

FACULTY DETAILS

1. Personal details:

Name: Dr Rajarshi Kar

Designation: Professor

Degrees: MBBS, MD

Department: Biochemistry

Area of Interest: Cancer, Molecular Biology, metabolic disorders, environmental pollution



2. Education and Trainings:

Degree	Institution	Place	Period
MBBS	R G Kar Medical College	Kolkata	1995-2000
MD	AIIMS	New Delhi	2004-2007

3. Experience:

S.No	Post	Institute	Period
1	Senior Resident	AIIMS, New Delhi	2007-2009
2	Assistant Professor	UCMS, Delhi	2009-2015
3	Associate Professor	UCMS, Delhi	2015-2019
4	Professor	UCMS, Delhi	2019 till date

4. Assignment in Academic Associations:

1. Active member of American Association of Cancer Research
2. Life member of Association of Medical Biochemists of India
3. Life member of Indian Society of Atherosclerosis Research

5. Award and Honors:

1. Awarded educational grant to participate in the 6th INTERNATIONAL SYMPOSIUM ON TARGETED ANTICANCER THERAPIES (TAT 2008), Bethesda, MD, USA, March 20-22, 2008. Grant was sponsored by the Center for Cancer Research (CCR) of the U.S. National Cancer Institute.
2. Scholar in training Travel award at AACR 101st Annual Meeting, 17-19th April 2010 Washington DC.

6. Projects:

a. Ongoing:

S.No	Title	Funding Agency	Period	Grants (Rs)
1	Adaptive Immune Responses to Covaxin and Covishield: A comparative study (As Co-investigator)	AllIMS, New Delhi	2 years	10 Lakhs

b. Completed

S.No	Title	Funding Agency	Period	Grants (Rs)
1	An insight into the mechanism of metal induced oxidative stress in mice brain - inactivating antioxidant enzymes or inhibiting their transcription.	Intramural	2012-2013	25,000
2	Primary cultures of epithelial ovarian cancer as a tool to detect resistance to chemotherapeutic agents – a pilot study.	DBT	2014-2018	25 lakhs
3	Telomere length, telomerase activity and expression of cell senescence and oxidative stress markers in the placental tissues of patients with Idiopathic Fetal Growth Restriction. (Co-investigator)	ICMR	2014-2019	20 Lakhs

7. Publications:

a. Indexed Journals:

1. **Kar R**, Sen S, Singh A, Sharma H, Kumar S, Gupta SD, Singh N. Role of Apoptotic Regulators in Human Epithelial Ovarian Cancer. *Cancer Biol Ther* 2007; 6: 1101
2. Mishra Y K, Mohapatra S , Avasthi DK, Kabiraj D, Lalla N P, Pivin J C, Sharma H, **Kar R** and Singh N. Gold–silica nanocomposites for the detection of human ovarian cancer cells: a preliminary study. *Nanotechnology* 2007;18: 345606
3. Shukla J, Sharma U, **Kar R**, Varma IK, Juyal S, Jaganathan NR, Bandopadhyaya GP. Tamoxifen: 2-hydroxypropyl- β -dextrin aggregated nanoassembly for nonbreast estrogen-receptor-positive cancer therapy. *Nanomedicine* 2009; 4: 895-902.
4. Ahmed T, Pathak R, Mustafa M, **Kar R**, Tripathi AK, Ahmed RS, Banerjee BD. Ameliorating effect of N-acetylcysteine and curcumin on pesticide-induced oxidative DNA damage in human peripheral blood mononuclear cells. *Environ Monit Assess* 2011; 179:293-299.
5. Halder S, Mehta AK, **Kar R**, Mustafa M, Mediratta PK, Sharma KK. Clove Oil Reverses Learning and Memory Deficits in Scopolamine-Treated Mice. *Planta Med* 2011; 77: 830–834.
6. Garg S, **Kar R**, Madhu SV. High density lipoproteins are significantly reduced in early stages of untreated type 2 diabetes mellitus. *International Journal of Clinical Biochemistry and Research*, 2015; 2:13-17.
7. **Kar R**, Garg S, Halder S, Galav V, Chandra N, Mehndiratta M. Cadmium exposure induces oxidative stress by decreasing expression of antioxidant enzymes in mice liver. *International Journal of Clinical Biochemistry and Research*, 2015; 2: 89-96
8. **Kar R**, Palanichamy JK, Banerjee A, Chattopadhyay P, Jain SK, Singh N. Survivin siRNA increases sensitivity of primary cultures of ovarian cancer cells to paclitaxel. *Clin Transl Oncol*. 2015;17:737-42.
9. Halder S, **Kar R**, Galav V, Mehta AK, Bhattacharya SK, Mediratta PK, Banerjee BD. Cadmium exposure during lactation causes learning and memory-impairment in F1 generation mice: amelioration by quercetin. *Drug Chem Toxicol*. 2015; 7:1-7.
10. Halder S, Kar R, Mehta AK, Bhattacharya SK, Mediratta PK, Banerjee BD. Quercetin modulates the effects of chromium exposure on learning, memory and antioxidant enzyme activity in F 1 generation mice. *Biological trace element research*. 2016 Jun 1;171(2):391-8.
11. Ghosh SK, Rudra O, **Kar R**, Ghosh A, Agarwal M. A curious case of blue-green discoloration in a middle-aged indian man: Chromhidrosis. *Dermatol Online J*. 2015 18;21(11)

12. Garg S, Malik P, **Kar R**, Sankar V, **Mehndiratta M**. Expression of lipoprotein associated phospholipase A2 enzyme in medical undergraduate students with metabolic syndrome. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*. 2016 Mar 31;10(1):S21-4.
13. Mehndiratta M, Garg S, **Kar R**, Puri D. Pitfalls of currently practiced approach for teaching medical students: opinions & options. *International Journal of Clinical Biochemistry and Research*, 2016;3(1):100-104
14. Agarwal R, Chaudhary S, **Kar R**, Radhakrishnan G, Sharma R. Serum placental growth factor in late first trimester of pregnancy for prediction of preeclampsia in primigravida - a case control study. *Int J Reprod Contracept Obstet Gynecol*. 2017 ;6(1):106-110
15. Agarwal R, Chaudhary S, **Kar R**, Radhakrishnan G, Tandon A. Prediction of preeclampsia in primigravida in late first trimester using serum placental growth factor alone and by combination model. *J Obstet Gynaecol*. 2017 Oct;37(7):877-882
16. **Kar R**, Chawla D, Gupta B, Mehndiratta M, Wadhwa N, Agarwal R. Establishment of Primary Cell Culture From Ascitic Fluid and Solid Tumor Obtained From Epithelial Ovarian Carcinoma Patients. *International Journal of Gynecological Cancer*. 2017 Sep 13.
17. Nimesh A, Mehndiratta M, **Kar R**, Garg S, Puri D. Currently practiced assessment methods for medical undergraduates: a time to ponder. *Eur J Pharm Med Res* 2017; 4(9): 657-61
18. Nimesh A, Mehndiratta M, Agarwal V, Garg S, **Kar R**. Serum absorption spectral scan pattern - an individual's blueprint: its use while authenticating laboratory results. *Int J Healthc Biomed Res* 2017; 6(1): 36-42
19. Halder S, **Kar R**, Chandra N, Bhattacharya SK, Mediratta PK, Banerjee BD. Cadmium enhances locomotor behaviour in f1 generation mice following maternal exposure during lactation: Modulation by Quercetin. *Ann of Behav Sci* 2017, 3:1 DOI: 10.21767/2471-7975.100005
20. Halder S, Kar R, Chandra N, Bhattacharya SK, Mediratta PK, Banerjee BD. Effect of Chromium on Glutathione-S-Transferase and Catalase Activity and their Respective Gene Expressions in the Brain Tissue of F1 Generation Mice Following Prenatal Exposure: Modulation by Quercetin. *J Clin Toxicol* 2017, 7:5 DOI: 10.4172/2161-0495.1000365
21. Chawla D, **Kar R**, Gupta B, Halder S, Garg S, Mehndiratta M, Wadhwa N, Agarwal R. Role of Survivin and p53 Expression in Response of Primary Culture of Ovarian Cancer Cells to Treatment with Chemotherapeutic Agents. *Int J Gynecol Cancer*. 2018 Jul;28(6):1239-1246.
22. Halder S, **Kar R**, Chandra N, Nimesh A, Mehta AK, Bhattacharya SK, Mediratta PK, Banerjee BD. Alteration in cognitive behaviour, brain antioxidant enzyme activity and their gene expression in F1 generation mice, following Cd exposure during the late gestation period: modulation by quercetin *Metab Brain Dis*. 2018 ; 33(6) :1935-1943.

23. Jhamb R, Gauraw AK, Kar R, Gogoi P, Avasthi R. A Comparative Study of Serum Matrix Metalloproteinase-9 in Tuberculous Meningitis With and Without Stroke. *International Journal of Healthcare and Medical Sciences*. 2019;5(8):37-41.
24. Jhamb R, Singh B, Kar R, Gogoi P, MADhu SV. A comparative study of serum vascular endothelial growth factor in patients with tuberculous meningitis with and without stroke. *Med Clin Arch*, 2019; 3:1-5
25. Halder S, Kar R, Chakraborty S, Bhattacharya SK, Mediratta PK, Banerjee BD. Cadmium level in brain correlates with memory impairment in F1 and F2 generation mice: improvement with quercetin. *Environmental Science and Pollution Research*. 2019 Apr;26(10):9632-9.
26. Garg S, Mehndiratta M, **Kar R**, Malik P. Interrelationship between nuclear factor-erythroid-2-related factor 2, NADPH quinone oxidoreductase and lipoprotein-associated phospholipase A2 expression in young patients of metabolic syndrome. *International Journal of Diabetes in Developing Countries*. 2019;39(1):74-81.
27. Halder S, Kar R, Chakraborty S, Banerjee BD. Chromium Exposure in Late Gestation Period Caused Increased Levels of Cr in Brain Tissue: Association with Alteration of Activity and Gene Expression of Antioxidant Enzymes of F1 and F2 Generation Mice. *Biological Trace Element Research*. 2020 Sep 5:1-9.
28. Chakraborty P, Jayachandran S, Padalkar P, Sitlhou L, Chakraborty S, Kar R, Bhaumik S, Srivastava M. Exposure to Nitrogen Dioxide (NO₂) from Vehicular Emission Could Increase the COVID-19 Pandemic Fatality in India: A Perspective. *Bulletin of environmental contamination and toxicology*. 2020 Aug;105(2):198-204.
29. Rathore A, Sharma R, Kar R, Tandon A, Suneja A, Guleria K. Role of Cervical Phosphorylated Insulin-Like Growth Factor-Binding Protein 1 (phIGFBP1) for Prediction of Successful Induction Among Primigravida with Prolonged Pregnancy. *The Journal of Obstetrics and Gynecology of India*. 2020 Sep 25:1-7.
30. Agarwal R, Goyal P, Mohta M, Kar R. Comparison of Sequential Organ Failure Assessment (SOFA) and Sepsis in Obstetrics Score (SOS) in Women with Pregnancy-Associated Sepsis with Respect to Critical Care Admission and Mortality: A Prospective Observational Study. *The Journal of Obstetrics and Gynecology of India*. 2020 Sep 25:1-7.
31. Agarwal R, Jaiswal N, Kar R, Singh A, Srivastava H. Is serum fibrinogen an affirmative marker for vaginal delivery without PPH? *The New Indian Journal of OBGY*, 2020; 6(2): 113-8

b. Other Journals:

1. Kar R, Sharma C, Sen S, Jain SK, Gupta SD, Singh N. Response of primary culture of human ovarian cancer cells to chemotherapy: In vitro individualized therapy. *Journal of cancer research and therapeutics*. 2016 Apr 1;12(2):1050.
2. Nimesh A, Mehndiratta M, Garg S, **Kar R**, Pure D. Improving Academic Performance of Medical Undergraduates: Impediments and Solutions. *RUHS Journal of Health Sciences*. 2018; 3(1):11-16.
3. Grover D, Jahmb R, Kotru M, Kar R, Giri S. Profile of Pancytopenia Patients Presenting to a Tertiary Care Hospital in North India. *JACM* 2018; 19(4): 261-64
4. Agarwal R, Kumari N, Kar R, Chandra N, Nimesh A, Singh A, Radhakrishnan G. Evaluation of Placental VEGFA mRNA Expression in Preeclampsia: A Case Control Study. *The Journal of Obstetrics and Gynecology of India*. 2019 Apr 2;69(2):142-8.
5. Goyal P, Agarwal R, Srivastava H, Kar R, Sikka M, Mohta M. Serial Serum Lactic Acid in Pregnancy-Associated Sepsis for Maternal Outcome. *The Journal of Obstetrics and Gynecology of India*. 2020 Jul 26:1-7.

c. Book Chapter:

1. Kar R. Neurotransmitters in health and disease. In: Talwar GP, Hasnain SE, Sarin SK. (eds.) *Textbook of Biochemistry, Biotechnology, Allied and Molecular Medicine*. 4th edition, Delhi: PHI Learning Private Limited; 2016. p.289-297.

d. Books:

e. Others:

8. H index: 10