

# Dr. Surajit Pathak, PhD

## Associate Professor

Faculty of Allied Health Sciences  
Chettinad Hospital & Research Institute  
Chettinad Academy of Research & Education  
Kelambakkam, Chennai 603 103, India



## Qualifications:

Ph.D: 2007, University of Kalyani, India

M.Sc: 2002, University of Kalyani, India

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## Research Interests:

**Major: Cancer Stem Cells, MicroRNA, Biomarker Discovery in Colon Cancer**

## Post-Doc / Work Experience:

- 1) 2008-2009 – University of Alabama at Birmingham, **USA**
- 2) 2009-2011- University of Padova, **Italy**
- 3) 2012-2015-University of Linkoping, **Sweden**
- 4) August 2015- September 2016, Assistant Professor (Sr-Scale), Chettinad Academy of Research and Education, Kelambakkam, Chennai
- 5) October 2016-Till present, Associate Professor, Chettinad Academy of Research and Education, Kelambakkam, Chennai

## Extramural projects/ Grants ongoing/completed (PI)

**Received Bilateral Mobility Research Grant for the Year 2019 from University of Padova, Italy to work on prognostics marker in colon cancer**

Received travel, accommodation, registration grant from AMWC 16<sup>th</sup> **Aesthetic & Anti-aging medicine world congress, 2019, Monaco** to give an invited lecture

Received travel, accommodation, registration grant from **AMWC ASIA & TDAC (Taiwan Dermatology aesthetic conference), 2019, Taiwan-Taipei** to give an invited lecture

**DST (India) SERB- 2018-2021 EMR Project granted on Research on “An approach towards investigating the interplay between microRNA 122 and AEG-1 protein in colon cancer progression”**

**DST (India)-Italy** Bilateral Research Grant Higher Education Ministry collaborative research project for the year 2017-2020 for conducting research on Title: TAZ as a marker for mesenchymal stem cells and its role in maintaining of its stemness property.

**ReGenera Research Group (Italy)** for the year 2017-2019 for conducting research on mesenchymal stem cells and maintaining of its stemness property.

Received travel, accommodation, registration Grant from AMWC EE - **4th Aesthetic & Anti-Aging Medicine World Congress Eastern Europe, Moscow, Russia** to give an Invited lecture

Received travel, accommodation, registration grant from AMWC **15<sup>th</sup> Aesthetic & Anti-aging medicine world congress, 2018, Monaco** to give an invited lecture

Received travel, accommodation, registration grant from **AMWC ASIA & TDAC (Taiwan Dermatology aesthetic conference), 2018, Taiwan-Taipei** to give an invited lecture

**Chettinad Academy of Research and Education** (2016-2017) research grant on study of application of nanotechnology in colon cancer.

**Editorial Board Member and Reviewer:**

Endocrine, Metabolic & Immune Disorders - Drug Targets and INNO

Biosciences Biomaterials and Stem Cells

Reviewer of journals of Elsevier, Taylor Francis, Biomed Central, Bentham Sciences

**Research Guidance:**

**Post Doc: 1**

**Ph.D.: 3 (Ongoing)**

**Ph.D. Thesis Awarded: 1 (Thesis Title-Assessment of nanoparticles toxicity in cosmetic products)**

**M.Sc. Project (Thesis completed)-6**

**Summary of Research:**

<b>Citation indices</b>	<b>All</b>	<b>Since 2012</b>
<b>Citations</b>	<b>1051</b>	<b>587</b>
<b>h-index</b>	<b>21</b>	<b>14</b>
<b>i10-index</b>	<b>27</b>	<b>24</b>

## **List of Publications:**

### **PAPERS**

**2019**

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Antara Banerjee, Yashna Chabria, NR Rajesh Kanna, Janani Gopi, Praveen Rawlo, Xiao-Feng Sun, **Surajit Pathak**, Role of Tumor specific niche in Colon Cancer Progression and emerging therapies by targeting tumor microenvironment. **2019. doi: 10.1007/5584\_2019\_355.**

Contributed in the chapter titled “Oxidative stress and smoke related lung diseases tentative approaches”. Jaganath Arunachalam, Sudhir Adalti, Francesco Marotta, **Antara Banerjee**, **Surajit Pathak**. **2019, (Springer Book on Oxidative stress and Lung Disorder, In Press)**

Vennila R, Sundaram RSM, Selvaraj S, **Pathak S**, Rupert S, Rajagopal S. Effect of Human Platelet Lysate in Differentiation of Wharton's Jelly derived Mesenchymal Stem Cells. **Endocr Metab Immune Disord Drug Targets, 2019 doi: 10.2174/1871530319666190226165910**

Antara Banerjee, Suhanya Veronica Prasad, Francesco Marotta, Ganesan Jothimani, **Surajit Pathak** Targeting Wnt Signaling through Small Molecules in Governing Stem Cell Fate and Diseases. **Endocrine, Metabolic & Immune Disorders - Drug Targets Bentham Sciences, 2019 doi: 10.2174/1871530319666190118103907.**

Wen-Jian Meng, **Pathak S**, Xiao Feng Sun. Expression of miR302a, miR-105 and miR-888 is Associated with Radiation Response and Clinical Outcome of Rectal Cancer Patients **BMC CANCER (2019) (In Revision)**

Ganesan J, Sushmitha S, Yashna C, Antara Banerjee, **Surajit Pathak**. A review on theragnostic applications of microRNAs and long non-coding RNAs in colorectal cancer. **Current Topics in Medicinal Chemistry, 2019, doi: 10.2174/1568026619666181221165344.**

Sushmitha Sriramulu, Murugesan Ramachandran, Saraswathi Subramanian, Rathiusha Kannan, Ganesan Jothimani, Madhumala Gopinath, Jose Sollano, Laura Bissi, Antara Banerjee, Francesco Marotta, **Pathak S**. A review on role of ATM gene in hereditary transfer of colorectal cancer. **Acta Biomed. 2019. Vol 89 (4):463-469.**

Vimala Devi S, Ramachandran Murugesan, Francesco Marotta, Antara Banerjee, Xiao Feng Sun, **Surajit Pathak**, Comparative study on anti-proliferative potentials of zinc oxide and aluminium oxide nanoparticles in colon cancer cells. **Acta Biomed 2019; Vol. 89, N. 0: 000-000.**

Contributed in the chapter titled “Occupational stress related - adrenal fatigue, hormonal imbalance and prevention through bio-identical hormones approach” **for publication in eBook edited by Nova publishing house New York. Surajit Pathak**, Yashna Chabria, Ram Murugesan, Antara Banerjee, Francesco Marotta, **2019 (In Press).**

Contributed in the chapter titled “Environmental- and dietary-metabolic stress in workers: Novel avenues in oral heavy metal chelation and fatty liver aids” **for publication in eBook edited by Nova publishing house New York. Surajit Pathak**, Sruthi K.H, Ram Murugesan, Antara Banerjee, Francesco Marotta, **2019 (In Press)**.

## 2018

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**Surajit Pathak**, Roberto Catanzaro, Dharani Vasan, Francesco Marotta, Yashna Chabria, Ganesan Jothimani, Rama Shanker Verma, Anisur, Ramachandran Murugesan, Rahman Khuda-Bukhsh, Antara Banerjee. Benefits of Aged Garlic Extract in Modulating Toxicity Biomarkers against P-dimethylaminoazobenzene and Phenobarbital Induced Liver Damage in *Rattus norvegicus*. **Drug and Chemical Toxicology. 2018; 12: 1-14.**

Sushmitha Sriramulu, **Surajit Pathak**, Ganesan Jothimani, Madhumala Gopinath, Ramachandran Murugesan, Antara Banerjee. A review on clinical applications of conditioned medium derived from Human Umbilical Cord-Mesenchymal Stem Cells (UC-MSCs) **Int J of Oncol Hematol and Stem Cell Res. 2018. 12(3); 229-233.**

Pragyan Paramita, Ramachandran Murugesan, Vimala Subramaniam, Madhumala G, Satish Ramalingam, Ilangovan Ramachandran, Banerjee A, Xiao Feng Sun, **Surajit Pathak\*** Role of liposomal nanoformulated lycopodium clavatum in reducing cellular proliferation and apoptosis in human colon cancer cells HCT15 **IET Nanobiotechnology (2018). DOI: 10.1049/iet-nbt.2017.0106, Online ISSN 1751-875X**

Jasmine Evert, **Pathak S**, Xiao-Feng Sun, Hong Zhang. A study on effect of Oxaliplatin in MicroRNA Expression in Human Colon Cancer **Journal of Cancer 9 (11):2046-2053. doi: 10.7150/jca.24474**

Vimala Devi S, Suhanya P, Banerjee Antara, Madhumala, Murugesan Ramachandran, Marotta, Francesco, **Pathak S**. Health hazards of Nanoparticles: Understanding the toxicity mechanism of Nanosized ZnO in Cosmetic products. **Drug and Chemical Toxicology, 2018: 1-10. doi: 10.1080/01480545.2018.1491987**

**Pathak S**, Sushmitha Sriramulu, Sathya Priya Thandavan, Antara Banerjee, Francesco Marotta. Enhancement of shelf life of the climacteric fruits: A review on application of CRISPRi Technology. **Trends in Technical and Scientific Research 2018; 1(2)**

**Surajit Pathak**, Madhumala Gopinath, Ramachandran Murugesan, Francesco Marotta, Rosa Di Liddo, Antara Banerjee, Sushmitha Sriramulu, Ganesan Jothimani, Vimala Devi Subramaniam, Srinivasan Narasimhan, Swarna Priya K, Xiao-Feng Sun. Role of Hippo pathway effector Tafazzin protein in

maintaining stemness of Umbilical cord derived mesenchymal stem cells (UC-MSC), **Int J of Oncol Hematol and Stem Cell Res. 2018; Vol 12, No.2.**

**Pathak S**, Sushmitha S, Banerjee A, Murugesan R, Zhang H, Girigoswami A, Bhavani B, Marotta F, Sun XF. A review on comparative efficacy of Cetuximab, Panitumumab and Bevacizumab antibody therapy with combination of FOLFOX-4 in K-RAS mutated colorectal cancer patients. **Oncotarget 2018, Vol 9 (7): 7739-7748.**

## **2017**

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Banerjee Antara; **Surajit Pathak**; Vimala Devi S; Ramachandran Murugesan; Rama Shanker Verma. Strategies for targeted drug delivery in treatment of colon cancer- current trends and future perspectives **Drug Discovery Today, 2017, 22(8):1224-1232.**

**S. Pathak**, P. Suhanya, S. Sushmitha, R. Murugesan, Fang He, F. Marotta and A. Banerjee. Coping with stress related effects on the brain – role of neuro-nutraceuticals and gut microbes. **International Journal of Probiotics and Prebiotics Vol. 12, No. 4, pp. xxx-xxx, 2017. ISSN 1555-1431**

Mary L, Sadhasivam B, Palaniyandi K, Muthuswamy T, Ramachandran I, Balakrishnan A, **Pathak S**, Narayan S, Ramalingam S. Chitosan-Based Nano-Formulation Enhanced the Anticancer Efficacy of Hesperetin. **Int J Biol Macromol 2017: S0141-8130(17)31776-2. doi: 10.1016/j.ijbiomac.2017.10.064.**

Jagadeesan AJ, Murugesan R, Vimala Devi S, Meera M, Vishwanathan Padmaja M, Ramesh A, Banerjee A, Sushmitha S, Khokhlov AN, Marotta F, **Pathak S\***. Current trends in etiology, prognosis and therapeutic aspects of Parkinson's disease: a review. **Acta Biomed 2017; Vol. 88, N. 3: 249-262**

**Surajit Pathak**, Antara Banerjee, Wen-Jian Meng, Suman Kumar Nandy, Madhumala G, Xiao-Feng Sun. TAZ (WWTR1) oncoprotein overexpression in colon cancer cells and its downregulation by radiation. **International J of Radiation Biology 2017:1-26. doi: 10.1080/09553002.2018.1400191.**

Makida Y, He F, Mohania D, Balieiro-Neto G, Alagozlu H, Pathak S. Chelator in Environmentally-exposed Poor Detoxifiers: An Adjuvant Hepatoprotective Treatment for Poly-drug Users? **Metabolomics: Open Access Metabolomics: 2016, Volume 6. Issue 3. 1000185. ISSN: 2153-0769.**

## **BOOKS/CHAPTERS (2017-18)**

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Contributed in the ebook chapter titled “**Urinary tract infections & Treatment**” for publication in **eBook** edited by Justin Prince (Published). **Pathak S**, Sushmitha S, Ganesan J, Murugesan R, Banerjee A, Bissi L, Marotta F, Open Aces e books (2017). ISBN: 978-81-935757-6-5

**Pathak S**, Sushmitha S, Ganesan J, Murugesan R, Marotta F, Bissi L, Banerjee A. Antimicrobial Research. Novel bioknowledge and programs. Educational programs. **Antimicrobial: research, bioknowledge, education chapter on biofilm, Biofilms**. (A. Méndez-Vilas, Ed), **Formatex Research Center, ISBN: 978-84-947512-0-22017: 273-279**

Contributed in the chapter titled “Novel therapeutic Approaches of Polyphenols: A review” for publication in eBook edited by Polyphenols Book, **Elsevier publishing house. Surajit Pathak**, Pallavi Kesavan, Ram Murugesan, Francesco Marotta, Surajit Pathak **Polyphenols Book, Elsevier 2018 B978-0-12-813006-3.00025-8, 00011**

Metabolism of Dietary Polyphenols by Human Gut Microbiota and Their Health Benefits, **Surajit Pathak\***, Pallavi Kesavan, Anushka Banerjee, Antara Banerjee, Gulcin Sagdicoglu Celep, Laura Bissi, and Francesco Marotta, **Polyphenols Book, Elsevier, B978-0-12-813006-3.00025-8, 00025**

Contributed in the chapter titled “An insight into the link between Oral health and Neurological diseases” for publication in eBook edited by Caister Academic Press. **Surajit Pathak**, Suhanya Veronica Prasad, Sushmitha S, Ganesan J, Ram Murugesan, Antara Banerjee, Francesco Marotta. **Book on Microbiota: Caister Academy Press, 2018. Page 87-98. DOI: <https://doi.org/10.21775/9781910190937.06>**

Contributed in the chapter titled “Gut Microbiome: the role in neuro development” for publication in eBook edited by Caister Academic Press. **Surajit Pathak**, Suhanya Veronica Prasad, Ram Murugesan, Antara Banerjee, Francesco Marotta. **Book on Microbiota: Caister Academy Press, 2018. Page 69-86. DOI: <https://doi.org/10.21775/9781910190937.05>**

**2015-2016**

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**Surajit Pathak**, Wen-Jian Meng, Suman Kumar Nandy, Jie Ping, Atil Bisgin, Linda Helmfors, Patrik Waldmann, Xiao-Feng Sun. Radiation and SN38 treatment modulates the expression of microRNAs, cytokines and chemokines in HCT 116 colon cancer cells in a p53-directed manner **Oncotarget 2015;6(42):44758-80.**

Wen-Jian Meng, **Surajit Pathak**, Zhen-Yu Ding, Hong Zhang, Gunnar Adell, Birgitta Holmlund, Yuan Li, Zong-Guang Zhoua, Xiao-Feng Sun. Special AT-rich sequence binding protein 1 expression correlates with response to preoperative radiotherapy and clinical outcome in rectal cancer. **Cancer Biology Therapy 2015; 16 (12):1738-45**

**Pathak Surajit**, Grillo Alessia, Scarpa Melania, Brun Paola, D'Incà Renata, Nai Laura, Banerjee Antara, Cavallo Donatella, Barzon Luisa, Palù Giorgio, Sturniolo Giacomo Carlo, Buda Andrea; Castagliuolo Ignazio. MiR-155 modulates the inflammatory phenotype of intestinal myofibroblasts by targeting SOCS1 in ulcerative colitis **Experimental & Molecular Medicine (2015) 47, e164; doi:10.1038/emm.2015.21 (Nature Publishing Group).**

Amber Smith, Rebecca Marquez, Wei-chung Tsao, **Surajit Pathak**, Alexandria Roy, Jie Ping, Bailey Wilkerson, Lan Lan, Wen-Jian Meng, Kristi Neufeld, Xiao-Feng Sun, Liang Xu. Tumor suppressive microRNA-137 negatively regulates Musashi-1 in colorectal cancer. **Oncotarget** 2015, 5, Page 1-16.

Antara Banerjee, Debora Bizzaro, Patrizia Burra, Rosa Di Liddo, **Surajit Pathak**, Diletta Arcidiacono, Andrea Cappon, Patrizio Bo, Maria Teresa Conconi, Marika Crescenzi, Claudia Maria Assunta Pinna, Pier Paolo Parnigotto, Malcom R Alison, Giacomo Carlo Sturniolo, Renata D'Incà and Francesco Paolo Russo. Umbilical cord mesenchymal stem cells modulate dextran sulphate sodium induced acute colitis in immunodeficient mice. **Stem Cell Res Ther**, 2015; 6(1):79.

**2014**

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**Surajit Pathak**, Wen-Jian Meng, Hong Zhang, Sebastian Gnosa, Suman Kumar Nandy, Gunnar Adell, Birgitta Holmlund, Xiao-Feng Sun. TAZ protein expression is associated with tumorigenesis and radiation response in colorectal cancer: A study of Swedish clinical trial on preoperative radiotherapy **PLoS One**. 2014; 9(5):e98317.

Paola Brun, **Surajit Pathak**, Ignazio Castagliuolo, Giorgio Palu, Paola Brun, Matteo Zuin, Roberto Cavazzana, Emilio Martines. Helium generated cold plasma finely regulates activation of human primary fibroblast-like cells through production of reactive oxygen species. **PLoS One** 2014; 9(8):e104397.

Caccaro R, D'Incà R, Martinato M, Pont ED, **Pathak S**, Frigo AC, Sturniolo GC. Fecal lactoferrin and intestinal permeability are effective non-invasive markers in the diagnostic work-up of chronic diarrhoea. **Biometals** 2014, 27(5):1069-76.

**2013**

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D'Incà R, Paccagnella M, Cardin R, **Pathak S**, Baldo V, Giron MC, Sturniolo GC. 5-ASA colonic mucosal concentrations resulting from different pharmaceutical formulations in ulcerative colitis. **World J Gastroenterol**, 2013; 19(34):5665-70.

Holmqvist A, Holmlund B, Ardsby M, **Pathak S**, Sun XF. PINCH expression in relation to radiation response in co cultured colon cancer and fibroblast cell lines. **Oncology Reports** 2013, 30(5):2097-104.

Brun P, Dean A, Di Marco V, **Surajit P**, Castagliuolo I, Carta D, Ferlin MG. Peroxisome proliferator-activated receptor- $\gamma$  mediates the anti-inflammatory effect of 3-hydroxy-4-pyridinecarboxylic acid derivatives: Synthesis and biological evaluation. **Eur J Med Chem**. 2013; 62C: 486-497.

Michielan A, Basso D, Martinato M, **Pathak S**, Banerjee A, Oliva L, Mario P, Sturniolo GC, D'Inca R. Increased antibody response to microbial antigens in patients with Crohn's disease and their unaffected first-degree relatives. **Dig Liver Dis.** 2013, **45(11):894-8.**

## 2012

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Caccaro R, D'Inca R, **Pathak S**, Sturniolo GC. Clinical utility of calprotectin and lactoferrin in patients with inflammatory bowel disease: is there something new from the literature? **Expert Rev Clin Immunol.** 2012; **8(6):579-85.**

## 2011

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Barollo M, Medici V, D'Inca R, Banerjee A, Ingravallo G, Scarpa M, **Pathak S**, Ruffolo C, Cardin R, Sturniolo GC. Antioxidative potential of a combined therapy of anti TNF $\alpha$  and Zn acetate in experimental colitis, **World J Gastroenterol**, 2011; **17(36):4099-103**

Khuda-Bukhsh AR, Banerjee A, Biswas SJ, Roy Karmakar S, Banerjee P, **Pathak S**, Guha B, Haque S, Das D, De A, Das D, Boujedaini N First report on efficacy of a millesimal potency Arsenicum Album LM 0/3 ameliorating arsenic toxicity in human living in a high risk arsenic village? **Zhong Xi Yi Jie He Xue Bao** 2011; **9 (6):596-604.**

## 2010

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Nai L, Scarpa M, **Pathak S**, Grillo AR, D'Inca R, Sturniolo GC, Castagliuolo I, Buda A. Intestinal Subepithelial Myofibroblasts of Ulcerative Colitis Patients Express Increased WNT5A Levels That Enhance Proliferation in an Autocrine Manner. **Gastroenterology**, Volume 138, Issue 5, Supplement 1, Pages S-791, May 2010

**Pathak S**, Banerjee A, Khuda-Bukhsh AR. Efficacy of Lycopodium Clavatum in reducing induced hepatotoxicity and genotoxicity in mice. **Int Journal of Biological and Chemical Science** 4(3): 770-781, 2010

P Lamiki, J Tsuchiya, **S Pathak**, R Okura, U Solimene, S Jain, S Kawakita, F Marotta: Probiotics in diverticular disease of the colon: an open label study. **Journal of Gastrointestinal and Liver Diseases** 2010; **19 (1): 31-36.**

Mandal SK, Biswas R, Bhattacharyya SS, Paul S, Dutta S, **Pathak S**, Khuda-Bukhsh AR. Lycopodine from Lycopodium clavatum extract inhibits proliferation of HeLa cells through induction of apoptosis via caspase-3 activation. **Eur J Pharmacol** 2010; **626(2-3):115-22.**



Banerjee A, **Pathak S**, Biswas SJ, Roy-Karmakar S, Naoual B, Belon P, Khuda-Bukhsh AR (2010). Comparative efficacy of two homeopathic potencies, Chelidonium Majus 30C and 200C, in amelioration of induced hepato-toxicity in rats. **Homeopathy (2010) 99(3):167-76.**

## 2009

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**Pathak S**, Banerjee A, Paul S, Khuda-Bukhsh AR (2009). Protective potentials of a plant extract (*Lycopodium clavatum*) on mice chronically fed Hepato-carcinogens. **Indian Journal of Experimental Biology** Vol. 47, July 2009, pp. 602-607.

Khuda-Bukhsh AR, Roy Karmakar S, Banerjee A, Banerjee P, **Pathak S**, Biswas SJ, Haque S, Das D, Boujedaini N, Belon P (2009). A follow-up study on the efficacy of the homeopathic remedy Arsenicum Album in volunteers living in high risk arsenic contaminated areas. **Evidence-Based Complementary and Alternative Medicine 2011:129214.**

Marotta F, Yadav H, **Pathak S**, Minelli E, Signorelli P, Lorenzetti A, Marandola P (2009). Inhibition of Human Breast Cancer Cell Growth and Enzymatic Activity by a Fermented Nutraceutical an *In Vitro* and *In Vivo* Study. *Steroid Enzymes and Cancer: Ann. N.Y. Acad. Sci.* **1155:273-7.**

Banerjee P, Bhattacharyya SS, **Pathak S**, Naoual B, Belon P, Khuda-Bukhsh AR (2009) On Evidences of Protective Potentials of Micro Doses of Ultra-High Diluted Arsenic Trioxide in Mice receiving repeated injections of Arsenic trioxide. **Evidence-Based Complementary and Alternative Medicine 2011:391752.**

## 2008

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Bhattacharyya SS, Mandal S, Biswas R, Paul S, **Pathak S**, Naoual B, Belon P, and Khuda-Bukhsh AR (2008). In vitro studies demonstrated anticancer activity of an alkaloid of the plant *Gelsemium sempervirens*. **Experimental Biology and Medicine 233(12):1591-601.**

Metugriachuk Y, Tsuchiya J, Marotta F, Kuroi O, Kawakita S, **Pathak S**, Minelli E (2008). Open label randomized trial on the effectiveness of a herbal compound in selected patients affected by functional dyspepsia. **International Medical Journal 15(1), 47-51.**

Banerjee P, Bhattacharya SS, Bhattacharjee N, **Pathak S**, Boujedaini Naoual, Belon P, Khuda- Bukhsh AR (2008). Ascorbic acid combats arsenic-induced oxidative stress in mince liver. **Ecotoxicology and Environmental Safety. 2009; 72(2):639-49.**

Banerjee P, Bhattacharjee SS, **Pathak S**, Belon P, Khuda-Bukhsh A.R (2008). Comparative efficacies of micro doses of a potentized homeopathic drug, Arsenicum Album in amelioration of toxicity induced by repeated sub-lethal injections of Arsenic trioxide in mice. **Pathobiology: 75(3):156-70.**

Khuda-Bukhsh A.R, **Pathak S** (2008). Homeopathic Drug Discovery: Theory update and Methodological aspect. **Expert Opinion in Drug Discovery**, 3(8):979-900.

Banerjee A, Biswas R, **Pathak S**, Boujedaini N, Belon P, Khuda-Bukhsh A.R. (2008). Crude Turmeric extract reduces oxidative stress in rats chronically fed carcinogens: An assessment of its hepatoprotective role in a time course study. **Journal of complementary and Integrative Medicine (Vol. 5: 1, Article 34)**.

## 2007

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**Pathak S**, Bhattacharjee N, Das JK, Choudhury SC, Roy-Karmakar S, Banerjee P, Paul S, Banerjee A, Khuda-Bukhsh AR. Supportive evidences for anti-cancerous potential of an alternative medicine in hepatocarcinogenesis of mice. **Research in Complementary Medicine (Forsch Komplementarmed)**, 14:148-156.

Bhattacharjee N, **Pathak S**, Khuda-Bukhsh A.R (2007). Amelioration of Carcinogen Induced Toxicity in Mice by Administration of a Potentized Homeopathic Drug, Natrum Sulphuricum 200. **Evidence based Complementary & Alternative medicine 1-11 DOI:10.1093/ecam/nem067**.

**Pathak S**, Khuda-Bukhsh A.R. (2007). Assessment of hepatocellular damage and hematological alterations in mice chronically fed p-dimethyl aminoazobenzene and phenobarbital. **Experimental and Molecular Pathology 83, 104-111**.

Belon P, Banerjee A, Roy Karmakar S, Biswas SJ, Chaki Choudhury S, Banerjee P, Das JK, **Pathak S**, Guha B, Paul S, Bhattacharjee N and Khuda-Bukhsh A.R. (2007). Homeopathic remedy for arsenic toxicity. Evidence-based findings from a randomized placebo controlled double blind human trial. **Science of the Total Environment, 384: 141–150**.

## 2006

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**Pathak S**, Das JK, Biswas SJ, Khuda-Bukhsh AR (2006). Protective potentials of a potentized homeopathic drug, Lycopodium-30, in ameliorating azodye induced hepatocarcinogenesis in mice. **Molecular and Cellular Biochemistry, 285(1-2):121-31**.

Belon P, Banerjee P, Chaki Choudhury S, Banerjee A, Biswas SJ, Roy Karmakar S, **Pathak S**, Guha B, Chatterjee S, Bhattacharjee N, Das JK and Khuda-Bukhsh AR (2006). Can administration of potentized homeopathic remedy, Arsenicum Album, alter anti-nuclear antibody (ANA) titer in people living in high risk arsenic contaminated areas? : I. A correlation with certain hematological parameters. **Evidence-Based Complementary and Alternative Medicine 3(1): 99–107**.

2005

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Khuda-Bukhsh AR, **Pathak S**, Guha B, Roy-Karmakar S Das JK, Banerjee P, Biswas SJ, Mukherjee P, Bhattacharjee N, Choudhury SC, Banerjee A, Bhadra S, Mallick P, Chakraborti Mallick J, and Mondal B (2005). Can homeopathic arsenic remedy combat arsenic poisoning in human exposed to groundwater arsenic contamination? A preliminary report on first human trial. **Evidence-Based Complementary and Alternative Medicine; 2 (4): 537–548.**

Biswas SJ, **Pathak S**, Bhattacharjee N, Das JK and Khuda-Bukhsh AR (2005). Efficacy of a potentized homeopathic drug, Carcinisin-200, fed alone and in combination with another drug, Chelidonium 200, in amelioration of p-DAB induced Hepatocarcinogenesis in mice **Journal of Alternative and Complementary Medicine. 11 (5), 2005, 839–854.**

2004

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Biswas SJ, Pathak S, Khuda-Bukhsh AR (2003). Assessment of genotoxic and cytotoxic potentials of an anti-epileptic drug, Phenobarbital, in mice: a time course study. **Mutation Research 563(2004) 1-11.**

#### **PAPERS IN CONFERENCE**

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Amber R. Smith, Rebecca Marquez, Bryan Tsao, Lan Lan, **Surajit Pathak**, Xiao-Feng Sun, Kristi Neufeld, Liang Xu. Tumor suppressor miR-137 inhibits colorectal cancer progression by negatively regulating cancer stem cell marker, Musashi-1. Abstract. AACR Annual Meeting, San Diego, USA, April 5-9, 2014 (Published in Cancer Research, October, 2014).

Banerjee A, Burra P, Di Liddo R, Arcidiacono D, **Pathak S**, Cappon A, Bo P, Conconi MT, Parnigotto PP, Russo FP, Sturniolo GC, D'Inca R. Ameliorative potentials of human umbilical cord derived mesenchymal stem cells in dextran sulphate sodium induced acute colitis in NOD.CB17-Prkdcscid/J mice. (Published Digestive Disease Week 2012, May 19-22, San Diego USA)

Banerjee A, Scarpa M, **Pathak S**, Burra P, Russo FP, Sturniolo GC, D'Inca R. Inflammatory bowel disease therapies adversely affect fertility in men- A systematic review (Published Digestive Disease Week 2012, May 19-22, San Diego, USA).

**Patent Received (2015-2019): 1** Method of process for evaluating the quality of Mesenchymal stem cells (Application number: 201741001090)

2) A method for detecting toxicity of nanoparticles (Application number: 201741001093)