

# CURRICULUM VITAE

**James Lawrence Michael Ferrara**

[james.ferrara@mssm.edu](mailto:james.ferrara@mssm.edu)

## **APPOINTMENTS/EMPLOYMENT**

### **PREVIOUS EMPLOYMENT**

07/1985 – 06/1987 Instructor in Pediatrics, Harvard Medical School  
07/1987 – 06/1993 Assistant Professor of Pediatrics, Harvard Medical School  
07/1993 – 10/1998 Associate Professor of Pediatrics, Harvard Medical School  
11/1998 – 06/2014 Professor of Pediatrics, Professor of Internal Medicine, University of Michigan Medical School  
07/2014 – Professor of Pediatrics, Professor of Internal Medicine, Icahn School of Medicine at Mount Sinai

### **CLINICAL/HOSPITAL APPOINTMENTS**

07/1980 – 06/1982 Clinical Instructor in Pediatrics, Children's Hospital  
07/1982 – 06/1985 Fellow in Hematology/Oncology, Children's Hospital  
07/1982 – 06/1985 Fellow in Pediatric Oncology, Dana-Farber Cancer Institute  
07/1985 – 10/1998 Assistant Physician in Medicine, Hematology/Oncology, Children's Hospital, BWH  
07/1985 – 10/1998 Assistant Physician, Dana-Farber Cancer Institute  
07/1986 – 10/1998 Assistant Physician, Brigham and Women's Hospital  
07/1998 – 03/2012 Director, Combined Adult and Pediatric Bone Marrow Transplant Program, University of Michigan Cancer Center  
07/1999 – 03/2012 Co-Director, BMT Leukemia/Lymphoma Program, University of Michigan Cancer Center  
07/2014 – Ward-Coleman professor of Cancer Medicine, Professor and Director of BMT Translational Research Center, Hematologic Malignancies Translational Research Center, Icahn School of Medicine at Mount Sinai

## **EDUCATION**

06/1970 H.A.B. Xavier University, Honors A. B., Summa Cum Laude  
06/1974 M.A. Oxford University, Literae Humaniores  
05/1976 M.D. Georgetown University, M.D., Cum Laude  
04/2009 D.Sc. Oxford University, Medical Sciences

### **POSTDOCTORAL TRAINING**

07/1980 – 06/1982 Residency in Pediatrics, Children's Hospital, Boston, MA  
07/1981 – 06/1982 Junior Resident in Pediatrics, Children's Hospital, Boston, MA  
07/1982 – 06/1985 Fellow in Pediatric Hematology/Oncology, Children's Hospital and the Dana-Farber Cancer Institute, Boston, MA

## **CERTIFICATION**

Diplomate, American Board of Pediatrics, No. 61496, October 8, 1997  
Diplomate, American Board of Pediatric Hematology/Oncology No. 1933, November 13, 2006

## **LICENSURE**

Michigan License Registration No. 4301-073406  
New York State License Registration No. 278246-1

## **HONORS/AWARDS**

1972	Fredin Memorial Scholarship, La Sorbonne
1974	Valedictorian, Xavier University
1976	Presidential Scholar, Georgetown Medical School
1980	Alpha Omega Alpha
1982	Von L. Meyer Fellowship, Boston Children's Hospital
1988	Perini Foundation Fellow, DFCI
1990	Claudia Adams Barr Investigator, DFCI
1993	Scholar Award, Leukemia Society of America
1997	Member, American Society for Clinical Investigation Alexander von Humboldt Research Prize, German Republic Who's Who in Medicine and Health Care Citation Who's Who in Science and Technology Citation America's Top Doctors Citation Who's Who in America Citation Member, American Pediatric Society
2002	Doris Duke Distinguished Clinical Scientist Award Outstanding Clinician Award, University of Michigan Medical School
2003	Member, Association of American Physicians
2004	Senior Fellow, Michigan Society of Fellows
2005	Who's Who in the World Citation America's Top Doctors for Cancer (1st Edition) Citation
2006	Chairman, Steering Committee, BMT Clinical Trials Network America's Top Pediatricians (Hematology/Oncology) Citation Member, Board of Trustees, Hampshire College, Amherst, MA
2008	IBC Top 100 Health Professionals Citation American Cancer Society Clinical Research Professor America's Top Physicians Citation
2009	Ruth Heyn Endowed Professor of Pediatric Oncology, The University of Michigan Doctor of Medicine, honoris causa, University of Regensburg, Germany Doctor of Science, Oxford University
2010	Dr. Lyonel G. Israel's Visiting Professor, CancerCare Manitoba, Manitoba, Canada
2011	E. Donnell Thomas Lecturer, ASBMT Visiting Fellow, All Soul's College, Oxford, England
2012	Nobel Symposium Lecture, Karolinska Institutet, Stockholm, Sweden
2014	America's Top Physicians Citation
2014	Ward-Coleman Chair in Cancer Medicine, Icahn School of Medicine at Mount Sinai

## **PATENTS**

2012	Methods for Detecting Graft-Versus-Host Disease: patent pending US Patent Application Serial No. 13/573,766; Issued: Dec. 18, 2012
------	--

## **OTHER PROFESSIONAL ROLES**

### **EDITORIAL POSITIONS, BOARDS AND PEER-REVIEW SERVICE**

2009	Biology of Blood and Marrow Transplantation, 2009 Education Supplement, Editor, Volume 15, Supplement 1, January 2009, Pages 1-168, Elsevier.
2011 – 2014	American Society of Hematology (ASH), Publications Committee
2013 – 2014	BMT CTN, State of the Science Symposium Steering Committee
2016	Development of a biomarker scoring system for use in graft-versus-host disease, 2016 Biomarkers in Medicine, 2016 Aug 14;10(8):793-5. Epub 2016 Jul 14. PMC Journal - In Process.

### **SCIENTIFIC ACTIVITIES**

#### **Editorial Boards**

1993 - 1998 Journal of Immunology  
1993 - 1999 Transplantation Immunology Bone Marrow Transplantation  
1998 - Biology of Blood and Marrow Transplantation

## **OTHER PROFESSIONAL POSITIONS AND MAJOR VISITING APPOINTMENTS**

1976 - 1979 Junior Research Fellow, Kennedy Institute of Ethics, Georgetown University  
1980 - 1998 Premedical Tutor, Adams House, Harvard University  
1982 - 1985 Chairman, Premedical Committee, Adams House, Harvard University  
1990 - 1992 Seminar Moderator, Aspen Institute for Humanistic Studies  
1990 - 1998 Member, Medical Ethics Division, Harvard Medical School  
1991 - 1998 Faculty Moderator, Harvard Program in the Practice of Scientific Investigation  
1996 - 2000 Member, NIH Study Section (Exp. Therapeutics-2)  
1997 - 1998 Member, Scientific Review Panel, NCI (Exp. Immunology)  
2001 - 2007 Reviewer, Leukemia and Lymphoma Society, Translational Research Grants  
2002 - 2004 Scientific Director, American Society for Blood and Marrow Transplantation  
2003 - 2006 Member, Scientific Committee on Lymphocyte Biology, American Society of Hematology  
2004 - 2008 Member, National Cancer Institute Study Section – Clinical Studies  
2006 - The Bone Marrow Foundation Medical Advisory Board  
2006 - Member, Board of Trustees, The Leukemia & Lymphoma Society (Michigan Chapter)  
2006 - 2007 Chairman, Steering Committee, BMT Clinical Trials Network  
2008 Chairman, American Society for Blood and Marrow Transplantation, Annual Meeting Program Committee  
2008 Vice Chair, American Society for Hematology, 2009 Transplantation Biology Committee  
2009 Chair, American Society for Hematology, 2010 Transplantation Biology Committee  
2011 - 2014 Member, American Society for Hematology Journals Committee

## **MEMBERSHIPS IN PROFESSIONAL SOCIETIES**

1976 Society for Health and Human Values Massachusetts Medical Society  
1982 Boston Blood Club  
1988 Transplantation Society American Association of Immunologists  
1991 American Society of Hematology  
1999 American Association for the Advancement of Science  
1995 Society for Pediatric Research  
American Society of Blood and Marrow Transplantation  
Molecular Medicine Society  
1997 American Society for Clinical Investigation  
2002 American Pediatric Society  
2003 Association of American Physicians  
2007 American Society of Clinical Oncology  
2009 American Association for Cancer Research

## **CONSULTING POSITIONS**

1992 Member, Behringwerke Scientific Advisory Board, Marburg, Germany  
1993 Chairman, NIAID Special Review Committee for Bone Marrow Transplant  
1995 External Reviewer, Medical Research Council, Canada  
1996 - 2000 Member, NIH Study Section (Exp. Therapeutics-2)  
1996 Member, NCI Task Force Report on Transplantation  
1997, 2007 Member, Scientific Advisory Board, BMT Program, Duke University  
1997 Member, Scientific Review Panel, NCI (Exp. Immunology)  
1998 Member, Children's Cancer Foundation Grant Review Panel  
1998, 2006 Member, Scientific Advisory Council, Cincinnati Children's Research Foundation  
1999 Member, Swiss National Science Foundation Review Panel  
2000 Member, Amgen Oncology Research Council  
2001 Member, External Advisory Board, Comprehensive Cancer Center of Case Western

2001 Member, Centocor Oncology Advisory Board  
 2001 - 2007 Reviewer, Leukemia and Lymphoma Society, Translational Research Grants  
 2001 Member, Central Society for Clinical Research  
 2001 Member, Scientific Advisory Board, BMT Program of Case Western Reserve University  
 2001 Member, Scientific Advisory Board, Human Genome Sciences  
 2001 Member, Special Emphasis Panels, NCI, NIAID  
 2002 - 2004 Scientific Director, American Society for Blood and Marrow Transplantation  
 2004 - 2008 Member, NCI Initial Review Group, Subcommittee D – Clinical Studies  
 2005 Member, External Advisory Board, Therakos, Inc.  
 2006 Chairman, Steering Committee, BMT Clinical Trials Network  
 2007 Member, Special Emphasis Panel, NIH Loan Repayment Program

**RESEARCH PROFILE**

My research focuses on the prevention, diagnosis and treatment of graft versus host disease (GVHD), the major complication of allogeneic bone marrow transplantation (BMT). My laboratory was the first to demonstrate that inflammatory cytokines produced by donor T cells and monocytes were critical effectors of acute GVHD in animal models, and coined the term “cytokine storm” to describe this process. My laboratory has also discovered and validated plasma biomarkers of acute GVHD that we have used to create an algorithm that accurately predicts at the time of initial diagnosis the eventual severity of GVHD. We are now exploring the biology of the biomarkers in animal models, which focuses on the interactions between the adaptive and innate immune systems, especially in the gastrointestinal tract, which is the GVHD target organ that is most resistant to treatment. Our goal is to translate insights from these animal models into innovative clinical trials.

**CLINICAL PROFILE**

My clinical practice focuses exclusively on patients who undergo BMT. Most recipients of allogeneic BMT are at risk for GVHD, the primary focus of my research. My laboratory efforts are thus essentially translational in nature, and my goal is to use insights gained from laboratory studies and animal models in the design and execution of innovative clinical trials to prevent and treat GVHD. As a clinical researcher, I have been the principal investigator or co-investigator on multiple trials for BMT patients. In this clinical research capacity I have served as the chairman of the steering committee of the BMT clinical trials network, the NIH cooperative group focused on the development of high impact clinical BMT trials that have the potential to change practice. To accelerate the translational aspects of my research, I have formed an international consortium of ten centers to provide both clinical data and samples and to conduct clinical trials in acute GVHD. This consortium will be the first to treat GVHD using the biomarker grading system as an inclusion criterion.

**IMPACT**

My long term goal is to make BMT a safer and more effective therapy for patients with life threatening disorders of the blood. My laboratory’s research in animal models has fundamentally changed the way we think about the pathophysiology of GVHD, which the schema for we proposed twenty years ago. In particular, we were the first to elucidate the role of inflammatory cytokines in this process. In the past ten years, my laboratory first discovered and then validated multiple plasma biomarkers of acute GVHD. We have now used these biomarkers to predict the maximal severity of GVHD and its eventual response to treatment. The impact of this new approach is likely to be global, because we have validated its accuracy in hundreds of patients from dozens of BMT centers across the globe. During the next decade these advances will give rise to a new generation of clinical trials led by researchers from Mt. Sinai that will test investigative agents for the prevention and treatment of acute GVHD. Our goal is to reduce the mortality from GVHD by 50% in the next ten years.

**GRANTS, CONTRACTS, FOUNDATION SUPPORT**

**PAST GRANTS**

List Funding Source, Project Title & Number	Role in Project	Dates	Direct Costs	Supplemental Info
			N/A	N/A

Scientist Award, "Murine Models of GVHD"				
Hood Foundation Research Grant, "Role of T cells in Experimental GVHD"	PI	1987-1988	N/A	N/A
American Cancer Society Research Grant, "GVHD to Minor H Antigen"	PI	1991-1992	N/A	N/A
NIAID P01, Induction of Host-Specific Tolerance	PI (Project 1)	1993-1995	N/A	N/A
NIAID R01, "Effector Mechanisms of GVHD"	PI	1992-1996	N/A	N/A
NCI R01, "Novel Approaches to CML"	Co-PI	1993-1997	N/A	N/A
Scholar Award, Leukemia Society of America	PI	1993-1998	N/A	N/A
LSA Translational Research Award, "IL-4 Protocol to Prevent GVHD"	PI	1997-1998	N/A	N/A
FDA, FDR-1457, "IL-1ra for the Prevention of Acute GVHD"	PI	1997-2000	N/A	N/A
FD-R-002021, FDA, Orphan Product Drug Grant, "A Phase I/II Trial of Keratinocyte Growth Factor (rHuKGF) to Prevent Acute GVHD in 6/6 HLA=BMT Recipients."	PI	2001-2004	N/A	N/A
R01 HL55162, NIH, "Idiopathic Pneumonia Syndrome after BMT"	PI	1999-2004	N/A	N/A
FD-R-002146, FDA, "Orphan Product Drug Grant"	PI	2002-2005	N/A	N/A
FD-R-002397, FDA, "Orphan Drug Grant"	PI	2003-2006	N/A	N/A
Leukemia & Lymphoma Society Focused Group Workshop "Blood and Marrow Transplant State of the Science Symposium"	PI	2006-2007	N/A	N/A
Distinguished Clinical Scientist Award Doris Duke Charitable Foundation Novel Strategies to Improve Allogeneic Bone Marrow Transplant	PI	2002-2007	N/A	N/A
Therakos, Inc., Basic Science Research Grant, "Characterization of the In Vivo Effects of Extracorporeal Photopheresis on T-cell and Antigen Presenting Cell Function in Murine Acute Graft-Versus-Host Disease"	PI	2005-2007	N/A	N/A
R13 HL088882, NIH/NHLBI, "BMT State of the Science Symposium"	PI	2007-2008	N/A	N/A
FD-R-002397, FDA/Orphan Products	Co-PI	2003-2008	N/A	N/A

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.