Aarohi Gaikwad

Second-year Biotechnology student, MES Abasaheb Garware College, Pune.

<u>Linkedin Profile</u> <u>My Website</u>

Current CGPA(SEM3): 8.85

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Research and Work Experience

- On-Job Research Training Agharkar Research Institute, Pune 1 Month
- Hands-on experience with PCR, HPLC, GCMS, Sanger sequencing, and microscopy. The training greatly enhanced my passion for research.
 - Internship | Sheetal Laboratory, Pune | 1 Month
- Performed water testing, improving skills in dilutions, moles, conversions, and pH analysis.
- Developed precision and practical expertise in basic laboratory procedures.

Relevant Skills

- Molecular Biology Techniques:
 - PCR, Sanger sequencing, CRISPR-Cas9
 - DNA & plasmid isolation
 - Competent cell preparation & transformation
- Analytical Techniques:
 - HPLC, GCMS, LCMS
 - Agarose gel electrophoresis
- Microbiology Techniques:
- Plating techniques, blue-white screening
- Gram staining, fungal staining, endospore staining
- Biochemical & Environmental Analysis:
 - Water testing (pH analysis, dilutions, moles & conversions)
 - Soil active carbon estimation
- Scientific Communication:
 - Research proposal writing
 - Scientific & review article writing
 - Essay & blog writing

Workshops and Courses

- <u>IISER Pune Gene Editing Through CRISPR-Cas9 Workshop:</u> The workshop strengthened molecular biology basics and I got to learn and perform the revolutionary CRISPR-Cas9 technique
- <u>Microbial Genomics Course | Biogrademy:</u> The course enhanced my understanding of fundamental concepts, such as genomics, and gave me a strong foundation.
- <u>Science Through Theatre Workshop | TIFR Hyderabad:</u>
 The workshop gave me valuable insights into communicating science through theatre, sparking my interest in this creative approach where art and science intersects seamlessly.
- MACS- Agharkar Research Institute HPLC, LCMS, GCMS Analytical equipment workshop: Hands-on Training of High-end Analytical equipment
- <u>MES Abasaheb Garware College Scientific Writing Course:</u> Improved academic and research communication skills. Learned to write research papers, review articles, scientific blogs, and research proposals.
- <u>Catalase Breaking The Bad Workshop</u> <u>IISER Pune (Jan 2024): Trained in:</u> Plant genomic DNA extraction, Polymerase Chain Reaction, Agarose Gel Electrophoresis, Measurement of Enzyme Activity.

Projects:

- <u>Rhizobium Isolation from Biofertilizers:</u> Conducted research and analysis at the KISAAN Agricultural Convention.
- Active Carbon Estimation in Soil: Developed and tested a protocol for soil analysis.
- Both projects contributed to increasing awareness among farmers from across India who attended the convention, helping them better understand and improve their soil health.
- I surveyed the "Correlation of Plants with our Mental State," analyzed the data, and created a detailed report on it.

Achievements, Leadership and Outreach:

- I was the <u>only first-year bachelor's student from my college to be selected for the On Job Training Program at Agharkar Research Institute, Pune.</u>
- All India Rank 1: Science-Based Essay Writing Competition | Khula Aasmaan, SPPU (2019).
- <u>Represented MES Abasaheb Garware College and SPPU</u> at the KISAAN Agricultural Convention.
 (2024)
- <u>Led a team of undergraduate researchers to execute two projects</u> at the KISAAN Agricultural Convention, improving problem-solving and collaboration skills.
- <u>Our project provided valuable insights to farmers</u>, helping them better understand their soil health. Contributing to this initiative was a deeply rewarding experience
- <u>Volunteered for the National Service Scheme(NSS)</u> Campus Cleaning and Poster Making Drives to promote Environmental Awareness at Abasaheb Garware College. (2024)
- Participated in a Rally for River Bank Conservation with Pune River Revival, Pune. (2023)

Hobbies

- Sports: Mountaineering, Swimming, Badminton
- Creativity: Enjoy Classical Music, Theatre, Painting
- Personality Development: Journaling, Writing Articles, Reading
- Staying updated on cutting-edge research