### CURRICULUM VITAE

**NAME**: **Michael Steven Kilberg, Ph.D.**

**TITLE**: Professor Emeritus

**CONTACT**: Department of Biochemistry and Molecular Biology

The University of Florida College of Medicine

Gainesville, Florida 32610-0245

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**EDUCATION**: Post-doctoral Scholar, Department of Biological

Chemistry, University of Michigan, 1977 to 1979

Ph.D., 1977 (Biochemistry & Molecular Biology)

The University of South Dakota, Vermillion

B.S., 1973 (Chemistry and Biology)

Morningside College, Sioux City, Iowa

**PROFESSIONAL EXPERIENCE**:

Professor Emeritus, Department of Biochemistry and Molecular Biology, University of Florida College of Medicine, 2022

Professor, Department of Biochemistry and Molecular Biology, University of Florida College of Medicine, 1989 to 2022

Director, Graduate Training Program in Biochemistry and Molecular Biology, University of Florida College of Medicine, 2000 to 2006

Professor and Associate Chairman, Department of Biochemistry and Molecular Biology, University of Florida College of Medicine, 1989 to 1996

Associate Professor and Associate Chairman, Department of Biochemistry and Molecular Biology, University of Florida College of Medicine, 1986 to 1989

Associate Professor, Department of Biochemistry and Molecular Biology, University of Florida College of Medicine, 1985 to 1986

Assistant Professor, Department of Biochemistry and Molecular Biology, University of Florida College of Medicine, 1980 to 1985

Assistant Research Scientist, Department of Biological Chemistry, University of Michigan Medical School, 1979 to 1980

**UNIVERSITY APPOINTMENTS**:

Member, UF Shands Cancer Center

Member, UF Genetics Institute

Member, UF Center for Epigenetics

Member, UF Center for Nutritional Sciences

PROFESSIONAL APPOINTMENTS:

Search Committee, Editor of Journal of Nutrition, American Society for Nutrition, 2012-13

Member, NIH Integrative Nutrition and Metabolic Processes Study Section, 2008-2012

Executive Committee, Nutritional Sciences Council, Member-At-Large for Molecular Nutrition, American Society for Nutrition, 2007-2008

Programmatic Task Force,Nutritional Sciences Council, American Society for Nutrition, 2007-8

Nominating Committee, American Society for Nutrition, 2007

Chair, Nutrient-Gene Interactions, Research Interest Section, American Society for Nutritional Sciences 2005-2006

Steering Committee Member, Nutrient-Gene Interactions, Research Interest Section, American Society for Nutrition 2000-2003

Council of Scientific Advisors, Children’s Nutrition Research Center, Baylor College of Medicine, 1998-2003.

**MEMBERSHIPS**: American Society of Biochemistry and Molecular Biology

American Society for Nutrition

American Physiological Society

**SELECTED AWARDS**:

College of Medicine Dissertation Mentoring Award, 2006

The University of Florida Doctoral Mentoring Award, 2006

College of Medicine, Exemplary Teacher Award, 2004-2016, 2021

College of Medicine Faculty Research Prize in Basic Science 1992

University of Florida Research Achievement Award 1986, 1988, 1991, 1992

University of Florida Research Foundation Professorship, Inaugural Year Awardee, 1997

University of Florida Professorial Excellence Program, 1998

Faculty Achievement Recognition Award, Inaugural Year Awardee, 2007

The Arvid Wretlind Lectureship, European Society for Parenteral and Enteral Nutrition, 1996

**EDITORIAL BOARDS**:

Journal of Biological Chemistry (2002-2007; 1997-2001; 1990-1995)

Associate Editor: American Journal of Physiology: Endocrinology and Metabolism (1991-1994)

The American Journal of Physiology: Cell Physiology (1988-1993)

**INVITED and REFEREED REVIEWS:**

21. Tsai, C.Y., Kilberg, M.S., and Husain, S.Z. (2020) The role of asparagine synthetase on nutrient metabolism in pancreatic disease. **Pancreatology**. 20:1029-1034.

20. Chiu, M., Taurino, G., Bianchi, M.G., Kilberg, M.S., and Bussolati. O. (2020) Asparagine Synthetase in Cancer: Beyond Acute Lymphoblastic Leukemia, **Front Oncol** 9:1480.

19. Lomelino, C.L., Andring, J.T., McKenna, R., and Kilberg, M.S. (2017) Asparagine synthetase: Function, structure, and role in disease. **J. Biol. Chem**., 292, 19952-19958.

18. Wortel, I.M.N., van der Meer, L.T., Kilberg, M.S., and van Leeuwen, F.N. (2017) Surviving Stress: Modulation of ATF4-Mediated Stress Responses in Normal and Malignant Cells. **Trends Endocrinol Metab**. 28, 794-806.

17. Kilberg, M.S., Terada, N., and Shan, J. (2016) Influence of Amino Acid Metabolism on Embryonic Stem Cell Function and Differentiation. **Adv. Nutr.** 7, 780S-789S

16. Balasubramanian, M.B., Butterworth, E.A, and Kilberg, M.S. (2013) Asparagine Synthetase: Regulation by Cell Stress and Involvement in Tumor Biology, **Amer. J. Physiol. Endo. Metab.**, 304, E789-E799.

15. Kilberg, M.S., Balasubramanian, M., Fu, L., and Shan, J., (2012) The Transcription Factor Network Associated with the Amino Acid Response in Mammalian Cells. **Adv. Nutr,** 3, 295-306.

14. Kilberg, M.S., Shan, J., and Su, N. (2009) ATF4-Dependent Transcription Mediates Amino Acid Signaling, **Trends Endocrin. Metab.**, 20, 436-443.

13. Richards, N. G.J. and Kilberg, M.S. (2006) Asparagine Synthetase Chemotherapy. **Annu. Rev. Biochem.,** 75, 629 - 654.

12. Kilberg, M.S., Chen, H., Leung-Pineda, V., and Pan, Y.-X. (2005) Nutritional Control of Gene Expression: How Mammalian Cells Respond to Amino Acid Limitation. **Annu. Rev. Nutr.,** 25, 59-85.

11. Barbosa-Tessmann, I., Chen, C., Zhong, C., and Kilberg, M.S. (2002) Genomic Sequences Necessary for Transcriptional Activation by Amino Acid Deprivation of Mammalian Cells, **J. Nutr.**, 132, 1801-1804.

10. Malandro, M.S. and Kilberg, M. S. (1996) Molecular Biology of Mammalian Amino Acid Transporters. **Annu. Rev. Biochem.**, 65, 305-336.

9. Laine, R.O., Hutson, R.G., and Kilberg, M.S. (1996) Eukaryotic Gene Expression: Metabolite Control by Amino Acids. **Prog. Nuc. Acid Res. and Mol. Biol.**, 53, 219-248.

8. Christensen, H.N. and Kilberg, M.S. (1995) Hepatic Amino Acid Transport Primary to the Urea Cycle in Regulation of Biologic Neutrality. **Nutrition Rev**., 53, 74-76.

7. Kilberg, M.S., Hutson, R.G., and Laine, R.O. (1994) Amino Acid-Regulated Gene Expression in Eukaryotic Cells. **FASEB J.** 8, 13-19.

6. Kilberg, M.S., Stevens, B.R., and Novak, D.A. (1993) Recent Advances in Mammalian Amino Acid Transport.  **Annu. Rev. Nutr.** 13, 137-165.

5. Bode, B., Tamarappoo, B.K., Mailliard, M., and Kilberg, M.S. (1990) Characteristics and Regulation of Hepatic Glutamine Transport. **J. Paren. Enteral Nutr.** 14, 51S-55S.

4. Kilberg, M.S. (1986) System A-Mediated Amino Acid Transport: Metabolic Control at the Plasma Membrane. **Trends Biochem. Sci.**, 11, 183-186.

3. Kilberg, M.S., Barber, E.F. and Handlogten, M.E. (1985) Characteristics and Hormonal Regulation of Amino Acid Transport System A in Isolated Rat Hepatocytes. **Curr. Topics Cell. Regul**. 25, 133-163.

2. Shotwell, M.A., Kilberg, M.S. and Oxender, D.L. (1983) The Regulation of Amino Acid Transport. **Biochim. Biophys. Acta, Reviews on Biomembranes**, 737, 267-284.

1. Kilberg, M.S. (1982) Amino Acid Transport in Rat Hepatocytes. **J. Memb. Biol**. 69, l-12.

REFEREED PUBLICATIONS:

145. Staklinski, S.J., Chang, M.C., Ahrens-Nicklas, R.C., Kaur, S., Stefanatos, A.K., Dudenhausen, E.E., Merritt, M.E., and Kilberg, M.S. (2023) Characterizing asparagine synthetase deficiency variants in lymphoblastoid cell lines. **JIMD Reports**, 64:167-179.

144. Staklinski S.J., Snanoudj S., Guerrot A.M., Vanhulle C., Lecoquierre F., Bekri S., and Kilberg M.S. (2022) Analysis of Enzyme Activity and Cellular Function for the N80S

and S480F Asparagine Synthetase Variants Expressed in a Child with Asparagine Synthetase Deficiency. **Int. J. Mol. Sci.**, 24:559-572.

143. Staklinski, S.J., Chang, M.C., Yu,F., Collins Ruff, K., Franz, D.N., Qian, J., Bloom, L.B., Merritt, M.E., McKenna, R., and Kilberg, M.S. (2022) Cellular and molecular characterization of two novel asparagine synthetase gene mutations linked to Asparagine Synthetase Deficiency. **J. Biol. Chem.**, 298, 102385-102401.

142. Fields, C.J., Li, L., Hiers, N.M., Li, T., Sheng, P., Huda, T., Shan, J., Gay, L., Gu, T., Bian, J., Kilberg, M.S., Renne, R., Xie, M. (2021) Sequencing of Argonaute-bound microRNA/mRNA hybrids reveals regulation of the unfolded protein response by microRNA-320a. **PLoS Genet**., 17, e1009934.

141. Farabaugh, K.T., Krokowski, D., Guan, B-J., Gao, Z., Gao, X-H., Wu, J., Jobava, R., Ray, G., de Jesus, T., Kilberg, M., Buchner, D., Sen, G.C., Cotton, C., McDonald, C., Xin, W., Longworth, M., Ramakrishnan, P., and Hatzoglou, M. (2020) PACT-mediated PKR activation acts as a hyperosmotic stress intensity sensor weakening osmoadaptation and enhancing inflammation. **eLIFE**, 9, E52241.

140. Chiu, M., Toscani, D., Marchica, V., Taurino, G., Costa, F., Bianchi ,M.G., Andreoli, R., Franceschi, V., Storti, P.,, Burroughs-Garcia J., Eufemiese, R.A., Dalla Palma, B.,, Campanini, N., Martella, E., Mancini, C., Shan, J.,Kilberg, M.S., D'Amico, G., Dander, E., Agnelli, L., Pruneri, G., Donofrio, G., Bussolati, O., and Giuliani, N. (2020) Myeloma Cells Deplete Bone Marrow Glutamine and Inhibit Osteoblast Differentiation Limiting Asparagine Availability. **Cancers**, 12, E3267.

139. Mukherjee, A., Ahmed, N., Rose, F., Ahmed, A.N., Javed, T.A., Wen, L., Bottino, R., Xiao, X., Kilberg, M.S., and Husain, S.Z. (2020) Asparagine Synthetase in Highly Expressed at Baseline in the Pancreas Through Heightened PERK Signaling. **Cell Mol. Gastroenterol. Hepatol.**, 9, 1-13.

138. Shan, J., Dudenhausen, E.E., and Kilberg, M.S. (2019) Induction of Early Growth Response Gene 1 (EGR1) by Endoplasmic Reticulum Stress is Mediated by the Extracellular Regulated Kinase (ERK) Arm of the MAPK Pathways. **Biochim. Biophys. Acta Mol. Cell. Res.,** 1866, 371-381.

137. Sacharow, S.J., Dudenhausen, E.E., Lomelino, C.L., Rodan, L., Moufawad El Achkar, C., Olson, H.E., Genetti, C.A., Agrawal, P.B., McKenna, R., and Kilberg, M.S. (2018) Characterization of a Novel Variant in Siblings with Asparagine Synthetase Deficiency. **Mol. Genet. Metab.**, 123, 317-325.

136. Hayner, J., Shan, J., and Kilberg, M.S. (2018) Regulation of the ATF3 gene by a single promoter in response to amino acid availability and endoplasmic reticulum stress in human primary hepatocytes and hepatoma cells. **Biochim. Biophys. Acta Gene Regul. Mech.,** 1861, 72-79.

135. Ferreira, R.B., Wang, M., Law, M.E., Davis, B.J., Bartley, A.N., Higgins, P.J., Kilberg, M.S., Santostefano, K.E., Terada, N., Heldermon, C.D., Castellano, R.K., and Law, B.K. (2017) Disulfide bond disrupting agents activate the unfolded protein response in EGFR- and HER2-positive breast tumor cells. **Oncotarget**, 8, 28971-28989.

134. Shan, J., Zhang, F., Sharkey, J., Tang, T.A., and Kilberg, M.S. (2016) The C/ebp-Atf Response Element (CARE) Location Reveals Two Distinct Atf4-dependent, Elongation-mediated Mechanisms for Transcriptional Induction of Aminoacyl-tRNA Synthetase Genes in Response to Amino Acid Limitation. **Nucl. Acids Res**., 44, 9719-9732.

133. Yuniati, L., van der Meer, L.T., Tijchon, E.T., van IngenSchenau, D., van Emst, L., Levers, M., Palit, S.A.L., Rodenbach, C., Poelmans, G., Hoogerbrugge, P.M., Shan, J., Kilberg, M.S., Scheijen, B., van Leeuwen, F.N. (2016) BTG1 modulates ATF4 function in response to cellular stress: implications for tumor cell survival. **Oncotarget,** 7, 3128-3143.

132. Palmer, E.E., Sachdev, R., Cardamone, M., Kandula, T., Morris, P., Miller, D., Zhu, Y., Macintosh, R., Dinger, M., Cowley, M., Buckley, M., Roscioli, T., Bye, A., Kilberg, M.S., Edwin P Kirk, E.P. (2015) Asparagine Synthetase Deficiency Causes Reduced Proliferation of Cells Under Conditions of Limited Asparagine. **Mol. Genet. Metab.**, 116, 178-86.

131. Guimarães-Camboa, N., Stowe, J., Aneas, I., Sakabe, N., Cattaneo, P., Henderson, L., Kilberg, M.S., Johnson, R.S., Chen, J., McCulloch, A.D., Nobrega, M.A., Evans, S.M., Zambon, A.C. (2015) HIF1α Represses Cell Stress Pathways to Allow Proliferation of Hypoxic Fetal Cardiomyocytes. **Dev. Cell**, 33, 507-521.

130. Crawford, R.R., Prescott, E.T., Sylvester, C.F., Higdon, A.N., Shan, J., Kilberg, M.S., and Mungrue, I.N. (2015) Human CHAC1 proteindegrades glutathione and mRNA inductionis regulated by the transcription factors ATF4 and ATF3 and a bipartite ATF/CRE element. **J. Biol. Chem.**, 290, 15878-15891.

129. Shan, J., Donelan, W., Hayner, J.N., Zhang, F., Dudenhausen, E.E., and Kilberg, M.S. (2014) MAPK signaling triggers transcriptional induction of cFOS during amino acid limitation of HepG2 cells. **Biochim. Biophys. Acta,** 1853, 539-548.

128. Shan, J., Balasubramanian, M.N., Donelan, W., Fu, L., Hayner, J., Lopez, M.-C., Baker, H.V., and Kilberg, M.S. (2014) A MEK-Dependent Transcriptional Program Controls Activation of the Early Growth Response 1 (EGR1) Gene Following Amino Acid Limitation, **J. Biol. Chem.**, 289, 24665-24679.

127. Fan, A.X., Papadopoulos, G.L., Hossain, M.A., Lin, I.-J., Hu, J., Tang, T.M., Kilberg, M.S., Renne, R., Strouboulis, J., and Bungert, J. (2014) Genomic and Proteomic Analysis of Transcription Factor TFII-I Reveals Insight into the Response to Cellular Stress, **Nucl. Acids Res.**, 42, 7625-41.

126. Shan, J., Hamazaki, T., Tang, T.A., Terada, N., and Kilberg, M.S. (2013) Activation of the Amino Acid Response Modulates Lineage Specification During Differentiation of Murine Embryonic Stem Cells. **Amer. J. Physiol. Endo. Metab.**, 305, E325-335.

125. Teske, B.F., Fusakio, M.E., Zhou, D., Shan, J., McClintick, J.N., Kilberg, M.S., and Wek. R.C. (2013) CHOP Induces Activating Transcription Factor 5 (ATF5) to Trigger Apoptosis in Response to Perturbations in Protein Homeostasis. **Mol. Biol. Cell**, 24, 2477-2490.

124. Han, J., Back, S., Hur, J., Lin, Y-H., Gildersleeve, R., Shan, J., Yuan, C., Krokowski, D., Wang, S., Hatzoglou, M., Kilberg, M.S., Sartor, M.A., and Kaufman, R.J. (2013) Endoplasmic reticulum (ER) stress-induced transcriptional regulation increases protein synthesis leading to cell death. **Nature Cell Biol.**, 15, 481-490.

123. Fu, L. and Kilberg, M.S. (2013) Elevated cJUN Expression and an ATF/CRE Site Within the ATF3 Promoter Contribute to Activation of ATF3 Transcription by the Amino Acid Response. **Physiol. Genomics,** 45, 127-137.

122. Balasubramanian, M.N., Shan, J., and Kilberg, M.S. (2013) Dynamic Changes in Genomic Histone Association and Modification During Activation of the ASNS and ATF3 Genes by Amino Acid Limitation. **Biochem. J.**, 449, 219-229.

121. Shan, J., Fu, L., Balasubramanian, M.N., Anthony, T., and Kilberg, M.S. (2012) ATF4-Dependent Regulation of the JMJD3 Gene During Amino Acid Deprivation Can be Rescued in Atf4-Deficient Cells by Inhibition of Deacetylation. **J. Biol. Chem.**, 287, 36393-36403.

120. Fu, L., Balasubramanian, M., Shan, J., Dudenhausen, E., and Kilberg, M.S. (2011) Auto-Activation of cJUN by Amino Acid Deprivation of Hepatocellular Carcinoma Cells Reveals a Novel cJUN-Mediated Signaling Pathway. **J. Biol. Chem.**, 286, 36724-36738.

119. Bouman, L., Schlierf, A., Lutz, A.K., Shan, J., Deinlein,A., Kast, J., Galehdar,Z., Palmisano,V., Patenge,N., Berg, D., Gasser,T., Augustin,R., Tru¨mbach,D., Irrcher, I., Park,D.S., Wurst, W., Kilberg, M.S., Tatzelt, J., and Winklhofer, K.F. (2011) Parkin is transcriptionally regulated by ATF4: evidence for an interconnection between mitochondrial stress and ER stress. **Cell Death Differ**., 18, 769-782.

118. Shan, J., Lopez, M-C., Baker, H.V., and Kilberg, M.S. (2010) Expression profiling after activation of the amino acid deprivation response in HepG2 human hepatoma cells. **Physiol. Genomics,** 41, 315-327.

117. Shan, J., Örd, D., Örd, T., and Kilberg, M.S. (2009) Elevated ATF4 Expression, in the Absence of Other Signals, is Sufficient for Transcriptional Induction via C/EBP-ATF Response Elements, J. Biol. Chem., 284, 21241-21248.

116. Su, N., Thiaville, M.M., Awad, K., Gjymishka, A., Brant, J.O., Yang, T.P., and Kilberg, M.S. (2009) Protein or Amino Acid Deprivation Differentially Regulates the Hepatic FOXA Genes Through an ATF4-Independent Pathway, **Hepatology,** 50, 282-290.

115. Palii, S.S., Kays, C.E., Deval, C., Bruhat, A., Fafournoux., and Kilberg, M.S. (2009) Specificity of amino acid regulated gene expression: analysis of genes subjected to either complete or single amino acid deprivation. Amino Acids, 37, 79-88.

114. Gjymishka, A., Su, N., and Kilberg, M.S. (2009) Transcriptional Induction of the Human Asparagine Synthetase Gene During the Unfolded Protein Response Does Not Require the ATF6 and IRE1/XBP1 Arms of the Pathway. **Biochem. J**., 417, 695-703.

113. Su, N. and Kilberg, M. S. (2008) C/EBP homology protein (CHOP) Interacts with Activating Transcription Factor 4 (ATF4) and Negatively Regulates the Stress-Dependent Induction of the Asparagine Synthetase Gene, J. Biol. Chem., 283, 35106-35117.

112. Thiaville, M.M., Dudenhausen, E.E., Awad, K.S., Zhong, C., and Kilberg, M.S. (2008) Activated Transcription Via Amino Acid Response Elements Does Not Require Enhanced Recruitment of the Mediator Complex. **Nuc. Acids Res.**, 36, 5571-5580.

111. Gjymishka, A., Palii, S.S., Shan, J., and Kilberg, M.S. (2008) Despite Increased ATF4 Binding at the C/EBP-ATF Composite Site Following Activation of the Unfolded Protein Response, System A Transporter 2 (SNAT2) Transcription Activity is Repressed in HepG2 Cells, **J. Biol. Chem.**, 283, 27736-27747.

110. Abbatiello, S.E., Pan, Y-X., Zhou, M., Wayne, A.S., Veenstra, T.D., Hunger, S.P., Kilberg, M.S., Eyler, J.R., Richards, N.G., Conrads, T.P. (2008) Mass Spectrometric Quantification of Asparagine Synthetase in Circulating Leukemia Cells from Acute Lymphoblastic Leukemia Patients. **J. Proteomics.,** 71, 61-70.

109. Thiaville, M.M., Pan, Y-X., Gjymishka, A., Zhong, C., Kaufman, R.J., and Kilberg, M.S. (2008) MEK Signaling is Required for Phosphorylation of eIF2α Following Amino Acid Limitation of HepG2 Human Hepatoma Cells. **J. Biol. Chem.,** 283, 10848-10857.

108. Aiken, K.J., Bickford, J.S., Kilberg, M.S., and Nick, H.S. (2008) Metabolic Regulation of Manganese Superoxide Dismutase Expression via Essential Amino Acid Deprivation. **J. Biol. Chem.,** 283, 10252-10263.

107. Thiaville, M.M., Dudenhausen, E.E., Zhong, C., Pan, Y-X., and Kilberg, M.S. (2008) Deprivation of Protein or Amino Acid Induces C/EBPβ Synthesis and Binding to Amino Acid Response Elements, but its Action is Not an Absolute Requirement for Enhanced Transcription. **Biochem. J.,** 410, 473-484.

106. Su, N., Pan, Y-X., Zhou, M., Harvey, R.C., Hunger, S.P., and Kilberg, M.S. (2008)

Correlation between Asparaginase Sensitivity and Asparagine Synthetase Protein Content, but not mRNA, in Acute Lymphoblastic Leukemia Cell Lines, **Pediatric Blood & Cancer**, 50, 274-279.

105. Pan, Y-X., Chen, C., Thiaville, M.M., and Kilberg, M.S. (2007) Activation of the ATF3 Gene through a Coordinated Amino Acid-Sensing Response Program that Controls Transcriptional Regulation of Responsive Genes Following Amino Acid Limitation. **Biochem. J.**, 401, 299-307.

104. Gutierrez, J.A., Pan, Y-X., Koroniak, L., Hiratake, J., Kilberg, M.S., and Richards, N.G.J. (2006) An Inhibitor of Human Asparagine Synthetase Suppresses Proliferation of an L-Asparaginase Resistant Leukemia Cell Line. **Chem. & Biol.**, 13, 1339-1347.

103. Kilberg, M.S. (2006) Amino Acid-Dependent Signal Transduction for Control of Transport and Metabolism. **Acta Biomed.**, 77(Suppl. 3), 18-20.

## 102. Chen, H. and Kilberg, M.S. (2006) Alignment of the Transcription Start Site Coincides with Increased Transcriptional Activity from the Human Asparagine Synthetase Gene Following Amino Acid Deprivation. J. Nutr., 136, 2463-2467.

101. Palii, S.S., Thiaville, M.M., Pan, Y-X., Zhong, C., and Kilberg, M.S. (2006) Characterization of the Amino Acid Response Element Within the Human SNAT2 System A Transporter Gene. **Biochem. J.**, 395, 517-527.

100. Chen C., Dudenhausen, E.E., Chen, H., Pan, Y-X., Gjymishka, A., and Kilberg, M.S. (2005) Amino Acid Limitation Induces Transcription from the Human C/EBPβ Gene Via an Enhancer Activity Located Downstream of the Protein Coding Sequence. **Biochem. J.**, 391, 649-658.

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91. Zhong, C., Chen, C., and Kilberg, M.S. (2003) Characterization of the Nutrient Sensing Response Unit in the Human Asparagine Synthetase Promoter. **Biochem. J.**, 372, 603-609.

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**86.** Siu, F., Bain, P.J., LeBlanc-Chaffin, R., Chen, H., and **Kilberg, M.S.** (2002) **ATF4 is a Mediator of the Nutrient Sensing Response Pathway that Activates the Human Asparagine Synthetase Gene. J. Biol. Chem., 277, 24120-24127.**

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#### BOOK CHAPTERS / MONOGRAPHS:

8. Kilberg, M.S., Zhong, C., McClellan, R., and Pan, Y. (2004) Transcriptional regulatory mechanisms for the response to amino acid deprivation of mammalian cells. In, **“Nutrient-Induced Responses in Eukaryotic Cells”**, Topics in Current Genetics, (Winderickx, J. and Taylor, P.M, eds), Springer Verlag, Berlin, pp. 5-24.

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3. Christensen, H.N. and Kilberg, M.S. (1987) Amino Acid Transport Across the Plasma Membrane: Role of Regulation in Interorgan Flows., In, **Physiological Society Study Guides**, Manchester University Press, Manchester, U.K., pp. 10-46.

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#### BOOKS EDITED:

Kilberg, M.S. and Häussinger, D., Editors, **“Mammalian Amino Acid Transport: Mechanisms and Control”**, Plenum Press (1992).

#### REPRESENTATIVE COMMITTEE ASSIGNMENTS:

**Departmental Committees (Examples)**

1980-1981 Faculty Recruiting Committee

1982-1984 Curriculum Committee

1984-1985 Faculty Recruiting Committee

1986-1988 Faculty Recruiting Committee

1981-1996 Graduate Studies Committee

1982-1995 Graduate Student Recruiting Committee

1982-1995 Computer Services Committee

1982-1989 Chairman, Graduate Student Recruiting Committee

1995 Faculty Recruiting Committee

1997-2004 Graduate Studies Committee

2003-2005 Chair, Faculty Recruiting Committee

2014-2018 Faculty Recruiting Committee

**Health Center Committees (Examples)**

1994 College of Medicine Task Force on Graduate Education Center

1996-1999 College of Medicine Professor Promotion Committee

1996-2000 Center for Structural Biology Optical Microscopy Core Facility

1996-1998 College of Medicine Faculty Research Advisory Board

1999-2000 College of Medicine IDP Curriculum Review Committee

2000-2002 Clinical Research Center Advisory Committee

2000-2005 College of Medicine IDP Graduate Program Advisory Board

2001-2005 Cancer Center Research Grant Committee, Co-Chairman

2001-2004 Cancer Center Institutional Research Grant Committee, member

2001-2003 Powel Center for Gene Therapy Oversight Committee

2004 Cancer Center Faculty Search Committee, Chair

2005 Genetic Institute Faculty Search Committee, Chair

2013-2022 Graduate Student Interdisciplinary Program Recruiting Committee

**University Committees (Examples)**

1982 Sponsored Research Grant Review Committee for the Life Sciences

1987-1989 University Senate

1991-1993 University Senate

1992-1993 Search Committee, VP for Research and Dean of Graduate School

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BCH 6206 Adv.Topics in Metabolic Control to graduate students.

DEN 5121. A one-semester course for first year dental students.

VEM 5131. A one-semester course for first year veterinary students.

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Michelle Woodard, M.D. 1992-1993 Private Practice, Watkinsville, GA

B. Tamarappoo, M.D., Ph.D. 1989-1994 Assoc. Medical Director, Cedars-Sinai, L.A.

James Matthews, Ph.D. 1995-1998 Professor, University of Kentucky

Michael Weiss, M.D. 1997-2000 Associate Professor of Pediatrics, Univ. Florida

Randy McClellan, M.D. 2000-2002 Pediatric Gastro Associates., Huntsville, AL

YuanXiang Pan, Ph.D. 2002-2006 Associate Professor, U. Illinois

Hong Chen, Ph.D. 2002-2006 Associate Professor, U. Illinois

Jixiu Shan, Ph.D. 2007-2021 Associate Research Professor, U. Florida

Keytam Awad, Ph.D. 2007-2009 Research Scientist, NIH

Lingchen Fu, M.D., Ph.D. 2009-2012 Assoc. Research Scientist, Arizona State Univ.

Will Donelan, Ph.D. 2012-2014 Research Scientist, University of Florida

Jaclyn Hayner, Ph.D. 2013-2016 Supervisor, ELISA Technologies

### LABORATORY FUNDING HISTORY

**Agency/Title/Years: Direct Costs Awarded**

Michigan Diabetes Research and Training Center, Pilot Study

Funded by NIH (AM-20572), "Characterization of Amino Acid

Transport in Rat Hepatocytes", 1979-1980. $16,246

Faculty Research Program, Division of Sponsored Research,

University of Florida, DSR-23, "Hepatic Amino Acid

Transport", 1980-1981. $14,123

National Institutes of Health, (R01) DK-92062, “Amino Acid

Regulation of Alternative Splicing” 2011-2015, $880,000

National Institutes of Health, (R01) DK-94729, “Amino Acid

Regulation of the FOS/JUN Transcription Factors” 2011-2015, $870,000

National Institutes of Health (NIADDKD), AM-28374, "Hepatic

Amino Acid Transport in Diabetic Animals", 1981-1984. $154,125

American Cancer Society (Florida Division), #F81UF-2,

"Regulation of Rat Liver Amino Acid Transport", 1981-1982. $ 9,800

National Science Foundation, PCM8203748, "Adaptive

Processes for Amino Acid Uptake by Liver Cells", 1982-1984. $35,209

National Institutes of Health (NIADDKD), AM-31580,

"Adaptive Processes for Amino Acid Uptake by Liver Cells",

1982-1985. $171,968

National Institutes of Health (NIADDKD), AM-28374, "Hepatic

Amino Acid Transport in Diabetic Animals", 1984-1986. $211,681

Faculty Research Program, Division of Sponsored Research,

University of Florida, "Regulation of Amino Acid Transport In

Liver", 1985-1986 $18,097

National Institutes of Health (NIADDKD), DK-31580, "Adaptive

Processes for Amino Acid Uptake by Liver Cells", 1986-1988. $403,000

National Institutes of Health (NIADDKD), DK-28374, "Hepatic

Amino Acid Transport in Diabetic Animals", 1987-1990. $311,000

Faculty Research Program, Division of Sponsored Research,

University of Florida, "Reconstitution of Human Amino Acid

Transporters", 1988-1989. (Co-P.I. with Dr. Mark Mailliard) $25,000

National Institutes of Health (NIADDKD), DK-31580, "Adaptive

Processes for Amino Acid Uptake by Liver Cells", 1988-1994. $761,563

National Institutes of Health (NIDDKD), DK-28374, "Hepatic

Amino Acid Transport in Diabetic Animals", 1990-1995. $670,337

National Institutes of Health, DK/HD-47836, (Symposium

support) "Nutrient Control of Gene Expression", 1994

(Co-PI with Dr. Steven Clarke, Colorado State University). $12,000

Juvenile Diabetes Foundation International, "Diabetes-Induced

Amino Acid Transporters, Funded, but declined due to overlap

with NIH DK-28374. $99,000

National Institutes of Health, HD-29934 (R01), "Molecular

Mechanisms of Placental Amino Acid Transport", 1993-1997

(Co-P.I. with Dr. Donald Novak, U. F.). $805,558

National Institutes of Health, DK/MH-36555 (R13),

"Transporters of Amino Acids, Peptides, and Bioactive

Amines Meeting", 1997 (P.I., Dr. C. MacLeod, UCSD). $23,660

National Institutes of Health, (T32) DK-07455, "Research

Training in Gastroenterology", 1994-1999, (a preceptor). $731,485

National Institutes of Health (T32) DK-07667, "Research Training

in Nutrition", 1994-1999, (a preceptor). $462,593

National Institutes of Health, DK-28374 (R01), "Hepatic

Amino Acid Transport in Diabetic Animals", 1996-2000. $652,190

National Institutes of Health, DK-52064 (R01), “Nutritional

Control of Asparagine Synthetase”, 1997-2000. $775,768

National Institutes of Health, HD-29934 (R01), "Molecular

Mechanisms of Placental Amino Acid Transport", 1999-2003

(P.I., D. Novak). $1,199,459

National Institutes of Health, (R01), "Fetal Origins of

Adult Disease", 2001-2005 (P.I., D. Novak). $750,000

National Institutes of Health, DK-59315 (R01), “Nutritional

Regulation of Ribosomal Protein Expression”, 2001-2006 $875,000

National Institutes of Health, CA-107437 (R21) “Measuring

Asparagine Synthetase Expression in Leukemia”, 2004-2006

(P.I.: Steve P. Hunger) $180,000

National Institutes of Health, HL-52136 (R37) “Hypoxia Inhibits

L-Arginine Uptake by Lung Endothelium”, 1998-2008,

(P.I.: Edward Block) $2,000,000

National Institutes of Health, DK-52064 (R01) “Nutritional Control

of Asparagine Synthetase”, 2006-2011 $1,117,000

National Institutes of Health, DK-70647-04 (R01) “Nutritional

Control of Transcription Factor Expression”,2006 – 2011 $1,000,000

Ajinomoto Company, “Amino Acid Limitation of Mouse

Embryonic Stem Cells”, 2011-2013, $250,000

National Institutes of Health, DK094729-01 (R01) “Amino Acid

Regulation of the FOS/JUN Transcription Factors”, 2011-2015 $1,250,000

National Institutes of Health, DK092062-01 (R01) “Amino Acid

Regulation of Alternative Splicing”, 2011-2015 $1,250,000

National Institutes of Health, DK79879 (R01) “Autophagy in liver injury”,

9/22/2014-8/31/2019 (P.I., J-S Kim) $1,250,000

National Institutes of Health, CA203565 (R01) “Nutritional Control of

Cancer Cell Function by Amino Acids”, 2015-2020 $1,144,000

National Institutes of Health, HD100576 (R21) “Asparagine Synthetase

Deficiency”, 2020- 2022 $275,000