BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME	POSITION TITLE
Charles F. Burant, M.D., Ph.D.	Professor of Internal Medicine
eRA COMMONS USER NAME (credential, e.g., agency login) burantc	

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	YEAR(s)	FIELD OF STUDY
University of Wisconsin, Madison	B.S.	1979	Biochemistry
University of Wisconsin, Madison	M.S.	1981	Toxicology
Medical University of South Carolina	M.D.	1987	Medicine
Medical University of South Carolina	Ph.D.	1987	Molecular & Cell Biology

A. Positions and Honors.

Professional and Research Experience

1981-1987 Medical Scientist Training Program, Medical University of South Carolina.
1987-1989 Resident in Medicine, University of California, San Francisco.
1989-1991 Fellow in Endocrinology & Metabolism, University of Chicago.
1991-1998 Instructor/Assistant Professor in Medicine, University of Chicago.
1998-2001 Head, Metabolic Diseases, Director, Cell Biology, Parke-Davis Pharmaceuticals.
2001-2006 Associate Professor of Internal Medicine, University of Michigan.
2006-present Director, Michigan Metabolomics and Obesity Center.
2006-present Professor of Internal Medicine and Molecular and Integrative Physiology, University of Michigan.

Honors/Memberships

1981-1987 Medical Scientist Training Program Award.
1984 Member Alpha Omega Alpha National Medical Honor Society.
1992-1993 American Diabetes Association- Career Development Award.
1993-2001 Member and Chair, American Diabetes Association Grant Review Panel.
1999-2008 Associate Editor, American Journal of Physiology; Endocrinology & Metabolism..
2004-2007 NIH Integrative Physiology of Obesity and Diabetes Study Section.
2006-present Endowed Chair-Robert C. and Veronica Atkins Professor in Metabolism.

B. Peer-reviewed publications (Partial list)

1. Chutkow WA, Simon MC, Le Beau MM, **Burant CF**: Cloning, localization and expression of SUR2, the putatuve drug binding subunit of cardiac, skeletal and vascular KATP channels. Diabetes 1996;45:1439-1445.
2. **Burant CF**, Sreenan S, Hirano K, Chang T, Lohmiller J, Lukens J, Davidson N, Ross S, Graves R: Troglitazone action is independent of adipose tissue. J Clin Invest 1997;100:2900-2909.
3. Corpe CP, Bovelander FJ, Hoekstra J, **Burant CF**: The control of GLUT5 expression by fructose occurs in mature enterocytes by diurnally influenced transcriptional and post-transcriptional events. Biochem Biophys Acta 1998;1402:229-238.
4. Pohlenz J, Rosenthal IM, Weiss RE, Jhiang SM, **Burant CF**, Refetoff S: Congenital hypothyroidism due to iodide transport defect caused by compound heterozygous mutations in the sodium/iodide symporter (NIS) gene. J Clin Invest 1998;101:1028-1035.
5. Chutkow WA, Michealski J, Nelson DA, Fan Z, **Burant CF**: Alternative splicing of SUR2 regulates nucleotide sensitivity of KATP. J Biol Chem 1999;274:13656-13665.
6. Sreenan S, Keck SA, Fuller TP, **Burant CF**: Troglitazone induced changes in substrate storage and metabolism in insulin resistant skeletal muscle. Am J Physiol 1999;276:E1119-1129.
7. Chutkow W, Pu J, Samuels V, Hansen P, Makielski J, **Burant C**: Disruption of SUR2 results in enhanced insulin sensitivity localized to skeletal muscle. Proc Natl Acad Sci USA 2001;98:11760-11764.

8. Corpe CP, Bovelander FP, Munoz CM, Hoekstra JH, Simpson IA, Kwon O, Levine M, **Burant CF**: Cloning & functional characterization of the mouse fructose transporter, GLUT5. Bio. Biophys Acta 2002;1576:191-197.
9. Chutkow WA, Pu J, Wheeler MT, Wada T, Makielski JC, **Burant CF**, McNally EM: Prinzmetal-like vasospasm, hypertension, and early death result from the absence of *Sur2* K_{ATP} channels in mice. J Clin Invest 2002;110:203-208.
10. Treutelaar MK, Skidmore JM, Dias-Leme CL, Hara M, Zhang L, Simeone D, Martin DM, **Burant CF**: Nestin-lineage cells contribute to microvasculature but not endocrine cells of the pancreatic islet. Diabetes 2003;52:2503-2512.
11. Subauste A, **Burant CF**: DGAT: Novel therapeutic target for obesity and Type 2 diabetes mellitus. Curr Drug Targets Immune Endocr Metabol Disord 2003;3:263-270.
12. **Burant CF**: Medical Management of Type 2 Diabetes, 5th Edition. 2005. Alexandria,Va.: American Diabetes Assoc.
13. Borer K, Wuorinen E, Chao C, **Burant CF**: Exercise energy expenditure is not consciously detected due to oro-gastric, not metabolic, basis of hunger sensation. Appetite 2005;45:177-181.
14. Gerin I, Dolinsky VW, Chiang S-H, **Burant CF**, Steffensen KR, Gustafsson J-A, MacDougald OA: LXRβ is required for adipocyte hypertrophy, glucose homeostasis and β-cell function in aged mice. J Biol Chem 2005;280:23024.
15. MacDougald OA, **Burant CF**: Obesity and metabolic perturbations following loss of aquaporin 7, the adipose glycerol transporter. Proc Nat Acad Sci 2005;102:10759-10760.
16. Li X, Hansen P, Li X, Chandraratna RAS, **Burant CF**: High affinity Retinoid X Receptor ligands decrease hepatic glucose production without peripheral insulin sensitization: antihyperglycemic effects in the absence of activation of the peroxisome proliferator-activated receptorγ-RXR heterodimer. J Biol Chem 2005;280:38317-30327.
17. Simeone D, Zhang L, Treutelaar MK, Zhang L, Graziano K, Logsdon CD, **Burant CF**: Islet hypertrophy after pancreatic disruption of Smad4. Am J Physiol (Endo Metab) 2006;291:E1305-16.
18. Li X, Zhang J, Meshinchi S, Raffin D, Dias-Leme C, Johnson JD, Treutelaar, MK, **Burant CF**: Islet Microvasculature in Islet Hyperplasia and Islet failure in Type 2 Diabetes. Diabetes 2006;55:2965-2973.
19. Wright WS, Longo KA, Dolinsky VW, Gerin I, Kang S, Bennett CN, Chiang SH, Prestwich TC, Gress C, **Burant CF**, Susulic VS, MacDougald OA. Wnt10b inhibits obesity in ob/ob and agouti mice. Diabetes. 2007;56:295-303.
20. Li C, Heidt DG, Dalerba P, **Burant CF**, Zhang L, Adsay V, Wicha M, Clarke MF, Simeone DM. Identification of pancreatic cancer stem cells. Cancer Res. 2007; 67:1030-1037.
21. Heidt DG, **Burant C**, Simeone DM. Total pancreatectomy: indications, operative technique, and postoperative sequelae. J Gastrointest Surg. 2007;11:209-16.
22. MacDougald OA, **Burant CF**. The rapidly expanding family of adipokines. Cell Metab. 2007;6:159-61.
23. Subauste AR, **Burant CF.** Role of FoxO1 in FFA-induced oxidative stress in adipocytes. Am J Physiol Endocrinol Metab. 2007;293:E159-164.
24. Ni Q, Reid KR, **Burant CF** and Kennedy RT. Capillary LC-MS for high sensitivity metabolomic analysis of single islets of Langerhans. Anal Chem. 2008 80:3539-46.
25. Borer KT, Wuorien E, Lukos JR, Denver J, Porges SW and **Burant CF**. Two Bouts of Exercise before meals, but not after meals, lower fasting blood glucose. Exercise and Sports Medicine 2009. 41:1606-14
26. Singer, B, Jutkiewicz, E, Fuller, C, Lichtenwalner, R, Zhang, H, Velander, A, Li, X., Gnegy, M, **Burant, C.F.** and Parent, J. Conditional Ablation and Recovery of Forebrain Neurogenesis in the Mouse. Journal of Comparative Neurology. 2009. 514:567-82.
27. Thyfault, J.P., Rector, R.S., Uptergrove, G. M. Borengasser, S. J., Morris, E. M., Wei, Y., Laye, M. J., **Burant, C.F**., Qi, N. Ridenhour, S.E.C., Koch, L.G., Britton, S. L., and Ibdah J. A. Rats selectively bred for low aerobic capacity have reduced hepatic mitochondrial oxidative capacity and susceptibility to hepatic steatosis and injury. J Physiol. 2009. 587:1805-16.
28. Borer KT, Wuorinen E, Ku K, **Burant CF**. Appetite responds to changes in meal content, whereas ghrelin, leptin, and insulin track changes in energy availability. 2009. J. Clin. Endo. Met. 94:2290-2298.
29. Schenk S, Harber MP, Shrivastava CR, **Burant, CF** and Horowitz, JF. Improved insulin sensitivity after weight loss and exercise training is mediated by a reduction in plasma fatty acid mobilization, not enhanced oxidative capacity. Am. J. Physiology 2009. (in press).