biol. Cell, Dec. 1999

**Southwick, F.S**., Witke, W. Li, W. and Kwiatkowski, D.J. Knocking out CapG, a calcium-sensitive actin filament barbed end capping protein, profoundly impairs macrophage receptor mediated ruffling, phagocytosis and endosomal rocketing. Blood, Dec, 2000

**Southwick, F.S. ,** Arnaudeau S., Krause, R., Li, W., Zeile, W., Lew, PD, Demaurex N. Calcium regulation of actin kinetics in Listeria infected cells. Molec. Biol Cell, Dec 2001

Parikh, S. , Litherland, S.A., Clare-Salzer, M.J., Li, W., Gulig, P.A., and **Frederick Southwick**. CapG-null mice have specific host defense defects rendering them more susceptible to Listeria monocytogenes, but not Salmonella typhimurium infection. Blood 2002

Larson, L. Arnaudeau S., Krause, R., Li, W., Lew, PD, Demaurex N. and **Southwick, F.S**. Calcium regulation of actin kinetics in Listeria infected cells. J. Infect Dis. 2002

**Southwick, F.S**., Vorobiev, E., Zhang, E., Hao, B., Mishra, V.S., Gibson, B.G., Bubb, M.R., Almo, S.C. Insights into the mechanism of actin filament severing: Addition of a single amino acid to the CapG severing mutant causes a loss of severing, but retention of monomer-binding and capping activity. Molec. Biol Cell, Dec 2003

Sidhu, G., Li, W., Laryngakas, N. , Balla, T. and **Southwick, F.**S. PI3 Kinase is required for Listeria Actin Based Motility. J. Infect Disease, 2004

During, R. L. , Li, W., Stephens, D. S, Quinn­, C. P. and **Southwick, F.S..** Anthrax Toxins Paralyze Neutrophil Actin-based Motility**.** American Society of Microbiology, 2005

During, R.L., Li, W., Landry, J., Quinn, C.P. and **Southwick, F.S.** Anthrax Lethal toxin blocks actin-based motility by preventing Hsp27 phosphorylation, American Society of Cell Biology, 2006

Bishai, E., Cheney, R., Sidhu, G. and **Southwick, F.S.** Shigella utilizes Myosin X for intracellular movement and cell-to-cell spread. American Society of Cell Biology, 2006

# Zhang, Y., Vorobiev, S.M., Gibson, B.G., Hao, B., Sidhu, G.S., Mishra, V.S., Yarmola,  E.G., Bubb. M.R., Almo, S.C. and Southwick, F.S. A CapG Gain-of-function Mutant Reveals Critical Structural and Functional Determinants for Actin Filament Severing. American Society of Cell Biology, 2006

Szarowicz, S.E., During, R.L., Li, W., Quinn, C.P., Tang, W-J., and **Southwick, F.S.** *Bacillus anthracis* Edema Toxin Impairs Neutrophil Actin-based Motility. American Society of Cell Biology, 2008

Bishai, E.A, Sidhu, G.S., Li, W., Bohil, A.P., Cheney, R.E. and **Southwick, F.S.** Myosin-X Facilitates Shigella Filopodia Formation
and Cell-to-Cell Spread. American Society of Cell Biology, 2008

Szarowicz, S.E., Chauncey, K. Sidhu, G. Gibson, B., Gertler, F., and **Southwick, F.S** . *Bacillus anthracis* Edema Toxin Impairs Neutrophil Chemotaxis and Enhances Filopodia Formation by Phosphorylating VASP. American Society of Cell Biology, 2009

***Honors Thesis*** *(Yale University)*

**Southwick, F.S.** A preliminary exploration of learning environments in Yale’s residential colleges. pg. 1-156 (Dr. Kenneth Kenniston, supervisor)

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