

CURRICULUM VITAE

Lina Marie Obeid

Personal Data

Business Address:

Ralph H. Johnson VA Medical Center and
Medical University of South Carolina
114 Doughty Street, Room 604
MSC 779

Phone:

Charleston, South Carolina 29425-0779
(843) 876-5169

Fax:

(843) 876-5172

E mail address:

obeidl@musc.edu

Appointments

Present Position(s):

1998 - Present

Staff Physician
Ralph Johnson VA Medical Center
Charleston, South Carolina

1998 - Present

Boyle Chair Professor
Division of General Internal Medicine-Geriatrics
Department of Medicine
Medical University of South Carolina

1998 - Present

Joint Professor
Department of Biochemistry and Molecular Biology
Medical University of South Carolina

Previous Position(s):

1996-1998

Associate Professor
Division of Geriatrics
Department of Medicine
Duke University Medical Center

Previous Position(s):

1994-1998

Assistant Professor
Department of Cell Biology
Duke University Medical Center

1992-1996

Assistant Professor
Division of Geriatrics
Department of Medicine
Duke University Medical Center

1991-1992

Faculty Re-trainee in Geriatrics
Department of Medicine
Duke University Medical Center

1990-1991

Associate in Medicine, Divisions of Endocrinology and
Geriatrics
Department of Medicine

Duke University Medical Center

Education

College:

1973-1975 American University of Beirut
Two years, Chemistry

1975-1977 Rutgers University, New Jersey
B.Sc., Chemistry with honors

Medical School:

1978-1983 American University of Beirut,
School of Medicine
M.D. with distinction

1983-1986 Resident in Medicine,
Department of Internal Medicine
Duke University Medical Center

1986-1990 Endocrinology Fellow, Duke University

Research Experience:

July 1986 - July 1987 Research Fellow in the lab of Dr. Robert J. Lefkowitz
Duke University Medical Center

August 1988 - April 1992 Research Associate in the lab of Dr. Yusuf A. Hannun
Duke University Medical Center

Grant Support (past)

Merit Award (Obeid-PI)
Agency: Veteran's Administration
"Role of a Novel Human Ceramidase in Apoptosis and Senescence"
Total project period: 10/1/00 - 9/30/03

Merit Award (Obeid-PI)
Agency: Veteran's Administration
Continuation : "Role of a Novel Human Ceramidase in Apoptosis and Senescence"
Total project period: 10/1/03 - 12/31/08

American Federation on Aging Research
Signal Transduction in Cellular Senescence
L. M. Obeid, Principal Investigator
Total project period: 07/01/95-06/30/2000

5 R29 AG12467, National Institute of Health/National Institute on Aging
Ceramide and Cell Senescence
L. M. Obeid, Principal Investigator
Total project period: 05/01/94-4/30/02

Hollings Cancer Center (Obeid-PI)

Department of Defense
"Translational Studies on the Role of Sphingosine Kinase in Lung Cancer"
Total project period: 08/01/02-07/31/05

P20 AR47788-01A1 (Obeid-Col)
Agency: NIH/NIAMS
"MCRC for Rheumatic Diseases in African-Americans"
Project A Leader: Maria Trojanowska, Ph.D. for "Sphingosine kinase in systemic sclerosis"
Total project period: 01/1/03-03/30/08

P01 CA097132-01A1 (Obeid-Col)
AGENCY: NIH
Sphingolipids in Cancer Therapy and Angiogenesis
PROJECT 3 Leader: Obeid, Lina M.
"Role for Sphingosine Kinase and Sphingosine-1-Phosphate in Tumor Angiogenesis"
Total project period: 07/01/03 – 06/30/08

R01 GM06325 (Hannun-PI)
Agency: NIH/NIGMS
"Modeling and Analysis of Yeast Sphingolipid Metabolism"
Total project period: 02/01/06 – 09/01/08

Grant Support (current)

IR01-GM-62887 (Obeid-PI)
Agency: NIH/NIGMS
"Sphingosine 1 Phosphate in Inflammation"
Total project period: 5/01/01 - 08/31/09

1R01-AG-16583 (Obeid-PI)
Agency: NIH/NIA
"Mitochondrial Ceramide in Chemotherapy-induced Apoptosis"
Total project period: 09/01/98-08/31/10

P20 RR017677-01 (Obeid-PI)
Agency: NIH
"COBRE in Lipidomics and Pathobiology"
Total project period: 07/1/02 - 09/30/12

P01 CA097132-01A1 (Obeid-Col)
AGENCY: NIH
Sphingolipids in Cancer Therapy and Angiogenesis
PROJECT 3 Leader: Obeid, Lina M.
"Role of Sphingosine Kinase in p53 Cancer Biology"
Total project period: 08/01/08 – 07/31/12

Awards and Honors

1978	B.S. with honors
1978-1983	Dean's honor list, School of Medicine
1982	Member, Alpha Omega Alpha, Honor Medical Society
1983	M.D. with distinction from American University of Beirut School of Medicine
1989-1990	Hartford Scholar

1990	Henry Christian Memorial Award
1992-1997	Clinical Investigator Award, National Institute of Aging
1994-1996	James A. Shannon Director's Award
1995-1998	Paul Beeson Physician Faculty Scholar
1995-2000	First Award, National Institute of Aging
2000-2003	Veterans Affairs Merit Award
2004	Fellow of AAAS

Professional Societies

1998 - present	Association of American Physicians
1998 - present	American Society for Biochemistry and Molecular Biology
2001 - present	American Federation for Clinical Research
2001 - present	American Geriatrics Society
2002 - present	Gerontological Society of America
2002 - present	American Association for the Advancement of Science
2003 - present	SC American Geriatrics Society

Teaching Experience

Spring 2005	Biochemistry elective BMB #605A, Medical University of South Carolina
Spring 2003	Lipid course, Biochemistry, Medical University of South Carolina
Spring 2002	BMB #702-01(4564) Molecular Basis of Apoptosis, Biochemistry, Medical University of South Carolina
Fall 2001	Common Curriculum in Pharmacology: Membrane Trafficking, Medical University of South Carolina
1998 - present	Geriatrics outpatient clinic at the Veteran Affairs Medical Center, Charleston, South Carolina (Teaching medical students and housestaff)
1988 - 1998	Supervise and teach several undergraduate, medical and graduate students in laboratory theory and teaching
1989 - 1998	Geriatric Education and Management Consultation Service at the Veterans Affairs Medical Center, Duke University (supervising Geriatric fellows)
1989 - 1998	Rounding on General Internal Medicine at the Veterans Affairs Medical Center, Duke University (Teaching medical students and housestaff)
1988	Medical Outpatient Clinic for supervising housestaff in the Department of Medicine at Duke University
1987	Physical Diagnosis Course for first year medical students at Duke University

Student Mentor

Students Undergraduate	Years/Mo. Mentored	Current Position
Lisa Leonard	Summer student 1995-1998	Medical Student at East Carolina University
Mat Demeter	Senior Research	Graduate School
Viann Bolick	2002	Graduated, The Citadel
Daniel Brown	2003	Graduated, The Citadel
Kashelle Othersen	2001-2002	Research Assistant University of North Carolina

Lab Rotation

Justin Turner	6/2000-9/2000	MCBP Student, MUSC
Megan Kibbey	9/2000-12/2000	DMD/Ph.D. Student, MUSC
Brian Hoel	2002 Lab rotation	Graduate Student, MUSC
Kristen Johnson	2003 Lab rotation	Graduate Student, MUSC
Linnea Freeman	2007 Lab rotation	PhD Student, MUSC

Summer Students

Amy Cheng	2005-2007	Summer Student, Obeid Lab
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Graduate

Jiandi Zhang	Ph.D. 1999	Research Scientist Rigel Biotech
Namjin Chung	Ph.D. 2000	Sr. Research Investigator Bristol-Myers Squibb Co. Pennington, NJ

Graduate**Students**

	Years/Mo. Mentored	Current Position	
Heather Greer	2001-2002 Med. Univ. of South Carolina	Laboratory Technician	M.S. 2007
Tarek Taha	M.D./Ph.D. 2007	Orthopaedic Surgery Fellow, Indianapolis, IN	
Christopher Gault	2004-Present	MSTP Student, Obeid Lab	
Tom Mullen	2004-Present	MSTP Student, Obeid Lab	
Linda Heffernan	2005-Present	MSTP Student, Obeid Lab	
K. Alexa Orr	2007-Present	PhD Student, Obeid Lab	

Postdoctoral

Mark Venable, Ph.D.	1993-97	Assistant Professor, Appalachian University, TN
Joanna Lee, Ph.D.	1994-98	Assistant Professor Oakland Children's Hospital
Cynthia Wilder, Ph.D.	1997-99	Patent Officer United States Patent Office
Ann Marie Conway, Ph.D.	1999-2000	Postdoctoral Fellow Glasgow, Scotland
Lina Boujaoude, M.D.	1999-2000	Associate Professor Gastroenterology, Hepatology, & Nutrition Baylor College of Medicine Houston, TX
Helene Birbes, Ph.D.	1999-2001	Assistant Professor Universitite Pierre et Marie Curie Inserm, Paris France
Korey Johnson, Ph.D.	2000-2004	Science Teacher Stratford High School Hanahan, SC
Angela Hutcheson, M.D.	2002-2003	M.D. San Francisco, CA
Stefanka Spassieva, Ph.D.	2003-present	Postdoctoral Fellow Med. Univ. of South Carolina
Mazen El Alwani, M.D.	2004-2006	OB/GYN Fellow NewPort News, VA
Lucille Ferrante, M.D.	2005-2006	Director, Huntsville Hospital For Women and Children

Viviana Anelli, Ph.D.	2005-2007	Huntsville, Alabama Postdoctoral Fellow Med. Univ. of South Carolina
Leah Siskind, Ph.D.	2007-present	Postdoctoral Fellow Med. Univ. of South Carolina
Ashley Snider, Ph.D.	2007-present	Postdoctoral Fellow Med. Univ. of South Carolina
Virginia Probin, Ph.D.	2007-present	Postdoctoral Fellow Med. Univ. of South Carolina

**Medical Students
Students**

	Years/Mo. Mentored	Current Position
Tanya Wahl	Duke Medical Student 1 year of research	Residency in Medicine Stanford University
Martha Wadeleigh	Duke Medical Student 1 year of research	Residency in Medicine Duke University

Graduate Student Committees

Primary Advisor/Thesis Advisor

1999	Jiandi Zhang, Duke University
2000	Namjin Chung, Duke University
2001-2005	Tarek Taha, MSTP, Medical University of South Carolina
2001-2008	Kellie Sims, Graduate Student, Medical University of South Carolina
2004-2007	Heather Greer-Crellin, MCBP, Medical University of South Carolina
2004-Present	Christopher Gault, MSTP, Medical University of South Carolina Thomas Mullen, MSTP, Medical University of South Carolina Linda Heffernan, MSTP, Medical University of South Carolina Deanna Baker, MSTP, Medical University of South Carolina
2007-Present	Alexa Orr, Graduate Student, Medical University of South Carolina

Graduate Student Committees

2000-2003	Terra Gibbs, MCBP, Medical University of South Carolina Michelle Hairfield, MCBP, Medical University of South Carolina Jeffrey Jones, MCBP, Medical University of South Carolina Benjamin Pettus, MSTP, Medical University of South Carolina Stewart Knoep, MSTP, Medical University of South Carolina Kevin Becker, MSTP, Medical University of South Carolina
2001-2005	Nicole Redmond, MSTP, Medical University of South Carolina Justin Turner, MCBP, Medical University of South Carolina Lena Heung, MCBP, Medical University of South Carolina John Shea, MCBP, Medical University of South Carolina
2002-2006	David Arrington, MCBP, Medical University of South Carolina Virginia Baker-Probin, MCBP, Medical University of South Carolina Leslie Wooten, MCBP, Medical University of South Carolina
2002-2007	Youssef Zaidan, MSTP, Medical University of South Carolina Brice
2005-2007	Nathan Alderson, MCBP, Medical University of South Carolina
2006-Present	Can Senkal, MCBP, Medical University of South Carolina
2206-Present	Arelis Salas, MCBP, Medical University of South Carolina
2007-Present	Travis McQuiston, MCBP, Medical University of South Carolina
2008-Present	Jessica Ross, Graduate Student, Medical University of South Carolina

Sabbaticals

Miriam Smythe	1 year	Assistant Professor VA Hospital Baltimore, MD
Wendy Boss	6 mo. 1998	Professor of Botany at NC State University
Julnar Usta	10/1999-11/2000	Professor, Biochemistry American University of Beirut

Mentor for Junior Faculty

Cungui Mao	1998-present	Asst. Professor, Medicine/G.I.M. Med. Univ. of South Carolina
Besim Ogretmen	1999-present	Asst. Professor, Biochemistry Med. Univ. of South Carolina
Jacqueline Kraveka	2000-present	Asst. Professor, Pediatrics Med. Univ. of South Carolina
Sergei Novgorodov	2001-present	Asst. Professor, Medicine/G.I.M. Med. Univ. of South Carolina
Kelley Argraves	2002-present	Asst. Professor, Molecular Biology Med. Univ. of South Carolina
Hiroko Hama	2002-present	Asst. Professor, Biochemistry Med. Univ. of South Carolina
Maurizio Del Poeta	2002-present	Asst. Professor, Biochemistry Med. Univ. of South Carolina
Samar Hammad	2003-present	Asst. Professor Department of Med Med. Univ. of South Carolina
Tatyana Gudz	2004-present	Asst. Professor of Biochemistry Med. Univ. of South Carolina
Chiara Luberto	2005-present	Asst. Professor, Biochemistry Med. Univ. of South Carolina
L. Ashley Cowart	2005-present	Asst. Professor of Biochemistry Med. Univ. of South Carolina
Toshihikio Kawamori	2005-present	Asst. Professor of Pathology/Lab Med Med. Univ. of South Carolina
Robin Helmrick-Muise	2005-present	Asst. Professor, HCC Med. Univ. of South Carolina
Suniti Misra	2006-present	Asst. Professor of Cell Biology Med. Univ. of South Carolina
David Perry	1998-2006	Asst. Professor, Biochemistry Med. Univ. of South Carolina
Charles Chalfant	1998-2003	Asst. Professor, Biochemistry Med. Univ. of South Carolina
Simhan Nagan	5/1999-6/2000	Asst. Professor, C.H.R.P. Med. Univ. of South Carolina
Korey Johnson	2004-2006	Research Instructor Med. Univ. of South Carolina

Current laboratory members

Kathryn Wiita-Fisk	1998-present	Administrative Coordinator I Med. Univ. of South Carolina
Sergei Novgorodov	2002-present	Assistant Professor Med. Univ. of South Carolina
Stefanka Spassieva	2003-present	Postdoctoral Fellow

George O. Washington	2003-present	Med. Univ. of South Carolina Lab Manager
Christopher Gault	2004-Present	Ralph Johnson Veterans Affairs MSTP Student
Tom Mullen	2004-Present	Med. Univ. of South Carolina MSTP Student
Linda Heffernan	2006-Present	Med. Univ. of South Carolina MCBP Student
Leah Siskind	2007-Present	Med. Univ. of South Carolina Postdoctoral Fellow
Ashley Snider	2007-Present	Med. Univ. of South Carolina Postdoctoral Fellow
Virginia Probin	2007-Present	Med. Univ. of South Carolina Postdoctoral Fellow
K. Alexa Orr	2007-Present	Med. Univ. of South Carolina Graduate Student
		Med. Univ. of South Carolina

Administrative Experience

1993-1998	Housestaff Selection Committee for the Department of Medicine
1996-1997	Chair, Search Committee for a faculty research position at the Durham VAMC GRECC
1996-1997	Member, Cancer Center, Duke University Medical Center Senior Fellow, Duke University Center for the Study of Aging
1998-2000	Member, Search Committee for Director of Medical University of South Carolina Center for the Study of Aging
1998-2001	Member, Search Committee for faculty for the Department of Biochemistry, MUSC
1999-2002	Member, Search Committee for faculty for the Department of Physiology, MUSC
1999-2003	Member, Internal Research and Sponsored Program Committee, MUSC
1999-present	Apoptosis Program Director, Hollings Cancer Center, MUSC
2000-present	Member, Program Committee, Paul Beeson Physician faculty Scholars in Aging Research Program, American Federation of Aging Research
2001-present	Director, Lipidomics Core, Hollings Cancer Center, MUSC
2001-2002	Member, Search Committee for the Chair of the Department of Psychiatry and Behavioral Sciences, MUSC
2002-2004	Committee Member - College of Medicine, Appointments, Promotions and Tenure, MUSC
2002-present	PI of Cobre Grant: "Center of Lipidomics and Pathobiology"
2002-present	Committee Member - Office of Diversity, MUSC
2002-present	Associate Director of Medical Science Training, Medical University of South Carolina
2002-present	Associate Director for Biology of Aging, Center for Study of Aging, Medical University of South Carolina
2002-present	Member, MUSC Strategic Plan
2003-2004	Member, Search Committee for Division Director for the Division of Endocrinology, MUSC
2003-present	Steering committee member for the NHLBI Short-term

2004-2005	Training Grant for Minority Medical Students MUSC
2004-2005	Member, Search Committee for Chair for the Department of Radiology, MUSC
2004-2005	Member, Search Committee for Division Director of General Internal Medicine/Geriatrics, Department of Medicine, MUSC
2004-2005	Member, Search Committee for Chair for the Department of Radiation Oncology, MUSC
2004-present	Chair, Appointment, Promotion & Tenure Committee, MUSC
2004-present	Scientific Review Committee: Southeast Affiliate American Federation for Aging Research.
2005-present	Advisory Committee, Neuroscience Institute, MUSC
2006-present	Member, Search Committee for the Chair of the Department of Psychiatry and Behavioral Sciences, MUSC
2007-present	Member, Jr. Faculty Mentoring Committee, Department of Medicine, MUSC
2008-present	Member, MUSC Curriculum Vitae Bank Committee

Invited Speakerships

March 16, 1995	The Biology of Aging Symposium in the annual scientific sessions of the American Society for Clinical Pharmacology and Therapeutics meeting in San Diego, CA
October 6, 1995	The Importance of In Vitro Aging to In Vivo Aging at the 25 th Annual Meeting of the American Aging Association
October 13, 1995	The New Biology Symposium for the 40 th Anniversary of the Center for the Study of Aging and Human Development at Duke University
June 1, 1996	American Federation for Aging Research's Ninth Annual Grantee Conference in Harriman, New York
June 12, 1996	Receptor Mediated Regulation and Signaling Symposium at the Tenth Quadrennial Congress of the International Society for Endocrinology
August 26-27, 1996	The National University of Athens
September 18, 1996	Symposium on "Second messengers and signal transduction", Pohang University of Science and Technology, Korea
October 22-25 1996	49 th Annual MD Anderson Symposium on Fundamental Cancer Research, "Regulatory Mechanisms in Growth and Differentiation"
November, 1996	Geriatric Society of America, Symposium on <i>In Vitro</i> Aging
January 13, 1997	Department of Biochemistry, Bowman Grey School of Medicine
February 12, 1997	Department of Pharmacology, Duke University Medical Center
March 18, 1997	Allegheny University of the Health Sciences, Center for Gerontological Research
April 21, 1997	Department of Biochemistry, East Carolina University
June 2, 1997	Clinical Institute of Research at The University of Montreal, Canada
June 5, 1997	Wayne State University, Institute for Chemical Toxicology
June 22-27, 1977	1997 Gordon Research Conference on Lipid Metabolism
July 7-9, 1997	Elizabeth Arden/Unilever Symposium: Frontiers in Sphingolipid Research, Ogunquit, Maine
October 6, 1997	Biozentrum of the University of Basel, Department of Chemistry, Basel, Switzerland

October 7, 1997	Third International Colloquium on "Cellular signal recognition and transduction", Berlin, Germany
October 8, 1997	Kekulé Institut Für Organische Chemie Und Biochemie, Universität Bonn, Bonn, Germany
November 2-5, 1997	The 1997 Basic Science Symposium "The Sphingolipid Cascade: Basic Mechanisms and Implications", American Society of Nephrology, San Antonio, Texas
January 13-16, 1998	1998 Gordon Research Conference on Glycolipid and Sphingolipid Biology, Ventura, California
January 23, 1998	Department of Biochemistry, Louisiana State University
February 24, 1998	Department of Oncology, Hoffmann-LaRoche, Nutley, New Jersey
May 16, 1998	998 Annual Meeting of American Society for Biochemistry and Molecular Biology, Washington DC.
May 16-19, 1998	1998 Annual Meeting of the Paul B. Beeson Physician Faculty Scholars in Aging Research Program, Scottsdale, Arizona
July 17, 1998	Cell Death Symposium, Queen's College, Flushing, New York.
June 30, 1999	4 th World Congress on Inflammation, Paris, France
August 1999	FASEB Summer Conference on Phospholipase D. Saxtons River, VT.
September 1999	Department of Physiology, University of Kentucky
May 2000	Annual Meeting of the Paul B. Beeson Physician Faculty Scholars in Aging Research Program, Colorado Springs, Colorado
May 2000	Gordon Research Conference on Glycolipid and Sphingolipid Biology, Il Ciococo, Italy.
April 2001	Experimental Biology 2001 Meeting, Orlando, Fl
May 2001	Annual Meeting of the Paul B. Beeson Physician Faculty Scholars in Aging Research Program, West Palm, Fl.
October 2001	Seventh International Meeting on Eicosanoids and Other Bioactive Lipids in Cancer, Inflammation, and Related Diseases, Vanderbilt University, Nashville, TN
January 2002	Gordon Research Conference, Glycolipid & Sphingolipid Biology, Ventura, CA
June 29, 2002	FASEB Summer Research Conference, Tucson, AZ
April 15, 2003	Invited Speaker, University of Iowa
June 3, 2003	Invited Speaker, 2 nd Charleston Ceramide Conference, Lake Como, Italy
July 2003	FASEB Summer Research Conference, Snowmass Village, Colorado
July 2004	Gordon Research Conference, Sphingolipid and Glycolipid Biology, Harima, Japan
December 2004	Invited Speaker, Vanderbilt University
September 2005	Invited Speaker, Eicosanoid Conference, San Francisco, CA
January 2006	Invited Speaker, Gordon Research Conference, Ventura, CA
April 2006	Invited Speaker, ASBMB/FASEB San Francisco, CA
July 2006	Invited Speaker, FASEB Summer Research Conference, Saxton River, VT
November 2006	Invited Speaker, SAIB Meeting, Lipid Symposium, Buenos Aires, Argentina
February 2007	Invited Speaker, Keystone Symposia, Taos, N.M.

June 2007	Invited Speaker, FASEB, Tucson, AZ
September 2007	Invited Speaker, Eicosanoid Conference, Montreal, Canada
November 2007	Invited Speaker, Sphingolipid Club, Bilbao, Spain
February 2008	Invited Speaker, Gordon Research Conference, Italy
July 2008	Invited Speaker, FASEB Summer Research Conference, New Haven, CT
October 2008	Invited Speaker, Southeastern Pharmacology Society, MUSC, Charleston, SC.
November 2008	Invited Speaker, Department of Medicine MUSC, Charleston, SC
November 2008	Invited Speaker, Tulane Center for Aging and Department of Biochemistry, Tulane University School of Medicine, New Orleans, LA
December 2008	Invited Speaker, Department of Pathology and Laboratory Medicine, MUSC, Charleston, SC
June 28 2008	Invited Speaker, FASEB Summer Research Conference, Carefree, AZ
September 9, 2009	Invited Speaker, FEBS Advanced Course, Ortona, Italy
November 18, 2009	4th Barossa Meeting, Barossa Valley, South Australia

Meeting Organizer

1996	31 st Southeastern Regional Lipid Conference, Cashiers, NC
2002	American Federation of Aging Research (AFAR) - Beeson Annual Meeting, Seattle, Washington
2001, 2003, 2005, 2007, 2009	Charleston Ceramide Conference, Charleston, SC
2007	Vice Chair, Gordon Research Conferences
2008	Member of European Sphingolipid Club (Organizing Committee)
2008	Hollings Cancer Center, MUSC, Director, Sphingolipid Program

Manuscript Editor

2001 - present	Editorial Board Member, Biochemical Journal
2002 - present	Editorial Board Member, FASEB
2005 - present	Editorial Board Member, ASBMB
2006 - present	Editorial Board Member, JBC

Manuscript Reviewer

Journal of Biological Chemistry
Molecular Pharmacology
Lipids
Cell Growth and Differentiation
Analytical Biochemistry
Journal of Neurochemistry
American Journal of Pathology
Oncogene
Experimental Cell Research
Nutrition and Cancer

Grant Reviewer

1999 - present	Veteran's Administration (Ad hoc reviewer)
1999 - present	American Federation of Aging Research (Beeson)

1999 - present	M.U.S.C. University Research Committee
2003 - present	American Federation of Aging Research (Atlanta Affiliate)
2003 - 2006	NIH: Permanent Member of Physiological Chemistry
2000 - 2002	NIH: Permanent Member of Medical Biochemistry
	National Cancer Institute (NCI)
	-Special Panel for PPG (1999 - 2000)
	-Special Panel for RFA CA00-002 (2000)
2004	National Science Foundation: MCB-Metabolic Biochemistry
2007-present	Reviewer, MUSC Institutional K12 Multidisciplinary Scholars Program in Clinical & Translational Science
2008-present	NIH: Member of Special Topics in Biological Sciences

Publications

1. Jordan, J.M., **Obeid, L.M.**, and Allen, N.B.(1986) Isolated Atlantoaxial Subluxation as the Presenting Manifestation of Inflammatory Bowel Disease. *Am. J. Med.* 80, 517-520.
2. **Obeid, L.M.**, Okazaki, T., Karolak, L. and Hannun, Y. (1990) Transcriptional Regulation of Protein Kinase C by 1,25Dihydroxyvitamin D₃ in HL-60 Cells. *J. Biol. Chem.* 265, 2370-2374.
3. Kim, M-Y., Linardic, C., **Obeid, L.M.**, and Hannun, Y.A. (1991) Identification of Sphingomyelin Turnover as an Effector Mechanism for the Action of TNF α and γ Interferon; Specific Role in Cell Differentiation. *J. Biol. Chem.* 266, 484-489.
4. Raymond, J.R., Albers, F.J., Middleton, J.P., Lefkowitz, R.J., Caron, M.G., **Obeid, L.M.**, and Dennis, V.W. (1991) 5-HT_{1A} and Histamine H₁ Receptors in HeLa Cells Stimulate Phosphatidylinositol Hydrolysis and Phosphate Uptake via Distinct G Protein Pools. *J. Biol. Chem.* 266, 372-379.
5. **Obeid, L.M.**, Blobbe, G.C., Karolak, L.A., and Hannun, Y.A. (1992) Cloning and Characterization of the Major Promoter of the Human Protein Kinase C β Gene: Regulation by Phorbol esters. *J. Biol. Chem.* 267, 20804-20810.
6. Blobbe, G.C., Sachs, C.W., Khan, W.A., Fabbro, D., Stabel, S., Wetsel, W., **Obeid, L.M.**, Fine, R., and Hannun, Y.A. (1992) Selective Regulation of Expression of Protein Kinase C Isoenzymes in Multidrug Resistant MCF-7 Cells: Functional Significance of Enhanced Expression of PKC α . *J. Biol. Chem.* 268, 658-664.
7. **Obeid, L.M.**, Linardic, C.M., Karolak, L., and Hannun, Y.A. (1993) Programmed Cell Death Induced by Ceramide. *SCIENCE* 259, 1769-1771.
8. Hannun, Y.A. **Obeid, L.M.**, and Wolff, R.A. (1993) The Novel Second Messenger Ceramide: Identification Mechanism of Action and Cellular Activity. Chapter in *Advances in Lipid Research*, R.M. Bell, A.H. Merrill, and Y.A. Hannun, Eds. (Academic Press, New York) V. 25, pp. 43-64.
9. Blobbe, G.C., Khan, W.A., Halpern, A.E., **Obeid, L.M.**, and Hannun, Y.A. (1993) Selective Regulation of Expression of Protein Kinase C β Isoenzymes Occurs via Alternative Splicing. *J. Biol. Chem.* 268, 10627-10635.
10. Dbaibo, G., **Obeid, L.M.**, and Hannun, Y.A. (1993) Tumor Necrosis Factor- α (TNF- α) Signal Transduction through Ceramide. *J. Biol. Chem.* 268, 17762-17766.

11. Bielawska, A., Crane, H.M., Liotta, D., **Obeid, L.M.**, and Hannun, Y.A. (1993) Selectivity of Ceramide-Mediated Biology: Lack of Activity of Erythro-dihydroceramide. *J. Biol. Chem.* 268, 26226-26232.
12. Gamard, C.J., Blobe, G.C., Hannun, Y.A., and **Obeid, L.M.** (1994) Specific Role for Protein Kinase C β in Cell Differentiation. *Cell Growth & Differentiation* Vol. 5, 405-409.
13. Wolff, R.A., Dobrowsky, R.T, **Obeid, L.M.**, and Hannun, Y. A. (1994) Role of Ceramide-Activated Protein Phosphatase in ceramide-mediated Signal Transduction. *J. Biol. Chem.* 269, 19605-19609.
14. Blobe, G.C., **Obeid, L.M.**, and Hannun, Y.A. (1994) Regulation of Protein Kinase C and Role in Cancer Biology. Chapter in *Cancer and Metastasis Reviews*, 13, 411-431.
15. Alcantara, O., **Obeid, L.**, Hannun, Y., Ponka, P., and Boldt, D.H. (1994) Regulation of Protein Kinase C (PKC) Expression by Iron: Effect of Different Iron Compounds on PKC- β and PKC- α Gene Expression and Role of the 5'-Flanking region of the PKC- β Gene in the Response to Ferric Transferrin. *Blood* 84, 3510-3517.
16. Venable, M.E., Blobe, G.C. and **Obeid, L.M.** (1994) Identification of a Defect in the Phospholipase D/diacylglycerol Pathway in Cellular Senescence: *J. Biol. Chem.* 269, 26040-26044.
17. Dbaibo, G.S., Wolff, R.A., **Obeid, L.M.** and Hannun, Y.A. (1995) Activation of a Retinoblastoma-protein Dependent Pathway by Sphingosine. *Biochem. Journal* 310, 453-459.
18. Hannun, Y.A. and **Obeid, L.M.** (1995) Ceramide: An Intracellular Signal for Apoptosis. *TIBS* 20, (2):73-77.
19. Jayadev, S., Liu, B., Bielawska, A.E., Nazaire, F., Pushkareva, M.Y., **Obeid, L.M.**, Hannun, Y.A. (1995) Role for Ceramide in Cell Cycle Arrest. *J. Biol. Chem.* 270, 2047-2052.
20. Dbaibo, G.S., Pushkareva, M.Y., Jayadev, S., Schwarz, J.K., Horowitz, J.M., **Obeid, L.M.**, Hannun, Y.A. (1995) Retinoblastoma Gene Product as a Downstream Target for a Ceramide-dependent Pathway of Growth Arrest. *PNAS* 92, 1347-1351.
21. Venable, M.E., Lee, J.Y., Smyth, M.J., Bielawska, A.E., and **Obeid, L.M.** (1995) Role of Ceramide in Cellular Senescence. *J. Biol. Chem.* 270, 30701-30708.
22. **Obeid, L.M.** and Hannun, Y.A. (1995) Ceramide: A Stress Signal and Mediator of Growth Suppression and Apoptosis. *J.Cell. Biochem.* 58, 191-198.
23. Pushkareva, M., **Obeid, L.M.** and Hannun, Y. (1995) Ceramide: An Endogenous Regulator of Apoptosis and Growth Suppression. *Immunology Today* 16, 294-297.
24. Saba, J., **Obeid, L.M.**, Hannun, Y.A. (1996) Ceramide: An Intracellular Mediator of Apoptosis and Growth Suppression. *Proceedings of the Royal Society* 351, 233-244.
25. Zhang, J., Alter, N., Reed, J.C., Borner, C., **Obeid, L.M.**, and Hannun, Y.A. (1996) Bcl-2 Interrupts the Ceramide-Mediated Pathway of Cell Death. *PNAS*. Vol. 93, 5325-5328.

26. Hannun, Y.A., **Obeid, L.M.**, and Dbaibo, G.S. (1996) Ceramide: A Novel Second Messenger and Lipid Mediator. *Handbook of Lipid Research Volume 8*, pp 177-204. Lipid Second Messengers, edited by Robert M. Bell, John Exton and Stephen Prescott, Plenum Press, New York.
27. Dbaibo, G.S., **Obeid, L.M.**, and Hannun, Y.A. (1996) The role of ceramide in the cellular stress response. *Frontiers in Bioactive Lipids*. Ed. J.Y. Vanderhoek. Plenum Press (New York); pp 183-192.
28. Smyth, M.J., Perry, D.K., Zhang, J., Poirier, G.G., Hannun, Y.A., and **Obeid, L.M.** (1996) p1ICE: A Downstream Target for Ceramide-induced Apoptosis and for the Inhibitory Action of bcl-2. *Biochem. Journal* 316, 25-28.
29. Lee, J.Y., Hannun, Y. A., and **Obeid, L.M.** (1996) Ceramide Inactivates Cellular Protein Kinase C α . *J. Biol. Chem.* 271, 13169-13174.
30. Perry, D.K., **Obeid, L. M.** and Hannun, Y.A. (1996) Ceramide and the Regulation of Apoptosis and the Stress Response. *TCM* 6, (5):158-162.
31. Blobe, G.C., Stribling, S., **Obeid, L.M.** and Hannun, Y.A. (1996) Protein Kinase C Isoenzymes: Their Regulation and Function. *Cancer Surveys Volume 27: Cell Signalling*. 213-248.
32. Venable, M.E., Bielawska, A. and **Obeid, L.M.** (1996) Ceramide Inhibits Phospholipase D in a Cell-Free System. *J. Biol. Chem.* 271, (40):24800-05.
33. Dbaibo, G., Perry, D., Gamard, C., Platt, R., Poirier, G., **Obeid, L.M.**, and Hannun, Y.A. (1997) Cytokine Response Modifier A (CrmA) Inhibits Ceramide Formation in Response to TNF: CrmA and Bcl-2 Target Distinct Components in the Apoptotic Pathway. *Journal of Experimental Medicine* 185, (3):481-490.
34. **Obeid, L.M.**, and Venable, M.E. (1997) Signal Transduction in Cellular Senescence. *Journal of the American Geriatrics Society* 45, 361-366.
35. Perry, D.K., Smyth, M.J., Wang, H-G., Reed, J.C., Poirier, G.G., **Obeid, L.M.**, and Hannun, Y.A. (1997) Bcl-2 Acts Upstream of the PARP Protease and Prevents Its Activation. *Cell Death and Differentiation* 4, 29-33.
36. Zhang, P., Liu, B., Jenkins, G.M., Hannun, Y.A., and **Obeid, L.M.** (1997) Expression of Neutral Sphingomyelinase Identifies a Distinct Pool of Sphingomyelin Involved in Apoptosis. *J. Biol. Chem.* 272, (15):9609-9612.
37. Lee, J.Y. and **Obeid, L.M.** (1997) Ceramide, Aging and Cellular Senescence. In *Sphingolipid-Mediated Signal Transduction*. Hannun, Y.A. ed. Volume in Molecular Biology Intelligence Unit. Landes Bioscience. (Chapman & Hall, New York) pp. 61-69.
38. Gamard, C.J., Dbaibo, G.S., Liu, B., **Obeid, L.M.**, and Hannun, Y.A. (1997) Selective Involvement of Ceramide in Cytokine-Induced Apoptosis. *J. Biol. Chem.* 272, (26):16474-16481.
39. Liu, B., **Obeid, L.M.**, and Hannun, Y.A. (1997) Sphingomyelinases in Cell Regulation. *Cell and Developmental Biology* 8, 311-322.

40. Puranam, K., Qian, W.-H., Nikbakht, K., Venable, M., Obeid, L.M., Hannun, Y.A., and Boustany, R.-M. (1997) Upregulation of Bcl-2 and Elevation of Ceramide in Batten Disease. *Neuropediatrics* 28, 37-41.
41. Smyth, M.J., **Obeid, L.M.**, and Hannun, Y.A. (1997) Ceramide: A Novel Lipid Mediator of Apoptosis. *Advances in Pharmacology*; Editor, S. Kaufmann 41, 133-154
42. Hannun, Y.A. and **Obeid, L.M.** (1997) Sphingolipids and the Eukaryotic Stress Response. *Experimental Medicine*. 15, 1482-1487.
43. Hannun, Y.A. and **Obeid, L.M.** (1997) Mechanisms of ceramide-mediated apoptosis. *Adv. Exp. Med. Biol.* 407, 145-149.
44. Mao, C., Jenkins, G., Hannun, Y.A., and **Obeid, L.M.** (1997) Identification and characteristics of *Saccharomyces cerevisiae* dihydrosphingosine-1-phosphate phosphatase. *J. Biol. Chem.* 272, 28690-28694.
45. Mao, C., Wadleigh, M., Hannun, Y. and **Obeid, L.M.** (1997) Identification and Characterization of *Saccharomyces cerevisiae* Dihydrosphingosine-1-phosphate Phosphatase. *J. Biol. Chem.* 272, (45): 28690-28694.
46. Lee, T.G., Park, J.B., Lee, S.D., Hong, S., Kim, J.H., Kim, Y., Yi, K.S., Bae, S., Hannun, Y.A., **Obeid, L.M.**, Suh, P.G., and Ryu, S.H. (1997) Phorbol Myristate Acetate-dependent Association of Protein Kinase C α With Phospholipase D1 in Intact Cells. *Biochim.Biophys.Acta Lipids Lipid Metab.* 1347, 199-204.
47. Venable, M., and **Obeid, L.M.** (1997) Phospholipase D and Cellular Senescence. In Sphingolipid-Mediated Signal Transduction. L. Daniel, *et al.*, ed. Volume in Phospholipase D Unit. Landes Bioscience. (Chapman & Hall, New York).
48. Zhang, P., Liu, B., Jenkins G.M., Hannun, Y.A., and **Obeid, L.M.** (1997) Expression of neutral sphingomyelinase identifies a distinct pool of sphingomyelin involved in apoptosis. *J. Biol. Chem.* 272, 9609-9612
49. Jenkins, G.M., Richards, A., Wahl, T., Mao, C., **Obeid, L.M.**, and Hannun, Y.A. (1997) Involvement of Yeast Sphingolipids in the Heat Stress Response of *Saccharomyces cerevisiae*. *J. Biol. Chem.* 272, (51):32566-32572.
50. Zhang, P., Liu, B., Kang, S.W., Seo, M.S., Rhee, S.G., and **Obeid, L.M.** (1997) Thioredoxin Peroxidase is a Novel Inhibitor of Apoptosis With a Mechanism Distinct From That of bcl-2. *J. Biol. Chem.* 272, (49):30615-30618.
51. Liu, B., Andrieu-Abadie, N., Levade, T., Zhang, P., **Obeid, L.M.**, and Hannun, Y. (1998) Glutathione Regulation of Neutral Sphingomyelinase in Tumor Necrosis Factor- α -induced Cell Death. *J. Biol. Chem.* 273, (18):11313-11320.
52. Dbaibo, G.S., Pushkareva, M.Y., Rachid, R.A., Alter, N., Smyth, M.J., **Obeid, L.M.**, and Hannun, Y. (1998) p53-dependent Ceramide Response to Genotoxic Stress. *J. Clin Invest.* 102, (2):329-339.
53. Lee, J.Y., Leonhardt, L.G., and **Obeid, L.M.** (1998) Cell Cycle Dependent Changes in Ceramide Levels Preceding Rb Dephosphorylation in G2/M. *Biochem. J* 334, (2): 457-461.

54. Chalfant, C.E., Watson, J.E., Bisnauth, L.D., Kang, J.B., Patel, N., **Obeid, L.M.**, Eichler, D.C., and Cooper, D.R. (1998) Insulin Regulates Protein Kinase CBII Expression Through Enhanced Exon Inclusion in L6 Skeletal Muscle Cells. *JBC* 273, (2):910-916.
55. Zhang, J., Driscoll, T.A., Hannun, Y.A., and **Obeid, L.M.** (1998) Regulation of Membrane Release in Apoptosis. *Biochem J.* 334, (2):479-485.
56. Zhang, J., Reedy, M.C., Hannun, Y.A. and **Obeid, L.M.** (1999) Inhibition of Caspases Inhibits the Release of Apoptotic Bodies: Bcl-2 Inhibits the Initiation of Formation of Apoptotic Bodies in Chemotherapeutic Agent-induced Apoptosis. *JCB* 145, (1):99-108.
57. Guo, WX., Mao, C., **Obeid, L.M.**, and Boustany, RM. (1999) A Disrupted Homologue of the Human *CLN3* or Juvenile Neuronal Ceroid Lipofuscinosis Gene in *Saccharomyces cerevisiae*: A Model to Study Batten Disease. *Cellular and Molecular Neurobiology* 19, (5)671-680.
58. Venable, M. and **Obeid, L.M.** (1999) Phospholipase D in cellular senescence. *BBA* 1439 291-298.
59. Zhang, J., Hannun, Y.A., and **Obeid, L.M.** (1999) A novel assay for apoptotic body formation and membrane release during apoptosis. *Cell Death and Differentiation* 6, 596-598.
60. **Obeid, L.M.** and Hannun, Y.A. (1999) Apoptosis and Senescence of Hematopoietic and Immune Cells: Mechanisms and Significance. Gallin, J.I. and Snyderman, R. eds. Chapter 51: *Inflammation: Basic Principles and Clinical Correlates* (Lippincott Williams & Wilkins, Philadelphia)
61. Mao, C., Saba, J.D., and **Obeid L.M.** (1999) The dihydrosphingosine-1-phosphate phosphatases of *Saccharomyces cerevisiae* are important regulators of cell proliferation and heat stress responses. *Biochem. J.* 342, 3:667-675.
62. Mao, C., and **Obeid, L.M.** (1999) Yeast Sphingosine-1-P Phosphatases: Assay, Expression, Deletion, Purification, and Cellular Localization by GFP Tagging. Merrill, A.H. and Hannun, Y.A. eds. Chapter 26: *Methods in Enzymology*, Volume 311: *Sphingolipid Metabolism and Cell Signaling*. (Academic Press)

63. Chung, N. and **Obeid, L.M.** (1999) Use of Yeast as a Model System for Studies of Sphingolipid Metabolism and Signaling. Merrill, A.H. and Hannun, Y.A. eds. Chapter 34: *Methods in Enzymology*, Volume 311: *Sphingolipid Metabolism and Cell Signaling*. (Academic Press)
64. Smith, E. R., Merrill Jr., A. H., **Obeid, L. M.**, and Hannun, Y. A. (2000) Effects of sphingosine and other sphingolipids on protein kinase C. *Methods in Enzymology*, Academic Press, Merrill, A. H. and Hannun, Y. A., Editors, Vol. 312, 361-373.
65. Mao, C., Xu, R., Bielawaka, A., and **Obeid, L.M.** (2000) Cloning of an Alkaline Ceramidase from *Saccharomyces cerevisiae*. *JBC* 275, 10:6876-6884.
66. Chung, N., Jenkins, G., Hannun, Y., Heitman, J., and **Obeid, L.M.** (2000) Sphingolipids Signal Heat-stress-induced Ubiquitin-dependent Proteolysis. *JBC* 275, 23:17229-17232.
67. Mao, C., Xu, R., Bielawska, A., Szulc, Z.A., and **Obeid, L.M.** (2000) Cloning and Characterization of a *Saccharomyces cerevisiae* Alkaline Ceramidase with Specificity of Dihydroceramide. *JBC* 275: 31369-31378.
68. Lee, J.Y., Hannun, Y.A., and **Obeid, L.M.** (2000) Functional Dichotomy of Protein Kinase C (PKC) in Tumor Necrosis Factor- α (TNF α) Signal Transduction in L929 Cells. *JBC* .275, 38: 29290-29298.
69. Lee, J.Y., Bielawska, A.E., and **Obeid, L.M.** (2000) Regulation of Cyclin-Dependent Kinase 2 Activity by Ceramide. *Exp. Cell Research* 261, 2: 303-311.
70. Kraveka, J., Schady, D., **Obeid, L.M.**, and Ogretmen, B. (2001) Immunoprecipitation of Human Telomerase Reverse Transcriptase with Telomerase Activity. *Analytical Biochem.* 291, 1: 166-169.
71. Hayter, H.L., Pettus, B.J., Ito, F., **Obeid, L.M.**, and Hannun, Y.A. (2001) TNF α -induced glutathione depletion lies downstream of cPLA(2) in L929 cells. *FEBS Lett.* 507, 2: 151-6.
72. Ogretmen, B., Usta, J., Wood, R., Kraveka, J., Luberto, C., Birbes, H., Hannun, Y.A., and **Obeid, L.M.** (2001) Role of Ceramide in Mediating the Inhibition of Telomerase Activity in A549 Human Lung Adenocarcinoma Cells. *JBC*, 276, 27: 24901-24910.
73. Mao, C., Xu, R., Szulc, Z.M., Bielawska, A., Galadari, S.H., and **Obeid, L.M.** (2001) Cloning and Characterization of a Novel Human Alkaline Ceramidase: a Mammalian Enzyme That Hydrolyzes Phytoceramide. *JBC* 276, 28: 26577-26588.
74. Ogretmen, B., Kraveka, J. M., Schady, D., Usta, J., Hannun, Y. A., and **Obeid, L. M.** (2001) Molecular Mechanisms of Ceramide-Mediated Telomerase Inhibition in the A549 Human Lung Adenocarcinoma Cell Line. *JBC* 276: 32506-32514
75. Boujaoude, L.B., Wilder-Bradshaw, C.B., Mao, C., Cohn, J., Ogretmen, B., Hannun, Y.A., and **Obeid, L.M.** (2001) CFTR regulates uptake of sphingoid base phosphates and LPA. *JBC* 276, 38: 35258-35264.
76. Chung, N., Mao, C., Heitman, J., Hannun, Y.A., and **Obeid, L.M.** (2001) Phytosphingosine as a specific inhibitor of growth and nutrient import in *Saccharomyces cerevisiae*. *JBC* 276, 38: 35614-35621.

77. Argraves, K. M., **Obeid, L. M.**, and Hannun, Y. A. (2002) Sphingolipids in vascular Biology. Chapter in *Eicosanoids and Other Bioactive Lipids in Cancer, Inflammation, and Radiation Injury*, K.V. Honn, L.J. Marnett, and S. Nigam, Eds. Kluwer Academic/Plenum Publishers, New York, NY 2: 5: 439-444.
78. Birbes, H., El Bawab, S., Hannun, Y.A. and **Obeid, L.M.**, (2001) Selective hydrolysis of a mitochondrial pool of sphingomyelin induces apoptosis. *FASEB*. 14: 2669-2679.
79. Birbes, H., El Bawab, S., **Obeid, L. M.**, and Hannun, Y. A. (2001) Mitochondria and Ceramide: Intertwined roles in regulation of apoptosis. *Advances in Enzymology* 42: 113-129.
80. Chalfant, C.E., Rathman, K., Pinkerman, R.L., Wood, R.E., **Obeid, L.M.**, Ogretmen, B., and Hannun, Y.A. (2002) *De novo* Ceramide Regulates the Alternative Splicing of Caspase 9 and Bcl-x in A549 Lung Adenocarcinoma Cells. *JBC* 277, 15: 12587-12595.
81. Ogretmen, B., Pettus, B.J., Rossi, M.J., Wood, R., Usta, J., Szulc, Z., Bielawska, A., **Obeid, L.M.**, Hannun, Y.A. (2002) Biochemical Mechanisms of the Generation of Endogenous Long Chain Ceramide in Response to Exogenous Short Chain Ceramide in the A549 Human Lung Adenocarcinoma Cell Line. *JBC* 277, 15: 12960-12696.
82. **Obeid, L.M.**, Okamoto, Y., and Mao, C.M. (2002) Yeast Sphingolipids: Metabolism and Biology. BBA review *Biochimica et Biophysica Acta* **55983**, 1-8.
83. Okamoto, Y., **Obeid, L.M.**, and Hannun, Y.A. (2002) Bcl-xL interrupts oxidative activation of neutral sphingomyelinase. *FEBS Letters*, 26616: 1-5.
84. Hannun, Y.A., and **Obeid, L.M.** (2002) The Ceramide-centric Universe of Lipid-mediated Cell Regulation: Stress Encounters of the Lipid Kind. Minireview. *JBC* 277, 29: 25847-25850.
85. Johnson, K. R., Becker, K. P., Facchinetti, M. M., Hannun, Y. A., and **Obeid, L. M.** (2002) PKC Dependent Activation of Sphingosine Kinase 1 and Translocation to the Plasma Membrane. Extracellular release of sphingosine-1-phosphate induced by PMA. *JBC* 277, 38: 35257-35262.
86. Luberto, C., Hassler, D. F., Signorelli, P., Okamoto, Y., Sawai, H., Boros, E., Hazen-Martin, D. J., **Obeid, L. M.**, Hannun, Y. A., and Smith, G. K. (2002) Inhibition of TNF-Induced Cell Death in MCF7 by a Novel Inhibitor of Neutral Sphingomyelinase. *JBC* 277: 43. 41128-41139.
87. Mao, C and **Obeid, L.M.** (2002) Ceramidases: Regulators of Turnover of Ceramide and Ceramide-Mediated Responses. In: *Ceramide Signaling*. Editor: Anthony H. Futerman, Landes Bioscience. ISBN: 1-58706-137-6.
88. El Bawab, S, Mao, C, **Obeid, L.M.**, and Hannun, Y.A. (2002) Ceramidases in the regulation of ceramide levels and function. *Subcellular Biochemistry: Phospholipid Metabolism in Apoptosis*, **36**, 187-205.
89. Sato, M., Markiewicz, M., Yamanaka, M., Bielawska, A., Mao, C., **Obeid, L.M.**, Hannun, Y.A., and Trojanowska, M. (2003) Modulation of Transforming Growth Factor- β (TGF- β) Signaling by Endogenous Sphingolipid Mediators. *JBC* 278:11, 9276-9282.

90. Mao, C., Xu, R., Szulc, Z.M., Bielawski J., Becker, K.P., Bielawska, A., Galadari, S.H., Hu, W., and **Obeid, L.M.** (2003) Cloning and Characterization of a Mouse Endoplasmic. *JBC* 278: 33, 31184-31191.
91. Johnson, K.R., Johnson, K.Y., Becker, K.P., Bielawski, J., Mao, C., and **Obeid, L.M.** (2003) Role of Human Sphingosine-1-phosphate Phosphatase 1 in the Regulation of Intra and Extracellular Sphingosine-1-phosphate Levels and Cell Viability. *JBC* 278: 36, 34541-34547.
92. Pettus, B.J., Bielawski, J., Porcelli, A.M., Reames, D.L., Johnson, K.R., Morrow, J., Chalfant, C.E., **Obeid, L.M.**, and Hannun, Y.A. (2003) The Sphingosine Kinase 1/Sphingosine-1-phosphate pathway mediates COX-2 induction and PGE2 production in response to TNF α . *FASEB* 17: 1411-1421.
93. Kravaka, J.M., Li, L., Bielawski, J., **Obeid, L.M.**, and Ogretmen, B. (2003) Involvement of Endogenous Ceramide in the Inhibition of Telomerase Activity, and Induction of Morphologic Differentiation in Response to All-Trans-Retinoic Acid in Human Neuroblastoma Cells." *Arch Biochem Biophys.* 419(2): 110-9
94. **Obeid, L.M.**, and Hannun, Y.A. (2003) Ceramide, Stress, and a "LAG" in Aging. *SAGE KE* 2003:39 pe27.
95. Sundararaj, K.P., Wood, R.E., Ponnusamy, S., Salas, A., Szulc, Z., Bielawska, A., **Obeid, L.M.**, Hannun, Y.A., and Ogretmen, B. (2004) Rapid Shortening of Telomere Length in Response to Ceramide Involves the Inhibition of Telomere-binding Activity of Nuclear Glyceraldehyde-3-phosphate dehydrogenase. *JBC* 279: 7, 6152-6162.
96. Sims, K.J., Spassieva, S.D., Voit, E.O., and **Obeid, L.M.** (2004) Yeast Sphingolipid Metabolism: Clues and Connections. *Biochem. & Cell Bio.* 82: 45-61.
97. Taha, T.A., Argraves, K., and **Obeid, L.M.** (2004) Sphingosine-1-phosphate Receptors: Receptor Specificity versus Functional Redundancy. *BBA.* 1682: 48-55.
98. Taha, T.A., Osta, W., Kozhaya, L., Bielawski, J., Johnson, K.R., Gillanders, W.E. Dbaibo, G.S., Hannun, Y.A., and **Obeid, L.M.** (2004) Downregulation of Sphingosine Kinase-1 by DNA damage: Dependence on proteases and p53. *JBC.* 279: 19, 20546-20554.
99. Marchesini, N., Osta, W., Bielawska, J., **Obeid, L.M.**, Hannun, Y.A. (2004) Role for mammalian neutral sphingomyelinase2 in confluence-induced growth arrest of MCF7 cells. *JBC.* 279: 24, 25101-25111.
100. Koybasi S, Senkal CE, Sundararaj K, Spassieva S, Bielawski J, Osta W, Day TA, Jiang JC, Jazwinski SM, Hannun YA, **Obeid LM**, Ogretmen B. (2004) Defects in cell growth regulation by c18:0-ceramide and longevity assurance gene 1 in human head and neck squamous cell carcinomas. *JBC.* 279(43):44311-9. Epub 2004 Aug 17.
101. Argraves, K.A., Wilkerson, B.A., Argraves, W.S., Fleming, P.A., **Obeid, L.M.**, and Drake, C.J.. (2004) Sphingosine-1-Phosphate Signaling Promotes Critical Migratory Events in Vasculogenesis. *JBC.* 10.1074.
102. Yamanaka, M., Shegogue, D., Pei, H., Bielawska, A., Bielawski, J., Pettus, B., Hannun, Y., **Obeid, L.**, and Trojanowska, M. (2004) Sphingosine Kinase 1 (SPHK1) is induced by TGF- α and mediates TIMP-1 upregulation. *JBC.* 10.1074.

- 103.** Rossi M.J., Sundararaj K., Koybasi S., Phillips M.S., Szulc Z.M., Bielawska A, Day T.A., **Obeid L.M.**, Hannun Y.A, and Ogretmen B. (2005) Inhibition of Growth and Telomerase Activity by Novel Cationic Ceramide Analogs with High Solubility in Human Head and Neck Squamous Cell Carcinoma (HNSCC) Cells. *Otolaryngology-head and neck surgery* 132. 1: 55-62.
- 104.** Birbes, H., Luberto, C., Hsu, T., El Bawab, S., Hannun , Y.A., and **Obeid, L.M.** (2005) A Mitochondrial Pool of Sphingomyelin is Involved in TNF α -induced Apoptosis. *BJ* 386: 445-451
- 105.** Hu, W., Xu, R., Zhang, G., Jin, J., Szulc, Z.M., Bielawski, J., Hannun, Y.A., **Obeid, L.M.**, and Mao, C. (2005) Golgi fragmentation is associated with ceramide-induced cellular effects. *Mol. Bio. Cell* 16:1555-1567
- 106.** Taha, T.A., Kitatani, K., Bielawski, J., Cho, W., Hannun, Y.A., and **Obeid, L.M.** (2005) TNF Induces the Loss of Sphingosine Kinase-1 by a Cathespin B Dependent Mechanism. *JBC*. 280:17196-17202.
- 107.** Novgorodov, S.A., Szulc, Z.M., Luberto, C., Jones, J.A., Bielawska, A., Hannun, Y.A., and **Obeid, L.M.** (2005) Positively Charged Ceramide is a Potent Inducer of Mitochondrial Permeabilization. *JBC*. 280:16096-16105.
- 108.** Thompson, C.R., Shankar, S.I., Melrose, N., VanOosten, R., Johnson, K., Pitson, S.M., **Obeid, L.M.**, and Kusner, D.J. (2005) Sphingosine Kinase 1 (SK1) is Recruited to Nascent Phagosomes in Human Macrophages. Inhibition of SK1 Translocation by *Mycobacterium tuberculosis*. *J Immunol*. 174(6):3551-61.
- 109.** Pettus, B. J., Kitatani, K., Chalfant, C. E., Taha, T. A., Kawamori, T., Bielawski, J., **Obeid, L. M.**, and Hannun, Y. A., (2005) The Coordination of Prostaglandin E2 production by sphingosine-1-phosphate and ceramide-1-phosphate. *Mol. Pharm* 8(2):330-5.
- 110.** Johnson, K.R., Johnson, K.Y., Crellin, H.G., Ogretmen, B., Boylan, A.M., Harley, R.A., and **Obeid, L.M.** (2005) Immunohistochemical Distribution of Sphingosine Kinase 1 in Normal and Tumor Lung Tissue. *JHC* 53(9): 1159-1166.
- 111.** Spassieva, S., Sims, K., and **Obeid, L.M.** (2005) Structural and signaling functions of yeast sphingolipids-two sides of the same coin. In: Cell Biology and Dynamics of Yeast Lipids. Editor A. Gayathri, Research Signpost. 201-218 ISBN: 81-7736-273-9.
- 112.** Bu, S., Yamanaka, M., Pei, H., Bielawska, A., Bielawski, J., Hannun, Y.A., **Obeid, L.M.**, Trojanowska, M. (2005) Dihydrosphingosine 1- phosphate stimulates MMP1 gene expression via activation of ERK1/2-Ets1 pathway in human fibroblasts. *FASEB* 20(1): 184-6.
- 113.** Kawamori, T., Osta, W., Johnson, K.R., Pettus, B. J., Tanaka, T., Wargovich, M. J., Reddy, B. S., **Obeid, L. M.**, Hannun, Y.A., and Zhou, D. (2006) Sphingosine kinase 1 is upregulated in colon carcinogenesis. *FASEB* 20(2): 236-8.
- 114.** Taha, T.A., Kitatani, K., El-Alwani, M., Bielawski, J., Hannun, Y.A., and **Obeid, L.M.** (2006) Loss of sphingosine kinase-1 activates the intrinsic pathway of programmed cell death: modulation of sphingolipid levels and the induction of apoptosis. *FASEB* 20(3):482-4.

- 115.** Stahelina, R.V., Hwant, J.H., Kim, J-H., Park, Z-Y., Johnson, K.R., **Obeid, L.M.**, and Cho, W. (2006) The mechanism of membrane targeting of human sphingosine kinase 1. *JBC* 280: 43030-43038.
- 116.** Fieber, C.B., Eldridge, J., Taha, T.A., **Obeid, L.M.**, and Muise-Helmericks, R.C. (2006) Modulation of Total Akt kinases by Increased Expression of a single Isoform: Requirement of the Sphingosine-1-Phosphate Receptor, Edg3/S1P3, for the VEGF-dependent Expression of Akt3 in Primary Endothelial Cells. *Experimental Cell Research* 312:7 1164-1173.
- 117.** Hammad, S.M., Taha, T.A., Nareika, A., Johnson, K.R., Lopes-Virella, M.F., **Obeid, L.M.** (2006) Oxidized LDL immune complexes induce release of sphingosine kinase in human U937 monocytic cells. *Prostaglandins Other Lipid Mediat.* 79(1-2):126-40.
- 118.** Houben, E., Holleran, W.M., Yaginuma, T., Mao, C., **Obeid, L.M.**, Rogiers, V., Takagi, Y., Elias, P.M., and Uchida, Y. (2006) Differentiation-Association Expression of Ceramidase Isoforms in Cultured Keratinocytes and Epidermis. *J Lipid Res* 47:(5) 1063-70.
- 119.** Taha, T.A., Hannun, Y.A., and **Obeid, L.M.** (2006) Sphingosine Kinase: Biochemical and Cellular Regulation and Role in Disease. *J. Biochem. Mol. Biol.* 39(2):113-31.
- 120.** Senkal, C., Ponnusamy, S., Rossi, M., Sundararaj, K., Szulc, Z., Bielawski, J., Bielawska, A. M., Cobanoglu, B., Koybashi, S., Sinha, D., Day, T., **Obeid, L.**, Hannun, Y., and Ogretmen, B. (2006) Potent Anti-tumor Activity of a Novel Cationic Pyridinium-Ceramide Alone or in Combination with Gemcitabine Against Human Head and Neck Squamous Cell Carcinomas *In vitro* and *In vivo*. *J. Pharmacol. Exp. Ther.* 17(3):1188-99.
- 121.** Dindo, D., Dahm, F. Bielawska, A., Szulc, Z., **Obeid, L. M.**, Hannun, Y. A., Graf R., and Clavien P. A. (2006) Cationic long-chain ceramide LCL-30 induces cell death by mitochondrial targeting in SW403 cells. *Molecular Cancer Therapeutics* 5(6): 1520-9.
- 122.** Norris, J. S., Bielawska, A., Day, T., El-Zawahri, A., Elojeimy, S., Hannun, Y. A., Holman, D., Hyer, M., Landon, C., Lowe, S., Dong, J. Y., McKillop, J., Norris, K., **Obeid, L.**, Rubinchik, S., Tavassoli, M., Tomlinson, S., Voelkel-Johnson, C., and Liu, X. (2006) Combined Therapeutic Use of AdGFP FasL and Small Molecule Inhibitors of Ceramide Metabolism in Prostate and Head and Neck Cancers: A Status Report. *Cancer Gene Therapy* 12:1045-51.
- 123.** El Alwani, M., Wu, B.X., Obeid, L.M., Hannun, Y.A. (2006) Bioactive sphingolipids in the modulation of the inflammatory response. *Pharmacol Ther.* 112:171-183.
- 124.** Zeidan, Y.H., Pettus, B.J., Elojeimy, S., Taha, T., **Obeid, L.M.**, Kawamori, T., Norris, J.S., Hannun, Y.A. (2006) Acid Ceramidase but not Acid Sphingomyelinase is Required for TNF α - Induced PGE₂ Production. *JBC* 281(42):31399-407.
- 125.** Xu, R., Jin, J., Hu, W., Sun, W., Taha, T., Szulc, Z., Bielawski, J., **Obeid, L.M.**, and Mao, C. (2006) Golgi Alkaline Ceramidase Regulates Cell Proliferation and Survival by Controlling Levels of Sphingosine and S1P. *FASEB* 20:1813-1825.
- 126.** El-Shewy, H.M., Johnson, K.R., Lee, M.I., Jaffa, A.A., **Obeid, L.M.**, and Luttrell L.M. (2006) Insulin-like growth factors mediate heterotrimeric G protein-dependent ERK1/2 activation by transactivating sphingosine-1-phosphate receptors. *JBC* 281(42):31399-407.

127. Spassieva, S., Seo, J-G., Jiang, J. C., Bielawski, J., Alvarez-Vasquez, F., Jazwinski, S. M., Hannun, Y.A., and **Obeid, L.M.** (2006) Necessary role for the Lag1p motif in (dihydro)ceramide synthase activity. *JBC* 281(45):33931-8.
128. Szulc ZM, Bielawski J, Gracz H, Gustilo M, Mayroo N, Hannun YA, **Obeid LM**, Bielawska A. (2006) Tailoring structure-function and targeting properties of ceramides by site-specific cationization. *Bioorg Med Chem* 14(21):7083-104.
129. Taha, T., El Alwani, M., Hannun, Y.A., and **Obeid, L.M.** (2006) Sphingosine kinase-1 is cleaved by cathepsin B in vitro: Identification of the initial cleavage sites for the protease. *FEBS Letters* 580:6047-6054.
130. Kitatani, K., Idkowiak-Baldys, J., Bielawski, J., Taha, T.A., Jenkins, R.W., Senkal, C.E., Ogretmen, B., **Obeid, L.M.**, and Hannun, Y.A. (2006) Protein kinase C induced activation of a ceramide/protein phosphatase 1 pathway leading to dephosphorylation of p38. *JBC* 281(48):36793-802.
131. Taha, T.A., Mullen, T.D., **Obeid, L.M.** (2006) A house divided: ceramide, sphingosine, and sphingosine-1-phosphate in programmed cell death. *BBA* 1758(12):2027-36
132. Cowart, L.A., Hannun, Y.A. and **Obeid, L.M.** (2006) Chapter 8: Metabolism and Function of Sphingolipids in *Saccharomyces Cerevisiae*: Relevance to Cancer Research. In *Yeast as Tool in Cancer Research*, Nitiss, John L.; Heitman, Joseph (Eds.) ISBN: 978-1-4020-5962-9.
133. Baran, Y., Salas, A., Senkal, C.E., Gunduz, U., Bielawski, J., **Obeid, L.M.**, Ogretmen, B. (2007) Alterations of ceramide/sphingosine 1-phosphate rheostat involved in the regulation of resistance to imatinib-induced apoptosis in K562 human chronic myeloid leukemia cells. *JBC* 282(15):10922-34. Epub 2007 Feb 15.
134. Cowart, L.A., and **Obeid, L.M.** (2007) Yeast Sphingolipids: Recent developments in understanding biosynthesis, regulation, and function. Article Type: Special Issue: Reg Lipid Metabolism. *Biochim Biophys Acta*. 1771(3):421-31.
135. Kusner, D.J., Thompson, C.R., Melrose, N.A., Pitson, S.M., **Obeid, L.M.**, Iyer, S.S., (2007) The localization and activity of sphingosine kinase 1 are coordinately-regulated with actin cytoskeletal dynamics in macrophages. *JBC* 282(32):23147-62.
136. Kravka, J.M., Li, L., Szulc, Z.M., Bielawski, J., Ogretmen, B., Hannun, Y.A., **Obeid, L.M.**, Bielawska, A. (2007) Involvement of dihydroceramide desaturase in cell cycle progression in human neuroblastoma cells. *JBC* 282(23):16718-28
137. Novgorodov AS, El-Alwani M, Bielawski J, **Obeid LM**, Gudz TI. (2007) Activation of sphingosine-1-phosphate receptor S1P5 inhibits oligodendrocyte progenitor migration. *FASEB J*. 21:7.
138. Yu, J., Novgorodov, S.A., Chudakova, D., Zhu, H., Bielawska, A., Bielawski, J., **Obeid, L.M.**, Kindy, M.S., Gudz, T.I. (2007) JNK3 signaling pathway activates ceramide synthase leading to mitochondrial dysfunction. *JBC* 282(35):25940-9.

- 139.** El Shewy, H., Jaffa, A., Lee, M., **Obeid, L.M.**, and Luttrell, L. (2007) The insulin-like growth factor type 1 and insulin-like growth factor type 2/mannose-6-phosphate receptors independently regulate ERK1/2 activity in HEK293 cells. *JBC* 282 (36): 26510-7.
- 140.** Hu, W., Xu, R., Zheng, G., Jin, J., Szulc, Z.M., Bielawski, J., Hannun, Y.A., **Obeid, L.M.**, and Mao, C. (2007) Golgi Fragmentation is Associated with Ceramide-induced Cellular Effects. *Molecular Biology of the Cell* 16:1555-1567.
- 141.** Zeidan, Y., **Obeid, L.M.**, Hannun, Y.A. (2007) A Novel Role for Protein Kinase C delta-Mediated Phosphorylation of Acid Sphingomyelinase in UV Light-Induced Mitochondrial Injury *FASEBJ* 22(1):183-93.
- 142.** Sun, W., Xu, R., Hu, W., Jin, J., Crellin, H.A., Bielawski, J., Szulc, Z.M., Thiers, B.H., **Obeid, L.M.**, Mao, C. (2007) Upregulation of the human alkaline ceramidase 1 and acid ceramidase mediates calcium-induced differentiation of epidermal keratinocytes. *JID*. 128(2):389-97.
- 143.** Spassieva, S., Bielawski, J., Anelli, V., and **Obeid, L.M.** (2007) Chapter 12: Combination of C17 Sphingoid Base Homologues and Mass Spectrometry Analysis as a New Approach to Study Sphingolipid Metabolism. In *Methods Enzymology*. Volume 434 Lipidomics and Bioactive Lipids: Lipids and Cell Signaling, Brown, H.A (Ed.) ISBN: 978-0-12-373965-0.
- 144.** Saad, A.F., Meacham, W.D., Bai, A., Anelli, V., Elojeimy, S., Mahdy, A.E.M., Turner L.S., Cheng, J., Bielawska, A., Bielawski, J., Keane, T.E., **Obeid, L.M.**, Hannun, Y.A., Norris, J.S., Liu, X. (2007) The Functional Effects of Acid Ceramidase Over-expression in Prostate Cancer Progression and Resistance to Chemotherapy. *Cancer Biol. Ther.*, Jun 23; 6(9).
- 145.** Kitagaki, H., Cowart, L.A., Matmati, N., Vaena de Avalos, S., Novgorodov, S.A., Zeidan, Y.H., Bielawski, J., **Obeid, L.M.**, Hannun, Y.A. (2007) Isc1 regulates sphingolipid metabolism in yeast mitochondria. *BBA*. 1768 (11): 2849-2861.
- 146.** Szulc, Z.M., **Obeid, L.M.**, Hannun, Y.A., and Bielawska, A. (2007) Highly Efficient and Regioselective Phosphorylation of Sphingolipids by Phase-Transfer Catalysis. *Polish J. Chem.* 81: 1899-1909.
- 147.** Hammad, S., Crellin, H., Wu, X., Melton, J., Anelli, V., and **Obeid, L.M.** (2008) Dual and Distinct Roles for Sphingosine Kinase 1 and Sphingosine 1 Phosphate in the Response to Inflammatory Stimuli in RAW Macrophages. *POLM*. 85(3-4):107-14. E pub ahead of print.
- 148.** Anelli, V., Gault, C.R., Cheng, A.B., and Obeid, L.M. (2008) Sphingosine Kinase 1 is Up-regulated During Hypoxia in U87MG Glioma Cells: Role of Hypoxia-inducible Factors 1 and 2. *JBC*. 283(6): 3365-75.
- 149.** Hannun, Y.A., and **Obeid, L.M.** (2008) Principles of bioactive lipid signaling: lessons from sphingolipids. *Nature Reviews Molecular Cell Biology*. (2):139-50.
- 150.** Misra, S., **Obeid, L.M.**, Hannun, Y.A., Minamisawa, S., Berger, F., Markwald, R.R., Toole, B.P., and Ghatak, S. (2008) Hyaluronan Constitutively Regulates Activation of Cox-2-mediated Cell Survival Activity in Intestinal Epithelial and Colon Cacinoma Cells. 283(21):14335-44.

151. Panjarian S, Kozhaya L, Arayssi S, Yehia M, Bielawski J, Bielawska A, Usta J, Hannun YA, **Obeid LM**, and Dbaibo GS. (2008) De novo N-palmitoylsphingosine synthesis is the major biochemical mechanism of ceramide accumulation following p53 up-regulation. *POLM*. 86(1-4):41-8.
152. Zeidan, Y.H., Jenkins, R.W., Korman, J.B, Liu, X., **Obeid, L.M.**, Norris, J.S., and Hannun (2008) Molecular Targeting of Acid Ceramidase: Implications to Cancer Therapy. *Current Drug Targets* 9, 000-000.
153. Jin, J., Hou, Q, Mullen T.D., Zeidan, Y.H., Bielawski, J., Kraveka, J.M., Bielawska, A., Obeid L.M., Hannun, Y.A., and Hsu, Y.T. (2008) Ceramide generated by sphingomyelin hydrolysis and the salvage pathway is involved in hypoxia/reoxygenation-induced Bax redistribution to mitochondria in NT-2 cells. *J Biol Chem*. 283(39):26509-26517.
154. Mao, C., and **Obeid, L.M.**, (2008) Ceramidases: regulators of cellular responses mediated by ceramide, sphingosine, and sphingosine-1-phosphate. Review *BBA - Molecular and Cell Biology of Lipids*. Tigyi, G. (Guest Editor) ISSN 7388-1981. 1781:424-434.
155. Novgorodov, S.A., Gudz, T.I., **Obeid, L.M.** (2008). Long-Chain Ceramide Is A Potent Inhibitor of the Mitochondrial Permeability Transition Pore. *JBC*, 283(36):24707-17.
156. Snider, A.J., Kawamori, T., Bradshaw, S.G., Orr, K.A., Gilkeson, G., Hannun, Y.A., and **Obeid, L.M.** (2008) A Role For Sphingosine Kinase 1 in Dextran Sulfate Sodium-Induced Colitis. *FASEB* in press.
157. Kawamori, T., Kaneshiro, T., Okumura, M., Maalouf, S., Uflacker, A., Bielawski, J., Hannun Y.A., **Obeid L.M.** (2008) Role for sphingosine kinase 1 in colon carcinogenesis. *FASEB* in press.
158. Sun, W., Hu, W., Xu, R., Jin, J., Galadari S.H., **Obeid, L.M.**, and Mao, C. (2008) Alkaline ceramidase 2 regulates b1 integrin maturation and cell adhesion. *FASEB* in press.
159. White, S., Ogretmen, B., Mullen, T.D., Senkal, C.E., **Obeid, L.M.**, and Voelkel-Johnson C. (2008) Ceramide synthase 6 modulates TRAIL sensitivity and nuclear translocation of active caspase 3 in colon cancer cells. *Oncogene* in press.