

Md Yousuf Ali

Amarillo, Texas

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SUMMARY

Pharmaceutical Scientist by training with a strong aptitude for learning new skills to solve the problem in the biomedical/life science field. Bringing exceptional research, programming, statistical analysis, machine learning, deep learning, and communication skills.

EDUCATION

Ph.D. in Pharmaceutical Sciences	GPA	Expected in
Texas Tech University Health Sciences Center, Amarillo, TX	3.97	01/2020
Masters in Pharmaceutical Chemistry		
University of Dhaka, Dhaka, Bangladesh	3.69	2010
Bachelor of Pharmacy		
University of Dhaka, Dhaka, Bangladesh	3.85	2008

PROFESSIONAL EXPERIENCE

Research Assistant	
Advisor: Dr. Margaret Weis	
Department of Pharmaceutical Sciences	
Texas Tech University Health Sciences Center, Amarillo, TX	
<ul style="list-style-type: none"> Designed and conducted a project that showed cytokine-stimulated iNOS expression requires long chain fatty acyl-CoA synthetase (ACSL) Designed and conducted a project that showed HNF-4α does not play any role in iNOS expression in bEnd.3 and C6 astrocytoma cells Trained a summer intern in basic molecular biology techniques 	01/2015
Teaching Assistant	-
<ul style="list-style-type: none"> Anatomy and physiology virtual lab - Assisted a group of 15 PharmD students to understand the anatomy of the human through a real and a virtual skeleton Anatomy and physiology Proctoring – Helped the faculty to conduct the exam of 150 students Case studies – Guided a group of 7 PharmD students to implement theoretical knowledge into practical scenario Clinical correlation - Currently helping a group of 24 students solving clinical correlation problem as a team 	01/2020
Product Development Officer	
ACI Limited (Pharmaceuticals)	12/2013
Narayangonj, Dhaka, Bangladesh	-
<ul style="list-style-type: none"> Performed physical and chemical test relevant to product development, analytical method development, and validation 	07/2014

- Performed physical and chemical tests requires for stability analysis such as accelerated stability, real-time or ongoing study of new products
- Ensured compliance of GLP at all stages of testing of products under the product development program.

Quality Assurance Officer

Renata Limited, Dhaka, Bangladesh.

07/2013

- Actively participated with the expert during Installation Qualification (IQ) and Operational Qualification (OQ) of different pharmaceutical machines like Rapid Mixing Granulator and Capsule Filling Machine.

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10/2013

PUBLICATIONS

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- Syeda Sadia Ameen, S.R.J., **Md. Yousuf Ali**. Evaluation of The Anti-Inflammatory and Antipyretic Activities of The Plant *Alpinia Nigra* (Family: Zingiberaceae). World Journal of Pharmaceutical Research 3, 164-170 (2014).
 - **Md. Yousuf Ali**, U.K.M. Antioxidant, Antimicrobial and Toxicological Investigation of Propolis: Pharmacological evaluation of Propolis collected from Sudarbans. LAMBERT Academic Publishing, 2012.

CONFERENCE PRESENTATIONS

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- **Yousuf Ali**, Margaret Teresa Weis. "Cytokine-stimulated iNOS Expression Requires Long Chain Fatty Acyl CoA Synthetase (ACSL)". Experimental Biology, Orlando, FL 04/2019

AWARDS AND HONORS

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- GSBS President's Travel Scholarship for Society for Neuroscience conference 2019
 - TTUHSC- AAPS Student Chapter travel award for American Association of Pharmaceutical Scientists (AAPS) conference 2019
 - Cayman Chemical Travel Grant 2019
 - American Association of Bangladeshi Pharmaceutical Scientists (AABPS) travel award 2019
 - Travel Grant from "Bangladesh-Sweden Trust Fund" for higher studies in abroad 2015

SELECTED TECHNICAL SKILLS

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- Cell culture
 - Western blot
 - RNA extraction
 - qPCR
 - siRNA Gene Knockdown
 - ELISA
 - Enzyme activity assay

SOFTWARE SKILLS

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- GraphPad Prism
 - SPSS
 - ImageJ
 - Endnote
 - ChemDraw
 - Microsoft office

PROGRAMMING SKILLS

-
- Python, R, SQL, SAS, Tableau, AWS, GCP, Git/GitHub, Docker, Linux
 - Bioconductor, ChIP-Seq, RNA-Seq, HISAT, FastQC, SAMtools, StringTie, MACS

PROJECTS:

Finding Donors for CharityML – Machine Learning [SVM, Random Forest, Gradient Boosting]

- Implemented supervised algorithms to identify people most likely to donate with accuracy 0.87

Identify Customer Segments [K-Means Clustering, PCA, Scikit-learn]

- Applied unsupervised learning technique to identify segments of the population that form the core customer base for a mail-order sales company

Neural Network from Scratch [Python, Numpy, Jupyter Notebook]

- Created a neural network from scratch with numpy to predict bike-sharing pattern

Dog Breed Classifier– Deep Learning [Convolutional Neural Network, PyTorch]

- Created a convolutional neural network both from scratch and using transfer learning that can identify breed of the dogs

Communicate Data Finding – Data Analysis [Matplotlib, Seaborn, Pandas, Numpy]

- Created more than 60 plots in univariate, bivariate and multivariate category for exploratory data analysis (EDA)

Startups using AI for drug discovery - Towards Data Science [Web scraping, BeautifulSoup]

- Created a map of startups that use Artificial Intelligence (AI) for drug discovery

Setup Bioconductor and learn Bioinformatics - posted in YouTube [Docker, R Studio, R]

- Showed how to setup Bioconductor with docker for learning bioinformatics

GRADUATE COURSES

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|----------------------------|------------------------------|------------------------|
| • Biochemistry | • Advanced Neuroscience | • Pharmacokinetics |
| • Immunology | • Cerebrovascular Biology | • Drug Delivery System |
| • Pharmacology | • Biomedical Informatics | • Regulatory Affairs |
| • Principle of Drug Action | • Intermediate Biostatistics | • Principle of Disease |

ONLINE CERTIFICATIONS

Bioconductor for Genomic Data Science - Coursera	06/2019 – 08/2019
Deep Learning Nanodegree - Udacity	03/2019 - 06/2019
Data Scientist Nanodegree - Udacity	11/2018 - 03/2019
Data Analyst Nanodegree - Udacity	09/2018 - 12/2018
Statistics with R Specialization (four courses) - Duke University - Coursera	03/2018 - 10/2018
Inferential Statistics - University of Amsterdam - Coursera	10/2017 - 01/2018

PROFESSIONAL ASSOCIATIONS

- American Association of Pharmaceutical Scientists (AAPS)
- American Society for Biochemistry and Molecular Biology(ASBMB)
- Society for Neuroscience (SFN)
- American Association of Bangladeshi Pharmaceutical Scientists (AABPS)