

BIBLIOGRAPHY

- Baglioni, C. 1962. The fusion of two peptide chains in hemoglobin Lepore and its interpretation as a genetic deletion. Proceedings of the National Academy of Sciences. 48:1880-1886.
- Bank, A. and Marks, P.A. 1966. Excess of α -chain synthesis relative to β -chain synthesis in thalassaemia major and minor. Nature. 212:1198-1200.
- Beale, D. and Lehmann, H. 1965. Abnormal Haemoglobin and the Genetic Code. Nature. 207:259-261.
- Blobel, G. 1971. Release, Identification and Isolation of Messenger RNA from Mammalian Ribosomes. Proceedings of the National Academy Sciences. 68:832-835.
- Borsook, H., Fischer, E.H. and Keighley, G. 1957. Factors Effecting Protein Synthesis in Vitro in Rabbit Reticulocytes. Journal of Biological Chemistry. 229:1059-1070.
- Bradley, J.B. Jr. and Wohl, R.C. 1967. Hemoglobin Gun Hill: Deletion of Five Amino Acid Residues and Impaired Heme-Globin Binding. Science. 157:1581-1583.
- Bray, G.A. 1960. A Simple Efficient Liquid Scintillator for Counting Aqueous Solutions in a Liquid Scintillation Counter. Analytical Biochemistry. 1:279-285.
- Clegg, J.B., Naughton, M.A. and Weatherall, D.J. 1966. Abnormal human haemoglobin separation and characterization of the alpha and beta-chains by chromatography and the determination of two new variants haemoglobin Chesapeake and Hb J (Bangkok). Journal

- of Molecular Biology. 19:91-108.
- Clegg, J.B., Naughton, M.A. and Weatherall, D.J. 1968. Separation of the α and β -chains of human haemoglobin. *Nature*. 219: 69-70.
- Clegg, J.B. and Weatherall, D.J. 1967. Haemoglobin Synthesis in α -Thalassaemia (Haemoglobin H Disease). *Nature*. 215:1241-1243.
- Clegg, J.B., Weatherall, D.J. and Milner, P.F. 1971. Haemoglobin Constant Spring-A Chain Termination Mutant? *Nature*. 234:337-340.
- Dacie, J.V. and Lewis, S.M. 1968. Practical Haematology 4th ed. Churchill, London.
- Dance, N., Huehns, E.R. and Beaven, G.H. 1963. The Abnormal Haemoglobin in Haemoglobin-H Disease. *Biochemical Journal*. 87:240-247.
- De Jong, W.W.W. 1969. Structural Characterization of Some Mutants of Human Haemoglobin; Including Two New Variants. A Doctor of Science Thesis, The University of Leiden.
- Efremov, G.D., Wrightstone, R.N., Huisman, T.H.J., Schroeder, W.A., Hyman, C., Ortega, J. and Williams, K. 1971. An Unusual Hemoglobin Anomaly and Its Relation to α -Thalassaemia and Hemoglobin-H Disease. *Journal of Clinical Investigation*. 50:1628-1636.
- Fessas, P., Lie-Injo, L.E., Na-Nakorn, S., Todd, D., Clegg, J.B. and Weatherall, D.J. 1972. Identification of Slow-Moving Haemoglobin in Haemoglobin H Disease from Different Racial Groups. *The Lancet*. June 17, p 1308-1310.

- Garby, L., Sjolín, S. and Vuille, J.C. 1962. Studies on erythrokinetics in infancy II. The relative rate of synthesis of Hb F and Hb A during the first month of life. *Acta Paediatrica*. 51:245-254.
- Gaskil, P. and Kobat, D. 1971. Unexpected Large Size of Globin Messenger Ribonucleic Acid. *Proceedings of the National Academy Sciences*. 68:72-75.
- Heywood, D., Karon, M. and Weissman, S. 1965. Asymmetrical incorporation of amino acid in alpha and beta chains of hemoglobin synthesized by thalassemic reticulocytes. *Journal of Laboratory and Clinical Medicine*. 66:476-481.
- Hill, R.J. and Konigsberg, W. 1962. The structure of human hemoglobin. IV. The chymotryptic digestion of α -chain of human hemoglobin. *Journal of Biological Chemistry*. 237:3151-3156.
- Holmquist, W.R. and Schroeder, W.A. 1964. Properties and partial characterization of adult human haemoglobin A_{1c}. *Biochimica Et Biophysica Acta*. 82:639-641.
- Huehns, E.R., Dance, N., Beaven, G.H., Hecht, F. and Motulsky, A.G. 1964. Human embryonic haemoglobin. *Cold Spring Harbor Symposium of Quantitative Biology*. 29:327-331.
- Huisman, T.H.J., Dozy, A.M., Horton, B.F. and Neehtman, C.M. 1966. Studies on the heterogeneity of hemoglobin X. The nature of various minor hemoglobin components produced in human red blood cell hemolysates on aging. *Journal of Laboratory and Clinical Medicine*. 67:355-372.

- Hunt, J.A. and Ingram, V.M. 1961. Abnormal Human Haemoglobins. VI. The Chemical Difference between Haemoglobin A and E. *Biochimica Et Biophysica Acta*. 49:520-535.
- Hunt, J.A. and Lehmann, H. 1959. Haemoglobin Bart's: A Foetal Haemoglobin without α -Chains. *Nature*. 184:872-873.
- Jones, R.T. and Brimhall, B. 1966. Hemoglobin Freiburg: Abnormal Hemoglobin Due to Deletion of a Single Amino Acid Residue. *Science*. 154:1024-1027.
- Jones, R.T., Schroeder, W.A., Balog, J.E. and Vinograd, J.R. 1959. Gross Structure of Hemoglobin H. *Journal of American Chemical Society*. 81:3161.
- Kan, Y.W., Schwartz, E. and Nathan, D.G. 1968. Globin Chain Synthesis in the Alpha-Thalassemia Syndromes. *Journal of Clinical Investigation*. 47:2515-2521.
- Kunkel, H.G., Ceppellini, R., Müller-Eberhard, U. and Wolf, J. 1957. Observations on the Minor Basic Hemoglobin Component in the Blood of Normal Individuals and Patients with Thalassemia. *Journal of Clinical Investigation*. 36:1615-1624.
- Kunkel, H.G. and Wallenius, G. 1955. New Hemoglobin in Normal Adult Blood. *Science*. 122:288.
- Lingrel, J.B. and Borsook, H. 1963. A Comparison of Amino Acid Incorporation into the Hemoglobin and Ribosomes of Marrow Erythroid and Circulating Reticulocytes of Severely Anemic Rabbits. *Biochemistry*. 2:309-314.

- Lorkin, P.A., Charlesworth, D., Lehmann, H., Rahbar, S., Tuchinda, A. and Lie-Injo, L.E. 1970. Two Haemoglobin Q α_{74} (EF₃) and α_{75} (EF₄) Aspartic Acid \longrightarrow Histidine. *British Journal of Haematology*. 19:117-124.
- Modell, C.B., Latter, A., Steadman, J.H. and Huehns, E.R. 1969. Haemoglobin Synthesis in β -Thalassaemia. *British Journal of Haematology*. 17:485-501.
- Morell, H., Savoie, J.C. and London, I.M. 1958. The Biosynthesis of Heme and the Incorporation of Glycine into Globin in Rabbit. *Journal of Biological Chemistry*. 233:923-928.
- Na-Nakorn, S. and Wasi, P. 1970. Alpha-Thalassaemia in Northern Thailand. *American Journal of Human Genetic*. 22:645-651.
- Na-Nakorn, S., Wasi, P., Pornpatkul, M. and Pootrakul, S. 1969. Further Evidence for a Genetic Basis of Haemoglobin H Disease from Newborn Offspring of the Patients. *Nature*. 223:59-60.
- Na-Nakorn, S., Wasi, P. and Suingdumrong, A. 1965. Haemoglobin H Disease in Thailand; Clinical and haematological studies in 138 cases. *Israel Journal of Medical Science*. 1:762-764.
- Nathan, D.G. 1972. Thalassaemia. *The New England Journal of Medicine*. 286:586-593.
- Ohta, Y., Yamaoka, K., Sumida, I. 1971. Haemoglobin Miyada, a β - δ -fusion peptide (anti-lepore) type discover in Japanese family. *Nature (New Biology) London*. 234:218-220.
- Pootrakul, S., Sapprapa, S., Wasi, P., Na-Nakorn, S. and Suwanik, R. 1974. Hemoglobin Synthesis in Obligatory α -Thalassaemia Traits. Abstracts of the XV Congress of the International

- Society of Hematology, Jerusalem, Israel, September, 1974.
- Pootrakul, S., Wasi, P. and Na-Nakorn, S. 1967. Haemoglobin Bart's Hydrop Foetalis in Thailand. *Annals of Human Genetic, London.* 30:293-311.
- Pootrakul, S., Wasi, P., Pornpatkul, M. and Na-Nakorn, S. 1970. Incidence of Alpha-Thalassaemia in Bangkok. *Journal of Medical Association Thailand.* 53:250-261.
- Rhinesmith, H.S., Schroeder, W.A. and Martin, N. 1958. The N-Terminal Sequence of the β -Chain of Normal Adult Human Hemoglobin *Journal of American Chemical Society.* 80:3358-3361.
- Schroeder, W.A., Huisman, T.H.J., Shelton, J.R. and Wilson, J.B. 1970. An Improved Method for Quantitative Determination of Human Fetal Hemoglobin. *Analytical Biochemistry.* 35:235-243.
- Schroeder, W.A., Shelton, J.R., Shelton, J.B., Cormick, J. and Jones, R.T. 1963. The amino acid sequence of the γ -chain of human fetal hemoglobin. *Biochemistry.* 2:992-1008.
- Singer, K., Chernoff, A.I. and Singer, L. 1951. Studies on Abnormal Haemoglobins I. Their Demonstration in Sickle Cell Anemia and Other Hematologic Disorders by Means of Alkali Denaturation. *Blood.* 6:413-427.
- Smithies, O. 1955. Zone Electrophoresis in Starch-Gel: Group Variations in the Serum Protein of Normal Human Adults. *Biochemical Journal.* 61:629-641.
- Smithies, O. 1959. An improved procedure for starch-gel electrophoresis: Further variations in the serum protein of normal individuals. *Biochemical Journal.* 71:585-587.

- Sofraniadou, K., Kaltooya, A., Loukopoulos, D. and Fessas, P. 1968. Hemoglobin "Athens" : An Alpha-Chain Variant with Unusual Properties. Abstract of the Simultaneous Sessions XII. Congress International Society of Hematology, New York. p 56.
- Waley, S.G. and Watson, J. 1953. Some Peptide of Lysine. Journal of Chemical Society. 1:475-479.
- Wasi, P. 1970. The Alpha Thalassaemia Genes. Journal of Medical Association Thailand. 53:677-683.
- Wasi, P., Disthasongchan, P. and Na-Nakorn, S. 1968. The effect of iron deficiency on the levels of hemoglobin A₂ and E. Journal of Laboratory and Clinical Medicine. 71:85-90.
- Wasi, P., Na-Nakorn, S., Pootrakul, P., and Panich, V. 1972. Incidence of Haemoglobin Thai: a re-examination of the genetics of α -thalassaemia disease. Annals of Human Genetic London. 35:467-470.
- Wasi, P., Na-Nakorn, S. and Suingdumrong, A. 1964. Haemoglobin H Disease in Thailand: A Genetical Study. Nature. 204:907-908.
- Weatherall, D.J. 1969. The Genetics of the Thalassaemia. British Medical Bullatin. 25:24-29.
- Weatherall, D.J., Clegg, J.B. and Naughton, M.A. 1965. Globin Synthesis in Thalassaemia: An in Vitro Studies. Nature. 208:1061-1065.
- Weatherall, D.J., Clegg, J.B. and Wong, H.B. 1970. The Haemoglobin Constitution of Infants with the Haemoglobin Bart's Hydrops Foetalis Syndrome. British Journal of Haematology. 18:357-367.

VITA

Name : Miss Sunant Pongsamart

Educational Record: B.Sc (Pharm.), 1969
School of Pharmacy, Mahidol University
Bangkok, Thailand

Status : Lecturer
Department of Biochemistry,
Faculty of Pharmacy,
Chulalongkorn University.