

## **Dawn L. Brasaemle**

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### **Education**

**Ph.D.**, University of Wisconsin-Madison, 1989, Biochemistry.

**B.S.**, University of Maine, 1982, Biology with a minor concentration in Chemistry, with highest honors.

### **Postgraduate Training**

**1989-1992 Postdoctoral Research Fellow**, Division of Nutritional Sciences and Division of Biological Sciences, Cornell University, Ithaca, NY.

### **Employment and Appointments**

**2012-present Professor**, Department of Nutritional Sciences, Rutgers, The State University of New Jersey.

**2007-present Member**, Rutgers Center for Lipid Research

**2006-present Member**, Graduate Program in Biochemistry, Graduate Programs in Molecular Biosciences, Rutgers, The State University of New Jersey.

**2005-2014 Director**, Graduate Program in Nutritional Sciences, Rutgers, The State University of New Jersey.

**2005-2012 Associate Professor**, Department of Nutritional Sciences, Rutgers, The State University of New Jersey.

**1999-present Member**, Graduate Program in Nutritional Sciences, Rutgers, The State University of New Jersey.

**1999-2005 Assistant Professor**, Department of Nutritional Sciences, Rutgers, The State University of New Jersey, New Brunswick, NJ.

**1997-1999 Assistant Professor**, Department of Biochemistry, MCP Hahnemann University, Philadelphia, PA.

**1992-1997 Senior Staff Fellow**, National Institute of Diabetes, Digestive and Kidney Diseases, National Institutes of Health, Bethesda, MD.

### **Non-academic Professional Activities**

**2008 Consultant**, Tibotec Pharmaceuticals, Ltd.

**2013-2016 Consultant**, Merck & Co., Inc.

### **Honors and Awards**

**2013** Co-organizer of the Kern Lipid Conference with Russell DeBose-Boyd, Vail, CO

**2011-2017** Member, Scientific Advisory Board, International PhD program “Metabolic and Cardiovascular Disease”, The Medical University of Graz, the University of Graz, and the Graz University of Technology, Graz, Austria

**2011-2012** Theme Co-organizer Lipids and Lipid Signaling sessions with Timothy Osborne, American Society of Biochemistry and Molecular Biology (ASBMB) 2012 Annual Meeting, San Diego, CA

- 2011-2012** Co-organizer, Keystone Symposium on the “Genetic and Molecular Basis of Obesity and Body Weight Regulation”, January 2012, with Evan Rosen and Bart Staels, Santa Fe, NM
- 2010-2016** Member, Board of Directors, The Kern Lipid Conference
- 2010** Visiting Scholar, Gladstone Institute for Cardiovascular Research, University of California, San Francisco
- 2009-2013** Member, Scientific Advisory Committee, European Union Lipidomic-Net, EUFP7 Large Scale Project (of 31 research groups at 26 institutions)
- 2007** Co-Founder and Co-organizer, FASEB Summer Conference, “Lipid Droplets: Metabolic Consequences of Stored Neutral Lipids”, with Rosalind A. Coleman, July 28 – August 2, 2007. Vermont Academy, Saxtons River, VT (This was the first conference dedicated to the study of lipid droplets)
- 2006** Award for Research Excellence, Cook College and the New Jersey Agricultural Experiment Station, Rutgers, The State University of New Jersey.
- 2005** Lecturer in the Institute of Human Nutrition’s Distinguished Lecture Series, Columbia University, New York, NY
- 2004-2008** Established Investigator of the American Heart Association
- 2003** Visiting Scholar, Department of Biochemistry and Molecular Biophysics, Columbia University, New York, NY.
- 2003** Everson Lecturer in Biochemistry, Department of Biochemistry, University of Wisconsin-Madison, Madison, WI
- 1997** Fellows Award for Research Excellence, National Institutes of Health

## **Grant Funding**

### ***Current Research Support***

- 2017-2018** “Functions of DDHD2, a novel lipase”, One Nutrition Pilot Project Grant, Institute of Food, Nutrition & Health, Rutgers University

### ***Completed Research Support***

- 1999-2016** “Structure/Function Studies of Perilipin A”, Federal Hatch Project #14171. Principal Investigator.
- 2014-2015** Research Supplement to NIH R01 DK054797 to Recover Losses Due to Hurricane Sandy Under the Disaster Relief Appropriations Act, Non-Construction. Principal Investigator.
- 2010-2015** “Perilipins and Cellular Triacylglycerol Metabolism” RO1 Public Health Service Research Grant, NIDDK, National Institutes of Health (NIH R01 DK054797). Principal Investigator. (Years 11-15)
- 2011-2012** Research Supplement to NIH R01 DK054797 to Promote Diversity in Health-Related Research Program
- 2010-2011** Research Resources grant “A Confocal Microscope”, National Institutes of Health, 1S1ORR025424. Co-investigator (1 of 9).
- 2010** ARRA supplement to NIH RO1 DK054797 to replace aging microscope equipment, Principal Investigator
- 2009** ARRA supplement to NIH RO1 DK054797 to support summer workers, Principal Investigator
- 2009** “Determinants of the metabolic syndrome: Transgenic and knockout mouse phenotyping,” Academic Excellence Fund, Rutgers University, funds to purchase an Oxymax Calorimeter/CLAMS system to measure energy expenditure and food intake in mice, Co-Investigator (1 of 16).
- 2008-2009** “Adipocyte Lipidomics: Contributions of phospholipid metabolism to adipocyte lipolysis”, Federal Hatch Project, administered by the New Jersey Agricultural Experiment Station and Rutgers University. Principal Investigator.

- 2007** “Acquisition of quantitative reverse transcriptase Real-Time PCR instrumentation for life sciences researchers,” Research Infrastructure Award, Rutgers School of Environmental and Biological Sciences, Co-Investigator (1 of 9).
- 2004-2008** “The Role of CGI-58 in Triacylglycerol Metabolism”, Established Investigator Award, American Heart Association. Principal Investigator.
- 2006-2008** “Lipoprotein Metabolism in Mice with Altered CGI-58 Levels in Liver”, Postdoctoral Fellowship awarded to Dr. Jorge Matias Caviglia (Principal Investigator), American Heart Association-Heritage Affiliate. Sponsor.
- 2007** “Lipid Droplets: Metabolic Consequences of the Storage of Neutral Lipids”, R13 Conference Grant, National Institutes of Health. Principal Investigator.
- 2006/2007** “Liquid Chromatography Mass Spectrometry System”, Research Resources Grant, National Institutes of Health. Co-Investigator.
- 2005-2007** “Study of triglyceride metabolism in transgenic mice over-expressing CGI-58 in adipose tissue”, Busch Biomedical Research Grant, Rutgers, The State University of New Jersey. Principal Investigator.
- 2005-2010** “Perilipins and Cellular Triacylglycerol Metabolism” RO1 Public Health Service Research Grant, NIDDK, National Institutes of Health. Principal Investigator.
- 2004-2007** “The impact of growth hormone on adipose tissue”, NIDDK Mentored Scientist Development Award, NIH, Co-Sponsor. (Darlene E. Berryman, Ph.D., Ohio University, Principal Investigator).
- 2004-2005** “Use of transgenic mice overexpressing CGI-58 to study CGI-58 function in adipose triacylglycerol metabolism”, Feasibility Study Seed Money, New Jersey Obesity Group. Principal Investigator.
- 2003-2005** “Development of Methodology to Study Uncharacterized Lipid Droplet-Associated Proteins”, Johnson & Johnson Discovery Award, Rutgers, The State University of New Jersey. Principal Investigator.
- 2001-2003** “Characterization of the adipocyte lipid droplet proteome”, Johnson & Johnson Discovery Award, Rutgers, The State University of New Jersey. Principal Investigator.
- 2000-2005** “Perilipin and Cellular Triacylglycerol Metabolism” RO1 Public Health Service Research Grant, NIDDK, National Institutes of Health. Principal Investigator.
- 1999-2000** “Functions of lipid droplet-associated proteins in the metabolism of neutral lipids”, Grant-in-Aid, American Heart Association-Pennsylvania/Delaware Affiliate. Principal Investigator.
- 1999-2001** “Perilipin and Cellular Triacylglycerol Metabolism”, Research Award, American Diabetes Association. Principal Investigator.
- 1998-1999** “Functions of lipid droplet-associated proteins in lipid droplet formation during adipocyte differentiation”, Beginning Grant-in-Aid, American Heart Association-Southeastern Pennsylvania Affiliate. Principal Investigator.
- 1991-1992** National Institutes of Health, National Research Service Award, Postdoctoral Fellowship. Cornell University.
- 1989-1991** American Heart Association-New York Affiliate, Postdoctoral Fellowship. Cornell University.
- 1986-1988** American Heart Association-Wisconsin Affiliate, Predoctoral Fellowship. University of Wisconsin-Madison.
- 1982-1985** National Institutes of Health, National Research Services Award, Predoctoral Fellowship. University of Wisconsin-Madison.

## **Invited Presentations**

### **2017**

Gordon Research Conference on Molecular and Cellular Biology of Lipids, Waterville Valley, NH, July

### **2016**

The Diabetes Institute at Ohio University, Athens, OH, December

Keynote Lecture for the Annual Retreat of the International PhD Program on Cardiovascular and Metabolic Disease, Graz, Austria, October

### **2015**

American Gastroenterological Association Symposium at Digestive Disease Week, Washington, D.C., May

### **2014**

Department of Biochemistry, West Virginia University, Morgantown, WV, September

Lipid Droplets: Metabolic Consequences of the Storage of Neutral Lipids, FASEB Summer Research Conference, Saxton's River, VT, July

Lipid MAPS consortium Annual Meeting, San Diego, CA, May

### **2013**

Department of Biology, University of Rochester, Rochester, NY, December

Department of Chemistry and Cell Biology, University of Utrecht, Netherlands, October

Southeast Regional Lipid Conference, Callaway Gardens, GA, September

### **2012**

Department of Biochemistry & Molecular Biology, Mayo Clinic College of Medicine, Scottsdale, AZ, December

Department of Biomedical Engineering, Rutgers University, New Brunswick, NJ, December

4<sup>th</sup> LipidomicNet Annual Steering Committee Meeting, Regensburg, Germany, October

American Society of Biochemistry and Molecular Biology session on "Lipid Droplets: A Dynamic Subcellular Compartment" at Experimental Biology 2012, San Diego, CA, April

Diabetes Research Center, University of Pennsylvania, Philadelphia, PA, April

Keystone Symposium on "Genetic and Molecular Basis of Obesity and Body Weight Regulation", Santa Fe, NM, January

### **2011**

Diabetes Research Center, Albert Einstein College of Medicine, Bronx, NY, December

Department of Nutritional Sciences, Rutgers, The State University of New Jersey, New Brunswick, NJ, November

Keynote lecture, 1<sup>st</sup> Annual Review of the International PhD Program Metabolic and Cardiovascular Disease, Graz, Austria, October

71<sup>st</sup> Scientific Sessions of the American Diabetes Association, San Diego, CA, June

Steenbock Symposium on Lipid Metabolism: Implications in Human Disease, University of Wisconsin-Madison, Madison, WI, May

Keystone Symposium on Lipid Biology and Lipotoxicity, Killarney, County Kerry, Ireland, May

New York Lipid and Vascular Biology Club, Rockefeller University, New York, NY, April

### **2010**

Molecular Pathology Graduate Program Seminar Series, Wake Forest University, Winston-Salem, NC, December.

American Heart Association Scientific Session 2010, Chicago, IL November  
Lipid Droplets: Metabolic Consequences of the Storage of Neutral Lipids, FASEB Summer Research Conference, Steamboat Springs, CO, July  
“Lipid Droplet Proteins”, 11<sup>th</sup> International Congress on Obesity, International Association for the Study of Obesity, Stockholm, Sweden, July  
Lipoprotein Metabolism Gordon Research Conference, Waterville Valley, NH, June

### **2009**

Department of Medical Sciences, University of Alberta, Edmonton, Alberta, September.  
1<sup>st</sup> LipidomicNet Annual Steering Committee Meeting, Regensburg, Germany, July.  
Conference on “Frontier Lipidology: Lipidomics in Health and Disease”, Gothenburg, Sweden, May.  
Plenary lecture in session on “Metabolism and Inflammation”, 10<sup>th</sup> Annual Conference of Arteriosclerosis, Thrombosis and Vascular Biology Council of the American Heart Association, Washington, D.C., April.  
American Society of Biochemistry and Molecular Biology session on “Mechanisms for Lipid Storage and Transport” at Experimental Biology 2009, New Orleans, LA, April.  
Department of Pharmacology, University of Texas Southwestern Medical Center, Dallas, TX, February.  
Department of Physiology and Biophysics, Boston University School of Medicine. Boston, MA, January.

### **2008**

Gladstone Institute for Cardiovascular Disease, University of California, San Francisco, CA, December.  
10<sup>th</sup> Annual Frontiers in Diabetes Research: Adipocyte Biology in Obesity and Diabetes, Naomi Berrie Diabetes Center, Columbia University, November.  
Fall Research Symposium for recipients of Established Investigator Award, American Heart Association, New Orleans, LA, November.  
South East Lipid Research Conference, Pine Mountain, GA, October.  
Plenary Lecture and Session Chair, 49<sup>th</sup> International Conference on the Bioscience of Lipids, Maastricht, The Netherlands, August.  
2008 Kern Aspen Lipid Conference, Given Institute, Aspen CO, August.  
Lipoprotein Metabolism Gordon Research Conference, Waterville Valley NH, June.  
Medical Diagnostic Laboratories, Hamilton, NJ, April.  
2<sup>nd</sup> International Symposium on Lipid and Membrane Biology, Graz, Austria, March.  
“Molecular Aspects of Lipid Droplet Biology”, Keystone Symposium on Molecular Control of Adipogenesis and Obesity, Banff, Alberta, Canada, February.

### **2007**

New York Lipid and Vascular Biology Club, Rockefeller University, New York, NY December.  
The 2007 Annual Meeting of the Obesity Society (NAASO), New Orleans, LA, October.  
Children’s Hospital Oakland Research Institute, Oakland, CA October.  
Department of Biochemistry, University of Medicine and Dentistry of New Jersey, Piscataway, NJ, October.  
Johnson & Johnson Skin Research Center, Skillman, NJ, September.  
Molecular Membrane Biology Gordon Research Conference, Proctor Academy, Andover, NH, July.  
6<sup>th</sup> International Conference on Lipid Binding Proteins, Simon Fraser University, Burnaby, British Columbia, June.

### **2006**

Department of Molecular Biology and Genetics, Cornell University, Ithaca, NY, November.

Department of Physiology, University of Medicine and Dentistry of New Jersey, Piscataway, NJ, November.

Department of Chemical Biology, Center for Cancer Prevention Research, Ernest Mario School of Pharmacy, Rutgers University, Piscataway, NJ, October.

Research and Development Facility of Avon Cosmetics, Suffern, NY, June.

50<sup>th</sup> Deuel Conference, Monterey, CA, March.

Merck Research Laboratories, Merck & Co., Rahway, NJ, January.

### **2005**

Laboratory of Cellular and Developmental Biology, National Institute of Diabetes, Digestive and Kidney Diseases, National Institutes of Health, Bethesda, MD, December.

University of Maryland School of Medicine, Baltimore, MD, November.

Department of Anatomy and Cell Biology, SUNY Downstate Medical Center, Brooklyn, NY, October.

Molecular and Cellular Biology of Lipids Gordon Research Conference, Waterville Valley, NH, July.

The Institute of Human Nutrition's Distinguished Lectures in Nutritional Sciences, Columbia University, New York, NY, June.

### **2004**

Department of Cellular and Molecular Physiology, Tufts University School of Medicine, Boston, MA, October.

Obesity Research Center, Columbia University, New York, NY, October.

Lipoprotein Metabolism Gordon Research Conference, Meriden, NH, June.

Molecular Control of Adipogenesis and Obesity, Keystone Symposium, Banff, Alberta, Canada, March.

### **2003**

Metabolic Diseases, Hoffman-LaRoche Pharmaceutical Company, Nutley, NJ, December.

2003 North American Association for the Study of Obesity Annual Meeting, Fort Lauderdale, FL, October.

State of the Art Presentation, Annual Scientific Sessions of the American Diabetes Association, New Orleans, LA, June.

Department of Biochemistry and Cell Biology, SUNY Stony Brook, Stony Brook, NY, May.

2003 Everson Lecturer in Biochemistry, Department of Biochemistry, University of Wisconsin-Madison, Madison, WI, April.

### **2002**

New York Lipid and Vascular Biology Club, Rockefeller University, New York, NY, December,

Naomi Berrie Diabetes Center Conference, Columbia University, New York, NY, October.

Department of Cell Biology, The Cleveland Clinic Foundation, Cleveland, OH, March.

### **2001**

Biochemical Research Institute of La Plata, Universidad Nacional de La Plata, La Plata, Argentina, December.

Sociedad de Biología de Cuyo, Universidad Nacional de San Luis, San Luis, Argentina, December.

Universidad Nacional de San Luis, San Luis, Argentina, 2 week short course on adipose differentiation and methods to study gene expression, November.

Department of Molecular Genetics and Department of Pharmacology, University of Texas Southwestern Medical Center, Dallas, TX, November.

Department of Biochemistry, Virginia Polytechnic Institute and State University, Blacksburg, VA, October.

Rutgers, The State University of New Jersey and the University of Sao Paulo, Brazil, Joint Biotechnology Conference, New Brunswick, NJ, August.

### **2000**

Department of Nutrition, University of North Carolina, Chapel Hill, NC, November.

2000 North American Association for the Study of Obesity Annual Meeting, Long Beach, CA, October.

Intestinal Lipid Absorption, FASEB Summer Research Conference, Saxton's River Vermont, July.

DuPont Pharmaceutical Company, Wilmington, DE, March.

### **1999**

Beta Beta Beta National Biological Honor Society, Cabrini College, Radnor, PA, April.

Department of Biochemistry, Uniformed Services University of the Health Sciences, Bethesda, MD, April.

Department of Nutritional Sciences, Rutgers University, New Brunswick, NJ, March.

Mid-Atlantic Lipid Research Symposium, State of the Art Seminar, Atlantic City, NJ, March.

Department of Biochemistry, University of Texas at San Antonio Health Sciences Center, San Antonio, TX, February.

Department of Human Ecology, Nutritional Sciences Division, University of Texas, Austin, TX, February.

### **1997**

Department of Biochemistry, Allegheny University of the Health Sciences, Philadelphia, PA, March.

Department of Microbiology and Molecular Cell Sciences, The University of Memphis, Memphis, TN, March.

Protein Trafficking Interest Group, National Institutes of Health, Bethesda, MD, February.

Laboratory of Cellular and Developmental Biology, National Institute of Diabetes, Digestive, and Kidney Diseases, NIH, Bethesda, MD, January.

### **1996**

The Gladstone Institute for Cardiovascular Research, University of California-San Francisco, CA, October.

The Philadelphia Lipid Club, Dupont-Merck Pharmaceutical Co., Wilmington, DE, October.

Lipid Metabolism Gordon Research Conference, NH, June.

## **Teaching and Supervisory Experience**

### ***Postdoctoral Fellows:***

2006-2009 Gabriela Montero-Moran, Ph.D., at Rutgers University.

2004-2008 Jorge Matias Caviglia, M.D., Ph.D., at Rutgers University.

1998-2002 Anne Garcia, Ph.D., at MCP Hahnemann University and Rutgers University.

1998-1999 Martha W. Love, Ph.D., at MCP Hahnemann University.

### ***Doctoral Students; all at Rutgers, The State University of New Jersey:***

2010-2013 Dana Lee Daley, B.S., Nutritional Sciences

2007-2008 Devon Golem, B.S., R.D., Nutritional Sciences

2005-2012 Derek McMahan, B.S., Nutritional Sciences, Ph.D. Final Defense: September 19, 2012; "A Functional Characterization of CGI-58"

2001-2005 Vidya Subramanian, B.S., M.S., Nutritional Sciences, Ph.D. Final Defense: October 26, 2005; "Structure/Function Studies of Lipid Droplet Associated Proteins Perlipin A and CGI-58".

2000-2006 Amy Marcinkiewicz, B.A., Nutritional Sciences, Laboratory research completed 6/2006.

***Masters Students; all at Rutgers, The State University of New Jersey:***

- 2013-2014 Sarah Hassanien, B.S., Nutritional Sciences, M.S. Final Defense: September 23, 2014, “Characterization of the novel H82R mutation in CGI-58 that causes neutral lipid storage disorder in humans”.
- 2011-2013 Mayda Hernandez, B.S., Biochemistry, M.S. Final Defense: December 11, 2013, “The phosphorylation of serine 492 of perilipin A facilitates ATGL-mediated lipolysis by CGI-58 independent mechanisms”.
- 2006-2008 Xiaofang Liang, B.S., Nutritional Sciences, M.S. Final Defense: September 16, 2008, “The PKA-mediated phosphorylation of perilipin A promotes lipolysis by triggering lipid droplet dispersion”.
- 2003-2004 Alexis Rothenberg, B.S., Nutritional Sciences, M.S. Final Defense: November 1, 2004, “Expression of CGI-58 in Neutral Lipid Storage Disorder Fibroblasts Clears Excessive Triacylglycerol”
- 1999-2000 Mina Lebitz, B.S., co-advisor with Drs. Judith Storch and Susan Fried, Nutritional Sciences, M.S. Final Defense: December 1, 2000, “Localization of Adipocyte Fatty Acid Binding Proteins (AFABP) in 3T3-L1 and Isolated Rat Adipocytes”

***Baccalaureate Students; Research mentorship, all at Rutgers, The State University of New Jersey:***

- 2017 Adam Ahmad Chaustre, George H. Cook Senior Honors Thesis Research, Fall 2016, Spring 2017
- 2016-2018 Rahyan Mahmud, Research in Biology, Spring 2016, Senior Honors Thesis Research in Biology, Fall 2017, Spring 2018
- 2015 Abdul Balaparya, Research in Molecular Biology and Biochemistry, Fall 2015 and Spring 2016
- 2015/2016 Rachael Aubin, Aresty Scholar, Fall 2015, Spring 2016
- 2014 Lauren Simon, Research in Biochemistry, Spring 2014
- 2011-2013 Daniel Mascarenhas, Honors Tutorial, Spring 2011, Fall 2011, Spring 2012; George H. Cook Senior Honors Thesis, Fall 2012, Spring 2013
- 2009-2012 Daniel Kurz, Honors Tutorials, Fall 2009, Fall 2010, Spring 2011; George H. Cook Senior Honors Thesis, Fall 2011, Spring 2012
- 2009 Amy Ehrich, summer research project and independent research in Nutrition, Fall semester
- 2009 Rachel Rosenblum, student at McGill University, summer research project
- 2008 Anupamaa Srivastava, Independent research in Nutrition, Fall semester
- 2008 June 3-October 31, Antonin Muggeo, visiting student from ENSBANA, Dijon, France
- 2008 Summer, Serguei Krasnoiartsev, Independent Research Project in Nutrition.
- 2008 Summer, Laura Hsieh, NIH STEP-UP program, undergraduate student from University of California, Berkeley
- 2007/2008 Amanda Smith, Independent Research Project in Nutritional Sciences, Fall semester
- 2006-2009 Dharika Shah, Independent Research Project in Nutritional Sciences and George H. Cook Senior Honors Thesis research “Mutation Analysis of CGI-58 for Functional Characterization”; recipient of Charles Messer Endowed Memorial Scholarship
- 2005-2007 Dianne Dapito, Honors Tutorial and George H. Cook Senior Honors Thesis project, “Adipose-Selective Overexpression of CGI-58 Does Not Affect Triacylglycerol Turnover or Protect Against Diet-Induced Obesity”. This thesis was presented as a poster at Experimental Biology 2007, published in Abstract form, and contributed to a manuscript.
- 2004 Cisilya Kosnopo, Independent Research Project in Biochemistry, Fall semester
- 2004 Nikhil Torsaskor, Independent Research Project in Biotechnology, Fall semester
- 2004-2007 Terry Yin, Independent Research Project in Nutritional Sciences.
- 2002/2003 Denise Gauthier, Independent Research Project in Biotechnology.
- 2002 Kirill Gordeyev, Cooperative Learning Experience in Biotechnology, Summer session and Fall semester.



- 2001/2002 Deanna DiDonato, George H. Cook Honors Thesis Research, “Fixation methods for the visualization of lipid droplets by immunofluorescence microscopy” This thesis was published as a manuscript in *J. Histochem. Cytochem.*
- 2001 Maryellen Sepelya, Douglass College Project, Summer session.
- 2001 Richard Burke, Independent Research Project in Biotechnology, Summer session.
- 2000/2001 Ashleigh Naczkowski, George H. Cook Honors Thesis “The Effects of Mutating Hydrophobic Regions of Perilipin A on Anchoring to Lipid Droplets”.
- 2000 Laura Winters, Tutorial, Honors Research Program, Fall semester.
- 2000 Christina Lim, Independent Research Project in Nutritional Sciences, Fall semester.

### ***High School Students, Research Mentorship (at Rutgers)***

- 2007 Matthew R. Zubrow, Summer research project, student at The Pingry School
- 2007 Calvin Jones, Summer research project, student at The Pingry School

### ***Courses:***

- 2013 Guest Lecturer, 11:709:427, Obesity: Biology, Behavior, and Management, Rutgers University, Spring semester.
- 2008, 2009, and 2010 Guest Lecturer, 11:015:265, Nutrition for Today, Rutgers University, Fall semester.
- 2006 Guest Lecturer, 16:709:515, Principles of Nutrition Research, Rutgers University, Spring semester.
- 2005 and 2007 Guest Lecturer, Junior/Senior Colloquium, Obesity: Biology, Behavior, and Management, Rutgers University, Fall semester.
- 2003 “Perilipins, Protein Phosphorylation, and Lipolysis”, Guest Lecturer, Nutrient-Gene Interactions, Graduate level class for the Department of Nutritional Sciences, Columbia University, Spring semester.
- 2004-present and 2002 Coordinator and Lecturer, 11:126:110 Issues & Concepts in Biotechnology, Rutgers University, Spring semesters.
- 2000 and 2002 Coordinator, 11:126:401 Seminar in Biotechnology, Rutgers University, Fall semesters.
- 2000-present Lecturer and Coordinator, 11:709:401 Advanced Nutrition II: Energy and Micronutrient Metabolism, Rutgers University, Spring Semester.
- 2000-present Lecturer and Coordinator, 16:709:552 Nutrition: A Biochemical and Physiological Basis, Rutgers University, Spring Semester.
- 1999 Lecturer, Cell Biology, Biomedical Graduate Program, MCP Hahnemann University, Spring Semester.
- 1998 Lecturer, Molecular Biology and Genetics, Biomedical Graduate Program, MCP Hahnemann University, Fall Semester.

### **Teaching Enhancement and Training**

- 2002 Attended Teaching Workshop on “Teaching Survival Skills and Ethics” sponsored by the University of Pittsburgh, held at Snowmass, CO, June 3-8, 2002.

### **Service**

#### **International Service**

##### ***Scientific Advisory Boards***

- 2011-2017 Member, Scientific Advisory Board, International PhD program “Metabolic and Cardiovascular Disease”, The Medical University of Graz, the University of Graz, and the Graz University of Technology, Graz, Austria
- 2010-2016 Member, Board of Directors, The Kern Lipid Conference
- 2009-2013 Scientific Advisory Committee, European Union LipidomicNet, EUFP7 Large Scale Project

(of 31 research groups in 26 institutions)

### ***Review of grant proposals***

2014 Review of grant proposals for the Human Frontier Science Program, Strasbourg, France  
2013 Review of grant proposals for the Human Frontier Science Program, Strasbourg, France  
2012 Review of grant proposals for the Austrian Science Fund  
2009 Review of grant proposals for the Austrian Science Fund; review of final reports (2015)  
2008 Review of grant proposals for the Austrian Genome Research Programme  
2007 Review of grant proposals for the Technology Foundation STW, The Netherlands  
2007 Review of grant proposals for the Wellcome Trust, UK  
2006 Review of grant proposals for the Austrian Science Fund  
2006 Review of grant proposals for the Austrian Genome Research Programme  
2001 Review of grant proposals for the Austrian Science Fund; review of final reports (2006)

### ***Conference organization and planning***

2013 Co-organizer of the Kern Lipid Conference, with Russell DeBose-Boyd  
2012 Theme Co-organizer Lipids and Lipid Signaling, with Timothy Osborne, ASBMB 2012 Annual Meeting  
2012 Co-organizer, Keystone Symposium on the “Genetic and Molecular Basis of Obesity and Body Weight Regulation”, with Evan Rosen and Bart Staels  
2009-2010 Keystone Symposia Metabolic Diseases Study Group, planning committee for 2012 Keystone Symposia  
2009 Abstract Reviewer for 10<sup>th</sup> Annual Conference of Arteriosclerosis, Thrombosis and Vascular Biology Council of the American Heart Association.  
2008-2009 Keystone Symposia Metabolic Diseases Study Group, planning committee for 2011 Keystone Symposia  
2008 Co-organizer of session on lipid droplets for the 49<sup>th</sup> Annual International Conference on the Bioscience of Lipids, with Dick van der Horst, Maastricht, The Netherlands, August  
2005-2007 Co-Founder and Co-Organizer, FASEB Summer Conference, “Lipid Droplets: Metabolic Consequences of Stored Neutral Lipids”, Vermont Academy, Saxton’s River, VT, July, 2007. With Dr. Rosalind Coleman, University of North Carolina, Chapel Hill, Co-Organizer. This was the first meeting of this new conference series.  
2003 and 2004 Abstract Reviewer for the American Diabetes Association’s 63<sup>rd</sup> and 64<sup>th</sup> Scientific Sessions.  
2002-2003 *Ad hoc* service on the subcommittee on Adipocyte Biology to the Scientific Sessions Planning Committee for the American Diabetes Association 63<sup>rd</sup> Scientific Sessions, Chaired by Dr. Sheila Collins.

### ***Editorial Boards***

2008-2013 Member, Editorial Board, Journal of Biological Chemistry  
2005-present Member, Editorial Board, Journal of Lipid Research

### ***Ad hoc review of manuscripts***

1997-present: American Journal of Physiology; Analytical Biochemistry; Analytical Chemistry; Arteriosclerosis, Thrombosis, and Vascular Biology; Biochemical and Biophysical Research Communications; Biochimica et Biophysica Acta—Molecular and Cellular Biology of Lipids; Biochimica et Biophysica Acta—Biomembranes; BioMed Central Cell Biology; Cell Metabolism; Cell Reports; Current Biology; Diabetes; FASEB Journal; FEBS Letters; Histochemistry and Cell Biology; Journal of Biological Chemistry (*ad hoc* prior to 2008 and after 2013); Journal of Cellular Biochemistry; Journal of Cell Biology; Journal of Cell Science;

Journal of Clinical Investigation; Journal of Histochemistry and Cytochemistry; Journal of Lipid Research (*ad hoc* prior to 2005); Journal of Nutrition; Journal of Proteomics; Journal of Proteome Research; Metabolism; Methods in Cell Biology; Molecular and Cellular Proteomics; Molecular Biology of the Cell; Molecular Endocrinology; Nature Communications; Obesity; Obesity Research; Proceedings of the National Academy of Science-USA; Public Library of Science One (PLoS One); PLoS Genetics; Traffic; Trends in Endocrinology and Metabolism

## **National Service**

### ***Review of grant proposals***

- 2014 Write-in reviewer, NIH Special Emphasis Panel 2015/01 ZRG1 F05-R (20), Fellowships: Cell Biology, Developmental Biology and Bioengineering, October 2014
- 2014 Member, NIH Special Emphasis Panel ZRG1 EMNR-R(56) of NIDDK for review of R01 proposals, June 2014
- 2012 Member, American Heart Association's Established Investigator Award Peer Review Study Group, Basic Science I
- 2011 Review of grant proposals for the Albert Einstein College of Medicine Diabetes Research Center
- 2011 Member, Special Emphasis Panel ZDK1-GRB-J M1 of NIDDK for review of R24 proposals for the Collaborative Interdisciplinary Team Science Program
- 2011 Review of proposals for the Cottrell College Science Award for the Research Corporation for Scientific Advancement
- 2009 Member, Special Emphasis Panel ZRG1-CB-N (58) R, for review of Challenge Grant proposals for Center for Scientific Review, National Institutes of Health, June 2009
- 2007 Review of grant proposals for the Michigan Diabetes Research and Training Center, University of Michigan School of Medicine, Ann Arbor, MI
- 2005-2011 *Ad hoc* service, NIH Study Section, Cellular Aspects of Diabetes and Obesity (October 2005, June 2006, October 2006, February 2007, February 2008, June 2008, October 2011).
- 2005 Member, NIH Special Emphasis Panel of ZRG1 EMNR B 90, Molecular Aspects of Diabetes and Obesity Study Section (July 2005).
- 2005 Review of grant proposals for the Boston Area Diabetes Endocrinology Research Center.
- 2003 *Ad hoc* service, ZRG1 REB 02 Reproductive Biology Study Section, NHLBI, NIH.
- 2000-2004 Member, American Heart Association Northeast Peer Review Committee; Lipid Metabolism, Thrombosis, Vascular Wall Biology.

### ***Other***

- 2002 Service on the American Society of Nutritional Sciences Task Force on Basic Science and Nutrition Issues, Chairman, Dr. James Fleet

## **Regional Service**

- 2016 Member, Program Committee for the first annual meeting of the New York City Regional Obesity Forum held 9/19/2016 at Icahn School of Medicine at Mt. Sinai, NY, NY
- 2001 Organizer, New Jersey Obesity Group Symposia: January 29, 2001, and May 31, 2001.

## **University Service**

### ***Graduate School New Brunswick and Nutritional Sciences Graduate Program, Rutgers University***

- 2007-2010 Member, Executive Council of the Graduate School-New Brunswick, Rutgers
- 2007, 2008, and 2009 Graduate School New Brunswick Dissertation Teaching Award Committee, H. Waterman, Chair.

2005-2014 Director, Graduate Program in Nutritional Sciences, Graduate School New Brunswick, Rutgers  
2004/2005 Graduate Program in Nutritional Sciences Curriculum Committee, Rutgers  
2000-2002 Graduate Program in Nutritional Sciences Admissions Committee, Rutgers

***School of Environmental and Biological Sciences (Formerly Cook College), Rutgers University***

2017-2020 Member, SEBS/NJAES Research Advisory Council, Bradley Hillman, Chair.  
2015-2016 Member, Search Committee for Assistant Professor in Digestive Health for the New Jersey Institute of Food, Nutrition and Health, George M. Carman, Chair.  
2012-2015 Member (2012-2015); Chair (2014/2015), Appointments and Promotions Committee, School of Environmental and Biological Sciences and the New Jersey Agricultural Experiment Station  
2011/2012 Member, School of Environmental and Biological Sciences Graduate Programs Excellence Fellowship Committee, Mark Miller, Chair.  
2012-present Member, Mentoring Committee for Dr. Troy Roepke, Department of Animal Sciences  
2011/2012 Chair, Search Committee for Professor and Chair of Nutritional Sciences  
2010/2011 Member, Institute of Food, Nutrition, and Health Building planning committee, Peter Gillies, Chair.  
2008/2009 Chair, School of Environmental and Biological Sciences Graduate Programs Excellence Fellowship Committee.  
2008-2011 Member, School of Environmental and Biological Sciences Planning Committee, H. Janes, Chair.  
2007/2008 Member, School of Environmental and Biological Sciences Graduate Programs Excellence Fellowship Committee, B. Huang, Chair.  
2007 Member, Biochemistry task force, School of Environmental and Biological Sciences, Rutgers, The State University of New Jersey  
2007/2008 Member, Search Committee for Founding Director of the Institute of Food, Nutrition, and Health, M. Gallo, Chair.  
2007 Member, School of Environmental and Biological Sciences Faculty Research Awards Committee, D. Maina, Chair.  
2007-present, Undergraduate Advisor, Biotechnology Majors including Sophomores, Juniors, and Seniors  
2006/2007 Member, School of Environmental and Biological Sciences Graduate Programs Excellence Fellowship Committee, T. Broccoli, Chair.  
2006 Member, Cook College/School of Environmental and Biological Sciences Committee to reformulate the Freshman Seminar Experience, L. Kerkhof, Chair  
2006 Member, Cook College *Ad hoc* Advisory Committee on Instructional Computing, M. Karwe, Chair.  
2005/2006 Member, Cook College Graduate Programs Excellence Fellowship Committee, T. Broccoli, Chair.  
2004/2005 Freshman Advisor, Cook College, Rutgers University.

***Department of Nutritional Sciences, Rutgers University***

2016-present Mentoring Committee for Dr. Harini Sampath, Assistant Professor, Department of Nutritional Sciences  
2016 Member, Search committee to hire a Research Associate  
2013 Member, Back-up power committee  
2013 Member, Interview committee for departmental administrative assistant  
2011-2012 Member, Strategic Planning Committee: Strategies to Increase Departmental Funding  
2008-2009 Member, Nutritional Sciences Strategic Planning Committee, John Worobey, Chair.

2007 Representative of Department of Nutritional Sciences to annual meeting of Nutrition and Food Science Department Chairs at Purdue University, November 11-14, 2007  
2006 Member, Faculty Academic Service Increment Program Award Committee, Department of Nutritional Sciences  
2005-2008 Member, Department of Nutritional Sciences Undergraduate Curriculum Committee, Adria Sherman, Chair  
2005-2011 Mentoring Committee for Dr. R. Ariel Igal, Assistant Professor, Department of Nutritional Sciences.  
2000-present Undergraduate Advisor, Nutritional Science Majors including Sophomores, Juniors, and Seniors, Rutgers University.  
2000/2001 Organizer, Department of Nutritional Sciences Seminar Series, Rutgers University.

***Prior Service at MCP Hahnemann University (now Medical School of Drexel University)***

1999 University Biosafety Committee

***Doctoral Dissertation Committees at Rutgers, The State University of New Jersey:***

2014-2015 Marc Tuazon, Chair: Sara Campbell, Final defense: April 2015  
2012- 2013 John Douglass, Chair: Dr. Judith Storch, Final defense: December 2013  
2012- 2014 Angela Gajda, Chair: Dr. Judith Storch, Final defense: April 2014  
2011- 2013 Leslie McCauliff, Chair: Dr. Judith Storch, Final defense: December 2013  
2011- 2014 Elizabeth Kuhn Spiegler, Chair: Loredana Quadro, Final defense: March, 2014  
2011- 2014 Allyson Agostini-Dreyer, Chair: Wendie Cohick, Final defense: March, 2014  
2011- 2014 Nir Nativ (Biomedical Engineering Graduate Program), Co-Chairs: Dr. Martin Yarmush and Dr. Francois Berthiaume, Final defense: March, 2014  
2009 Yasmine Shafaie, (Food Science Graduate Program), Chair: Dr. Beverly Tepper  
2008 Georgie Fear, Chair: Dr. Ilya Raskin  
2007-2010 Diana Johnson, Chair: Dr. Joseph Dixon, Final Defense: September, 2010  
2006-2007 Yu-Fang Chang, (Food Science Graduate Program), Chair: Dr. George Carman, Final Defense: April 10, 2007  
2005-2008 Su-Hyoun Chon, Chair: Dr. Judith Storch, Final Defense: May, 2008  
2003-2005 Mi-Jeong Lee, Chair: Dr. Susan K. Fried, Final Defense: April, 2005  
2000-2003 Usha Sivaprasad, Chair: Dr. Wendie Cohick, Final Defense: November, 2003  
1999-2000 Heng-Ling Liou, Chair: Dr. Judith Storch, Final Defense: September, 2000

***Doctoral Dissertation Committees at Robert Wood Johnson Medical School, UMDNJ:***

2008-2010 Andrea Rozo, Chair: Dr. Hong Ruan, Final Defense: August, 2010

***Masters Degree Thesis Committees, all at Rutgers, The State University of New Jersey:***

2017 Meagan Hennessy, Chair: Dr. George M. Carman  
2017 Dushyant Kshatriya, Chair: Dr. Nicholas Bello  
2017 Kristin Moskal, Chair: Dr. Ilya Raskin  
2016 Annette Jochum, Chair: Dr. Judith Storch, Final Defense, May, 2016  
2010 Kyung Jin Ahn, Chair: Dr. Judith Storch, Final Defense: August, 2010  
2006 Arti Verma, Chair: Dr. T. J. Thomas, Final Defense: June, 2006  
2000 Ingrid A. Harten, Advisor: Dr. Susan Fried, Final Defense: April, 2000

***Faculty Sponsor for Cooperative Education Experiences***

2016 Thi Ba, Spring semester  
2014 Sarah Fine, Summer session  
2011 Alexandra Friedman, Fall semester

2011 Emily Trinh, Summer Session and Fall semester  
2008 Maria Montano, Summer Session and Fall semester  
2002 Kirill Gordeyev, Fall semester  
2002 Taylor L. Graham, Summer session and Fall semester  
2001 Deanna DiDonato, Summer session

#### ***George H. Cook Senior Honors Thesis Committees***

2017/2018 Christina Panetta, Reader  
2016/2017 Adam Ahmad Chaustre, Primary Advisor  
2016/2017 Michael Ferrante, Reader  
2012/2013 Daniel Mascarenhas, Primary Advisor  
2011/2012 Daniel Kurz, Primary Advisor  
2008/2009 Dharika Shah, Primary Advisor  
2006/2007 Dianne Dapito, Primary Advisor  
2005/2006 Luba Raklin, Reader  
2003/2004 Laura Winters, Reader  
2001/2002 Deanna DiDonato, Primary Advisor  
2000/2001 Ashleigh Naczkowski, Primary Advisor

#### ***Molecular Biology and Biochemistry Senior Honors Thesis Program***

2006/2007 Meghan Malka, Reader

#### **Other Service to the Science Community**

2009 External examiner of doctoral dissertation committee for Ms. Eliza Wiech, The Graduate Center of The City University of New York, Chair: Dr. Juergen Polle (Brooklyn College)  
2009 External examiner of doctoral dissertation committee for Ms. Huajin Wang, Department of Medical Sciences-Cell Biology, University of Alberta, Edmonton, Canada, Chair: Dr. Richard Lehner, Final defense September 2009

#### **Memberships**

American Diabetes Association, American Heart Association, American Society for Biochemistry and Molecular Biology, American Society for Nutritional Sciences

### **Bibliography (personal h-index=34 *Web of Science*; 35 *Google Scholar*)**

#### **Manuscripts in Peer-Reviewed Journals:**

1. Boucias, D. G., **Brasaemle, D. L.**, and Nation, J. L. 1984. Lipid composition of the entomopathogenic fungus *Nomuraea rileyi*. *J. Invertebr. Path.* 43, 254-258.
2. **Brasaemle, D. L.**, and Attie, A. D. 1988. Microelisa reader quantitation of fixed, stained, solubilized cells in microtitre dishes. *BioTechniques.* 6, 418-419.
3. **Brasaemle, D. L.**, Robertson, A. D., and Attie, A. D. 1988. Transbilayer movement of cholesterol in the human erythrocyte membrane. *J. Lipid Res.* 29, 481-489.

4. **Brasaemle, D. L.**, and Attie, A. D. 1990. Rapid intracellular transport of LDL-derived cholesterol to the plasma membrane in cultured fibroblasts. *J. Lipid Res.* 31, 103-112.
5. **Brasaemle, D. L.**, Cornely-Moss, K. A., and Bensadoun, A. 1993. Hepatic lipase treatment of chylomicron remnants increases exposure of apolipoprotein E. *J. Lipid Res.* 34, 455-465.
6. Servetnick, D. A., **Brasaemle, D. L.**, Gruia-Gray, J., Kimmel, A. R., Wolff, J., and Londos, C. 1995. Perilipins are associated with cholesteryl ester droplets in steroidogenic adrenal cortical cells and Leydig cells. *J. Biol. Chem.* 270, 16970-16973.
7. Londos, C., **Brasaemle, D. L.**, Gruia-Gray, J., Servetnick, D. A., Schultz, C. J., Levin, D. M., and Kimmel, A. R. 1995. Perilipin: unique proteins associated with intracellular neutral lipid droplets in adipocytes and steroidogenic cells. *Biochem. Soc. Transactions* 23, 611-615.
8. Londos, C., Gruia-Gray, J., **Brasaemle, D. L.**, Rondinone, C. M., Takeda, T., Dwyer, N. K., Barber, T., Kimmel, A. R., and Blanchette-Mackie, E. J. 1996. Perilipin: possible roles in structure and metabolism of intracellular neutral lipids in adipocytes and steroidogenic cells. *Int. J. Obesity* 20, Suppl. 3, S97-S101.
9. **Brasaemle, D. L.**, Barber, T., Kimmel, A. R., and Londos, C. 1997. Post-translational regulation of perilipin expression: Stabilization by stored intracellular neutral lipids. *J. Biol. Chem.* 272, 9378-9387.
10. **Brasaemle, D. L.**, Barber, T., Wolins, N. E., Serrero, G., Blanchette-Mackie, E. J., and Londos, C. 1997. Adipose differentiation-related protein is an ubiquitously expressed lipid storage droplet-associated protein. *J. Lipid Res.* 38, 2249-2263. (#16 in *J. Lipid Res.* most highly cited papers)
11. Berryman, D. E., Mulero, J. J., Hughes, L. B., **Brasaemle, D. L.**, and Bensadoun, A. 1998. Oligomeric structure of hepatic lipase: Evidence from a novel epitope tag technique. *Biochim. Biophys. Acta* 1382, 217-229.
12. Londos, C., **Brasaemle, D. L.**, Schultz, C. J., Segrest, J. P., and Kimmel, A. R. 1999. Perilipins, ADRP, and other proteins that associate with intracellular neutral lipid droplets in animal cells. *Semin. Cell Dev. Biol.* 10, 51-58.
13. Londos, C., **Brasaemle, D. L.**, Schultz, C. J., Adler-Wailes, D. C., Levin, D. M., Kimmel, A. R., and Rondinone, C. M. 1999. On the Control of Lipolysis in Adipocytes. *Ann. NY Acad. Sci.* 892, 155-168.
14. **Brasaemle, D. L.**, Levin, D. M., Adler-Wailes, D. C., and Londos, C. 2000. The lipolytic stimulation of 3T3-L1 adipocytes promotes the translocation of cytosolic hormone-sensitive lipase to the surfaces of lipid storage droplets. *Biochim. Biophys. Acta*, 1483, 251-262.
15. **Brasaemle, D. L.**, Rubin, B., Harten, I. A., Gruia-Gray, J., Kimmel, A. R., and Londos, C. 2000. Perilipin A increases triacylglycerol storage by decreasing the rate of triacylglycerol hydrolysis. *J. Biol. Chem.*, 275, 38486-38493.
16. Wolins, N. E., Rubin, B., and **Brasaemle, D. L.** 2001. TIP47 associates with lipid droplets. *J. Biol. Chem.*, 276, 5101-5108.

17. Cole, N. B., Murphy, D. D., Grider, T., Reuter, S., **Brasaemle, D. L.**, and Nussbaum, R. L. 2002. Lipid droplet binding and oligomerization properties of the Parkinson's disease protein  $\alpha$ -synuclein. *J. Biol. Chem.*, 277, 6344-6352.
18. Garcia, A., Sekowski, A., Subramanian, V., and **Brasaemle, D. L.** 2003. The central domain is required to target and anchor perilipin A to lipid droplets. *J. Biol. Chem.*, 278, 625-635.
19. Tansey, J. T., Huml, A. M., Vogt, R., Davis, K. E., Jones, J. M., Fraser, K. A., **Brasaemle, D. L.**, Kimmel, A. R., and Londos, C. 2003. Functional studies on native and mutated forms of perilipins: A role in protein kinase A-activated lipolysis of triacylglycerols in CHO cells. *J. Biol. Chem.*, 278, 8401-8406.
20. DiDonato, D., and **Brasaemle, D. L.** 2003. Fixation methods for the visualization of lipid droplets by immunofluorescence microscopy. *J. Histochem. Cytochem.*, 51, 773-780.
21. Moreno, D. A., Ilic, N., Poulev, A. **Brasaemle, D. L.**, Fried, S. K., and Raskin, I. 2003. Inhibitory effects of grape seed extract on lipases. *Nutrition, The International Journal of Applied and Basic Nutritional Sciences* 19, 876-879.
22. Garcia, A., Subramanian, V., Sekowski, A., Love, M., and **Brasaemle, D. L.** 2004. The amino and carboxyl termini of perilipin A facilitate the storage of triacylglycerol. *J. Biol. Chem.* 279, 8409-8416.
23. Cohen, A. W., Razani, B., Schubert, W., Williams, T. M., Wang, X. B., Iyengar, P., **Brasaemle, D. L.**, Scherer, P. E., and Lisanti, M. P. 2004. Role of Caveolin-1 in the Regulation of Lipolysis and Lipid Droplet Formation. *Diabetes* 53, 1261-1270.
24. Subramanian, V., Rothenberg, A., Gomez, C., Cohen, A. W., Garcia, A., Bhattacharyya, S., Shapiro, L., Dolios, G., Wang, R., Lisanti, M. P., and **Brasaemle, D. L.** 2004. Perilipin A mediates the reversible binding of CGI-58 to lipid droplets in 3T3-L1 adipocytes. *J. Biol. Chem.* 279, 42062-42071.
25. Subramanian, V., Garcia, A., Sekowski, A., and **Brasaemle, D. L.** 2004. Hydrophobic sequences target and anchor perilipin A to lipid droplets. *J. Lipid Res.* 45, 1983-1991.
26. **Brasaemle, D. L.**, Dolios, G., Shapiro, L., and Wang, R. 2004. Proteomic analysis of proteins associated with lipid droplets in basal and lipolytically-stimulated 3T3-L1 adipocytes. *J. Biol. Chem.*, 279, 46835-46842. (more than 600 citations)
27. Cohen, A. W., Schubert, W., **Brasaemle, D. L.**, Scherer, P. E., and Lisanti, M. P. 2005. Caveolin-1 expression is essential for proper non-shivering thermogenesis in brown adipose tissue. *Diabetes*, 54, 679-686.
28. Capozza, F., Combs, T., Cohen, A., Cho, Y. R., Park, S. Y., Schubert, W., Williams, T., **Brasaemle, D. L.**, Jelicks, L., Scherer, P., Kim, J., and Lisanti, M. 2005. Caveolin-3 knockout mice show increased adiposity and whole-body insulin resistance, with ligand-induced insulin receptor instability in skeletal muscle. *Am. J. Physiol. Cell Physiol.* 288, C1317-1331.
29. Marcinkiewicz, A., Gauthier, D., Garcia, A., and **Brasaemle, D. L.** 2006. Phosphorylation of serine 492 of perilipin A directs lipid droplet fragmentation and dispersion. *J. Biol. Chem.*, 281, 11901-11909.



30. Wolins, N. E., **Brasaemle, D. L.**, Bickel, P. E. 2006. A proposed model of fat packaging by exchangeable lipid droplet proteins. *FEBS Lett.* 580, 5484-5491.
31. **Brasaemle, D. L.** 2006. A Metabolic Push to Proliferate. *Science*, 313, 1581-1582.
32. **Brasaemle, D. L.**, and Hansen, J. C. 2006. Developmental Biology: Holding Pattern for Histones. *Current Biology*, 16, R918-R920.
33. **Brasaemle, D. L.** 2007. The perilipin family of structural lipid droplet proteins: Stabilization of lipid droplets and control of lipolysis. *J. Lipid Res.* 48, 2547-2559. (#15 of *J. Lipid Res.* most highly cited papers)
34. **Brasaemle, D. L.**, Subramanian, V., Garcia, A., Marcinkiewicz, A., and Rothenberg, A. 2009. Perilipin A and the Control of Lipolysis. *Molecular and Cell. Biochem.* 326, 15-21. DOI:10.1007/s11010-008-9998-8
35. Caviglia, J. M., Sparks, J., Toraskar, N., Brinker, A., Yin, T. C., Dixon, J., and **Brasaemle, D. L.** 2009. ABHD5/CGI58 facilitates the assembly and secretion of apolipoprotein B-lipoproteins by McA RH7777 rat hepatoma cells. *Biochim. Biophys. Acta-Molec. and Cell Biol. Lipids* 1791:198-205. DOI:10.1016/j.bbailip.208.12.018
36. Wang, H., Hu, L., Dalen, K., Dorward, H., Marcinkiewicz, A., Russell, D., Gong, D., Londos, C., Holm, C., Yamaguchi, T., Rizzo, M., **Brasaemle, D. L.**, and Sztalryd, C. 2009. Activation of hormone-sensitive lipase requires two steps: protein phosphorylation and binding to the PAT-1 domain of lipid droplet coat proteins. *J. Biol. Chem.* 284, 32116-32125. DOI:10.1074/jbcM109.006726.
37. Montero-Moran, G., Caviglia, J. M., McMahon, D., Rothenberg, A., Subramanian, V., Xu, Z., Lara-Gonzalez, S., Storch, J., Carman, G. M., and **Brasaemle, D. L.** 2010. CGI-58/ABHD5 is a Coenzyme A-dependent lysophosphatidic acid acyltransferase. *J. Lipid Res.* 51, 709-719. DOI:10.1194/jlrM001917.
38. Kimmel, A. R., **Brasaemle, D. L.**, McAndrews-Hill, M., Sztalryd, C., and Londos, C. 2010. Adoption of PERILIPIN as a unifying nomenclature for the mammalian PAT-family of intracellular lipid storage droplet proteins. *J. Lipid Res.* 51, 468-471. DOI:10.1194/jlr.R000034.
39. **Brasaemle, D. L.** 2010. Lipolysis control: The plot thickens. *Cell Metab.* 11, 173-174. DOI:10.1016/j.cmet.2010.02.008.
40. Wang, H., Bell, M., Sreenevasan, U., Hu, H., Liu, J., Dalen, K., Londos, C., Yamaguchi, T., Rizzo, M.A., Coleman, R. A., Gong, D., **Brasaemle, D.**, and Sztalryd, C. 2011. Unique regulation of adipose triglyceride lipase (ATGL) by perilipin 5, a lipid droplet-associated protein. *J. Biol. Chem.* 286, 15707-15715. DOI:10.1074/jbc.M110.207779.
41. Caviglia, J. M., Betters, J.L., Dapito, D. H., Lord, C.C., Sullivan, S. P., Chua, S., Sekowski, A., Yin, T., Mu, H., Shapiro, L., Brown, J.M., and **Brasaemle, D. L.** 2011. Adipose-selective overexpression of CGI-58 does not increase lipolysis or protect against diet-induced obesity. *J. Lipid Res.* 52, 2032-2042. DOI:10.1194/jlr.M019117.

42. **Brasaemle, D. L.** 2011. DisseCCTing phospholipid function in lipid droplet dynamics. *Cell Metab.*, 14, 437-438. DOI:10.1016/j.cmet.2011.09.002.
43. **Brasaemle, D.L.** and Osborne, T.F. 2011. Chewing the fat: An expanding role for lipids in complex biological processes. *ASBMB Today*, October 2011 issue, 28-29.
44. Lord, C., Betters, J. L., Ivanova, P. T., Milne, S. B., Myers, D. S., Madenspacher, J., Chung S., Liu, M., Davis, M. A., Lee, R. G., Crooke, R. M., Graham, M. J., Parks, J. S., **Brasaemle, D. L.**, Fessler, M. B., Brown, H. A., and Brown, J.M. 2012. CGI-58/ABHD5-derived signaling lipids regulate systemic inflammation and insulin action. *Diabetes*, 61, 355-363. DOI:10.2337/db11-0994.
45. **Brasaemle, D. L.** and Wolins, N.E. 2012. Packaging of fat: an evolving model of lipid droplet assembly and expansion. *J. Biol. Chem.*, 287, 2273-2279. DOI:10.1074/jbc.R111.309088.
46. Nativ, N. I., Maguire, T. J., Yarmush, G., **Brasaemle, D. L.**, Henry, S. D., Guarrera, J. V., Berthiaume, F., and Yarmush, M. L. 2012. Liver defatting: an alternative approach to enable steatotic liver transplantation, *Amer. J. Transplant.*, 12, 3176-3183. DOI:10.1111/j. 1600-6143.2012.04288.x
47. **Brasaemle, D. L.** 2013. Perilipin 5: Putting the brakes on lipolysis. *J. Lipid Res.*, 54:876-877. DOI:10.1194/jlrE036962.
48. McMahon, D., Dinh, A., Kurz, D., Shah, D., Han, G.-S., Carman, G. M., and **Brasaemle, D. L.** 2014. Comparative Gene Identification 58 (CGI-58)/Alpha Beta Hydrolase Domain 5 (ABHD5) lacks acyltransferase activity. *J. Lipid Res.* 55, 1750-1760. DOI:10.1194/jlrM051151.
49. Sahu-Osen, A., Montero-Moran, G., Schittmayer, M., Fritz, K., Dinh, A., Chang, Y.-F., Boeszoermyeni, A., Cornaciu, I., Russell, D., Oberer, M., Carman, G. M., Birner-Gruenberger, R., and **Brasaemle, D. L.** 2015 CGI-58/ABHD5 is phosphorylated on Ser-239 by protein kinase A: Control of subcellular localization. *J. Lipid Res.* 56, 109-121. DOI:10.1194/jlr.M055004.
50. Sztalryd, C. and **Brasaemle, D. L.** 2017. The perilipin family of lipid droplet proteins: Gatekeepers of intracellular lipolysis. *Biochim. Biophys. Acta—Molec. And Cell Biol. of Lipids*, in press. doi: 10.1016/j.bbailip.2017.07.009.

## Chapters in Books:

1. Bensadoun, A., Hughes, B., Melford, K., Hsu, J., and **Brasaemle, D. L.** 1998. Purification of rat hepatic lipase essentially free of apolipoprotein E and apolipoprotein B. in *Methods in Molecular Biology: Lipase and Phospholipase Protocols*, M. H. Doolittle and K. Reue, editors. 109, 151-156.
2. **Brasaemle, D. L.**, and Wolins, N. E. 2006. Isolation of lipid droplets from cells by density gradient centrifugation. Methods Chapter for *Current Protocols in Cell Biology*. Editors Juan S. Bonifacino, Mary Dasso, Joe B. Harford, Jennifer Lippincott-Schwartz, and Kenneth M. Yamada, Publisher John Wiley & Sons, Inc. *Supplement 29, Unit 3.15; pages 3.15.1-3.15.12.*
3. **Brasaemle, D.** and Wolins N. 2016. Isolation of lipid droplets from cells by density gradient centrifugation. *Current Protocols in Cell Biology* 72:3.15.1-3.15.13. Editors Juan S. Bonifacino, Joe B.

## Published Abstracts:

1. **Brasaemle, D. L.**, Servetnick, D. A., Wolff, J., and Londos, C. 1994. Perilipins at the surface of cholesteryl ester droplets in Y-1 adrenal cortical cells. *J. Cell. Biochem. Suppl.* 18A:CZ202.
2. Servetnick, D. A., Theodorakis, J. L., **Brasaemle, D. L.**, and Londos, C. 1994. In vitro translocation of hormone-sensitive lipase to adipocyte lipid storage droplets. *J. Cell. Biochem. Suppl.* 18A:CZ221.
3. **Brasaemle, D. L.**, Garcia, A., Rubin, B., Harten, I. A., Sekowski, A., and Love, M. W. 2000. Regulation of Fat Metabolism: Perilipins and ADRP. *Obesity Res.* 8 (Suppl. 1): I50.
4. Garcia, A., Love, M. W., and **Brasaemle, D. L.** 2000. Structure/Function Analysis of Perilipin A. *Obesity Res.* 8 (Suppl. 1): PA4.
5. Marcinkiewicz, A., and **Brasaemle, D. L.** 2002. Phosphorylation of Perilipin A Triggers the Dispersion of Lipid Droplets upon Lipolytic Stimulation. *FASEB J.* 16:A222.
6. Subramanian, V., Garcia, A., and **Brasaemle, D. L.** 2002. Hydrophobic Domains of Perilipin A are Essential for Proper Targeting and Protection of Triacylglycerol Stores. *FASEB J.* 16:A632.
7. Dolios, G., **Brasaemle, D. L.**, Shapiro, L., and Wang, R. 2004. Proteomic study of proteins associated with lipid droplets in 3T3-L1 adipocytes. *Molec. & Cell. Proteomics* 3:S68, #5.10.
8. Dapito, D. H., Caviglia, J. M., Chua, S., Sekowski, A., Yin, T., Mu, H., Shapiro, L., and **Brasaemle, D. L.** 2007. Adipose-selective overexpression of CGI-58 does not alter lipolysis or protect against diet-induced obesity. *FASEB J.* 21:A704:685.8
9. **Brasaemle, D. L.**, Montero-Moran, G., Caviglia, J. M., McMahon, D., Liang, X., Subramanian, V., Dapito, D. H., and Sullivan, S. 2008. Lipid droplet associated proteins and control of triacylglycerol metabolism. *Chem. Phys. Lipids* 154, supplement: S4
10. Sztalryd, C., Wang, H., Dalen, K., Dorward, H., Gong, D. W., Londos, C., Holm, C., **Brasaemle, D.**, Rizzo, M. 2009. Differential regulation of adipose triglyceride lipase (ATGL) and hormone-sensitive lipase (HSL) by lipid droplet-associated proteins (PAT proteins) in adipose and non-adipose tissues. *Obesity* 17 (Suppl. 2): S69
11. **Brasaemle, D. L.**, Wang, H., Sztalryd, C., Liang, X., Sullivan, S., Marcinkiewicz, A., and Russell, D. 2010. Perilipin family proteins control lipolysis. *Obesity Rev.* 11 (Suppl. 1):T1:RS3.2
12. **Brasaemle, D. L.** 2012. Control of Lipolysis by Perilipins. *FASEB J.* 26:104.3
13. Hassanién, S., McMahon, D., Kurz, D., Shah, D., Dinh, A., and **Brasaemle, D. L.** 2014. Characterization of the novel H82R mutation in CGI-58 that causes Neutral Lipid Storage Disorder in humans. *FASEB J.* 28:LB153.