

Abhirupa Kar, MSc

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PROFESSIONAL SUMMARY

Life Sciences and Public Health Research Professional with 14+ years of experience spanning translational research, biobanking, diagnostics, real-world evidence generation, clinical research operations, and health systems strengthening. Experienced in managing multidisciplinary research programs, coordinating international and government-supported projects, overseeing research data and biospecimen systems, and translating scientific evidence into operational and policy-relevant insights. Proven ability to collaborate with clinicians, researchers, industry partners, government agencies, and community stakeholders across the healthcare ecosystem. Published researcher with expertise in oncology, infectious diseases, diagnostics, laboratory systems, and population health research.

CORE COMPETENCIES

Research & Evidence Generation

- Clinical Research Operations
- Translational Research
- Real-World Evidence Generation
- Research Program Management
- Epidemiological & Public Health Research
- Evidence Synthesis & Literature Review
- Scientific Writing & Publications

Life Sciences & Diagnostics

- Biobanking & Biospecimen Management
- Oncology (Biomarker) Research
- Molecular Diagnostics
- HPV Screening Technologies
- Clinical Sample Management

Project & Stakeholder Management

- Cross-functional Team Coordination
- Research Feasibility Assessment
- Ethics & Regulatory Compliance
- SOP Development
- Quality Management Systems
- Budget & Resource Planning
- Academic-Industry Collaboration

Data & Systems

- Data Management
- Research Documentation
- LabVantage LIMS
- Research Reporting
- Quality Assurance
- Monitoring & Evaluation

PROFESSIONAL EXPERIENCE

Biorepository Manager

Tata Medical Center Biorepository (TiMBR) | Aug 2020 – Present

Lead biobanking and translational research operations supporting 25+ internationally collaborative and government-supported research projects and clinical programs.

Key Achievements

- Managed biospecimen and data operations supporting more than 25 research projects and clinical studies across multiple oncology departments.
- Established and refined biobanking workflows aligned with evolving international standards.
- Implemented quality assurance and compliance systems improving operational efficiency and sample utilization.
- Supported project feasibility assessment, resource planning, ethics submissions, and investigator-initiated studies.
- Facilitated collaborations among academic institutions, clinicians, researchers, industry partners, and government-supported initiatives.
- Developed SOPs and governance frameworks for biospecimen management and informed consent processes.
- Contributed to publication development, translational research initiatives, and multidisciplinary research programs.

Kolkata Gynecological Oncology Trials and Translational Research Group | Mar 2020 – Jul 2020

- Supported clinical research coordination, participant data systems, and operational workflows for oncology research initiatives

Biobank Technologist & Researcher

SyMEC Project, Tata Medical Center | Jan 2019 – Jul 2020

Key Achievements

- Supported a multicenter cervical cancer screening and translational research project involving 2500+ participants.
- Managed diagnostics workflows, sample processing, research documentation, and data management.
- Worked closely with clinicians, laboratory teams, and researchers to support implementation of screening protocols.
- Served on Tata Medical Center's COVID-19 response team coordinating data, samples, and reporting activities with ICMR and the West Bengal Health Department.

DST-Inspire Research Fellow

University of Calcutta | Aug 2012 – Jul 2017

- Conducted environmental health and microbiology research linked to public health and environmental exposure pathways

Research Scholar

University of Calcutta | Aug 2017 – Dec 2018

- Conducted interdisciplinary environmental health research focused on environmental contamination and public health implications
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ADDITIONAL LEADERSHIP & PUBLIC HEALTH EXPERIENCE

Secretary (Pro Bono) | Civilian Welfare Foundation

2016 – 2026

Provided strategic leadership and program oversight for community-based public health initiatives focused on health equity, healthcare accessibility, gender inclusion, and underserved populations. Led cross-sector collaborations involving government agencies, healthcare providers, academic institutions, NGOs, and community stakeholders to design and implement evidence-informed health interventions.

Key Contributions

- Led implementation of a UNDP Global Youth Empowerment Fund-supported project improving healthcare access for transgender women through community engagement, healthcare provider sensitization, and development of advocacy tools.
- Established a district-level transdisciplinary healthcare model serving underserved tribal and marginalized populations in West Bengal, integrating low-cost diagnostic services, primary healthcare consultations, mental health support, nutrition services, occupational therapy, and rehabilitation.
- Directed community-based health needs assessments and evidence-generation initiatives among LGBTQIA+ populations across West Bengal and Delhi to identify healthcare gaps and inform service delivery strategies.
- Designed and coordinated a Gender-Affirmative Paramedical Training Program, creating pathways for LGBTQIA+ individuals to participate in the healthcare workforce through structured training and industry internships.
- Led implementation support for Olympism 365 West Bengal, an International Olympic Committee-supported initiative serving over 600 women with intellectual disabilities through sports-based empowerment, leadership development, and gender-based violence awareness interventions.
- Managed stakeholder engagement, project planning, monitoring and reporting, community consultations, partnership development, and program documentation across multiple concurrent initiatives.
- Collaborated with local governance systems, public health institutions, healthcare professionals, and community organizations to strengthen healthcare accessibility and promote inclusive service delivery models.

EDUCATION

MSc Environmental Science (Gold Medalist)

University of Calcutta | 2011

BSc (Hons) Microbiology

University of Calcutta | 2009

PUBLICATIONS

Sidhu, J., Chakraborty, A., Das, P., Steffen, F. D., Kundu, S., Basu, S., Kar, A., ... & Saha, V. (2026). Functional precision approach in patients with very high risk acute lymphoblastic leukaemia in India: a single-centre cohort study. *The Lancet Regional Health-Southeast Asia*, 44.

Dutta, A., Chowdhury, N., Selvarajan, A. V., Guha, P., Banerjee, P., Kar, A., et al. (2026). An annotated living organoid biobank for studying gallbladder diseases and drug responses. *Digestive Diseases and Sciences*. <https://doi.org/10.12809/eaap25134>

Karmakar, S., Dutta, R., Das, E., Patra, M., Kar, A., & Moulik, S. (2025). Association of cytomegalovirus seropositivity with depression, anxiety, general well-being and pain among the LGBTQIA+ population: A cross-sectional transdisciplinary study. *East Asian Archives of Psychiatry*.

SyMEC Research Group, Mukhopadhyay, A., Mathai, S., Bhaumik, J., Bhattacharya, S., Chandy, M., & Kar, A. (2024). Nested multiplex endpoint PCR: An alternative method for HPV genotyping in resource-limited settings. *Journal of Academic Clinical Microbiology*, 26(1), 1–6.

Sidhu, J., Chakraborty, A., Das, P., et al., & Kar, A. (2023). Delayed intensification including venetoclax and bortezomib prolongs survival in very high-risk acute lymphoblastic leukaemia. *Blood*, 142, 4244.

Kar, A., Sarkar, S., Mukhopadhyay, A., & Mukhopadhyay, U. K. (2016). Microbial mediated mechanism of release of arsenic from soil to surface water in lower Gangetic plain. *Proceedings of International Conference*, 41–42.

Sain, S., Sengupta, S., Kar, A., et al. (2014). Effect of modified cellulose fibres on biodegradation behaviour. *Polymer Degradation and Stability*, 99, 156–165.

Dey, T. K., Banerjee, P., Bakshi, M., Kar, A., & Ghosh, S. (2014). Groundwater arsenic contamination in West Bengal. *International Letters of Natural Sciences*, 8(1).

Sain, S., Sengupta, S., Ray, D., Kar, A., & Mukhopadhyay, A. (2013). Cellulose nanofiber reinforced nanocomposites. *Advanced Materials Research*, 747, 387–390.

Kar, A., Banerjee, S., Mukherjee, S., Bhattacharya, S., Mukhopadhyay, A., & Mukhopadhyay, U. K. (2011). Microbial water quality indicators. *World Aqua Congress Proceedings*, 33–43.