

Dr. Ghulam Hassan Dar
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Work Experience

Current Position:	Assistant Professor, Department of Biochemistry,
<i>Affiliation:</i>	<i>Cluster University Srinagar</i>
<i>Year:</i>	<i>June 10, 2025 - present</i>
Previous Position:	Assistant Professor, Department of Biochemistry, S.P.College Srinagar
<i>Affiliation:</i>	<i>Department of Higher Education, (J&K)</i>
<i>Year:</i>	<i>May14, 2019– June 09, 2025</i>
Previous Position:	Postdoctoral Research Scientist:
<i>Affiliation:</i>	University of Oxford, United Kingdom
<i>Year:</i>	<i>September, 2015 to 10 May, 2019</i>
<i>Research Project:</i>	<i>Exosome-based Gene Therapy for Huntington's Disease</i>

Research Publications

- **Dar GH.**, Mendes. C., Kuan W.L., Conceição.M., Andaloussi.S.A., Mager.I., Roberts C.T., Roger A. et.al; GAPDH controls extracellular vesicle biogenesis and enhances therapeutic potential of EVs in silencing the Huntingtin gene in mice via siRNA delivery. ***Nature Communication*, 12, 6666 (2021 (Impact factor 18)**
- **Dar, GH.**; Gopal, V.; Rao, N.M. Conformation-Dependent Binding and Tumor Targeted Delivery of Small Interfering RNA by Double Stranded RNA Binding Domain: Affibody Chimera. ***Journal of Nanomedicine: NBM*, 2015; doi: 10.1016/j.nano.2015.01.017 (PMID: 25720988) (Impact Factor 6.5)**
- **Dar, GH.**;Gopal, V.; Rao, N.M. Systemic delivery of stable siRNA-encapsulating lipid vesicles: optimization, biodistribution and tumor suppression. ***Molecular Pharmaceutics*, 2015; doi: 10.1021/mp500677x (PMID: 25545110) (Impact Factor:4.5)**
- Mohammed ,M.; **Dar, GH.**; J. Durga; V. Uthra, S.Kamal, R. Nandini, Patel, A.B; Gopal,V. A designed recombinant fusion protein for targeted delivery of siRNA to the mouse brain. ***Journal of Controlled Release*, 2016; doi:10.1016/j.jconrel.2016.03.007 (PMID: 26948382) (Impact Factor 11.47)**
- Gopal, V.; Xavier, J.; **Dar, GH.**; Jafurulla, M.; Chattopadhyay, A.; Rao, N.M. Targeted liposomes to deliver DNA to cells expressing 5-HT receptors. ***Int. J. Pharm.*, 2011; doi: 10.1016/j.ijpharm.2011.08.004 (PMID: 21855617)(Impact Factor 5.86)**
- R.Rajkiran; S, Kumar, **Dar, GH.**; P, Vijayanand; et al.; Efficiency of dual siRNA mediated gene therapy for intervertebral disc degeneration. ***Journal of Spine*, 2018 (PMID:30439528) (Impact Factor: 4.583)**
- K, Rajesh; J, Durga; M, Sudip; Mohammad, M; **Dar, GH.**; V, Uthra; Ranjan, P; Gopal, V. Engineered fusion protein-loaded gold nanocarriers for targeted co-delivery of doxorubicin and erbB2-siRNA in human epidermal growth factor receptor-2+ ovarian cancer. ***Journal of Material Chemistry B*, 2017 (Impact factor 7.57)**
- **Dar, GH.**; Nathan E, Rao NM, Gopal V, 2013. Targeted Delivery of Short Interfering RNA by Human TAR RNA-Binding Protein- Affibody Chimera. ***Mol. Therapy Vol. 21, Supplement 1, May 2013. (Abstract no. 156) ASGCT 16th Annual Meeting, Salt Lake City, Utah. May 15-18, 2013. (Impact factor 6.97)***
- **Dar GH.** Badierah R, Nathan EG, Bhat MA, Dar AH, Redwan EM. Extracellular vesicles: A new paradigm in understanding, diagnosing and treating neurodegenerative disease. ***Front Aging Neurosci*. 2022 Nov 3;14:967231.**

International Patents

S.No	Patent title	Name of the applicant	Patent No.	Country	Status
1	<i>Recombinant protein-based method for the delivery of silencer RNA to target the brain</i>	<i>D. Vijaya, Dar. GH</i>	<i>US 10 208098B2</i>	<i>U.S.A</i>	<i>Confirmed</i>
2	<i>A Simple and Effective Technology for Single Step Loading of Extracellular Vesicles for Targeted Drug Delivery</i>	<i>Dar GH, Wood M. et al</i>	<i>US202/0409739A1</i>	<i>U.S.A</i>	<i>Confirmed</i>

Grants, Awards and fellowships

S.No	Name of the Grant/Award/fellowships	Awarding agency	Year
1	JK Science Technology grant (Rs. 7.8 Lac)	JK Science Technology & Innovation Council	2021
2	SERB-TARE Research Grant (Rs. 18 lac)	Department of Science and Technology	2022
2	Medical and Life Sciences Translational Fund of £75,000 at University of Oxford	Medical Research Council, United Kingdom	2018
3	Royalty for transferring technology to Evox company at University of Oxford.	Evov company, Oxford (United Kingdom)	2017
4	Int. Travel grant for attending conference at U.S.A	Department of Biotechnology, India	2013
5	5 year-CSIR-UGC NET/JRF fellowship	CSIR (India)	2008

Academic Qualification

Ph.D.

Thesis title: *Design and evaluation of lipids and proteins for targeted nucleic acid delivery*
Affiliation: *Jawaharlal Nehru University*
Institute: *Centre for Cellular and Molecular Biology (CCMB), Hyderabad*
Supervisor: *Dr. N. Madhusudhana Rao, Dr. Vijaya Gopal*
Year of Admission: *8 August, 2008*
Year of thesis submission: *June, 2014,*
Year of Award: *10 February, 2015*

M.Sc. in Biochemistry

Name of University: *University of Kashmir*
Year: *2006-2007*
%Marks: *74.65*

B.Sc.

Name of College/University: *S.P. College (Srinagar)affiliated to University of Kashmir*
Subject: *Biochemistry, Chemistry, Zoology, English*
Year: *2002-2005*

% Marks: *62.5*

10+2

Name of the Institute: *Jawahar Novadaya Vidhalaya (Shahkoot, Baramula)*
Year: *2000-2002*
Subject: *Maths, Biology, Chemistry, Physics, English*
% Marks: *74.65*

International conference attended

S.No	Title	Country	Year	Work presentation
1	Science Beyond Classroom: Career development and academic excellence	India	2025	Organizer
2	International Conference on Multidisciplinary Research and Innovation	India	2024	Speaker
3.	Science Popularization, Innovation & Extension	India	2022	Speaker
4	Oxosome 3rd Annual Meeting presentation	United Kingdom	2018	Oral
5	International Society of Extracellular vesicles 2017-Annual meeting	Canada	2017	Poster presentation
6	International Conference on chemical biology	India	2014	Poster presentation
7	16th Annual meeting of American Society of Gene and cell therapy	U.S.A	2013	Poster presentation
	Cell Biology Conference and International workshop Cell Cycle regulation	India	2009	Poster presentation

Students trained and their current position

Subuhi, Tahoor	2024-2025 Dissertation Students of IG 10 th Semester, S.P.College Srinagar
Arizoo and Azhar	2024-2025 Dissertation Students of IG 10 th Semester, S.P.College Srinagar
Ayaz Bashir	Research Assistant, 2021-2023 at S.P.College Srinagar
Henok Habtemariam:	2018 Dissertation Student from University of Amsterdam, Netherlands, Currently a D.Phil. student at University of Amsterdam (Netherlands)
Erica Nathan:	2014-2015(Research assistant at CCMB, Currently employed at Cambridge University, United Kingdom)
Amy Kumar:	2012-2014(Research assistant), Currently a working at Dr. Reddy's Lab, India)
Monika Rishi:	2013 (Dissertation Student), Currently a Ph.D at Ben-Gurion University, Israel)
Tejaswi-Prasad:	2011-2013 (Project assistant, Currently a PhD student in University of Malaysia)
Tripti-agarwal:	2014-2015 (Dissertation student, Currently a PhD student at Philadelphia University)

Research Skills

Exosome biology and Gene therapy,

Preclinical testing

Molecular Biology

Neurogenerative disorders

Cell Biology

Liposomal preparation and characterization

References

Dr. Mathew J Wood (Postdoc Supervisor),
Professor, Department of Paediatrics,
University of Oxford, (United Kingdom)
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Dr. N. Madhusudhana Rao (Thesis Advisor)
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Dr. Vijaya Gopal (PhD Supervisor),
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