BIOGRAPHICAL SKETCH
Phillip H. Pekala

Personal Information

Born:	12 April, 1949, New Kensington, PA
Marital Status:	Married with two children
Address:	1318 Fantasia Street Greenville, NC 27858
Phone:	(252) 765-8143
Business:	Department of Biochemistry & Molecular Biology Brody School of Medicine East Carolina University (252) 744-2684 Email: pekalap@ecu.edu Web Site: http://www.ecu.edu/cs-dhs/biochemistry/Faculty-Pekala.cfm

Educational Background

St. Vincent College, Latrobe, PA	BS (Chemistry)	1971
Indiana University of Pennsylvania, Indiana, PA	MS (Chemistry)	1974
Virginia Polytechnic Institute and State University, Blacksburg, VA	Ph.D. (Biochemistry)	1978
The Johns Hopkins University School of Medicine, Baltimore, MD	Postdoctoral Fellow (Biological Chemistry)	1981

Professional Experience

1971-1972: Graduate teaching assistant, Department of Chemistry, Indiana University of Pennsylvania. Taught General Chemistry laboratory.

1972-1973: Graduate research assistant with Dr. R. A. Hartline, Department of Chemistry, Indiana University of Pennsylvania.

1974-1978: Graduate research assistant with Dr. B. M. Anderson, Department of Biochemistry, Virginia Polytechnic Institute and State University.

1978-1981: Postdoctoral research associate with Dr. M. Daniel Lane, Department of Physiological Chemistry, The Johns Hopkins University School of Medicine.

1979-1980: Johns Hopkins University School of Medicine, General Medical Biochemistry and Recitation Section Discussion leader.

1981-1986: Assistant Professor, Department of Biochemistry, School of Medicine, East Carolina University, Greenville, NC.

1985-1987: Consultant to Biogen, Inc.

1985-1988: Admissions Committee, East Carolina University School of Medicine.

1986-1992: Associate Professor, Department of Biochemistry, School of Medicine, East Carolina University. Greenville, NC.

1987-1991: Member basic science study section, American Institute for Cancer Research.

1988-1992: Member of the External Advisory Committee for the Program Project grant on "Tumor Necrosis Factor and Metabolism", Louisiana State University School of Medicine, Department of Physiology.

1988 : Invited faculty opponent for the Dissertation Defense of Henrik Semb, Department of Physiological Chemistry, University of Umea, Umea Sweden.

1989-1991: Chairman, Pilot and Feasibility Grant Program in Diabetes Research, Diabetes Center, East Carolina University School of Medicine.

1990 : Invited external examiner for the Dissertation of Shrikant Mishra, Basic Science Division, School of Veterinary Medicine, Virginia Polytechnic Institute and State University, Blacksburg, Virginia.
1990-1991: *Ad hoc* member, NIH Metabolic Pathology Study Section.
1991-1995: Member, NIH Metabolic Pathology Study Section.
1992- : Professor, Department of Biochemistry, School of Medicine, East Carolina University, Greenville, NC.
1994-1999: Member, Editorial Board, *Journal of Biological Chemistry*.
1995-1999: NIH Reviewers Reserve.
1999-2001: Member, NIH Metabolic Pathology Study Section (second term).
2000 Adjunct Professor, Biological Sciences, Odense University, Odense, Denmark. Two month tenure with salary & benefits to function as member of a faculty search team.
2000-2005: Member, Editorial Board*, Journal of Biological Chemistry* (second term).
2000 : Co-Founder EnzRel Inc.
2001 : Member, NIH Special Emphasis Study Section on establishment of a Biomedical Research Infrastructure Network.
2002-2005: Research Committee, Brody School of Medicine
2004-2006: Assistant Dean for Research, Brody School of Medicine
2005-2006: Associate Director for Research, Leo Jenkins Cancer Center
2006-2010: Interim Chair, Department of Biochemistry & Molecular Biology

2008-2013: Member, Editorial Board, *Journal of Biological Chemistry* (third term)
2010 : Chair, Department of Biochemistry & Molecular Biology
2011 : Session Chair for "The Art of Collaboration" Symposium at the April 2011 Experimental Biology Meetings in Washington DC

Honors & Awards

2002 : M1 Teaching Recognition Award, Class of 2005
2002 : Designated Brody School of Medicine *Master Educator*.
2003 : University of North Carolina Board of Governors Award for Excellence in Teaching
2006 : M1 Teaching Recognition Award, Class of 2009
2006 : Invited speaker at the Class of 2006 Pearls Lectures.
2008 : M1 Teaching Recognition Award, Class of 2011
2008 : Virginia Tech, Department of Biochemistry, College of Agriculture and Life Science, Outstanding Research Alumnus Award
2008 : Invited speaker at the Class of 2008 Pearls Lectures.
2011 : Invited speaker at the Class of 2011 Pearls Lectures.
2011 : Seymore Bakerman Award for Excellence in Basic Science Teaching
2012 : M1 Teaching Recognition Award, Class of 2015
2013 : Invited speaker at the Class of 2013 Pearls Lectures.
2014 : University Distinguished Graduate Mentor Award (doctoral class)

Society Memberships

American Society of Biological Chemists and Molecular Biologists & American Diabetes Assoc.

Grant Awards

United States Public Health Service National Research Service Award (1 F32 AM06028-01), 1978. Insulin and Regulation of Carboxylase Phosphorylation.
American Cancer Society Fellowship (PF1950), 1980. Relationship Between Poly ADP-Ribosylation and Differentiation of 3T3-L1 Preadipocytes.

The East Carolina University, School of Medicine Biomedical Research Support Grant (70562), 1981. The Relationship Between Poly ADP-Ribose Synthesis and Preadipocyte Differentiation.

Research Corporation, Cottrell Research Grant, 1982. Poly ADP-Ribose and Preadipocyte Differentiation.

North Carolina Board of Science and Technology Research Grant (84-3297), 1984-1985. Studies of a Macrophage Secretory Protein that Regulates Metabolism.

The East Carolina University School of Medicine Biomedical Research Support Grant (2 SO7-12RO5812-12), 1992.

National Institute of General Medical Sciences, United States Public Health Service Research Grant (3 PO1 GM32654-09S1), 1992-1994. Mechanisms Mediating Metabolic Changes in Sepsis. This was part of a joint program between my laboratory and the Department of Physiology, LSU School of Medicine.

NIAAA Center Award (1 P50 AA09803-01), 1993-1996, entitled, "Alcohol Research Center: Alcohol, Infection and Host Response." This award was for a cooperative effort between my laboratory and the Department of Physiology, LSU School of Medicine.

North Carolina Board of Science and Technology Research Grant (94B-ARG-0082), 1994-1996. Fatty Acid Regulation of the Insulin Responsive Glucose Transporter (GLUT-4) Gene Expression.

North Carolina Institute of Nutrition (2-93421), 1994-1998. Fatty Acid Regulation of Gene Expression.

National Institute of General Medical Sciences, United States Public Health Service Research Grant (1 RO1 GM32892), 1984-1999, A Macrophage Endogenous Factor that Suppresses Anabolism.

National Institute of Diabetes and Digestive and Kidney Diseases, United States Public Health Service Research Grant (1 RO1 DK55769), 1999-2006, Regulation of Glucose Transporter mRNA Stability.

American Diabetes Association Research Award, 2003-2007, The Regulation of Adipose Tissue Metabolism by the RNA Binding Protein HuR.

National Institute of Diabetes and Digestive and Kidney Diseases. United States Public Health Service Research Grant (1 R15 DK088666Z), 2010 -2013.

Invited Reviewer For:

The Journal of Clinical Investigation, The Journal of Lipid Research, Gene, Biochem. Biophys. Acta American Journal of Physiology, Molecular Endocrinology, Endocrinology, Oncogene

School of Medicine Committee Membership:

1985-1988: Medical School Admissions Committee
1987-1990: Radiation Safety Committee

1988-1995:	Ad Hoc Microbiology Promotion and Tenure Committee
1988-1990:	Microbiology Faculty Search Committee
1988-1995:	Executive Committee, Diabetes Center
1989-1993:	Executive Committee, Cancer Center
1989-1993:	Advisory Board for Preventative Cardiology
1989-1993:	Family Practice (M-1) Curriculum Committee
1989-1993:	Pathology Curriculum Committee
1989-1991:	Chairman, Pilot & Feasibility Grant Program in Diabetes Research
1991-1994:	Core Facility Advisory Committee
1996-1998:	School of Medicine Research Planning Committee
1997-2005:	Medical Student Summer Research Planning Committee
1998-2003:	Executive Curriculum Committee
2001-2003:	Medical School Promotion & Tenure Committee
2001-2005:	Co-Director Medical Student Summer Research Program

Students Trained in My Laboratory:

S. Russ Price	Ph.D.	(1981-1986)	Maria Small	Med. Student	(1994)
Peter Cornelius	Ph.D.	(1984-1989)	Melissa Marlowe Coale	Non-degree student	
Jackie M. Stephens	Ph.D.	(1988-1992)	Mary Peace McRae	Non-degree student	
Kevin McGowan	Ph.D.	(1990-1995)	Seaborn Blair	M.S.	(1981-1984)
Sheree Long	Ph.D.	(1990-1995)	M. Douglas Lee	M.S.	(1983-1986)
Renu Jain	Ph.D.	(1992-1997)	Raleigh Tenney	UG/MS	(1999-2003)
Vesna A. Karschner	Ph.D.	(2005-2010)	Michelle Butts	UG	(1988-1990)
Chen Qi M.D.	Fellow	(1996-1998)	Maria Chacon Hesele	UG	(1999-2002)
Kira Gantt, Ph.D.	Fellow	(2000-2002)	Melanie Houston	UG	(2002-2003)
			Evan Wells	UG	(2011-2013)

Professional Highlights of my Students

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Russ Price: Was the first graduate student in the Ph.D. program in the Department of Biochemistry & Molecular Biology and the first to receive the degree. His dissertation title was: The regulation of lipoprotein lipase synthesis in 3T3-L1 adipocytes by endotoxin-induced macrophage monokines. As a postdoc Russ was a Fellow in the laboratory of Joel Moss, National Heart, Lung and Blood Institute. He is currently a Professor, Departments of Medicine & Physiology, Emory University School of Medicine. He has been continuously funded through the NIH and recently received a VA appointment. He has served on multiple NIH study sections and the Editorial board of the J. Biol. Chem.

Peter Cornelius: His dissertation title was: Monokine regulation of lipoprotein lipase and glucose transporter gene expression. He performed his postdoctoral fellowship in the laboratory of Dr. M. D. Lane, Department of Biological Chemistry. The Johns Hopkins University School of Medicine. He served as a lab chief for 18 years a Pfizer and currently is CSO & Director of Metabolic Diseases at Systamedic, Groton, CT. He has become an experienced pharmacologist with proven success in leading multi-disciplinary teams as well as identifying and developing clinical candidates through end of phase I clinical trials

Jackie Stephens: Her dissertation title was: Regulation of glucose transporter gene expression by tumor necrosis factor-α in 3T3-L1 preadipocytes and adipocytes. She performed her postdoctoral fellowship in the laboratory of Dr. Paul Pilch, Department of Biochemistry, Boston University School of Medicine. She is currently holds the Claude B. Pennington, Jr. Endowed Chair in Biomedical Research, at the Pennington Biomedical Research Center, LSU and is Director of Basic Sciences, at the Pennington. She has maintained continues NIH funding, has served as a member of an NIH Study Section and recently chaired that study secion. She has been a member of theEditorial Board of the J. Biol. Chem. And served as a co-organizer of the Keystone Meeting on Adipogenesis.

Kevin McGowan: His dissertation title was: Mechanisms of tumor necrosis factor-α induced alterations in glucose transporter (GLUT-1) mRNA stability in fibroblasts. His postdoctoral years were served in the laboratory of Dr. Pierre Coloumb, Department of Biological Chemistry, The Johns Hopkins University School of Medicine. He is currently the Shared Resources Director, Cell & Molecular Biology, Howard Hughes Institute, Janella Farms, VA.
Sherry Long: Her dissertation title was: Mechanisms of tumor necrosis factor-α induced glucose transporter (GLUT-4) mRNA stability in adipocytes. She performed her postdoctoral research in the laboratory of Dr. Yusuf Hannun, The Departments of Biochemistry and Hematology/Oncology, The Duke University Medical School. She took a position as a research scientist with Biacore, Inc. and ran a facility focusing on methods development and analysis. She left Biacor to raise her children.
Renu Jain: Her dissertation title was: Tumor necrosis factor-α mediated activation of signal transduction cascades and transcription factors in the 3T3-L1 adipocytes. She performed her postdoctoral felloship in the laboratory of Dr. Channing Der, Lineberger Cancer Center, School of Medicine, UNC-Chapel Hill. She spent several years at GlaxoSmithKline, RTP, NC where she oversaw the conduct of two global pediatric HIV GSK protocols which tested a new HIV medicine therapy for HIV-1 infected children as young as 6 months. She was recognized as one of "The 100 Incredible East Carolina University women". She is currently Program Director, Clinical Development at Talecris Biotherapeutics.
Vesna Karschner: Her dissertation title was: The role of the RNA binding protein HuR in the control of C/EBPβ expression. She performed her postdoctoral research in the laboratory of Dr. Christopher Geyer, The Department of Anatomy & Cell Biology, Brody School of Medicine, Greenville, NC and is currently a Staff Scientist at the NIEHS, RTP, NC.
M. Douglas Lee: MS thesis title was: Monokine regulation of hexose metabolism in L6 myotubes. He went on to medical school and spent his third years as a Howard Hughes Fellow at the National Institutes of Health (the first from our institution). Currently a pulmonologist in Wilmington, NC.
Melissa Coale: a research technician in my laboratory who behaved like a graduate student. She entered Brody SOM after her tenure in my lab and spent her 3rd year of medical school at the NIH as Howard Hughes Medical Research Fellow. Currently a dermatologist in Charlotte, NC.
Raleigh Tenney: His MS thesis title was: Regulation of Gαi2 expression in 3T3-L1 adipocytes by Interleukin 11. He was recruited out of my lab to work as a Research Scientist, Diabetes & Obesity Division, Eli Lilly, Indianapolis, IN.
Kira Gantt, a postdoctroal fellow in my laboratory, served as Manager of Education and Career Programs for the American Association of Immunologists. Currently the Education Program Manager, Hume Center for National Security and Technology, Bradley Department of Electrical and Computer Engineering, Virginia Tech.
Mary Peace McRae, another research technician in my laboratory who behaved like a graduate student went on to receive the Pharm.D. at the Medical College of VA, her Ph.D. in Pharmacy UNC-Chapel Hill, and is currently Assistant Professor, Dept. of Pharmacotherapy & Outcomes Sciences, Va Commenwealth Univ.
Maria Small, a medical student, was awarded a National Medical Fellowship and worked in my laboratory over the course of her M4 academic year, received her MD, currently doing Ob/Gyn in Durham, NC.
Maria Chacon Hesele, an undergraduate in the laboratory, went on to receive her Ph.D. in Cell & Molecular Biology, at the Emory University SOM, currently a postdoctoral fellow at the University of Pennsylvania.

Summer Medical Student Fellows:

Sarah Compton	2012	Melissa Coale	1990*†
Katherine Sauer	2010*	Ken Call	1989*†

Garett Franklin	2009	M. Douglas Lee	1989*†
Heath Jones	2005*†	Judith Spivey	1985*
Karrie A. Stansfield	2002*†	Cathy Horn	1986*†
Jennifer R. Turnbull	2001*†	Seaborn Blair	1984*†
James Wheeler	1999*†	Willis M. Privott	1982
Laurie Johnson	1999	Wiley Davis	1982
James DeVente	1998*		
Michelle Butts	1996*†		
Joy Sigmon	1991*		

Maria Small* in 1994 was awarded a National Medical Fellowship and worked in my laboratory over the course of the academic year.

*indicates that a student was a co-author on an abstract presented at a national meeting.

† Indicates that the student was a co-author on a published manuscript.

Undergraduate Students:

1. **Michelle Butts**: 1989-1990 undergraduate student worker.
   1990-1991: Research Technician in Pekala laboratory.
   1991-1995: Medical student at the Brody School of Medicine.
   Pediatrician in Phoenix, AZ.

2. **Raleigh Tenney**: 1999– 2001 undergraduate student worker.
   2001 – 2002: Research technician in my laboratory.
   2002 – 2003: Masters degree student in my laboratory.
   Currently a research scientist at Eli Lilly.

3. **Maria Chacon Hesele**: 2002– 2004 undergraduate honors thesis student.
   2003: received funding for her application to the Summer Undergraduate Research Fellowship from Pfizer Research. She presented the results of her research at Pfizer in Groton, CN in October, 2004; Ph.D. Emory University School of Medicine, 2011; Fellowship: University of Pennsylvania.

4. **Melanie Houston**: 2009-2010 undergraduate honors thesis student. Graduate from the Brody SOM in 2014, currently a family medicine resident at the BSOM.

5. **Evan Wells**: 2011-2013 undergraduate honors student. Incrediably talented individual. Currently working as a research technician while applying to graduate school.

Membership on Ph.D. Dissertation Committees:

Department of Biochemistry

Mark Hemrick, Ph.D. (1990)
Darrell Neufer, Ph.D. (1993)
Lilla Somerville, Ph.D. (1999)
Steven Pohnert, Ph.D. (2002)
Melissa Richardson, Ph.D. (2009)
Mohit Mathur, Ph.D. (2009)
Ryan Overcash, (2012)
Xiaofei Chen (2014)
Andrew Friday (in progress)
Michelle Robinson (in progress)
Heather Teague (2014)
Mark Melton (2014)

Department of Microbiology

Barry Stripp, Ph.D. (1989)
Scott Coburn, Ph.D. (1990)
Paul Algate, Ph.D. (1993)
Marc Rogers, Ph.D. (1994)
Xiao-yang Wang, Ph.D. (1997)
Paula Arnold, Ph.D. (1998)
Paul Hoyle, Ph.D. (1998)
William Blalock, Ph.D. (1999)
CarolynWeinstein-Oppenheimer,Ph.D. (2001)
Christopher Howe, Ph.D. (2004)
John Lee, Ph.D. (2004)
Patrick Novalonik, Ph.D. (2004)
Claire Knoten (2012)

Department of Physiology

Guy Groblewski, Ph.D. (1991)
William Stewart, Ph.D. (1994)
Joe Christian, Ph.D. (2002)
Alan Stephenson, Ph.D. (2005)

Department of Pharmacology

Daniel Cushing, Ph.D. (1990)
Kevin Foley, Ph.D. (2002)

Of this group, William Stewart merits mentioning. I was not his major professor but served as his major mentor working at the bench with him, training him in techniques ranging from enzyme kinetics to RNA isolation. He went on to a very good fellowship and currently holds the rank of Professor in the Department of Biology at Middle Tennessee State University. He maintains a strong collaborative relationship with Jackie Stephens from my lab and works on the STAT proteins.

Teaching Assignments:

1. Medical Course:

BIOC 6300 Medical Biochemistry:
9-1hr lectures on lipid metabolism
6-1 hr lectures on protein synthesis and regulation
3-1hr lectures on purine, pyrimidine & heme synthesis/degradation
2-1hr lectures on obesity & diabetes
9-1 hr conferences/small group sessions

2. Graduate Courses:

BIOC 7301 Graduate Biochemistry 1: 6-90min lectures on lipid structure, function & metabolism

BIOC 8320 Graduate Biochemistry 2: 8- 90 min lectures on advanced topics in lipid metabolism. Also served as course director.

In previous years my major teaching assignments have been in BIOC 6300 and the graduate course BIOC 6310 Molecular Biochemistry, in which I presented 15-75 min lectures and 2-75 min problem solving sessions. My section of the course detailed protein synthesis and regulation.

3. Summer Course for Future Physicians:
6- 1 hour lectures on lipid metabolism

4. Dental Biochemistry
2-1hour lectures on lipid structure and metabolism

Invited Talks

"Model for cachexia in chronic disease: secretory products of endotoxin-stimulated macrophages induce a catabolic state in 3T3-L1 adipocytes." Presented to the Department of Biochemistry, University of Pittsburgh, School of Medicine, April, 20, 1984.

"Regulation of metabolism during infection." Presented to the Department of Chemistry, Indiana University of PA, October 5, 1984.

"Regulation of 3T3-L1 adipocyte metabolism by an endotoxin-induced macrophage secretory protein." Presented to the Chemistry Department, Biochemistry Section, Arizona State University, March 18, 1985.

"Regulation of 3T3-L1 adipocyte metabolism by endotoxin-induced macrophage secretory proteins." Presented to the cytokine research group of Biogen Corp. Boston MA, May 6, 1985.

"Cytokine regulation of hexose metabolism in L6 myotubes." presented to the St. Vincent College Alumni Chemical Sciences Symposium, November, 14, 1986.
"Regulation of cellular metabolism by tumor necrosis factor." Presented at the 23rd National Meeting of the Reticuloendothelial Society, Denver, CO, September 5, 1986.

"Monokine regulation of cellular metabolism." presented in the Vanderbilt University Basic Medical Sciences Seminar Series, October 15, 1986.

"Metabolic responses to tumor necrosis factor." presented to the Biology Club, St. Andrews Presbyterian College, Laurinburg, NC, March 19, 1987.

"Regulation of lipid metabolism by TNF and IL-1. Presented in the Departments of Biochemistry & Endocrinology (Medicine) Seminar Series, April 5, 1987.

"Effects of TNF and related monokines on adipocyte metabolism." Presented to the Department of Physiological Chemistry, University of Umea, Umea, Sweden. April 12, 1988.

"The regulation of energy storage tissue metabolism by tumor necrosis factor." presented to the Cancer Nutrition Laboratory, Cancer Prevention Research Program, NCI, NIH, July 11, 1988.

"Regulation of 3T3-L1 preadipocyte metabolism by tumor necrosis factor." presented at the Department of Biological Chemistry Johns Hopkins University School of Medicine Noon Journal Club, June 15, 1988.

"Monokine regulation of cellular metabolism." presented to the Metabolic Research Group, Monsanto Company, St. Louis, MO, October 28, 1988.

"Regulation of cellular metabolism by tumor necrosis factor." presented as a Distinguished Lecture in the Department of Physiology Seminar Series, LSU School of Medicine, January 16, 1989.

"Regulation of glucose transport and transporter gene expression by tumor necrosis factor and 8-bromo-cAMP." Presented as an invited talk for the Diabetes Day events at the ECU School of Medicine, November 30, 1989.

"Regulation of hexose metabolism in quiescent 3T3-L1 fibroblasts by tumor necrosis factor." Presented in the Molecular Biology lecture series at the National Institutes on Aging (NIH) Baltimore MD, December 5, 1989.

"Regulation of hexose transport by tumor necrosis factor." Presented in the Physiological Sciences seminar series at the National Institute of General Medical Science (NIH) Bethesda, MD, March 7, 1990.

"Tumor necrosis factor and metabolism." Presented to the Biology Department, Davidson College, March 23, 1990.

"Regulation of glucose transporter gene expression during tumor necrosis factor induced cell cycle progression." Presented at the International Meeting for Advances in Understanding Trauma and Burn Injury, June 21, 1990.
"Regulation of hexose uptake by TNF in 3T3-L1 fibroblasts." Presented to the Department of Hematology & Oncology, Duke University School of Medicine, August 1, 1990.

"Regulation of glucose transporter gene expression in 3T3-L1 fibroblasts and adipocytes by TNF." Presented to the Basic Science Division of the Virginia Polytechnic Institute & State University School for Veterinary Medicine, February 11, 1991.

"Regulation of glucose transporter gene expression in 3T3-L1 Fibroblasts and adipocytes by tumor necrosis Factor-α." Presented to the Research Division of California Biotechnology, July 16, 1991.

"Tumor necrosis factor-α induced glucose transporter mRNA stability." Presented to the Department of Physiology, LSU School of Medicine, April 13, 1992.

"The regulation of glucose transporter gene expression by tumor necrosis factor-α" Presented to the Department of Molecular Biology, NJCMD, Stratford, NJ, February 4, 1993.

"Regulation of glucose transporter mRNA stability in 3T3-L1 adipocytes by tumor necrosis factor-α", Presented at the FASEB Conference on Recent Advances in Glucose Transporter Biology, Snowmass, CO, August 3, 1993.

"Regulation of glucose transporter gene expression in 3T3-L1 cells." Presented to the Departments of Biology and Chemistry, UNC-G, Greensboro, NC, September 15, 1993.

"Regulation of insulin resistance by tumor necrosis factor-α." Presented to the ECU Diabetes Research Group, Greenville, NC, December 15, 1993.

"Arachidonic acid down-regulates the insulin-dependent glucose transporter gene (GLUT-4) in 3T3-L1 adipocytes by inhibiting transcription and enhancing mRNA turnover." Presented in the Session on Regulation of Adipogenesis, Keystone Conference on the Adipose Cell, Park City, UT, January 9, 1994. Co-Chairman (with Gennette Serrero, Ph.D.)

"Regulation of adipocyte gene expression by TNF-α." Presented at the "Adipocytes and Adiposity: Regulation by Hormones and Cytokines" symposium for the Experimental Biology 94 meeting in Anaheim, CA, April 28, 1994.

"Regulation of glucose transporter gene expression in 3T3-L1 cells by TNF-α." Presented to the Departments of Anatomy and Biochemistry, NJCMD, Newark, NJ, May 3, 1994.

"Regulation of glucose transporter gene expression in 3T3-L1 cells by TNF-α." Presented to the Diabetes Department at Sandoz Research Institute, East Hanover, NJ, May 4, 1994.

"Regulation of glucose transporter gene expression by tumor necrosis factor-α and fatty acids." Presented to the Biochemistry Department, West Virginia University School of Medicine, Morgantown, WV, October 5, 1994.

"Lipid mediators of insulin resistance." Presented to the Department of Nutrition, School of Public Health, UNC Chapel Hill, November 16, 1995.

"Lipid mediators of insulin resistance." Presented to the Department of Biochemistry, School of Medicine, LSU Shreveport, January 18, 1996.

"Ceramide as a regulator of GLUT4 gene expression" Presented to the Department of Chemistry, UNC-Greensboro, February 21, 1996.

"Regulation of glucose transporter gene expression: the contribution of mRNA stability." Presented to the Department of Pharmacology, University of Virginia School of Medicine. Nov. 21, 1996.

"A ceramide activated signal transduction pathway controls GLUT4 gene expression." Plenary Session on: *The Adipocyte and Disease,* Keystone Symposium on the Adipose Cell. January 20, 1997.

"Tumor necrosis factorα initiation of multiple signal transduction pathways in adipocytes: Identification of a pathway controlling GLUT4 gene expression." Advances in Enzyme Regulation Symposium, Indiana University School of Medicine. September 29, 1997.

"The regulation of adipose tissue gene expression by tumor necrosis factorα." Presented to the Research Division of Vysis, Inc. Downers Grove, Il. October 10, 1997.

"TNF-α mediated activation of signal transduction cascades and transcription factors in 3T3-L1 adipocytes." Presented at the 38th International Symposium on Advances in Enzyme Regulation. Indianapolis, IN. September 29th, 1997.

"TNF mediated insulin resistance." Presented to the Department of Poultry Science, NC State University. October 21, 1997.

"TNF-induced insulin resistance in adipocytes." Presented to the Department of Oral Molecular Biology, School of Dental Medicine, Oregon Health Sciences University. March 17, 1998.

"The influence of mRNA stability on glucose transporter gene expression." Presented to the Division on Signal Transduction, National Institutes Environmental Health Sciences, RTP, NC April 26, 1999.

"mRNA stability as a mechanism of controlling gene expression." The 27th Steenbok Symposium, "Adipocyte Biology & Hormone Signaling" University of Wisconsin, Madison. June 6 - 9, 1999.

"Adipocyte expression of a neuronal RNA-binding protein." Presented at the 41st International Symposium on Advances in Enzyme Regulation. Indianapolis, IN. October 3rd, 2000.

"RNA Binding Proteins and Glucose Transporter Gene Expression in 3T3-L1 Adipocytes" Presented to the Department of Biochemistry, Brody School of Medicine, Greenville, NC. February 5th, 2001.

"The Regulation of Glucose Transporter Gene Expression by RNA Binding Proteins" Presented to the ZenBio Corporation, Research Triangle Park, NC February 7th, 2001.

"RNA Binding Proteins and Glucose Transporter Gene Expression in 3T3-L1 Adipocytes" Presented to the Department of Biological Sciences, LSU Baton Rouge, Feb. 12th 2001.

"RNA Binding Proteins and Glucose Transporter Gene Expression in 3T3-L1 Adipocytes" Presented to the Departments of Oral Molecular Biology and Anatomy and Cell Biology, OHSU Portland, OR. March 18th 2001.

"RNA Binding Proteins and Glucose Transporter Gene Expression in 3T3-L1 Adipocytes" Presented to the Department of Microbiology and Immunology, Brody School of Medicine, Greenville, NC. April 3rd, 2001.

"The Elav family of RNA Binding Proteins and their control of Adipocyte Gene Expression" Presented to the WWAMI Faculty at Anchorage, AL. May 30th, 2001.

"Adipocyte Gene Expression: Transcriptional and Posttranscriptional Considerations" Presented to the Department of Pharmacology, Brody School of Medicine, Greenville, NC. September 5th, 2001.

"Interleukin Regulation of Adipocyte Metabolism and Gene Expression" Presented at the 43rd International Symposium on Advances in Enzyme Regulation. Indianapolis, IN. September 24th, 2002.

"RNA Binding Proteins and the Regulation of Adipocyte Gene Expression and Adipogenesis" Presented to the department of Physiology, Brody School of Medicine, January 8th 2004.

"HuR and the Regulation of Adipocyte Differentiation". Presented to the Department of Biochemistry & Molecular Biology, Brody School of Medicine, February 16th, 2004.

"HuR and the Regulation of Adipocyte Differentiation". Presented in the Vice Provost's Seminar Series at UNC-Greensboro. May 5th, 2004.

"A Role for HuR in the Control of Adipogenesis". Department of Biology, East Carolina University. October 12, 2005.

"Fat Tissue: The Good, The Bad & The Ugly". Presented on behalf of the North Carolina Association for Biomedical Research at the *Rx for Science Literacy Teacher Workshop*. September 20th, 2006.

"Control of adipocyte differentiation: Influence of C/EBPβ and the RNA binding protein HuR". Presented to the faculty of biological sciences, Washington State University, September 4th, 2007.

"Control of adipocyte differentiation: Influence of C/EBPβ and the RNA binding protein HuR". Presented to the Department of Biochemistry, Case Western Reserve University, October 18th, 2007.

"A Role for the RNA binding protein HuR in Adipogenesis". Presented to the Brody Brothers Foundation, Brody School of Medicine, November 20th, 2007.

"A Role for the RNA binding protein HuR in Adipogenesis. Presented to the Department of Biochemistry & Nutrition, Virginia Tech, April 18th, 2008.

"HuR and Adipogenesis." Presented at Pathology Grand Rounds, Brody School of Medicine, October 13th, 2008.

" Regulation of 3T3-L1 Preadipocyte Differentiation*" Presented in the* Department of Biochemistry & Molecular Biology Seminar Series, Greenville, North Carolina. November 2009.

"The role of the embryonic stem cell transcription factor Zfp206 in adipocyte differentiation" NIEHS Seminar Series, RTP, North Carolina. February 2010.

"Novel regulatory mechanisms in adipogenesis" Interview for Chair of B&MB Brody School of Medicine, Greenville, North Carolina. April 2010.

"Manuscripts and grant applications: responding to critiques." Exp. Bio. Symposium on "It's not your fault: dealing with frustrations at the bench." Washington, DC, April, 2011.

"Zscan10, a novel regulator of adipogenesis." The Edison Institute, Athens, Ohio Feb. 2012.

Published Articles (Student co-authors highlighted in bold print)

1. Pekala, P. H. and Hartline, R. A. (1973) Isolation of radioactive D- and L-α-aminoadipate of high specific activity by selective bacterial metabolism, *Anal. Biochem*. **55**, 411-419.

2. Pekala, P. H., Pefetti, T. and Hartline, R. A. (1975) Physiological basis for preferential uptake of D-A-aminoadipate over the L-isomer by *Alcaligenes denitrificans. Biochem. Biophys. Acta.* **394**, 65-75.

3. Pekala, P. H. and Anderson, B. M. (1978) Studies of the bovine erythrocyte NAD glycohydrolase. *J. Biol. Chem.* **253**, 7453-7459.

4. Pekala, P. H., Meredith, M. J., Tarlow, D. and Lane, M. D. (1978) Multiple phosphorylation of acetyl-CoA carboxylase in chick liver cells. *J. Biol. Chem*. **253**, 5267-5269.

5. Pekala, P. H. and Anderson, B. M. (1980) Self inactivation of an erythrocyte NAD glycohydrolase. *Molec. Cell. Biochem.* **31**, 49-56.

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