

CURRICULUM VITAE

Timothy Alan Springer

Education:

1971 B.A. University of California, Berkeley (Biochemistry)
1976 Ph.D. Harvard University (Biochemistry and Molecular Biology)

Postdoctoral Training:

1976-1977 National Institutes of Health Research Fellow, University of Cambridge, England, and MRC Laboratory of Molecular Biology, Cambridge, England (César Milstein)

Academic Appointments:

1977-1983 Assistant Professor of Pathology, Harvard Medical School
1983-1989 Associate Professor of Pathology, Harvard Medical School
1981-1988 Chief, Laboratory of Membrane Immunochemistry, Dana Farber Cancer Institute
1988-1993 Vice President, Immune Disease Institute (former Center for Blood Research)
1988- Senior Investigator, Immune Disease Institute (former Center for Blood Research)
1989-2011 Professor of Pathology, Harvard Medical School
1989- Latham Family Professor, Harvard Medical School
2011- Professor of Biological Chemistry and Molecular Pharmacology, Harvard Medical School
2011- Professor of Medicine, Boston Children's Hospital
2012- Senior Investigator, Program in Cellular and Molecular Medicine, Boston Children's Hospital

Non-profit Service:

2016- Co-founder and Chair, Institute for Protein Innovation
2019- Executive Chair, Institute for Protein Innovation

Awards and Honors:

1966 National Merit Scholarship
1971 Phi Beta Kappa
1971 Biochemistry Departmental Citation (awarded to most outstanding graduate)
1971 B.A. with Distinction in General Scholarship and Great Distinction in the Major
1981 American Cancer Society Junior Faculty Research Award
1984-1989 American Cancer Society Faculty Research Award
1988&2004 MERIT Grant Award, National Institutes of Health
1992 Distinguished Lectureship, Vanderbilt School of Medicine
1993 American Heart Association Basic Research Prize
1994 Royal Society of Medicine Medal, Visiting Professor, United Kingdom
1995 William B. Coley Medal for Distinguished Research in Fundamental Immunology
Cancer Research Institute
1995 Marie T. Bonazinga Award for Excellence in Leukocyte Biology Research
Society for Leukocyte Biology
1996- Member, National Academy of Sciences
1997 Wellcome Visiting Professor, Wayne State University
2001- Fellow, American Academy of Arts and Sciences
2004 Crafoord Prize in Polyarthritis, Royal Swedish Academy of Sciences
2004 Fellowship, John Simon Guggenheim Memorial Foundation
2004- Honorary Chair Professor, Fudan University, Shanghai, China
2006- Honorary Professor, College of Life Sciences, Nankai University, Tianjin, China
2007- Honorary Professor, Shanghai Jiao Tong University
2010- John Warren Fellow, Harvard Medical School Dean's Council
2011 Doctor Medicinae Honoris Causa, Aarhus University, Denmark
2013- Fellow, American Association for the Advancement of Science

2014 Meritorious Career Award, American Association of Immunologists
 2014 Henry M. Stratton Medal, American Society of Hematology
 2015 Biennial Medal for Contributions to Hemostasis, International Society on Thrombosis and Haemostasis
 2019 Canada Gairdner International Award, Gairdner Foundation
 2019 Anthony Cerami Award for Translational Medicine, Molecular Medicine

Major Committee Assignments:

National and Regional:

1980 Panel Member, NIAID Study Group on Immunology
 1982 Ad Hoc Member, Experimental Immunology Study Section
 1985 Ad Hoc Member, Allergy and Immunology Study Section
 1986 Ad Hoc Member, Board of Scientific Councilors, National Institutes of Allergy and Infectious Disease
 1986-1990 Member, Allergy and Immunology Study Section, National Institutes of Health
 1989-2000 Councilor, International Leukocyte Workshop
 1990 Organizer, International Conference on Leukocyte Adhesion Molecules, Titisee, Germany
 1990-1992 Executive Committee, International Congresses on Inflammation
 1991 Organizer, Banbury Center Conference on Adhesion Molecule Receptors and Disease, Cold Spring Harbor, New York
 1991 Organizer, Juan March Foundation Workshop on Adhesion Receptors in the Immune System, Madrid, Spain
 1991-1993 Scientific Advisory Board, New England Regional Primate Research Center
 1994 Co-Organizer, Keystone Symposium, "Biology of Physicochemical Interactions at the Cell Surface"
 1992-1994 Chair, Adhesion Structures Section, Fifth International Leukocyte Workshop
 1994-1996 Chair, Endothelial Cell Section, Sixth International Leukocyte Workshop
 1996-2000 Howard Hughes Medical Institute, Scientific Review Board
 2011 NIAID/DIR Board of Scientific Counselors Review Meeting
 2012 National Research Council Committee on "Proposal Evaluation for Allocation of Supercomputing Time for the Study of Molecular Dynamics."
 2018 Panel Member, Workshop on how future structural biology resources at APS-U can be used to address grand challenges for biological research, Advanced Photon Source, Argonne National Laboratory
 2019-2024 Trustee and Member of the Board of Trustees, Marine Biological Laboratory

Harvard:

1982-1994 Committee on Cell and Developmental Biology
 1989-1991 Ryan Fellowship Committee
 1989- Executive Committee, Committee on Immunology
 1989-1992 Center for Blood Research, Planning Director for Space in the Warren Alpert Building
 1990-1993 Member and then Chair, Dunham Lectureship Committee
 1991-1993 Faculty Fellowships Committee
 1991- Chair and member, numerous ad hoc search committees for full professors and junior faculty members. Recruits from committees chaired: Rick van Etten, Jose-Carlos Gutierrez-Ramos, Uli von Andrian, Anjana Rao, Denisa Wagner, Sun Hur, Wesley Wong, Hao Wu
 1991-1994 Committee on Immunology, Admissions Committee
 1989- Appointments Committee, Center for Blood Research
 1993-1994 Health Sciences and Technology Fellowships Committee
 1993-2004 Executive Committee, Department of Pathology
 1994- Ph.D. Program Faculty in Biomedical and Biological Sciences
 1996-1999 Member, Faculty Council
 2002-2011 Overseer, Board of Overseers, Center for Blood Research
 2004- Committee on University Resources, Harvard University
 2004- Member, Center for Molecular and Cellular Dynamics, Harvard Medical School
 2010- Board of Trustees, Boston Children's Hospital Board of Trust

Editorial Boards:

1981-1985	Associate Editor, Journal of Immunology
1981-	Editorial Board, Hybridoma
1985-1995	Advisory Editor, Journal of Experimental Medicine
1988-1993	Editorial Board, Cellular Immunology
1988-1992	Editorial Board, Journal of Clinical Immunology
1989-1992	Editorial Board, New Biologist
1989-1992	Editorial Board, Cell Regulation (Molecular Biology of the Cell)
1992-1996	Associate Editor, Molecular Biology of the Cell
1996-2001	Editorial Board, Immunological Reviews

Memberships and Committee Assignments in Professional Societies:

1979-	American Association of Immunologists
1981-1994	Reticuloendothelial Society
1982-	American Society for Biochemistry and Molecular Biology
1985-1986	American Association of Immunologists Meeting, Block Chairman, Macrophages & Natural Killer Cells
1986	Reticuloendothelial Society, Membership Chair
1987	Program Committee, Reticuloendothelial Society (chair 1989)
1989-	American Association of Pathologists
1993	Nomination Committee, American Association of Immunologists
1995-	Society for Leukocyte Biology
2001	Canadian Vaccines and Immunotherapeutics Network, Scientific Advisor
2004-2007	Chair, Biophysics and Computational Biology (Section 29), National Academy of Sciences

Consulting:

1989-1995	Boehringer Ingelheim
1992-1999	LeukoSite, Inc., Founder and Chairman of Scientific Advisory Board
1995-1999	LeukoSite, Inc., Member, Board of Directors
1999-2001	Millennium Pharmaceuticals
2003	Sunesis Pharmaceuticals
2008-	Selecta Biosciences, Board Director and Scientific Advisory Board Member
2010-	Moderna Therapeutics, Board Director and Scientific Advisory Board Member
2011-2015	Pfizer, Inc., Resident Professor and Scientific Advisory Board Member
2012-	Scholar Rock, Founder, Board Director, and Scientific Advisory Board Member
2015-	Morphic Therapeutic, Founder, Board Director, and Scientific Advisory Board Member
2016-	Institute for Protein Innovation, Co-Founder and Executive Chair

Major Research Interests: Adhesion Receptors of the Immune System, Integrins, von Willebrand factor, Transforming Growth Factor- β and Bone Morphogenetic Protein Family, Structural Vaccinology of Malaria

Teaching Experience:

1972-1974	Harvard University, Biochemistry 10 Teaching Assistant
1974-1975	Harvard University, Biochemistry 111 Teaching Assistant
1981	Instructor, Alton Jones Cell Culture Center Course on Macrophages, Lake Placid, NY
1984, 1986	Developer and leader, Harvard Medical School Continuing Education Course, "Hybridomas in Biotechnology and Medicine"
1985-1994	Course leader and lecturer, Harvard Medical School, Immunology 203, "Biochemistry and Molecular Biology of the Immune System"
1988	Lecturer, Harvard Medical School, "Identity, Microbes and Defense," in New Pathway Curriculum
1988-1994	Lecturer, Harvard University, Molecular and Cellular Biology 200a "Molecular Development of the Cell"
1989, 1993-1998	Lecturer, Harvard Medical School, Human Pathology, HST-030
1996, 1998	Lecturer, Rockefeller U., Cell Biology Course

1998 Lecturer, Harvard Medical School, Advanced Biomedical Sciences Course “Revisiting Biomedical Sciences and Pathology”
 1999 Lecturer, Harvard University, Molecular and Cellular Immunology 169
 1999 Presentation to Graduate Students, Harvard University, Biological and Biomedical Sciences
 1999, 2001 Lecturer, Harvard University, Molecular Immunology 268
 2003 Lecturer, Harvard University, Immunology Critical Reading Course 204
 2007 Lecturer, Harvard University, Department of Biological Chemistry and Molecular Pharmacology 201 Proteins
 2008-2013 Lecturer, Harvard Medical School, Biophysics 300 Seminar Series
 2010 Lecturer, Department of Biological Chemistry and Molecular Pharmacology 201, Harvard Medical School
 2012 Instructor, Division of Medical Sciences, Harvard Medical School Nanocourse, Immune System Molecules In Three Dimensions
 2015-2016 Lecturer, Department of Biological Chemistry and Molecular Pharmacology 236, Harvard Medical School

Selected Lectures and Honors:

1990 Visiting Professor, University of Michigan, Ann Arbor, Michigan
 1991 Centennial Celebration-Scientific Symposium, Washington University School of Medicine, St. Louis, Missouri
 1991 Harvey Lecturer, William Harvey Research Institute, St. Bartholomew’s, London, England
 1992 Keynote Address, Joint Keystone Symposia on “Inflammation, Growth Regulatory Molecules, and Atherosclerosis” and “The Molecular Biology of the Endothelial Cell,” Keystone, Colorado
 1992 9th Zoltan Ovari Symposium Lecturer, The Honors Program, New York University Medical Center, New York City, New York
 1992 1st Annual Invited Speaker, Pathology Department, Albert Einstein School of Medicine, Bronx, New York
 1992 14th Annual Jim McGinnis Memorial Lecturer, Duke University Medical Center, Durham, North Carolina
 1992 Lecturer, National Heart, Lung and Blood Institute Symposium on Atherosclerosis to Honor Gardner McMillian, Bethesda, Maryland
 1992 Boehringer-Ingelheim Distinguished Lecturer in Biomedical Sciences, Vanderbilt University, Nashville, Tennessee
 1993 Lecturer, William B. Coley Symposium, Frontiers of Immunology and Cancer Immunology, Cancer Research Institute and Memorial Sloan-Kettering, New York City, New York
 1994 Lecturer, The Harvey Society, New York City, New York
 1994 Juan March Foundation Lecturer, Madrid, Spain
 1994 Basic Science Lecturer, American Association for Thoracic Surgery Annual Meeting, New York City, New York
 1994 Burroughs-Wellcome Visiting Professor, Royal Society of Medicine, London, Cambridge, Birmingham, and Oxford, England
 1994 Second Annual Norman Heatley Lecturer, University of Oxford, Sir William Dunn School of Pathology, Oxford, England
 1995 Second Daiichi Lecturer, UCSF, “The effect of force on bond lifetimes: Are selectins and integrins specialized for high tensile strength?” San Francisco, California
 1995 Lecturer, Nobel Conference on “Cell Adhesion Molecules and Cell-Matrix Receptors in Vertebrate Tissues”, Karolinska Institutet, Stockholm, Sweden
 1995 Plenary Speaker and Symposium Co-Chair on Selectins, World Congress on Inflammation, Brighton, England
 1996 Plenary Lecturer, Keystone Symposium, Exploring and Exploiting Antibody and Ig Superfamily Combining Sites, Taos, New Mexico
 1996 Co-Organizer and Speaker, Vascular Endothelium and Regulation of Leukocyte Traffic Meeting, Instituto Juan March de Estudios e Investigaciones, Madrid, Spain
 1997 Welcome Visiting Professor, Wayne State University, Detroit, Michigan
 1998 Presidential Symposium Speaker on Integrin Receptors, American Society of Haematology, Miami, Florida
 1998 Keynote Lecturer, Third International Workshop on Signal Transduction in the Activation and Development of Mast Cells and Basophils, National Institutes of Health, Bethesda, Maryland
 1998 Keynote Address, “Integrins and G Proteins: Structurally Homologous Proteins that Regulate Interactions Outside and Inside the Cell Membrane”, Society for Leukocyte Biology, Garda, Italy
 1999 John T. Edsall Lecturer, Department of Molecular and Cellular Biology, Harvard University, Cambridge, Massachusetts
 2000 Speaker, Crafoord Prize Symposia, The Royal Swedish Academy of Sciences, Sweden

2001 Keynote Address, Keystone Symposium, "Chemokine and Chemokine Receptors", Taos, New Mexico

2001 Keynote Speaker, NCI Center for Cancer Research, Fellows Symposium, Bethesda, Maryland

2003 Speaker, The Future of Structural Biology, New York Structural Biology Center, New York City, New York

2003 Speaker, Dean's Lecture at Mount Sinai School of Medicine, New York City, New York

2004 Speaker, President's Research Seminar Series, Memorial Sloan-Kettering Cancer Center, New York City, New York

2006 12th Annual Edmond Alexandre Goidl Lectureship on Immunology, University of Maryland at Baltimore, School of Medicine, Baltimore, Maryland

2008 Keynote Speaker, "Transendothelial Migration and Bidirectional Signal Transmission in Integrins", Keystone Symposia, Keystone, Colorado

2008 Lecturer, 12th International Vascular Biology Meeting, Sydney, Australia

2008 Lecturer, Spanish National Center for Cardiovascular Research Symposium, Madrid, Spain

2008 Lecturer, "A Structural Mechanism for Coordinating Ligand Binding by Integrins with Attachment to the Cytoskeleton", Department of Biosciences and Biotechnology, University of Helsinki, Helsinki, Italy

2008 Keynote Speaker, Beirne B. Carter Lecture in Immunology, University of Virginia, Charlottesville, Virginia

2008 Co-Chair & Lecturer, 48th American Society for Cell Biology Annual Meeting, San Francisco, California

2009 Speaker, "Bidirectional Signaling through Integrins Reinforces Ligand and Cytoskeleton Engagement", Montana State University, Bozeman, Montana

2009 Lecturer, Gordon Research Conference on Fibronectin, Integrins & Related Molecules, Ventura, California

2009 Lecturer, "Interactions Between Platelets, von Willebrand Factor, and Hydrodynamic Shear Force", 8th Annual Aster Lectures, Blood Research Institute, BloodCenter of Wisconsin, Milwaukee, Wisconsin

2009 Physiology Course Lecturer, Woods Hole Marine Biological Laboratory, Woods Hole, Massachusetts

2009 Speaker, "Interactions Between Platelets, von Willebrand Factor, and Hydrodynamic Shear Force", D. E. Shaw Research, LLC (DESRES), New York City, New York

2009 Lecturer, "The Shear-Sensor Domain in the Ultra-Large Protein - von Willebrand Factor", PhysCell Conference, Primosten, Croatia

2009 Lecturer, Tri-Institutional Structural Biology Seminar Series, Memorial Sloan-Kettering Cancer Center and Weill Medical College, Rockefeller University, New York City, New York

2009 Room Visiting Lecturer, "Interactions Between Platelets, von Willebrand Factor, and Hydrodynamic Shear Force", The Scripps Research Institute, San Diego, California

2010 Speaker, Molecular Biophysics Discussion Group, UT Southwestern Medical Center, Dallas, Texas

2010 Platform Speaker, Keystone Symposia on Structural Analysis of Supramolecular Assemblies by Hybrid Methods, Lake Tahoe, California

2010 Speaker, "The Flex-Bond, a Mechanically Stabilized Receptor-Ligand Bond Important in the Vasculature," Cell and Developmental Biology Seminar, University of Illinois at Urbana-Champaign, Urbana, Illinois

2010 Keynote Speaker, "The Traction Force Model for Integrin Activation", Gordon Research Conference on Signaling by Adhesion Receptors, Colby College, Waterville, Maine

2010 Lecturer, Gordon Research Conference on Hemostasis, Waterville Valley, New Hampshire

2010 Lecturer, "The Traction-Force Model for Integrin Activation," Department of Molecular Biology, University of Aarhus, Aarhus, Denmark

2011 Lecturer, "The Traction Force Model for Integrin Activation", Immunology and Microbial Science Affinity Group, The Scripps Research Institute, La Jolla, California

2011 Speaker, "The Evidence of the Traction Force Model of Integrin Activation", Gordon Research Conference on Fibronectin, Integrins and Related Molecules, Lucca, Italy

2011 Speaker, "Integrins and Tissue Inflammation", American Society of Transplantation Symposium, San Francisco, California

2011 State of the Art Lecturer, "The Domain Architecture of VWF and Activation by Elongational Flow", XXIII Congress of the International Society on Thrombosis and Haemostasis, Kyoto, Japan

2011 Lecturer, Department of Molecular Biology, University of Aarhus, Aarhus, Denmark

2011 Lecturer, "Biology and Physics of von Willebrand Factor Concatamers", 17th IUPAB International Biophysics Congress, Beijing, China

2011 Keynote Speaker, "The Domain Architecture of VWF and Activation by Elongational Flow", 5th Mechanobiology Conference on Mechanobiology of Multi-cellular Systems, Singapore City, Singapore

2012 Lecturer, 1st Molecular Approaches to Malaria (MAM) Conference, Lorne, Australia

2012 Lecturer, The Department of Cell Biology, NYU Langone Medical Center, New York City, New York

2012 Chair & Lecturer, "Improving Malaria Vaccine Strategies through the Application of Immunologic Principles", National Institute of Allergy and Infectious Diseases Workshop, Bethesda, Maryland

2012 Session Chair and Lecturer, "Single molecule studies on the von Willebrand factor", Gordon Research Conference on Single Molecule Approaches to Biology, West Dover, Vermont

2012 Speaker, "Structural Basis for Relay of Allostery in α I Integrins", Spanish National Cancer Research Centre (CNIO) Frontiers Meetings on Allosteric Regulation of Cell Signalling, Madrid, Spain

2012 State of the Art Lecturer, 20th Annual Meeting of the Belgian Society on Thrombosis and Hemostasis, Antwerp, Belgium

2012 Speaker, "Activation of A1 domain adhesiveness in VWF by elongational force", 54th American Society of Hematology Annual Meeting, Atlanta, Georgia

2013 Lecturer, 7th Biennial Single Molecule Biophysics Winter Conference, Aspen Center for Physics, Boulder, Colorado

2013 Lecturer, Malaria Research Institute, Johns Hopkins School of Public Health, Baltimore, Maryland

2013 Lecturer, Instruct Biennial Structural Biology Meeting, European Molecular Biology Laboratory, Heidelberg, Germany

2013 Lecturer, AbbVie Seminar, AbbVie R&D, Cambridge, Massachusetts

2013 Lecturer, XXIVth Congress of the International Society on Thrombosis and Haemostasis, Amsterdam, Netherlands

2013 Physiology Course Lecturer, Woods Hole Marine Biological Laboratory, Woods Hole, Massachusetts

2013 Lecturer, Gordon Research Conference on Elastin, Elastic Fibers & Microfibrils, University of New England, Biddeford, Maine

2013 Lecturer, FASEB Conference on The TGF- β Superfamily: Signaling in Development & Diseases, Steamboat Springs, Colorado

2013 Lecturer, "Regulation of Transforming Growth Factor Beta Activity and Cardiovascular Disease", Fondation des Treilles, Paris, France

2013 Plenary Lecturer, Korean Society for Molecular and Cellular Biology, Seoul, Korea

2013 Lecturer, "Structural Basis for Gliding Motility in *Plasmodium* and *Toxoplasma*", National Institute of Allergy and Infectious Diseases, Bethesda, Maryland

2014 Lecturer, "Integrins as Force-Regulated Signaling Machines", Midwinter Conference of Immunologists at Asilomar, Pacific Grove, California

2014 Lecturer, The Department of Biochemistry, UCSF, San Francisco, California

2014 Lecturer, The Department of Bioengineering, UC Berkeley, Berkeley, California

2014 AAI-Life Technologies Meritorious Career Award Lecturer, American Association of Immunologists Convention, Pittsburg, Pennsylvania

2014 Lecturer, "Biology and Physics of von Willebrand Factor Concatamers", The Landsteiner Lectures, University of Amsterdam, Amsterdam, Netherlands

2014 Lecturer, FASEB Conference on Immunoreceptor, Steamboat Springs, Colorado

2014 HHMI Summer Institute Lecturer, Woods Hole Marine Biological Laboratory, Woods Hole, Massachusetts

2014 Lecturer, 20th Annual Structural Biology Retreat, Cambridge, Massachusetts

2014 Plenary Lecturer, "Why Are Some Members of TGF- β Family Latent Whereas Others Are Not?" 10th International BMP Conference, Berlin, Germany

2014 Speaker, American Society for Matrix Biology Biennial Meeting, Cleveland, Ohio

2014 Lecturer, Cold Spring Harbor Asia Conference on Mechanisms of Transmembrane Signaling, Suzhou, China

2015 Lecturer, "How To Make Synthetic Antiboies to Neuronal Proteins: The Secrets That Immunologists Won't Tell You", Kirby Neurobiology Center Lectures, Boston Children's Hospital, Boston, Massachusetts

2015 Lecturer, "VWF: Jedi Knight of the Bloodstream", "Shear flow regulation of Hemostasis - bridging the gap between Nanomechanics and Clinical Presentation, 1st International Shenc Symposium, Hamburg, Germany

2015 Lecturer, "Integrins in the Immune System: Biology and Therapeutics", University of Chicago, Chicago, IL

2016 Lecturer, "Landscapes and Mechanisms for Integrin Activation", Platelets 2016: 9th International Symposium, Wellesley, Massachusetts

2016 Speaker, "Ensuring Validation through Training and Proficiency", Antibody Validation: Standards, Policies and Practices, Asilomar Conference Grounds, Pacific Grove, California

2016 Lecturer, "A microglia context molecule for TGF β required for maintenance of nervous system function", 11th International BMP Conference, Boston, Massachusetts

2016 Lecturer, "A microglia context molecule for TGF β required for maintenance of nervous system function", University of Pittsburgh, Pittsburgh, PA

2017 Lecturer, "A Microglia Context Molecule for TGF- β Required for Maintenance of Nervous System Function", TGF- β in Immunity, Inflammation and Cancer, Keystone Symposia on Molecular and Cellular Biology, Taos, New Mexico

- 2018 Lecturer, "A Novel Milieu Molecule for TGF- β Required for Microglia Function", UT Southwestern Medical Center, Dallas, Texas
- 2018 Lecturer, "Synthetic Antibodies and Nanobodies for Structural Biology", Advanced Photon Source (APS-U)- Macromolecular X-ray crystallography (MX) Workshop, Argonne National Laboratory, DuPage County, Illinois
- 2018 Plenary Lecturer, "Milieu molecules and localized TGF- β signaling", American Society for Matrix Biology Biennial Meeting, Las Vegas, Nevada
- 2019 Invited Speaker, "The Milieu Model for TGF- β Activation", Immune Engineering Symposium 2019, Koch Institute for Integrative Cancer Research at MIT, Cambridge, Massachusetts
- 2019 Invited Speaker, "Structural basis of GPIb-VWF binding, shear driven low/high affinity switch model for A1 domain, A2 domain destabilization by VWD 2A mutations", Von Willebrand Factor/von Willebrand Disease Symposium, Sanofi, Waltham, Massachusetts
- 2019 Keynote Address, "A Novel Milieu Molecule for TGF- β Required for Microglia Function", Gordon Research Conference on Fibronectin, Integrins and Related Molecules, Lucca, Italy
- 2020 Invited Speaker, "Extracellular Signaling in the TGF- β Family", New Technologies in Skeletal Biology, Bones and Teeth Gordon Research Conference, Galveston, Texas
- 2020 Lecturer, "Communication between the extracellular landscape and the cytoskeleton by integrins and tensile force", Parker H. Petit Institute for Engineering and Bioscience, Georgia Tech, Georgia

Physician Fellows Trained and Current Positions:

Elizabeth Robbins, M.D., Associate Clinical Professor, Pediatrics, UCSF, San Francisco, CA; Julio Garcia-Aguilar, M.D., Ph.D., Professor of Surgery, UCSF, San Francisco, CA; Olli Carpen, M.D., Ph.D., Chair and Professor, Department of Pathology, University of Turku, Turku, Finland; Stephan Martin, M.D., Professor, German Diabetes Research Institute, Heinrich Heine University, Duesseldorf, Germany; Akira Yokota, M.D., Ph.D., Director, Division of Allergy and Rheumatology, Osaka Prefectural Habiko Hospital, Japan; Lilli Petruzzelli, M.D., Ph.D., VP Oncology Translational Medicine, Novartis, Cambridge, MA; Ted Post, M.D., Deputy Editor, Up-to-Date, Inc., Wellesley, MA.; Tatsuo Kinashi, M.D., Ph.D., Professor, Department of Molecular Genetics, Institute of Biomedical Science, Kansai Medical University, Moriguchi, Osaka, Japan; Lloyd Klickstein, M.D., Ph.D., Head of Translational Medicine, Novartis Institutes for BioMedical Research, Cambridge, MA; David Chang, M.D., Ph.D., Chief Medical Officer and VP of Research & Development, Kite Pharma, Inc., Santa Monica, CA; Antje Kirchhoff, M.D., Pediatric Nephrologist, Universitätsklinikum Würzburg, Würzburg, Germany; Thomas G. Diacovo, M.D., Associate Professor, Pediatrics and Pathology & Cell Biology, Columbia University Medical Center; Stephen J. Roth, M.P.H., M.D., Professor of Pediatrics, Division of Pediatric Cardiology, Lucile Packard Children's Hospital, Stanford University School of Medicine, Palo Alto, CA; Robert Fuhlbrigge, M.D., Ph.D., Associate Professor, Pediatrics and Dermatology, Harvard Medical School, Boston, MA; Christian Weber, M.D., Professor, Institute for Cardiovascular Prevention, Ludwig Maximilians University of Munich, Munich, Germany; Joji Kitayama, M.D., Ph.D., Associate Professor of Surgical Oncology, University of Tokyo, Tokyo, Japan; Conrad C. Bleul, M.D., Global Program Medical Director, Novartis, Basel, Switzerland; Daniel Jones, M.D., Ph.D., Professor, Department of Hematopathology, MD Anderson Cancer Center, Houston, TX; Maarten de Chateau, M.D., Ph.D., CEO and Founder of Cormorant Pharmaceuticals, Solna, Sweden; Motomu Shimaoka, M.D., Ph.D., Professor and Chair, Molecular Pathobiology and Cell Adhesion Biology, Mie University, Mie, Japan; Koichi Yuki, M.D., Associate in Cardiac Anesthesia of Boston Children's Hospital, Instructor in Anaesthesia of Harvard Medical School, Boston, MA; Kunio Hieshima, M.D., Ph.D., Assistant Professor, Department of Microbiology, Kinki University Faculty of Medicine, Osaka, Japan; Saurabh Patel, M.D., Ph.D., Attending, Gastroenterology/Nutrition, Boston Children's Hospital, Boston, MA

Postdoctoral Fellows Trained and Current Positions:

Konrad Kürzinger, Ph.D., Director and Head of Protein Chemistry, Roche Diagnostic GmbH, Research Center, Tutzing, West Germany; Alok Bhattacharya, M.Sc., M. Phil., Ph.D., Professor, Jawaharlal Nehru University, New Delhi, India; Carl Ware, Ph.D., Director of Infectious and Inflammatory Diseases Center, Professor of Molecular Immunology, Sanford-Burnham Medical Research Institute, La Jolla, CA; Maykin Ho, Ph.D., Managing Director, Goldman Sachs, New York, NY; Francisco Sanchez-Madrid, Ph.D., Professor of Immunology, Hospital de la Princesa, Autonomous University of Madrid, Madrid, Spain; Janice Nagy, Ph.D., Principal Associate of Pathology, Beth Israel Deaconess Hospital, Harvard Medical School, Boston, MA; Robert Rothlein, Ph.D., former Senior Vice President, Biology, Transtech Pharma, High Point, NC (deceased); Steven Marlin, Ph.D., former Vice President of Business Development, Alliances in Government Affairs, Boehringer-Ingelheim, Ridgefield, CT; Marian L. Plunkett, Ph.D., Associate Director, Cell Biology, Attenuon, San Diego, CA; Leandro Sastre, Ph.D., Investigador Científico, Centro de Investigaciones Biológicas, Consejo Superior de Investigaciones Científicas, Madrid, Spain; Angel Corbi Lopez, Ph.D., Professor, Centro de Investigaciones Biológicas, Consejo Superior de Investigaciones Científicas, Madrid, Spain; Andrew Wardlaw, Ph.D., Professor of Respiratory Medicine, Director of Institute for Lung Health, University of Leicester, Leicester, England; Periasamy

Selvaraj, Ph.D., Professor, Department of Pathology and Laboratory Medicine, Emory University School of Medicine, Atlanta, GA; Po-Ying Chan-Hui, Ph.D., Senior Director of In Vitro Pharmacology, Theraclone Sciences, Seattle, WA; Margaret Hibbs, Ph.D., Associate Professor of Immunology, Monash University, Melbourne, Australia; Steven Stacker, Ph.D., Professor and Head of Tumor Angiogenesis, Peter MacCallum Cancer Center, Melbourne, Australia; Donald Staunton, Ph.D., President and Chief Scientific Officer, CisThera Inc., Kirkland, WA; Michael B. Lawrence, Ph.D., Associate Professor, Department of Biomedical Engineering, University of Virginia, Charlottesville, VA; Caroline Bilsland, Ph.D., Clinical Research Associate, National Medical Research Corporation, Blue Bell, PA; Yves St. Pierre, M.Sc., Ph.D., Professor, INRS-Institute Armand-Frappier, Institut National de la Recherche Scientifique, University of Quebec, Laval, Quebec, Canada; Hong Xu, Ph.D., Director, Licensing and Development, Pfizer, New London, CT; Dennis Wong, Ph.D., Group Medical Director, Bristol-Myers Squibb, New York, NY; John Luk, Ph.D., Senior Director, Janssen Pharmaceuticals R&D, Shanghai, China; Songqing Na, Ph.D., Research Scientist, Cancer Inflammation and Cell Survival Research, Lilly Research Laboratories, Eli Lilly and Company, Indianapolis, IN; Jean-Philippe Girard, Ph.D., Director, Institute of Pharmacology and Structural Biology, Centre National de la Recherche Scientifique, Toulouse, France; Ronen Alon, M.Sc., Ph.D., Professor, The Linda Jacobs Chair in Immune and Stem Cell Research, Weizmann Institute of Science, Rehovot, Israel; Kamal D. Puri, Ph.D., Director, Immunology & Inflammation, Celgene, Boston, MA; Chi Chi Huang, M.S., Ph.D., Scientific Director, Janssen R&D, Philadelphia, PA; Jose Casanovas, M.Sc., Ph.D., Professor, National Center for Biotechnology - Spanish National Research Council (NCB-CSIC), University of Madrid, Madrid, Spain; Claus Oxvig, Ph.D., Professor, Department of Molecular Biology and Genetics, Aarhus University, Aarhus, Denmark; Chafen Lu, Ph.D., Assistant Professor, Boston Children's Hospital, Boston, MA; Qun Zang, Ph.D., Assistant Professor, Department of Surgery, Southwestern Medical Center, Dallas, TX; Eric Fedyk, Ph.D., Global Program Leader, Takeda Pharmaceuticals International, Chicago, IL; Padmaja Yalamanchili, Ph.D., Senior Research Investigator, Discovery Biology, Bristol Myers Squibb Medical Imaging, Billerica, MA; Chang-Duk Jun, Ph.D., Professor, School of Life Sciences, Gwangju Institute of Science and Technology, Korea; Qing Ma, Ph.D., Associate Professor, Department of Stem Cell Transplantation, University of Texas MD Anderson Cancer Center, Houston, TX; Holly Jing, Ph.D., Consultant and Co-Founder, 3D BioPharma Inc., San Diego, CA; Junichi Takagi, Ph.D., Professor, Laboratory of Protein Synthesis and Expression, Institute for Protein Research, Osaka University, Osaka, Japan; Azucena Salas, Ph.D., Ramon y Cajal Investigator, Instituto de Investigaciones Biomedicas August Pi i Sunyer (IDIBAPS), Barcelona, Spain; Minsoo Kim, Ph.D., Associate Professor, Department of Microbiology & Immunology, David H. Smith Center for Vaccine Biology and Immunology, University of Rochester Medical Center; Thomas Vorup-Jensen, Ph.D., Professor of Medical Microbiology and Immunology, University of Aarhus, Denmark; Doohun Kim, Ph.D., Associate Professor, Department of Biotechnology, Ajou University, Suwon, South Korea; Nathan Astrof, Ph.D., Instructor, Department of Biochemistry and Microbiology, Rutgers University, Piscataway, NJ; Shuqi Chen, Ph.D., Chief Executive Officer, IQum Inc., Marlborough, MA; Christopher Carman, Ph.D., Assistant Professor, Department of Medicine, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA; Moonsoo Jin, Ph.D., Associate Professor, Department of Biomedical Engineering, Weill Cornell Medical College, Cornell University, New York, NY; Uyen Phan, Ph.D., Principal Scientist, Merck, Palo Alto, CA; Tsan Xiao, Ph.D., Chief, Structural Immunobiology Unit Laboratory of Immunology National Institute of Allergy and Infectious Diseases National Institutes of Health; Wei Yang, Ph.D., Head, Department of Molecular Biology, Beijing Novo Nordisk Pharmaceuticals Sci & Tech Co. 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Publications

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