

DAFTAR PUSTAKA

- Abboud H, Ahmed A, & Fernandez HH, 2011. Essential tremor: choosing the right management plan for your patient, *Cleveland Clinic Journal of Medicine*, vol. 78, no. 12, pp. 821–828.
- Allaman I, Bélanger M, & Magistretti PJ, 2011. Astrocyte-neuron metabolic relationships: for better and for worse, *Trends in Neurosciences*, vol. 34, no. 2, pp. 76–87.
- Amor S, Peferoen LAN, Vogel DYS, Breur M, van der Valk P, Baker D, & van Noort JM, 2014. Inflammation in neurodegenerative diseases - an update, *Immunology*, vol. 142, no. 2, pp. 151–166.
- Anderson RF and Harris TA, 2003. Dopamine and uric acid act as antioxidants in the repair of DNA radicals: implications in Parkinson's disease, *Free Radical Research*, vol. 37, no. 10, pp. 1131–1136.
- Anthofer J, Steib K, Fellner C, Lange M, Brawanski A, & Schlaier J, 2014. The variability of atlas-based targets in relation to surrounding major fibre tracts in thalamic deep brain stimulation, *Acta Neurochirurgica*, vol. 156, no. 8, pp. 1497–1504.
- Ariga H, Takahashi-Niki K, Kato I, Maita H, Niki T, & Iguchi-Ariga SMM, 2013. Neuroprotective function of DJ-1 in Parkinson's disease, *Oxidative medicine and cellular longevity*, vol. 2013.
- Arima K, Hirai S, Sunohara N, Aoto K, Izumiyama Y, Uéda K, et al., 1999. "Cellular co-localization of phosphorylated tau- and NACP/α-synuclein epitopes in Lewy bodies in sporadic Parkinson's disease and in dementia with Lewy bodies, *Brain Research*, vol. 843, no. 1–2, pp. 53–61.
- Bain PG, 2002. The management of tremor, *Journal of neurology, neurosurgery, and psychiatry*, vol. 72 suppl. 1, pp. 13–19.
- Bajaj N, Hauser RA, and Grachev ID, 2013. Clinical utility of dopamine transporter single photon emission CT (DaT-SPECT) with (123I) ioflupane in diagnosis of parkinsonian syndromes, *Journal of Neurology, Neurosurgery and Psychiatry*, vol. 84, no. 11, pp. 1288–1295.
- Bandhyopadhyay U and Cuervo AM, 2007. Chaperone-mediated autophagy in aging and neurodegeneration: lessons from α-synuclein, *Experimental Gerontology*, vo. 42, no. 1–2, pp. 120–128.
- Bellomo G, Santambrogio L, Fiacconi M, Scarponi AM, & Ciuffetti G, 1991. Plasma profiles of adrenocorticotropic hormone, cortisol, growth hormone and prolactin in patients with untreated Parkinson's disease. *Journal of Neurology*, vol. 238, no. 1, pp. 19–22.
- Benzekry, S., Tracz, A., Mastri, M., Corbelli, R., Barbolosi, D., Ebos, J. M., 2016. Modeling spontaneous metastasis following surgery: an in vivo-in silico approach, *Cancer Research*, vol. 76, no. 3, pp. 535–547.
- Bercovich B, Stancovski I, Maye A, Blumenfeld N, Laszlo A, Schwartz AL, & Ciechanover A, 1997. Ubiquitin-dependent degradation of certain protein substrates in vitro requires the molecular chaperone Hsc70, *Journal of Biological Chemistry*, vol. 272, no. 14, pp. 9002–9010.
- Bergman HI, Feingold A, Nini A, Raz A, Slovin H, Abeles M, Vaadia E, 1998. Physiological aspects of information processing in the basal ganglia of normal and parkinsonian monkeys, *Trends in Neurosciences*, vol. 21, no.

- 1, pp. 32–37.
- Bertolaccini, L., Pardolesi, A. and Solli, P., 2017. Thoracic surgeons, mathematics, and statisticians : a new multidisciplinary team?, *Journal of Visualized Surgery*, vol. 3, no.5, pp. 1–2..
- Bhatia KP, Bain P, Bajaj N, Elble RJ, Hallett M, et al., 2017. Consensus Statement on the classification of tremors, from the task force on tremor of the international Parkinson and movement disorder society, *Movement Disorders*, vol. 31, no. 1, pp. 75 – 87.
- Bjørling-Poulsen M, Andersen HR, and Grandjean P, 2008. Potential developmental neurotoxicity of pesticides used in Europe, *Environmental Health*, vol. 7, no.1, pp. 1-22.
- Bohnen NI and Albin RL, 2011. The cholinergic system and Parkinson disease, *Behavioural Brain Research*, vol. 221, no. 2, pp. 564–573.
- Bötzel K, Tronnier V, & Gasser T, 2014. The differential diagnosis and treatment of tremor, *Deutsches Ärzteblatt international*, vol. 111, no. 13, pp. 225-36.
- Braak H, Tredici KD, Rüb U, de Vos RA, Jansen Steur EN, & Braak E, 2003. Staging of brain pathology related to sporadic Parkinson's disease., *Neurobiology of aging*. United States, vol. 24, no. 2, pp. 197–211.
- Brauer, F. and Castillo-Chavez, C., 2012. *Mathematical models in population biology and epidemiology*, 2nd edn., Springer, New York.
- Calabresi P, Centonze D, Bernardi G, 2000. Cellular factors controlling neuronal vulnerability in the brain: a lesson from the striatum, *Neurology*, vol. 55, no. 9, pp. 1249–1255.
- Cannon JR and Greenamyre JT, 2011. The role of environmental exposures in neurodegeneration and neurodegenerative diseases, *Toxicological Sciences*, vol. 124, no.2, pp. 225–250.
- Cardinale A, Chiesa R, and Sierks M, 2015. Protein misfolding and propagation in neurodegenerative diseases, *Young Perspectives for Old Diseases*, vol. 16, pp. 103–118.
- Cavicchi, A., Gambarotta, L. and Massabò, R., 2009. Computational modeling of reconstructive surgery : the effects of the natural tension on skin wrinkling, *Finite Elements in Analysis and Design*, vol. 45, no. 8–9, pp. 519–529.
- Chan NC, Salazar AM, Pham AH, Sweredoski MJ, Kolawa NJ, Graham RLJ, et al., 2011. Broad activation of the ubiquitin-proteasome system by parkin is critical for mitophagy, *Human Molecular Genetics*, vol. 20, no. 9, pp. 1726–1737.
- Chaudhuri KR and Schapira AHV, 2009. Non-motor symptoms of Parkinson's disease: dopaminergic pathophysiology and treatment, *The Lancet. Neurology*, vol. 8, no.5, pp. 464–474.
- Cosson A, Tatu, Vuillier F, Parratte B, Diop M, & Monnier G, 2003. Arterial vascularization of the human thalamus: extra-parenchymal arterial groups, *Surgical and Radiologic Anatomy*, vol. 25, no. 5–6, pp. 408–415.
- Cuervo AM, 2004 Impaired degradation of mutant α -synuclein by chaperone-mediated autophagy, *Science*, vol. 305, no. 5688, pp. 1292–1295.
- Dauer W, and Przedborski S, 2003. Parkinson ' s Disease: mechanisms and models, *Neuron*, vol. 39, no. 6, pp. 889–909.

- Dexter DT and Jenner P, 2013. Parkinson disease: from pathology to molecular disease mechanisms, *Free Radical Biology and Medicine*, vol. 62, pp. 132–144.
- Dias V, Junn E, & Mouradian MM, 2013. The role of oxidative stress in Parkinson's disease, *Journal of Parkinson's Disease*, vol. 3, no. 4, pp. 461–491.
- Dickson DW, Braak H, Duda JE, Duyckaerts C, Gasser T, & Halliday GM, 2009. Neuropathological assessment of Parkinson's disease: refining the diagnostic criteria, *The Lancet. Neurology*, vol. 8, no. 12, pp. 1150–1157.
- Dogu O, Sevim S, Camdeviren H, Sasmaz T, Bugdayci R, & Aral M, 2003. Prevalence of essential tremor: door-to-door neurologic exams in Mersin province, Turkey, *Neurology*, vol. 61, no. 12, pp. 1804–1806.
- Dokladny K, Myers OB, & Moseley PL, 2015. Heat shock response and autophagy cooperation and control, *Autophagy*, vol. 11, no. 2, pp. 200–213.
- Dong XX, Wang Y, and Qin ZH, 2009. Molecular mechanisms of excitotoxicity and their relevance to pathogenesis of neurodegenerative diseases, *Acta Pharmacologica Sinica*, vol. 30, no. 4, pp. 379–387.
- Dormont D, Seidenwurm D, Galanaud D, Cornu P, Yelnik J, & Bardinet E, 2010. Neuroimaging and deep brain stimulation, *American Journal of Neuroradiology*, vol. 31, no. 1, pp. 15–23.
- Dorszewska J, Prendecki M, Lianeri M, & Kozubski W, 2014. Molecular effects of L-dopa therapy in Parkinson's disease, *Current Genomics*, vol. 15, no. 1, p. 11.
- Dunning CJR, Reyes JF, Steiner JA, & Brundin P, 2012. Can Parkinson's disease pathology be propagated from one neuron to another ?, *Progress in neurobiology*, vol. 97, no. 2, pp. 205–219.
- Elble RJ, 2016. The essential tremor syndromes, *Current Opinion in Neurology*, vol. 29, no. 4, pp. 507–512.
- Elias WJ and Shah BB, 2014. Tremor, *Jama*, vol. 311, no. 9, pp. 948–954.
- Ferrari CC and Tarelli R, 2011. Parkinson's disease and systemic inflammation, *Parkinson's disease*, vol. 2011, pp. 1–9.
- Galvan A, and Wichmann T, 2008. Pathophysiology of parkinsonism, *Clinical Neurophysiology*, vol. 119, no. 7, pp. 1459–1474.
- German DC, Manaye K, Smith WK, Woodward DJ, & Saper CB, 1989. Midbrain dopaminergic cell loss in Parkinson's disease: computer visualization, *Annals of Neurology*, vol. 26, no. 4, pp. 507–514.
- German DC, Manaye KF, Sonsalla PK, & Brooks BA, 1992. Midbrain dopaminergic cell loss in Parkinson's disease and MPTP-induced parkinsonism: sparing of calbindin-D28k-containing cells, *Ann N Y Acad Sci*, vol. 648, pp. 42–62.
- Gironell A, Martínez-Corral M, Pagonabarraga J, & Kulisevsky J, 2010. The glass scale: a simple tool to determine severity in essential tremor, *Parkinsonism and Related Disorders*, vol. 16, no. 6, pp. 412–414.
- Gironell A, Nogue-Ribosa R, Gich T, Marin-Lahoz J, Pascual-Sedano B, 2015. Severity stages in essential tremor: a long-term retrospective study using the glass scale., *Tremor and Other Hyperkinetic Movements*, vol. 5, no. 299.

- Goedert M, Clavaguera F, and Tolnay M, 2010. The propagation of prion-like protein inclusions in neurodegenerative disease, *Trends in neurosciences*. England, vol. 33, no. 7, pp. 317–325.
- Goetz CG, Tilley BC, Shaftman SR, Stebbins GT, Fahn S, et al., 2008. Movement disorder society-sponsored Revision of the unified Parkinson's disease rating scale (MDS-UPDRS): scale presentation and clinimetric testing results, *Movement Disorders*, vol. 23, no. 15, pp. 2129–2170.
- Guil G, 1968. Neurophysiologic control procedures for stereotaxic thalamotomy, *Neuro-Chirurgie*, vol. 14, no. 4, pp. 553–566.
- Gunawardena, J., 2012. Some lessons about models from Michaelis and Menten, *Molecular Biology of the Cell*, vol. 23, no. 4, pp. 517–519.
- Hauser DN and Hastings TG, 2013. Mitochondrial dysfunction and oxidative stress in Parkinson's disease and monogenic parkinsonism, *Neurobiology of Disease*, vol. 51, pp. 35–42.
- Helmich RC, Toni I, Deusel G, & Bloem BR, 2013. The pathophysiology of essential tremor and Parkinson's tremor, *Current Neurology and Neuroscience Reports*, vol. 13, no. 9, pp. 378–388.
- Hodgkin, A. L. and Huxley, A. F., 1952. A quantitative description of membrane current and its application to conduction and excitation in nerve, *The Journal of Physiology*, vol. 117, no. 4, pp. 500–544.
- Huot P, Sgambato-Faure V, Fox SH, McCreary AC, 2017. Serotonergic approaches in Parkinson's disease: translational perspectives, an update, *ACS Chemical Neuroscience*, vol. 8, no. 5, pp. 973–986.
- Hurley MJ, Brandon B, Gentleman SM, Dexter DT, 2013. Parkinson's disease is associated with altered expression of CaV1 channels and calcium-binding proteins, *Brain*, vol. 136, no. 7, pp. 2077–2097.
- Ibáñez CF and Andressoo JO, 2017. Biology of GDNF and its receptors — relevance for disorders of the central nervous system, *Neurobiology of Disease*, vol. 97, pp. 80–89.
- Isaias IU, Spiegel J, Brumberg J, Cosgrove KP, Marotta G, Oishi N, et al., 2014. Nicotinic acetylcholine receptor density in cognitively intact subjects at an early stage of Parkinson's disease, *Frontiers in Aging Neuroscience*, vol. 6, no. 213, pp. 1–7.
- Jakab A, Blanc R, Berényi EL, Székely G, 2012. Generation of individualized thalamus target maps by using statistical shape models and thalamocortical tractography, *American Journal of Neuroradiology*, vol. 33, no. 11, pp. 2110–2116.
- Jamal T, Michele AJ, and Jacques F, 1999. Thalamic deep brain stimulation for the treatment of head, voice, and bilateral limb tremor, *Journal of Neurosurgery*, vol. 91, no. 1, pp. 68–72.
- Jankovic J, 1995. Outcome after stereotactic thalamotomy for parkinsonian, essential, and other types of tremor, *Neurosurgery*, vol. 37, no. 4, pp. 680–687.
- Jankovic J, 2005. Motor fluctuations and dyskinesias in Parkinson's disease: clinical manifestations, *Movement Disorders*, vol. 20, suppl. 11, pp. s11–s16.
- Jankovic, J. 2008. Parkinson's disease: clinical features and diagnosis., *Journal of neurology, neurosurgery, and psychiatry*, vol. 79, no. 4, pp. 368–376.

- Jankovic J, and Schwartz K, 1991. Botulinum toxin treatment of tremors, *Neurology*, vol. 41, no. 8, pp. 1185–1188.
- Jellinger KA, 2014. Neuropathology of Parkinson's disease, *Inflammation in Parkinson's Disease*, Springer, pp. 25–74.
- Johnson, K. A. and Goody, R. S., 2011. The original Michaelis Constant: translation of the 1913 Michaelis–Menten paper, *Biochemistry*, vol. 50, no. 39, pp. 8264–8269.
- Kalaitzakis ME, Graeber MB, Gentleman SM, & Pearce RKB, 2008. The dorsal motor nucleus of the vagus is not an obligatory trigger site of Parkinson's disease: a critical analysis of alpha-synuclein staging, *Neuropathology and applied neurobiology*, vol. 34, no. 3, pp. 284–295.
- Kanowski M, Voges J, Buentjen L, Stadler J, Heinze HJ, & Tempelmann C, 2014. Direct visualization of anatomic subfields within the superior aspect of the human lateral thalamus by MRI at 7T, *American Journal of Neuroradiology*, vol. 35, no. 9, pp. 1721–1727.
- Karas PJ, Mikell CB, Christian E, Liker MA, & Sheth SA, 2013. Deep brain stimulation: a mechanistic and clinical update, *Neurosurgical Focus*, vol. 35, no. 5.
- Karunanithi S, and Brown IR, 2015. Heat shock response and homeostatic plasticity, *Frontiers in Cellular Neuroscience*, vol. 9, no. 68, pp. 1–7.
- Krisht KM, Sorour M, Cote M, Hardy J, Couldwell WT, 2015. Marching beyond the sella: Gerard Guiot and his contributions to neurosurgery, *Journal of Neurosurgery*, vol. 122, no. 2, pp. 464–472.
- Kim WS, Kagedal K, and Halliday GM, 2014. Alpha-synuclein biology in Lewy body diseases, *Alzheimer's Research and Therapy*, vol. 6, no. 1, pp. 1–9.
- Kincses ZT, Szabó N, Valálik I, Kopniczky Z, Dézsi L, Klivényi P, et al., 2012. Target identification for stereotactic thalamotomy using diffusion tractography, *PloS one*, vol. 7, no. 1.
- Kinfe TM and Vesper J, 2013. The impact of multichannel microelectrode recording (MER) in deep brain stimulation of the basal ganglia, *Stereotactic and Functional Neurosurgery*. Springer, pp. 27–33.
- Klein C and Westenberger A, 2012. Genetics of Parkinson's disease., *Cold Spring Harbor Perspectives in Medicine*, vol. 2, no. 1, pp. 363–369.
- Koller WC, Lyons KE, Wilkinson SB, Troster AI, & Pahwa R, 2001. Long-term safety and efficacy of unilateral deep brain stimulation of the thalamus in essential tremor, *Movement Disorders*, vol. 16, no. 3, pp. 464–468.
- Koller W, and Hristova A, 1996. Efficacy and safety of stereotaxic surgical treatment of tremor disorders, *European Journal of Neurology*, vol. 3, no. 6, pp. 507–514.
- Kondziolka D, Ong JG, Lee JYK, Moore RY, Flickinger JC, Lunsford LD, 2008. Gamma knife thalamotomy for essential tremor, *Journal of Neurosurgery*, vol. 108, no. 1, pp. 111–117.
- Langston JW, 2006. The Parkinson's complex: parkinsonism is just the tip of the iceberg, *Annals of neurology*, vol. 59, no. 4, pp. 591–596.
- Larsen KE and Sulzer D, 2002. Autophagy in neurons: a review, *Histology and Histopathology*, vol. 17, no. 3, pp. 897–908.
- Lees AJ, 2007. Unresolved issues relating to the shaking palsy on the celebration of James Parkinson's 250th birthday, *Movement Disorders*, vol. 22,

- suppl. 17, pp. S327–S334.
- Levine B, Klionsky DJ, Arbor A, 2004. Development by self-digestion, *Developmental Cell*, vol. 6, no. 4, pp. 463–477.
- Lhommée E, Wojtecki L, Czernecki V, Witt K, Maier F, Tonder L, et al, 2018. Behavioural outcomes of subthalamic stimulation and medical therapy versus medical therapy alone for Parkinson's disease with early motor complications (EARLYSTIM trial): secondary analysis of an open-label randomised trial, *Lancet Neurol*, vol. 17, no. 3, pp. 223–231.
- Liu AKL, Chang RCC, Pearce RKB, & Gentleman SM, 2015. Nucleus basalis of Meynert revisited: anatomy, history and differential involvement in Alzheimer's and Parkinson's disease, *Acta Neuropathologica*, vol. 129, no. 4, pp. 527–540.
- Lotharius J and Brundin P, 2002. Pathogenesis of Parkinson's disease: dopamine, vesicles and α -synuclein, *Nature Reviews Neuroscience*, vol. 3, no. 12, pp. 932–942.
- Lotharius J, 2002. Impaired dopamine storage resulting from alpha-synuclein mutations may contribute to the pathogenesis of Parkinson's disease, *Human Molecular Genetics*, vol. 11, no. 20, 2395–2407.
- Louis ED, 2004. The shaking palsy, the first forty-five years: a Journey through the british literature, *Movement Disorders*, vol. 12, no. 6, pp. 1068–1072.
- Louis ED, 2014. Re-thinking the biology of essential tremor: from models to morphology, *Parkinsonism and Related Disorders*, vol. 20, suppl.1, pp. S88–S93.
- Louis ED and Ferreira JJ, 2010. How common is the most common adult movement disorder? update on the worldwide prevalence of essential tremor, *Movement Disorders*, vol. 25, no. 5, pp. 534–541.
- Lozano A, Gildenberg P, and Tasker R, 2009. *Textbook of stereotactic and functional neurosurgery*, 2nd edn, Springer, Berlin.
- Machin D, Campbell MJ, Tan SB and Tan SH, 2009. *Sample size tables for clinical studies*, 3rd edn., Blackwell, New Jersey.
- Maiti P, Manna J, Veleri S, & Frautschy S, 2014. Molecular chaperone dysfunction in neurodegenerative diseases and effects of curcumin, *BioMed Research International*, vol. 2014, pp. 1-14.
- Maiti P, Manna J, and Dunbar GL, 2017. Current understanding of the molecular mechanisms in Parkinson's disease: Targets for potential treatments, *Translational Neurodegeneration*, vol. 6, no. 1, pp. 1-35.
- Maria J and Instituto L, 1967. Surgical treatment for Parkinson disease, *World Federation of Neurological Surgeon*, France.
- Mark LP, Prost RW, Ulmer JL, Smith MM, Daniels DL, Strottmann JM, et al., 2014. Pictorial review of glutamate excitotoxicity: fundamental concepts for neuroimaging, *Am J Neuroradiol*, vol. 22, no.10, pp. 1813–1824.
- Marques O and Outeiro TF, 2012. Alpha-synuclein: from secretion to dysfunction and death, *Cell Death and Disease*, vol. 3, no. 7, pp. e350-357.
- McNaught KSP, Olanow CW, Halliwell B, Isacson O, & Jenner P, 2001. Failure of the ubiquitin proteasome system in Parkinson's disease, *Nature Reviews Neuroscience*, vol. 2, no. 8, pp. 589–594.
- Meredith GE and Rademacher DJ, 2011. MPTP mouse models of Parkinson's disease: an update, *Journal of Parkinson's Disease*, vol. 1, no. 1, pp. 19–

- 33.
- Milosevic L, Kalia SK, Hodaie M, Lozano AM, Popovic MR, & Hutchison WD, 2018. Physiological mechanisms of thalamic ventral intermediate nucleus stimulation for tremor suppression, *Brain*, vol. 141, no. 7, pp. 2142–2155.
- Morel A, 2007. *Stereotactic atlas of the human thalamus and basal ganglia*. Informa Healthcare, Florida
- Netter FH, 2014. *Atlas of human anatomy*, 6th edn, Saunders, Philadelphia.
- Nikkhah G, Carvalho GA, and Pinsker M, 2013. Functional neurosurgery in Parkinson's disease: a long journey from destruction over modulation towards restoration, *Stereotactic and Functional Neurosurgery*, vol. 117, pp. 5–11.
- Page RD, 1992. The use of thalamotomy in the treatment of levodopa-induced dyskinesia, *Acta Neurochir (Wien)*, vol. 114, no.3-4, pp. 77-117.
- Pahwa R, Lyons KE, Wilkinson SB, Traster AI, Overman J, Kieltyka J, & Koller WC, 2001. Comparison of thalamotomy to deep brain stimulation of the thalamus in essential tremor, *Movement Disorders*, vol. 16, no. 1, pp. 140–143.
- Pahwa R, Isaacson S, Jimenez SJ, Malaty IA, Deik A, Johnson R, et al, 2019. Impact of dyskinesia on activities of daily living in Parkinson's disease: results from pooled phase 3 ADS-5102 clinical trials, *Parkinsonism Relat Disord*, vol. 60, pp. 118-125.
- Pan T, Kondo S, Le W, & Jankovic J, 2008. The role of autophagy-lysosome pathway in neurodegeneration associated with Parkinson's disease, *Brain*, vol. 131, no. 8, pp. 1969–1978.
- Park, L. J., Park, C. H., Park, C., Lee, T., 1997. Application of genetic algorithms to parameter estimation of bioprocesses, *Medical & Biological Engineering & Computing*, vol. 35, no. 1, pp. 47–49.
- Parker WD, Parks JK, and Swerdlow RH, 2008. Complex i deficiency in Parkinson's disease frontal cortex, *Brain Research*, vol. 1189, pp. 215–218.
- Parkinson J, 2002. An essay on the shaking palsy, *The Journal of Neuropsychiatry and Clinical Neurosciences*, vol. 14, no. 2, pp. 223–236.
- Perier C and Vila M, 2012. Mitochondrial biology and Parkinson's disease, *Cold Spring Harbor Perspectives in Medicine*, vol. 2, no. 2, pp. 1–19.
- Popat RA, Van Den Eeden SK, Tanner CM, McGuire V, Bernstein AL, Bloch DA, et al., 2005. Effect of reproductive factors and postmenopausal hormone use on the risk of Parkinson disease, *Neurology*, vol. 65, no. 3, pp. 383–390.
- Pukasß K and Richter-Landsberg C, 2015. Inhibition of UCH-L1 in oligodendroglial cells results in microtubule stabilization and prevents α -synuclein aggregate formation by activating the autophagic pathway: implications for multiple system atrophy, *Frontiers in Cellular Neuroscience*, vol. 9, no. 163, pp. 1–16.
- Puschmann A and Wszolek ZK, 2011. Diagnosis and treatment of common forms of tremor, *Seminars in Neurology*, vol. 31, no. 1, pp. 65–77.
- Qin XY, Zhan SP, Cao C, Loh YP, & Cheng Y, 2016. Aberrations in peripheral inflammatory cytokine levels in Parkinson disease: a systematic review

- and meta-analysis, *JAMA Neurology*, vol. 73, no. 11, pp. 1316–1324.
- Ray DE, Elbaz A, Nichols E, Abd-Allah F, Abdelalim A, Adsuar JC, et al, 2018. Global, regional, and national burden of Parkinson's disease, 1990–2016: a systematic analysis for the global burden of disease study 2016. *Lancet Neurol*, vol. 17, no. 11, pp. 939–953.
- Rehman H, 2000. Diagnosis and management of tremor, *Archives of internal medicine*, vol. 160, pp. 2438–2444.
- Rizzi G and Tan KR, 2017. Dopamine and *acetylcholine*, a circuit point of view in Parkinson's disease, *Frontiers in Neural Circuits*, vol. 11, no. 110.
- Rodriguez MC, Obeso JA, and Olanow CW, 1998. Subthalamic nucleus-mediated excitotoxicity in Parkinson's disease: a target for neuroprotection, *Annals of neurology*, vol. 44, suppl. 1, pp. s175–s188.
- Rolf H, Mundinger F, and Traugott R, 1979. Correlation, *Stereotaxis in Parkinson Syndrome*, Springer, Berlin, pp : 196-204.
- Rubinsztein DC, 2006. The roles of intracellular protein-degradation pathways in neurodegeneration, *Nature*, vol. 443, no. 7113, pp. 780–786.
- Sammartino F, Krishna V, King NKK, Lozano AM, et al., 2016. Tractography-based ventral intermediate nucleus targeting: novel methodology and intraoperative validation, *Movement disorders*, vol. 31, no. 8, pp. 1217–1225.
- Sawad H, Oeda T, & Yamamoto K, 2013. Catecholamines and neurodegeneration in Parkinson's disease—from diagnostic marker to aggregations of α-synuclein, *Diagnostics*, vol. 3, no. 2, pp. 210–221.
- Schlossmacher MG, Frosch MP, Gai WP, Medina M, Sharma N, Forno L, et al., 2002. Parkin localizes to the Lewy bodies of Parkinson disease and dementia with Lewy bodies, *American Journal of Pathology*, vol. 160, no. 5, pp. 1655–1667.
- Schneider SA and Deuschl G, 2014. The treatment of tremor, *Neurotherapeutics*, vol. 11, no. 1, pp. 128–138.
- Schneier F, Barnes LF, Albert SM, Louis ED, 2001. Characteristics of social phobia among persons with essential tremor, *The Journal of Clinical Psychiatry*, vol. 62, pp. 367–372.
- Schraen-Maschke S, Sergeant N, Dhaenens CM, Bombois S, Deramecourt V, Caillet-Boudin ML, et al., 2008. Tau as a biomarker of neurodegenerative diseases, *Biomarkers Medicine*, vol. 2, no. 4, pp. 363–384.
- Schrag A, Ben-Shlomo Y, Quinn NP, 2000. Cross sectional prevalence survey of idiopathic Parkinson's disease and parkinsonism in London, *BMJ*, vol. 321, no. 7252, pp. 21–22.
- Schuurman PR, Bosch DA, Bossuyt PMM, Bonsel GJ, van Someren EJW, de Bie RMA, et al., 2000. A comparison of continuous thalamic stimulation and thalamotomy for suppression of severe tremor, *New England Journal of Medicine*, vol. 342, no. 7, pp. 461–468.
- Schwarz ST, Afzal M, Morgan PS, Bajaj N, Gowland PA, & Auer DP, 2014. The 'swallow tail' appearance of the healthy nigrosome - a new accurate test of Parkinson's disease: a case-control and retrospective cross-sectional MRI study at 3T, *PLoS ONE*, vol. 9, no. 4.
- Shimura H, Hattori N, Kubo S, Mizuno Y, Asakawa S, Minoshima S, et al., 2000.

- Familial Parkinson disease gene product, parkin, is a ubiquitin-protein ligase, *Nature Genetics*, vol. 25, no. 3, pp. 302–305.
- Shimura H, 2001. Ubiquitination of a new form of α -synuclein by parkin from human brain: implications for Parkinson's disease, *Science*, vol. 293, no. 5528, pp. 263–269.
- Snell RS, 2009. *Clinical neuroanatomy*, 7th edn, LWW, Philadelphia.
- Solari N, Bonito-Oliva A, Fisone G, & Brambilla R, 2013. Understanding cognitive deficits in Parkinson's disease: lessons from preclinical animal models, *Learning and Memory*, vol. 20, no. 10, pp. 592–600.
- Stanley S, 1996. Outcome after stereotactic thalamotomy for parkinsonian, essential, and other types of tremor, *Neurosurgery*, vol. 39, no. 2, 421–421.
- Tagliavini F and Pilleri G, 1983. Basal nucleus of meynert, *Journal of the Neurological Sciences*, vol. 62, no. 1-3, pp. 243–260.
- Taira T, Horisawa S, Takeda N, & Ghate P, 2018. Stereotactic radiofrequency lesioning for movement disorders., *Prog neurol surg*, vol. 33, pp. 107–119.
- Torres, N. V. and Santos, G., 2015. The mathematical modeling process in biosciences, *Frontiers in Genetics*, vol. 6, no.354, pp. 1-9.
- Tufekci KU, Meuwissen R, Genc S, & Genc K, 2012. Inflammation in Parkinson's disease, *Advances in protein chemistry and structural biology*, vol. 88, pp. 69–132.
- Vassal F, Coste J, Derost P, Mendes V, Gabrillargues J, Nuti C, et al., 2012. Direct stereotactic targeting of the ventrointermediate nucleus of the thalamus based on anatomic 1.5-T MRI mapping with a white matter attenuated inversion recovery (WAIR) sequence, *Brain Stimulation*, vol. 5, no. 4, pp. 625–633.
- Venda LL, Cragg SJ, Buchman VL, & Wade-Martins R, 2010. α -synuclein and dopamine at the crossroads of Parkinson's disease, *Trends in Neurosciences*, vol. 33, no. 12, pp. 559–568.
- Wang P, Li X, Yang W, & Yu S, 2016. Blood plasma of patients with Parkinson's disease increases alpha-synuclein aggregation and neurotoxicity, *Parkinson's Disease*, vol. 2016, pp. 1-14.
- Wang X and Michaelis EK, 2010. Selective neuronal vulnerability to oxidative stress in the brain, *Frontiers in Aging Neuroscience*, vol. 2, no. 12, pp. 1–13.
- Warrick P, Dromey C, Irish JC, Durkin L, Pakiam A, & Lang A, 2000. Botulinum toxin for essential tremor of the voice with multiple anatomical sites of tremor: a crossover design study of unilateral versus bilateral injection, *Laryngoscope*, vol. 110, no. 8, pp. 1366–1374.
- Watanabe Y, Himeda T, and Araki T, 2005. Mechanisms of MPTP toxicity and their implications for therapy of Parkinson's disease, *Medical Science Monitor*, vol. 11, no. 1, pp. 17–23.
- Webb JL, Ravikumar B, Atkins J, Skepper JN, & Rubinsztein DC, 2003. Alpha-synuclein is degraded by both autophagy and the proteasome, *Biological Chemistry*, vol. 278, no. 4, pp. 25009–25013.
- Wei Z, Li X, Liu Q, & Cheng Y, 2018. Oxidative stress in Parkinson's disease : a systematic review and meta-analysis, *Frontiers in Molecular*

- Neuroscience*, vol. 11, no. 236, pp. 1–7.
- Williams A, Gill S, Varma T, Jenkinson C, Quinn N, Mitchell R, et al, 2010. Deep brain stimulation plus best medical therapy versus best medical therapy alone for advanced Parkinson's disease (PD SURG trial): a randomised, open-label trial, *Lancet Neurol*, vol. 9, no. 6, pp. 581–591.
- Winter Y, von Campenhausen S, Popov G, Reese JP, Klotsche J, Bötzell K, et al, 2009. Costs of illness in a Russian cohort of patients with Parkinson's disease, *Pharmacoeconomics*, vol. 27, pp. 571–584.
- Wirdefeldt K, Adami HO, Cole P, Trichopoulos D, Mandel J, 2011. Epidemiology and etiology of Parkinson's disease: a review of the evidence, *European Journal of Epidemiology*, vol. 26, suppl. 1, pp. 1–58.
- Wu HY, Chen SF, Hsieh JY, Chou F, Wang YH, Lin WT, et al., 2015. Structural basis of antizyme-mediated regulation of polyamine homeostasis, *Proceedings of the National Academy of Sciences*, vol. 112, no. 36, pp. 11229–11234.
- Wytttenbach A, 2004. Role of heat shock proteins during polyglutamine neurodegeneration, *Journal of Molecular Neuroscience*, vol. 23, pp. 69–95.
- Xie CL, Shao B, Chen J, Zhou Y, Lin SY, Wang WW, 2016. Effects of neurostimulation for advanced Parkinson's disease patients on motor symptoms: a multiple-treatments meta-analyses of randomized controlled trials, *Sci Rep*, vol. 4, no. 6, p. 25285.
- Yamada K, Sakai K, Akazawa K, Yuen S, & Nishimura T, 2009. MR tractography: a review of its clinical applications, *Magnetic Resonance in Medical Sciences*, vol. 8, no. 4, pp. 165–174.
- Zhao YJ, Tan LC, Li SC, Au WL, Seah SH, Lau PN, et al, 2011. Economic burden of Parkinson's disease in Singapore, *Eur J Neurol*, vol. 18, no. 3, pp. 519–526.
- Zirh A, Reich SG, Dougherty PM, & Lenz FA, 1999. Stereotactic thalamotomy in the treatment of essential tremor of the upper extremity: reassessment including a blinded measure of outcome, *J Neurol Neurosurg Psychiatry*, vol. 66, pp. 772–775.