

## Literatura

Appelbaum F. R.: The clinical use of hematopoietic growth factors. *Semin. Hematol., Suppl.*, 26, 7, 1989

Arendt J. et al.: Alleviation of jet lag by melatonin. *Br. Med. J.*, 292, p. 1170, 1986

Arendt J.: Clinical perspectives for melatonin and its agonists. *Biological Psychiatry*, 35, 1, pp. 1-2, 1994

Armstrong D., Sohal R. S., Cutler R. G., Slater T. F. (eds): *Free Radicals in Molecular Biology, Aging, and Disease*. Raven Press, New York, 1984

Bennet A. E. et al.: Insulin-like growth factor-I and II: Aging and bone density in women. *J. Clin. Endocrinol. Metabol.*, 59, 4, 701, 1984

Bueker E. D.: *Anat. Res.*, 102: 105, 1948

Bjorksten J.: The crosslinkage theory of aging. *J. Am. Geriatr. Soc.*, 4, 16, 1968

Burgess A. W., Sizeland M.: Growth factors and the gut. *J. Gastroenterol. Hepatol. Suppl.*, 1, 10, 1990

Brown W. T.: Human mutations affecting aging. *Mech. Ageing Dev.*, 9, 325-336, 1979

Cardarelli N. F.: The role of Thymus - Pineal Axis in a Immune Mechanisms of Aging. *J. Theor. Biol.*, 145, 397, 1990

Cairo M. S.: Hematopoietic growth factors. *J. Pediatr.*, 118, S1-S3, 1991

Caroleo M. C., Doria G. and Nistico G.: Melatonin restores immunodepression in aged and cyclophosphamide-treated mice. In: Pierpaoli W., Regelson W. and Fabris N. (editors): *The Aging Clock*. Annals of the New York Academy of Sciences. Vol 719, New York, 1994

- Comfort A.: Aging. Molt, Rinehart and Winston, New York, 1962
- Crowley C., Curtis H. J.: The development of somatic mutations in mice with age. Proc. Natl. Acad. Sci. U.S.A., 49, 626-628, 1963
- Curtis H. J.: Biological mechanisms underlying the aging process. Science, 141, 686-694, 1963
- Das U. N.: Melatonin: Is it an endogenous anti-mutagenic, oncostatic and anti-aging molecule? Med. Sci. Res., 22, 7, pp. 463-466, 1994
- Das U. N.: Melatonin in the pathobiology and treatment of cancer. The Cancer Journal, 8, pp. 103-108, 1995
- Dilman V. M.: Aging, rate of aging and cancer. In: Pierpaoli W., Regelson W. and Fabris N. (editoři): The Aging Clock. Annals of the New York Academy of Sciences. Vol 719, New York, 1994
- Dean W.: Biological aging measurement, The Center for Biogerontology, Los Angeles, 1988
- Dollins A. B. et al.: Effect of inducing nocturnal serum melatonin on sleep, mood, body temperature and performance. Proc. Natl. Acad. Sci. USA, 91, 5, pp 1824-1828, 1994
- Ďoubal S.: Teorie spolehlivosti a biologické systémy. Biologické listy, 44, 45-55, 1979
- Ďoubal S.: Disertační práce, Biofyzikální ústav ČSAV, Brno, 1980
- Ďoubal S.: Perspektivy využití teorie spolehlivosti v gerontologii. Čs. fysiол., 30. 1-16, 1981
- Ďoubal S.: Theory of reliability, biological systems and aging. Mech. Ageing Dev., 18, 339-353, 1982
- Ďoubal S., Klemnera P.: Mathematical models of growth, development and aging. In: Deyl Z., Zycha J.(eds): Methods in Animal Physiology. CRC Press, Boca Raton, 175-189, 1989

- Joh T., Itoh M., Katsumi K., Tanaka R.: Physiological concentration of human epidermal growth factor in biological fluids. *Clin. Chimica Acta*, 158, 81 1986
- Kasai K., Nakamura T., Shimoda S. I.: Human urinary epidermal growth factor. *Hormone Res.*, 31, 157, 1989
- Khansari D., Gustad T.: Effects of long-term, low-dose growth hormone therapy on immune function and life expectancy of mice. *Mech. Ageing Dev.*, 57, 87, 1991
- King R. J., Jones M. B., Minoo P.: Regulation of lung proliferation by polypeptide growth hormone. *Am. J. Physiol.*, 25, 123, 1989
- Kirkwood T. B. L.: Evolution of aging. *Nature. Lond.*, 270, 301-304, 1977
- Kirkwood T. B. L.: Error propagation in intracellular information transfer. *J. Theor. Biol.*, 82, 363-382, 1980
- Klemra P.: Habilitační práce, Farmaceutická fakulta UK, Hradec Králové, 1994
- Klemra P., Ďoubal S.: Practical methodology of evaluation of mortality curves and detection of aging-related interventions. *Age*, 1997 (v tisku).
- Klíř J., Valach M.: Kybernetické modelování. SNTL, Praha, 1965
- Kloeden P. E., Rosler R., Rosler O. E.: Does centralised clock for aging exists? *Gerontol.*, 36, 314, 1990
- Kowald A. a Kirkwood T. B. L.: Towards a network theory of aging: A model combining the free radical theory and the protein error theory. *J. theor. Biol.*, 168, 75-94, 1994
- Laver J., Moore M. S.: Clinical use of human recombinant hematopoietic growth factors. *J. Natl. Cancer Inst.*, 81, 1370, 1989
- Lerner A. B., et al.: Isolation Structure of melatonin. of melatonin. *J. Am.Chem.Soc.*, 80, 2587, 1958

- Lerner A.B. Case J. D., Heinzelman R. V.: Structure of melatonin. *J. Am. Chem. Soc.* 80, 6084, 1959 (a)
- Lerner A. B., Case J. D., Heinzelman R. V.: Structure of melatonin. *J. Am. Chem. Soc.*, 81, 6084-6085, 1959 (b)
- Lestiene R.: On thermodynamical and biological interpretation of Gompertz mortality rate distributions. *Mech. Ageing Dev.*, 42, 197-214, 1988
- Levi-Montalcini R., Hamburger V.: Nerve growth factor, *J. Exp. Zool.*, 116: 321, 1951
- Lipton S. A.: Growth factors for neuronal survival and process of regeneration. *Arch. Neurol.*, 46, 1241, 1989
- Makeham W. M.: On the law of mortality and the construction of annuity tables. *Journal of Institute of Actuaries*, 8, 1960
- Medvedev S. A.: Starenie organizma na moljekularnoj urovně. *Uspěchy sovr. biol.*, 51, 299, 1961
- Medvedev S. A.: An attempt at a rational classification of theories of ageing. *Biol. Rev.*, 65, 375-398, 1990
- Meites J., Goya R., Takahashi S.: Why the neuroendocrine system is important in ageing process. *Exp. Gerontol.*, 22, 1, 1987
- Mocchegiani E. et al.: The zink-melatonin interrelationship. In: Pierpaoli W., Regelson W. and Fabris N. (eds.): *The Aging Clock. Annals of the New York Academy of Sciences. Vol 719, New York, 1994*
- Nakamura E., Miyao K., Ozeki T.: Assessment of biological age by principal component analysis. *Mech. Ageing. Dev.*, 46, 1-18, 1988
- Nakamura E.: A study on the basic nature of human biological aging processes based upon a hierarchical factor solution of the age-related physiological variables. *Mech. Ageing Dev.*, 60, 153-170, 1991
- Olson C, B.: A review of why and how we age: A defense of multifactorial theory of aging. *Mech. Ageing Dev.*, 41, 1-6, 1987

Orgel L. E.: The maintenance of accuracy of protein synthesis and its relevance to aging. Proc.

Natl. Acad. Sci. U.S.A., 49, 517-521, 1963

Paduolo L., Arbib M. A.: System Theory. W. B. Saunders Comp., Philadelphia, 1974

Perez-Polo J. R., Foreman P. J., Perez K. W.: Nerve growth factor and neuronal cell death. In: Bazan N. G.(edit.): Molecular Neurobiology, The Human Press Inc., 1990

Pierce G. F. et al.: Role of PDGF in wound healing. J. Cell. Biochem., 45, 19, 1991

Petrie K. et al.: Effect of melatonin on jet lag after long haul flights. Br. Med. J., 298, 705-707, 1989

Pierpaolli W., Yi C.: The involment of pineal gland and melatonin in immunity and aging. J. Neuroimmun., 27, 99, 1990

Pierpaoli W. et al: The pineal control of aging. Ann. N.Y. Acad. of Sci., 621, 291-313, 1991

Pierpaoli W., Regelson W., Fabris N. (eds): The Aging Clock. Annals of New York Academy of Sciences, Vol. 719, New York, 1994

Pierpaoli W., Regelson W., Colman C.: The melatonin miracle. Forth Estate, London, 1995

Pryor W. A.: Free Radicals. McGraw Hill, New York, 1966

Pryor W. A.: Free radicals in autoxidation and in aging. In: Armstrong D., Sohal R. S., Cutler

R. G., Slater T. F. (eds): Free Radicals in Molecular Biology, Aging, and Disease. Raven Press, New York, 1984

Popper et al. : Organ systems as a pacemakers of aging. In: Warner et al: Modern Biological Theories of Aging. Raven Press, New York, 1986

Reis W., Pöthing D.: Chronological and biological age. *Exp. Gerontol.*, 19, 211-219, 1984

Reiter R. J.: Neuroendocrine effects of pineal gland and of melatonin. In: Ganong W. F. and Martini L. (eds): *Frontiers in Neuroendocrinology*. Raven Press, New York, 1982

Reiter R. J.: The ageing pineal gland and physiological consequences. *Bio-Essays*, 14, 169, 1992

Reiter R. J. et al.: Melatonin as a free radical scavenger. In: Pierpaoli W., Regelson W. and Fabris N. (editoři): *The Aging Clock*. Annals of the New York Academy of Sciences. Vol 719, New York, 1994

Reiter R. J. et al.: A review of the evidences supporting melatonin's role as an antioxidant. *J. Pineal Res.*, 18, 1-18, 1995

Reiter R. J.: The pineal gland and melatonin in relation to aging. *Experimental Gerontology*, 30, 3/4, 199-212, 1995

Riggs J. E. and Millicchia R. J. : Mortality among the elderly in the U.S., 1956-1987: demonstration of the upper boundary to Gompertzian mortality. *Mech. Ageing Dev.*, 62, 191-199, 1992 (a).

Riggs J. E.: Rising cancer mortality in the United States, 1962-1987: Evidence against environmental causation. *Regulatory Toxicol. a. Pharmacol.*, 16, 81-92, 1992 (b).

Rothe M., Falanga V.: Epidermal growth factor and skin aging. *Arch. Dermatol.*, 125, 1390, 1989

Shock N. W.: Discussion on mortality and measurement. In: Strehler et al (eds): *The Biology of Aging*. Am. Inst. on Biol. Sci., Washington D.C., 1960

Sinex F. M.: Aging and lability of irreplaceable molecules. In: Strehler B. L.(ed.): *The Biology of Aging.*, Am. Inst. Biol. Sci., Washington D.C., 1960

Smith J. R., Lumpkin Ch. K.: Loss of gene repression activity: a theory of cellular senescence. *Mech. Ageing Dev.*, 7, 65-80, 1980.

Strehler B. L.: Time, Cells, and Aging. Academic Press, New York, 1962 (first edition)

Strehler B. L.: Time, Cells, and Aging. Academic Press, New York, 1977 (second edition)

Švec et al.: Teorie automatického řízení, SNTL, Praha, 1969

Tomoda A. et al.: A school refusal case with biological rhythm disturbances and melatonin therapy. *Brain and Development*, 16, 1, pp. 71-76, 1994

Touitou Y., Haus E.: Aging of the human endocrine and neuroendocrine system. In: Pierpaoli W., Regelson W. and Fabris N. (editoři): *The Aging Clock*. Annals of the New York Academy of Sciences. Vol 719, New York, 1994

Turturro A., Hart R. W.: Biomarkers of aging: An overview. *Biomed. and Environ. Sci.*, 4, 130-133, 1991

Tripathi C. R., Kolli S.P., Tripathi B. J.: FGF in the eye - prospects for therapeutical use. *Drug Dev. Res.*, 19, 225, 1990

Tripathi C. R., Borisuth N. S. C., Tripathi B. J.: Growth factors in aqueous humor and their therapeutical implication in glaucoma disorder of human eye. *Drug Dev. Res.*, 22, 1, 1991

Vassiljev N. et al.: The pineal gland and immunity. In: Pierpaoli W., Regelson W. and Fabris N. (editoři): *The Aging Clock*. Annals of the New York Academy of Sciences. Vol 719, New York, 1994

Voitenko V. P., Tokar A. V.: The assessment of biological age and sex differences of human aging. *Exp. Aging Res.*, 9, 239-244, 1983

Villareal D. T., Morley J. E.: Trophic factors in aging - should older people receive hormonal replacement therapy? *Drugs and Aging*, 4, 6, 492-509, 1994

Vried J., Sheppard M. S., Borer K. T.: Melatonin increases serum growth hormone and IGF-1 levels in male syrian hamsters via hypothalamic neurotransmitters. *Growth Develop. Ageing*, 54, 165, 1990

Witten M.: A return to time, cells, and aging. *Mech. Ageing Dev.*, 21, 69-81, 1983

Ziegler B. P.: *Theory of Modeling and Simulation*. J. Wiley and Sons, New York, 1976