

BIOGRAPHICAL SKETCH

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NAME Kitabchi, Abbas E.		POSITION TITLE Professor of Medicine & Molecular Sciences Director, Div. Endocrinology, Diabetes & Metabolism	
eRA COMMONS USER NAME AKITABCHI			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Cornell College, Mount Vernon, IA	B.S.	1954	Biology, Chemistry
University of Oklahoma, Oklahoma City, OK	M.S.	1956	Physiology
University of Oklahoma, Oklahoma City, OK	Ph.D.	1958	Med Sciences
University of Oklahoma, Oklahoma City, OK	M.D.	1965	Medicine

A. Positions and Honors

1958-1961 Postdoctorate in Biochemistry, Oklahoma Medical Research Foundation, Oklahoma City, OK
 1961-1965 Biochemist, Oklahoma Medical Research Institute, Oklahoma City, OK
 1965-1966 Senior Investigator, Biochemistry, Oklahoma Medical Research Institute, Oklahoma City, OK
 1965-1966 Intern, VA Hospital and University of Oklahoma Medical Center, Oklahoma City, OK
 1966-1968 NIH Postdoctoral Fellow in Endocrinology and Metabolism, Univ. Washington, Seattle, WA
 1966-1968 Instructor of Medicine, University of Washington, Seattle, WA
 1968-1971 Assistant Professor of Medicine, University of Tennessee, Memphis, TN
 1968-1972 Associate Professor of Biochemistry, University of Tennessee, Memphis, TN
 1968-1973 Associate Chief of Staff for Research and Education, VA Hospital, Memphis, TN
 1968-1974 Chief, Laboratories of Endocrinology and Metabolism, VA Hospital, Memphis, TN
 1971-1973 Associate Professor of Medicine, University of Tennessee, Memphis, TN
 1990-1991 Visiting Scientist, Virginia Mason Research Center (Immunology/Diabetes Program, Dr. Gerald Nepom, Director) and University of Washington, Seattle, WA (on Sabbatical from UT)
 1973-1992 Program Director, General Clinical Research Center, University of Tennessee, Memphis, TN
 1972-present Professor of Medicine and Molecular Sciences, University of Tennessee, Memphis, TN
 1973-present Director, Division of Endocrinology, Diabetes and Metabolism, Dept Medicine, University of Tennessee, Memphis, TN

Honors

Special NIH Fellowship in Endocrinology (with Dr. R.H. Williams) 1966-1968; Alpha Omega Alpha 1982; Keynote Speaker 63rd Annual Japanese Endocrine Society, 1990; Beverly Todd Towery Visiting Professor, University of Louisville, KY, 1993; ADA Charles H. Best Medal for Distinguished Service, 1994; Best Doctors in America 1999-2002; Horner Professor, The University of Tennessee Health Science Center, College of Medicine, Memphis, TN, 2001; Visiting Professor at Roosevelt Hospital, Columbia University and Mt. Sinai Hospital, New York, NY, 2004; Invited Speaker, International Diabetes Federation, Cape Town Africa, December, 2006, Member, ADA National Research Committee 1995-1998 and 2002-2005; President, ADA Tennessee Affiliate 1974, 1992; Member, Steering Committee, Diabetes Control and Complications Trial (DCCT), NIDDK, NIH, 1982-1993; Member, Study Group, Epidemiology of Diabetes Intervention and Complications (EDIC), NIDDK, NIH, 1993-1999; Member, Steering Committee and Intervention Subcommittee, Diabetes Prevention Program (DPP), NIDDK, NIH, 1997-2005; Member Steering Committee and Drug Study Subcommittee, DPP Outcome Studies (DPPOS), NIDDK, NIH 2004-present NIDDK, NIH, 1997-2005; Member, Steering Committee and Look AHEAD (Action for Health in Diabetes), NIDDK, NIH, 1999-2004, Chairman, Diabetes Education and Support Committee, Look AHEAD, NIDDK, NIH, 2001-present, and Member, Committee Overseeing Protocol and Pharmacologic Intervention Working Group, Look AHEAD, NIDDK, NIH, 2001-present. Member, ADA Southern Region Program Planning Committee, 2003-present (Co-chair, 2006), Member, NIDDK NIH Special Emphasis Panel Review Committee, 2006-.

Memberships: AAP, ASCI, ASBMB, AIN, The Endocrine Society, IDF, ADA, EASD, F.A.C.E., F.A.C.P.

Editorial Boards: J Clin Endo Metab (1976-1979 and 2002-2005); Capsules and Comments (1977-1982); Diabetes (1981-1987); Associate Editor, Hormone Secreting Pituitary Tumors (1982); Associate Editor, The Hypothalamus, (1983); Endocrinology (1984-1988); Diabetes Care (1995-1997 and 2005-2008); Guest Editor, Diabetes Spectrum (2002), Metabolism (2003-2008); Iranian Journal of Diabetes and Lipid Disorders (2004-2008); International Journal of Osteoporosis and Metabolism (2007).

B. Selected peer-reviewed publications (from 250+)

1. Kitabchi, A.E., and Stentz, F.B. 1986. Insulin Degrading Activities in Human Tissues, In (J Larner and S. Pohl, eds), Methods in Diabetes Research, 2:165-186, New York, John Wiley and Sons.
2. Stentz, F.B., Kitabchi, A.E., Schilling, J.W., Schronk, L.R., and Seyer, J.M. 1989. Identification of Insulin Intermediates and Sites of Cleavage of Native Insulin (non-radioactive) by Insulin Protease from Human Fibroblasts. J Biol Chem 264:20275-20282.
3. Buffington, C.K., Givens, J.R., and Kitabchi, A.E. 1990. Sensitivity of PDH to Insulin in Activated T-lymphocytes: Lack of Responsiveness to Insulin in Patients with Polycystic Ovarian Disease and Diabetes. Diabetes 39:361-368.
4. Kitabchi, A.E., Buffington, C.K., Givens, J.R., and Inouye, H. 1991. The Role of Testosterone and Dehydro-epiandrosterone on Insulin Resistance and Sensitivity in Hyperandrogenic Females: Use of Activated T-Lymphocytes as an In Vitro Study Model and Its Correlation to In Vivo Studies. In (Dunaif A, Givens JR, Haseltine FP, and Merriam GR, eds), Polycystic Ovary Syndrome. Boston, Blackwell Scientific Publications, 289-305.
5. The DCCT Research Group. 1993. The Effect of Intensive Treatment of Diabetes on the Development and Progression of Long-Term Complications in Insulin-Dependent Diabetes Mellitus. N Engl J Med 329:977-986.
6. Kitabchi, A.E., and Buffington, C.K. 1994. Body Fat Distribution, Hyperandrogenicity, and Health Risks. In (Speroff L., ed), Seminars in Reproductive Endocrinology. NY, Thieme, Inc., 12:6-14.
7. Buffington, C.K., and Kitabchi, A.E. 1994. Evidence for a Defect in Insulin Metabolism in Hyperandrogenic Women with Polycystic Ovarian Syndrome. Metabolism 43:1367-1372.
8. Umpierrez, G.E., Kelly, J.P., Navarrete, J.E., Casals, M.M.C., and Kitabchi, A.E. 1997. Hyperglycemic Crises in Urban Blacks. Arch Intern Med 157:669-675.
9. Umpierrez, G.E., Woo, W., Hagopian, W.A., Isaacs, S.D., Palmer, J.P., Gaur, L.K., Nepom, G.T., Clark, W.S., Mixon, P.S., and Kitabchi, A.E. 1999. Immunogenetic Analysis Suggest Different Pathogenesis Between Obese and Lean African-Americans with DKA. Diabetes Care 22: 1517-23.
10. Johnson, K.C., Graney, M.J., Applegate, W.B., Kitabchi, A.E., and Runyan, J.W. 1999. Does Syndrome X Exist in Hypertensive Elderly Persons with Impaired Glycemic Control? J Gerontol 54:M571-6.
11. Kitabchi, A.E., Imseis, R.E., Bush, A.J., Williams-Cleaves, B., and Pourmotabbed, G. 1999. Racial Differences in the Correlation between Gonadal Androgens and Serum Insulin Levels. Diabetes Care 22:1524-1529.
12. Kitabchi, A.E., Umpierrez, G.E., Murphy, M.B., Barret, E.J., Kreisberg, R.A., Malone, J.I., and Wall, B.M. 2001. Management of Hyperglycemic Crises in Diabetes Mellitus. Diabetes Care 24:131-153.
13. DPP Research Group. 2002. Reduction in the Incidence of Type 2 Diabetes with Lifestyle Intervention or Metformin. N Eng J Med 346:393-403.
14. Umpierrez, G.E., Isaacs, S.D., Bazargan, N., You, X., Thaler, L.M., and Kitabchi, A.E. 2002. Hyperglycemia: An Independent Risk Factor for Hospital Mortality in Patients with Undiagnosed Diabetes. J Clin End Metab 87:978-982.
15. Kitabchi, A.E. 2002. Guest Editorial. Acute Care of Patients with Diabetes. Diabetes Spectrum 15:17-19.
16. The Look AHEAD Research Group. 2003. Look AHEAD (Action for Health in Diabetes): Design and Methods for a Clinical Trial of Weight Loss for the Prevention of Cardiovascular Disease in Type 2 Diabetes. Contr Clin Trials 24:610-628.
17. Kitabchi, A.E. and Umpierrez, G.E. 2003. Changes in Serum Leptin and Obese Subjects with Acute Hyperglycemia Crisis. J Clin End Metab 88:2593-2596.
18. Stentz, F.B. and Kitabchi, A.E. 2003. Activated T Lymphocytes in Type 2 Diabetes: Implications from *In Vitro* Studies. Current Drug Targets 4:493-503.

19. Kitabchi, A.E. 2003. Editorial: Ketosis-Prone Diabetes – A New Subgroup of Patients with Atypical Type 1 and Type 2 Diabetes? *J Clin End Metab* 88:5087-5089.
20. Stentz, F.B. and Kitabchi, A.E. 2004. De Novo Emergence of Growth Factor Receptors in Activated Human CD4+ and CD8+ T Lymphocytes. *Metabolism* 53:117-122.
21. Kitabchi, A.E., Stentz, F.B., Umpierrez, G.E. 2004. Diabetic Ketoacidosis Induces *in vivo* Activation of Human T-lymphocytes. *Biochem Biophys Res Commun* 315:404-7.
22. Stentz, F.B., Umpierrez, G.E., Cuervo, R. and Kitabchi, A.E. 2004. Proinflammatory Cytokines, Markers of Cardiovascular Risks, Oxidative Stress, and Lipid Peroxidation in Patients with Hyperglycemic Crises. *Diabetes* 53:2079-2086.
23. Stentz, F.B. and Kitabchi, A.E. 2004. Transcriptome and Proteome Expression in Activated CD4 and CD8 in Human T-Lymphocytes. *Biochem Biophys Res Commun* 324:692-6.
24. Kitabchi, A.E. Editorial. 2005. Hyperglycemic Crises: Improving Prevention and Management. *Am Fam Physician* 71:1659-60.
25. Freire, A., Umpierrez, G.E., and Kitabchi, A.E. 2005. Biomarkers of Risk Factor for Mortality in Medical ICU Independent of Initial Blood Glucose Levels. *Chest* 125:5.3109.
26. Kitabchi, A.E., Tempresa, M., Knowler, W.C., Kahn, S.E., Fowler, S.E., Haffner, S.M., Andres, R., Saudek, C., Edelstein, S.L., Arakaki, R., Murphy, M.B., and Shamon, H., for the Diabetes Prevention Program Research Group. Role of Insulin Secretion and Sensitivity in the Evolution of Type 2 Diabetes in the Diabetes Prevention Program: 2005. Effect of Lifestyle Intervention and Metformin. *Diabetes* 54:2404-2414.
27. DCCT/EDIC, Kitabchi AE. 2005. Intensive Diabetes Treatment and Cardiovascular Disease in Patients with Type 1 Diabetes. *NEJM* 353:2643-53.
28. Kitabchi, A.E. and Murphy, M.B. 2006. Consequences of Insulin Deficiency. In: *Atlas of Diabetes*, 3rd edition (Skyler JS, ed). Current Medicine LLC, Philadelphia PA, pp. 41-56.
29. Umpierrez, G.E., Smiley, D., Kitabchi, A.E. 2006. Ketosis-Prone type 2 diabetes mellitus. *Ann Intern Med* 144:350-357.
30. Kitabchi, A.E. 2006. The Escalating Pandemics of Obesity and Sedentary Lifestyle. *IAMA Bulletin* 10:27-28.
31. Gosmanov, A.R., Stentz, F.B. and Kitabchi, A.E. 2006. *De Novo* Emergence of Insulin-Stimulated Glucose Uptake in Human Aortic Endothelial Cells Incubated with High Glucose. *Am J Physiol Endocrinol Metab* 290: E516-E522.
32. Stentz, F.B., and Kitabchi, A.E. 2006. Palmitic acid-induced activation of human T-Lymphocytes and aortic endothelial cells with production of insulin receptors, reactive oxygen species, cytokines, and lipid peroxidation. *Biochem Biophys Res Commun* 346:721-726.
33. Kitabchi, A.E. Diabetic Ketoacidosis. 2006. *Conn's Current Therapy* (Rakel RE, Bope ET, eds) Elsevier Inc. 2006, p715-720.
34. Kitabchi, A.E., Umpierrez, G.E., Murphy, M.B., and Kreisberg, R.A. 2006. Hyperglycemic Crises in Adult Patients with Diabetes: A Consensus Statement from The American Diabetes Association *Diabetes Care* 29:2739-2748, 2006.
35. Kitabchi, A.E., and Nyenwe, N. 2006. Hyperglycemic Crises in Diabetes Mellitus: Diabetic Ketoacidosis and Hyperglycemic Hyperosmolar State. *Endocrinology and Metabolism Clinics of North American* 35:725-751.
36. Walker, EA, Molitch M, Kramer MK, Kahn S, Ma Y, Edelstein S, Smith K, Johnson MK, Kitabchi A, Crandall J. 2006. Adherence to Preventive Medications: Predictors and Outcomes in the Diabetes Prevention Program. *Diabetes Care* 29:1997-2002.

C. Research Support

Ongoing Research Support

2 U01DK48411-13

Kitabchi (PI)

12/01/06-11/30/07

NIH/NIDDK

Amount: \$401,427

Diabetes Prevention Program (DPP) – Post-DPP Follow-up Studies (DPPOS)

The primary objective of the DPPOS is to evaluate the long-term effects of active DPP intervention on the development of diabetes and composite diabetes-related microangiopathic and cardiovascular disease outcomes

R073316101 Kitabchi (PI) 1/5/04-6/4/08
 Takeda Pharmaceuticals Amount: \$559,664
ACTOS Now for Prevention of Diabetes ("ACT NOW")

A multicenter prospective double blind randomized protocol to study efficacy of Actos® in prevention of diabetes in subjects with impaired glucose tolerance.

1R01DK067269-01A1 Dagogo-Jack – (PI) 8/2006-8/2011
 NIH/NIDDK Amount: \$588,835
 Pathobiology of Prediabetes in a Bi-Racial Cohort
 Role: Co-investigator

U01-DK57078 Karen Johnson (PI) Abbas Kitabchi (Co-PI) 9/30/06-9/29/07
 NIH/NIDDK Amount \$1,368,087
Look AHEAD (Action for Health in Diabetes)

Look AHEAD is an NIH-sponsored, multi-center study developed to examine the long-term cardiovascular effects of an intervention program designed to achieve and maintain weight loss, compared with standard intervention, in overweight volunteers with type 2 diabetes (DM2)
 Role: Co-investigator (PI, 2001-2005)

NIH-DK62203 Dagogo-Jack (PI), Kitabchi (Co-PI) 3/01/06 –3/01/2016
Epidemiology of Diabetes Intervention and Complications (EDIC) Amount: \$891,817
 The EDIC study is an epidemiologic investigation on the participants of the Diabetes Control and Complications Trial (DCCT).
 Role: Co-investigator

Completed Research Support

R01-DK530611 Kitabchi (PI) 9/1/98-6/30/05
 NIH_ Amount \$501,335
Mechanisms of Action in DPP Interventions

This study will gather information on 300 IGT female subjects under its primary aim and on 900 (300 IGT, 300 normal, 300 diabetic) to meet its secondary aim. The study proposes that changes in insulin and glucose response during OGTT, metabolism of glucose and insulin, and insulin resistance can be explained by a combination of fixed and time-dependent covariate effects of androgens.

Pending Grants

R01- 1R01DK072435-01 Stentz (PI), Kitabchi (Co-PI) 03/1/07-02/28/11
 NIH Amount: \$800,000
Biomarkers of Diabetes by Proteomic/Genomics in T-Cells.

NIH-P-60-DK079641-01 Kitabchi (PI) 2/01/06-01/31/2013
Diabetes Research and Training Center at UTHSC Direct Amount: \$6,661,776

PATENT APPROVAL

Method of Separating A₁₄(¹²⁵I) Insulin from Heterogeneously Labeled Insulin Molecules for Biological Studies.
 U.S. Patent #4,528,124 (with Frankie B. Stentz, PhD and Reba K. Wright, PhD) July 1985