

Pranay Dey

PHD-Senior Research Fellow, MSc, BSc

Accomplished Senior Research Fellow with strong history of advancing intellectual knowledge in the field of Breast cancer. Prepared to leverage Informatics and Molecular Biology knowledge and 6 years of research experience to lead and answer any conundrum, within the limits of Practicality. Analytical and Self-driven Research Fellow with 5 years in designing, conducting and sharing results of complex and multi-faceted research. Selected to represent ACTREC, TMC at National academic conferences. Collaborated with esteemed faculty and students to achieve excellence in preparation and performing tricky biological experiments.

Contact

Address

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Skills

Researching
knowledge

●●●●○
Very Good

Answering
research
questions

●●●●○
Very Good

Researching
products

●●●●○
Very Good

Quantitative
analytical
research

●●●●○
Very Good

Efficient
researcher

●●●●○
Very Good

Work History

2017-10 -

Current

PHD-Senior Research Fellow


ACTREC, Tata Memorial Centre, Navi Mumbai, Maharashtra


- Got 1st rank in the ACTREC-TMC entrance exam and Interview.
- Qualified CSIR-JRF entrance exam (AIR-35), December 2017.
- Worked on an un-proven hypothesis and established HER2 high breast cancer cell lines in the lab.
- Developed and characterized Neratinib resistant cell lines in the lab.
- Learned *in-silico* Molecular Dynamic simulation to address the Hypothesis for the project.
- Oversaw studies of Juniors, documented data and extrapolated results.
- Generated high-quality, professional papers in collaboration with seniors for submission to scientific publications.
- Presented posters at National conferences, speaking about HER2 biology and Targeted therapeutics against HER2 in current clinical practice.
- Currently working with different Faculties and students in ACTREC, TMC to answer their specific biological questions.

Story 
Research Very Good

Research 
project design Very Good

Research 
expert Good

Advanced 
research in Good
Breast cancer

Molecular 
and cellular Good
biology
research
background

Software



Molecular 
Dynamic Very Good
Simulations

Image J 
Very Good

Pymol 
Very Good

TCGA Data 
Analysis (CBIO Very Good
portal)

Education

2009-04 -
2011-03

High School Diploma

*D.A.V Public School - Sec-49, Sainik Colony,
Faridabad*

2011-08 -
2014-07

Bachelor of Science: Microbiology Honours

*Swami Shraddhanand College, University of Delhi -
Alipur, New Delhi*

- Awarded Summer Under-Graduate Research Programme (SURP-2013) fellowship for 3 months research training in Dr. B.R. Ambedkar Center for Biomedical Research, Delhi.
- Attended Hands-on training in Virology at Vallabhbhai Patel Chest Institute, Delhi.
- Attended 2-Day Hands-on Training and Symposium on Molecular biology techniques at Amity University, Noida

2015-08 -
2017-04

Master of Science: Medical Biotechnology

PGIMER - Chandigarh

- Achieved 2nd rank in the PGIMER entrance examination.
- Worked on Pathogenic Salmonella Typhi, Salmonella Tyhimurium and Shigella Dysenteriae for Msc thesis work titled "Functional RNomics of miR-2909 on intracellular pathogens"

2017-08 -
Current

Ph.D.: Oncology

ACTREC, TMC - Sec-22, Kharghar

- Secured 1st rank in ACTREC, TMC entrance examination and Interview.
- Currently working on the impact of HER2 mutations on the HER2 targeted medicine in clinics.
- **Publication:**
Dey, P., Rathod, M., De, A. (2019). Targeting stem cells in the realm of drug-resistant breast cancer.

Breast Cancer (Dove Med. Press) 11, 115–135. doi: 10.2147/BCTT.S189224

- Arijit Mal, **Pranay Dey**, Robert Hayes, Justin V. McCarthy, Arjun Ray, Abhijit De*. In silico analysis shows altered binding affinity via phosphorylation of EpICD important for its role in downstream signalling. ACS Omega.
- Presented a part of thesis work entitled "**Impact of HER2 interaction domain mutations on Molecular interaction dynamics of HER2 along with its family members**" at 38th Annual Convention of Indian Association for Cancer Research (IACR-2019) held in Chandigarh; March, 2019.
- Presented the *In-silico* work entitled "**Pathogenic HER2 interaction domain mutations cause receptor switching with its family members in Her2 subtype breast cancer**" at 15th Annual National Research Scholar Meet (NRSM) held in ACTREC, Navi Mumbai in December, 2019.
- Member of NRSM organizing Core committee that organized the 16th Annual National Research Scholar Meet (NRSM) in December, 2020 during COVID-19.
- Participated in online symposium titled "**Advanced Computer Aided Drug/Biologics design**" organized by Schrodinger and Manipal Institute of Life Sciences.
- Attended **5th Annual Stanford Drug Discovery Symposium** held online on April, 2021.

Accomplishments

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Dey, P., Rathod, M., De, A. (2019). Targeting stem cells in the realm of drug-resistant breast cancer. Breast Cancer (Dove Med. Press) 11, 115–135. doi: 10.2147/BCTT.S189224

Arijit Mal, **Pranay Dey**, Robert Hayes, Justin V. McCarthy, Arjun Ray, Abhijit De*. **In silico analysis shows altered binding affinity via phosphorylation of**

EpICD important for its role in downstream signalling.

ACS Omega.