

- liver X receptor agonist in plasma using liquid chromatography-tandem mass spectrometry. *J. Chromatogr. B. Analyt Technol Biomed. Life Sci.* **878**, 1885-1888 (2010).
219. Hoshino J, Park E-J, Kondratyuk TP, Marler L, Pezzuto JM, van Breemen RB, Mo S, Li Y, Cushman M. Selective synthesis and biological evaluation of sulfate-conjugated resveratrol metabolites. *J. Med. Chem.* **53**, 5033-5043 (2010).
220. Dahl JH, van Breemen RB. Rapid quantitative analysis of 8-iso-PGF_{2α} using liquid chromatography-tandem mass spectrometry and comparison to an enzyme immunoassay method. *Anal. Biochem.* **404**, 211-216 (2010).
221. Bolca S, Li J, Nikolić D, Roche N, Blondeel P, Possemiers S, De Keukeleire D, Bracke M, Heyerick A, van Breemen RB, Depypere H. Disposition of hop prenylflavonoids in human breast tissue. *Mol. Nutr. Food Res.* **54**, Suppl. 2, S284-94 (2010).
222. Marler L, Conda-Sheridan M, Cinelli MA, Morrell AE, Cushman M, Chen L, Huang K, van Breemen R, Pezzuto JM. Cancer chemopreventive potential of aromathecins and phenazines, novel natural product derivatives. *Anticancer Res.* **30**, 4873-4882 (2010).
223. Dong L, Shion H, Davis RG, Terry-Penak B, Castro-Perez J, van Breemen RB. Collision cross-section determination and tandem mass spectrometric analysis of isomeric carotenoids using electrospray ion mobility time-of-flight mass spectrometry. *Anal. Chem.* **82**, 9014-9021 (2010).
224. Wang Z, Chandrasena ER, Yuan Y, Peng KW, van Breemen RB, Thatcher GR, Bolton JB. Redox cycling of catechol estrogens generating apurinic/apyrimidinic sites and 8-oxo-deoxyguanosine via reactive oxygen species differentiates equine and human estrogens. *Chem. Res. Toxicol.* **23**, 1365-1373 (2010).
225. Cao H, Yu R, Tao Y, Nikolic D, van Breemen RB. Measurement of cyclooxygenase inhibition using liquid chromatography-tandem mass spectrometry. *J. Pharm. Biomed. Anal.* **54**, 230-235 (2011). PMC2946453; NIHMS230195
226. White AB, Galbiati F, Givogri MI, Lopez Rosas A, Qiu X, van Breemen R, Bongarzone ER. Persistence of psychosine in brain lipid rafts is a limiting factor in the therapeutic recovery of a mouse model for Krabbe disease. *J. Neurosci. Res.* **89**, 352-364 (2011).
227. Choi Y, Jermihov K, Nam S-J, Sturdy M, Maloney K, Qiu X, Chadwick LR, Main M, Chen S-N, Mesecar AD, Farnsworth NR, Pauli GF, Fenical W, Pezzuto JM, van Breemen RB. Screening natural products for inhibitors of quinone reductase-2 using ultrafiltration LC-MS. *Anal. Chem.* **83**, 1048-1052 (2011). PMC3034444; NIHMS261572
228. van Breemen RB, Tao Y, Li W. Cyclooxygenase-2 inhibitors in ginger (*Zingiber officinale*). *Fitoterapia*, **82**, 38-43 (2011). NIHMS241578
229. Chen SN, Friesen JB, Webster D, Nikolić D, van Breemen RB, Wang ZJ, Fong HH, Farnsworth NR, Pauli GF. Phytoconstituents from *Vitex agnus-castus* fruits. *Fitoterapia*, **82**, 528-533 (2011).
230. Yang JH, Kondratyuk TP, Jermihov KC, Marler LE, Qiu X, Choi Y, Cao H, Yu R, Sturdy M, Huang R, Liu Y, Wang LQ, Mesecar AD, van Breemen RB, Pezzuto JM, Fong HH, Chen YG, Zhang HJ. Bioactive compounds from the fern *Lepisorus contortus*. *J. Nat. Prod.* **74**, 129-136 (2011).

231. Castelvetti LC, Givogri MI, Zhu H, Smith B, Lopez-Rosas A, Qiu X, van Breemen R, Bongarzone ER. Axonopathy is a compounding factor in the pathogenesis of Krabbe disease. *Acta Neuropathol.* **122**, 35-48 (2011).
232. Hu C, Egger AL, Mesecar AD, van Breemen RB. Modification of Keap1 cysteine residues by sulforaphane. *Chem. Res. Toxicol.* **24**, 515-21 (2011).
233. van Breemen RB, Sharifi R, Viana M, Pajkovic N, Zhu D, Yuan L, Yang Y, Bowen PE, Stacewicz-Sapuntzakis M. Antioxidant effects of lycopene in African American men with prostate cancer or benign prostate hyperplasia: a randomized controlled trial. *Cancer Prev. Res. (Phila.)* **4**, 711-718 (2011).
234. Park EJ, Kondratyuk TP, Morrell A, Kiselev E, Conda-Sheridan M, Cushman M, Ahn S, Choi Y, White JJ, van Breemen RB, Pezzuto JM. Induction of retinoid X receptor activity and consequent upregulation of p21WAF1/CIP1 by indenoisoquinolines in MCF7 cells. *Cancer Prev. Res. (Phila.)* **4**, 592-607 (2011).
235. Kondratyuk TP, Park EJ, Marler LE, Ahn S, Yuan Y, Choi Y, Yu R, van Breemen RB, Sun B, Hoshino J, Cushman M, Jermihov KC, Mesecar AD, Grubbs CJ, Pezzuto JM. Resveratrol derivatives as promising chemopreventive agents with improved potency and selectivity. *Mol. Nutr. Food Res.* **55**, 1249-1265 (2011).
236. Yu R, Xiao L, Zhao G, Christman JW, van Breemen RB. Competitive enzymatic interactions determine the relative amounts of prostaglandins E₂ and D₂. *J. Pharmacol. Exper. Ther.* **339**, 716-725 (2011).
237. Gödecke T, Yao P, Napolitano JG, Nikolić D, Dietz BM, Bolton JL, van Breemen RB, Farnsworth NR, Chen S-N, Lankin DC, Pauli GF. Integrated standardization concept for *Angelica* botanicals using quantitative NMR. *Fitoterapia* **83**, 18-32 (2012).
238. Gaba RC, Baumgarten S, Omene BO, van Breemen RB, Garcia KD, Larson AC, Omary RA. Ethiodized oil uptake does not predict doxorubicin drug delivery after chemoembolization in VX2 liver tumors. *J. Vasc. Interv. Radiol.* **23**, 265-73 (2012).
239. Hu C, Nikolić D, Egger AL, Mesecar AD, van Breemen RB. Screening for natural chemoprevention agents that modify Keap1. *Anal. Biochem.* **421**, 108-114 (2012).
240. van Breemen RB, Dong L, Pajkovic ND. Atmospheric pressure chemical ionization tandem mass spectrometry of carotenoids. *Int. J. Mass Spectrom.* **312**, 163-172 (2012).
241. Kondratyuk TP, Park E-J, Yu R, van Breemen RB, Asolkar RN, Murphy BT, Fenical W, Pezzuto JM. Novel marine phenazines as potential cancer chemopreventive and anti-inflammatory agents *Mar. Drugs*, **10**, 451-464 (2012).
242. Li J, Gödecke T, Chen SN, Imai A, Lankin DC, Farnsworth NR, Pauli GF, van Breemen RB, Nikolić D. In vitro metabolic interactions between black cohosh (*Cimicifuga racemosa*) and tamoxifen via inhibition of cytochromes P450 2D6 and 3A4. *Xenobiotica*. (2012) in press.
243. Al-Alem U, Peter H, Gann PH, Dahl J, van Breemen RB, Mistry V, Lam PMW, Evans MD, Van Horn L, Wright ME. Associations between functional polymorphisms in antioxidant defense genes and urinary oxidative stress biomarkers in healthy, premenopausal women. *Genes Nutr.* (2012) in press.

244. Nikolić D, Gödecke T, Chen S-N, White J, Lankin DC, Pauli GF, van Breemen RB. Mass spectrometric dereplication of nitrogen-containing constituents of black cohosh (*Cimicifuga racemosa* L.). *Fitoterapia* (2012) in press.
245. Baumgarten S, Gaba RC, van Breemen RB. Confirmation of drug delivery after liver chemoembolization: Direct tissue doxorubicin measurement by UHPLC-MS-MS. *Biomed. Chromatogr.* (2012) in press.

2. Chapters in Books

246. van Breemen RB. Structural analysis of phosphatidylinositol from carrot cell membranes by fast atom bombardment and tandem mass spectrometry. In *Mass Spectrometry in the Molecular Sciences: A Tutorial*, pp. 443-451, ed. by Gross ML. Kluwer Academic Publishers, Dordrecht, 1992. Invited contribution.
247. van Breemen RB. Mass spectrometry of textile dyes. In *Advances in Colour Chemistry Series*, pp. 96-116, ed. by Peters AT, and Freeman HS. Blackie Academic & Professional, Chapman and Hall, Glasgow, 1995. Invited contribution.
248. van Breemen RB, Woodbury CP, Venton DL. Screening molecular diversity using mass spectrometry. In *Mass Spectrometry of Biological Molecules*, 2nd ed. Ed. by Larsen BS, and McEwen CN. Marcel Dekker, New York, pp 99-113, 1998.
249. Fitzloff JF, Yat P, Lu LL, Awang, DVC, Arnason JT, van Breemen RB, Hall T, Blumenthal M, Fong HHS. Perspectives on the quality assurance of ginseng products in North America. In *Advances in Ginseng Research – Proceedings of the 7th International Symposium on Ginseng*. Ed. By Huh H, Choi KJ and Kim YC. The Korean Society of Ginseng, Seoul, Korea, September 22-25, 1998.
250. Barua AB, Olson JA, Furr HC, and van Breemen RB. Vitamin A and carotenoids. In *Modern Chromatographic Analysis of the Vitamins*, 3rd ed. Ed. by De Leenheer A, Lambert WE, and Van Bocxlaer JF. Marcel Dekker, Inc., New York, pp 1-74, 2000.
251. van Breemen RB. Mass Spectrometry of carotenoids. In *Current Protocols in Food Analytical Chemistry*. Ed. by Wrolstad RE. John Wiley & Sons, New York, pp F2.4.1-F2.4.13, 2001.
252. van Breemen RB. Mass spectrometry of chlorophylls. In *Current Protocols in Food Analytical Chemistry*. Ed. by Wrolstad RE. John Wiley & Sons, New York, pp F4.5.1-F4.5.9, 2001.
253. van Breemen RB. Introduction to mass spectrometry for food chemistry. In *Current Protocols in Food Analytical Chemistry*. Ed. by Wrolstad RE. John Wiley & Sons, New York, Appendix 3A.1-3A.7, 2001.
254. van Breemen RB. Mass spectrometry and drug discovery. In *Burger's Medicinal Chemistry and Drug Discovery*. 6th Edition, Volume 1: Drug Discovery. Ed. By Abraham DJ. John Wiley & Sons, New York, 2003.
255. Constantinou AI and van Breemen RB. Lycopene, a dietary cancer chemopreventive agent. In *Cancer Chemoprevention, Volume 1: Promising Cancer Chemoprevention Agents*. Ed. by Kelloff GJ, Hawk ET, and Sigman CC. Humana Press, Totowa, NJ, pp 525-535, 2004.

256. Pajkovic N and van Breemen RB. Chapter 8: Analysis of carotenoids using atmospheric pressure chemical ionization mass spectrometry. In *Modern Methods of Lipid Analysis*. Ed. by Byrdwell WC. AOCS Press, Champaign, IL, pp 413-430, 2005.
257. van Breemen RB. Chapter 4: Natural products from plants. In *The Encyclopedia of Mass Spectrometry, Volume 3: Biological Applications, Part B: Carbohydrates, Nucleic Acids and other Biological Compounds*. Ed. by Caprioli RM. Elsevier, Oxford, UK, pp 317-322, 2006.
258. Fong HHS, Pauli GF, Bolton JL, van Breemen RB, Banuvar S, Shulman L, Geller SE and Farnsworth NR. Chapter 2: Evidence-based herbal medicine: Challenges in efficacy and safety assessments. In *Annals of Traditional Chinese Medicine – Vol. 2. Current Review of Chinese Medicine: Quality Control of Herbs and Herbal Medicine*. Ed. by Leung PC, Fong H, Xue CC. World Scientific, New Jersey, pp 11-26, 2006.
259. van Breemen RB. Chapter 5: Pharmaceutical Applications: On-line ultrafiltration mass spectrometry, principles and applications. In *Encyclopedia of Mass Spectrometry Volume 8: Hyphenated Methods*. Ed. by Niessen WM. Elsevier Science, Oxford, UK, pp 515-522, 2006.
260. van Breemen RB, Newsome AG, Dahl, JH. Mass spectrometry and drug discovery. In *Burger's Medicinal Chemistry, Drug Discovery and Development*. 7th Edition, Volume 1: Drug Discovery. Ed. By Abraham DJ. John Wiley & Sons, New York, 2010.
261. Koch D, Johnson L, Gehrke CW, Sandra P, van Breemen RB. Chapter 9. Chromatography - Advances in environmental and natural products, chemical analysis and synthesis. In *Chromatography a Science of Discovery*. Ed. By Wixom RL and Gehrke CW. John Wiley & Sons, Hoboken, New Jersey, pp 345-360, 2010.

3. Patents

US Patent No. US 5872015. "Molecular Diversity Screening Method." Patent issued February 16, 1999. Patent application filed May 10, 1996. Inventors: Venton, D. L., Woodbury, C. P., and van Breemen, R. B.

US Patent No. US 6,995,022 B1. "Screening of Xenobiotics and Endogenous Compounds for Metabolic Transformation, Formation of Toxic Metabolites, and Bioavailability." Patent issued February 7, 2006. Patent application filed December 23, 1999. Inventors: van Breemen, R. B., and Bolton, J. L.

World Patent WO/2010/025209. "Jasmonic acid compounds in cocoa products." Patent issued April 3, 2010. Patent application filed August 27, 2009. Inventors: Hurst, W. J., Stuart, D. A., Calderon Justavino, A. I., van Breemen, R. B.

4. Book Reviews

van Breemen, R. B., *Anal. Chem.*, **63**, 235A (1991). Review of Biomedical Applications of Mass Spectrometry, Volume 34, C. H. Suelter and J. T. Watson, Eds., John Wiley & Sons, New York, 1990.

van Breemen, R. B., *J. Am. Soc. Mass Spectrom.*, **3**, 867 (1992). Review of Continuous-Flow Fast Atom Bombardment Mass Spectrometry, R. M. Caprioli, Ed., John Wiley & Sons, New York, 1990.

van Breemen, R. B., *J. Med. Chem.*, **35**, 4919-4920 (1992). Review of Mass Spectrometry in the Biological Sciences: A Tutorial, M. L. Gross, Ed., Kluwer Academic Publishers, Dordrecht, 1992.

van Breemen, R. B., *Anal. Chem.*, **65**, 795A (1993). Review of Liquid Chromatography-Mass Spectrometry, W. Niessen and J. van der Graaf, Marcel Dekker, Inc., New York, 1992.

van Breemen, R. B., *J. Am. Chem. Soc.*, **121**, 8413-8414 (1999). Review of Integration of Pharmaceutical Discovery and Development: Case Histories. Volume 11. Pharmaceutical Biotechnology. Edited by R. T. Borhardt, R. M. Freidinger, T. K. Sawyer and P. L. Smith. Plenum Press, New York. 1998.

van Breemen, R. B. *J. Am. Chem. Soc.*, **123**, 8646-8647 (2001). Review of Combinatorial Chemistry. A Practical Approach, Willi Bannwarth and Eduard Felder, Eds. Wiley-VCH: Weinheim. 2000.

COURSES TAUGHT

CH527 Mass Spectrometry, created and taught new course Fall 1986, 1988, 1990, 1992

CH525 Physical Methods in Organic Chemistry, Spring 1987-1993

CH220 Introductory Organic Chemistry, Fall 1987

CH315 Quantitative Analysis, Spring 1988

CH221 Organic Chemistry I, Spring 1989, Fall 1993

CH223 Organic Chemistry II, Fall 1989, Fall 1991

BPS385 Special Topics: Survey of Research in Pharmaceutical Sciences, Fall 2006

BPS471 Clinical Pharmacology II, Spring 2005, Spring 2006 (lecturer)

MDCH 561 Principles of Medicinal Chemistry, Fall 1996-1997 (lecturer), 1998 (coordinator), 1999-2006 (lecturer)

MDCH 562 Spectroscopy in Medicinal Chemistry, Fall 1994-1995 (coordinator), 1996-2000 (lecturer), 2001 (coordinator), 2002 (lecturer), 2004-2012 (coordinator)

MDCH 565 Laboratory Methods in Medicinal Chemistry, Summer 1995-2001 (lecturer)

MDCH 592 Research Topics in Medicinal Chemistry 2002-2008 (lecturer)

MDCH 594 LC-MS Techniques 2007-2008 (coordinator)

MDCH 595/PMPG 595 Seminars in Medicinal Chemistry/Pharmacognosy 1999, 2002, 2006, 2007(coordinator); 2001, 2003, 2005 (lecturer)

PHAR 333 Review of Spectroscopy, Fall 1998-1999 (lecturer), 2000 (co-coordinator), 2001-2011 (lecturer)

PHAR 403 Principles of Drug Action and Therapeutics VI: Medicinal Chemistry of Antiviral Agents, Spring 2008-2011 (lecturer)

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