

University of Mississippi

eGrove

---

Publications (2015-)

Research Grants, Publications, and U. S.  
Patents

---

12-31-2015

## Research News. Publications, 2015. Volume 2

University of Mississippi. School of Pharmacy

Soumyajit Majumdar

*University of Mississippi*

Follow this and additional works at: [https://egrove.olemiss.edu/pharmacy\\_publications](https://egrove.olemiss.edu/pharmacy_publications)



Part of the [Pharmacy and Pharmaceutical Sciences Commons](#)

---

### Recommended Citation

University of Mississippi. School of Pharmacy and Majumdar, Soumyajit, "Research News. Publications, 2015. Volume 2" (2015). *Publications (2015-)*. 2.

[https://egrove.olemiss.edu/pharmacy\\_publications/2](https://egrove.olemiss.edu/pharmacy_publications/2)

This Report is brought to you for free and open access by the Research Grants, Publications, and U. S. Patents at eGrove. It has been accepted for inclusion in Publications (2015-) by an authorized administrator of eGrove. For more information, please contact [egrove@olemiss.edu](mailto:egrove@olemiss.edu).



---

***Interoffice Memorandum***

**SCHOOL OF PHARMACY  
OFFICE OF THE DEAN  
University, MS 38677-1848  
Phone: (662) 915-7267 Fax: (662) 915-5118**

---

To: All School of Pharmacy and USDA Personnel

From: Soumyajit Majumdar, Associate Dean for Research and Graduate Programs

Date: April 8, 2016

The following Publications have appeared during the July 1, 2015 through December 31, 2015 period.

1. Abreu Miranda M, Lemos M, Alves Cowart K, Rodenburg D, D McChesney J, Radwan MM, Furtado NA, Kenupp Bastos J. Gastroprotective activity of the hydroethanolic extract and isolated compounds from the leaves of *Solanum cernuum* Vell. *J Ethnopharmacol.* 2015 Aug 22; 172:421-9. doi:10.1016/j.jep.2015.06.047. Epub 2015 Jul 2. PubMed PMID:26144696.
2. Alessio Cimmino, Marco Evidente, Marco Masi, Abbas Ali, Nurhayat Tabanca, Ikhlas A. Khan, Antonio Evidente, Papyracillic acid and its derivatives as biting deterrents against *Aedes aegypti* (Diptera: Culicidae): structure-activity relationships, *Med. Chem. Res.* (2015) 24:3981-3989, doi:10.1007/s00044-015-1439-0.
3. Ali A, Wang YH, Khan IA. Larvicidal and Biting Deterrent Activity of Essential Oils of *Curcuma longa*, Ar-turmerone, and Curcuminoids Against *Aedes aegypti* and *Anopheles quadrimaculatus* (Culicidae: Diptera). *J Med Entomol.* 2015 Sep; 52(5):979-86. doi:10.1093/jme/tjv072. Epub 2015 Jun 23. PubMed PMID:26336212.
4. Ali, A., N. Tabanca, B. Demirci, E. K. Blythe, K. H. C. Baser, I. A. Khan. Chemical Composition and Biological Activity of Essential Oils from Four *Nepeta* Species and

Hybrids against *Aedes aegypti* (L.) (Diptera: Culicidae). Rec. Nat. Prod. 2015; 10:137-147.

5. Alshahrani SM, Morott JT, Alshetaili AS, Tiwari RV, Majumdar S, Repka MA. Influence of degassing on hot-melt extrusion process. Eur J Pharm Sci. 2015 Dec 1; 80:43-52. doi:10.1016/j.ejps.2015.08.008. Epub 2015 Aug 19. PubMed PMID:26296861; PubMed Central PMCID: PMC4667714.
6. Alshetaili AS, Almutairy BK, Tiwari RV, Morott JT, Alshehri SM, Feng X, Alsulays BB, Park JB, Zhang F, Repka MA. Preparation and Evaluation of Hot-Melt Extruded Patient-Centric Ketoprofen Mini-tablets. Curr Drug Deliv. 2015 Oct 12. [Epub ahead of print] PubMed PMID:26456211.
7. Alsulays BB, Park JB, Alshehri SM, Morott JT, Alshahrani SM, Tiwari RV Alshetaili AS, Majumdar S, Langley N, Kolter K, Gryczke A, Repka MA. Influence of Molecular Weight of Carriers and Processing Parameters on the Extrudability, Drug Release, and Stability of Fenofibrate Formulations Processed by Hot-Melt Extrusion. J Drug Deliv Sci Technol. 2015 Oct 1; 29:189-198. PubMed PMID:26640526; PubMed Central PMCID: PMC4668592.
8. Armstrong L., Waite N., Rosenthal M. Supporting student development through a cooperative education coaching program. Asia-Pacific Journal of Cooperative Education: 2015; 16(4): 255-265.
9. Avonto C, Chittiboyina AG, Rua D, Khan IA. A fluorescence high throughput screening method for the detection of reactive electrophiles as potential skin sensitizers. Toxicol Appl Pharmacol. 2015 Dec 1; 289(2):177-84. doi:10.1016/j.taap.2015.09.027. Epub 2015 Oct 9. PubMed PMID:26455772.
10. Avonto C, Wang YH, Avula B, Wang M, Rua D, Khan IA. Comparative studies on the chemical and enzymatic stability of alpha- and beta-arbutin. Int J Cosmet Sci. 2015 Sep 9. doi:10.1111/ics.12275. [Epub ahead of print] PubMed PMID:26352830.
11. Avula B, Chittiboyina AG, Sagi S, Wang YH, Wang M, Khan IA, Cohen PA. Identification and quantification of vinpocetine and picamilon in dietary supplements sold in the United States. Drug Test Anal. 2015 Oct 1. doi:10.1002/dta.1853. [Epub ahead of print] PubMed PMID:26426301.
12. Avula B, Sagi S, Gafner S, Upton R, Wang YH, Wang M, Khan IA. Identification of Ginkgo biloba supplements adulteration using high performance thin layer chromatography and ultra high performance liquid chromatography-diode array detector-quadrupole time of flight-mass spectrometry. Anal Bioanal Chem. 2015 Oct; 407(25):7733-46. doi:10.1007/s00216-015-8938-1. Epub 2015 Aug 22. PubMed PMID:26297458.
13. Avula B, Wang M, Sagi S, Cohen PA, Wang YH, Lasonkar P, Chittiboyina AG, Feng W, Khan IA. Identification and quantification of 1,3-dimethylbutylamine (DMBA) from Camellia sinensis tea leaves and dietary supplements. J Pharm Biomed Anal. 2015 Nov 10; 115:159-68. doi:10.1016/j.jpba.2015.07.004. Epub 2015 Jul 8. PubMed PMID:26209774.
14. Bae J, McNamara LE, Nael MA, Mahdi F, Doerksen RJ, Bidwell GL 3rd, Hammer NI, Jo S. Nitroreductase-triggered activation of a novel caged fluorescent probe obtained from

methylene blue. Chem Commun (Camb). 2015 Aug 18; 51(64):12787-90.  
doi:10.1039/c5cc03824c. PubMed PMID:26165999; PubMed Central PMCID:  
PMC4547460.

15. Barnard M, West-Strum D, Holmes E, Yang Y, Fisher A. The Potential for Screening for Intimate Partner Violence in Community Pharmacies: An Exploratory Study of Female Consumers' Perspectives. Journal of Interpersonal Violence 2015.  
doi:10.1177/0886260515614272. Jiv.sagepub.com Nov. 9, 2015.
16. Bascom CS, Rosenthal MM, Houle SKD. Are Pharmacists Ready for a Greater Role in Travel Health? An Evaluation of the Knowledge and Confidence in Providing Travel Health Advice of Pharmacists Practicing in a Community Pharmacy Chain in Alberta, Canada. Journal of Travel Medicine. 2015; 22:99-104.
17. Bedia Koçyiğit-Kaymakcioğlu, Nagihan Beyhan, Nurhayat Tabanca, Abbas Ali, David E. Wedge, Stephen O. Duke, Ulrich R. Bernier and Ikhlas A. Khan; Discovery and structure activity relationships of 2-pyrazolines derived from chalcones from a pest management perspective, Med. Chem. Res., doi 10.1007/s00044-015-1415-8.
18. Bhagurkar AM, Angamuthu M, Patil H, Tiwari RV, Maurya A, Hashemnejad SM, Kundu S, Murthy SN, Repka MA. Development of an Ointment Formulation Using Hot-Melt Extrusion Technology. AAPS PharmSciTech. 2015 Dec 1. [Epub ahead of print] PubMed PMID:26628438.
19. Bookstaver PB, Bland CM, Griffin B, Stover KR, Eiland LS, McLaughlin M. A Review of Antibiotic Use in Pregnancy. Pharmacotherapy. 2015 Nov; 35(11):1052-62.  
doi:10.1002/phar.1649. Review. PubMed PMID:26598097.
20. Bourassa EA, Stedenfeld KA, Sved AF, Speth RC. Selective C1 Lesioning Slightly Decreases Angiotensin II Type I Receptor Expression in the Rat Rostral Medulla (RVLM). Neurochem Res. 2015 Oct; 40(10):2113-20. doi:10.1007/s11064-015-1649-3. Epub 2015 Jul 3. PubMed PMID:26138553; PubMed Central PMCID: PMC4631665.
21. Brewer CB, Bentley JP, Day LB, Waddell DE. Resistance exercise and naproxen sodium: effects on a stable PGF2 $\alpha$  metabolite and morphological adaptations of the upper body appendicular skeleton. Inflammopharmacology. 2015 Dec; 23(6):319-27.  
doi:10.1007/s10787-015-0248-x. Epub 2015 Aug 20. PubMed PMID:26289996.
22. Búfalo J, Cantrell CL, Jacob MR, Schrader KK, Tekwani BL, Kustova TS, Ali A, Boaro CS. Antimicrobial and Antileishmanial Activities of Diterpenoids Isolated from the Roots of *Salvia deserta*. Planta Med. 2015 Aug 26. [Epub ahead of print] PubMed PMID:26308356.
23. Carper MB, Claudio PP, Clinical potential of gene mutations in lung cancer. Clin Transl Med. 2015 Dec; 4(1):33. doi:10.1186/s40169-015-0074-1. Epub 2015 Nov 24.
24. Carter LB, Strum MW, Shawpurwala Z, West DS. "Technology Integration into Diabetes Self-Management in Children with Type 1 Diabetes Mellitus: Opportunities for Pharmacists. INNOVATIONS in Pharmacy 2015; 6(4) Article 226.  
(<http://www.pharmacy.umn.edu/innovations/issue2015vol.6no.4/home.html>).
25. Chandra Suman, Hemant Lata and Mahmoud A. ElSohly, Botany of *Cannabis sativa* in "The Analytical Chemistry of Cannabis - Quality Assessment, Assurance, and

Regulation of Medicinal Marijuana and Cannabinoid Preparations" Eds. Brian F. Thomas and Mahmoud A. ElSohly, Elsevier, (2015) Chapter 1, pp. 1-26.

26. Cleary JD, Stover KR. Antifungal-Associated Drug-Induced Cardiac Disease. *Clin Infect Dis*. 2015 Dec 1; 61 Suppl 6:S662-8. doi: 10.1093/cid/civ739. PubMed PMID:26567285.
27. Cohen PA, Wang YH, Maller G, DeSouza R, Khan IA. Pharmaceutical quantities of yohimbine found in dietary supplements in the USA. *Drug Test Anal*. 2015 Sep 22. doi:10.1002/dta.1849. [Epub ahead of print] PubMed PMID:26391406.
28. Dasmahapatra AK, Khan IA. DNA methyltransferase expressions in Japanese rice fish (*Oryzias latipes*) embryogenesis is developmentally regulated and modulated by ethanol and 5-azacytidine. *Comp Biochem Physiol C Toxicol Pharmacol*. 2015 Oct-Nov; 176-177:1-9. doi:10.1016/j.cbpc.2015.07.002. Epub 2015 Jul 13. PubMed PMID:26183885.
29. Dasmahapatra AK, Khan IA. Modulation of DNA methylation machineries in Japanese rice fish (*Oryzias latipes*) embryogenesis by ethanol and 5-azacytidine. *Comp Biochem Physiol C Toxicol Pharmacol*. 2016 Jan; 179:174-83. doi: 10.1016/j.cbpc.2015.10.011. Epub 2015 Oct 26. PubMed PMID:26510680.
30. Du K, De Mieri M, Neuburger M, Zietsman PC, Marston A, van Vuuren SF, Ferreira D, Hamburger M, van der Westhuizen JH. Labdane and Clerodane Diterpenoids from *Colophospermum mopane*. *J Nat Prod*. 2015 Oct 23; 78(10):2494-504. doi: 10.1021/acs.jnatprod.5b00729. Epub 2015 Oct 7. PubMed PMID:26444248.
31. Elkhayat ES, Ibrahim SR, Mohamed GA, Ross SA, Terrenolide S, a new antileishmanial butenolide from the endophytic fungus *Aspergillus terreus*. *Nat Prod Res*. 2015 Aug 24:1-7. [Epub ahead of print].
32. ElSohly MA, Gul W, Tolbert C, ElSohly KM, Murphy TP, Avula B, Chittiboyina AG, Wang M, Khan IA, Yang M, Guo D, Zhang WD, Su J. Methylhexanamine is not detectable in *Pelargonium* or *Geranium* species and their essential oils: A multi-centre investigation. *Drug Test Anal*. 2015 Jul; 7(7):645-54. doi:10.1002/dta.1726. Epub 2014 Oct 23. PubMed PMID:25346500.
33. Eltahawy NA, Ibrahim AK, Radwan MM, Zaitone SA, Gomaa M, ElSohly MA, Hassanean HA, Ahmed SA. Mechanism of action of antiepileptic ceramide from Red Sea soft coral *Sarcophyton auritum*. *Bioorg Med Chem Lett*. 2015 Aug 21. pii: S0960-894X(15)00874-4. doi:10.1016/j.bmcl.2015.08.039. [Epub ahead of print] PubMed PMID:26577694.
34. Fajemiroye J.O., Polepally PR, Chaurasiya ND, Tekwani BL, Zjawiony JK, Costa EA. Oleanolic acid acrylate elicits antidepressant-like effect mediated by 5-HT<sub>1A</sub> receptor. *Sci Rep*. 2015 Jul 22; 5:11582. doi:10.1038/srep11582. PubMed PMID:26199018.
35. Fasinu PS, Gurley BJ, Walker LA. Clinically Relevant Pharmacokinetic Herb-drug Interactions in Antiretroviral Therapy. *Curr Drug Metab*. 2015 Nov 2. [Epub ahead of print] PubMed PMID:26526838.
36. Feng X, Vo A, Patil H, Tiwari RV, Alshetali AS, Pimparade MB, Repka MA. The effects of polymer carrier, hot melt extrusion process and downstream processing parameters on the moisture sorption properties of amorphous solid dispersions. *J Pharm Pharmacol*. 2015 Nov 21. doi: 10.1111/jphp.12488. [Epub ahead of print] PubMed PMID:26589107.

37. Feng X, Ye X, Park JB, Lu W, Morott J, Beissner B, Lian ZJ, Pinto E, Bi V, Porter S, Durig T, Majumdar S, Repka MA. Evaluation of the recrystallization kinetics of hot-melt extruded polymeric solid dispersions using an improved Avrami equation. *Drug Dev Ind Pharm.* 2015; 41(9):1479-87. doi:10.3109/03639045.2014.958755. Epub 2015 Jul 21. PubMed PMID:25224341.
38. Galal AM, Raman V, Khan IA. *Sida cordifolia*, a traditional herb in a modern perspective – a review. *Current Traditional Medicine.* 2015 Mar 31; 1(1): 5-17. doi:10.2174/2215083801666141226215639.
39. Gochfeld DJ, Ankisetty S, Slattery M Proteomic profiling of healthy and diseased hybrid soft corals (*Sinularia maxima* x *polydactyla*). *Diseases of Aquatic Organisms* (2015) 116:133-141. PMID:26480916.
40. Gogineni V, Schinazi RF, Hamann MT. Role of Marine Natural Products in the Genesis of Antiviral Agents. *Chem Rev.* 2015 Sep 23; 115(18):9655-706. doi:10.1021/cr4006318. Epub 2015 Aug 28. PubMed PMID:26317854.
41. Gorovoi P.G., Suleimen E.M., Dudkin R.V., Wang M., Khan I and Ross S.A.; Constituent Composition and Biological Activity of *Nepta manchuriensis* Essential Oil; *Chemistry of Natural Compounds*, Sept. 2015, doi10.1007/s10600-015-1473-7.
42. Gregory DF, Allen DD, Clark NJ, Ewachiw BD. (2016). Partnership with schools. In Cuellar LM & Ginsburg DB (Eds.), *Preceptor's handbook for pharmacists*, Third edition (pp.219-243). Bethesda, MD: American Society of Health-System Pharmacists.
43. Harrell K., Has The Time Come for a Bachelor's Degree Prerequisite to Pharmacy School? *Am J Pharm Educ.* 2015 Oct 25; 79(8):111. doi:10.5688/ajpe798111.
44. Hemant Lata, Suman Chandra, Ikhlas A. Khan and Mahmoud A. ElSohly, *In vitro* Propagation of *Cannabis sativa* L. and evaluation of regenerated plants for Genetic Fidelity and Cannabinoids Content for Quality Assurance, In "Protocols for In Vitro Cultures and Secondary Metabolite Analysis of Aromatic and Medicinal Plants- Second Edition" (2015) Ed. Sri Mohan Jain, Springer, Chapter 19.
45. Hemant Lata, Suman Chandra, Natascha Techen, Ikhlas A. Khan and Mahmoud A. ElSohly, *In vitro* mass propagation of *Cannabis sativa*: A protocol refinement using novel aromatic cytokinin *meta*-topolin and the assessment of eco-physiological, biochemical and genetic fidelity of micropropagated plants, *Journal of Applied Research on Medicinal and Aromatic Plants*, (2016) 3 (1): 18-26, DOI: 10.1016/j.jarmap.2015.12.001.
46. Hemant Lata, Suman Chandra, Yan-Hong Wang, Mahmoud A. ElSohly and Ikhlas A. Khan, Polyhouse cultivation of *in vitro* raised elite *Stevia rebaudiana* Bertoni: An Assessment of Biochemical and Photosynthetic Characteristics, *International Journal of tropical Agriculture*, (2015) 33 (4): 2381-2389.
47. Huang Z, Zhu ZX, Li YT, Pang DR, Zheng J, Zhang Q, Zhao YF, Ferreira D, Zjawiony JK, Tu PF, Li J. Anti-inflammatory Labdane Diterpenoids from *Leonurus macranthus*. *J Nat Prod.* 2015 Sep 25; 78(9):2276-85. doi:10.1021/acs.jnatprod.5b00635. Epub 2015 Sep 8. PubMed PMID:26348503.
48. Jianping Wu, Jianping Zhao, Yanli Liu, Xianoran Li, Qiongming Xu, Yulin Feng, Ikhlas A. Khan, Shilin YActa ang, Five new triterpenoid saponins from the Roots of *Camellia*

*oleifera* C. Abel with cytotoxic activities, 2015 Phytochemical Society of Europe, doi.org/10.1016/j.phytol.2015.08.005.

49. Joshi N, Khanna R, Shah R. Relationship between depression and physical activity, disability, burden, and health-related quality of life among patients with arthritis. *Population Health Management*. 2015; 18 (2): 104-114.
50. Jowers LB, Shapurwala Z, West-Strum D, Strum M. Association between perceived health care provider support and satisfaction with insulin pumps in children with Type 1 Diabetes Mellitus: Opportunities for Pharmacists. *INNOVATIONS in Pharmacy*. 2015; 6(4): article 226.
51. Juluri A, Popescu C, Zhou L, Murthy RN, Gowda VK, P CK, Pimparade MB, Repka MA, Murthy SN. Taste Masking of Griseofulvin and Caffeine Anhydrous Using Kleptose Linecaps DE17 by Hot Melt Extrusion, doi:10.1208/s12249-015-0374-1, PMID: 26288942 [PubMed - as supplied by publisher].
52. Kemp AM, Clark MS, Dobbs T, Sherman J, Cox R. Top Ten Facts You Need To Know Synthetic Cannabinoids: Not So Nice Spice. *Am J Med*. 2015 Oct 29. pii: S0002-9343(15)01008-6. doi:10.1016/j.amjmed.2015.10.008. [Epub ahead of print] Review. PubMed PMID:26522795.
53. Kowalczyk A.P., Lozak A, Bachlinski R., Duszyńska A., Sakowska J., Zjawiony J.K. "Identification challenges in examination of commercial plant material of *Psychotria viridis*." *Acta Pol. Pharm. Drug Res.*, 2015, 72, 747-755.
54. Kumarihamy M, León F, Pettaway S, Wilson L, Lambert JA, Wang M, Hill C, McCurdy CR, ElSohly MA, Cutler SJ, Muhammad I. In vitro opioid receptor affinity and in vivo behavioral studies of *Nelumbo nucifera* flower. *J Ethnopharmacol*. 2015 Nov 4; 174:57-65. doi:10.1016/j.jep.2015.08.006. Epub 2015 Aug 7. PubMed PMID:26260436; PubMed Central PMCID: PMC4636954.
55. Li, S.; Zhao, J.; Wang, W.; Lu, Y.; Xu, Q.; Liu, Y.; Li, X.; Khan, I. A.; Yang, S., Seven new triterpenoids from the aerial parts of *Ilex cornuta* and protective effects against H<sub>2</sub>O<sub>2</sub>-induced myocardial cell injury. *Phytochemistry Letters* 2015, 14, 178-184.
56. Li, X.; Zhao, J.; Li, X.; Liu, Y.; Xu, Q.; Khan, I. A.; Yang, S., New Triterpenoid Glycosides from the Roots of *Camellia oleifera* Abel. *Helvetica Chimica Acta* 2015, 98 (4), 496-508.
57. Lobb WB, Wilkin NE, Holmes ER. Pharmacists' perceptions of the economic value of compounded pharmaceuticals: A comparison of compounded and commercial pharmaceuticals in select disease states. *International Journal of Pharmaceutical Compounding*. 2015; 19(6):514-520.
58. Lu J, Cuellar K, Hammer NI, Jo S, Gryczke A, Kolter K, Langley N, Repka MA. Solid-state characterization of Felodipine-Soluplus amorphous solid dispersions. *Drug Dev Ind Pharm*. 2015 Nov 4:1-12. [Epub ahead of print] PubMed PMID:26530290.
59. Madak-Erdogan Z, Gong P, Zhao YC, Xu L, Wrobel KU, Hartman JA, Wang M, Cam A, Iwaniec UT, Turner RT, Twaddle NC, Doerge DR, Khan IA, Katzenellenbogen JA, Katzenellenbogen BS, Helferich WG. Dietary licorice root supplementation reduces diet-induced weight gain, lipid deposition, and hepatic steatosis in ovariectomized mice without stimulating reproductive tissues and mammary gland. *Mol Nutr Food Res*. 2015 Nov 10. doi:10.1002/mnfr.201500445. [Epub ahead of print] PubMed PMID:26555669.

60. Maffo, T., Wafo, P., Kamdem, R. S. T., Melong, R., Uzor, P. F., Mkounga, P., Ali, Z., Ngadjui, B. T. Terpenoids from the stem bark of *Neoboutonia macrocalyx* (Euphorbiaceae). *Phytochem. Lett.* 2015;12, 328-331.
61. Mahdi, F.; Morgan, J.B.; Liu, W.; Agarwal, A.K.; Jekabsons, M.B.; Liu, Y.; Zhou, Y.-D.; Nagle, D.G. "Sampangine (a Copteryne Alkaloid) Exerts Biological Activities through Cellular Redox Cycling of Its Quinone and Semiquinone Intermediates" *J. Nat. Prod.*, 2015, 78, 3018–3023. (<http://dx.doi.org/10.1021/acs.jnatprod.5b00819>) Epub 2015 Dec 4.
62. Maldonado A, Johnson A, Gochfeld D, Slattery M, Ostrander GK, Bingham J-P, Schlenk D, Hard coral (*Porites lobata*) extracts and homarine on cytochrome P450 expression in Hawaiian butterflyfishes with different feeding strategies. *Comparative Biochemistry and Physiology Part C: Toxicology & Pharmacology* (2016) 179:57-63.
63. Mallika Kumarihamy, Francisco Leon, Sara Pettaway, Lisa Wilson, Janet Lambert, Mei Wang, Christopher Hill, Christopher R. McCurdy, Mahmoud ElSohly, Stephen J. Cutler, Ilias Muhammad. In Vitro Opioid Receptor Affinity and in Vivo Behavioral Studies of *Nelumbo nucifera* Flower. *Journal of Ethnopharmacology* 2015, 174, 57-65.
64. Manda VK, Avula B, Chittiboyina AG, Khan IA, Walker LA, Khan SI., Inhibition of CYP3A4 and CYP1A2 by *Aegle marmelos* and its constituents. *Xenobiotica*. 2015 Aug 6: 1-9. [Epub ahead of print].
65. McGowan JW, Bidwell GL 3rd, Vig PJ. Challenges and new strategies for therapeutic peptide delivery to the CNS. *Ther Deliv.* 2015 Jul; 6(7):841-53. doi:10.4155/tde.15.30. Review. PubMed PMID:26228775.
66. Mizuno CS, Souza AB, Tekwani BL, Ambrósio SR, Veneziani RC. Synthesis and biological evaluation of polyalthic acid derivatives for the treatment of neglected diseases. *Bioorg Med Chem Lett.* 2015 Dec 1; 25(23):5529-31. doi:10.1016/j.bmcl. 2015.10.062. Epub 2015 Oct 21. PubMed PMID:26520665.
67. Mohamed SM, Bachkeet EY, Bayoumi SA, Jain S, Cutler SJ, Tekwani BL, Ross SA. Potent antitrypanosomal triterpenoid saponins from *Mussaenda luteola*. *Fitoterapia*. 2015 Dec; 107:114-21. doi:10.1016/j.fitote. 2015.10.011. Epub 2015 Oct 30. PubMed PMID:26524249.
68. Morgan RK, Batra H, Gaerig VC, Hockings J, Brooks TA. Identification and characterization of a new G-quadruplex forming region within the kRAS promoter as a transcriptional regulator. *Biochim Biophys Acta*. 2015 Nov 18. pii: S1874-9399(15)00243-6. doi:10.1016/j.bbagr.2015.11.004. [Epub ahead of print] PubMed PMID:26597160.
69. Morgan, RK; Hockings, J; Gaerig, VC; Greer, KM; Kothalawala, N; Dass, A; Brooks, TA. "New transcriptionally silencing G-quadruplex formations within the kRAS promoter", *BBA-Gene Regulatory Mechanisms*. 2015 Nov 18, pii:S1874-9399(15)00243-6. e-pub ahead of print. PMID:26597160.
70. Mubashir Masoodi, Zulfiqar Ali, Shuang Liang, Hongquan Yin, Wei Wang, Ikhlas A. Khan, Labdane diterpenoids from *Marrubium vulgare*, *Phytochemical Society of Europe*, 2015 doi:10.1016/j.phytol.2015.07.005.
71. Mukherjee D, Singh CB, Dey S, Mandal S, Ghosh J, Mallick S, Hussain A, Swapana N, Ross S, Pal C. Induction of apoptosis by zerumbone isolated from *Zingiber zerumbet* (L.)



Smith in protozoan parasite *Leishmania donovani* due to oxidative stress. *Braz J Infect Dis*. 2015 Nov 28. pii: S1413-8670(15)00203-2. doi:0.1016/j.bjid. 2015.10.002. [Epub ahead of print] PubMed PMID:26643969.

72. Nesma M. Mohamed, Makboul A. Makboul, Salwa F. Farag, Surendra Jain, Melissa R. Jacob, Babu L. Tekwani, Samir A. Ross, Triterpenes from the roots of *Lantana montevidensis* with antiprotozoal activity, *Phytochemical Society of Europe*, 2015 doi10.1016/j.phytol2015.11.008.
73. Nicholson H, Comeau A, Mesangeau C, McCurdy CR, Bowen WD. Characterization of CM572, a Selective Irreversible Partial Agonist of the Sigma-2 Receptor with Antitumor Activity. *J Pharmacol Exp Ther*. 2015 Aug; 354(2):203-12. doi:10.1124/jpet.115.224105. Epub 2015 Jun 1. PubMed PMID:26034081; PubMed Central PMCID: PMC4518069.
74. Palem CR, Dudhipala NR, Battu SK, Repka MA, Rao Yamsani M. Development, optimization and in vivo characterization of domperidone-controlled release hot-melt-extruded films for buccal delivery. *Drug Dev Ind Pharm*. 2015 Nov 4:1-12. [Epub ahead of print] PubMed PMID:26530127.
75. Parveen I, Wang M, Zhao J, Chittiboyina AG, Tabanca N, Ali A, Baerson SR, Techen N, Chappell J, Khan IA, Pan Z. Investigating sesquiterpene biosynthesis in *Ginkgo biloba*: molecular cloning and functional characterization of (E,E)-farnesol and  $\alpha$ -bisabolene synthases. *Plant Mol Biol*. 2015 Nov; 89(4-5):451-62. doi:10.1007/s11103-015-0381-3. Epub 2015 Oct 6. PubMed PMID:26442918.
76. Pathomwachaiwat, T., Ochareon, P., Soonthornchareonnon, N., Ali, Z., Khan, I. A., Prathanturarug, S. Alkaline phosphatase activity-guided isolation of active compounds and new dammarane-type triterpenes from *Cissus quadrangularis* hexane extract. *J. Ethnopharmacol*. 2015; 160, 52-60.
77. Patil H, Tiwari RV, Repka MA. Hot-Melt Extrusion: from Theory to Application in Pharmaceutical Formulation. *AAPS PharmSciTech*. 2015 Jul 10. [Epub ahead of print] PubMed PMID:26159653.
78. Patil HG, Tiwari RV, Repka MA, Singh KK. Formulation and development of orodispersible sustained release tablet of domperidone. *Drug Dev Ind Pharm*. 2015 Oct 16: 1-10. [Epub ahead of print] PubMed PMID:26472165.
79. Priyanto A.D.; Doerksen R.J.; Chang C.I.; Lin Y-C; Wang T-C; Widjanarko S.B.; Kusnadi J; Hsu J-L "Screening, discovery, and characterization of angiotensin-I converting enzyme inhibitory peptides derived from proteolytic hydrolysate of bitter melon seed proteins," *Journal of Proteomics*, (2015); 128, 424-435; doi:10.1016/j.jprot.2015.08.018.
80. Priyanto A.D.; Doerksen R.J.; Chang C.I.; Lin Y-C; Wang T-C; Widjanarko S.B; Kusnadi J; Hsu J-L "Data in support of optimized production of angiotensin-I converting enzyme inhibitory peptides derived from proteolytic hydrolysate of bitter melon seed proteins," *Data in Brief*, (2015) 5, 403-407 doi:10.1016/j.dib.2015.09.038.
81. Punyamurthula NS, Hingorani T, Adelli G, Gul W, ElSohly MA, Repka MA, Majumdar S. Controlled release tablet formulation containing natural  $\Delta(9)$ -tetrahydrocannabinol. *Drug Dev Ind Pharm*. 2015 Dec 7:1-7. [Epub ahead of print] PubMed PMID:26585693.
82. Raman V, Sagi S, Galal AM, Avula B, Viljoen A, Khan IA. Adulteration in commercial buchu dietary supplements: Analyses of commercial and authentic buchu samples and

comparative studies of *Agathosma betulina* and *Agathosma crenulata* by microscopy and HPTLC. *S Afr J Bot.* 2015 Sep 30; 100:122-13. doi:10.1016/j.sajb.2015.05.012.

83. Ravu RR, Jacob MR, Jeffries C, Tu Y, Khan SI, Agarwal AK, Guy RK, Walker LA, Clark AM, Li XC. LC-MS- and <sup>1</sup>H NMR spectroscopy-guided identification of antifungal diterpenoids from *Sagittaria latifolia*. *J. Nat. Prod.* 2015, 78: 2255-2259.
84. Rehman JU, Tabanca N, Khan IA. A Novel in vitro Bioassay to Explore the Repellent Effects of Compounds Against Mosquito *Aedes aegypti* (Diptera: Culicidae). *J Med Entomol.* 2015 Nov 20. pii: tjv182. [Epub ahead of print] PubMed PMID:26590191.
85. Riche DM, Davis C. EXAMINE: targeting risk and treatment in diabetes. *Lancet.* 2015 Oct 10; 386(10002):1443-4. doi:10.1016/S0140-6736(15)00406-7. PubMed PMID:26466041.
86. Rosenthal M, Holmes E, Banahan B 3rd. Making MTM implementable and sustainable in community pharmacy: Is it time for a different game plan? *Res Social Adm Pharm.* 2015 Jul 30. pii: S1551-7411(15)00151-5. doi:10.1016/j.sapharm.2015.07.006. [Epub ahead of print] PubMed PMID:26311321.
87. Rosenthal M, Holmes E, Banahan B. Making MTM implementable and sustainable in community pharmacy: is it time for a difference game plan? *Research in Social and Administrative Pharmacy* 2015; DOI: [doi.org/10.1016/j.sapharm.2015.07.006](https://doi.org/10.1016/j.sapharm.2015.07.006).
88. Rounak Nande, Candace M. Howard, Pier Paolo Claudio, Ultrasound-mediated oncolytic virus delivery and uptake for increased therapeutic efficacy: state of the art, *Oncolytic Virotherapy* 2015: 4 193-205, doi 10.2147/OV.S66097.
89. Sabrin R.M. Irahim, Ehab S. Elkhayat, Gamal A. Mohamed, Amgad I.M. Khedr, Mostafa A. Fouad, Mohamed H.R. Kotb, Samir Ross; "Aspernolides F and G, new butyrolactones from the endophytic fungus *Aspergillus terreus*. *Phytochemical Society of Europe*, 2015, 1875-3900.
90. Sagi S, Avula B, Wang YH, Khan IA. Quantification and characterization of alkaloids from roots of *Rauwolfia serpentina* using ultra-high performance liquid chromatography-photo diode array-mass spectrometry. *Anal Bioanal Chem.* 2015 Oct 17. [Epub ahead of print] PubMed PMID:26476922.
91. Shah R, Yang Y. Health and Economic Burden of Obesity in Elderly Individuals with Asthma in the United States. *Population Health Management.* 2015; June 18 (3): 186-191.
92. Shaymaa M. M. Mohamed, Enaam Y. Bachkeet, Soad A. Bayoumi, Surendra Jain, Babu L. Tekwani, Stephen J. Cutler, Samir A. Ross. Potent Antitrypanosomal Triterpenoid Saponins from *Mussaenda luteola*. *Fitoterapia* 107, 114-121, 2015. doi:10.1016/j.fitote.2015.10.011.
93. Shaymaa M. Mohamed, Khaled M. Elokely, Enaam Y. Bachkeet, Soad A.L. Bayoumi, Vincenzo Carnevale, Michael L. Klein, Stephen J. Cutler, and Samir A. Ross. New Glycosides and Trypanocidal Metabolites from *Vangueria edulis*. *Natural Products Communications* 2015 10(11), 1897-1900.
94. Shi YN, Shi YM, Yang L, Li XC, Zhao JH, Qu Y, Zhu HT, Wang D, Cheng RR, Yang CR, Xu M, Zhang YJ. Lignans and aromatic glycosides from *Piper wallichii* and their antithrombotic activities. *J. Ethnopharmacol.* 2015, 162:87-96.

95. Slattery M, Gochfeld DJ, Diaz MC, Thacker RW, Lesser MP (2015) Variability in chemical defense across a shallow to mesophotic depth gradient in the Caribbean sponge *Plakortis angulospiculatus*. *Coral Reefs*. DOI:10.1007/s00338-015-1324-9.
96. Slominski A.T., Li W., Kim T.K., Semak I., Wang J, Zjawiony J.K., Tuckey R.C..” Novel activities of CYP11A1 and their potential physiological significance”, *J. Steroid Biochem. Mol. Biol.*, 2015, 151, 25-37
97. Slominski AT, Li W, Kim TK, Semak I, Wang J, Zjawiony JK, Tuckey RC. Novel activities of CYP11A1 and their potential physiological significance. *J Steroid Biochem Mol Biol*. 2015 Jul; 151:25-37. doi:10.1016/j.jsbmb.2014.11.010. Epub 2014 Nov 13. Review. PubMed PMID:25448732.
98. Suleimen E.M., Dudkin R.V., Gorovoi P.G., Wang M., Khan I and Ross S.A.; Constituent Compositions of Essential Oils From *Artemisia littorcola* AND *A. mandshurica*; *Chemistry of Natural Compounds*, 2015 July, doi10.1007/s10600-015-1414-5.
99. Tabanca, N., Demirci, B., Ali, A., Ali, Z., Blythe, E. K., Khan, I. A. Essential oils of green and red *Perilla frutescens* as potential sources of compounds for mosquito management. *Ind. Crops Prod*. 2015; 65, 36-44.
100. Tabanca, N., Demirci, B., Ali, A., Khan, S.I., Jacob, M.R., Aytac, Z., Khan, I.K. Chemical Composition, Biting Deterrent, Antimalarial and Antimicrobial Activity of Essential Oil from *Hypericum scabrum* L. *Current Bioactive Comp*. 2015; 11 (2) 62-72.
101. Tiwari RV, Polk AN, Patil H, Ye X, Pimparade MB, Repka MA. Rat Palatability Study for Taste Assessment of Caffeine Citrate Formulation Prepared via Hot-Melt Extrusion Technology. *AAPS PharmSciTech*. 2015 Nov 16. [Epub ahead of print] PubMed PMID:26573158.
102. Tuan NQ, Lee W, Oh J, Kulkarni RR, Gény C, Jung B, Kang H, Bae JS, Na M. Flavanones and Chromones from *Salicornia herbacea* Mitigate Septic Lethality via Restoration of Vascular Barrier Integrity. *J Agric Food Chem*. 2015 Nov 25; 63(46):10121-30. doi:10.1021/acs.jafc.5b04069. Epub 2015 Nov 11. PubMed PMID:26522440.
103. Viljoen, A.; Zhao, J.; Sandasi, M.; Chen, W.; Khan, I. Phytochemical distinction between *Pelargonium sidoides* (“Umckaloabo”) and *P. reniforme* through <sup>1</sup>H-NMR and UHPLC–MS metabolomic profiling. *Metabolomics*, 2015, 11, 594-602.
104. Vo AQ, Feng X, Morott JT, Pimparade MB, Tiwari RV, Zhang F, Repka MA. A Novel Floating Controlled Release Drug Delivery System Prepared by Hot-Melt Extrusion. *Eur J Pharm Biopharm*. 2015 Nov 28. pii: S0939-6411(15)00487-7. doi:10.1016/j.ejpb.2015.11.015. [Epub ahead of print] PubMed PMID:26643801.
105. Wali AF, Avula B, Ali Z, Khan IA, Mushtaq A, Rehman MU, Akbar S, Masoodi MH. Antioxidant, Hepatoprotective Potential and Chemical Profiling of Propolis Ethanolic Extract from Kashmir Himalaya Region Using UHPLC-DAD-QToF-MS. *Biomed Res Int*. 2015; 2015:393462. doi:10.1155/2015/393462. Epub 2015 Oct 11. PubMed PMID:26539487; PubMed Central PMCID: PMC 4619790.
106. Wanner, J., N. Tabanca, M. Zehl, L. Jirovetz, E. Schmidt, A. Patschka, A. Ali, A. S. Estep, J. J. Becnel, A. Y. Li and I. A. Khan. Investigations into the Chemistry and

Insecticidal Activity of *Euonymus europaeus* Seed Oil and Methanol Extract. *Current Bioactive Comp.* 2015; 11: 13-22.

107. Waseem Gul, Ahmed Galal, Mahmoud A. ElSohly and Paulo Carvalho, Crystal structure of (9S, 10S)-10-ethoxy-9-hydroxy-6,6,9-trimethyl-3-pentyl-7,8,9,10-tetrahydro-6H-benzo[c]chromen-1-yl 4-methylbenzenesulfonate; *Acta Crystallographica* (2015). E71,o1082-o1083.
108. Waters AL, Oh J, Place AR, Hamann MT. Stereochemical Studies of the Karlotoxin Class Using NMR Spectroscopy and DP4 Chemical-Shift Analysis: Insights into their Mechanism of Action. *Angew Chem Int Ed Engl.* 2015 Nov 16. doi:10.1002/anie.201507418. [Epub ahead of print] PubMed PMID:26568046.
109. Weiblen GD, Wenger JP, Craft KJ, ElSohly MA, Mehmedic Z, Treiber EL, Marks MD. Gene duplication and divergence affecting drug content in *Cannabis sativa*. *New Phytol.* 2015 Dec; 208(4):1241-50. doi:10.1111/nph.13562. Epub 2015 Jul 17. PubMed PMID:26189495.
110. White K.L., Robinson J.E., DiBerto J., Frederick J., Polepally P.R., Zjawiony J.K., Nichols D., Malanga C.J., Roth B.L. "The G-protein biased k-opioid receptor agonist RB-64 is analgesic with a unique spectrum of activities in vivo", *J. Pharmacol Exp. Ther.*, 2015, 352, 98-109.
111. Xie B, Sharp JS. Hydroxyl Radical Dosimetry for High Flux Hydroxyl Radical Protein Footprinting Applications Using a Simple Optical Detection Method. *Anal Chem.* 2015 Nov 3;87(21):10719-23. doi:10.1021/acs.analchem.5b02865. Epub 2015 Oct 15. PubMed PMID:26455423; PubMed Central PMCID: PMC4631671.
112. Ye X, Patil H, Feng X, Tiwari RV, Lu J, Gryczke A, Kolter K, Langley N, Majumdar S, Neupane D, Mishra SR, Repka MA. Conjugation of Hot-Melt Extrusion with High-Pressure Homogenization: a Novel Method of Continuously Preparing Nanocrystal Solid Dispersions. *AAPS PharmSciTech.* 2015 Aug 18. [Epub ahead of print] PubMed PMID:26283197.
113. Yu Q, Ravu RR, Xu Q, Ganji S, Jacob MR, Khan S, Yu BY, Li XC. Antibacterial prenylated acylphloroglucinols from *Psoralea corymbosa*. *J. Nat. Prod.*, 2015, 78, 2748-2753.
114. Zhang ZH, Wei F, Vaziri ND, Cheng XL, Bai X, Lin RC, Zhao YY. Metabolomics insights into chronic kidney disease and modulatory effect of rhubarb against tubulointerstitial fibrosis. *Sci Rep.* 2015 Sep 28; 5:14472. doi:10.1038/srep14472. PubMed PMID: 26412413; PubMed Central PMCID: PMC4585987.
115. Zheng Huang, Zhi-Xiang Zhu, Yue-Ting Li, Dao-Ran Pang, Jiao Zheng, Qian Zhang, Yun-Fang Zhao, Daneel Ferreira, Jordan Zjawiony, Peng-Fei Tu, Jun Li, "Anti-inflammatory Labdane Diterpenoids from *Leonurus macranthus*" *J. Nat. Prod.* 2015, 78, 2276-2285.