ANIRUDH GAUTAM MANNAVA

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OBJECTIVE

A result oriented individual seeking to utilize training and experience in scientific research and data science to contribute to business decisions through a suitable consulting role.

PROFESSIONAL EXPERIENCE

Senior Associate Scientist at Sanofi, Waltham, Massachusetts   07/2020 – 04/2021
- Developed unique molecular biology tools for gene therapy
- Aided troubleshooting experimental strategies and methodologies to achieve better and faster results
- Acquired a broad understanding of the development of gene therapy products

Graduate Research Assistant at University of Minnesota, Twin cities**,** Minnesota   08/2018 – 01/2020
- Demonstrated the non-enzymatic activity of a crucial enzyme in regulation of neurons using cutting edge microscopy. Authored and published findings from the study in a scientific journal.
- Guided, coordinated, and helped establish new protein purification methods
- Developed simple and easy-to-use methods for image analysis of cellular components during cell division

Research Executive at Pfizer Biologics Development Centre, Chennai, India   12/2017 – 06/2018
- Implemented and refined various chromatography based methods to support in-process testing of biosimilar molecules (HPLC Size exclusion, UPLC glycan analysis, Methionine oxidation analysis of biosimilars)
- Delivered timely results working in a team of analytical research and development scientists in a matrix organization
- Developed a holistic understanding of biosimilar development, GxP environment, and necessary FDA guidelines

Graduate Research Assistant at National University of Singapore, Kent Ridge, Singapore   08/2013 – 02/2017
- Investigated molecular signalling in cellular organization and developmental biology and authored two scientific publications with findings from the same.
- Introduced and established protocols for the usage of latest gene editing methods and microscopy techniques.
- Handled lab management and purchasing.

Graduate Teaching Assistant at National University of Singapore, Kent Ridge, Singapore   01/2014 – 04/2016
- Taught lab modules in biochemistry and molecular biology for over two hundred undergraduates
- Mentored a group of over twenty Yale-NUS undergraduates to work on independent projects
- Invigilated and graded several undergraduate examinations

Intern at Biocon Ltd. Bengaluru, India   11/2012 – 02/2013
- Performed over five hundred assays to support scientists in conducting and analysing pharmacokinetic studies

Project Trainee, Indian Institute of Science, Bengaluru, India   01/2012 – 05/2012
- Implemented a novel experimental strategy to investigate protein-protein interactions in breast cancer

Intern, Institute for Stem cell biology and regenerative medicine (InStem) Bengaluru, India,   06/2011 – 08/2011
- Used molecular biology based approaches to study a tumour suppressor in embryonic stem cells

Summer Trainee – INBIGS, ONGC Assam   06/2010 – 07/2010
- Conducted a project on Bioremediation of oil spills on Water

EDUCATION

PGP-DSBA – Post Graduate Program in Data Science and Business Analytics   05/2021 – Present
University of Texas at Austin (McCombs school of business – an online program)
Link: https://eportfolio.greatlearning.in/anirudh-g-mannava

Master of Science Molecular, Cellular, Developmental Biology and Genetics   08/2018 – 03/2020
University of Minnesota, Twin Cities
GPA = 3.25

Master of Science (MSc by research) in Biological Sciences   08/2013 – 11/2016
National University of Singapore (NUS), Singapore
CAP = 3.64

Bachelor of Engineering (B.E. Biotechnology)   08/2008 – 07/2012
M.S. Ramaiah Institute of Technology (MSRIT), Bangalore, India
First Class with Distinction GPA = 9.11

AWARDS, CERTIFICATIONS AND VOLUNTEERING

- Completed Green Belt training program on lean six sigma methodology and received a Lean six sigma certification by KPMG (27th to 30th July 2017)
- Data-driven Decision Making by PwC on Coursera. Certificate earned on July 28, 2017
- Qualified the Graduate Aptitude Test in Engineering (GATE 2012) in Biotechnology (98th percentile)
- Awarded the NUS Research Scholarship by the Department of Biological Sciences at National University of Singapore 2013
- Secured 2nd place for the best poster presentation at the national conference "ABHYUDAY 2010" on Molecular Medicine and Nanobiotechnology for the poster entitled "study of radioprotection activity on pBR322 plasmid by chemo-herbal regime."
- Won the 2nd prize in photography conducted by Pfizer, Chennai, India in 2018

SCIENTIFIC PUBLICATIONS

- Mannava, A. G. and N. S. Tolwinski (2015). "Membrane bound GSK-3 activates Wnt signaling through disheveled and arrow."PLoS One 10(4): e0121879 (1st author, Impact Factor = 3.24)
- Kaur, P et al (2017). "Membrane Targeting of Disheveled Can Bypass the Need for Arrow/LRP5." Scientific Reports (3rd author, Impact Factor = 5.133)
- Coombes, C.E., et al., Nonenzymatic Activity of the alpha-Tubulin Acetyltransferase alphaTAT Limits Synaptic Bouton Growth in Neurons. Curr Biol, 2020 (2nd author, Impact Factor = 9.601)

All publications can be found on PubMed: https://pubmed.ncbi.nlm.nih.gov/?term=anirudh+mannava

TECHNICAL SKILLS

- **Protein biochemistry:** Protein extraction and purification, Affinity chromatography, SDS-PAGE, Coomassie blue and silver staining, denaturing/non-denaturing gel, UV-Vis Spectrophotometry, protein quantification method, 2D-gel Electrophoresis, Western Blotting, ELISA, IP, Co-IP, Colorimetry, AKTA based gel filtration and ion exchange chromatography, HPLC size exclusion, UPLC-Glycan analysis
- **Molecular Biology/rDNA Techniques:** Plasmid isolation, Genomic DNA isolation, transformation, cloning, expression and purification of proteins in prokaryotic system, Restriction digestion, PCR, ligation and agarose gel electrophoresis.
- **Microbiology:** Basic microbial techniques and culturing of strains, spread plating, streaking, minimum inhibition concentration estimation.
- **Animal Cell Culture:** Primary cell culturing from Source/subject, passaging, transfection, electroporation,
- **Drosophila techniques:** Fly Crossing (Beginner), Germline clones, Embryo fixations, Antibody Staining, Immunofluorescence
- **Microscopy:** Bright field microscopy, Confocal Microscopy, Light Sheet Microscopy, TIRF microscopy
- **Data analytics:** Python, exploratory data analysis- Univariate/bivariate/multivariate analysis, A/B testing, statistical hypothesis testing and inference, Machine learning - Supervised learning, regression models (linear and logistic), modelling, Decision trees, ensemble techniques - Data Pre-processing, Customer Profiling, Bagging Classifiers (Bagging and Random Forest), Boosting Classifier (AdaBoost, Gradient Boosting, XGBoost), Stacking Classifier, Hyperparameter Tuning, unsupervised learning – clustering, K-means clustering, hierarchical clustering, cluster profiling,
- **Data Visualization:** Python(plots), Tableau

Miscellaneous: Microsoft Office, Microsoft Word, Microsoft Word, Microsoft Excel, Microsoft PowerPoint, Keynote, Mac OS.

I HEREBY DECLARE THAT THE INFORMTATION FURNISHED ABOVE IS TRUE TO THE BEST OF MY KNOWLEDGE

Last updated: 5th Jan 2022