

CURRICULUM VITAE

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PERSONAL

Date of Birth: March 7, 1948
Place of Birth: Durban, Republic of South Africa (RSA)
Citizenship: United States

EDUCATION

1971 M.B.B.Ch. (M.D. equivalent) University of Witwatersrand, Johannesburg, RSA
1983 Ph.D. University of Cape Town, Cape Town, RSA

ADDITIONAL DEGREES

1975 M.R.C.P. (Member of the Royal College of Physicians) London, England, UK
1990 F.R.C.P. (Fellow of the Royal College of Physicians) Edinburgh, Scotland
2003 F.A.C.E (Fellow of the American College of Endocrinology)

POSTGRADUATE TRAINING

1972 - 1974 Rotating Internship (Internal Medicine, Surgery and Pediatrics)
Johannesburg General Hospital, Johannesburg, RSA
1975 Senior House Officer, Royal Northern Hospital, London, UK
1976-1977 Registrar, Internal Medicine, University of Cape Town and Groote Schuur
Hospital, Cape Town, RSA
1977-1979 Research Fellow, Diabetes and Endocrine Research Group, University of
Cape Town, RSA

1979-1980 Senior Registrar, Endocrinology and Metabolism, Groote Schuur Hospital, Cape Town, RSA

FACULTY POSITIONS

1980-1982 Lecturer, Internal Medicine & Endocrinology, University of Cape Town Medical School

1982-1983 Senior Lecturer, Internal Medicine & Endocrinology, University of Cape Town Medical School

1982-1983 Acting Head, Endocrine and Diabetes Radioimmunoassay Laboratory, University of Cape Town

1983-1989 Assistant Professor of Medicine, Department of Endocrinology, Metabolism, and Nutrition, University of Washington

1987-1989 Director, Radioimmunoassay Core, Diabetes Endocrinology Research Center, University of Washington

1989 Associate Professor of Medicine, Department of Endocrinology, Metabolism and Nutrition, University of Washington

1989-2004 Clinical Associate Professor of Medicine, Department of Endocrinology, Metabolism, and Nutrition, University of Washington

2004- Clinical Professor of Medicine, Department of Endocrinology, Metabolism, and Nutrition, University of Washington

ENDOCRINE AND INTERNAL MEDICINE PRACTICE

1989-1998 Partner, Rainier Internal Medicine, Renton WA

1998-2006 Partner, Southlake Clinic (previously Valley Internal Medicine), Renton WA

HOSPITAL POSITIONS

1980-1982 Specialist Physician, Groote Schuur Hospital, Cape Town, RSA

1982-1983 Senior Specialist Physician
Groote Schuur Hospital, Cape Town, RSA

1983-1989 Attending Physician, Pacific Medical Center, Seattle, Washington

HOSPITAL MEDICAL STAFF

1987-2005 Providence Medical Center, Seattle, Washington

1989-2006 Valley Medical Center, Renton, Washington

1996-2002 Swedish Medical Center, Seattle, Washington

HONORS

1980 Bernard Pimstone Memorial Award for Best Young Investigator

BOARD CERTIFICATIONS

- 1980 Registered as Specialist in Internal Medicine with South African Medical and Dental Council
- 1985 American Board in Internal Medicine
- 1987 American Board in Endocrinology and Metabolism

MEDICAL LICENSURE

- 1971 South Africa
- 1973 United Kingdom
- 1982 State of Washington
License Number MD00021403

PROFESSIONAL ORGANIZATIONS

- 1972-1973 Medical Association of South Africa
- 1979-1983 Board Member, Society for Endocrinology, Metabolism, and Diabetes of Southern Africa
- 1982- American Diabetes Association
- 1984-1989 American Federation for Clinical Research
- 1984-2006 Endocrine Society
- 1984-2006 King County Medical Society

SPECIAL NATIONAL RESPONSIBILITY

Organizing committee for symposium on current trends in Diabetes Mellitus (satellite meeting in Cape Town to 11th Congress of International Diabetes Federation in Nairobi), November 1982

SPECIAL LOCAL RESPONSIBILITY

- 1985-1991 Board Member, American Diabetes Association, Washington Affiliate
- 1985-1987 Co-chairman, Professional Education Committee, American Diabetes Association, Washington Affiliate
- 1985-1989 Pharmacy and Therapeutics Committee, Pacific Medical Center
- 1987-1989 Research Committee, Pacific Medical Center
- 1988-1990 Peer Review Committee, American Diabetes Association, Washington Affiliate
- 1992-2002 CME Committee, Valley Medical Center

1998- Endocrine Days organizing committee

CLINICAL RESEARCH PROJECTS

- 1983-1989 Diabetes Control and Complications Trial, Co-Investigator, National Institutes of Health
- 1983-1989 Investigations of the Etiology of Type I Diabetes, Co-Investigator, National Institute of Health
- 1992-present Investigator, Rainier Clinical Research Center, Inc.

BIBLIOGRAPHY

1. **Klaff** LJ, Levin PJ, Potgieter PD, Losman JG, Nochomovitz LE, and Ferguson AD: Treatment of paraquat poisoning with the membrane oxygenator: a case report. *S Afr Med J* 51:203-205, 1977.
2. **Klaff** LJ, Vinik AI, Berelowitz M and Jackson WPU: Circulating antibodies in diabetics treated with monocomponent and conventional insulin. *S Afr Med J* 54:149-153, 1978.
3. Levin PJ, **Klaff** LJ, Rose AG, and Ferguson AD: Pulmonary effects of contact exposure to paraquat: a clinical and epidemiological study. *Thorax* 34:150-160, 1979.
4. **Klaff** LJ, Vinik AI, Jackson WPU, Malan E, Kernoff L, and Jacobs P: A comparison of the effects of the sulfonylurea drugs gliclazide and glibenclamide on blood glucose control and platelet functions. *S Afr Med J* 56:247-250, 1979.
5. Coetzee J, **Klaff** LJ, and Epstein S: The measurement of human serum parathyroid hormone in disorders of calcium metabolism and during administration of certain gut hormones. *S Afr Med J* 57:165-170, 1980.
6. Levitt NS, Vinik AI, Sive AA, **Klaff** LJ, and Phillips C: A double-blind cross-over trial of synthetic gonadotrophin-releasing hormone (LHRH) in impotent male diabetics. *S Afr Med J* 57:701-704, 1980.
7. **Klaff** LJ, Hudson A, Sheppard M, and Tyler M: In vitro release of cholecystokinin octapeptide-like immuno-reactivity from rat brain synaptosomes. *S Afr Med J* 59:158-160, 1981.
8. **Klaff** LJ, Kernoff L, Vinik AI, Jackson WPU, and Jacobs P: Sulphonylureas and platelet function. *American J Med* 70:627-730, 1981.
9. Wright JP, Young GO, **Klaff** LJ, Weers LA, Price SK, and Marks IN: Gastric mucosal prostaglandin E levels in patients with gastric ulcer disease and carcinoma. *Gastroenterology* 82:263-267, 1982.
10. Millar RP, **Klaff** LJ, Barron J, Levitt NS, and Ling N: Somatostatin-28 inhibits Gn-RH-stimulated gonadotrophin secretion in man. *Clin Endocrinol* 17:103-107, 1982.
11. **Klaff** LJ, Hudson AM, Paul M, and Millar RP: A method for studying synaptosomal release of neurotransmitter candidates as evaluated by studies on cortical cholecystokinin octapeptide release. *Peptides* 3:155-161, 1982.
12. **Klaff** LJ, Barron JL, Levitt NS, Millar RP, and Ling N: Somatostatin-28 inhibits thyroid-stimulating hormone release in man. *S Afr Med J* 62:929-930, 1982.

13. Millar RP, **Klaff** LJ, Barron JL, Levitt NS, and Ling N: Somatostatin-28 and somatostatin-14 suppression of arginine-, insulin-, and TRH-stimulated GH & prolactin secretion in man. *Clin Endocrinol* 18:277-285, 1983.
14. Mee AS, **Klaff** LJ, Girdwood A, Paul M, Tyler M, and Marks IS: A comparative study of pancreatic polypeptide secretion endocrine and exocrine function and structural damage in chronic alcohol induced pancreatitis (CAIP). *Gut* 24:642-647, 1983.
15. Maze SS, **Klaff** LJ, and Yach D: Syndrome of inappropriate antidiuretic hormone secretion in association with herpes zoster of the chest wall. *S Afr Med J* 63:735-736, 1983.
16. **Klaff** LJ, Barron JL, Levitt NS, Ling N, and Millar RP: Inhibition of pancreatic hormone secretion by somatostatin-28 and somatostatin-14 in man. *Acta Endocrinologica* 104:91-95, 1983.
17. Barron JL, **Klaff** LJ, Levitt NS, Ling N, and Millar RP: Arginine hydrochloride stimulation of serum potassium and aldosterone is enhanced by somatostatin-28. *Acta Endocrinologica* 105:407-410, 1984.
18. Koeslag JH, Levinrad LI, **Klaff** LJ: Pancreatic polypeptide response to exercise: Effect of alanine and glucose ingestion in carbohydrate-starved athletes. *S Afr Med J* 67:884-887, 1985.
19. Roost R, Wright JP, Young GO, Lipshitz EM, **Klaff** L, Isaacs S, and Marks IN: The effect of aspirin and anti-ulcer drugs on gastric mucosal prostaglandin E. *S Afr Med J* 70:594-597, 1986
20. Johnston C, Raghu P, McCulloch DK, Beard JC, Ward WK, **Klaff** LJ, McKnight B, Bergman RN, Palmer JP: Beta cell function and insulin sensitivity in non-diabetic HLA identical siblings of insulin dependent diabetics. *Diabetes* 36:829-837, 1987.
21. **Klaff** LJ and Taborsky GJ Jr: Pancreatic somatostatin is a mediator of glucagon inhibition by hyperglycemia. *Diabetes* 36:592-596, 1987.
22. **Klaff** LJ, Tamborlane WV, Cleary PA, Steffes MW, and Becker DJ: For the DCCT Research Group: Effects of age, duration and treatment of IDDM on residual B-cell function: Observations during eligibility testing for the diabetes control and complications trial (DCCT). *J Clin Endocrinol Metab* 65:30-36, 1987.
23. **Klaff** LJ and Taborsky GJ Jr: The role of pancreatic somatostatin in determining the glucagon response to arginine and morphine. *Am J Physiol* 252:E751-E755, 1987.
24. Dent DM, Miller JL, **Klaff** L, and Barron J: The incidence and causes of hypercalcaemia. *Postgrad Med J* 63:745-750, 1987.
25. McCulloch DM, Raghu PK, Johnston C, **Klaff** LJ, Kahn SE, Beard JC, Ward WK, Benson EA, Koerker DJ, Bergman RN, Palmer JP: Defects in beta cell function and insulin sensitivity in normoglycemic streptozocin treated baboons: a model of preclinical insulin dependent diabetes. *J Clin Endocrinol Metab* 67:785-792, 1988.
26. Sutton M, **Klaff** LJ, Asplin CM, Clemons P, Tatpati O, Lyen K, Raghu P, Baker L, Guthrie R, Sperling M, and Palmer JP: Insulin autoantibodies at diagnosis of insulin dependent diabetes--effect on the antibody response to insulin treatment. *Metabolism* 37:1005-1007, 1988.
27. **Klaff** LJ, Dunning BE, and Taborsky GJ Jr: Somatostatin-28 does not regulate islet function in the dog. *Endocrinology* 123:2668-2674, 1988.

28. Willcox PA, Immelman EJ, Barron JL, **Klaff** LJ, Harries-Jones EP, Hainsworth M, and Millar RP: Pancreatic somatostatinoma: presentation with recurrent episodes of severe hyperglycemia and ketoacidosis. *Quart J Med* 255:559-571, 1988.
29. McCulloch DK, Raghu PK, Koerker DJ, Palmer JP, and **Klaff** LJ: Responses of the pancreatic A-cell during hypoglycemia hyperglycemia are dependent on the B-cell. *Metabolism* 38:702-709, 1989.
30. McCulloch DK, **Klaff** LJ, Kahn SE, Schoenfeld SL, Greenbaum CJ, Mauseth RS, Benson EA, Nepom GT, Shewey L, and Palmer JP: Nonprogression of subclinical B-cell dysfunction among first-degree relatives of IDDM patients: 5-year follow-up of Seattle study. *Diabetes* 39:549-556, 1990.
31. Markholst H, **Klaff** LJ, Kloppel G, Lernmark A, Mordes JP, and Palmer J: Lack of systemically found insulin autoantibodies in spontaneously diabetic BB rats. *Diabetes* 39:720-727, 1990.
32. Kahn SE, **Klaff** LJ, Schwartz MW, Beard JC, Bergman RN, Taborsky GJ Jr, and Porte D Jr: Treatment with a somatostatin analog decreases pancreatic B-cell and whole body sensitivity to glucose. *J Clin Endocrinol Metab* 71:797-805, 1990
33. Greenbaum CJ, Havel PJ, Taborsky GJ Jr, and **Klaff** LJ: Intra-islet insulin permits glucose to directly suppress pancreatic A cell function. *J Clin Invest* 88:767-773,1991.
34. Hegewald MJ, Schoenfeld SL, McCulloch DK, Greenbaum CJ, **Klaff** LJ, and Palmer JP: Increased specificity and sensitivity of insulin antibody measurements in autoimmune thyroid disease and type I diabetes. *J Immunol Meth* 154: 61-68,1992.
35. Kolterman OG, Schwartz S, Corder C, Levy B, **Klaff** LJ, Peterson J, Gottlieb A: Effect of 14 days' subcutaneous administration of the human amylin analogue, pramlintide (AC137), on an intravenous insulin challenge and response to a standard liquid meal in patients with IDDM. *Diabetologia* 39:492-499, 1996.
36. Raskin P, **Klaff** L, Bergenstal R, Halle JP, Donley D, Mecca T: A 16-week comparison of the novel insulin analog insulin glargine (HOE901) and NPH human insulin used with insulin lispro in patients with type 1 diabetes. *Diabetes Care* 23:1666-1671, 2000.
37. Ehlers MR, **Klaff** LJ, D'Alessio DA, Brazg R, Kay HD, Harley R, Mathison A, Schneider R: Recombinant glucagon-like peptide-1 (7-36 amide) lowers fasting serum glucose in a broad spectrum of patients with type 2 diabetes. *Horm Metab Res* 35:611-6, 2003.
38. Raskin P, **Klaff** L, McGill J, South SA, Hollander P, Khutoryansky N, Hale PM; Repaglinide vs. Nateglinide Metformin Combination Study Group. Efficacy and safety of combination therapy: repaglinide plus metformin versus nateglinide plus metformin. *Diabetes Care* 26: 2063-8, 2003.
39. Warren ML, Conway MJ , **Klaff** LJ, Rosenstock J, Allen E: Postprandial vs preprandial dosing of biphasic insulin aspart in elderly patients with type 2 diabetes. *Diabetes Res and Clin Practice* 66:23-9, 2004.

**BOOKS, CHAPTERS, EDITORIALS, & EDUCATIONAL PUBLICATIONS
(NON-PEER REVIEWED)**

1. **Klaff** LJ, Sheppard M, Hudson AM, Tyler M, and Vinik AI: Cholecystokinin-octapeptide-like immunoreactivity in rat central nervous system. In: *Neuropeptides, Biochemical & Physiological Studies*, edited by RP Millar. Churchill Livingstone, Edinburgh, 1981, pp 87-96.
2. **Klaff** LJ, Vinik AI, and Heldsinger A: Acid secretagogue potencies and interactions in the activation of carbonic anhydrase in guinea pig parietal cells. In: *Neuropeptides, Biochemical & Physiological Studies*, edited by RP Millar. Churchill Livingstone, Edinburgh, 1981, pp 336-343.
3. **Klaff** LJ, Kernoff L, Vinik AI, Jackson WPU, Jacobs P: Sulphonylureas and platelet function. In: *Diabetes Mellitus*, edited by JS Skyler and GF Cahill Jr. Yorke Medical Books, USA, 1981, pp 152-155.
4. Millar RP, **Klaff** LJ, and Barron JL: The new hypothalamic releasing factors (editorial). *S Afr Med J* 62:924-925, 1982.
5. **Klaff** LJ and Sive AA: Continuous subcutaneous insulin infusion (editorial). *S Afr Med J* 63:61-62, 1983.
6. Guest Editor, *South African Journal of Continuing Medical Education*, Vol 1, No 3, 1983. Subject: Diabetes Mellitus. (a) Kahn SE and **Klaff** LJ: The importance of metabolic control in diabetes mellitus, pp 15-23. (b) Klaff LJ and Sive AA: Factors in the genesis of diabetes mellitus, pp 80-84.
7. Clinical Discussant, *Clinicopathological Conference*. Post-abortal fever and shock. *S Afr Med J* 63:444-447, 1983.
8. **Klaff** LJ: Computer program. *Diabetes mellitus: an update on outpatient evaluation and management 1985*. CME Inc. and University of Washington, Seattle.
9. **Klaff** LJ and Palmer JP: Risk for developing cardiovascular risk factor: glucose intolerance. In: *Cardiology clinics: risk for developing cardiovascular risk factors and adverse effects of risk factor reduction*, edited by FH Messerlio and C Amodeo. W.B. Saunders Co., Philadelphia, 1986, pp 67-73.