



## BIBLIOGRAPHY

- Adler, S., and Fraley, D.S. Acid-base regulation : cellular and whole body. In A.I. Arieff, and R.A. DeFronzo (eds.), Fluid, electrolyte, and acid-base disorders, pp. 221-267. Churchill Livingstone, 1985.
- AL-Awqati, Q, Norby, L.H., Mueller, A., and Steinmetz, P.R. Characteristics of stimulation of  $H^+$  transport by aldosterone in turtle urinary bladder. J. Clin. Invest. 58 (1976) : 351-358.
- Arruda, J.A.L., Sabatini, S., and Westenfelder, C. Vanadate inhibits urinary acidification by the turtle bladder. Kidney Int. 20 (1981) : 772 - 779.
- Balfour, W.E., Grantham, J.J., and Glynn, I.M. Vanadate-stimulated natriuresis. Nature 275(1978a) : 768.
- \_\_\_\_\_. Vanadate : A potent inhibitor of renal (Na+K)-ATPase and a powerful diuretic in unanesthetized rats. Kidney Int. 14 (1978b) : 760. (abst)

- Benabe, J.E., Cruz-Soto, M.A., and Martinez-Maldonado, M. Critical role of extracellular calcium in vanadate-induced renal vasoconstriction. Am. J. Physiol. 246(1984) : F317-F322.
- Boyd, J.E., and Mulrow, P.J. Further studies of the influence of potassium upon aldosterone production in the rat. Endocrinology. 90 (1972) : 299 - 301.
- Cantley, L.C.Jr., Josephson, L. Warner, R., Yanagisawa, M., Lechene, C., and Guidotti, G. Vanadate is a potent (Na-K)-ATPase inhibitor found in ATP derived from muscle. J. Biol. Chem. 252(1977) : 7421 - 7423.
- Cantley, L.C.Jr., Cantley, L.G., and Josephson, L. A characterization of vanadate interactions with the (Na, K)-ATPase. Mechanistic and regulatory implications. J. Biol. Chem. 253 (1978) : 7361 - 7368.
- Crans, D.C., Simone, C.M., Saha, A.K., and Glew, R.H. Vanadate monomers and dimers both inhibit the human prostatic acid phosphatase. Biochem. Biophys. Res. Comm. 165 (1989) : 246 - 250.
- Day, H., Middendorf, D., Lukert, B., Heinz, A., and Grantham, J. The renal response to intravenous vanadate in rats. J. Lab. Chem. Med. 96 (1980) : 382 - 395.

Diaz-Diaz, F.D., Labelle, E.F., Eaton, D.C., and DuBose, J.R., T.D. ATP-dependent proton transport in human renal medulla. Am. J. Physiol. 251 (1986) : F297 - F302.

Dixon, T.E., and AL-Awqati, Q. Urinary acidification in turtle bladder is due to a reversible proton translocating ATPase. Proc. Natl. Acad. Sci. USA. 76 (1979) : 3135 - 3138.

Doucet, A., and Marsy, S. Characterization of K-ATPase activity in distal nephron : stimulation by potassium depletion. Am. J. Physiol. 253 (1987) : F418 - F423.

Faller, L.D., et al. Mechanistic aspects of gastric  $[H^+ - K^+]$ -ATPase. Ann. NY. Acad. Sci. 402 (1982) : 146 - 163.

Feest, T.G., and Wrong, O.M. Renal tubular acidosis. In N.F. Jones, and D.K. Peters (eds.), Recent advances in renal medicine, pp. 243-266. Edinburgh : Churchill Livigstone, 1982.

Funder, J.W., et al. Effect of plasma  $[K^+]$  on secretion of aldosterone. Endocrinology 85 (1969) : 381 - 384.

- Furst, P., and Solioz, M. Formation of a  $\beta$ -aspartyl phosphate intermediate by the vanadate-sensitive ATPase of *Streptococcus faecalis*. J. Biol. Chem. 260 (1985) : 50 - 52.
- Gary, L.C., and Narang, N. Ouabain-insensitive K-Adenosine Triphosphatase in distal nephron segments of the rabbit. J. Clin. Invest. 81 (1988) : 1204 - 1208.
- Gluck S., and AL-Awqati, Q. An electrogenic proton translocating adenosine triphosphatase from bovine kidney medulla. J. Clin. Invest. 73 (1984) : 1704 - 1710.
- Grantham, J.J. The renal sodium pump and vanadate. Am. J. Physiol. 239 (1980) : F 97 - F 106.
- Grantham, J.J., and Glynn, I.M. Renal Na, K-ATPase : determinants of inhibition by vanadium. Am. J. Physiol. 236 (1979) : F 530 - F 535.
- Hagege, J., Gabe, M., and Richet, G. Scanning of the apical pole of distal tubular cells under differing acid-base conditions. Kidney Int. 5 (1974) : 137 - 146.
- Higashi, Y., and Bello-Reuss, E. Effects of sodium orthovanadate on whole kidney and single nephron function. Kidney Int. 18 (1980) : 302 - 308.

- Inciarte, D.J., Steffen, R.P., Dobbins, D.E., Swindall, B.J., Johnson, J., and Haddy, F.J. Cardiovascular effects of vanadate in the dog. Am. J. Physiol. 239 (1980) : H47 - H56.
- Ives, H.E., and Rector, Jr., F.C. Proton transport and cell function. J. Clin. Invest. 73 (1984) : 285 - 290.
- Jandhyala, B.S., and Hom, J.G. Minireview : Physiological and pharmacological properties of vanadium. Life. Sci. 33 (1983) : 1325 - 1340.
- Kaunitz, J.D., Gunther, R.D., and Sachs, G. Characterization of an electrogenic ATP and chloride-dependent proton translocating pump from rat renal medulla. J. Biol. Chem. 260 (1985) : 11567 - 11573.
- Koeppen, B.M., and Helman, S.I. Acidification of luminal fluid by the rabbit cortical collecting tubule perfused *in vitro*. Am. J. Physiol. 242 (1982) : F 521 - F 531.
- Koeppen, B.M., Giebisch, G., and Malnic G. Mechanism and regulation of renal tubular acidification. In Seldin, D.W., and Giebisch, G. (eds.), The Kidney : Physiology and pathophysiology, pp. 1491 - 1527. New York : Raven Press, 1985.

- Kumar, A., and Corder, C.N. Diuretic and vasoconstrictor effects of sodium orthovanadate on the isolated perfused rat kidney. J. Pharmacol. Exper. Therap. 213 (1980) : 85 - 90.
- Kunau, R.T., Webb, H.L., and Borman, S.C. Characteristics of the relationship between the flow rate of tubular fluid and potassium transport in the distal tubule of the rat. J. Clin. Invest. 54 (1974) : 1488 - 1495.
- Larsen, J.A., Thomsen, O.G., and Hansen, O. Vanadate-induced oliguria in the anesthetized cat. Acta Physiol. Scand. 106 (1979) : 495 - 496.
- Lawrance, P.S., and Jared, J.G., Maintenance of potassium balance, In Lea, and Febiger (eds) Physiology of kidney, pp. 203 - 212. Philadelphia, 1982.
- Lopez-Novoa, J.M., Mayol, V., and Martinez-Maldonado, M. Renal actions of orthovanadate in the dog Proc. Soc. Exp. Biol. Med. 170 (1982) : 418 - 426.
- Mellman, I., Fuchs, R., and Helenius, A., Acidification of the endocytic and exocytic pathways. Ann. Rev. Biochem. 55 (1986) : 663 - 700.

- Morris, R.C. Jr. Renal tubular acidosis. Mechanisms, classification and implications. N Engl. J. Med. 281 (1969) : 1405 - 1413.
- Narins, R.G., Jones, E.R., Townsend, R., Goodkin, D.A., and Shay, R.J. Metabolic acid-base disorders : pathophysiology, classification, and treatment. In A.I. Arieff, and R.A. DeFronzo (eds.), Fluid, electrolyte, and acid-base disorders, pp. 269 - 384. Churchill Livingstone, 1985.
- Nechay, B.R. Mechanisms of action of vanadium. Ann. Rev. Pharmacol. Toxicol. 24 (1984) : 501 - 524.
- Nechay, B.R., et al. Role of vanadium in biology. Fed. Proc. 45 (1986) : 123 - 132.
- Phillips, T.D., Nechay, B.R., and Heidelbaugh, N.D., Vanadium : chemistry and the kidney. Fed. Proc. 42 (1983) : 2969 - 2973.
- Roman, R.J., Bonventre, J.V., Silva, P., and Lechene, C. Sodium orthovanadate diuresis in rats. J. Pharmacol. Exp. Ther. 218 (1981) : 168 - 174.
- Rudnick, G. ATP-driven  $H^+$  pumping into intracellular organelles. Ann. Rev. Physiol 48 (1986) : 403 - 413.



Sachs, G., Faller, L.D., and Rabon, E.  
Proton/Hydroxyl transport in gastric and  
intestinal epithelia. J. Membr. Biol.  
64(1982) : 123 - 135.

Sallman, A.L., Lubansky, H.J., Talor, Z., and Arruda,  
J.A. Plasma membrane proton ATPase from human  
kidney. Eur. J. Biochem. 157 (1986) : 547 -  
551. (abst.)

Sanga Nilwarangkur. Renal tubular acidosis. The  
Bulletin of the Nephrology Society of  
Thailand. 6 (1987) : 6 - 19.

Schwabe, U., Puchstein, C., Hannemann, H., and Sochtig,  
E. Activation of adenylate cyclase by  
vanadate. Nature (London) 277 (1979) : 143 -  
145.

Stanton, B.A., and Giebisch, G.H. Potassium transport  
by the renal distal tubule : effects of  
potassium loading. Am. J. Physiol. 243(1982)  
: F487 - F493.

Steinmetz, P.R., Hauted, R.F., and Mueller, A. Coupling  
between  $H^+$  transport and anaerobic glycolysis  
in turtle bladder vanadate sensitivity of  $H^+$   
pump. Clin. Res. 28 (1980) : 560. (abst).



- Stone, D.K., Seldin, D.W., Kokko, J.P., and Jacobson, H.R. Mineralocorticoid modulation of medullary collecting duct acidification. J. Clin. Invest. 72 (1983) : 77 - 83.
- Stone, D.K., and Xie, X. S. Proton Translocating ATPase : Issues in structure and function. Kidney Int. 33 (1988) : 767 - 774.
- Toto, R.D. Metabolic acid-base disorders. In J.P. Kokko, and R.L. Tannen (eds), Fluids and electrolytes, pp. 229 - 304. Philadelphia : W.B. Saunders Co., 1986.
- Vipada Chaovakul, Sanga Nilwarangkur, and Sumalee Nimmannit "Distal renal tubular acidosis : clinical feature and the effects of long term treatment with alkali", Proc. 1 st National Symp. Urolithiasis and Renal Tubular Acidosis, pp. 162 - 169. Khon Kaen, Thailand, 1987.
- Visith Sitprija, et al. Gastric hypoacidity in distal renal tubular acidosis. Nephron 50 (1988) : 395 - 396.
- Visith Sitprija, et al. Renal tubular acidosis, vanadium and buffaloes. Nephron 54 (1990) : 97 - 98.
- Westenfelder, C., Hamburger, R.K., and Garcia, M.E. Effects of vanadate on renal tubular function

- in rats. Am. J. Physiol. 240 (1981) : F 522 - F529.
- Wingo, C.S. Active proton secretion and potassium absorption in the rabbit outer medullary collecting duct. J. Clin. Invest. 84 (1989) : 361 - 365.
- Youmans, S.J., and Barry, C.R. ATP-dependent  $H^+$  transport by the turtle bladder : NBD-Cl preferentially inhibits the vanadate-insensitive component in isolated membranes. Biochem. Biophys. Res. Commun. 161 (1989) : 312 - 319.
- Youmans, S.J., and Brodsky, W.A. Vanadate inhibition of ATP-dependent  $H^+$  transport in membrane vesicles from turtle bladder epithelial cells. Biochem. Biophys. Acta. 900 (1987) : 88 - 102.
- Young, D.B. Relationship between plasma potassium concentration and renal potassium excretion. Am. J. Physiol. 242 (1982) : F599 - F603.



## BIOGRAPHY

Miss Kannika Chankasem was born on 1<sup>st</sup> January, 1963 at Petchaburn. She received her high school certificate from Ampornphaisarn School, Nonthaburi in 1982 and Graduated with B.Sc. (Nursing) from the Faculty of Nursing, Mahidol University in 1986.