

CHAPTER FIVE

R E F E R E N C E S

- Abrahams, S.J. and Holtzman, E. (1973). Secretion and endocytosis in insulin stimulated rat adrenal medulla cells. *J.Cell Biol.* 56,540.
- Aloe, L and Levi-montalcini, R. (1980). Enhanced differentiation of sexually dimorphic organs in L-thyroxine treated tfm mice. *Cell Tissue Res.* 205, 19.
- Ances, I.G. (1973). Serum concentrations of epidermal growth factor in human pregnancy. *Am. J.Obstet Gynecol* 115. 357.
- Andrews, A.T. (1981). Electrophoresis: theory techniques, and biochemical and clinical applications. Clarendon Press Oxford, 50.
- Angeletti, P.U. and Angeletti, R. (1967). Androgen-dependent esterase activity in the mouse submaxillary gland. *Biochim-Biophys Acta.* 136, 187.
- Attardi, P.G.; Levi-Montalcini, R.; Wenger, B.S. and Angeletti, P.U. (1965). Submaxillary gland of mouse: effects of a fraction on tissues of mesodermal origin in vitro, *science* 150, 1307.
- Barka, T. (1980). Biologically active polypeptides in mouse submandibular gland. *Acta Histochem Cytochem*, 13,9.
- Bathena, S.J.; Smith, S.S.; Voyles, N.R.; Penhas, J.C.; Recant, L. (1977). Studies on submaxillary gland immunoglucagon. *Biochem Biophys Res commun* 74, 1574.

- Bennett, G. and Leblond, C.P. (1970). Formation of cell coat material for the whole surface of columnar cells in the rat small intestine as visualized by radio-autography with L-Fucose-3H. *H.Cell Biol.* 46, 409.
- Bennett, G.; Leblond, C.P. and Haddad, A. (1974). Migration of glycoprotein from the golgi apparatus to the surface of various cell types as shown by radioautography after labelled fucose injection into rats. *J.Cell Biol.* 60, 258.
- Bhathena, S.J.; Smith, S.S.; Voyles, N.R.; Penhos, J.C. and Recant, L. (1977). Studies on submaxillary gland immunoreactive glucagon. *Biochem. Biophys. Res. Comm.* 74, 1574.
- Bhoola, K.D. and Dorey, G. (1972). Distribution of Kallikrein trypsin-like proteases and amylase in submaxillary glands. In *Vasopeptides Chemistry, Pharmacology and Pathophysiology*. Edited by N.Black, F. Sicuteri, Plenum Press, New York, 233.
- Bhoola, K.D.; Dorey, G. and Jones, C.W. (1973). The influence of androgens on enzyme (chymotrypsin and trypsin-like proteases, renin, kallikrein and amylase) and on cellular structure of the mouse submaxillary gland. *I. Physiol. (Lond)* 235.
- Bhoola, K.D.; Dorey, G. and Jones, C.W. (1974). The ontogenic development and action of sex hormones on kallikrein and other proteases in the submaxillary gland. *Fogarty Int Centre Proc.* 27, 365.

- Bing, J. and Farup, P. (1965). Location of renin - or a renin-like substance in the submaxillary glands of albino mice. *Acta Pathol Microbiol. Scand.* 64, 203.
- Bing, J.; Eskildsen, P.C.; ~~Faarup~~, P. and Frederiksen, O. (1967). Location of renin in Kidneys and extra renal tissues. *Circulat. Res.* 20, Suppl. II. 3.
- Bing, J. and Poulsen, K. (1976): Vast and apparently paradoxical continuous rise in plasma renin after removal of gently manipulated submaxillary glands in nephrectomized mice. *Acta. Pathol Microbiol. Scand.* 84, 285.
- Bing, J.; Malling, C. and Poulson, K. (1977). Cause of the continuous rise in plasma renin concentration after removal of manipulated submaxillary glands in nephrectomized mice. *Acta Pathol. Microbiol. Scand.* 85, 683.
- Blobel, G.; Walter, P.; Chang, C.N.; Goldman, B.M.; Erikson, A.H. and Lingappa, V.R. (1979). Translocation of protein across membranes; the signal hypothesis and beyond *Symp. soc. exp. Biol.* 33, 9.
- Blobel, G. (1980). Intracellularprotein topogenesis. *Proc. Natn. Acad. Sci. USA*, 77, 1496.
- Borgers, M. (1973). The cytochemical application of new potent inhibitors of alkaline phosphatases. *J. Histochem. Cytochem.* 21, 812.
- Borgers, M.; and Thone, F. (1975). The inhibition of alkaline phosphatase by L.P. bromotetramisole. *Histochemistry* 44, 277.

- Borgers, M. and Thone, F. (1976). Further characterization of phosphatase activities using non-specific substrates. *Histochem. J.* 8, 301.
- Brandtzaeg, P.; Gautvik, K.M.; Nustad, K. and Pierce, J.V. (1976). Rat submandibular gland kallikreins: Purification and cellular localization. *Br. J.Pharmacol.* 56, 155.
- Brinkworth, R.I. and Masters, C.J. (1978). The turnover of lactate dehydrogenase in skeletal muscle of the mouse. Influence of fiber type and exercise regimen. (Dep. Biochem, Univ. Queensland, St. Lucia, Aust.) *Biochim. Biophys. Acta* 540 (1), 1, (Eng.)
- Brody, I.A. and Engel, W.K. (1964). Isozyme histochemistry: The display of selective lactate dehydrogenase isozymes in sections of skeletal muscle. *J. Histochem Cytochem* 12, 687.
- Burchell, A.; Cohen, P.T.W. and Cohen, P. (1976). Distribution of isozymes of the glycogenolytic cascade in different types of muscle fibre. *FEBS Lett.* 57, 17
- Byyny, R.L.; Orth, D.N. and Cohen, S. (1962). Radioimmunoassay of epidermal growth factor: *J.Biol. Chem.* 253, 7807.
- Caramia, F.; Angeletti, P.U. and Levi-Montalcini, R. (1962). Experimental analysis of the mouse submaxillary salivary gland in relationship to its nerve growth factor content. *Endocrinology* 70, 915.

- Caramia, F. (1966). Ultrastructure of mouse submaxillary gland. I sexual differences. *J. Ultrastruct Res.* 16, 505.
- Caramia, F. (1966). Ultrastructure of mouse submaxillary gland. II. Effect of castration in the male. *J. Ultrastruct. Res.* 16, 524.
- Carpenter, G. and Cohen, S. (1976). Human epidermal growth factor and the proliferation of human fibroblasts. *J. Cell. Physiol.* 88, 227.
- Castle, J.D.; Jamieson, J.D. and Palade, G.E. (1972). Radioautographic analysis of the secretory process in the parotid acinar cell of the rabbit. *J. Cell. Biol.* 53, 290.
- Chatterji, C.C. (1991). "Carbohydrate Metabolism" In *Human Physiology* 1, 537.
- Chauncy, H.H. and Quintarelli, G. (1961). Localization of acid phosphatase, nonspecific esterases and -D-galactosidase in parotid and submaxillary glands of domestic and laboratory animals. *Amer. J. Anat.* 108, 263.
- Chiasson, J.L.; Dietz, M.R.; Shikama, H. and Wotten, M. (1980). Insulin regulation of skeletal muscle glycogen metabolism.
- Chin, Chun Jo. and Nahm, Sook Hyun. (1980). Changes of lactate dehydrogenase activity of rat skeletal muscle after exercise. (*Coll. Med., Korea Univ., Seoul, S.Korea*). *Koryo Toehakkyo Uikwa Taehak Chapchi* 17(1), 319.

- Chretien, M. and Zajdela, F. (1965). Mice en evidence histochemique de la secretion de l' amylase, dans les glandes salivaires sous - maxillaires, retrolinguales et sous - parotidiennes de la souris. C.R.Acad. Sci (Paris) 260, 4263.
- Cohen, S. (1960). Purification of a nerve growth promoting protein from the mouse salivary gland and its neurocytotoxic antiserum. Proc. Natl. Acad. Sci. USA. 46, 302.
- Cohen, S. (1962). Isolation of a mouse submaxillary gland protein accelerating incisor eruption and eyelid opening in the new-born animal. J.Biol. Chem. 237, 1555.
- Cohen, S. and Taylor, J.M. (1974). Part I. Epidermal growth factor chemical and biological characterization. Recent Prog. Horm. Res. 30, 533.
- Cohen, S.; Taylor, J.M.; Murakami, K.; Michelakis, A.M. and Inagami, T. (1972). Isolation and characterization of renin-like enzymes from mouse submaxillary glands. Biochemistry 11, 4286.
- Cohen, S. and Savage, C.R. (1974) Part II. Recent studies on the chemistry and biology of epidermal growth factor. Recent Prog. Horm Res. 30, 551.
- Cohen, S. and Taylor, J.M. (1974). Epidermal growth factor: chemical and biological characterization. In Macromolecules Regulating Growth and Development Edited by ED. Hay, TF King, F.Papaconstantinou Academic Press, New York, 25.

- Cohen, S.; Carpenter, G. and Lembach, K.J. (1975). Interaction of epidermal growth factor. EGF with cultured fibroblasts. *Adv. Metab. Disor* 8, 265.
- Cohen, P. (1982). The role of protein phosphorylation in neutral and hormonal control of cellular activity, *Nature* 296, 613.
- Conlee, R.K.; Rennie, M.J. and Winder, W.W. (1976). Skeletal muscle glycogen content: diurnal variation and effects of fasting. *Am.J. Physiol.* 231, 614.
- Cox, R.P. and Griffin, M.S. (1965). Pyrophosphatase activity of mammalian alkaline phosphatase. *Lancet* 2, 1018.
- Davies, D.V. and Davies, F. (1962). In "Grays Anatomy" ed. by Davies and Davies 1376.
- Davies, B.D. and Tai, P.C. (1980). Mechanism of protein secretion across membranes. *Nature, Lond.* 283, 433.
- Dawson, D.M.; Goodfriend, T.L. and Kaplan, N.O. (1964). "Lactic Dehydrogenases": Functions of the two types. *Science* 143, 929.
- De Jong W.; Lovenberg, W. and Sjoerdsma, A. (1972). Renin-like activity in submaxillary gland in several strains of rats including the spontaneously hypertensive rat. *Biochem Pharmacol* 21, 2123.
- Dunbar, J.C.; Silverman, H.; Kirman, E. and Foa, P.P. (1977). Role of the submaxillary gland and of the kidney in the hyperglucagonemia of eviscerated rats. In *Glucagon: Its Role in Physiology and Clinical*

- Medicine. Edited by Foa, JS Baja JL Foa. Springer Verlag, New York, 157.
- Ellison, S.A. (1964). In "Salivary glands and their secretions" ed. by Srebnay and Meyer, 3, 365.
- El-Refai, M. and Bergman, R.N. (1979). Glucagon-stimulated glycogenolysis :Time-dependent sensitivity to insulin. Am.J.Physiol. 236, E₂₄₆.
- Erdos, E.G.; Tague, L.L. and Mivva, I. (1968). Kallikrein in granules of the submaxillary gland. Biochem. Pharmacol. 17, 667.
- Fall, K. and Karlson, J. (1977). Glycogen synthetase and phosphorylase activity in slow and fast skeletal muscle fibres in man. Acta Physiol. Scand. 100, 210.
- Fischer, R. (1950). "In Statistical Methods For Research Workers" 11th ed, revised, Hafner Publishing Company, New York.
- Frati, L.; Cenci, G.; Sbaraglia, G.; Teti, D.V. and Covelli, I. (1976). Levels of epidermal growth factor in mice tissues measured by a specific radio receptor assay. Life Sci. 18, 905.
- Fukuoka, Y.; Hojima, Y.; Miyaura, S. and Moriwaki, C. (1979). Purification of cat submaxillary kallikrein. J. Biochem. 85, 549.
- Gaidadzhiev, K.h. (1974) Changes in the concentrations of the water soluble proteins and the activities of lactic dehydrogenase, glutamic - Oxalacetic and glutamic pyruvic transaminases in M-gastrocnemius of a rat

- at various stages after crushing the innervating nerve [Reinnervation]. [I.Pavlov Higher Med. Inst., Plovdiv, Bulg.]. *Folia Med. (Plovdiv)* 16(2), 71 (Eng).
- Garrett, J.R.; Smith, R.E.; Kidd, A.; Kyriacou, K. and Grabske, R.J.(1982). Kallikrein-like activity in salivary glands using a new tripeptide substrate, including preliminary secretory studies and observations on mast cells [Dep. Oral Pathol., Kings Coll. Hosp. Dent. Sch., London, U.K. SE5 8RX] *Histochem. J.* 14(6), 967 (Eng.).
- Gautvik, K.M.; Berg-Orstavik, T. and Nustad, K. (1974). Role of the kallikrein-kinin system in glandular secretion In *Chemistry and Biology of the Kallikrein-kinin system. in Health and Disease*, 27, 335.
- Gecse, A.; Wilson, C.M. and Erdos, E.G. (1976). Introduction to particle-bound renin arginine esterase by testosterone in the mouse. *Biochem Pharmacol.* 25, 763.
- Geuze, J.J. and Poort, C. (1973). Cell membrane resorption in the rat exocrine pancreas cell after in vivo stimulation of the secretion, as studied by in vitro incubation with extra cellular space markers. *J.Cell. Biol.* 57, 159.
- Goldstein, M.N. and Burdman, J.A. (1965). Studies of the nerve growth factor in submandibular glands of female mice treated with testosterone. *Anat. Rec.* 151, 199.

- Gresik, E.W.; Michelakis, A.; Barka, T. and Ross, T. (1978).
Immunocytochemical localization of renin in the sub-
mandibular gland of the mouse. *J.Histochem Cytochem*
26, 855.
- Grodsky, G.M. (1973). The chemistry and function of hormones.
In Harper H.A. (ed.): "Review of Physiological
Chemistry". Los Altos, CA: Lange Medical Publ, 446.
- Gupta, S.P. (1991). Statistical Methods, 26th ed. revised. Sultan
Chand and Sons, New Delhi.
- Gutman, Y.; Levy, M. and Shorr, J. (1973). Renin-like activity
of the rat submaxillary gland. Characterization and
the effect of several drugs and stimuli. *Br J.*
Pharmacol. 59.
- Gyton, A.C.(1981) "Insulin, Glucagon and Diabetes Mellitus"
in Text book of Medical Physiology, 855.
- Hainsworth, F.R. and Stricker, E.M. (1970). Salivary cooling
by rats in the heat. In "Physiological and Behavioral
Temperature Regulation" (J.D.Hardy, A.P.Gagge and
J.A.J. Stolwijk, eds), 611, Thomas, Springfield
Illinois.
- Hand, A.R. and Oliver, C. (1970a). Cytochemical studies of GERL
and its role in secretory grannule formation in
exocrine cells. *Histochem. J.* 9, 375.
- Hand, A.R. and Oliver, C. (1970 b) Relationship between the
golgi apparatus GERL and secretory grannules in
acinar cells of the rat exo-orbital lacrimal gland.
J. Cell. Biol. 74, 399.

- Hendry, I.A.; Addison, G.M. and Iverson, L.L. (1972). Radio-immunoassay of nerve growth factor from mouse salivary gland. In Nerve Growth Factor and it.
- Hendry, I.A. and Iverson, L.I. (1973). Reduction in the concentration of nerve growth factor in mice after sialectomy and castration. *Nature* 243, 500.
- Hirata, Y. and Orth, D.N. (1979). Concentration of epidermal growth faactor, nerve growth factor, and submandibular gland renin in male and female mouse tissue and fluids. *Endocrinology*, 105, 1382.
- Hisataka, S.; Chiasson, J.L.; and Exton, J.H. (1980). Studies on the interaction between insulin and Epinephrine in the control of skeletal muscle. *Glycogen Metabolism. J.Biol. Chem.* 256, 4450.
- Hojima, Y.; Maranda, B.; Moriwaki, C. and Schachter, M. (1977). Direct evidence for the location of kallikrein in the striated ducts of the cats submandibular gland by the use of specific antibody. *J.Physiol.* 268, 793.
- Hojvat, S.; Kirsteins, L.; Kisla, J.; Paloyan, V. and Lawrence, A.M. (1977). Immunoreactive glucagon in the salivary glands of man and animal. In *Glucagon: Its Role in Physiology and Clinical Medicine* Edited by PP Foa, FS Baja, NL Foa. Springer-Verlag New York 143.
- Hopsu-Hava, V.K.; Riekkinen, P.J. and Ekfors, T.O. (1967). Studies on the alkaline trypsin-like enzymes in rat submandibular gland and saliva. *Acta Odontol Scand* 25, 657.

- Hoshino, K.; Decker, R.F.; Molnar, F. and Kim, Y.T. (1976) Hypoglycaemia effects of salivary duct ligation upon diabetes mellitus in mice. Arch Oral Biol. 21, 105.
- Howard, S.; Tager; and James, M. (1978). Intestinal and Pancreatic Glucagon-like peptides. The J.Bio.Chem. 254, 2229.
- Ishii, D.N. and Shooter, E.M. (1975). Regulation of nerve growth factor synthesis in mouse submaxillary glands by testosterone. J. Neurochem 25, 843.
- Ingebritsen, T.S.; Stewart, A.A. and Cohen, P. (1983). The protein phosphatase involved in cellular regulation. Measurement of type-1 and type-2 protein phosphatases in extracts of mammalian tissues; an assessment of their physiological roles. Eur. J. Biochem. 132, 297.
- Jacobsen, N.O. (1969). The histochemical localization of lactic dehydrogenase isoenzymes in the rat nephron by means of an improved polyvinyl alcohol method. Histochemistry 20, 250.
- Jamieson, J.D. and Palade, G.E. (1971). Condensing vacuole conversion and zymogen granule discharge in pancreatic exocrine cells: metabolic studies J.Cell Biol. 48, 503.
- Johnson, D.G.; Gorden, P. and Kopin, I.J. (1971). A sensitive radioimmunoassay for 7s nerve growth factor antigens in serum and tissues. J. Neurochem. 18, 2355.

- Jones, R.O.(1966). The in vitro effect of epithelial growth factor on rat organ cultures. *Exp. Cell Res.* 43, 645.
- Junqueira, L.C.U. and Fava-de-Moraes, F. (1965). *In :secretion and exkretion"* Springer, Berlin 36.
- Kelly, Y.; Palovan, V.; Edwards, K.; Kislá, J.and Hojvat, S. (1977). Salivary gland glucagon, effects of age and sex. *Clin Res.* 25, 572.
- Kramer, M.F. and Geuze, J.J. (1974). Redundant cell-membrane regulation in the exocrine Pancreas cells after pilocarpine stimulation of the secretion. In "Advances in cytopharmacology" (B.Ceccarelli, F. Clementi and J. Meldolesi, eds), 2, 87, Raven Press, New York.
- Kumar, S.; Steward, J.K.; Taylor, G. and Waghe, M. (1972). Fluorescence studies using anti-nerve growth factor. *Exp. Cell. Res.* 74, 170.
- Ladda, R.L.; Bullock, L.P.; Gianopoulos, T. and McCormick, I. (1979). Radioreceptor assay for epidermal growth factor. *Anal. Biochem.* 93, 286.
- Langley, J.N. (1878). Zur physiologic der speichelabsonderung. I. vom Einfusse der chorda tympani und des N. Sympathicus auf die Absonderung der Unterkieferdruse der katze. *Untersuch. Physiol. Inst. Heidelberg* 1, 476.
- Langley, J.N. and Fletcher, H.M. (1889). II on the secretion of saliva, chiefly on the secretion of salts in it. *Phil. Trans. B.* 180, 109.

- Lawrence, A.M.; Kirsteins, L.; Hojvat, S.; Rubin, L. and Palovan, V. (1975). Salivary gland glucagon: a potent extrapancreatic hyperglycemic factor. *Clin Res.* 23, 536.
- Lawrence, A.M.; Kirsteins, L.; Hojvat, S.; Rubin, L. and Mitton, J. (1976). Submaxillary gland hyperglycemic factor in man and Animals an extrapancreatic glucaagon. *Clin. Res.* 24, 364.
- Lawrence, A.M.; Tan, S.; Hojvat, S. and Kirsteins, L. (1977). Salivary gland hyperglycemic factor: an extrapancreatic source of glucagon-like material science 195, 70.
- Leeson, C.R. (1967). Structure of salivary glands In "Handbook of Physiology". [C.F.Code, ed], section 6, 2, 463. American Physiological Society, Washington.
- Lembach, K.J. (1976). Induction of human fibroblast proliferation by epidermal growth factor EGF: enhancement by an EGF-binding arginine esterase and by ascorbate. *Proc. Natl. Acad. Sci.* 73, 183.
- Lemon, M.; Fledler, F.; Forg-Brey, B.; Hirschauer, C. and Leysath, G. (1979). The isolation and properties of pig submandibular kallikrein. *Biochem. J.* 177, 159.
- Levi-Montalcini, R. and Cohen, S. (1960). Effects of the extract of the mouse submaxillary salivary glands on the sympathetic system of mammals. *Ann. N.Y. Acad. Sci.* 85, 324.

- Lawrence, A.M.; Kirsteins, L.; Hojvat, S.; Rubin, L. and Palovan, V. (1975). Salivary gland glucagon: a potent extrapancreatic hyperglycemic factor. *Clin Res.* 23, 536.
- Lawrence, A.M.; Kirsteins, L.; Hojvat, S.; Rubin, L. and Mitton, J. (1976). Submaxillary gland hyperglycemic factor in man and Animals an extrapancreatic glucagon. *Clin. Res.* 24, 364.
- Lawrence, A.M.; Tan, S.; Hojvat, S. and Kirsteins, L. (1977). Salivary gland hyperglycemic factor: an extrapancreatic source of glucagon-like material science 195, 70.
- Leeson, C.R. (1967). Structure of salivary glands In "Handbook of Physiology". [C.F.Code, ed], section 6, 2, 463. American Physiological Society, Washington.
- Lembach, K.J. (1976). Induction of human fibroblast proliferation by epidermal growth factor EGF: enhancement by an EGF-binding arginine esterase and by ascorbate. *Proc. Nat. Acad. Sci.* 73, 183.
- Lemon, M.; Fledler, F.; Forg-Brey, B.; Hirschauer, C. and Leysath, G. (1979). The isolation and properties of pig submandibular kallikrein. *Biochem. J.* 177, 159.
- Levi-Montalcini, R. and Cohen, S. (1960). Effects of the extract of the mouse submaxillary salivary glands on the sympathetic system of mammals. *Ann. N.Y. Acad. Sci.* 85, 324.

- Lindberg, B. and Darle, N. (1977). The effect of glucagon and blood transfusion on hepatic circulation and oxygen consumption in hemorrhagic shock. *J. Surg. Res.* 23, 257.
- Linhardt, K. and Walter, K. (1965). "Phosphatases" In *Methods of Enzymatic Analysis*, Ed. by Bergmeyer, H.U.; Academic Press, New York, London, 783.
- Lowrey, C.H.; Rosebrough, N.J.; Farr, A.L.; and Ranall, R.J. (1951). Protein measurement with folin phenol reagent. *J. Biol. Chem.* 193, 265.
- Maltra, Subir, R.; Rabito, Sara, F. and Carretero, Oscar, A. (1986). Release of Kallikrein and tonin from the rat submandibular gland. [*Hypertens. Res. Div., Henry Ford Hosp., Detroit, M.I. 48202 USA*]. *Adv. Exp. Med. Biol.* 198 A. (Kinins 4 Pt A), 247(Eng).
- Manzie, J.W.; Michelakis, A.M. and Yoshida, H. (1974). Sympathetic nervous system and renin release from submaxillary glands and kidneys. *Am. J. Physiol.* 227, 1281.
- Manchester, J.H.; Parmley, W.W.; Matloff, J.M. and Sonnenblick, E. (1969). Beneficial effects of glucagon in canine myocardial infarction and shock. *Clin. Res.* 17, 252.
- McMillan, P.J. (1967). Differential demonstration of muscle and heart type lactic dehydrogenase of rat muscle and kidney. *J. Histochem Cytochem.* 15, 21.

- Michelakis, A.M.; Yoshida, H.; Menzie, J.; Murakami, K. and Inagami, T. (1974). A radioimmunoassay for the direct measurement of renin in mice and its application to submaxillary gland and kidney studies *Endocrinology* 94, 1101.
- Moriwaki, C.; Hojima, H. and Schachter, M. (1976). Purification of kallikrein from cat submaxillary gland. In *kinins: Pharmacodynamics and Biological Roles*. Edited by F.Sicuteri, N. Black, GL Haberland. Plenum Press, New York, 151.
- Moss, D.W. (1969a). Biochemical Studies on Phosphohydrolase isoenzymes. *Ann. N.Y.Acad.Sci.* 166, 641.
- Moss, D.W. (1969b). The influence of metal ions on the ortho-phosphatase and inorganic pyrophosphatase activities of human alkaline phosphatase. *Biochem. J.* 112, 699.
- Moss, D.W. and Walli, A.K. (1969). Intermediates in the hydrolysis of ATP by human alkaline phosphatase. *Biochim. Biophys. Acta.* 191, 476.
- Murphy, R.A.; Watson, Ann. V.; Metz, J.; Forssmann, W. and George (1980). The mouse submandibular gland: An exocrine organ for growth factors (Dep. Anat., Harvard Med.Sch., Boston, MA USA). *J. Histochem. Cytochem.* 28(8), 890.[Eng].
- Neutra, M. and Lablond, C.P. (1966a). Synthesis of the carbohydrate of mucus in the Golgi complex as shown by electron microscope radioautography of goblet cells

- from rats injected with glucose - H^3 J.Cell.Biol. 30,119.
- Neutra, M. and Leblond, C.P. (1966b) Radioautographic comparison of the uptake of galactose - H^3 and glucose H^3 in the golgi region of various cell secreting glycoproteins or mucopolysaccharides. J. Cell. Biol. 30, 137.
- Nishino, T.; Kodaira, T.; Shin, S.; Imagawa, K; Yanaiharu, N; Shima, K. and Kumahara, Y. (1981). Production of antisera to des Asn²⁸ Thr²⁹ Homoser²⁷ -glucagon; The development of radioimmunoassay for total glucagon-like immuno reactivity in human plasma. Endocrinol. Japan. 28, 419.
- Novikoff, A.B. (1976) The endoplasmic reticulum, a cytochemists view (a review) Proc. Nat.Acad. Sci. (Wash) 73, 2781
- Novikoff, A.B. and Novikoff, P.M. (1977). Cytochemical contributions to differentiating GERL from the Golgi apparatus. Histochem. J. 9, 525.
- Nustad, K.; Gautvik, K.M. and Pierce, J.V. (1974). Glandular kallikreins purification, characterization, and biosynthesis. Fogarty Internat Center Proc. In Chemistry and Biology of the Kallikrein-Kinin system in Health and Disease [Fogarty Int (tt Proc)] 27, 77.
- Orci, L.; Malaisse-Lagae, F.; Ravazzola, M.; Amherdt, M. and Renold, A.E. (1973). Exocytosis-endocytosis coupling in the pancreatic beta cell. Science 181, 561.

- Disc electrophoresis, I. Background and theory.*
- Ornstein, L. (1964). *Ann. N.Y. Acad. Sci.* 121, 321.
- Orstavik, T.B.; Brandtzaeg, P.; Nustad, K. and Halvorsen, K.M. (1975). Cellular localization of kallikreins in rat submandibular and sublingual salivary glands. Immunofluorescence tracing related to histological characteristics. *Acta Histochem. (Jena)* 54, 183.
- Penhos, J.C.; Ezequiel, M.; Lepp, A. and Ramey, E.R. (1975). Plasma immunoreactive insulin-IRI and immunoreactive glucagon IRG evisceration with and without a functional liver. *Diabetes* 4, 637.
- Perez-Castillo, A. And Blazquez, E. (1980). Synthesis and release of glucagon by human salivary glands. *Diabetologia* 19, 123.
- Peter, J.B.; Barnard, R.J.; Edgerton, V.R.; Gillespie, C.A. and Stempel, K.E. (1972). Metabolic profiles of three fiber types of skeletal muscle in guinea pigs and rabbits (Dep. Med. Univ, California, Los Angeles, Calif). *Biochemistry* 11 (14), 2627 (Eng).
- Pfleiderer, G. (1957). "Glycogen" In *Methods of Enzymatic Analysis*, Ed. by Bergmeyer, H.U.; Academic Press, New York, London, 59.
- Pisanty, J.; Dieck, M.N.; Garza, M.L; Garza, J.M.; Gomez, M.F. (1975). Diabetogenic effect of submaxillary gland implantation and submaxillary gland extract injection in dogs and mice. *IRCS Med Sci.* 3, 521.

- Poulsen, K.; Vuust, J.; Lykkegaard, S.; Nielson, A. and Lund, T. (1979). Renin is synthesized as a 50 000 dalton single-chain polypeptide in cell-free translation systems. *FEBS Lett* 98, 135.
- Proctor, H.J.; Wood, J.J. and Palladino, W.G. (1980). Effect of glucagon on hepatic cellular energetics during a low flow state. *Surgery* 87, 369.
- Proud, D.; Bailey, G.S.; Nustad, K. and Gautvik, K.M. (1977). The immunological similarity of rat glandular kallikreins. *Biochem. J.* 167, 835.
- Rezvyakov, N.P. (1972). Histochemical characteristics of red and white muscles of mammals. [Kazan. Vet. Inst. im Baumaana, Kazan, USSR] *Uch. Zap. Kazan. Vet. inst.* 114, 151 (Russ).
- Richman, R.A.; Claus, T.H.; Pilgis, S.J. and Friedman, D.L. (1976). Hormonal stimulation of DNA Synthesis in *Natl. Acad. Sci.* 73, 3589.
- Riekkinen, P.J. and Niemi, M. (1968). Androgen-dependent salivary gland protease in the rat. *Endocrinology*, 83, 1224.
- Roberts, M.L. (1974). Testosterone-induced accumulation of epidermal growth faactor in the submandibular salivary glands of mice, assessed by radioimmunoassay. *Biochem. Pharmacol.* 23, 3305.

- Rowe, G.G. (1970). Systemic and coronary hemodynamic effects of glucagon. *Am. J. Cardiol.* 25,670.
- Samols, E.; Tyler, J. and Kajinuma, H. (1970). Influence of the sulfonamides on pancreatic humoral secretion and evidence of an insulin-glucagon feedback system. In Rodriguez RR and vallance-owen I (eds) *Proceedings Seventh International Diabetes Federation Congress* 636, Amsterdam: Excerpta Medica.
- Samols, E.; Tyler, J. and Marks, V. (1972). Glucagon-insulin interrelationships. In Lefebvre PJ (ed) *Glucagon Molecular Physiology, Clinical and Therapeutic Implications* 151, Oxford, Pergamon.
- Samols, E. and Harrison, J. (1976). Intra Islet negative insulin-glucagon feed back. *Metabolism* 25, 1443.
- Samols, E. (1983). Glucagon and insulin secretion. In Lefebvre PJ (ed) *Handbook of Experimental Pharmacology* volume 66/I, Glucagon I, 485, Berlin Heidelberg: Springer-Verlag.
- Samols, E.; Weir, G.C. and Bonner-Weir, S. (1983). Intra islet insulin-glucagon-somatostatin relationships. In Lefebvre PJ (ed) *Handbook of Experimental Pharmacology*, volume 66/II, Glucagon II, 133, Berlin, Heidelberg: Springer-Verlag.
- Schachter, H. (1974). Glycosylation of glycoproteins during intracellular transport of secretory products. In "Advances in cytopharmacology" (B.Ceccarelli, F.Clementi and J. Meldolesi, eds.) Vol. 2, 207, Raven Press, New York.

- Schumer, W.; Miller, B.; Nichols, R.L.; McDonald, G.O. and Nyhus, L.M. (1973). Metabolic and microcirculatory effects of glucagon in hypovolemic shock. Arch. Surg. 107, 176.
- Schwab, M.E.; Stockel, K. and Thoenen, H. (1976). Immunocytochemical localization of nerve growth factor (NGF) in the submandibular gland of adult mice by light and electron microscopy. Cell Tiss. Res. 169, 289.
- Sevela And Tovarek (1989). "Lactate dehydrogenase" Laboratory Manual in Biochemistry, Ed. by Stroev, E.A. and Makarova, V.G.; MIR Publishers, Moscow. 106.
- Shafer, W.C.; Clark, P.G. and Muhler, J.C. (1959). Salivary gland function in the rat. III Protease and orginase activity of submaxillary glands and whole saliva. J. dent. Res. 38, 121.
- Shepard, T.H.; Lawrence, H.; Gordon, John, E. and Wollenweber (1965). "Lactic dehydrogenase isoenzymes in muscle from patients with Duchenne Muscular Dystrophy. Department of Paediatrics and Department of Surgery School of Medicine, University of Washington, Seattle, Nature, 1107.
- Silverman, H. and Dunbar, J.C. (1974). The submaxillary gland as a possible source of glucagon. Bull Sinai Hosp Detroit 22, 192.
- Simson, J.A.V.; Hazen, D.; Spicer, S.S.; Murphy, R.A. and Young, M. (1978). Secretagoguemediated discharge of

- nerve growth factor from granular tubules of male mouse submandibular glands: an immunocytochemical study. *Anat. Rec.* 192, 375.
- Singh, I. and Tsang, K.Y. (1975). An in vitro production of bone specific alkaline phosphatase. *Exp. Cell. Res.* 95, 347.
- Smith, R.J.; Frommer, J. and Schiff, R. (1971). Localization and onset of amylase activity in mouse salivary glands determined by a substrate film method. *J. Histochem. Cytochem.* 19, 310.
- Smith, R.J. and Frommer, J. (1972 a). On the function of granular tubules in rodent submandibular glands: histochemical observations on octodon degas. *Arch. Oral Biol.* 17, 1375.
- Smith, R.J. and Frommer, J. (1972 b). Effects of prepubertal castration on development of granular tubules and amylase activity in the male mouse, submandibular gland. *Arch. Oral Biol.* 17, 1561.
- Smith, S.; Mazur, A.; Voyles, N.; Bhatena, S.; and Recant, L. (1979). Is submaxillary gland immunoreactive glucagon important in carbohydrate homeostasis ? *Metabolism* 28, 343.
- Sreebny, L.M. and Meyer, J. (1964). Hormones, inanition and salivary glands. In "Salivary Glands and Their Secretions" (L.M.Sreebny and J. Meyer, eds), 83, Pergamon, Oxford.
- Starkey, R.H.; Cohen, S. and Orth, D.N. (1976). Epidermal growth factor : identification of a new hormone in

- human Urine. Science 189, 800.
- Tadara, G.J.; De Larco, J.E. and Cohen, S. (1976). Transformation by murine and feline sarcoma viruses specifically blocks binding of epidermal growth factor to cells. Nature 264, 26.
- Tahara, Y.; Shima, K.; Hirota, M.; Ikegami, H.; Tanaka, A. and Kumahara, Y. (1983). Salivary gland glucagon is a fictitious substance due to tracer-degrading activity resistant to protease inhibitors. Biochem. Biophys. Res. Comm. 133, 340.
- Tahara, Y.; Shima, K.; Hirota, M.; Tanaka, A.; Ikegami, H. and Kumahara, Y. (1985). Glucagon immunoreactivity in salivary glands: Evidence for degradation of [¹²⁵I]-Glucagon By submandibular Acid - Saline Extract of Rats. Department of Medicine and Geriatrics, Osaka University Medical School, Fukushima, Osaka 553, Japan.
- Talwar, G.P.; Srivastava, L.M. and Moudgil, K.D. (1989). "Insulin" In Textbook of Biochemistry And Human Biology Second Edition, Prentice-Hall of India Private Limited, New Delhi.
- Takada, K.; Tamura, K.; and Mori, M. (1968). Effect of Mg ion on histochemical demonstratin of alkaline phosphatase in decalcified hard tissue. Acta Histochem. Cytochem 1, 37.

- Taylor, J.M.; Cohen, S. and Mitchell, W.M. (1970). Epidermal growth factor high and low molecular weight forms Proc. Natl. Acad. Sci. USA 67, 164.
- Taylor, J.M.; Mitchell, W.M. and Cohen, S. (1974). Characterization of the high molecular weight form of epidermal growth factor. J. Biol. Chem. 249, 3198.
- Taylor, C.; Cox, A.J.; Kernohan, J.C. and Cohen, P. (1975). Debranching enzyme from rabbit skeletal muscle purification properties and physiological role. Eur. J. Biochem. 51, 105.
- Terjung, R.L.; Baldwin, K.M.; Winder, W. and Holloszy, J.O. (1974). Glycogen repletion in different types of muscle and in liver after exhausting exercise (Sch. Med. Washington Univ., St. Louis, M.O.) Amer. J. Physiol. 226 (6) 1387.
- Trautschold, I.; Werle, E.; Schmal, A. and Hendrikoff, N.G. (1966). Hormonal regulation of isorenin levels in the submandibular gland of the white mouse and localization of the enzyme in the gland. Hoppe Seylers Z Physiol Chem 344, 232.
- Tsutou, A.; Nakamura, S.I.; Negami, A.; Nakaza, T.; Kobayashi, T.; Mizuta, K.; Hashimoto, E.; and Yamamura, H. (1985). Comparison of Enzyme activities on glycogen metabolism in rabbit slow and fast muscles (Department of Biochemistry, Center of Medical Technology, Fukui Medical School, Matsuoka, Fukui 910 - Japan) J. Biochem. Physiol. 81B No.3, 641.

- Turkington, R.W. (1969 a). The role of epithelial growth factor in mammary gland development in vitro. *Exp. Cell Res.* 57, 79.
- Turkington, R.W. (1969b) Stimulation of mammary cell proliferation by epithelial growth factor in vitro. *Cancer Res.* 29, 1457.
- Turkington, R.W.; Males, J.L. and Cohen, S. (1971). Synthesis and storage of epithelial-epidermal growth factor in submaxillary gland. *Cancer Res.* 31, 252.
- Umbarger, H.E. (1964). Intracellular Regulatory Mechanisms. *Science* 145, 674.
- Unger, R.H. and Orci, L. (1976). Physiology and pathophysiology of glucagon. *Physiol. Rev.* 56, 778.
- Vander, Ark C.R. and Reynolds, E.W. (1990). Clinical evaluation of glucagon in the treatment of cardiogenic shock. *Clin Res.* 17, 519.
- Van Lemnep, E.W.; Kennerson, A.R. and Compton, J. (1977). The Ultrastructure of the Sheep Parotid gland. *Cell Tiss Res.* 179, 377.
- Walas, O.; Walaas, E. and Horn, R.S. (1973). Influence of sodium potassium and lithium on the response of glycogen synthetase I to insulin and epinephrine in the isolated rat diaphragm (Inst. Med. Biochem., Univ. Oslo, Oslo, Norway). *Biochim. Biophys. Acta* 313 (2), 296 (Eng).
- Wallace, L.J. and Partlow, L.M. (1976). Alpha-adrenergic regulation of secretion of mouse saliva rich in growth factor. *Proc. Natl. Acad. Sci. USA.* 73, 4210.

- Wallace, L.J.; Partlow, L.M. and Wardell, L.J. (1977). Nerve growth factor in mouse saliva elicited by nerve stimulation. *Trans. Am.Soc. Neurochem* 8, 135.
- Walkenbach, R.J.; Hazen, R. and Larner, J. (1980). Hormonal regulation of glycogen synthase. Insulin decreases protein kinase sensitivity to cyclic AMP (Sch. Med. Univ. Virginia, Charlottesville, VA 22908 USA) *Biochim Biophys Acta*, 629 (3), 421 (Eng).
- Weimer, V.L. and Haraguchi, K.H. (1975). Submaxillary mesoderm growth factor (Health Sci. Cent., Univ. Oregon, Portland, Oreg.) *Physiol. Chem. Phys.* 7(1), 7 (Eng).
- Weir, G.C., Knowlton,, S.D., Atkins, R.F., Mckennam, K.X. and Martin, D.P. (1976). Glucagon secretion from the perfused pancreas of streptozotocin-treated rats. *Diabetes* 25, 275.
- Werle, E. and Von Roden, P. (1936), Ueber das Vorkommen Von Kallikrein in der speichel-druesen und im mundspeichel. *Biochem. Z.* 286, 213.
- Westermark, B. (1976). Density dependent proliferation of human glia cells stimulated by epidermal growth factor. *Biochem. Biophys. Res. Commun.* 69, 304.
- Wilkinson, J.H. (1970). "Lactate Dehydrogenase" in isoenzyme chapman And Hall Ltd. 11, New FFtter lane London EC₄.

- York, J.W.; Oscai, L.B. and Penney, D.G. (1974). Alteration in skeletal muscle lactate dehydrogenase isoenzymes following exercise training. (Sch. Phys. Educ., Univ. Illinois, Chicago, I 11). Biochem. Biophys. Res. Commun. 61(4), 1387 (Eng.).
- Young, M.; Saide, J.D.; Murphy, R.A. and Blanchard, M.H. (1978). Nerve growth factor: multiple dissociation products in homogenates of the mouse submandibular gland purification and molecular properties of the intact undissociated form of the protein. Biochemistry 17, 1490.
- Young, M. (1979). Proteolytic activity of nerve growth factor- a case of autocatalytic activation. Biochemistry 18, 3050.
- Young, J.A. and Van Lennep, E.W. (1978). Transport in salivary and sweat glands. In "Membrane Transport in Biology" (G. Giebisch, D.C. Tosteson and H.H.Ussing, eds), 4, Springer, New York.
- Zamoskovskaya, G.A. and Vsatenko, M.S. (1974). Effect of denervation and reinnervation on lactate and malate dehydrogenase. (Inst. Exp. Med., Leningrad, USSR) Zh. Evol. Biokhim. Fiziol. 10 (1) 10 (Russ).
- Zondag, H.A. (1963). Lactate Dehydrogenase Isozymes : Lability at low temperature science 142, 965.