

CHAPTER 7

REFERENCES

- Ale, M. T., & Meyer, A. S. (2013). Fucoidans from brown seaweeds: An update on structures, extraction techniques and use of enzymes as tools for structural elucidation. *RSC Advances*, 3(22), 8131–8141. <https://doi.org/10.1039/c3ra23373a>
- Andrae, B., Andersson, T. M.-L., Lambert, P. C., Kemetli, L., Silfverdal, L., Strander, B., ... Sparén, P. (2012). Screening and cervical cancer cure: population based cohort study. *BMJ (Clinical Research Ed.)*, 344, e900. <https://doi.org/10.1136/BMJ.E900>
- Andrijono, Purwoto, G., Sekarutami, S. M., Handjari, D. R., Primariadewi, Nuhonni, S. A., ... Octavia, L. I. (2013). Panduan Penatalaksanaan Kanker Serviks. *Komite Penanggulangan Kanker Nasional*, 1–30.
- Aravindan, S., Ramraj, S. K., Somasundaram, S. T., Herman, T. S., & Aravindan, N. (2015). Polyphenols from marine brown algae target radiotherapy-coordinated EMT and stemness-maintenance in residual pancreatic cancer. *Stem Cell Research & Therapy*, 6(1), 182. <https://doi.org/10.1186/s13287-015-0173-3>
- Atashrazm, F., Lowenthal, R. M., Woods, G. M., Holloway, A. F., & Dickinson, J. L. (2015). Fucoidan and cancer: a multifunctional molecule with anti-tumor potential. *Marine Drugs*, 13(4), 2327–2346. <https://doi.org/10.3390/md13042327>
- Balboa, E. M., Conde, E., Moure, A., Falqué, E., & Domínguez, H. (2013). In vitro antioxidant properties of crude extracts and compounds from brown algae. *Food Chemistry*, 138(2–3), 1764–1785. <https://doi.org/10.1016/j.foodchem.2012.11.026>
- Benedict, S. R. (1909). *A reagent for the detection of reducing sugars*. *Journal of Biological Chemistry* (Vol. 5). American Society for Biochemistry and Molecular Biology. Retrieved from <http://www.jbc.org/cgi/content/short/5/5/485>
- Brar, S. K., Dhillon, G. S., & Soccol, C. R. (2013). *Biotransformation of waste biomass into high value biochemicals*. Retrieved from [https://books.google.co.id/books?id=1Eq-BAAAQBAJ&dq=carotenoids+are+not+strong+antioxidants+when+added+to+food+but+relatively+unstable+in+food+systems+because+they+are+susceptible+to+light,+oxygen+and+auto-oxidation+\(Xianquan+et+al.+2005\).&source=gbs_navl](https://books.google.co.id/books?id=1Eq-BAAAQBAJ&dq=carotenoids+are+not+strong+antioxidants+when+added+to+food+but+relatively+unstable+in+food+systems+because+they+are+susceptible+to+light,+oxygen+and+auto-oxidation+(Xianquan+et+al.+2005).&source=gbs_navl)
- Bruni, L., L. B.-R., Albero, G., Serrano, B., Mena, M., Gómez, D., ... De, S. S. (2017). Human Papillomavirus and Related Diseases Report, (July), 6. Retrieved from <http://www.hpvcentre.net/statistics/reports/MYS.pdf>
- Bucar, F., Wube, A., & Schmid, M. (2013). Natural product isolation – how to get from biological material to pure compounds. *Natural Product Reports*, 30(4), 525. <https://doi.org/10.1039/c3np20106f>
- Buschmann, A. H., Camus, C., Infante, J., Neori, A., Israel, Á., Hernández-González, M. C., ... Critchley, A. T. (2017). Seaweed production: overview of the global state of exploitation, farming and emerging research activity. *European Journal of Phycology*, 52(4), 391–406. <https://doi.org/10.1080/09670262.2017.1365175>
- Campos, N. G., Burger, E. A., Sy, S., Sharma, M., Schiffman, M., Rodriguez, A. C., ... Kim, J. J.

- (2014). An updated natural history model of cervical cancer: derivation of model parameters. *American Journal of Epidemiology*, *180*(5), 545–555.
<https://doi.org/10.1093/aje/kwu159>
- Costa, L. S., Fidelis, G. P., Cordeiro, S. L., Oliveira, R. M., Sabry, D. A., Câmara, R. B. G., ... Rocha, H. A. O. (2010). Biological activities of sulfated polysaccharides from tropical seaweeds. *Biomedicine and Pharmacotherapy*, *64*(1), 21–28.
<https://doi.org/10.1016/j.biopha.2009.03.005>
- Costa, L. S., Telles, C. B. S., Oliveira, R. M., Nobre, L. T. D. B., Dantas-Santos, N., Camara, R. B. G., ... Rocha, H. A. O. (2011). Heterofucan from *Sargassum filipendula* induces apoptosis in HeLa cells. *Marine Drugs*, *9*(4), 603–614. <https://doi.org/10.3390/md9040603>
- Cui, Y., Zhang, X., You, K., Guo, Y., Liu, C., Fang, X., & Geng, L. (2017). Nanomechanical Characteristics of Cervical Cancer and Cervical Intraepithelial Neoplasia Revealed by Atomic Force Microscopy. *Medical Science Monitor : International Medical Journal of Experimental and Clinical Research*, *23*, 4205–4213.
<https://doi.org/10.12659/MSM.903484>
- Cuschieri, K., Brewster, D. H., Graham, C., Nicoll, S., Williams, A. R. W., Murray, G. I., ... Cubie, H. A. (2014). Influence of HPV type on prognosis in patients diagnosed with invasive cervical cancer. *International Journal of Cancer*, *135*(11), 2721–2726.
<https://doi.org/10.1002/ijc.28902>
- Darlin, L., Borgfeldt, C., Widén, E., & Kannisto, P. (2014). Elderly women above screening age diagnosed with cervical cancer have a worse prognosis. *Anticancer Research*, *34*(9), 5147–5151. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/25202106>
- Deivendran, S., Marzook, K. H., & Radhakrishna Pillai, M. (2014). The Role of Inflammation in Cervical Cancer. In *Advances in experimental medicine and biology* (Vol. 816, pp. 377–399).
https://doi.org/10.1007/978-3-0348-0837-8_15
- Faktakanker.com. (n.d.). Operasi Kanker Serviks : Dampak, Biaya, dan Efeknya - FaktaKanker.com. Retrieved July 29, 2018, from <https://faktakanker.com/kanker-serviks/operasi-kanker-serviks-dampak-biaya-dan-efeknya>
- Fedorov, S. N., Ermakova, S. P., Zvyagintseva, T. N., & Stonik, V. A. (2013). Anticancer and cancer preventive properties of marine polysaccharides: some results and prospects. *Marine Drugs*, *11*(12), 4876–4901. <https://doi.org/10.3390/md11124876>
- Fitton, J. H., Stringer, D. N., & Karpinić, S. S. (2015). Therapies from Fucoïdan: An Update. *Marine Drugs*, *13*(9), 5920–5946. <https://doi.org/10.3390/md13095920>
- Fletcher, H. R., Biller, P., Ross, A. B., & Adams, J. M. M. (2017). The seasonal variation of fucoïdan within three species of brown macroalgae. *Algal Research*, *22*, 79–86.
<https://doi.org/10.1016/J.ALGAL.2016.10.015>
- Ganesan, P., Matsubara, K., Sugawara, T., & Hirata, T. (2013). Marine algal carotenoids inhibit angiogenesis by down-regulating FGF-2-mediated intracellular signals in vascular endothelial cells. *Molecular and Cellular Biochemistry*, *380*(1–2), 1–9.
<https://doi.org/10.1007/s11010-013-1651-5>
- Geisen, U., Zenthoefer, M., Peipp, M., Kerber, J., Plenge, J., Managò, A., ... Kalthoff, H. (2015). Molecular Mechanisms by Which a *Fucus vesiculosus* Extract Mediates Cell Cycle Inhibition and Cell Death in Pancreatic Cancer Cells. *Marine Drugs*, *13*(7), 4470–4491.
<https://doi.org/10.3390/md13074470>

- Ghasemzadeh, A., Jaafar, H. Z. E., Juraimi, A. S., & Tayebi-Meigooni, A. (2015). Comparative evaluation of different extraction techniques and solvents for the assay of phytochemicals and antioxidant activity of hashemi rice bran. *Molecules*, *20*(6), 10822–10838. <https://doi.org/10.3390/molecules200610822>
- Gomes, D., Telles, C., Costa, M., Almeida-Lima, J., Costa, L., Keesen, T., & Rocha, H. (2015). Methanolic Extracts from Brown Seaweeds *Dictyota cilliolata* and *Dictyota menstrualis* Induce Apoptosis in Human Cervical Adenocarcinoma HeLa Cells. *Molecules*, *20*(4), 6573–6591. <https://doi.org/10.3390/molecules20046573>
- Gordon, N., Stemmer, S. M., Greenberg, D., & Goldstein, D. A. (2018). Trajectories of Injectable Cancer Drug Costs After Launch in the United States. *Journal of Clinical Oncology : Official Journal of the American Society of Clinical Oncology*, *36*(4), 319–325. <https://doi.org/10.1200/JCO.2016.72.2124>
- Grosso, C., Valentão, P., Ferreres, F., & Andrade, P. B. (2015). Alternative and efficient extraction methods for marine-derived compounds. *Marine Drugs*, *13*(5), 3182–3230. <https://doi.org/10.3390/md13053182>
- Hakulinen, T. (1996). The future cancer burden as a study subject. *Acta Oncologica*, *35*(6), 665–670. <https://doi.org/10.3109/02841869609083996>
- Hamed, I., Özogul, F., Özogul, Y., & Regenstein, J. M. (2015). Marine Bioactive Compounds and Their Health Benefits: A Review. *Comprehensive Reviews in Food Science and Food Safety*, *14*(4), 446–465. <https://doi.org/10.1111/1541-4337.12136>
- Hanahan, D., & Weinberg, R. A. (2011). Hallmarks of cancer: the next generation. *Cell*, *144*(5), 646–674. <https://doi.org/10.1016/j.cell.2011.02.013>
- Hasegawa, T., & Usui, T. (1992). Cautionary note regarding the phenol color test by ferric chloride in acidic solution. *Journal of Chemical Education*, *69*(10), 840. <https://doi.org/10.1021/ed069p840>
- Hassan, M., Watari, H., AbuAlmaaty, A., Ohba, Y., & Sakuragi, N. (2014). Apoptosis and molecular targeting therapy in cancer. *BioMed Research International*, *2014*, 150845. <https://doi.org/10.1155/2014/150845>
- HE, Z., LI, B., RANKIN, G. O., ROJANASAKUL, Y., & CHEN, Y. C. (2015). Selecting bioactive phenolic compounds as potential agents to inhibit proliferation and VEGF expression in human ovarian cancer cells. *Oncology Letters*, *9*(3), 1444–1450. <https://doi.org/10.3892/ol.2014.2818>
- Isnansetyo, A., Lutfia, F. N. L., Nursid, M., Trijoko, & Susidarti, R. A. (2017). Cytotoxicity of Fucoidan from Three Tropical Brown Algae Against Breast and Colon Cancer Cell Lines. *Pharmacognosy Journal*, *9*(1), 14–20. <https://doi.org/10.5530/pj.2017.1.3>
- Kementrian Kesehatan RI Pusat Data dan Informasi Kesehatan. (2015). Stop Kanker. *Infodatin-Kanker*, 1–8. <https://doi.org/10.1017/CBO9781107415324.004>
- Kier, L. B. (1981). Quantitation of Solvent Polarity Based on Molecular Structure. *Journal of Pharmaceutical Sciences*, *70*(8), 930–933. <https://doi.org/10.1002/jps.2600700825>
- Kim, E. J., Park, S. Y., Lee, J.-Y., & Park, J. H. Y. (2010). Fucoidan present in brown algae induces apoptosis of human colon cancer cells. *BMC Gastroenterology*, *10*(1), 96. <https://doi.org/10.1186/1471-230X-10-96>
- Kobayashi, Y., Tateno, H., Dohra, H., Moriwaki, K., Miyoshi, E., Hirabayashi, J., & Kawagishi, H. (2012). A novel core fucose-specific lectin from the mushroom *Pholiota squarrosa*. *The*

- Journal of Biological Chemistry*, 287(41), 33973–33982.
<https://doi.org/10.1074/jbc.M111.327692>
- Kumar Bargah, R. (2015). Preliminary test of phytochemical screening of crude ethanolic and aqueous extract of *Moringa pterygosperma* Gaertn. *Journal of Pharmacognosy and Phytochemistry JPP*, 7(41), 7–9. Retrieved from
<https://pdfs.semanticscholar.org/15a5/af5f089878c078108aabe996f46b671e7952.pdf>
- Li, B., Lu, F., Wei, X., & Zhao, R. (2008). Fucoidan: Structure and Bioactivity. *Molecules*, 13(8), 1671–1695. <https://doi.org/10.3390/molecules13081671>
- Liu, G., Kuang, S., Wu, S., Jin, W., & Sun, C. (2016). A novel polysaccharide from *Sargassum integerrimum* induces apoptosis in A549 cells and prevents angiogenesis in vitro and in vivo. *Scientific Reports*, 6, 26722. <https://doi.org/10.1038/srep26722>
- López, A., Rico, M., Rivero, A., & Suárez de Tangil, M. (2011). The effects of solvents on the phenolic contents and antioxidant activity of *Stypocaulon scoparium* algae extracts. *Food Chemistry*, 125(3), 1104–1109. <https://doi.org/10.1016/j.foodchem.2010.09.101>
- Machu, L., Misurcova, L., Vavra Ambrozova, J., Orsavova, J., Mlcek, J., Sochor, J., & Jurikova, T. (2015). Phenolic Content and Antioxidant Capacity in Algal Food Products. *Molecules*, 20(1), 1118–1133. <https://doi.org/10.3390/molecules20011118>
- Malve, H. (2016). Exploring the ocean for new drug developments: Marine pharmacology. *Journal of Pharmacy & Bioallied Sciences*, 8(2), 83–91. <https://doi.org/10.4103/0975-7406.171700>
- Markman, M. (2014). Advances in cervical cancer pharmacotherapies. *Expert Review of Clinical Pharmacology*, 7(2), 219–223. <https://doi.org/10.1586/17512433.2014.884924>
- Marques, C. T., de Azevedo, T. C. G., Nascimento, M. S., Medeiros, V. P., Alves, L. G., Benevides, N. M. B., ... Leite, E. L. (2011). Sulfated fucans extracted from algae *Padina gymnospora* have anti-inflammatory effect. *Brazilian Journal of Pharmacognosy*, 22(1), 115–122. <https://doi.org/10.1590/S0102-695X2011005000206>
- Matanjun, P., Mohamed, S., Mustapha, N. M., Muhammad, K., & Ming, C. H. (2008). Antioxidant activities and phenolics content of eight species of seaweeds from north Borneo. *Journal of Applied Phycology*, 20(4), 367–373. <https://doi.org/10.1007/s10811-007-9264-6>
- Mayer, A. M., Nguyen, M., Kalwajtyś, P., Kerns, H., Newman, D. J., & Glaser, K. B. (2017). The Marine Pharmacology and Pharmaceuticals Pipeline in 2016. *The FASEB Journal*, 31(1_supplement), 818.1-818.1. https://doi.org/10.1096/fasebj.31.1_supplement.818.1
- Medlin, E. E., Kushner, D. M., & Barroilhet, L. (2015). Robotic surgery for early stage cervical cancer: Evolution and current trends. *Journal of Surgical Oncology*, 112(7), 772–781. <https://doi.org/10.1002/jso.24008>
- Menderes, G., Black, J., Schwab, C. L., & Santin, A. D. (2016). Immunotherapy and targeted therapy for cervical cancer: an update. *Expert Review of Anticancer Therapy*, 16(1), 83–98. <https://doi.org/10.1586/14737140.2016.1121108>
- Ministry of Environment and Forestry of Indonesia. (2014). The fifth national report of Indonesia to the convention on biological diversity. Retrieved from
<http://www.cbd.int/doc/legal/cbd-en.pdf>
- Montaser, R., & Luesch, H. (2011). Marine natural products: a new wave of drugs? *Future Medicinal Chemistry*, 3(12), 1475–1489. <https://doi.org/10.4155/fmc.11.118>
- Moody, C. A., & Laimins, L. A. (2010). Human papillomavirus oncoproteins: pathways to

- transformation. *Nature Reviews Cancer*, 10(8), 550–560. <https://doi.org/10.1038/nrc2886>
- Moussavou, G., Kwak, D. H., Obiang-Obonou, B. W., Maranguy, C. A. O., Dinzouna-Boutamba, S.-D., Lee, D. H., ... Choo, Y. K. (2014). Anticancer effects of different seaweeds on human colon and breast cancers. *Marine Drugs*, 12(9), 4898–4911. <https://doi.org/10.3390/md12094898>
- Muller, P. A. J., & Vousden, K. H. (2014). Mutant p53 in cancer: New functions and therapeutic opportunities. *Cancer Cell*, 25(3), 304–317. <https://doi.org/10.1016/j.ccr.2014.01.021>
- Namvar, F., Mohamad, R., Baharara, J., Zafar-Balanejad, S., Fargahi, F., & Rahman, H. S. (2013a). Antioxidant, Antiproliferative, and Antiangiogenesis Effects of Polyphenol-Rich Seaweed (*Sargassum muticum*). *BioMed Research International*, 2013, 1–9. <https://doi.org/10.1155/2013/604787>
- Namvar, F., Mohamad, R., Baharara, J., Zafar-Balanejad, S., Fargahi, F., & Rahman, H. S. (2013b). Antioxidant, antiproliferative, and antiangiogenesis effects of polyphenol-rich seaweed (*Sargassum muticum*). *BioMed Research International*, 2013, 604787. <https://doi.org/10.1155/2013/604787>
- National Cancer Institute. (n.d.). Definition of cancer - NCI Dictionary of Cancer Terms - National Cancer Institute. Retrieved August 2, 2018, from <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/cancer>
- Nuranna, L., Aziz, M. F., Cornain, S., Purwoto, G., Purbadi, S., Budiningsih, S., ... Peters, A. A. W. (2012). Cervical cancer prevention program in Jakarta, Indonesia: See and Treat model in developing country. *Journal of Gynecologic Oncology*, 23(3), 147–152. <https://doi.org/10.3802/jgo.2012.23.3.147>
- Olivier, M., Hollstein, M., & Hainaut, P. (2010). TP53 mutations in human cancers: origins, consequences, and clinical use. *Cold Spring Harbor Perspectives in Biology*, 2(1), a001008. <https://doi.org/10.1101/cshperspect.a001008>
- Park, H. Y., Park, S.-H., Jeong, J.-W., Yoon, D., Han, M. H., Lee, D.-S., ... Choi, Y. H. (2017). Induction of p53-Independent Apoptosis and G1 Cell Cycle Arrest by Fucoïdan in HCT116 Human Colorectal Carcinoma Cells. *Marine Drugs*, 15(6). <https://doi.org/10.3390/md15060154>
- Peng, J., Yuan, J.-P., Wu, C.-F., & Wang, J.-H. (2011). Fucoxanthin, a Marine Carotenoid Present in Brown Seaweeds and Diatoms: Metabolism and Bioactivities Relevant to Human Health. *Marine Drugs*, 9(10), 1806–1828. <https://doi.org/10.3390/md9101806>
- Pesee, M., Kirdpon, W., Puapairoj, A., Kirdpon, S., & Prathnadi, P. (2013). Palliative treatment of advanced cervical cancer with radiotherapy and thai herbal medicine as supportive remedy - analysis of survival. *Asian Pacific Journal of Cancer Prevention : APJCP*, 14(3), 1593–1596. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/23679241>
- Petersen, M. K., & Voth, G. A. (2006). Amphiphilic Character of the Hydrated Proton in Methanol–Water Solutions. *The Journal of Physical Chemistry B*, 110(14), 7085–7089. <https://doi.org/10.1021/jp060698o>
- Ponce, N. M. A., Pujol, C. A., Damonte, E. B., Flores, M. L., & Stortz, C. A. (2003). Fucoïdins from the brown seaweed *Adenocystis utricularis*: Extraction methods, antiviral activity and structural studies. *Carbohydrate Research*, 338(2), 153–165. [https://doi.org/10.1016/S0008-6215\(02\)00403-2](https://doi.org/10.1016/S0008-6215(02)00403-2)
- Puspita, M., Deniel, M., Widowati, I., Radjasa, O. K., Douzenel, P., Bedoux, G., & Bourgougnon,

- N. (2017). Antioxidant and antibacterial activity of solid-liquid and enzyme-assisted extraction of phenolic compound from three species of tropical Sargassum. *IOP Conference Series: Earth and Environmental Science*, 55(1), 012057. <https://doi.org/10.1088/1755-1315/55/1/012057>
- Rivlin, N., Brosh, R., Oren, M., & Rotter, V. (2011). Mutations in the p53 Tumor Suppressor Gene: Important Milestones at the Various Steps of Tumorigenesis. *Genes & Cancer*, 2(4), 466–474. <https://doi.org/10.1177/1947601911408889>
- Rodríguez-Carunchio, L., Soveral, I., Steenbergen, R., Torné, A., Martínez, S., Fusté, P., ... del Pino, M. (2015). HPV-negative carcinoma of the uterine cervix: a distinct type of cervical cancer with poor prognosis. *BJOG: An International Journal of Obstetrics & Gynaecology*, 122(1), 119–127. <https://doi.org/10.1111/1471-0528.13071>
- Rodriguez-Jasso, R. M., Mussatto, S. I., Pastrana, L., Aguilar, C. N., & Teixeira, J. A. (2011). Microwave-assisted extraction of sulfated polysaccharides (fucoidan) from brown seaweed. *Carbohydrate Polymers*, 86(3), 1137–1144. <https://doi.org/10.1016/j.carbpol.2011.06.006>
- ROKKAKU, T., KIMURA, R., ISHIKAWA, C., YASUMOTO, T., SENBA, M., KANAYA, F., & MORI, N. (2013). Anticancer effects of marine carotenoids, fucoxanthin and its deacetylated product, fucoxanthinol, on osteosarcoma. *International Journal of Oncology*, 43(4), 1176–1186. <https://doi.org/10.3892/ijo.2013.2019>
- Ruiz-Torres, V., Encinar, J. A., Herranz-López, M., Pérez-Sánchez, A., Galiano, V., Barrajon-Catalán, E., & Micol, V. (2017). An updated review on marine anticancer compounds: The use of virtual screening for the discovery of small-molecule cancer drugs. *Molecules*, 22(7). <https://doi.org/10.3390/molecules22071037>
- Rustagi, A. S., Kamineneni, A., Weinmann, S., Reed, S. D., Newcomb, P., & Weiss, N. S. (2014). Cervical screening and cervical cancer death among older women: a population-based, case-control study. *American Journal of Epidemiology*, 179(9), 1107–1114. <https://doi.org/10.1093/aje/kwu035>
- Sasidharan, S., Chen, Y., Saravanan, D., Sundram, K. M., & Yoga Latha, L. (2011). Extraction, isolation and characterization of bioactive compounds from plants' extracts. *African Journal of Traditional, Complementary, and Alternative Medicines : AJTCAM*, 8(1), 1–10. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/22238476>
- Sidhu, M. C. (2017). Which is the best solvent (ethanol OR methanol) for phytochemical study? Retrieved August 10, 2018, from https://www.researchgate.net/post/Which_is_the_best_solvent_ethanol_OR_methanol_f_or_phytochemical_study
- Sionov, R. V., & Haupt, Y. (1999). The cellular response to p53: the decision between life and death. *Oncogene*, 18(45), 6145–6157. <https://doi.org/10.1038/sj.onc.1203130>
- Smittenaar, C. R., Petersen, K. A., Stewart, K., & Moitt, N. (2016). Cancer incidence and mortality projections in the UK until 2035. *British Journal of Cancer*, 115(9), 1147–1155. <https://doi.org/10.1038/bjc.2016.304>
- Somashekhar, S. P., & Ashwin, K. R. (2015). Management of Early Stage Cervical Cancer. *Reviews on Recent Clinical Trials*, 10(4), 302–308. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/26411950>
- Song, Q., Merajver, S. D., & Li, J. Z. (2015). Cancer classification in the genomic era: five

- contemporary problems. *Human Genomics*, 9, 27. <https://doi.org/10.1186/s40246-015-0049-8>
- Synytsya, A., Kim, W. J., Kim, S. M., Pohl, R., Synytsya, A., Kvasnička, F., ... Il Park, Y. (2010). Structure and antitumour activity of fucoidan isolated from sporophyll of Korean brown seaweed *Undaria pinnatifida*. *Carbohydrate Polymers*, 81(1), 41–48. <https://doi.org/10.1016/j.carbpol.2010.01.052>
- techniques. (n.d.). Retrieved August 8, 2018, from [https://www.mrothery.co.uk/module1/Mod 1 techniques.htm](https://www.mrothery.co.uk/module1/Mod1%20techniques.htm)
- Thanigaivel, S., Vidhya Hindu, S., Vijayakumar, S., Mukherjee, A., Chandrasekaran, N., & Thomas, J. (2015). Differential solvent extraction of two seaweeds and their efficacy in controlling *Aeromonas salmonicida* infection in *Oreochromis mossambicus*: A novel therapeutic approach. *Aquaculture*, 443, 56–64. <https://doi.org/10.1016/j.aquaculture.2015.03.010>
- Thomas, N. V., & Kim, S.-K. (2011). Potential pharmacological applications of polyphenolic derivatives from marine brown algae. *Environmental Toxicology and Pharmacology*, 32(3), 325–335. <https://doi.org/10.1016/j.etap.2011.09.004>
- Thun, M. J., DeLancey, J. O., Center, M. M., Jemal, A., & Ward, E. M. (2010). The global burden of cancer: priorities for prevention. *Carcinogenesis*, 31(1), 100–110. <https://doi.org/10.1093/carcin/bgp263>
- Villanova, L., Careccia, S., De Maria, R., & Fiori, M. (2018). Micro-Economics of Apoptosis in Cancer: ncRNAs Modulation of BCL-2 Family Members. *International Journal of Molecular Sciences*, 19(4), 958. <https://doi.org/10.3390/ijms19040958>
- WHO. (2012). WHO | Cancer. Retrieved from <http://www.who.int/cancer/resources/keyfacts/en/>
- Wijesinghe, W. A. J. P., & Jeon, Y.-J. (2012a). Exploiting biological activities of brown seaweed *Ecklonia cava* for potential industrial applications: a review. *International Journal of Food Sciences and Nutrition*, 63(2), 225–235. <https://doi.org/10.3109/09637486.2011.619965>
- Wijesinghe, W. A. J. P., & Jeon, Y. J. (2012b). Biological activities and potential industrial applications of fucose rich sulfated polysaccharides and fucoidans isolated from brown seaweeds: A review. *Carbohydrate Polymers*, 88(1), 13–20. <https://doi.org/10.1016/j.carbpol.2011.12.029>
- Woodman, C. B. J., Collins, S. I., & Young, L. S. (2007). The natural history of cervical HPV infection: Unresolved issues. *Nature Reviews Cancer*, 7(1), 11–22. <https://doi.org/10.1038/nrc2050>
- XU, J.-Y., MENG, Q.-H., CHONG, Y., JIAO, Y., ZHAO, L., ROSEN, E. M., & FAN, S. (2012). Sanguinarine inhibits growth of human cervical cancer cells through the induction of apoptosis. *Oncology Reports*, 28(6), 2264–2270. <https://doi.org/10.3892/or.2012.2024>
- Zhang, Q., Zhu, B., & Li, Y. (2017). Resolution of Cancer-Promoting Inflammation: A New Approach for Anticancer Therapy. *Frontiers in Immunology*, 8, 71. <https://doi.org/10.3389/fimmu.2017.00071>
- Zhao, X., Tao, X., Xu, L., Yin, L., Qi, Y., Xu, Y., ... Peng, J. (2016). Dioscin induces apoptosis in human cervical carcinoma HeLa and SiHa cells through ROS-mediated DNA damage and the mitochondrial signaling pathway. *Molecules*, 21(6). <https://doi.org/10.3390/molecules21060730>