## Radha Munagala, Ph.D.

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#### **EDUCATION**

May 1997	B.Sc. (Genetics, Chemistry & Microbiology) - Osmania University, Hyderabad, India				
Jan 1999	PGDCA (Computer Science) - Pondicherry University, Pondicherry, India				
Jun 2000	M.Sc. (Biochemistry) - Periyar University, Salem, India				
Jan 2002	M.Phil (Biochemistry) - Avinashilingam University, Coimbatore, India				
Jul 2008	Ph.D. (Biochemistry) - Madras University, Chennai, India				

### **ACADEMIC APPOINTMENTS**

Aug 2014 -	Assista	ant F	rofe	SSC	or, [	Эер:	art	men	t of	Medicine,
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University of Louisville, Louisville, KY

Oct 2012 - July 2014	Instructor, Department of Medicine,
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University of Louisville, Louisville, KY

Oct 2007 - Sep 2012 Post-Doctoral Associate, JG Brown Cancer Center,

University of Louisville, Louisville, KY

#### OTHER POSITIONS AND EMPLOYMENT

Jan 2003 - Jul 2003 Biochemist (trainee), R & D

Kemin Nutritional Technologies Pvt. Ltd., Chennai, TN, India

Sep 2003 - Dec 2003 Research Assistant

Diabetes Research Centre & MV Hospital for Diabetes,

Chennai, India

Aug 2004 - May 2005 Research Assistant

K. J. Hospital Research and PG Center, Chennai, India

### **CERTIFICATION AND LICENSURE**

N/A

### PROFESSIONAL MEMBERSHIPS AND ACTIVITIES

- 2007 14 American Association for Cancer Research
- 2014 International Society of Extracellular Vesicles (ISEV)
- 2013 American Society of Clinical Oncology (ASCO) (Member in Training)

#### **HONORS AND AWARDS**

- 2000 Secured University IX Rank in M.Sc. from Periyar University, Salem, Tamil Nadu, India.
- 2005 07 Awarded Research Fellowship by Rameshwardasji Birla Smarak Kosh, Medical Research center, Mumbai, India.
- 2007 Awarded Visiting Scholarship (Jan 2007 Apr 2007) by the Department of Pharmacology and Toxicology, James Brown Cancer Center, University of Louisville, Louisville, KY, USA
- 2010 Ralph Scott Fellow Basic Research 2<sup>nd</sup> Prize for poster presentation at 9<sup>th</sup> Annual Retreat, James Graham Brown Cancer Center, University of Louisville.
- 2011 Gesellschaft für Umwelt- Genetic Toxicology und Mutationsforschung (GUM) Travel award
- 2011 Graduate Student Scholarship Travel Grant University of Louisville
- 2011 Health Science Campus Research Committee Travel Award University of Louisville
- 2011 Center for Genetics and Molecular Medicine (CGeMM) Travel award— University of Louisville
- 2011 Judges' Travel Subsidy award for the 2011 Annual Biomedical Research Conference for Minority Students (ABRCMS)
- 2014 Travel Award Brown Cancer Center for attending ISEV International meeting (Rotterdam, The Netherlands)

## Special recognition

Research article - Antioxidant and antiproliferative potential of anthocyanins/ ellagitannins-enriched extracts from *Eugenia jambolana* Lam. ('jamun', the Indian Blackberry) (Nutrition and Cancer. 2012; 64: 428-438) - featured in Nutrition Frontier, a quarterly publication of the Nutritional Science Research Group (NSRG), National Cancer Institute (NCI) and National Institute of Health (NIH). This is one of only two articles selected by NSRG program staff based on scientific merit, innovation, and potential public health impact.

2013 Research article - MicroRNA 'signature' during estrogen-mediated mammary carcinogenesis and its reversal by ellagic acid intervention (Cancer Letters.2013; 175: 175) - featured in Nutrition Frontiers.

#### COMMITTEE ASSIGNMENTS AND ADMINISTRATIVE SERVICES

None

#### **EDUCATIONAL ACTIVITIES**

2010 - 12 Judge at 'Research! Louisville', annual meeting poster presentation of graduate and post-doctoral fellows, University of Louisville.

Judged poster presentation of undergraduate students at Annual Biomedical Research Conference for Minority Students (ABRCMS) (2011) held at St. Louis, MO.

## Mentoring High School/Undergraduate students/clinical fellow

## Twisha Joshi- High-school student student

Feb 2009 - Aug 2009

Provided training on "Evaluation of Antioxidant and Anti-proliferative Activity of Several Natural Compounds In Vitro"

This work has been presented in various regional and national meetings

- Awarded 1<sup>st</sup> prize in Life Science Category, Life Sciences category at Kentucky Science and Engineering Fair 2010.
- Awarded 3<sup>rd</sup> prize in Best of Fair Winners, Life Sciences category at Kentucky Science and Engineering Fair 2010.

### Cameron Campbell- Undergrad student

June 2013- Aug 2013

Provided training on the project "Role of Exosomes in Tumor Growth and Metastasis"

This work was presented in Research Louisville 2013 meeting

Awarded 3rd place in undergrad category.

### **Kendall Huddleston -** Undergrad student

May 2014- Aug 2014

Providing training on the project "Biomarker significance of exosomes during breast cancer initiation and progression"

#### **CLINICAL ACTIVITIES**

None

#### **GRANTS AND CONTRACTS**

#### **Active grants**

DOD Breast Cancer Research Program Breakthrough Award Gupta RC (PI)

7/14-6/17

Title: "Prevention and Treatment of Breast Cancer by Blueberry Anthos"

Effort: 40%

Role: CO-INVESTIGATOR

## Pending (02)

 DOD Breast Cancer Research Program Breakthrough Award Munagala R (PI) 9/15-6/18

<u>Title:</u> "Role of tumor-derived exosomes in breast cancer metastasis and angiogenesis"

Effort: 25%

Role: PRINCIPLE-INVESTIGATOR

 Commonwealth of Kentucky Lung Cancer Research Program Cycle 14 Aqil F (PI) 2/15-1/17

Title: "Chemosensitization of Lung Cancer by Berry Anthocyanidins"

Effort: 5%

Role: CO-INVESTIGATOR

### **Previous grants** (02)

• KY Lung Cancer Res. Board Gupta RC (PI) 9/7-2/1

<u>Title</u>: "Effect of estrogen on polycyclic aromatic hydrocarbon (PAH)-mediated lung

cancer"

Role: KEY PERSONNEL

NIH R21 Grant
Vadhanam MV (PI)

8/10 -7/13

<u>Title</u>: "Identification and synergism of bioactive components of pomegranate juice in

prostate cancer" NIH Role: KEY PERSONNEL

#### **PATENTS**

International Patent submitted: Gupta, R.C., Munagala, R., Aqil, F., Jeyabalan, J. Milk-derived microvesicle compositions and related methods. U. S. Provisional Patent Application Serial No. 61/769,551; ULRF Ref. No. 13027; C/M Code: UN024/13027

#### **EDITORIAL WORK**

#### **Journal Editorial Board**

- Associate editor International Journal of Molecular Biology
- Associate editor Scientific Journals International (SJI)
- Regional editor Molecular Enzymology and Drug Targets

#### **Peer Reviewer**

- Cancer Letters
- Indian Journal of Pharmacology (IJP)
- Chemistry, Biochemistry and Polymer Science
- Journal of Extracellular Vesicles
- Scientific Journal of Biological Science
- The International Journal of Neuroscience
- International Journal of Molecular biology
- International Research Journal of Microbiology
- PlosOne
- Gynecologic Oncology Case Reports
- Molecular Oncology
- Saudi Journal of Biological Sciences
- Expert Opinion On Drug Metabolism & Toxicology

#### ABSTRACTS AND PRESENTATIONS

#### **ORAL PRESENTATIONS**

2012 - Invited talk: The Biophysical and Structural Biology seminar series - "Chemoprevention Strategies for Cervical Cancer."

#### **POSTERS**

#### **National/International Meetings**

- 1. **Munagala R** and Bala N. (2006) Molecular studies in cancer cervix patients through radiation therapy
- 2. **Munagala R**, Ravoori S, Bala N, Gupta RC. (2008) Modulation of cervix DNA adducts ("adductomics") in cancer patients through radiation therapy Proc Am Assoc Cancer Res Vol 49: Abst 4714.
- Munagala R, Kausar H, Gupta RC. (2009) Mechanism of apoptosis induced by withaferin A in human cervical cancer cell lines Proc Am Assoc Cancer Res Vol 50: Abst 3903.

- 4. Kausar H, **Munagala R** and Gupta RC. (2009) Growth inhibition of Human lung cancer cells by Cucurbitacin B: Potential mechanisms Proc Am Assoc Cancer Res Vol 50: Abst 3896.
- 5. **Munagala R**, Ravoori S, Ganesharajah S, Bala N, Gupta RC. (2010) Modulation of DNA adducts in cervix specimens during radiotherapy in cervical cancer patients and its prognostic importance. Mutagenesis, Abst P32.
- 6. Gupta RC, **Munagala R**, Vadhanam MV, Chagpar A, Fleming M, Fink B, Gridley M, Henry Vasconez. (2010) "Adductomics": DNA adduct profiling in human normal and tumor breast tissues. Mutagenesis, Abst O12.
- 7. Gupta, R.C., Bansal, SS., Aqil, F., Cao, P., Jeyabalan, J., Russell, G., Kausar, H., **Munagala, R**., Ravoori, S. and Vadhanam, M.V. (2010) Continuous ("24/7") systemic delivery of chemopreventive agents by polymeric implants a novel concept. DDNPTM November 2010, NIPER, S.A.S. Nagar, INDIA.
- 8. **Munagala R**, Aqil F, Jeyabalan J, Vadhanam MV, Gupta RC (2010) Increased antitumor activity by novel systemic delivery and molecular targets of Tanshinone II A Proc Am Assoc Cancer Res Vol 51: Abst 5690.
- Munagala R, Vadhanam MV, Chagpar A, Fleming M, Fink B, Gridley M, Henry Vasconez, Gupta RC (2010) Elevated DNA adducts detected in human breast tumors than normal tissues from mammoplasty Proc Am Assoc Cancer Res Vol 51: Abst 1701.
- 10. Aqil F, Jeyabalan J, **Munagala R**, Ravoori S, Vadhanam MV, Gupta RC. (2010) Chemoprevention of rat mammary carcinogenesis by Apiaceae spices: Potential mechanisms, Proc Am Assoc Cancer Res Vol 51: Abst 1879.
- 11. **Munagala R**, Vadhanam MV, Kausar H, Bansal SS, F Aqil F, Jeyabalan J, Ravoori S and Gupta RC (2011) MicroRNA 'signature' during estrogen-mediated mammary carcinogenesis Proc Am Assoc Cancer Res Vol 52: Abst 3587.
- 12. Aqil F, **Munagala R**, Jeyabalan J, Vadhanam MV and Gupta RC (2011) Enhanced bioactivity of punicalagins by polymeric implants against benzo[a]pyrene-induced DNA adducts *in vivo* Proc Am Assoc Cancer Res Vol 52: Abst 3711.
- 13. Gupta A, Aqil F, Kausar H, **Munagala R**, Jeyabalan J, , Sharma R, Singh IP and Gupta RC (2011) Chemopreventive activities of the dark-color fruit 'jamun', the Indian blackberry Proc Am Assoc Cancer Res Vol 52: Abst 4619 (**Awarded 1**<sup>st</sup> **prize**).
- 14. **Munagala R** and Gupta RC. (2011) Modulation of DNA adducts in cervix specimens during radiotherapy in cervical cancer patients and its prognostic importance, Mutagenesis vol. 26 no. 5 pp. 689–722.
- 15. **Munagala, R.**, Aqil, F., Gupta, R.C., Higashi, R. and Vadhanam, M.V. (2012) Pomegranate components modulate distinct pathways in prostate cancer cells. Proc Am Assoc Cancer Res. Vol 53: Abst # 12-A-3833-AACR.

- Aqil, F., Jeyabalan, J., Munagala, R., Ravoori, S., Vadhanam, M.V. and Gupta, R.C. (2012) Prevention of breast cancer by spices: Involvement of miRNAs and other molecular targets. Proc Am Assoc Cancer Res. Vol 53: Abst # 12-A-5804-AACR.
- 17. Aqil, F., Jeyabalan, J., **Munagala, R.**, Ravoori, S., Sharma, R., Sidana, J., Singh, I.P. and Gupta, R.C. (2012) Breast cancer chemoprevention by 'Jamun', the Indian blackberry: Potential mechanisms. Proc Am Assoc Cancer Res. Vol 53: Abst # 12-A-6785-AACR.
- 18. Gupta, R.C., Jeyabalan, J., Aqil, F., Sidana, J., Singh, I.P., **Munagala, R**., and Kausar, H. (2012) 'Color' Therapy Berry anthocyanidins as potential drug for cancer treatment. Accepted for the presentation in DDNPTM November 2012, NIPER, S.A.S. Nagar, India.
- 19. **Munagala, R.**, Aqil, F., Taylor D.D and Gupta, R.C. (2013) Tumor-derived circulatory exosomal miRNAs as biomarkers of recurrent lung tumors. Proc Am Assoc Cancer Res. Vol 54. Abst 1947.
- 20. Aqil, F., **Munagala, R.**, Kausar, H., Jeyabalan, J and Gupta, R.C. (2013) Enhanced activity of chemotherapeutic drugs by blueberry anthocyanidins and withaferin A against human lung cancer cells. Proc Am Assoc Cancer Res. Vol 54. Abst 3678.
- 21. Jeyabalan, J., Aqil, F., **Munagala, R** and Gupta, R.C. (2013) Chemopreventive and therapeutic activity of high anthocyanin-content blueberry against estrogen-mediated breast cancer. Proc Am Assoc Cancer Res. Vol 54. Abst 3705.
- 22. Gupta, R.C., Aqil, F., Kausar, H., Jeyabalan, J., Vadhanam MV. and **Munagala**, R. Therapeutic Potential of Blueberry Anthos ('Color' Therapy). International Berry Health Benefits Symposium, Charlotte, North Carolina, June 18-20, 2013.
- 23. Gupta, R., Aqil, F., Kausar, H., Jeyabalan, J., Vadhanam, M. and **Munagala, R**. (2013). Chemosensitizing Effects of Blueberry Anthocyanidins. 16th International Symposium, October 11-13, 2013, Crete, Greece).
- 24. **Munagala**, **R** and Gupta R.C. (2014) Role of tumor-derived exosomes in growth and metastasis of breast cancer. Proc Am Assoc Cancer Res. Vol 54, Abstract 4957.
- 25. **Munagala, R.,** Campbell, C and Gupta R.C. (2014) Role of exosomes in tumor growth and metastasis of lung cancer. Proc Am Assoc Cancer Res. Vol 54, Abstract 1054.
- 26. Aqil, F., **Munagala, R**., Jeyabalan, J and Gupta, R.C. (2014) Milk derived exosomes: Scalable source of biologically active drug delivery nanoparticles. Proc Am Assoc Cancer Res. Vol 54, Abstract 5407.
- 27. **Munagala, R.**, Aqil, F and Gupta, R.C. Exosomal biomarkers for primary and recurrent lung cancer. Journal of Extracellular Vesicles 2014, 3: 24214 http://dx.doi.org/10.3402/jev.v3. Abst # P4A-181, p: 81.
- 28. **Munagala, R.**, Aqil, F., Jeyabalan, J and Gupta, R.C. Large scale isolation and characterization of bovine milk- and colostrum-derived exosomes. Journal of Extracellular Vesicles 2014, 3: 24214 http://dx.doi.org/10.3402/jev.v3. Abst # P9A-320, p:144.

- 29. **Munagala, R.,** Campbell, C and Gupta R.C. Role of tumor-derived exosomes in growth and metastasis of cancers. Journal of Extracellular Vesicles 2014, 3: 24214 http://dx.doi.org/10.3402/jev.v3. Abst # P1A-018 p: 32.
- 30. **Aqil, F**, Munagala, R., Jeyabalan, J and Gupta, R.C. Biodistribution of milk-derived exosomes and exosomal curcumin, Journal of Extracellular Vesicles 2014, 3: 24214 http://dx.doi.org/10.3402/jev.v3. Abst # P4C-187, p: 84.

## **Local/Regional Meetings**

- 1. **Munagala R**, Ravoori S, Bala N, Gupta RC (2007) Modulation of cervix DNA adducts ("adductomics") in cancer patients through radiation therapy. 6<sup>Th</sup> BCC Retreat, Louisville.
- 2. **Munagala R**, Kausar H, Gupta RC (2009) Mechanism of apoptosis induced by withaferin A in human cervical cancer cell lines. 8<sup>Th</sup> BCC Retreat, Louisville.
- 3. Kausar H, **Munagala R** and Gupta RC (2009) Growth inhibition of Human lung cancer cells by Cucurbitacin B: Potential mechanisms. 8<sup>Th</sup> BCC Retreat, Louisville.
- 4. **Munagala R**, Aqil F, Jeyabalan J, Vadhanam MV, Gupta RC (2010) Increased antitumor activity by novel systemic delivery and molecular targets of Tanshinone II A, 9<sup>Th</sup> BCC Retreat, Louisville **(Awarded II Prize)**.
- 5. Aqil F, Jeyabalan J, **Munagala R**, Ravoori S, Vadhanam MV, Gupta RC. (2010) Chemoprevention of rat mammary carcinogenesis by Apiaceae spices: Potential mechanisms, 9<sup>Th</sup> BCC Retreat, Louisville.
- 6. **Munagala, R.**, Aqil, F., Jeyabalan, J., Vadhanam, M.V., and Gupta, R.C. (2010) Novel Systemic delivery increases anti-tumor activity of Tanshinone IIA and Evidence of involved molecular targets. 9<sup>Th</sup> BCC Retreat, Louisville.
- 7. **Munagala R**, Vadhanam MV, Kausar H, Bansal SS, F Aqil F, Jeyabalan J, Ravoori S and Gupta RC (2011) MicroRNA 'signature' during estrogen-mediated mammary carcinogenesis 10<sup>Th</sup> BCC Retreat, Louisville.
- 8. Aqil F, **Munagala R**, Jeyabalan J, Vadhanam MV and Gupta RC (2011) Enhanced bioactivity of punicalagins by polymeric implants against benzo[a]pyrene-induced DNA adducts *in vivo* 10<sup>Th</sup> BCC Retreat, Louisville.
- 9. Gupta A, Aqil F, Kausar H, **Munagala R**, Jeyabalan J, Sharma R, Singh IP and Gupta RC (2011) Chemopreventive activities of the dark-color fruit 'jamun', the Indian blackberry 10<sup>Th</sup> BCC Retreat, Louisville.
- Munagala, R., Aqil, F., Gupta, R.C., Higashi, R. and Vadhanam, M.V. (2012) Pomegranate components modulate distinct pathways in prostate cancer cells. 11<sup>Th</sup> BCC Retreat, Louisville.
- 11. Aqil, F., Jeyabalan, J., **Munagala, R**., Ravoori, S., Vadhanam, M.V. and Gupta, R.C. (2012) Prevention of breast cancer by spices: Involvement of miRNAs and other molecular targets. 11<sup>Th</sup> BCC Retreat. Louisville.

- 12. Aqil, F., Jeyabalan, J., **Munagala, R.**, Ravoori, S., Sharma, R., Sidana, J., Singh, I.P. and Gupta, R.C. (2012) Breast cancer chemoprevention by 'Jamun', the Indian blackberry: Potential mechanisms. 11<sup>Th</sup> BCC Retreat, Louisville.
- 13. Siow, RJ., Aqil, F., **Munagala, R**. and Gupta, RC. (2012). Sustainable delivery of chemopreventives by biodegradable polymeric implants. Research Louisville, Univ. of Louisville, Louisville, (**Awarded IV Prize**).
- 14. Campbell C., Gupta, RC and **Munagala R** (2013). Role of Exosomes in Tumor Growth and Metastasis. Research Louisville, Univ. of Louisville, Louisville, (Awarded III Prize).
- 15. Aqil, F., **Munagala, R.**, Kausar, H., Jeyabalan, J and Gupta, R.C. (2013) Enhanced activity of chemotherapeutic drugs by blueberry anthocyanidins and withaferin A against human lung cancer cells. 12<sup>Th</sup> BCC Retreat, Louisville.
- 16. Jeyabalan, J., Aqil, F., **Munagala, R** and Gupta, R.C. (2013) Chemopreventive and therapeutic activity of high anthocyanin-content blueberry against estrogen-mediated breast cancer. 12<sup>Th</sup> BCC Retreat, Louisville.
- 17. **Munagala, R.**, Aqil, F., Taylor D.D and Gupta, R.C. (2013) Tumor-derived circulatory exosomal miRNAs as biomarkers of recurrent lung tumors. 12<sup>Th</sup> BCC Retreat, Louisville.

#### **PUBLICATIONS**

### Research Articles Published in Peer- Reviewed Journals

- 1. **Munagala R**, Parvatham R. and Subash A. (2002) Economic, Nutritional and Health Status of the Tannery workers and people living in the nearby area Indian Journal of Environment and Ecoplanning, 6(3), 545-550.
- 2. **Munagala R**, Parvatham R. and Subash A. (2003) Study of Biochemical Parameters, Chromosomal aberrations and sister chromatid exchanges in Tannery Workers and People living in the nearby area Indian Journal of Environment and Ecoplanning, 7(2), 244-247.
- 3. **Munagala R**, Nagarajan B. (2007) Isolation of RNA from cell scrapings and blood samples from cervical cancer patients. Current Science, 93 (2): 138-139.
- 4. **Munagala R**, Karunanithi R, Pugaluendhi V, Panickar TMR, Paul Korath M and Jagadeesan K. (2007) Maggots: Micro-surgeons of wound debridement, Bombay Hospital Journal, 96(2), 126-128.
- 5. Nagarajan B, **Munagala R.** (2008) Modulating Factors in Cervical Carcinogenesis, Asia- pacific oncology and Hematology, Volume-1, Touch Briefings, 58-59.
- 6. **Munagala R**, Nagarajan B. (2008) Alterations in cytokine levels in cervical carcinoma patients through radiation therapy. Current Science, 94 (10): 1292-1296.

- 7. Gupta R, **Munagala R**, Vadhanam MV, Nagarajan B, Ravoori S. (2009) DNA adduct accumulation during the course of human cervical cancer development, and during and after radiotherapy Toxicology Letters, Volume 189, Supplement 1, Page S27.
- 8. **Munagala R**, Dona GM, Rai S, Jenson, A, Bala N, Ghim S and Gupta, RC. (2009) Significance of multiple HPV infection in cervical cancer patients and its impact on treatment response. Int J Oncology 34:263-271. PMID: 19082497.
- 9. **Munagala R**, Rai SN, Ganesharajah S, Nagarajan B, Gupta RC. (2010) Clinico-pathological but not socio-demographic factors affect the prognosis in cervical carcinoma. Oncol Rep. Aug; 24(2):511-20. PMID: 20596641
- Munagala R, Kausar H, Gupta RC. (2011) Withaferin A induces p53-dependent apoptosis by repression of HPV oncogenes and up-regulation of tumor suppressor proteins in human cervical cancer cells, Carcinogenesis, Nov; 32(11):1697-705. PMID: 21859835
- 11. Aqil, F., Gupta, A., **Munagala, R.**, Jeyabalan, J., Kausar, H., Sharma, R., Singh I.P., and Gupta, R.C. (2012) Antioxidant and antiproliferative potential of anthocyanins/ellagitannins-enriched extracts from *Eugenia jambolana* Lam. ('jamun', the Indian Blackberry), Nutr Cancer, Apr; 64(3):428-38. PMID: 22420901
- 12. Gupta R, Bansal, S. Aqil, F. Jeyabalan, J., Cao, P., Russel, GK., **Munagala, R.**, Ravoori, S. and Vadhanam, MV. (2012) Controlled-release systemic delivery a new concept in cancer chemoprevention. Carcinogenesis, Aug; 33(8):1608-15. PMID: 22696595
- 13. Aqil, F., **Munagala, R.**, Kausar, H., Jeyabalan, J., Vadhanam, M.V. and Gupta, R.C. (2012) Anti-proliferative and antioxidant activity of punical against and its protection against oxidative DNA adducts. Food Res Int, Nov; 49(1): 345-353. PMID: 23493479
- Kausar, H. Munagala, R. Bansal, S. Vadhanam, MV, Aqil, F. and Gupta, R.C. (2013) Cucurbitacin B potently suppresses non-small-cell lung cancer growth: identification of intracellular thiols as critical targets, Cancer Letters May; 332(1):35-45. PMID: 23340170
- 15. **Munagala, R.**, Aqil, F., Vadhanam, MV, and Gupta, R.C. (2013) MicroRNA 'signature' during estrogen-mediated mammary carcinogenesis and its reversal by ellagic acid intervention, Cancer Letters, 339, 175-184, 2013. PMID: 23791885
- Jeyabalan, J., Aqil, F., Munagala, R., Annamalai, L., Vadhanam, M.V. and Gupta, R.C. (2014) Chemopreventive and therapeutic activity of dietary blueberry against estrogen-mediated breast cancer. J. Agric. Food Chem. [Epub ahead of print] PMID: 24245576
- 17. **Munagala R**, Aqil F, Jeyabalan J, Vadhanam MV, Gupta RC. (2014) Increased antitumor activity by novel systemic delivery and molecular targets of Tanshinone II A. Cancer Letters 356 (2015) 536–546. PMID: 25304375

#### **Review Articles**

- Munagala, R., Aqil, F. and Gupta, R.C. (2011) Promising Molecular Targeted Therapies in Breast Cancer. Indian Journal of Pharmacology 43: 236-245 (<u>Featured on the Cover of the Journal</u>). PMID: 21713084
- Aqil F, Munagala R, Jeyabalan J and Vadhanam MV. (2013) Drug Delivery Systems to Enhance Bioavailability of Phytochemicals. Cancer Letters June; 334 (1): 133– 141. PMID: 23435377

## Articles <u>under consideration</u> in Peer-Reviewed Journals

1. **Munagala, R.**, Aqil, F., Jeyabalan, J., and Gupta, R.C. (2014) Scalable milk-derived exosomes for drug delivery. (Science Translational Medicine)

## **Articles in preparation**

- 1. **Munagala, R.**, Aqil, F., Gupta, R.C., Higashi, R. and Vadhanam, M.V. (2014) Pomegranate components modulate distinct pathways in prostate cancer cells.
- 2. **Munagala R**, Vadhanam MV, Chagpar A, Fleming M, Fink B, Gridley M, Henry Vasconez, Gupta RC (2014) Elevated DNA adducts detected in human breast tumors than normal tissues from mammoplasty.
- 3. Aqil, F., **Munagala, R**., Kausar, H., Jeyabalan, J and Gupta, R.C. (2014) Enhanced activity of chemotherapeutic drugs by blueberry anthocyanidins and withaferin A against human lung cancer cells.
- 4. Aqil, F., Jeyabalan, J., **Munagala, R**., Ravoori, S., Vadhanam, MV. and Gupta RC. (2014) Prevention of breast cancer by *Cuminum cyminum*: Involvement of miRNA and other molecular targets.
- 5. Aqil, F., Jeyabalan, J., **Munagala, R**., Ravoori, S. and Gupta RC. (2014) Breast cancer chemoprevention by *Syzygium cumini* "Jamun"; the Indian blackberry: Potential mechanisms.
- 6. **Munagala R**, Aqil F, Taylor DD and Gupta RC (2014) Tumor-derived circulatory exosomal miRNAs as biomarkers of recurrent lung tumors.
- 7. **Munagala R**, Aqil F and Gupta RC (2014) Chemosensitization of Breast cancer cells to taxol by Withaferin A.
- 8. Munagala R, Aqil F and Gupta RC (2014) Role of exosomes in cancer metastasis

# **Book Chapters**

 Environmental Biotechnology (2004) A Study of Biochemical Parameters, Chromosomal Aberration and Sister Chromatid Exchange in Tannery Workers and People Living Near the Tanner Units by Munagala R, Parvatham, R and Subhash A, 2004. ISBN: 817035336X.

- 2. A Study of Biochemical Parameters, Chromosomal Aberration and Sister Chromatid Exchange in Tannery Workers and People Living Near the Tanner Units, *Industrial Pollution and Management.* **Munagala R**, Parvatham, R and Subhash A, 2004, 209-215. ISBN: 817648-774-0.
- 3. The Indian Blackberry ('Jamun'), antioxidant capacity and cancer protection. Aqil F, **Munagala R**, Jeyabalan J, Joshi T, Singh IP and Gupta RC, Cancer Oxidative Stress and Dietary Antioxidants 2014, 101–113

#### **WORKSHOP/TRAINING ATTENDED**

- 1. National Symposium on "Current Scenario in the applications of Tissue" 12<sup>th</sup> Dec 1998, held at Avinashilingam Deemed University, Coimbatore, Tamil Nadu, India.
- 2. State level two-day crash course on "Applied Biology- an update" 10-11<sup>th</sup> Oct 1998, held at K.S.R. College of Arts and Science, Thiruchengodu, Tamil Nadu, India.
- 3. National Seminar on "Gender Equity Critical areas on Concern" 23<sup>rd</sup> Sep 2000, held at Avinashilingam Deemed University, Coimbatore, Tamil Nadu, India
- 4. 8th National Seminar on "Science of Human Development Focus: Healthy Mind, Healthy Body" 4-5<sup>th</sup> Oct 2000, held at Avinashilingam Deemed University, Coimbatore, Tamil Nadu, India.
- 5. One-Day Symposium on "Transgenesis" 12<sup>th</sup> Feb 2001, held at Avinashilingam Deemed University, Coimbatore, Tamil Nadu, India
- 6. Two-Day International Symposium on "Mutagenesis and Public Health", XXXI Annual Conference of Environmental Mutagen Society of India February 23- 25<sup>th</sup>, 2006, Uppal, Hyderabad, Andhra Pradesh, India.
- 7. Pfizer sponsored Investigator Training Program Workshop on principle of ICH-GCP, University of Louisville, Louisville, KY, March 30<sup>th</sup>, 2012.
- 8. International Conference of RNA Nanotechnology and Therapeutics, University of Kentucky, Lexington, KY, April 3-5, 2013.
- 9. Symposium on "Technologies in Carcinogenesis and Chemoprevention", University of Louisville, Louisville, KY, May 30-31, 2013.