CURRICULUM VITAE
December 23, 2014

I. PERSONAL INFORMATION

Name: Chaodong Wu
Rank: Associate Professor
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Texas A&M University
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Date of appointment: April 1, 2007

II. EDUCATION

Beijing Medical University, China. PhD in Medical Science, 09/1995-07/1998
Tongji Medical University (Wuhan), China. Master of Medical Science, 09/1992-07/1995
Hubei University of Chinese Medicine (Wuhan), China. MD, Medicine, 09/1987-07/1992

III. EXPERIENCE

A. Current Position

Date: September 1, 2013 - present

Appointment: 50% College, 50% AgriLife Research

Current job expectation: 45% Research, 45% Teaching, 10% service

Research – 45% Effort
1) Development of a nationally recognized research program that addresses high priority needs in the area of overnutrition-related metabolic diseases such as insulin resistance, fatty liver disease, and diabetes that leads to expansion of critical knowledge, scholarly achievement, excellence in research, discovery of new and innovative technologies, an enhanced understanding of biological mechanisms or systems and/or creation of intellectual property; other duties include securing extramural funds to support ongoing research activities and effectively communicating the significance or impact of the research performed;
2) Supervision and training of undergraduate students, M.S. and Ph.D. degree candidates and/or post-doctoral appointees in the discipline of Nutrition;

Teaching – 45% Effort
3) Teaching undergraduate and graduate courses in Nutrition such as Nutrition and Physiological Chemistry (NUTR 470), Nutrition Seminar (NUTR 681), and Research

(NUTR 485, NUTR 491, and NUTR 691); other responsibilities include mentoring of students and providing academic guidance to enable success within the discipline.

Service – 10% Effort
4) Service to the department, college, university and the general public as part of the ongoing mission of a Land Grant Institution.

B. Past Positions and Experiences

04/2007 - 08/2013: Texas A&M University, College Station, TX. Assistant Professor. My responsibilities were to develop a nationally recognized research program that addresses high priority needs in the area of overnutrition-related metabolic diseases such as insulin resistance, fatty liver disease, and diabetes that leads to expansion of critical knowledge, scholarly achievement, excellence in research, discovery of new and innovative technologies, an enhanced understanding of biological mechanisms or systems and/or creation of intellectual property. My other research duties include securing extramural funds to support ongoing research activities and effectively communicating the significance or impact of the research performed, and supervise and train undergraduate students, M.S. and Ph.D. degree candidates and/or post-doctoral appointees in the discipline of Nutrition. My teaching duties were to teach undergraduate and graduate courses in Nutrition such as Nutrition and Physiological Chemistry (NUTR 470), Nutrition Seminar (NUTR 681), and Research (NUTR 485, NUTR 491, and NUTR 691). My other responsibilities in teaching include mentoring of students and providing academic guidance to enable success within the discipline. My responsibilities also include serving to the department, college, university and the general public as part of the ongoing mission of a Land Grant Institution.

02/2006 - 03/2007: Hoffmann-La Roche, Nutley, New Jersey. Principal Scientist. My responsibilities were to design and perform animal experiments to validate the efficacy of small molecule compound(s) at treating type 2 diabetes. I was also in charge of gathering research data for the development of a database to detail the anti-diabetic efficacy of known small molecule compounds. Additionally, I provided information that was used by the decision-making-team (DMT). I supervised one Senior Scientist. My expertise includes integrative physiology and metabolism with a focus on the regulation of systemic glucose homeostasis, hepatic glucose production, and muscle glycogen metabolism.

08/2003 - 02/2007: The University of Minnesota, Minneapolis, MN. Research Associate. My responsibilities were to elucidate the mechanisms by which hepatic glycolysis controls liver glucose production and thereby systemic glucose homeostasis. My expertise includes integrative physiology and metabolism and whole body energy balance. I published 8 peer-reviewed articles and 3 book chapters. I was also involved in training of two PhD students, one MS student, and five rotation graduate students, and in teaching laboratory course.

08/1998 - 07/2003: The University of Minnesota, Minneapolis, MN. Postdoctoral Research Associate. My responsibilities were to design and perform research to validate the concept that suppressing hepatic glucose production is viable for treatment of diabetes. My expertise includes integrative physiology and metabolism with a focus on the regulation of hepatic

glucose metabolism and systemic glucose homeostasis. I published 3 peer-reviewed research articles, and was involved in training of one PhD student and two rotation graduate students.

09/1995 - 07/1998: Beijing Medical University, Beijing, China. Research Assistant. My responsibilities were to design and perform research to characterize the bioactivity of the recombinant envelop protein of hepatitis C virus. My expertise includes hepatology and medical virology. In this time period, I published 8 peer-reviewed research articles. I was involved in training of one visiting scholar and in teaching basic medical courses.

09/1992 - 07/1995: Tongji Medical University, Wuhan, China. Research Assistant. My responsibilities were to design and perform research to characterize the efficacy of Chinese medicinal at protecting against acute liver injury. My expertise includes hepatology, inflammation, Chinese medicinal, and the integration of Chinese and Western medicine. I published 5 peer-reviewed research articles. I was involved in training of medical interns.

09/1991 - 07/1992: Hubei Hospital, Hubei University of Chinese Medicine, Wuhan, China. Intern. My responsibilities were to receive medical training and to provide medical service. My expertise includes Chinese medicine and internal medicine.

IV. TEACHING

A. Program Statement

My career teaching goals are to incorporate research into the education program and train new generations of nutrition scientists. The objectives of my educational program are to effectively teach nutrition courses and involve undergraduate and graduate students in research so that new knowledge of nutritional science is disseminated.

My teaching philosophy is to provide the fundamental content of the integration of nutrition, biochemistry, and physiology, and help students develop the ability of critical-thinking and skills of problem-solving. My teaching methods include large-group interactive sessions, small-group teaching, and research activities. As an instructor of NUTR 470, I am guided by my teaching philosophy to teach via a path to excellence. NUTR 470 is a core course for undergraduate students with nutrition major. This course was originally offered yearly. Because of my involvement, NUTR 470 has been offered twice a year since fall 2007.

Over the past seven years, I have introduced my research to the classroom by interpreting research data pertinent to nutrient metabolism and integrative physiology to motivate students to learn and to develop and improve skills in critical-thinking and problem-solving. Since spring 2011, I have been involved in teaching classroom-based graduate level course(s). In spring 2011, I gave a guest lecture about cell signaling from nutritional perspectives to biology graduate students. In spring semester of 2012, I gave the same lecture with a few updates on new data generated by my research. Since fall semester of 2011, I have also been involved in teaching a nutrition graduate course. In my introduction lectures for

NUTR 681, I use my research data as examples to teach students to effectively ask scientific questions, with the goal to train students to improve skills in critical thinking.

Undergraduate research is an essential component of higher education. For the past seven years, I have directed 4 undergraduate students in nutritional research and 1 undergraduate student in food science research. They were provided with research opportunities, and were asked to review recent scientific literature and participate in bi-weekly lab meetings.

Graduate students are tomorrow's professors and new generations of scientists. As major professor, I have supervised five PhD students and three Master students over the past seven years. These students have been assigned with independent research projects to address questions pertinent to how overnutrition causes insulin resistance. In addition, I have served on 9 graduate (PhD and Master) committees for the past 7 years. To disseminate new knowledge in nutrition, I have facilitated my graduate students to present their research at national scientific meetings.

Measurable criteria: I have used the following criteria to assess the success of classroom teaching: 1) positive comments from students on course content and on methods of teaching and evaluations (sample comments are provided section **IV. Teaching, item G**); and 2) the incorporation of the new knowledge generated by the Wu Lab into courses/lectures by nutrition peers of universities outside Texas A&M will be tracked using web-search engines such as Google. I have also set the following criteria to assess the success of undergraduate and graduate research as a key component of teaching: 1) at least two oral presentations at lab meetings per seminar (all students); 2) at least two poster and/or oral presentations at national/international scientific meetings during the 4-year training period (PhD students only); and 3) preparation/submission of at least 2 manuscripts during the 4-year training period (PhD students only). For the past three years, my graduate students have attended the Experimental Biology meeting and the American Diabetes Association Annual Scientific meeting for several times. They have also authored and/or co-authored a number of papers including those that are published in the *J Biol Chem*, the most-cited biomedical journal in the world, and in *Circulation*, *PLoS One*, and/or *J Nutr Biochem*.

Courses Taught (Since appointment at TAMU)

	Semester and Year	**Enrollment**	**Student Evaluation**	**Dept. Average**
Undergraduate				
NUTR 470	(3 h), Fall 07	34	4.49	NUTR 4.71 FSTC 4.59
NUTR 470	(3 h), Spring 08	109	4.76	NUTR 4.77 FSTC 4.77
FSTC 491	(3 h), Spring 08	1	-	
FSTC 489*	(3 h), Spring 08	24	-	
NUTR 470	(3 h), Fall 08	59	4.80	NUTR 4.69 FSTC 4.74
NUTR 491	(3 h), Spring 09	1	-	NUTR 4.65

FSTC 489*	(3 h), Spring 09	35	-	FSTC 4.78
NUTR 470	(3 h), Fall 09	83	4.77	NUTR 4.62 FSTC 4.39
FSTC 489*	(3 h), Spring 10	51	-	NUTR 4.63 FSTC 4.52
NUTR 470	(3 h), Fall 10	82	4.62	NUTR 4.60 FSTC 4.59
FSTC 489*	(3 h), Fall 10	85	-	
NUTR 470	(3 h), Spring 11	81	4.61	NUTR 4.68 FSTC 4.72
NUTR 485	(3 h), Spring 11	1	-	
NUTR 485	(3 h), Summer 11	1	-	NUTR 4.76 FSTC 4.82
NUTR 415*	(3 h), Fall 11	85	-	NUTR 4.67 FSTC 4.72
NUTR 470	(3 h), Fall 11	45	4.47	
NUTR 470	(3 h), Spring 12	59	4.95	NUTR 4.71 FSTC 4.71
NUTR 289*	(3 h), Fall 12	24	-	
NUTR 300*	(3 h), Fall 12	45	-	
NUTR 470	(3 h), Fall 12	53	4.80	
NUTR 470	(3 h), Spring 13	57	4.72	
NUTR 300*	(3 h), Fall 13	44	-	
NUTR 470 500	(3 h), Fall 13	58	4.73	
NUTR 470 200	(3 h), Fall 13	4	4.82	
NUTR 470 500	(3 h), Spring 14	75	4.73	
NUTR 300*	(3 h), Fall 14	53	-	
NUTR 470 500	(3 h), Fall 14	56		
NUTR 485	(3 h), Fall 14	2	-	
NUTR 491	(1 h), Fall 14	1		
NUTR 470 500	(3 h), Spring 15	87		
Graduate				
NUTR 691	(3 h), Fall 07	1	-	NUTR 4.71 FSTC 4.59
NUTR 691	(2 h), Spring 08	1	-	NUTR 4.77 FSTC 4.77
NUTR 691	(3 h), Fall 09	2	-	NUTR 4.62 FSTC 4.39
NUTR 691	(3 h), Spring 10	2	-	NUTR 4.63 FSTC 4.52

NUTR 691	(6 h), Summer 10	2	-	
NUTR 691	(3 h), Fall 10	3	-	NUTR 4.60 FSTC 4.59
NUTR 691	(3 h), Spring 11	3	-	NUTR 4.68 FSTC 4.72
BIOL 613*	(3 h), Spring 11	13	-	n/a
NUTR 691	(3 h), Summer 11	2	-	n/a
NUTR 681	(1 h), Fall 11	9	4.86	NUTR 4.67 FSTC 4.72
NUTR 691	(3 h), Fall 11	4	-	
NUTR 681**	(1 h), Spring 12	16	4.84	NUTR 4.71 FSTC 4.71
NUTR 691	(3 h), Spring 12	3	-	
BIOL 613*	(3 h), Spring 12	8	-	n/a
NUTR 691	(6 h), Summer 12	2	-	n/a
NUTR 691	(1 h), Fall 12	2	-	n/a
NUTR 691	(3 h), Spring 13	4	-	n/a
NUTR 691	(6 h), Summer 13	3	-	n/a
NUTR 691	(3 h), Fall 13	4	-	
NUTR 691	(3 h), Spring 14	5	-	
NUTR 691	(6 h), Summer 14	4	-	n/a
NUTR 691	(3 h), Fall 14	6	-	
NUTR 691	(3 h), Spring 15	6	-	

* Guest lecture

** Sample syllabi are provided as appendices.

B. List of Courses Taught

NUTR 470, Nutrition and Physiological Chemistry

NUTR 470 is an integration of nutrition, biochemistry, and physiology. Students will be provided with knowledge of how carbohydrates, lipids, and proteins are metabolized to generate energy, as well as the physiological regulation of nutrient metabolism. This course also includes aspects of macronutrients for health promotion and disease prevention.

Course Objectives: Upon successful completion of the course, students should have a comprehensive understanding of how metabolism of 1) carbohydrates 2) lipids and 3) proteins and amino acids is regulated at the integrative level. Students should also know typical macronutrients that are considered for health promotion and disease prevention.

Learning Outcomes: Students should know and be able to communicate verbally and in writing that

1. dietary recommendations for intake of carbohydrates, lipids, and proteins are to meet the energy requirement of the body
2. essential nutrients that generate health benefits
3. nutrients have to be digested, absorbed, and metabolized for energy generation
4. metabolic pathways are coordinately regulated under a given nutritional condition
5. key enzymes that are involved in energy metabolism are appropriately regulated under physiological conditions

Since spring 2011, students have been required to complete an assignment of scientific writing. The purpose is to develop and improve skills in critical-thinking.

NUTR 289, Current Perspectives in Nutrition

FSTC 489, Special Topics in Probiotics & Microbiology

In spring 2008, I was invited by Dr. Joseph Sturino, the course instructor, to give a guest lecture about the role of liver in nutrient metabolism.

FSTC 489, Special Topics in Religious and Ethnic Foods
(Renamed as NUTR/FSTC 415, NUTR/FSTC 315, and then NUTR 300)

In spring 2009, I was invited by Dr. Mian Riaz, the course instructor, to give a guest lecture about Chinese foods in relation to Chinese culture and tradition. My power point presentation addressed the main types of Chinese foods, as well as its symbolic meanings and its associated Chinese culture and traditions. I also discussed the major festivals in China and foods that are served during the corresponding festivals. I concluded that family values are the core of Chinese culture and tradition, and are reflected well by Chinese foods. This lecture, with a few updates, was also given in the spring semester of 2010. In addition, I have made comments on Chinese foods from a nutrition perspective.

Since fall 2011, this course has been renamed as NUTR/FSTC 415 (and then NUTR/FSTC 315). In fall 2011, I also gave a guest lecture on Chinese Foods and Culture.

FSTC 491, Directed undergraduate Research of Food Science

In spring 2008, I directed Mr. Hung Khiem Trang in his undergraduate research in food science and/or nutritional science.

NUTR 485/491, Directed undergraduate Research of Nutrition

In spring 2009, I directed Ms. Martha Pilar McKay in her undergraduate research.

In spring 2011, I directed Mr. Kha Lai in his undergraduate nutrition research. His research was supported by funds from the Department of Nutrition and Food Science.

In summer 2011, I directed Mr. Shih Lung Woo in his undergraduate research in nutrition. His research was supported by funds from the College of Agriculture and Life Science and by the Department of Nutrition and Food Science.

In spring 2012, I directed Mr. Ritchie Pena in his undergraduate research in nutrition.

In spring 2013, I directed Ms. Ting Qi in her undergraduate research in nutrition that is supported by a grant from NFSC and COALS.

In fall 2014, I directed Ms. Callan Young in her undergraduate research in nutrition.

In fall 2014, I directed Ms. Jiahui Pang in her undergraduate research in nutrition.

In fall 2014, I directed Mr. Andrew Park in his undergraduate research in nutrition.

BIOL 613, Cell Biology

In spring 2011, I was invited by Dr. Hongmin Qin to give a guest lecture on cell signaling from nutrition perspectives to biology graduate students. My presentation addressed roles of major cell signaling pathways in regulating nutrient metabolism. My lecture also addressed the interaction between metabolism and inflammation at the level of cell signaling, and its relation to cell functions and systemic physiology. I included my most recent research in my lecture. In spring 2012, I gave the same lecture with a few updates.

NUTR 681, Nutrition Seminar

In fall 2011, I was assigned as the instructor of NUTR 681. In my introduction lectures, I used my research data as examples to teach students to appropriately ask scientific questions. The rationale is to train students to improve skills in critical thinking.
In spring 2012, course assignments included 1) asking two questions to speakers at each of the seminars, 2) writing at least two summaries in the format for an abstract in a scientific journal.

NUTR 691, Graduate Research of Nutrition

Since fall 2007, I have directed Ms. Xin Guo in her PhD research on PFKFB3 regulation of diet-induced adipose tissue inflammatory response and systemic insulin resistance.

Since fall 2009, I have directed Ms. Vera Halim in her MS research focusing on the involvement of PFKFB3 in the beneficial effects of healthy dietary supplements.

Since fall 2010, I have directed Ms. Hang Xu in her PhD research with a focus on defining the role of PFKFB3 and diet in the regulation of macrophage polarization.

Since spring 2012, I have directed Mr. Shih-Lung Woo in his MS research with a focus on metformin protection of hepatocyte fat deposition and macrophage activation.

In 2013, I assigned a project to Ms. Ting Guo to elucidate the mechanisms by which MIF20 protects against overnutrition-associated adipose tissue inflammation.

In 2013, I assigned a project to Ms. Ting Qi to determine the temporal effects of nutrients on adipocyte inflammatory responses.

In 2013, I assigned a project to Ms. Ya Pei to determine the regulatory role of cGAS-cGAS product system in overnutrition-associated adipose tissue inflammation.

In 2014, I assigned a project to Ms. Rachel Botchlett to determine nutrient effects on intestine inflammatory responses.

C. Creativity in Teaching

Since fall 2007, I have conducted the following activities to enhance teaching.

April, 2007: Consulted with Dr. Joanne Lupton about how to teach in an effective manner
Aug, 2007: Using the internet to obtain updated information related to NUTR 470 content
Aug, 2009: Incorporating new research data into lecture notes
01/08/2010: Attended workshop sponsored by the Center for Teaching Excellence, *"Writing Syllabi that Engage and Motivate Students*"
01/13/2010: Attended workshop sponsored by the Center for Teaching Excellence, *"Their Cheating Hearts: Why Students Plagiarize and What You Can Do About It"*
April, 2011: Discussed with Dr. Hongmin Qin about how to provide biology students with new knowledge of how cell signaling from nutrition perspective
10/05/2011: Attended workshop sponsored by the Center for Teaching Excellence, *"Teaching Methods*"
10/20/2011: Attended workshop sponsored by the Center for Teaching Excellence, *"Enhancing Faculty Involvement with Graduate Students Through Improved Mentoring Strategies*"
11/18/2011: Attended workshop sponsored by the Center for Teaching Excellence, *"Faculty Teaching Academy*"
July, 2013: Consulted with Dr. Karen Kubena about how to teach a nutrition honor course
Jan, 2014: Consulted with Dr. Karen Kubena about how to improve my teaching for a nutrition honor course

I have actively utilized E-learning (WebCT) to enhance teaching. I posted course materials in E-learning a week before the start of each NUTR 470 sections. The posted materials included course syllabi, course objectives, learning outcomes, lecture notes, and course concepts.

I have frequently utilized E-learning to monitor student academic performance. After each quiz and/or exam, I checked the points earned by each student. I issued office visit requests to students who did not do well. During their visits, I inquired about why they did not do well and discussed the ways through which they could improve their performance. At the end of course sections, all of those students showed improvements in their finals.
I have updated and upgraded the courses I taught. Major changes included (by course):

NUTR 470, Nutrition and Physiological Chemistry

For the past five years, I have put all my lecture notes on power point presentations. Students commented that my lecture notes were "very organized" and "well prepared" and "delivered concise information in a straight way".

I have employed the following ways to enhance teaching.

- Introducing health-related research to classroom to trigger students' interest in nutrition. For example, I introduced my research data about the effect of high-fat diet (HFD) feeding on inducing obesity and hepatic steatosis to explain why the core of nutrition is to use healthy foods for health promotion and disease prevention.
- Including images, animations, and video clips to visually emphasize course content. For example, I included an animation of GLUT4 translocation and a video clip to illustrate how ATP synthase produces ATP.
- Using research data to explain profound concepts and to exemplify how principles of nutrient metabolism are obtained. For example, I used my research data to explain how excessive glucose is converted into fat in the liver.
- Interacting with students. While delivering lectures, I frequently asked questions pertinent to scientific concepts covered.
- Encouraging critical-thinking. I frequently asked students questions pertinent to scientific concepts covered in lectures.
- Providing students with the opportunities to interpret research data. I included bonus questions in final exams. The rationale is that senior students who take this course will very likely face research data in their near future, i.e., graduate school and professional career.
- Advocating in-house nutrition experts and their research. While delivering lectures related to macronutrients, I introduced Drs. Joanne Lupton, Robert Chapkin, Rosemary Walzem, and Guoyao Wu and their research to students.
- Before the start of a new lecture, I always went over the concepts covered by previous lectures. While delivering lectures, I also frequently connected currently covered concepts with previously discussed concepts.

In Dec 2010, the curriculum review committee evaluated core courses of nutrition provided by the Department of Nutrition and Food Science. The meeting had emphasized the importance of writing to undergraduate education in nutrition. Accordingly, I have eliminated a portion of multiple choice questions from exams and final exam and added an assignment of scientific writing in nutrition.

FSTC 489 (Special Topics in Probiotics & Microbiology)

I created a new power point presentation in which I included the following key components.

- The liver plays a key role in maintaining whole body glucose homeostasis by regulating hepatic glucose production.

- The liver converses excess glucose into fat, which is then secreted into blood stream as very low density lipoproteins. Eventually, fat is stored in adipose tissue.
- The liver is the only place for the generation of ketone bodies, which are the sole energy source used by the brain during starvation.
- The liver is the main place for ammonia detoxification through urea cycle.
- The liver is the main place where amino acids are converted into glucose during fasting.

NUTR 289, Current Perspectives in Nutrition

I created a new power point presentation in which I included the following key components.

- Lipid and health

FSTC 489 (Special Topics in Religious and Ethnic Foods)
(Renamed as NUTR/FSTC 415, NUTR/FSTC 315, and then NUTR 300)

I created a new power point presentation in which I included the following key components.

- Chinese foods vary based on geographical regions. However, the core values – family values – are the same.
- Chinese foods always have symbolic meanings of good wishes.
- A specific festival is associated with a unique type of foods. For example, moon cakes are served only in Mid-Autumn Festival, which is the day for family reunions.

FSTC 491, Directed undergraduate Research of Food Science

I assigned a project to Mr. Hung Khiem Trang to construct a plasmid that contains the cDNA of PFKFB3 under the control of aP2 promoter.

NUTR 485/491, Directed undergraduate Research of Nutrition

I directed Ms. Martha Pilar McKay to define the role of PFKFB3 in suppression of overnutrition-associated macrophage proinflammatory activation.

In spring 2011, I directed Mr. Kha Lai to determine the effects of nutrients, i.e., glucose and free fatty acids, on modulating macrophage proinflammatory response. His research was supported by funds from the Department of Nutrition and Food Science.

In summer 2011, I directed Mr. Shih Lung Woo to determine the effects of berberine, the bioactive compound of an herbal medicinal, on modulating macrophage polarization.

In spring 2012, I directed Mr. Ritchie Pena in his undergraduate research in nutrition. Mr. Pena was involved in experiments to analyze hepatocyte lipid metabolism.

In spring 2013, I directed Ms. Ting Qi in her undergraduate research in nutrition that is supported by a grant from NFSC and COALS.

BIOL 613, Cell Biology

I created a new power point presentation to include the following key components.

- Major cell signaling pathways involved in nutrient metabolism, i.e., insulin signaling pathway and glucagon signaling pathway
- Intracellular signaling pathways involved in nutrient sensing, i.e., AMPK signaling
- Inflammatory signaling pathways, i.e., the TLR4 and NF-κB pathways
- The interactions between "metabolic" signaling pathways and inflammatory signaling pathways under the condition of overnutrition

NUTR 681, Nutrition Seminar

I created a new power point presentation for my introduction lecture, in which I included my research data as examples to teach students to appropriately ask scientific questions.

The examples included:

- High-fat diet (HFD)-induced adipose tissue inflammation
- Obesity-related fatty liver disease
- Adipocyte-macrophage cross-talk
- Intestine inflammation

NUTR 691, Graduate Research of Nutrition

I trained Ms. Xin (Cindy) Guo in animal experiments, and in applying molecular approaches to her research to elucidate the role of PFKFB3 in regulating adipocyte function. For the past five years, her excellence in research has led to 6 recent publications including in the *Journal of Biological Chemistry* and *Circulation*.

In 2009, I assigned a project to Ms. Halim to determine the extent to which PFKFB3 is involved in the anti-inflammatory effect of n-3 poly-unsaturated fatty acids in adipocytes.

In 2010, I assigned a project to Ms. Xu to elucidate the role of the interaction between PFKFB3/iPFK2 and diet in regulating macrophage inflammatory status.

In 2012, I assigned a project to Mr. Woo to elucidate the mechanisms by which metformin inhibit hepatocyte fat deposition.

In 2013, I assigned a project to Ms. Ting Guo to elucidate the mechanisms by which MIF20 protects against overnutrition-associated adipose tissue inflammation.

In 2013, I assigned a project to Ms. Ting Qi to determine the temporal effects of nutrients on adipocyte inflammatory responses.

In 2013, I assigned a project to Ms. Ya Pei to determine the regulatory role of cGAS-cGAS product system in overnutrition-associated adipose tissue inflammation.

In 2014, I assigned a project to Ms. Rachel Botchlett t to examine nutritional control of PFKFB3 in intestinal epithelia cells in relation to intestine inflammation during obesity.

D. Cumulative Summary of Students Supervised

Graduate Student committee Involvement

	Since appointment at TAMU		Career	
Degree	**Chair or Co-chair**	**Member**	**Chair or Co-chair**	**Member**
Master of Agriculture	0	0	0	0
Master of Science	3	6	3	6
PhD	5	5	5	5

Cumulative Summary of Trainees: Graduate Students and Post-Doctoral Fellows (Since appointment at TAMU)

Type Trainee	Chair	Committee Member	Year Enrolled	Year Graduated	Awards	Current Position
Graduate						
Name/Master						
Vera Halim/Master (Nutrition)	Chaodong Wu		2009	2011		Nutritionist, Nestle, Indonesia
Emily Nelson/Master (Nutrition)	Caurnel Morgan	Chaodong Wu	2007	2011		
Ana Ortiz-Quezada/Master (Food Sci)	Luis Cisneros	Chaodong Wu	2008	2010		Scientist
Paula Simons/Master (Food Science)	Luis Cisneros	Chaodong Wu	2011	2012		
Elizabeth Richey/Master (Genetics)	Hongmin Qin	Chaodong Wu	2010	2012		
Karla Siska/Master (Food Science)	Joseph Awika	Chaodong Wu	2010	2012		Scientist
Prerna Bhargava/Master (Food Sci.)	Luis Cisneros	Chaodong Wu	2013	In progress		
Ting Guo (Nutrition)	Chaodong Wu		2013	In progress		
Ting Qi (Nutrition)	Chaodong Wu		2013	In progress		
Name/PhD						
Xin Guo/PhD (Nutrition)	Chaodong Wu		2007	2013		Postdoctoral
Hang Xu/PhD (Nutrition)	Chaodong Wu		2010	In progress		
Ghazal Ghahramany/PhD (Nutrition)	Steve Smith	Chaodong Wu	2007	2012		Scientist
Sam Moon Kim/PhD (Neuroscience)	David Earnest	Chaodong Wu	2010	In progress		
Xiuzhi Wu/PhD (Nutrition)	Rosemary Walzem	Chaodong Wu	2010	In progress		
Merrick Gearing/PhD (Food Science)	Peter Murano	Chaodong Wu	2010	In progress		
Rachel Botchlett/PhD (Nutrition)	Chaodong Wu		2011	In progress		
Shih-Lung Woo/PhD (Nutrition)	Chaodong Wu		2012	In progress		
Ya Pei/PhD (Nutrition)	Chaodong Wu		2013	In progress		
Maria Schreckinger/PhD (Food Sci.)	Luis Cisneros	Chaodong Wu				
Post-doctoral						
Xin Guo, PhD, RD (Nutrition)	Chaodong Wu		2013	In progress		
Xiang Hu, MD, PhD (Nutrition)	Chaodong Wu		2013	In progress		
Yan Zhao, MD, PhD (Nutrition)	Chaodong Wu		2013	In progress		
Juan Zheng, MD, PhD (Nutrition)	Chaodong Wu		2014	In progress		

Cumulative Summary of Trainees: Undergraduate Students (Since appointment at TAMU)

Type Trainee	Course & Credits	Major	Student Year	Calendar Year	Awards	Current Position
Undergraduate						
Hung Khiem Trang	FSTC 491 (3h)	Food Science	U4	2008		Graduate student
Martha Pilar McKay	NUTR 485 (3h)	Nutrition	U3	2009		Professional school
Kha Lai	NUTR 485 (3h)	Nutrition	U4	2011	NFSC U Research [1]	TAMU COM, MD student
Shih-Lung Woo	NUTR 485 (4h)	Nutrition	U4	2011	COALS U Research [2]	Nutrition G7
Ritchie Pena	NUTR 485 (3h)	Nutrition	U4	2012		Admitted to dental school
Janet Gutierrez	observing research	Nutrition	U4	2008		Graduate school
Leticia Ramirez	observing research	Nutrition	U4	2012		Applying for professional school
Ting Qi	observing research	Nutrition	U3 U4	2012 2013	NFSC U Research [1]	Nutrition G7
Callan Young	NUTR 485 (3h)	Nutrition	U3	2014		
Andrew Park	NUTR 485 (3h)	Nutrition	U4	2014		
Jiahui Pang	NUTR 491 (1h)	Nutrition	U4	2014		

[1] Undergraduate research supported by the Department of Nutrition and Foods Science
[2] Undergraduate research supported by the College of Agriculture and Life Science and the Department of Nutrition and Foods Science

E. My Role in Obtaining Funds to Support My Teaching Program

Over the past five years, I have obtained extramural funds to support my teaching program. As the Principal Investigator, I received a Junior Faculty Award from the American Diabetes Association for a total of $386,400 (the actual funds after mandatory cuts from the original budget of $414,000, 01/01/2010 - 12/31/2012). This Award includes the support for graduate research. I also receive a Beginning Grant-in-Aid (BGIA) from the American Heart Association for a total of $140,000 (01/01/2012 - 12/31/2013). This BGIA provides support for graduate students. In addition, I serve as a Co-Investigator for a Basic Science Award (BSA) funded by the American Diabetes Association for a total of $322,000 (the actual funds after mandatory cuts from the original budget of $345,000, 01/01/2010 - 12/31/2012). This Award allocates funds ($22,594) to my research program. With the support of this BSA, I have incorporated new research data for classroom teaching. As a Co-Investigator, I also receive funds ($14,090) from another BGIA funded by the American Heart Association, which provides supports for my research involving graduate students. In April 2013, I received two R01 grants ($1,604,850 for 04/15/13-03/31/18 and $1,257,578 for 05/05/2013-04/30/2017) from the National Institutes of Health to support my nutrition research. Since my appointment at Texas A&M University, I have been extremely active in securing grants as evidenced by my submission of more than 30 proposals over the past six years. All my current pending proposals include an education component to support graduate students.

F. Seminars and Guest Lectures

TAMU seminars and guest lectures

1. 10/02/2007: PFKFB Genes and Metabolic Diseases, Invited talk
   The Intercollegiate Faculty of Nutrition, Texas A&M University, College Station, TX.
2. 03/26/2008: Role of Liver in Metabolic Regulation – Perspectives of Nutrition and Physiology, Guest lecture,
   FSTC 489 (Special Topics in Probiotics & Microbiology) students
3. 03/19/2009: Chinese Food and Culture, Guest lecture,
   FSTC 489 (Special Topics in Religious and Ethnic Food) students
4. 03/29/2010: Chinese Food and Culture, Guest lecture
   FSTC 489 (Special Topics in Religious and Ethnic Food) students
5. 09/06/2010: Novel Aspects of Overnutrition-associated Adipose Tissue Inflammatory Response and Systemic Insulin Resistance, Invited talk
   The Intercollegiate Faculty of Nutrition, Texas A&M University, College Station, TX.
6. 11/1/2010: Chinese Food and Culture, Guest lecture
   FSTC 489 (Special Topics in Religious and Ethnic Food) students
7. 02/22/2011: Regulation of Adipose Tissue Inflammatory Response and Systemic Insulin Resistance Independent of Adiposity, Invited talk
   Department of Biology, Texas A&M University, College Station, TX.
8. 03/17/2011: Role of Adipose Tissue in Fatty Liver Disease: Adiposity versus

Inflammation, Invited talk, the Institute of Bioscience and Technology, Texas A&M Health Science Center, Houston, TX.

9. 04/14/2011: Cell Signaling: Perspectives in Nutritional Physiology, Guest lecture, BIOL 613 (Cell Biology) students, Department of Biology, Texas A&M University, College Station, TX.
10. 11/02/2011: Chinese Food and Culture, Guest lecture
NUTR 415 (Special Topics in Religious and Ethnic Food) students
11. 12/08/2011: Metabolic Regulation of Adipose Tissue Inflammatory Response in Obesity, Invited talk
Cardiovascular Research Institute, Texas A&M University Health Science Center, College Station, TX.
12. 04/12/2012: Cell Signaling: Perspectives in Nutritional Physiology, Guest lecture, BIOL 613 (Cell Biology) students, Department of Biology, Texas A&M University, College Station, TX.
13. 10/10/2012: Lipid and Health: Hepatic Events of Palmitoleate Supplementation, Guest lecture, NUTR 289 (Current Perspectives in Nutrition) students
14. 10/31/2012: Chinese Food and Culture, Guest lecture
NUTR 300 (Religious and Ethnic Foods) students
15. 12/07/2012: Metabolic Regulation of Adipocyte-macrophage Crosstalk in Obesity, Seminar talk,
The Center for Biological Clocks Research at Texas A&M
16. 05/10/2013: Circadian Clocks Regulation of Macrophage Activation and Insulin Resistance in Obesity. Seminar talk,
The Center for Biological Clocks Research at Texas A&M
17. 09/09/2013: Health Obesity: PFKFB3 Uncoupling Fat Deposition and Inflammation, Invited talk, Toxicology seminar series, Texas A&M University, College Station, TX.
18. 10/28/2013: Chinese Food and Culture, Guest lecture
NUTR 300 (Religious and Ethnic Foods) students
19. 05/09/2014: Myeloid Cell-specific Circadian Clock Dysregulation Exacerbates Insulin Resistance during obesity, Seminar talk,
The Center for Biological Clocks Research at Texas A&M
20. 05/15/2014: Grand Challenge: Obesity and Metabolic Diseases
Invited talk,
COALS Grand Challenge Mini-Symposia, Texas A&M
21. 10/31/2014: Texas A&M Nutrition Obesity Research mini-symposium
Invited talk,
College Station, Texas A&M University
22. 11/06/2014: Circadian Dysregulation and Inflammation during Obesity
Invited talk,
Human Health and Kinesiology seminar series, Texas A&M University, College Station, TX.
23. 11/17/2014: Chinese Food and Culture, Guest lecture
NUTR 300 (Religious and Ethnic Foods) students

Other universities (state, national, and international)

1. 02/04/2009: PFKFB Genes and Metabolic Diseases, Invited talk
   UT Southwestern Medical Center at Dallas, Dallas, TX, the obesity outreach program
2. 10/17/2010: Regulation of Overnutrition-associated Adipose Tissue Inflammatory Response and Systemic Insulin Resistance: Novel Concepts, Invited talk for 110th Anniversary of Tongji Hospital
   Tongji Hospital, Tongji Medical College of Huazhong University of Science and Technology, Wuhan, China
3. 10/23/2010: A Novel Role for Adipose Tissue in NAFLD/NASH, Invited talk
   The Institute of Hepatology, Peking University Health Science Center, Beijing, China
4. 04/20/2012: Metabolic and Inflammatory Aspects of Palmitoleate Supplementation: Good and Bad, Invited talk
   University of Illinois at Urbana Champaign, Champaign, Illinois,
5. 07/17/2012: Metabolic Regulation of Obesity-associated Risk in Relation to Atherosclerosis, Invited talk
   The Third Hospital of Sun Yat-sen University, Guangzhou, China
6. 07/18/2012: Healthy Obesity: Dissociation of Fat Deposition and Inflammatory Responses in Adipose and Liver tissues, Invited talk
   Union Hospital, Tongji Medical College of Huazhong University of Science and Technology, Wuhan, China
7. 11/08/2013: Uncoupling Fat Deposition and Inflammation in Obesity
   Invited talk
   University of North Dakota, Grand Forks, North Dakota
8. 07/05/2014: Circadian Clock Dysregulation and Diabetes
   Invited talk
   The 6th Union Hospital Endocrinology Forum, Wuhan, China
9. 07/05/2014: PFKFB3 Control of Tongue Caner by Responding to Circadian Clock Outputs, Invited talk
   Union Hospital, Tongji Medical College, Wuhan, China
10. 07/07/2014: It's all in the timing: Circadian Clocks, Macrophage Activation, and Insulin Resistance, Invited talk
    Peking University Shenzheng Graduate School, Shenzheng, China
11. 07/08/2014: Circadian Clock Regulation of Macrophage Activation and Insulin Sensitivity in Obesity, Invited talk
    The Third Hospital of Sun Yat-sen University, Guangzhou, China
12. 07/09/2014: NAFLD Pathophysiology and Intervention: New Aspects
    Invited talk
    Hubei Hospital of Chinese Medicine, Hubei University of Chinese Medicine, Wuhan, China
13. 07/14/2014: Circadian Clock Dysregulation Underlies Inflammation and Insulin Resistance in Obesity, Invited talk
    Tongji Hospital of Tongji Medical College, Wuhan, China
14. 11/10/2014: Uncoupling Fat Deposition and Inflammation in Obesity

Invited talk
Virginia Tech, Blacksburg, VA

Professional Societies (8 lectures at the National level, detailed in **Section X**, item **G)**

G. Sample Comments from Students I Taught

Self evaluation:
I believe my teaching is highly effective. The incorporation of research data into my classroom presentations has made course content interesting and attractive. Additionally, the ways that I connect nutrient metabolism and human diseases have made course content highly applicable to health promotion and disease prevention. As supported by student comments, I care about my students, about motivating their desire to learn and contributing to their successes.

Sample comments were obtained from TAMU teaching evaluation forms.

- Comments from NUTR 470 classes (Fall, 2007 – Fall, 2011)

"Very knowledgeable about the subject, he enjoyed teaching."
"I have really enjoyed taking your Nutrition 470 course this semester, and I have been particularly interested in the research findings you mention during class."

"The instructor is very enthusiastic. His lectures integrate important and interesting concepts of Nutrition, Physiology, and Biochemistry."

"Willing to work with students"; "Great professor, would take again"

"Well put together lectures. He enjoyed teaching & wanted to share his knowledge."

"Cares about students learning & tries to teach accordingly"

"Truly cared about the success of his students, encouraged questions provided resources for further information (research opportunities)"

"Great teacher, very explanatory of concepts and easy to understand, I enjoyed this class very much"; "Very respectful & helpful to all students"

"I am so glad I took this course from such a knowledgeable professor. I liked the pace we had for learning in this class and liked how professor Wu repeated concepts multiple times. I learned a lot from his teaching style."

"He is very organized with his lecture notes. Clear objective for each section in the semester exam comes straight out of notes, so it's easier to study for. He cares whether we learned and is always open for questions & help."

"Thank you for teaching—you made it interesting."

"Excellent teacher, very knowledgeable and enthusiastic, always prepared."

"One of the best classes I've taken over the last four years of college, His slide presentations were amazing, very descriptive and could stand alone."

"Course material was good and contained the information that was expected"

"Very organized and communicated thoroughly what information was needed for exams"

"Dr. Wu was very enthusiastic about teaching the class and knew the information very well and was able to communicate it thoroughly."

"Overall information summarizes what we have learned in the past 4yrs."
"Emphasizing key points, integrating nutritional information"
"Excellent professor, very knowledgeable and enthusiastic about the material"

"Dr. Wu was very enthusiastic and passionate about the material"

- Comments from NUTR 681 class (Fall, 2011)

"Lots of materials were covered in the course. We have the speakers talk about molecular biology and also people from the clinical field. We also get to know the research of our own faculty."

"Very encouraging and passionate with the course and give clear instructions about the course. Very easy to communicate and give us reasonable workload"

"I liked the diverse speakers that came and spoke to us this semester and I greatly enjoyed listening to the in house speaking."

"Very helpful feedback regarding the summarize I wrote about two different speaking"

"Nice, friendly, helpful"; "Vast topics covered by leading scientists"

V. RESEARCH

A. Program Statement

Overnutrition is a causal factor of many metabolic diseases including type 2 diabetes, non-alcoholic steatohepatitis, and atherosclerosis. These diseases constitute the major threat to human health and appear to be attributable to overnutrition-associated inflammation. However, it remains poorly understood exactly how inflammation interacts with metabolism to cause these metabolic diseases. Additionally, the effective ways for curing these metabolic diseases are still lacking or limited. As such, my career goal in research is to elucidate the interaction between nutrient metabolism and inflammation so that evidence-based novel

approaches can be developed for preventing and/or treating these metabolic diseases. My areas of emphasis include inflammation, hepatology, integrative physiology and metabolism, and atherosclerosis. My current objectives are to identify the mechanisms by which diets modulate metabolic genes and/or inflammatory genes as it relates to the pathogenesis of overnutrition-associated type 2 diabetes, steatohepatitis, and atherosclerosis, and to provide essential information for developing novel preventive and/or therapeutic approaches, i.e., natural plant extracts, dietary fish oils, and/or pharmacological agents, for metabolic diseases. My research program is integrated well with my teaching program. In particular, my Master and PhD students have been actively involved in my research program. With the support from extramural research funds, I have been able to further strengthen my teaching program by training more graduate students. Moreover, the new knowledge generated by my research program is disseminated to research communities in a timely manner through key peer-reviewed scientific journals. I have also incorporated the new knowledge into my teaching program by using my research data to explain nutrition-related concepts during my classroom teaching. To contribute to AgriLife Extension and service, I have presented my research in several AgriLife Extension and service formats. These formats include the obesity outreach program directed by UT Southwestern Medical Center at Dallas and the Texas Science Partners. My research accomplishments have also enabled me to serve as a member of the peer-review committee of the American Heart Association.

B. Major Accomplishments

- I demonstrated that cytokines such as TNFα and IL-6 mediate endotoxin-induced liver damage (***Chinese Medical Journal***, 1995,108:548). I cloned the coding sequence of the second envelope glycoprotein (E2) of a Chinese isolate of hepatitis C virus (HCV), and pioneered HCV DNA vaccine in China (***Chinese Medical Journal***, 1999, 112:166).

- I validated that hepatic fructose-2,6-bisphosphate regulates liver glucose production, thereby blood glucose homeostasis *in vivo* (***J Clin Invest***, 2001,107:91; ***Am J Physiol Endocrinol Metab***, 2002,282:E38; and 2006,291:E536).

- I demonstrated for the first time that high levels of fructose-2,6-bisphosphate stimulate glucokinase gene expression without the requirement of insulin (***Endocrinology***, 2004,145:650). With support from the Minnesota Obesity Center, I demonstrated for the first time that enhancing glycolysis separately at two steps differentially alters hepatic lipogenesis (***Cell Metabolism***, 2005,2:131).

- After arriving at TAMU, I started my independent research. I demonstrated that PFKFB3, an adipocyte-abundant gene that stimulates glycolysis, regulates insulin sensitivity and glucose homeostasis (***J Biol Chem*** 2010, 285: 3713). This paper was reported by *AgriLife news* of TAMU (http://agnews.tamu.edu/showstory.php?id=1596). The pertinent news release was cited by media including those that are from India, China, and Ghana. Indeed, the three biggest Chinese media, namely Xinhua Net, CCTV, and People's Daily, cited the story. This JBC paper was featured by the NAVBO Vascular Biology Publications Alert. NAVBO is the North American Vascular Biology Organization.

- My research on adipose tissue inflammatory response was funded by the *American Diabetes Association* in February of 2010 (http://www.diabetes.org/news-research/research/research-database/regulation-of-adipose-tissue.html).This achievement was recognized by the College of Agriculture and Life Science.

- I demonstrated for the first time that PFKFB3 is needed for the insulin-sensitizing and anti-diabetic effect of active PPARγ (***J Biol Chem*** 2010, 285: 23711). Additionally, I proposed for the first time that PFKFB3 is a metabolic regulator that critically controls macrophage polarization (funded by the *American Heart Association* in January 2012).

- I demonstrated for the first time that the PFKFB3 in adipocytes enables a critical role for adipose tissue in altering lipid profile in a pattern to stimulate fat deposition but to inhibit inflammatory responses and to improve insulin sensitivity (***J Biol Chem*** (2012, 287:21492–21500). The story that PFKFB3 serves as a gene for "healthy" obesity was reported by *AgriLife news* of Texas A&M University (http://today.agrilife.org/2012/05/31/healthy-obesity-research/). News release of this paper was also reported by local media including *ABC40* and *KAGS news*. Additionally, in the June 6 2012 issue of TAMU President's news letter, **President Loftin** recognized my efforts in studying "healthy" obesity.

- I demonstrated that palmitoleate protects against liver inflammatory response while increasing hepatic steatosis (***PLoS ONE***, 2012, 7(6): e392862012).

- I was invited to write a review addressing glycolysis in the control of glucose homeostasis (***Acta Pharmaceutica Sinica B***, 2012, 2(4):358–367).

- Through collaborations, I have actively studied roles of inflammatory and signaling molecules including $A_{2A}R$ and IKKβ in regulating atherosclerosis (***ATVB*** 2009, 29:1046; ***ATVB*** 2010, 30:915; ***ATVB*** 2010,30:1000; ***ATVB*** 2013, 33:241-8; ***ATVB*** 2014, 34:1231-1239).

- Through collaboration, I have also been involved in research to identify and characterize a novel regulator of macrophage polarization (***Circulation*** 2012, 125: 2892-2903).

- I proposed a role for intestine inflammation in insulin resistance and diabetes (***J Nutr Biochem*** 2013, 24:770-5).

- I proposed a role for inducible 6-phosphofructo-2-kinase in regulating neuronal glycolysis in relation to feeding control (***J Nutr Biochem*** 2013, 24: 1153-1158).

- I elucidated new mechanisms by which metformin improves hepatic steatosis and suppresses liver inflammation (***PLoS ONE***, 2014, 9:e91111).

- I demonstrated, for the first time, how overnutrition induces peripheral circadian clock dysregulation in the context of inflammation and metabolic disease (***J Biol Chem*** 2014, 289:16374-16388).

- Since 2010, I have served as a member of the peer-review committee of the *American Heart Association*. Additionally, I was invited by the University of Minnesota to serve as an external reviewer for Minnesota Agriculture Experimental Station research proposals.

- In 2009, I was invited to serve as an Ad hoc reviewer for research proposals assigned by ***Hepatobiliary Pathophysiology Study Section*** of the *National Institute of Health*.

- Since spring 2011, I have been served as an oversea expert to review proposals submitted to Chinese National Science Foundation.

- In 2012, I was invited to serve as an Early Career Reviewer for ***Cellular Aspects of Diabetes and Obesity Study Section*** – CADO of the NIH.

- In Dec 2013 and Feb 2014, I was invited to serve as an Ad hoc Reviewer for ***Integrative Physiology of Obesity and Diabetes Study Section*** – IPOD of the NIH.

- In Jan 2014, I was invited to serve as an Ad hoc Reviewer for ***Heart, Lung, and Blood Program*** – HLBP of the NIH.

C. My Role in Obtaining Funds to Support My Research Program

Over the past five years, I have been extremely active in grant acquisition in order to obtain both extramural and internal funds to support my research program. In my first two years after my appointment at Texas A&M University, I attended two Office of the Vice President for Research (VPR)-sponsored semester-long grant writing workshops. In April of 2008, I was selected to participate in a grant writing workshop co-sponsored by the American Society of Nutrition/Institute of Food Technologists (ASN/IFT) in Washington DC. Additionally, I have been active in consulting with my mentors, Drs. Edward Harris and Rosemary Walzem, as well as my senior colleagues, Drs. Joanne Lupton and Robert Chapkin, on how to effectively write research proposals. As the Principal Investigator, I received a Junior Faculty Award (JFA) ($386,400, the actual funds after mandatory cuts from the original budget of $414,000, 01/01/2010 - 12/31/2012) from the American Diabetes Association in February of 2010. This JFA provides support for my current research on defining the mechanisms underlying overnutrition-induced adipose tissue inflammatory response. In 2012, I received a Beginning Grant-in-Aid (BGIA) from the American Heart Association at a total amount of $140,000 (01/01/2012 - 12/31/2013). This BGIA provides support for graduate students. Meanwhile, I am serving as a Co-Investigator for a Basic Science Award (BSA) funded by the American Diabetes Association. This BSA, at a total amount of $322,000 (the actual amount after mandatory cuts from the original budget of $345,000), allocates funds ($22,594) to support my research program on defining the role of inflammation-regulatory molecules in the regulation of overnutrition-associated insulin resistance (01/15/2010 - 01/14/2013). In April 2013, I received two R01 grants ($1,604,850 for 04/15/13-03/31/18 and $1,257,578 for 05/05/2013-04/30/2017) from the National Institutes of Health to support my nutrition research address metabolic regulation of

adipocyte-macrophage crosstalk in obesity and the protective role of A2A receptor for non-alcoholic fatty liver disease. As a Co-Investigator, I also receive funds ($14,090) from another BGIA funded by American Heart Association to support my research involving graduate students (07/0/2011 - 06/31/2013). Totally, I have submitted more than 30 major proposals over the past six years.

VI. EXTENSION

I do not have formal appointment in Texas AgriLife Extension. However, I strongly support Extension activities. For the past five years, my extension activities include my presentations at University of Texas Southwestern Obesity Alliance Weekly Seminar Series on Nutrition, Metabolism and Obesity, which is an outreach program funded by the State of Texas, and at the Texas Science Partners. I would also be very interested in collaborating with extension scientists to perform translational research pertinent to "healthy" obesity.

VII. SERVICE

A. Service to Department, College, and University

2007-present: Departmental Safety Committee, member, Chair (2008 -2009)
2007-present: Departmental Facilities Committee, member, Chair (2014)
2009: Agricultural and Natural Resources Policy (ANRP) – screening committee
2009: Referee for poster section of the Intercollegiate Faculty of Nutrition Research Symposium
2010-2012: Member of graduate admission committee, Intercollegiate Faculty of Nutrition
2010-present: Departmental Award Committee, member, Co-Chair (2010-present), Chair (2012, 2013)
2011: Nutrition Interdisciplinary Degree Program (NUTR IDP) Transition Committee
2012: Departmental By-laws Committee
2012: Departmental Ad hoc Committee for Assessing Technical Knowledge
2012-present: Member of graduate admission committee, TAMU Nutrition graduate program
2013-present: Departmental Ad hoc Committee for Assessing Technical Knowledge
2013-present: Graduate Program Committee of Nutrition and Food Science
2013: Search committee for Head of Department of Nutrition and Food Science
2014: Search committee for Assistant Professor of Department of Nutrition and Food Science

B. Service to National and International Societies, Organizations, and Governments

Professional memberships and activities

2001-present: Membership, American Diabetes Association

2002-2005: Full membership, Sigma Xi, The Scientific Research Society
2006: Senior editor, Medjaden Services Ltd.
2007-2012: Full membership, Intercollegiate Faculty of Nutrition
2007: Consultant, MEDACorp
2009-present: Membership, Chinese American Diabetes Association
2009-present: Full membership, American Society of Nutrition
2011-present: Co-Chair, Nutrient-Sensing Mechanisms (mini-symposium), Experimental Biology 2011, and 2012
2012-present: ASN, committee members, Nutrient-Sensing Mechanisms

Grant Review

2009: External reviewer for Minnesota Agriculture Extension research proposals
2009: Ad hoc reviewer for Hepatobiliary Pathophysiology Study Section – HBPP, National Institutes of Health (NIH/NIDDK)
2010-present: Member of peer-review committee (national)*****, Vascular Wall Biology – Atherosclerosis study section, American Heart Association
2011-present: Member of peer-review committee, Life Science and Medical Science Sections, Chinese National Science Foundation
2012: Early Career Reviewer, Cellular Aspects of Diabetes and Obesity Study Section – CADO, National Institutes of Health (NIH/NIDDK)
2013: Ad hoc Reviewer, Integrative Physiology of Obesity and Diabetes Study Section – IPOD, National Institutes of Health (NIH/NIDDK)
2014: Ad hoc Reviewer, Heart, Lung, and Blood Program Project Review Committee – HLBPP/NIH
2014: Ad hoc Reviewer, Integrative Physiology of Obesity and Diabetes Study Section – IPOD, National Institutes of Health (NIH/NIDDK)

***** Regular members are appointed to staggered terms of three-four years beginning January 1 through December 31. Qualifications include: 1) minimum Assistant Professor career level or equivalent; 2) nationally recognized competence in one or more fields of biomedical research; 3) current or recent independent peer reviewed funding typically at the national level; or equivalent research; 4) consistent record of peer reviewed publications within the past 5 years; 5) knowledge of the AHA and commitment to its mission; 6) mature judgment and objectivity; and 7) ability to work effectively in a group.

Journal Review

2005-2008: Member of special editorial board, *Chinese J Gastroenterol Hepatol*
2009-present: Ad hoc reviewer for *Nutrition Research; Obesity*
2010-present: Ad hoc reviewer for *Experimental Biology and Medicine*
2010-present: Member of editorial board, *Journal of Nutrition and Food Science*
2012-present: Ad hoc reviewer for *British Journal of Nutrition; PLoS ONE; International Journal of Biological Sciences; Molecular and Cellular Biochemistry; Journal of Molecular Endocrinology; International Journal of Obesity; and Journal of Lipid Research*

Summary of Service Activities since your Last Promotion (Please list the name of each entity and the role you played)

Time Period	Professional Societies	Editorial Boards	Other External Entities	University and/or Agency Committees	Departmental Committees
2007-2012	American Society of Nutrition at Experimental Biology (Co-Chair, Nutrient-Sensing Mechanisms (mini-symposium)	Journal of Nutrition and Food Science (Editorial board) Nutrition Research (Reviewer) Obesity (Reviewer) Experimental Biology and Medicine (Reviewer) British Journal of Nutrition (Reviewer) PLoS ONE (Reviewer) International Journal of Biological Sciences (Reviewer) International Journal of Obesity (Reviewer) Journal of Molecular Endocrinology	External reviewer for Minnesota Agriculture Extension research proposals Hepatobiliary Pathophysiology Study Section – HBPP, National Institutes of Health (NIH/NIDDK) (Ad-hoc Reviewer) Vascular Wall Biology – Atherosclerosis study section, American Heart Association (Full member, peer-view committee) Life Science and Medical Science Sections, Chinese National Science Foundation (oversea reviewer) Cellular Aspects of Diabetes and Obesity Study Section – CADO, NIH/NIDDK (Early Career Reviewer)	Agricultural and Natural Resources Policy (ANRP) (faculty and staff screening committee) IFN (member of graduate admission) Intercollegiate Faculty of Nutrition (IFN) Research Symposium (Judge) Nutrition Interdisciplinary Degree Program (NUTR IDP) Transition Committee (member) Nutrition Graduate Program Committee (member) Nutrition and Food Science Department Head Search Committee (member)	Departmental Safety Committee (member, Chair) Departmental Facilities Committee (member) Departmental Award Committee (member, Co-Chair); Departmental Committee Bylaws (member)

		(Reviewer) Journal of Lipid Research (Reviewer)	Integrative Physiology of Obesity and Diabetes Study Section – IPOD, NIH/NIDDK (Ad hoc Reviewer)		

VIII. INTERNATIONAL

Since 2011, I have served as a reviewer for Life Science and Medical Science Sections of Chinese National Science Foundation.

Since 2011, I have collaborated with investigators in research to define the mechanisms by which herbal medicine protects against non-alcoholic fatty liver disease.

IX. GRANTS AND CONTRACTS AWARDED

Grant Summary Charts are listed at the end of this CV.

Funding Received

Internal non-competitive (Gift)

Graduate Research Assistantship 09/01/07-08/31/10 $25,000
Dr. Joanne Lupton (William W. Allen Foundation)
Dr. Lupton allocates funds for junior faculty to support graduate students.

Internal competitive

Undergraduate student research funding Spring 2011 $600
Mr. Kha Lai is supported by departmental funds to conduct undergraduate research in the laboratory of Dr. Chaodong Wu

Undergraduate mentorship grant Summer 2011 $500 + $500
Mr. Shih Lung Woo is supported by funds from the College of Agriculture and Life Science and by the Department of Nutrition and Food Science.

Grand Challenge Grant Wu (PI)/Chew (MPI) 12/05/14-08/31/17
College of Agriculture and Life Sciences of Texas A&M University $150,000
Big Idea: Formation of Texas A&M Nutrition Obesity Research Center
The goal of this grant is to obtain seed funding to drive an integrated program on nutrition obesity research.
Role: PI

Local Competitive

Pilot & Feasibility Research Award, Wu (PI) 04/01/02-03/31/03 $29,700
Minnesota Obesity Center
Reduction of adiposity by increasing fructose-2,6-bisphosphate concentration in obese mice
This project determines the effect of enhancing hepatic glycolysis on reducing obesity.
Role: PI

Dr. Wu oversees the entire project, which provides funds to cover research supply only.

Research Award, Wu (PI) 9/01/04-8/30/05 $15,000
Minnesota Medical Foundation
A pair-feeding study for regulation of energy balance by enhancing hepatic glucose metabolism in obese mice
The goal of this project is to determine the extent to which pair-feeding modulates the effect of enhancing hepatic glycolysis on the regulation of energy balance.
Role: PI
Dr. Wu oversees the entire this project, which provides funds to cover research supply and part of technician's salary.

Pilot & Feasibility Research Award, Wu (PI) 02/01/05-01/31/06 $15,700
Minnesota Obesity Center
Reduction of adiposity by increasing fructose-2,6-bisphosphate concentration in obese mice
This is one-year extension of the P&F Award funded in 2002.
Role: PI
Dr. Wu oversees the entire project, which provides funds to cover research supply only.

External Competitive

1-10-JF-54 Junior Faculty Award, Wu (PI) 01/01/10-12/31/12 $386,400
American Diabetes Association
Regulation of adipose tissue inflammatory response in diet-induced diabetes: the role of PFKFB3
The goal of this study is to gain insight of the novel and unique role played by PFKFB3 in regulating the adipose tissue inflammatory response in diet-induced diabetes.
Role: PI (25%)
Dr. Wu oversees the overall of this project and assists lab staff in the design of experiments, interpreting results, and writing the resultant papers.

12BGIA9050003 Beginning Grant-in-Aid, Wu (PI) 01/01/12-12/31/13 $140,000
American Heart Association
PFKFB3 regulation of macrophage polarization and atherosclerosis
The goal of this project is to investigate the regulatory mechanisms of PFKFB3 for macrophage polarization in relation to the development of atherosclerosis.
Role: PI (15%)
Dr. Wu oversees the overall of this project and assists lab staff in the design of experiments, interpreting results, and writing the resultant papers.

1R01DK095828-01A1, Wu (PI) 05/05/13-04/30/17
NIDDK/NIH $1,257,578
Metabolic regulation of adipocyte-macrophage crosstalk in obesity
The goal of this study is to define the novel role of PFKFB3 in regulating adipocyte-macrophage crosstalk in relation to insulin resistance in obesity.

Role: PI (30%)
Overlap: There is scientific overlap (less than $40,000) between Aim 1 of 12BGIA9050003 and part of Aim2a of this R01 grant.
Dr. Wu oversees the overall of this project and assists lab staff in the design of experiments, interpreting results, and writing the resultant papers.

1R01DK095862-01A1, Wu (PI) 04/15/13-03/31/18
NIDDK/NIH $1,604,850
Protective role of adenosine 2A receptor in NAFLD
The goal of this study is to define a novel protective role for adenosine 2A receptor ($A_{2A}R$) in non-alcoholic fatty liver disease (NAFLD).
Role: PI (25%)
No overlap
Dr. Wu oversees the overall of this project and assists lab staff in the design of experiments, interpreting results, and writing the resultant papers.

1-13-BS-214-BR Research Award (Bridge funding), Wu (PI) 11/01/13-10/31/14
American Diabetes Association $60,000
Hepatocyte adenosine 2A receptor regulates liver lipogenesis and inflammatory responses in DIO
The goal of the bridge funding is to generate new preliminary data for resubmission to ADA or other funding agency.
Role: PI
No overlap

1-10-BS-76 Research Award, Huo (PI) 01/01/10-12/31/13 $322,000*
American Diabetes Association
Macrophage A_{2A} receptor regulates glucose homeostasis
The goal of this study is to define the mechanisms underlying the role of macrophage $A_{2A}R$ in the regulation of glucose homeostasis
Role: Co-Investigator (5%)
* A total amount of $ 22,594 is dedicated to Dr. Wu's research.
Dr. Wu serves as a Co-Investigator to oversee research conducted in the Wu Lab to determine the effect of macrophage $A_{2A}R$ deficiency on diet-induced insulin resistance in the liver and adipose tissue.

11BGIA7850037, Zhou (PI) 07/01/11-06/30/13 $140,000*
American Heart Association
Regulation of CVD risk in obesity: the role of macrophage miR-223 in adipose tissue inflammation
The goal of this project is to investigate the regulatory mechanisms of miR-223 in macrophage function that contributing to the pathogeneisis of obesity related cardiovascular diseases.
Role: Co-Investigator (5%)
* A total amount of $14,090 is dedicated to Dr. Wu's research.

Dr. Wu serves as a Co-Investigator to oversee research conducted in the Wu Lab to determine the effect of miR-223 deficiency on diet-induced adipose tissue inflammation and systemic insulin resistance.

Scored but unfunded proposals

Research Grant, Wu (PI: Wu) 03/01/12-02/28/17 $1,831,250
NIH/NIDDK
microRNA-223 regulation of insulin sensitivity *
The goal of this study is to define a novel role for the miR-223 in macrophages in regulating macrophage polarization and systemic insulin sensitivity.
Role: PI (30%) 3.6 calendar
* Impact/Priority score: 49 Percentile: 46

Research Grant, Wu (PI) 07/01/11-06/30/16 $1,824,915
NIH/NIDDK
Novel role for adipose tissue in NASH
The goal of this study is to define a novel role for adipose tissue in regulating diet-induced liver inflammatory response in a hepatic steatosis-independent manner.
Role: PI (35%) 4.2 calendar
* Impact/Priority score: 59 Percentile: 54

Research Grant, Wu (PI/MPI: Wu/Huo) 07/01/11-06/30/16 $424,625
NIH/NIDDK
Macrophage AMPKalpha1 regulates overnutrition-associated insulin resistance *
The goal of this study is to define the role of the AMPKa1 in macrophages in regulating diet-induced insulin resistance.
Role: PI (15%) 1.8 calendar
* Impact/Priority score: 49

Research Grant, Wu (PI: Huo) 07/01/11-06/30/16 $2,147,845
NIH/NIDDK
Role of adenosine 2A receptor in regulating insulin resistance *
The goal of this study is to define the role of the $A_{2A}R$ in macrophages, hepatocytes, and/or adipocytes in regulating diet-induced insulin resistance.
Role: Subcontract PI (15%) 1.8 calendar
* Impact/Priority score: 25 Percentile: **16**
NIDDK payline was changed from **17** to **15** percentile after April 2011 because of budget cut enforced by the US Congress.

Research Grant, Wu (PI: Wu) 04/01/10-03/31/12 $146,500
NIH/NIDDK
Role of Adipose PFKFB3 in Controlling the Pathogenesis of NAFLD *
The goal of this study is to define the role of the $A_{2A}R$ in macrophages, hepatocytes, and/or adipocytes in regulating diet-induced insulin resistance.

Role: Subcontract PI (10%) 1.2 calendar
* Impact/Priority score: 38

X. PUBLICATIONS AND PROFESSIONAL OUTPUT (from oldest to most recent)

A. Publications and Scholarly Work

Summary of Published Scholarly Work

Type	Since Appointment at TAMU	Career
Refereed/Peer-Reviewed	14	41
Editor-reviewed		3
Scientific Abstracts	11	26
Books		
Chapters in Books		3
Research Agency Publications		
Extension Agency Publications		
Popular/Industry Articles		

Important Note

1. Principal/senior author(s) is or are referred to as corresponding/co-corresponding author(s) and/or the last author.

Impact factors and Eigenfactors of selected scientific journals (as of 2011)

Journal	Impact factor	Eigenfactor[1]
Circulation	14.739	0.33959
Cell Metabolism	13.668	0.07160
J Clin Invest	13.069	0.21856
Diabetes	8.286	0.10432
Cell Mol Life Sci	6.570	0.06525
Arterioscler Thromb Vasc Biol	6.368	0.08257
J Biol Chem	4.773	0.74298
Am J Physiol Endocrinol Metab	4.746	0.04827
Mol Endocrinol	4.544	0.03566
Endocrinology	4.459	0.08613
PLoS ONE	4.092	0.50216
J Nutr Biochem	3.891	0.01069

Eur J Biochem (FEBS Journal)	3.790	0.05521
Genesis	2.527	0.01271

[1] Eigenfactor is a rating of the importance of a scientific journal. As of 2011, J Biol Chem is ranked #7 among all scientific journals. The best is Nature, which has a value of 1.65658.

B. Refereed/Peer-Reviewed Research Articles

Wu C was listed as the principal/senior author in 14 articles.
Guo X, a PhD student of Wu C, was listed as a co-author in 9 articles and as the first author in 5 articles.
Xu H, a PhD student of Wu C, was listed as the first and/or co-author in 9 articles.
Halim V, a MS student of Wu C, was listed as a co-author in 4 articles.
Woo SL, a PhD student of Wu C, was listed as the first and/or co-author in 9 articles.

1. Luo M. Li MZ, Ye WY, Lin BY, and **Wu CD**. Changes in the levels of plasma tumor necrosis factor in rabbits with endotoxin-induced DIC. ***Chin Criti Care Med,*** 1995;7:65-67.
2. **Wu CD**, Li MZ, Zhang YP, Lin BY., Luo M., and Xu LJ. Effects of reduqing injection on plasma TNF-α and IL-6 levels in rabbits with endotoxin-induced DIC. ***Chin J Integra Tradi Wester Med,*** 1995, 15:356-358.
3. **Wu C.**, Li M., Chen C, Zhang M. Endotoxin-induced liver injury and plasma tumor TNFα, IL6 level changes in rabbits. ***Chin J Dig Dis,*** 1995, 15:256-258. Chinese version.
4. **Wu C.**, Li M., Chen C., and Zhang M. Endotoxin-induced liver injury and changes in the levels of plasma tumor necrosis factor-α and interleukin-6 in rabbits. ***Chin Med J,*** 1995,108:548-550. English version
5. **Wu CD**, Li MZ, Zhang MF, Wang KF., Xu LJ., Li HG. Effects of Traditional Chinese medicine reduqing on interleukin-6 and acute phase proteins in rabbits with endotoxin-induced disseminated intravascular coagulation. ***Chin Criti Care Med,*** 1996;8:3-4.
6. **Wu CD**., and Tao QM. Cloning and sequencing of E2/NS1 gene from a Chinese genotype III isolate of hepatitis C virus. ***Natl Med J China,*** 1998,78:115-117.
7. **Wu CD**., and Tao QM. Comparison between homologies of E2/NS1 gene from genotype III Chinese isolates of hepatitis C virus and that from reported isolates. ***Chin Med J,*** 1998,111:807-809.
8. **Wu CD**., Gao JE., and Tao QM. Stable expression E2 glycoprotein of hepatitis C virus in mammalian cell. ***Chin Biochem Mol Bio J,*** 1998,14:15-19.
9. **Wu CD**., and Tao QM. E2 glycoprotein of genotype III Chinese isolates of hepatitis C virus expressed in mammalian cell as antigen for anti-E2 detection. ***Chin Med Sci J,*** 1998,13:77-79.
10. **Wu CD**., Tao QM. Du SC and Chang JH. Amplification of E2/NS1 gene derived from a genotype III Chinese isolate of hepatitis C virus and construction of mammalian expression plasmid. ***J Beijing Med Univ,*** 1998,30:371.
11. **Wu CD**., Tao QM. and Feng B.F. Inducing antibody response against E2 glycoprotein of hepatitis C virus in BALB/C mice by plasmid DNA based immunization. ***J Beijing Med Univ,*** 1998,30:395-396.

12. **Wu CD**., and Tao QM. Homologies of E2/NS1 gene derived from a genotype III Chinese isolate of hepatitis C virus to that from reported isolates. ***Chin Biochem Mol Bio J,*** 1998,14:553-556.
13. **Wu CD.**, Tao QM., and Feng BF. Antibody response to E2 glycoprotein induced in mice by immunization of plasmid DNA containing sequence derived from a Chinese genotype III/2a isolate of hepatitis C virus. ***Chin Med J,*** 1999, 112:166-168.
14. Zhu C, **Wu C**., and Tao Q. Detection of antibody against E2 glycoprotein in sera from hepatitis C patients. ***Acta Universitatis Scieniae Medicinae Chongqince***. 1999,24:262-263.
15. Zhu C, **Wu C**., Tao Q, and Feng B. Enzyme immune assay for detecting antibody against hepatitis C virus E2 glycoprotein. ***Chin J Med Lab Sci,*** 1999,22:21-221.
16. Zhu C, **Wu C.**, Tao Q, Feng B. and Chang J. Expression of glycoprotein of hepatitis C virus in mammalian cell and application of purified protein for detection of antibody against E2 in hepatitis C patients. ***Chin J Hepatol,*** 1999, 7(4):214-6.
17. **Wu C.**, Okar D.A., Newgard C.B., and Lange A.J. Suppression of hepatic glucose production lowers blood glucose by overexpression of 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase in mouse liver. ***J Clin Invest,*** 2001,107:91-98.
18. **Wu C.**, Okar D.A., Newgard C.B., and Lange A.J. Increasing fructose-2,6-bisphosphate overcomes hepatic insulin resistance of type 2 diabetes. ***Am J Physiol,*** 2002, 282:E38-E45.
19. Choi I-Y. , **Wu C.**, Okar D.A., Lange A.J and Grutter R. Elucidation of the role of fructose-2,6-bisphosphate in regulation of glucose fluxes in mice using *in vivo* ^{13}C NMR measurements of hepatic carbohydrate metabolism. ***Eur J Biochem,*** 2002,269:4418-4426.
20. **Wu C.**, Okar D.A., Stoeckman A.K., Peng L.J., A.H. Herrera, J.E. Herrera, Towle H.C., and Lange A.J. A potential role for fructose-2,6-bisphosphate in insulin stimulation of hepatic glucokinase gene expression. ***Endocrinology,*** 2004,145:650-658.
21. Donthi R.V., Ye G., **Wu C.**, McClain D.A., Lange A.J., and Epstein P.N. Cardiac expression of kinase deficient 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase inhibits glycolysis, promotes hypertrophy, impairs myocyte function and reduces insulin sensitivity. ***J Biol Chem.*** 2004, 279: 48085-48090.
22. Baar R.A., Dingfelder C.S., Smith L.A., Bernlohr D.A., **Wu C.**, Lange A.J., and Parks E.J. Investigation of in vivo fatty acid metabolism in AFABP/aP2$^{-/-}$ mice. ***Am J Physiol,*** 2005, 288:E187-193.
23. Payne V.A., Arden C., **Wu C.**, Lange A.J. and Agius L. Dual role of phosphofructokinase-2/fructose bisphosphatase-2 in regulating the compartmentation and expression of glucokinase in hepatocytes. ***Diabetes,*** 2005,54:1949-1957.
24. **Wu C**., Kang J., Peng L-J., Li H., Khan S.A., Hillard C.J., Okar D.A., and Lange A.J. Enhancing hepatic glycolysis reduces obesity: Differential effects on lipogenesis depend on site of glycolytic modulation. ***Cell Metabolism***, 2005, 2: 131-140.
25. Niswender, C.M., Willis, B.S., Wallen A., Sweet I.R., Jetton T.L., Thompson B.R., **Wu C.**, Lange A.J., and McKnight G.S. Cre recombinase-dependent expression of a constitutively active mutant allele of the catalytic subunit of protein kinase A. ***Genesis***, 2005, 43: 108-118.

26. **Wu C**., Khan SA, Peng Li-Jen, Li H., Camela S., and Lange A.J. Perturbation of glucose flux in the liver by decreasing fructose-2,6-bisphosphate levels causes hepatic insulin resistance and hyperglycemia. ***Am J Physiol Endocrinol Metab,*** 2006, 291: E536-543.
27. Smith W.E., Langer S., **Wu C**., Baltrusch S., and Okar D.A. Molecular coordination of hepatic glucose metabolism by the 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase:Glucokinase complex. ***Mol Endocrinol.*** 2007, 21: 1478-1487.
28. Wang H., Zhang W., Zhu C., Bucher C., Blazar BR., Zhang C., Chen JF., Linden J., **Wu C** (***co-corresponding author***), and Huo Y. Inactivation of the adenosine A2A receptor protects apolipoprotein E–deficient mice from atherosclerosis. ***Arterioscler Thromb Vasc Biol*** 2009, 29:1046-1052.
29. Huo Y, Guo X (***PhD student***), Li H, Wang H, Zhang W, Wang Y, Zhou H, Gao Z, Telang S, Chesney J, Chen YE, Ye J, Chapkin RS, and **Wu C** (***corresponding author***). Disruption of inducible 6-phosphofructo-2-kinase ameliorates diet-induced adiposity but exacerbates systemic insulin resistance and adipose tissue inflammatory response. ***J Biol Chem***, 2010, 285: 3713-3721. PMCID: PMC2823512
30. Wang H, Zhang W, Tang R, Zhu C, Bucher C, Blazar B, Geng J, Zhang C, Linden J, **Wu C** (***co-corresponding author***), and Huo Y. (2010). Adenosine receptor A_{2A} deficiency in leukocytes increases arterial neointima formation in apolipoprotein E–deficient mice. ***Arterioscler Thromb Vasc Biol***, 2010, 30:915-922.
31. Zhang W., Wang J., Wang H., Tang R., Belcher JD., Viollet B., Geng JG, Zhang C., **Wu C**, Slungaard A., Zhu C, and Huo Y. Acadesine inhibits tissue factor induction and thrombus formation by activating the phosphoinositide 3-kinase/Akt signaling pathway. ***Arterioscler Thromb Vasc Biol***, 2010, 30:1000-1006
32. Guo X (***PhD student***), Xu K, Zhang J, Li H, Zhang W, Wang H, Lange AJ, Chen Y, Huo Y, and **Wu C** (***corresponding author***). Involvement of inducible 6-phosphofructo-2-kinase in the anti-diabetic effect of PPARγ activation in mice. ***J Biol Chem***, 2010, 285:23711-23720. PMCID: PMC2911274
33. Zhuang G., Meng C., Guo X. (***PhD student***)., Cheruku PS., Shi L., Xu H. (***PhD student***), Li H., Wang G., Evans A., Safe S., **Wu C**. ***(co-corresponding author)***, and Zhou B. (2012) A novel regulator of macrophage activation: miR-223 in obesity associated adipose tissue inflammation. ***Circulation***, 2012, 125: 2892-2903.
34. Huo Y, Guo X (***PhD student***), Li H, Xu H (***PhD student***), Halim V (***MS student***), Zhang W, Wang H, Fan YY, Ong KT, Woo SL (***MS student***), Chapkin RS, Mashek DG, Chen Y, Dong H, Lu F, Wei L, **Wu C**. **(*corresponding author*)**. Targeted overexpression of inducible 6-phosphofructo-2-kinase in adipose tissue increases fat deposition but protects against diet-induced insulin resistance and inflammatory responses. ***J Biol Chem***, 2012, 287:21492–21500. PMCID: PMC3375570
35. Guo X. (***PhD student***), Li H., Xu H. (***PhD student***), Halim V. (***MS student***), Zhang W., Wang H., Ong K.T., Woo S.L. (***MS student***), Walzem R.L., Mashek D.G., Dong H., Lu F., Wei L., Huo Y, and **Wu C (*corresponding author*)**. Palmitoleate induces hepatic steatosis but suppresses liver inflammatory response in mice. ***PLoS One***, 2012, 7(6): e392862012. PMCID: PMC3387145
36. Monk JM, Hou TY, Turk HF, Weeks B, **Wu C**, McMurray DN, and Chapkin RS. Dietary n-3 polyunsaturated fatty acids (PUFA) decrease obesity-associated Th17 cell-mediated inflammation during colitis. ***PLoS One***, 2012, 7(11): e49739.PMCID: PMC3500317

37. Guo X. (***PhD student***), Li H., Xu H. (***PhD student***), Woo S.L. (***MS student***), Dong H., Lu F., Lange AJ, and **Wu C (*corresponding author*)**. (***Invited review***) Glycolysis in the control of blood glucose homeostasis. ***Acta Pharmaceutica Sinica B***, 2012, 2(4):358–367.
38. Guo X. (***PhD student***), Li H., Xu H. (***PhD student***), Halim V. (***MS student***), Thomas LN, Woo SL (***MS student***), Huo Y, Chen YE, Sturino JM, and **Wu C (*corresponding author*)**. Disruption of inducible 6-phosphofructo-2-kinase impairs the suppressive effect of PPARγ activation on diet-induced intestine inflammatory response. ***J Nutr Biochem***, 2013, 24:770-5. PMCID: PMC3584194
39. Wei S, Wang H, Zhang G, Lu Y, An X, Ren S, Wang Y, Chen Y, White J, Zhang C, Simon D, **Wu C**, Li Z, and Huo Y. Platelet IKKβ deficiency increases mouse arterial neointima formation via delayed glycoprotein Ibα shedding. ***Arterioscler Thromb Vasc Biol*** 2013, 33:241-8. PMCID: PMC3755353
40. Li H., Guo X. (**PhD student**), Xu H. (**PhD student**), Woo S.L. (**MS student**), Halim V. (***MS student***), Morgan C., and **Wu C** (***corresponding author***). A role for inducible 6-phosphofructo-2-kinase in the control of neuronal glycolysis. ***J Nutr Biochem***, 2013, 24: 1153-1158. PMID: 23246158 [PubMed - in process]
41. Chen Y, Mu P, He S, Tang X, Guo X (**PhD student**), Li H, Xu H (**PhD student**), Woo S-L (**MS student**), Qian X, Zeng L, and **Wu C (*corresponding author*)**. Gly482Ser mutation blunts the effects of PGC-1α on decreasing fat deposition and on stimulating PEPCK expression in hepatocytes. ***Nutr Res***, 2013, 33:332-9. PMID: 23602251 [PubMed - in process]
42. Woo SL (**PhD student**), Xu H (**PhD student**), Li H, Zhao Y, Hu X, Zhao J, Guo X, Guo T (**MS student**), Botchlett R (**PhD student**), Qi T (**MS student**), Pei Y (**PhD student**), Zheng J, Xu Y, An X, Chen L, Chen L, Li Q, Xiao X, Huo Y, and **Wu C (*corresponding author*)** (2014) Metformin ameliorates hepatic steatosis and inflammation without altering adipose phenotype in diet-induced obesity. ***PLoS One***, 2014, 9:e91111. PMCID: PMC3956460
43. Xu Y, An X, Guo X, Habtetsion TG, Wang Y, Xu X, Li Q, Li H, Zhang C, Caldwell RB, Fulton DJ, Su Y, Hoda MN, Zhou G, **Wu C (*co-corresponding author*)**, and Huo Y. (2014) Endothelial PFKFB3 plays a critical role in angiogenesis. ***Arterioscler Thromb Vasc Biol***, 2014, 34:1231-1239 PMCID: PMC4120754
44. Xu H (**PhD student**), Li H, Woo SL (**PhD student**), Kim SM, Shende VR, Neuendorff N, Guo X, Guo T (**MS student**), Qi T (**MS student**), Pei Y (**PhD student**), Zhao Y, Hu X, Zhao J, Chen L, Chen L, Ji JY, Alaniz RC, Earnest DJ, **Wu C (*corresponding author*)**. (2014) Myeloid cell-specific disruption of Period1 and Period2 exacerbates diet-induced inflammation and insulin resistance. ***J Biol Chem***, 2014, 289:16374-16388. PMCID: PMC4047405
45. Shannonhouse JL, Urbanski HF, Woo SL, Fong LA, Goddard SD, Lucas WF, Jones ER, **Wu C**, Morgan C. Aquaporin-11 control of testicular fertility markers in Syrian hamsters. ***Mol Cell Endocrinol***. 2014, 391(1-2):1-9. PMID: 24791736 [PubMed - in process]
46. Ming Y, Hu X, Song Y, Liu Z, Li J, Gao R, Zhang Y, Mei H, Guo T, Xiao L, Wang B, **Wu C**, Xiao X. (2014) CMHX008, a novel peroxisome proliferator-activated receptor γ partial agonist, enhances insulin sensitivity in vitro and in vivo. ***PLoS One***. 2014, 9(7):e102102 PMCID: PMC4087031

C. Abstracts

Wu C was listed as the principal/senior author in 9 abstracts.
Guo X, a PhD student of Wu C, was listed as a co-author in 10 abstracts.
Halim V, a MS student of Wu C, was listed as a co-author in one abstract.
Xu H, a PhD student of Wu C, was listed as a co-author in 5 abstracts.
Woo SL, a PhD student of Wu C, was listed as a co-author in 3 abstracts.
Guo T, a MS student of Wu C, was listed as a co-author in 2 abstracts.
Pei Y, a PhD student of Wu C, was listed as a co-author in one abstract.
Qi T, a MS student of Wu C, was listed as a co-author in one abstract.

1. **Wu C**., Okar D.A., Newgard C.B., and Lange A.J. Overexpression of 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase in mouse liver leads to suppression of hepatic glucose production and lowered blood glucose. ***Diabetes*** 2000,49(suppl 1):A291.
2. Choi I-Y. , **Wu C**., Okar D.A., Lange A.J and Grutter R. Assessment of hepatic carbohydrate metabolism in vivo by 3D-localized ^{13}C NMR: The role of fructose-2,6-bisphosphate in regulation of glucose fluxes in mice. ***Proc Int Soc Magn Reson Med*** 2001,9:206.
3. Herrera A, **Wu C**, Lange A.J., and Herrera J. Regulation of hepatic levels of HNF-1/HNF-4 by fructose-2, 6-bisphosphate. ***Diabetes*** 2001,50(suppl 2):A409.
4. **Wu C**., Okar D.A., Peng, L-J., and Lange A.J. Decreasing fructose-2,6-bisphosphate leads to diabetic phenotype in normal mice. ***Diabetes*** 2002,51(suppl 2):A319.
5. **Wu C**., Okar D.A., Peng, L-J., and Lange A.J. Effect of fructose-2,6-bisphosphate level on Akt phosphorylation. ***Diabetes*** 2002,51(suppl 2):A452-453.
6. Kang J., **Wu C.**, Peng L.J., and Lange A.J. The interactions between fructose-2,6-bisphosphate and hepatic glucokinase in maintaining blood glucose homeostasis. ***Diabetes*** 2003,52(Suppl 1): A547.
7. **Wu C**., L.J. Peng, Okar D.A., and Lange A.J. Reduction of adiposity by increasing fructose-2, 6-bisphosphate concentration in obese mice. ***Diabetes*** 2003,52(suppl 1):A391.
8. **Wu C**., Wu P., Peng L-J., Okar D.A., Harris R.A., and Lange A.J. Increasing hepatic fructose-2,6-bisphosphate content alters PDK-4 expression in extra-hepatic tissues. ***Diabetes*** 2003,52(suppl 1):A536.
9. Donthi R., Fan T., **Wu C**., Lange A.J., and Epstein P. Over-Expression of kinase deficient 6-phosphofructo-2-kinase/fructose2,6-bisphosphate alters cardiac metabolism and induces mild hypertrophy. ***Diabetes*** 2003,52(suppl 1):A117.
10. Donthi R., **Wu C**., McClain D., Lange A.J., Epstein P.N. Cardiac over-expression of kinase deficient PFK-2 induces insulin resistance, mild hypertrophy and sensitization to ischemia. ***FASEB J*** 2004,18(S):C167.
11. **Wu, C**., Kang, J., Peng, LJ., Li, H., Hillard, CJ., Lange, AJ. Acceleration of energy expenditure by increasing hepatic glucose metabolism of obese mice. ***Diabetes*** 2004,53(suppl2):A411.
12. **Wu C**., Peng L.J., Kang J., Li H., and Lange A.J. Differential effects of fructose-2,6-bisphosphate on liver and skeletal muscle fatty acid oxidation in obese mice. ***Diabetes*** 2005,54(suppl 1):A360-361.

13. **Wu C**., Peng L.J., Khan S.A., Kang J., Hillard C.J., and Lange A.J. Alterations of hepatic flux by decreasing fructose-2,6-bisphosphate levels lead to insulin resistance of the liver and whole body. ***Diabetes*** 2005,54(suppl 1):A378.
14. Khan SA, **Wu C.**, Peng LJ, and Lange AJ. Mapping the fructose-2,6-bisphosphate signaling pathway. ***FASEB J,*** 2006,20(5):A959-A960 Part 2.
15. **Wu C.,** and Lange A.J. Cooperative regulation of hepatic fuel metabolism: A proteomic study of the effects of fructose-2,6-bisphosphate. ***FASEB J,*** 2006,20(5):A959.Part 2.
16. Guo X. (***PhD student***), Li H., and **Wu C.** (***corresponding author***). A role of PFKFB3/iPFK2 in the regulation of neuronal glycolysis and food intake. ***FASEB J.*** 2009 23:973.1
17. Guo X. (***PhD student***), Li H., and **Wu C.** (***corresponding author***) A role of PFKFB3/iPFK2 in the regulation of high fat diet-induced inflammation and metabolic responses. ***FASEB J.*** 2009,23:109.8
18. Thomas, L.N., Guo X. (***PhD student***), **C. Wu**, and Sturino, J.M. Inflammation attenuation by rosiglitazone also affects biomarkers related to host-microbiota interaction. United States National Academy of Sciences Sackler Symposium on Microbes and Health (Irvine, CA). 2009 Awarded, Graduate Student Registration Grant.
19. Li H., Guo X. (***PhD student***), Thomas L.N., Sturino J.M., and **Wu C.** (***corresponding author***) Involvement of PFKFB3/iPFK2 in the suppressive effect of rosiglitazone on diet-induced intestine inflammatory response. ***FASEB J.*** 2010,24:341.5
20. Guo X. (***PhD student***), Li H., and **Wu C.** (***corresponding author***) PFKFB3/iPFK2 links nutrient metabolism and overnutrition-associated adipocyte inflammatory response through controlling oxidative stress. ***FASEB J.*** 2010 24:543.2
21. Guo X. (***PhD student***), Xu K., Li H., Zhang W., Wang H., Zhang J., Huo Y., Chen Y.E., and **Wu C.** (***corresponding author***) Inducible 6-phosphofructo-2-kinase is involved in the anti-diabetic effect of rosiglitazone in mice. ***Diabetes***, 2010,59(S1):A393
22. Guo X. (***PhD student***), Li H., Lu F., and **Wu C.** (***corresponding author***) Adipocyte PFKFB3 overexpression protects mice from diet-induced adipose tissue inflammation and systemic insulin resistance. ***FASEB J.*** 2011,25:337.8
23. Halim V. (***MS student***), Guo X. (***PhD student***), Li H., and **Wu C.** (***corresponding author***). A novel mechanism for the insulin-sensitizing effect of leucine in adipocytes. ***FASEB J.*** 2011,25:351.2
24. Guo X. (***PhD student***), Li H., Xu H. (***PhD student***), Meng C. (***PhD student***), Zhuang G., Zhou B., Lu F. **Wu C.** (***corresponding author***). A critical role for adipose tissue in regulating diet-induced liver inflammatory response. ***Diabetes***, 2011,60(S1):
25. Guo X. (***PhD student***), Li H., Xu H. (***PhD student***), Meng C, and **Wu C.** (***corresponding author***). Palmitoleate supplementation dissociates liver inflammatory response from hepatic steatosis in mice. ***FASEB J.*** 2012,26:34.6
26. Xu H. (***PhD student***), Guo X. (***PhD student***), Li H., Woo S.L. (***MS student***), and **Wu C.** (***corresponding author***). A role for palmitoleate in regulating macrophage activation. ***Experimental Biology 2013.***
27. Xu H. (***PhD student***), Guo X., Li H., Woo S.L. (***MS student***), and **Wu C.** (***corresponding author***). Metabolic regulation of adipose tissue inflammation and systemic insulin sensitivity: a role for PFKFB3 in macrophage polarization. 2013 ***American Heart Association 2013 Scientific Sessions,*** Dallas, TX, poster presentation

28. Woo S.L. (***PhD student***), Xu H. (***PhD student***), Li H., Guo X., Guo T. (***MS student***), Qi T. (***MS student***), Huo Y., and **Wu C.** (***corresponding author***). Metformin ameliorates diet-induced hepatic steatosis and inflammation without altering adipose phenotype. ***Experimental Biology 2014***, oral presentation
29. Guo X., Guo T. (***MS student***), Li H., Pei Y. (***PhD student***), Xu H. (***PhD student***), Hu X., Zhao Y., Zhao J., and **Wu C.** (***corresponding author***). Temporal effects of peroxisome proliferator-activated receptor γ (PPARγ) activation on macrophage inflammatory responses. ***Experimental Biology 2014***, poster presentation

D. Book Chapters

1. Baltrusch S., **Wu C.**, Okar D.A., Tiedge M., and Lange A.J. Interaction of GK with the bifunctional enzyme 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase (6PF2K/F26P_2ase). In *Glucokinase and glycemic disease: From basics to novel therapeutics*. **Frontiers in Diabetes.** Basel, Karger, 2004, 16, pp 262-274.
2. Okar D.A., **Wu C.**, and Lange A.J. Regulation of the regulatory enzyme, 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase. ***Adv Enzyme Regul*** 2004;44(1):123-154.
3. **Wu C**., Khan S.A., Peng L.J., and Lange A.J. Roles for fructose-2,6-bisphosphate in the control of fuel metabolism: beyond its allosteric effects on glycolytic and gluconeogenic enzymes. ***Adv Enzyme Regul***, 2006, 46: 72-88.

E. Editor-Reviewed Publications

1. **Wu C**., Khan S.A., and Lange A.J. (***Invited review***) Regulation of glycolysis – Role of insulin. ***Exp Gerontol,*** 2005, 40: 894–899.
2. **Wu C.**, Okar D.A., and Lange A.J. (***Invited review***) Reduction of hepatic glucose production as a therapeutic target in the treatment of diabetes. ***Curr Drug Targets-IEMD,*** 2005, 5:51-59.
3. Okar D.A., Lange A.J., and **Wu C.** Interaction with PFK-2/FBP-2 is essential to glucokinase molecular physiology. ***Cell Mol Life Sci*** 2009, 66: 731-732.

F. Scientific and Professional Presentations

Scientific and Professional Presentations, also includes abstracts
(Since appointment at TAMU)

Type	Invited	Submitted	Total
International	10		10
National	25 (10 abstracts)		25 (10 abstracts)
Regional			
State	3		3
Local	23		23

Scientific and Professional Presentations, also includes abstracts
(Career)

Type	Invited	Submitted	Total

International	10		10
National	55 (24 abstracts)		55 (24 abstracts)
Regional			
State	3		3
Local	25		25

G. Invited Seminars and Lectures

TAMU seminars and guest lectures

23 lectures detailed in section **IV. Teaching,** item **F**

Other universities

14 lectures detailed in section **IV. Teaching,** item **F**

Professional Societies

1. 06/05/2009: Role of PFKFB3 in the Control of Adipose tissue Inflammation and Systemic Metabolism, Invited talk, Chinese American Diabetes Association. New Orleans, LA.
2. 04/27/2010: Involvement of PFKFB3/iPFK2 in the Suppressive Effect of Rosiglitazone on Diet-induced Intestine Inflammatory Response. Oral presentation, *Experimental Biology*, Anaheim, CA
3. 04/12/2011: Adipocyte PFKFB3 Overexpression Protects Mice from Diet-Induced Adipose Tissue Inflammation and Systemic Insulin Resistance, Oral presentation, *Experimental Biology*, Washington DC
4. 04/12/2011: A Novel Mechanism for the Insulin-Sensitizing Effect of Leucine in Adipocytes, Oral presentation, *Experimental Biology*, Washington DC
5. 06/23/2011: A Critical Role for Adipose Tissue in Regulating Diet-induced Liver Inflammatory Response, Oral presentation, *Chinese American Diabetes Association*, San Diego, CA
6. 04/21/2012: Palmitoleate Supplementation Dissociates Liver Inflammatory Response from Hepatic Steatosis in Mice, Oral presentation, *Experimental Biology*, San Diego, CA
7. 03/23/2013: Is Circadian Clock Dysregulation Linked to Adipose Tissue Inflammation in Obesity? Oral presentation, *the Southeastern and Central Texas Society for Clocks*, College Station, TX
8. 06/24/2013: Adenosine 2A receptor protects against diet-induced hepatic steatosis and insulin resistance in mice, Oral presentation, *Chinese American Diabetes Association*, Chicago, IL
9. 04/28/2014: Advancing nutrition knowledge on metabolic diseases through collaborative research between the US and China, China International Forum, Invited talk, *Experimental Biology*, San Diego, CA

XI. PROFESSIONAL HONORS AND AWARDS

A. Awards

Title of Award	Name of Organization	Date Awarded	Description of what award was for	Number of the award granted annually
Travel Award	The Center for Diabetes Research, University of Minnesota	2001	This Award provides funds for trainees to present diabetes-related research at a national meeting.	Up to 2 awards are given annually at the university level.
Pilot & Feasibility Research Award	Minnesota Obesity Center	2002 & 2005	This Program provides seed money to attract new investigators, both young and established, into the field of obesity.	Two to five awards are given annually at the state level.
Travel Award	Dept. of BMBB, the University of Minnesota,	2001	This Award provides funds for trainees to present diabetes-related research at a national meeting.	Up to 2 awards are given annually at the university level.
Research Award	Minnesota Medical Foundation	2004	This Award provides funds to support medical research.	2 to 5 awards are given annually at the university level.
Junior Faculty Award	American Diabetes Association	2010	This national award provides funds ($414,000) to support the research program of junior faculty.	4 to 8 awards are given annually at the national level.

B. Other honors

Member of special editorial board
Chinese Journal of Gastroenterology and Hepatology, 2005 - 2008

ASN/IFT Grant Writing Workshop
A grant writing workshop for American Society of Nutrition/Institute of Food Technologists (ASN/IFT) member teams for research at the nutrition-food science interface, 04/14/2008 – 04/15/2008.

Ten proposals were selected based on likelihood for success for federal funding based on the biosketches of the investigators and the proposed research aims. Selection was made nationwide.

Member of peer-review committee
American Heart Association, Study Section of Vascular Wall Biology and Atherosclerosis.
2010-present
Qualifications include: 1) minimum Assistant Professor career level or equivalent; 2) nationally recognized competence in one or more fields of biomedical research; 3) current or recent independent peer reviewed funding typically at the national level; or equivalent research; 4) consistent record of peer reviewed publications within the past 5 years; 5) knowledge of the AHA and commitment to its mission; 6) mature judgment and objectivity; and 7) ability to work effectively in a group.

Editorial board
Journal of Nutrition and Food Science, 2010 – present

Member of peer-review committee
2011-present
Life Science and Medical Science Sections, Chinese National Science Foundation

Early Career Reviewer
2012 Feb
Cellular Aspects of Diabetes and Obesity Study Section – CADO, National Institutes of Health (NIH/NIDDK)

Ad hoc Reviewer
2013 Dec
Integrative Physiology of Obesity and Diabetes Study Section – IPOD, National Institutes of Health (NIH/NIDDK)

2014 Feb
Heart, Lung, and Blood Program Project Review Committee – HLBPP/NIH

2014 Feb
Integrative Physiology of Obesity and Diabetes Study Section – IPOD, National Institutes of Health (NIH/NIDDK)

2014 NIDDK New PI Workshop, December 2-3, 2014
Only PIs with NIH/NIDDK-funded R01 grants were invited to participate in the workshop for them to prepare R01 renewal.

XII. Other/Professional Development Activities

Teaching Enrichment Activities Summary

Year	Type of Activity

2010	*"Writing Syllabi that Engage and Motivate Students*", workshop sponsored by the Center for Teaching Excellence
2010	*"Their Cheating Hearts: Why Students Plagiarize and What You Can Do About It*", workshop sponsored by the Center for Teaching Excellence
2011	*"Teaching Methods*", workshop sponsored by the Center for Teaching Excellence
2011	*"Enhancing Faculty Involvement with Graduate Students Through Improved Mentoring Strategies*", workshop sponsored by the Center for Teaching Excellence
2011	*"Faculty Teaching Academy*", workshop sponsored by the Center for Teaching Excellence

AgriLife Research/Extension Enrichment Activities Summary

Year	**Type of Activity**
2008	ASN/IFT Grant Writing Workshop, sponsored by the American Society of Nutrition and the Institute of Food Technologists
Spring 2008	Selected for participation of Texas A&M University Semester long grant writing workshop
Fall 2008	Selected for participation of Texas A&M University Semester long grant writing workshop
Fall 2014	Invited/selected for participation of NIDDK new PI workshop

Other Relevant Accomplishments Summary

Year	**Type of Accomplishments**
2010	News release: Gene action may lead to diabetes prevention, cure
2011	Member, The Center for Biological Clocks Research at Texas A&M
2012	News release: Is there a 'healthy' obesity gene?
2012	Recognition by TAMU President (President's newsletter)
2014	News release: It's all in the timing

GRANT AWARDS FUNDED SUMMARY
(Since appointment at TAMU)

Type of Grant Federal/State/ Industry/Other	**External or Internal**	**Dates of Award**	**Funding Agency**	**Competitive (Y/N)**	**Role (PI, Co-PI)**	**Title of Grant**	**Total $ Amount Awarded**	**$ Amount Attributable to Candidate**
Other/National	External	1/15/2010-12/31/2012	ADA	Y	PI	Regulation of adipose tissue inflammatory response in diet-induced diabetes: the role of PFKFB3	386,400	386,400
Other/National	External	1/012012-12/31/2013	AHA	Y	PI	PFKFB3 regulation of macrophage polarization and atherosclerosis	140,000	140,000
Federal/National	External	4/15/2013-03/31/2018	NIH	Y	PI	Protective role of adenosine 2A receptor in NAFLD	1,604,850	1,274,868
Federal/National	External	5/05/2013-04/30/2017	NIH	Y	PI	Metabolic regulation of adipocyte-macrophage crosstalk in obesity	1,274,868	1,274,868
Other/National	External	1/15/2010-12/31/2012	ADA	Y	Co-I	Macrophage A_{2A} receptor regulates glucose homeostasis	322,000	22,594
Other/National	External	07/0/2011-06/30/2013	AHA	Y	Co-I	Regulation of CVD risk in obesity: the role of macrophage miR-223 in adipose tissue inflammation	140,000	14,090

***GRANT AWARDS PENDING, i.e., approved by not yet awarded, SUMMARY**
(Since appointment at TAMU)

Type of Grant Federal/State/ Industry/Other	**External or Internal**	**Dates of Award**	**Funding Agency**	**Competitive (Y/N)**	**Role (PI, Co-PI)**	**Title of Grant**	**Total $ Amount Awarded**	**$ Amount Attributable to Candidate**
Other/National	External	1/01/2013-10/31/2014	ADA	Y	PI	Hepatocyte adenosine 2A receptor regulates liver lipogenesis and inflammatory responses in DIO	60,000	60,000
Other/Local	Internal	12/05/14-08/31/17	COALS/ TAMU	Y	PI/MPI	Big Idea: Formation of Texas A&M Nutrition Obesity Research Center	150,000	150,000

***GRANTS SUBMITTED (NOT AWARDED) SUMMARY**
(Since appointment at TAMU)

Type of Grant Federal/State/ Industry/Other	**External or Internal**	**Dates of Award**	**Funding Agency**	**Competitive (Y/N)**	**Role (PI, Co-PI)**	**Title of Grant**	**Total $ Amount Awarded**	**$ Amount Attributable to Candidate**
Federal	External	07/01/12-06/30/17	NIH NHLBI	Y	Co-I	Defining the link between metabolism, circadian clocks, and human health	9,970,912	852,274
Federal	External	03/01/12-02/28/17	NIH NIDDK	Y	PI	microRNA-223 regulation of insulin sensitivity	1,831,250	1,831,250
Federal	External	03/01/12-02/28/14	NIH NHLBI	Y	PI	Role of microRNA-223 in macrophage activation and atherosclerosis	402,875	402,875
Federal	External	03/01/12-02/28/14	NIH NIDDK	Y	PI	Regulation of diet-induced insulin resistance by IEC PFKFB3	402,875	402,875
Other (National)	External	1/01/12-12/31/13	AHA	Y	PI	Atherosclerosis protection in mice by palmitoleate supplementation	140,000	140,000
Federal	External	07/01/11-06/30/16	NIH NIDDK	Y	PI	Novel role for adipose tissue in NASH	1,824,915	1,824,915
Federal	External	07/01/11-06/30/16	NIH NIDDK	Y A2 revision	Co-I	Role of adenosine 2A receptor in regulating insulin resistance	1,885,625	476,125
Other (National)	External	07/01/11-06/30/13	AHA	Y Revision	PI	Role of PFKFB3 in macrophage polarization and lipid homeostasis	140,000	140,000
Other (National)	External	01/01/11-12/31/12	AHA	Y	PI	Role of PFKFB3 in regulating macrophage	140,000	140,000

						inflammatory status		
Federal	External	12/01/10-11/30/15	NIH NIDDK	Y A1 revision	Co-PI	Role of adenosine 2A receptor in regulating insulin resistance	1,904,175	732,501
Federal	External	12/01/10-11/30/12	NIH NIDDK	Y	Co-PI	Macrophage AMPKalpha1 regulates overnutrition-associated insulin resistance	424,625	109,875
Federal	External	04/01/10-03/31/13	NSF	Y	PI	A nutrigenomic study for the role of PFKFB3 in metabolic homeostasis	447,733	447,733
Federal	External	04/01/10-03/31/12	NIH NIAAA	Y	PI	Role of adipose PFKFB3 in controlling the pathogenesis of NAFLD	146,500	146,500
Other (National)	External	01/01/10-12/31/13	AHA	Y	PI	Regulation of CVD risk in diet-induced obesity by adipose PFKFB3	308,000	308,000
Federal	External	12/01/09-11/30/11	NIH NIDDK	Y	PI	Role of adenosine A2A receptor in the pathogenesis of NAFLD	424,400	424,400
Other (National)	External	07/15/09-06/30/11	ADA	Y	PI	Role of adenosine A2A receptor in the control of hepatic inflammation and lipid metabolism	414,000	414,000
Federal	External	07/01/09-06/30/14	NIH NIDDK	Y	Co-PI	Role of inflammation in the control of glucose homeostasis	3,146,593	1,249,843
Federal	External	04/01/09-03/31/14	NIH NIDDK	Y	PI	Role of glycolysis in the regulation of food intake	1,831,250	1,831,250
Federal	External	01/15/09-01/14/14	NSF	Y	PI	CAREER: Hypothalamic control of food intake – the role of glycolysis	749,997	749,997
Other (National)	External	1/15/2009-12/31/2011	ADA	Y	PI	Hepatic regulation of food intake – the role of	414,000	414,000

						glycolysis		
Federal	External	12/01/08-11/30/13	NIH NIDDK	Y Revision	PI	Role of adipose PFKFB3/iPFK2 in metabolic regulation	1,715,072	1,771,072
Other (National)	External	07/15/08-06/30/11	ADA	Y Revision	PI	Stimulation of PFKFB3 by PPARγ2 in adipose: mechanism of TZD-induced weight gain	414,000	414,000
Federal	External	07/01/08-06/30/13	NIH NIDDK	Y	PI	Role of adipose PFKFB3/iPFK2 in metabolic regulation	1,771,582	1,771,582
Federal	External	04/01/08-03/31/13	NSF	Y	PI	CAREER: Hepatic regulation of energy balance	749,939	749,939
Other (National)	External	1/15/08-12/31/10	ADA	Y	PI	Stimulation of PFKFB3 by PPARγ2 in adipose: mechanism of TZD-induced weight gain	414,000	414,000

Confirmation on Correctness

I hereby confirm that the curriculum vitae, included in this dossier, is the most current, and is correct as of the date of the signature.

_____ __12/23/2014_____

Chaodong Wu, MD, PhD Date