

# **DESHBANDHU COLLEGE**

# (UNIVERSITY OF DELHI) KALKAJI, NEW DELHI - 110019 Faculty Details Proforma for College Website

Title Dr.	First Name	ASTHA	Last Name	GIRI	Photograph
Designation	ASSISTANT I	PROFESSOR (			
Address	AG 59 SHALIMAR BAGH DELHI 110088				
Phone No. Office					
Residence					
Mobile					
Email	Astha.giri@yahoo.com, agiri@db.du.ac.in				
Web-Page					
Educational Qualification	ons				
Degree	Institution				Year
Ph.D.	Vallabhbhai Patel Chest Institute, University of Delhi				Awarded in 2019
M.Phil.					
PG	Dr. BR Amb	edkar Centre	for Biomedi	ical Research,	2012
	University of	of Delhi			
UG	Daulat Ram	College, Uni	2010		
Any other qualification					

After submitting my thesis on drug resistant *Mycobacterium tuberculosis*, I worked as a guest faculty in the Department of Biochemistry, Panjab University, Chandigarh from Mar 2018-Dec 2018. Following which I taught on ad-hoc basis in the Department of Biochemistry, Shaheed Rajguru College of Applied Sciences for Women, University of Delhi from Jan 2019 to July 2019 before joining Deshbandhu College in August 2019

# Administrative Assignments at Deshbandhu College

- i) A member of the Department Website Committee of the Biochemistry Department, Deshbandhu College, since 2020.
- ii) A member of the DBT STAR College Scheme Committee, Deshbandhu College, since 2020.
- iii) Served as a Member, organizing committee in INSPIRE-DST Program, held at Deshbandhu College from 17<sup>th</sup> to 21<sup>st</sup> December 2019.
- iv) Member of Proctorial Committee, Deshbandhu College, 2019-2020.
- v) Member of Discipline Committee in SABRANG 2020.

# Areas of Interest/Specialization

# I have worked extensively on drug resistant tuberculosis

**Subjects Taught** 

Career Profile

Ist Yr	IInd Yr	IIIrd Yr	
Proteins (Practicals)	Hormones:	Basic Microbiology	Advanced cell biology
	Biochemistry and		(Practical)
	Function		
Enzyme (Practicals)	Metabolism of	Molecular basis of	
	amino acids and	Non-infectious	
	nucleotides	diseases	
	Protein purification	Molecular basis of	
	(Sec)	infectious diseases	
	Membrane biology	Gene expression and	
	and Bioenergetics	regulation (practical)	
	(Practical)		
	Microbial techniques	Genetics (Practical)	
		Genetic Engineering	
		and Biotechnology	

#### Research Guidance

- 1. Conducted summer project for in-house students at SRCASW college on the topic: Study of antimicrobial activity in peels of citrus fruits from 24/05/2019 to 24/06/2019.
- Conducted 1 month summer training and research project for Ms. Kirti Garg (Student of B.Sc Microbiology, Amity University, Noida) on the topic: Exploring the antimicrobial activity of Indian spice extracts, from 28/05/2019 to 28/06/2019. The work was presented at Nuticon-2019, held at Bangkok, Thailand in Nov 2019.
- 3. Conducted 1day workshop on in-silico molecular cloning and primer designing for undergraduate students of St. Joseph college, Vishakhapatnam and post-graduate students of Forensic science institute, Faridabad on 10/05/2019 and 28/06/2019 respectively.

#### **Publications Profile**

- 1. Lack of association of novel mutation Asp397Gly in aftB gene with ethambutol resistance in clinical isolates of Mycobacterium tuberculosis. Tuberculosis (Edinb). 2019 Mar;115:49-55. Astha Giri, Safi H, Cabibbe AM, Gupta S, Narang A, Tyagi G, Shrivastava K, Kumar C, Kumar Sharma N, Lingaraju S, Trovato A, Battaglia S, Cirillo DM, Bose M, Alland D, Varma-Basil M.
- 2. Polymorphisms in Rv3806c (ubiA) and the upstream region of embA in relation to ethambutol resistance in clinical isolates of Mycobacterium tuberculosis from North India. Tuberculosis.

  2018;108:41 46. Astha Giri, Shraddha Gupta, Hassan Safi, Anshika Narang, Kamal Shrivastava, Naresh Kumar, Subramanya Lingaraju, Mahmud Hanif, Anuj Bhatnagar, Balakrishnan Menon, David Alland, Mandira Varma-Basil.
- 3. Contribution of putative efflux pump genes to isoniazid resistance in clinical isolates of Mycobacterium tuberculosis. Int J Mycobacteriol. 2017;6(2):177-183. Narang A, Giri A, Gupta S, Garima K, Bose M, Varma-Basil M.
- 4. Potential impact of efflux pump genes in mediating rifampicin resistance in clinical isolates of Mycobacterium tuberculosis from India. Narang A, Garima K, Porwal S, Bhandekar A, Shrivastava K, Giri A, Sharma NK, Bose M, Varma-Basil M. PLoS One. 2019 Sep 26;14 (9):e0223163.
- 5. An overview of pulmonary infections due to rapidly growing mycobacteria in South Asia and

impressions from a subtropical region. Shrivastava K, Kumar C, Singh A, Narang A, Giri A et al. Int J Mycobacteriology. 2020 Mar 6;9(1): 62-70

6. A snapshot of the predominant single nucleotide polymorphism cluster groups of *Mycobacterium tuberculosis* clinical isolates in Delhi, India. Tuberculosis. 2016;100:72-81. Varma-Basil M, Narang A, Chakravorty S, Garima K, Gupta S, Sharma N, Giri A, Zozio T, Couvin D, Hanif M, Bhatnagar A, Menon B, Niemann S, Rastogi N, Alland D, Bose M.

# Conference Organization/ Presentations

## Participation as a member of organizing committee:

- 1. Participated as organizing member in International Webinar on "RARE DISEASES: RARE INSIGHTS INTO THE RESEARCH, CHALLENGES AND CONCERNS" organized on 29th March, 2021.
- 2. Participated as Organizing member of International Webinar Series lecture on "Hands on Training Session in Scientific Writing" organized on 12th November, 2020.
- 3. Participated as organizing member in International Webinar Series "Understanding Pathophysiology and Therapeutic Strategies for Neurological Disorders" on 29th October, 2020.
- 4. Participated as organizing member in International Webinar Series on "Non-invasive Cancer Diagnosis and Prognosis" on 17th October, 2020.
- 5. Participated as Organising member in National Conference in: Pharmacovigilance: Advancement of Safe drug development" in 16th-17th January 2020.
- 6. Participated as a member, Organizing Committee of the academic fest of the Department of Biochemistry "Biospark" on 24<sup>th</sup> September 2019 at Deshbandhu College.
- 7. Organized and participated in the CME on Non-tuberculous Mycobacteria held at Vallabhbhai Patel Chest Institute on 1st November 2018.
- **8.** Organized and Participated in the National Workshop on Advancement in Immunology held in the Department of Virology, Vallabhbhai Patel Chest Institute, University of Delhi.

#### Participation in conferences/symposia/trainings:

#### **Trainings:**

- 1. Participated in the "Online Hands-on Workshop in Research Methodology" on 1st-5th April, 2021.
- 2. Participated in Seven Day Faculty Development Program on "Development and Delivery of Moocs and E-content" being jointly organized by the Central University of Haryana and Deshbandhu College, University of Delhi under PMMMNMTT scheme from June 26 -July 1, 2020.

## Oral presentation:

Garg K, Giri A. Use of Indian Spices: Age old practice as promising anti-microbials.

at International Conference, NutriCon 2019, held in Thailand in November, 2019.

Garg K, **Giri A**. Clove (Syzygium aromaticum) and Black pepper (Piper nigrum) as promising antimicrobial agents against common food borne pathogens " in the International Conference on Advances in Biosciences and Biotechnology, organised by Jaypee Institute of Information and Technology held on 28-30<sup>th</sup> Jan, 2021. The presentation won the 1<sup>st</sup> prize in the competition.

#### Poster Presentation and participation in conferences:

- 1. Garg K, Giri A. "Promising antimicrobial activity of clove against common respiratory pathogen, *Staphylococcus aureus*" at the International Conference on Natural Products and Human Health, held by Deshbandhu College, University of Delhi on 28<sup>th</sup> Feb, 2020.
- 2. Participated in the workshop organized by Biotechnology Industry and Research Assistance Council on the National Entrepreneurship Day, held on 9<sup>th</sup> November 2017 in Miranda House, University of Delhi
- 3. International Poster Presentation and Travel Grant;

Presented a poster at the 38<sup>th</sup> Annual Congress of the European Society of Microbiology, Sibenik Croatia, held on 25-28<sup>th</sup> June 2017 entitiled: Mutations in Rv3805c (*aftB*): A probable cause of high-level ethambutol resistance in clinical isolates of *Mycobacterium tuberculosis*.

*4.* Best Poster Award at the meet of Indian Association of Medical Microbiologists Delhi Chapter 2017, held on 25<sup>th</sup> March 2017 entitled:

Polymorphisms upstream to *embA* lead to high-level ethambutol resistance in clinical isolates of *Mycobacterium tuberculosis* from North India.

- 5. Attended Workshop "Medical Research and Statistical Methods" organized by Post Graduate Institute of Medical Education and Research, Dr. Ram Manohar Lohia Hospital, New Delhi, India (March 02-03, 2016).
- 6. Presented a poster at the 7<sup>th</sup> Annual Conference of Indian Association of Medical Microbiologists, Delhi Chapter, Micro-D-Con 2015 held on Dec 10-12 2015 entitled:

Lack of association between genotypic polymorphisms in *ubiA* and phenotypic ethambutol resistance in clinical isolates of *Mycobacterium tuberculosis* from Delhi.

7. <u>International Poster</u>: Poster presentation at International Union Against Tuberculosis and Lung Diseases held on 26<sup>th</sup> October 2016 at Liverpool, United Kingdom.

Lack of association between genotypic polymorphisms in *ubiA* and ethambutol resistance in clinical isolates of *Mycobacterium tuberculosis* from North India.

Astha Giri, Mandira Varma-Basil.

- 8. Presented a poster at the meet of Indian Association of Medical Microbiologists Delhi Chapter 2014, held on 29<sup>th</sup> March 2014 entitled: Genetic association study reveals heterozygous protection of LTA4H variant in North Indians with tuberculosis.
- 9. Best Poster Award: "Use of MIRU-VNTR in discriminating high IS6110 copy isolates of *M. tuberculosis* obtained from patients of pulmonary tuberculosis in Delhi" Anshika Narang, Kushal Garima, Naresh Kumar, Shraddha Podwal, Anshu Mittal, Astha Giri, Kamal Shrivastava, Mridula Bose, Mandira Varma-Basil.
- 10. Participated in the Find Treat Cure TB conference held on World TB Day 24<sup>th</sup> March 2014 at All India Institute of Medical Sciences, New Delhi.
- 11. Participated in IMMUNOCON-2013, 40<sup>th</sup> Annual Conference of Indian Immunology Society, organized by Department of Biochemisty, University College of Medical Sciences from 15<sup>th</sup>- 17<sup>th</sup> November 2013.
- 12. Attended the "Stop Tuberculosis in my lifetime" symposium held on World TB Day, 24<sup>th</sup> March

2013 at All India Institute of Medical Sciences, New Delhi.

- 13. Participated in CME programme on Evaluation of Drug Safety held on 5<sup>th</sup> April 2013 at VPCI, University of Delhi
- 14. Organized workshop "Molecular Daignostic Methods in Respiratory Infections" in the 26<sup>th</sup> National Conference of Indian Association of Medical Microbiologists organized by Vallabhbhai Patel Chest Institute, New Delhi, India during Microcon 2012 (November 21, 2012).
- 15. Participated in the National Conference on Recent Advances in pure and applied chemistry organized by A.C.B.R, Delhi University from 28<sup>th</sup>- 29<sup>th</sup> December 2010.

# Research Projects (Major Grants/Research Collaboration)

Worked as CoPI/ Mentor in DBT Star College Scheme Project in 2020-2021: Identification and characterization of the potential antimicrobial activity present in natural products (fruits and spices) against commonly found microbes.

#### **Awards and Distinctions**

- 1. Awarded the G.P Talwar Travel Grant for participating in ESM Annual Congress 2017.
- 2. Awarded the Travel Grant by the European Society of Mycobacteriology for attending their 38<sup>th</sup> Annual Congress held in Sibenik, Croatia.
- 3. Awarded the Best free poster award at IAMM-2017 held in AIIMS on 25/03/2017
- 4. GATE 2012 qualified: 94 percentile
- 5. CSIR/UGC NET LS (2011, 2012) qualified
- 6. Awarded summer fellowship/scholarship by the Indian Academy of Sciences (INSA) in 2011.
- 7. Received the Silver Jubilee Award for securing 3<sup>rd</sup> position in the year 2009 from the University of Delhi, North Campus.

# **Association With Professional Bodies**

Member of Indian Association of Medical Microbiologists

# Other Activities

- Won the Women's singles of the CAG's Badminton Tournament held in July 2019
- Winner of the Women's Single, Women's Doulbles and Women's Lucky Doubles title of VPCI
   Sports and Cultural Activities 2016.
- Winner of the Women's Single Badminton title of VPCI Sports and Cultural Activities 2015.

- Winner of the Women's Double Badminton title of VPCI Sports and Cultural Activities 2015
- Event organizer and head of the creative team at A.C.B.R annual cultural event Chaperons 2011
- Winner of several poster making competitions at school and college level.

Signature of Faculty Member

• You are also requested to give your complete resume as a Word or PDF file to be attached as a link on your department page.