REFERENCES

- Albin, R.L., Young, A.B. and Penny, J.B. The functional anatomy of basal ganglia disorders. <u>TINS.</u> 12 (1989) : 366-375.
- Bantli, H., Bloedel, J.R. and Tolbert, D. Activation of neurons in the cerebellar nuclei and ascending reticular formation by stimulation of the cerebellar surface. Journal of Neurosurgery. 45 (1976): 539-554.
- Berardelli, A., Sabra, A.F. and Hallett, M. Physiological mechanisms of rigidity in Parkinson's. <u>Journal of Neurosurgery</u>, and <u>Psychiatry</u>, 46 (1983).
- Brodal, A. <u>Neurological Anatomy. In Relation to Clinical Medicine</u>,

 3rd edition. pp. 260-293 : Oxford University Press,

 1981.
- Buonamici, M., Maj,R., Pagani, F., Rossi, A.C. and Khazan, N. Tremor at rest episodes in unilaterally 6-OHDA-induced substantia nigra lesioned rats: EEG-EMG and behavior.

 Neuropharmacology. 25 (1986): 323-325.

- Burke, D., Hagbarth, K.E. and Wallin, B.G. Reflex mechanisms in Parkinsonian rigidity. <u>Scandinavia Journal Rehabitation Medicine.</u> 9 (1977) : 15-23.
- Carpenter, M.B. <u>Core text of Neuroanatomy</u>, 4th edition. pp. 224-247: Williams & Wilkins, 1991.
- Chambers, W. W.and Sprague, J.M. Function localization in the cerebellum. Archives of Neurology and Psychiatry. 36 (1955): 653-680.
- Chusid, J.G. Principles of Neurodiagnosis. <u>Correlative</u>

 <u>Neuroanatomy Function Neurology.</u> 1st edition. pp.

 188-193: 1985.
- Clemmesen, S. Some studies on muscle tone. <u>Proceedings of the Royal Society of Medicine.</u> 44 (1951): 637-646.
- Cooper, I.S. Effect of chronic stimulation of anterior cerebellum neurological disease. <u>The Lancet.</u> 27 (1973): p. 206

Delong, M.R. Primate models of movement disorders of basal ganglia origin. TINS. 13 (1990): 281-285.

451-452.

__., Schulman , S., Nanes, M. and Delehanty , A. Cerebellar

stimulation for spastic cerebral palsy. Double blind

quantitative study. Apply Neurophysiology . 50 (1987)

- Delwaide, P.L., Sabbatino and Dewaide, C. Some pathophysiological aspect. <u>Journal of Neural Transmission.</u> 22 (1986): 129-139
- Denny-Brown, D. Diseases of the basal ganglia. <u>The Lancet.</u>
 19 (1960): 1009-1105.
- Doudet, A.K., Gross, C., Arluison, M. and Bioulac, B. Modifications of precentral cortex discharge and EMG activity in monkeys with MPTP induced lesions of DA nigral neurons. Experimental Brain Research. 80 (1990): 177-188.
- Duggan, T.C. and Melellan, D.L. Technical contribution measurement of muscle tone: A method suitable for clinical use. <u>Electroencephalography and Clinical Neurophysiology</u>. 35 (1973): 653-658.
- Ebner, T.J., Vitek, J.L., Schwartz, A.B. and Bloedel, J.R.

 Effects of cerebellar stimulation on abnormal proprioceptive reflexes in spastic primates. <u>Experimental Neurology</u>. 70 (1980): 721-725.

- _____. The effects of cerebellar stimulation on the stretch reflex in the spastic monkey. <u>Brain.</u> 105 (1982): 425-442.
- Eccles , J.C., Ito, M. and Szentagothai , J. <u>The Cerebellum as a Neuronal Machine</u> , Springer Verlag. New York Inc, 1967.
- Eccles, J.C., The dynamic loop hypothesis of movement control.

 Information Processing in the Nervous System. p.255:

 Springer Verlag. New York Inc., 1969.
- Fisher, M.A. and Penn, R.D. Evidence for changes in segmental motoneurone pools by chronic cerebellar stimulation and its clinical significance. <u>Journal of Neurology</u>.

 Neurosurgery, and Psychiatry, 41 (1978): 630-635.
- Granit, R. and Phillips, C.G. Effects on Purkinje cells of surface stimulation of the cerebellum. <u>Journal of Physiology</u>. 35 (1957): 73-92.

- Gunreben, G. and Schulte. Mattler, W. Evaluation of motor unit firing rates by standard concentric needle electromyography. <u>Electromyography in Clinical Nourophysiology</u>. 32 (1992): 103-111.
- Guyton, A.C. <u>Textbook of Medical Physiology</u>. 8th edition : W.B. Saunders company, 1991.
- Harvey, R.J., Porter, R. and Rawson, J.A. Discharges of intercerebellar nuclear cells in monkeys. <u>Journal of Physiology.</u> 297 (1979): 559-580.
- Hemmy, D.C., Larson, S.J., Sances, A. and Millar, E.A. The effects of cerebellar stimulation on focal seizure activity and spasticity in monkeys. <u>Journal of Neurosurgery</u>. 46 (1977): 648-653.
- Herman. R. The myotatic reflex. Brain. 93 (1970): 273-312.
- Hershler, C., Upton, A.R.M., Debruin, H., Burcea, I., King, R.N. and Zoghaib, C. Effects of chronic cerebellar stimulation (CCS) setting on the gait and speech of a spastic cerebral palsy adult. <u>PACE</u>. 12 (1989): 861-869.

- Ito, M. Is the cerebellum really a computer. <u>TINS.</u> (1979): 122-125.
- Iversen, L.L. Actions of 6-hydroxydopamine on catecholaminecontaining neurons in the central nervous system. <u>Advaces</u> in <u>Neurology</u>. 3 (1973): 243 - 255.
- Kandel, E.R., Schwartz J.M. and Jessell, T.M. <u>Principles of neural Science</u>, 3^{ed} edition. pp.653, 1991.
- Lechtenlerg, R. Ataxia and other cerebellar syndromes. <u>Parkinson's</u>

 <u>Disease and Movement Disorders</u>, pp. 115-144:

 Williams & Wilins, 1993.
- Llinas, R. Mechanisms of suparspinal actions upon spinal cord activites. Differences between reticular and cerebellar inhibitory actions upon alpha extensor motormeurons.

 Journal of Neurophysiology. 27 (1967): 1117 1126.
- Lowenthal, M. and Horsley, V. On the relations between the cerebellar and other centres (namely, cerebral and spinal) with especial reference to the action of antagonistic muscles. Proceedings of the Royal Society of Medicine. 61 (1897): 20-25.

- Manni, E., Henatsch, H.D., Henatsch, EVA-M and Dow, R.S. Localization of facilitatory and inhibitory sites in and around the cerebellar nuclei affecting limb posture, alpha and gamma motoneurons. <u>Journal of Neurophysiology</u>. 27 (1964): 210-228.
- Marsden, C.D. The mysterious motor function of the basal ganglia:

 The Robert Wartenberg lecture. Neurology. 32 (1982):
 514-539.
- Massion, J. and Rispal-Padel, L. Spatial organization of the cerebello-thalamo-cortical pathway. <u>Brain Research.</u> 40 (1972): 61-65.
- Mclellan, D.L., Selwyn, M. and Cooper, I.S. Time course of clinical and physiological effects of stimulation of the cerebellar surface in patients spasticity. <u>Journal of Neurology and Psychiatry</u>. 41 (1978): 150-160.
- Mempel, E. and Wieczorek, M. Parkinson's syndrome induced in cats by the use of 6-hydroxydopamine. Observations of behavior and motor disorders. <u>Acta Neurobiology</u> Experimental. 50 (1990): 269-279.

- Mortimer, J.M. and Webster, D.D. Evidence for a quantitative association between EMG stretch responses and Parkinsonian rigidity. <u>Brain Research.</u> 162 (1979): 169-173.
- Moruzzi, C. Effects at different frequencies of cerebellar stimulation upon postural tonus and myotatic reflexes.

 <u>Electroencephalogram in Clinical Neurophysiology</u>. 2

 (1950): 463 469.
- Ohye, C. Neural Circuits involved in Parkinsonion motor disturbance studies in monkeys. <u>European Neurology</u>. 26 (1987): 41-46.
- Penn, R.D., Gottlub, G.L. and Agarwal, G.C. Cerebellar stimulation in man: Qantitative changes in spasticity. <u>Journal of Neurosurgery.</u> 48 (1978): 779-786.
- ., and Young, A.B. Speculations on the functional anatomy of basal ganglia disorders. <u>Annual Review of Neuroscience</u>. 6 (1980): 73-94.

- Pycock, C.J. and Marsden, C.D. The rotation rodent: A two component system? <u>Europian Journal of Pharmacology</u>. 47 (1978): 167-175.
- Ratusnik, D.L., Wolfe, V.I. Penn, R.D. and Schewitz, S. Effects on speech of chronic cerebellar stimulation in cerebal palsy. <u>Journal of Neurosurgery.</u> 48 (1978): 876-882.
- Racagni, G, Cattabeni, B.F., Maggi, A., Di Giulio, A.M. and Groppetti, A. Interactions among dopamine, acetylcholine, and GABA in the nigrastriatal system. <u>Interactions Between Putative Neurotransmitters in the Brain</u>, pp. 61 72: New York: Garattini, S., Pujol, J.F. and Samanin, R. 1978.
- Rivest, R., ST-Pierre, S. and Jolicaeur, F.B. Structure activity studies of neurotoxin on muscular rigidity and tremor induced by 6-hydroxydopamine lesions in the posterolateral hypothalamus of the rat. Neuropharma cology. 30 (1991): 47-52.

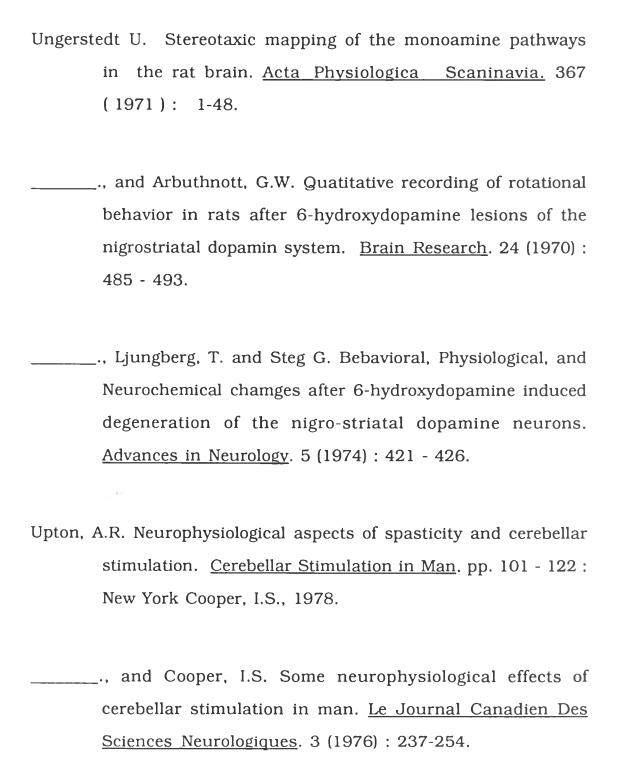
- Robinson, T.E. and Becker, J.B. The rotational behavior model; asymmetry in the effects of unilateral 6-OHDA lesions of the substantia nigra in rats. <u>Brain Research</u>. 264 (1983): 127-131
- Rushworth, G. Spasticity and rigidity: on experimental study and review. <u>Journal of Neurology</u>. <u>Neurosurgery</u>. and <u>Psychiatry</u>. 23 (1960): 99-118.
- Russman, B.S., Gahm, N., Cerciello, R.L. and Fiorentino, M. Chronic cerebellar stimulator in children with cerebral palsy a controlled study. Neurology. 29 (1979): 543-544.
 - Sambrook, M., Crossman, A. and Slater, P. Experimental torticollis in the marmoset produced by injection of 6-hydroxydopamine into the ascending nigro-striatal pathway. Experimental of Neurology. 63 (1979): 583 593.
- Sances, A., Larson, S.J., Myklebust, J., Swiontek, T., Millar, E.A., Cusick, J.F., Hemmy, D.C., Jodat, R. and Ackmann, J. Evaluation of electrode configurations in cerebellar implants. Apply Neurophysiology. 40 (1977/78) : 141 159.

- Scherman, D., Desnos, C., Francois, MS., Pollak, P., Javoy Agid, F. and Agid, Y. Striatal dopamine deficiency in Parkinson's disesase: Role of aging. <u>Annals of Neurology</u>. 26 (1989): 551-557.
- Schulman, J.H., Davis, R. and Nanes, M. Cerebellar stimulation for spastic cerebral palsy. <u>PACE</u>. 10 (1987): 226-231.
- Schultz, W. Recent physiological and pathophysiological aspects of Parkinsonian movement disorders. <u>Life Sciences</u>. 34 (1984): 2213-2223.
- Shahani, B.T., Oxon, D.P. and Wierzbicka. Electromyographic studies of motor control in humans. <u>Neurological Clinics.</u> 5 (1987): 541-559.
- Siegfried, B. and Bures, J. conditioning compensates the neglect due to unilateral 6-OHDA lesions of substantia nigra in rats.

 Brain Research. 167 (1979): 139 155.
- Sotelo, C., Javoy, F., Agid, y. and Glowinski, J. Injection of 6-hydroxydopamine in the substantia nigra of the rat. <u>Brain Research.</u> 58 (1973): 269-290.

- Sprague, J.M. and Chambers, W.W. Control of posture by reticular formation and cerebellum in the intact, anesthetized and unanesthetized and in the decerebrated cat. <u>Journal of Physiology</u>. 11 (1954): 52-76.
- Stolov, W.C. The concept of normal muscle tone, hypotonia and hypertonia. <u>Archives of Physiology Medical Rehabilitation.</u> 47 (1966): 156-168.
- Steg, G. Efferent muscle innervation and rigidity. <u>Acta Physiologica Scandinavica</u>. 61 (1964): 5-49.
- Thilmann, A.F., Fellows S.J. and Garms. E. The mechanism of spastic muscle hypertonus. <u>Brain.</u> 144 (1990): 223-244.
- Thomas, J.E. Muscle tone, spasticity, rigidity. <u>Journal of Nerve</u> and <u>Movement Disorder</u>. 132 (1961): 505-514.
- Tsementzis, S.A., Gillingham, F.J., Gordon, A. and Lakie, M.D. Two methods of measuring muscle tone applied in patients with decerebrate rigidity. <u>Journal of Neurology.</u>

 <u>Neurosurgery</u>, and <u>Psychiatry</u>. 43 (1980) : 25-36.



- Watts, R.L., Mandir, A.S., BSEE, Ahn, K.J., Juncos, J.L., Zakers, G.O. and Freeman, A. Electrophysiologic analysis of early Parkinson's disease. <u>Geriatrics.</u> 46 (1991): 31-36.
- Wilson, SAK. Disorders of motility and muscle tone, with specal reference to the striatum. Lancet. 2 (1925): 1-53.
- Wood, H.J., Ziegler, M.G., Lake, C.R., Sode, J., Brooks, B. and Buren, J.M. Elevations in cerebrospinal fluid norepinephrine during unilateral and bilateral cerebellar stimulation in man. Neurosurgery. (1977): 260-264.
- Ziegler, M.G.M. and Szechtman, H. Relation between motor asymmetry and direction of rotational behaviour under amphetamine and apomorphine in rat with unilateral degeneration of the nigrostriatal dopamine system.

 Behavioral Brain Research. 39 (1990): 123-133.
- Zigmond, M.J. and Stricker, E.M. Animals models of Parkinsonism using selective neurotoxins: Clinical and basic implications. <u>International Review of Neurology</u>. 34 (1989): 1-79.

BIOGRAPHY

Miss supanee Kiat-o-ran was born on February 24, 1967 in Ubonratchathanee. She got the Bachelor of Science in Physical Therapy from Khon-Kaen University in 1979.

