

PERSONAL INFORMATION -----**Sagar Aryal**

Permanent Address: New Baneshwor-31, Kathmandu, Nepal

Temporary Address: Waldhausweg, 66123 Saarbrücken, Saarland, Germany

Mobile Number: 977-9840052308

Email: sag.micro@gmail.com

Website: www.sagararyal.com | **Skype ID:** broneps

Gender: Male | **Date of Birth:** 1st Feb, 1990 | **Nationality:** Nepalese | **Marital Status:** Married

Country Visited: Canada, United Kingdom, Germany, Austria, Switzerland, Luxembourg, Slovakia, Czech Republic, China, India.

EDUCATION -----**Feb 2018 – Present Ph.D. in Microbiology**

Central Department of Microbiology, Tribhuvan University, Kathmandu, Nepal

Ph.D. Topic: Molecular characterization of soil actinomycetes and identification of biologically active secondary metabolites.

2011 – 2013**Master's Degree (M.Sc.) in Medical Microbiology**

St. Xavier's College, Maitighar, Kathmandu, Nepal (Tribhuvan University)

Thesis Title: Molecular characterization of multidrug-resistant *Mycobacterium tuberculosis*

2008 - 2011**Bachelor's Degree (B.Sc.) in Microbiology**

St. Xavier's College, Maitighar, Kathmandu, Nepal (Tribhuvan University)

2013 - 2014**One Year Bachelor's Degree (B.Ed.) in Health**

Bagmati Community College, Shantinagar, Kathmandu, Nepal

2006 - 2008**Higher Secondary Education (10+2)**

Himalayan White House International College, Kathmandu, Nepal

1996 - 2006**School Leaving Certificate (SLC)**

Kathmandu Don Bosco School, Kathmandu, Nepal

AWARDS & GRANTS -----**DAAD Bi-nationally Supervised Doctoral Degrees Research Grant**

Helmholtz Institute for Pharmaceutical Research Saarland (HIPS)

Saarbrücken, Germany.

University Grant Commission (UGC) Nepal Ph.D. Fellowship

Award no.: PhD/74_75/S&T-12

Bill and Melinda Gates Foundation Global Health Travel Award 2019

(Registration, Travel, Accommodation and all other expenses covered)

Keystone Symposia on Tuberculosis: Mechanisms, Pathogenesis and Treatment

Fairmont Banff Springs - Banff, Alberta Canada (Jan 17 - Jan 21, 2019)

Research Guide Award- Frs. Locke and Stiller Research Awards (LSRA) Cycle 1 (2017-18)
St. Xavier's College, Kathmandu, Nepal

Annual Applied Microbiology Conference 2018 Grant (Registration, Travel, Accommodation and all other expenses covered)

97-99 Kings Road, Brighton BN1 2FW, United Kingdom (UK)

Society for Applied Microbiology

Best Proposal Award

2018 Synthetic Biotechnology Training Course for Developing Countries

Institute of Microbiology, Chinese Academy of Science (CAS), Beijing, China

Topic: Improving β -carotenoid production in *E. coli* by metabolic engineering based synthetic biology

NAST Research Grant 2017

Principal Investigator

Topic: Sero-epidemiology and genetic characterization of *O. tsutsugamushi* from Nepali Typhus Patients

SfAM Annual Conference 2017 Grant (Registration, Travel, Accommodation and all other expenses covered)

Gateshead Quays, South Shore Road, Gateshead NE8 3BA

Society for Applied Microbiology

Green Chemistry for Sustainable Development Conference Grant 2017

(Registration, Travel, Accommodation and all other expenses covered)

Secunderabad, India (Loyola Academy)

SfAM Communications Award 2015: Professional Communicator Category Winner

Society for Applied Microbiology, London, United Kingdom (UK).

iversity GmbH Ambassador 2013

<https://iversity.org/blog/presenting-our-ambassadors/>

Recognition from National Academy of Young Scientists (NAYS), Pakistan

NAYS recognition for the enormous contribution and life time devotion to science on the occasion of WORLD SCIENTISTS' DAY 2015

TRAINING AND WORKSHOPS -----

- | | |
|------------------------|---|
| Mar 23-25, 2018 | "Research Methodology in Biomedical Sciences" workshop organized by KRIBS
ICA Training Centre, Koteshwor, Kathmandu, Nepal |
| Jan 15-19, 2018 | 2018 Synthetic Biotechnology Training Course for Developing Countries
Institute of Microbiology, Chinese Academy of Science (CAS), Beijing, China |
| Mar 13-15, 2017 | Workshop on "Zoonotic Disease Pandemic Preparedness for South Asia, Using One Health Platform"
Hotel Annapurna Kathmandu, Nepal |
| Nov 3 - 5, 2016 | "IMED 2016 Hackathon" organized by ISID
Hilton Hotel am Stadtpark, Vienna, Austria |
| Nov 4, 2016 | "Innovative Surveillance and EpiCore" Workshop organized by ISID
Hilton Hotel am Stadtpark, Vienna, Austria |
| Jan 16, 2016 | Workshop on "Basic Skills for Hospital Pharmacists"
Indreni Foodland, New Baneshwor, Kathmandu, Nepal |

- Nov 25-27, 2015** **Author AID “Scientific Writing and Publishing” Workshop**
Orchid Hotel, Tripureshwor, Kathmandu, Nepal
- August 10, 2015** **Training on “Bio-Safety and Bio-Security” organized by NPHL**
Rhino Hotel, Chitwan, Nepal
- July 19-31, 2015** **Training on “SPSS Software”**
St. Xavier’s College, Maitighar, Kathmandu, Nepal
- June 25 - 27, 2015** **Workshop on “Data Analysis Using SPSS Software”**
Central Department of Microbiology, TU, Kirtipur, Kathmandu, Nepal
- April - June, 2012** **Certificate in “Food Preparation and Control”**
Indreni Tourism and Hotel Training Center Pvt. Ltd., Kathmandu, Nepal
- Feb - April, 2012** **Developing Applications with MySQL and PHP**
NIIT, Jamal, Kathmandu, Nepal

WORK EXPERIENCES -----

- Nov 2016- Present** **Research Head, Department of Natural Products**
Kathmandu Research Institute for Biological Sciences (KRIBS), Lalitpur, Nepal
<http://kribs.org.np/>
- Feb 2015- June 2019** **Lecturer, Department of Microbiology, St. Xavier’s College**
Kathmandu, Nepal
<http://sxc.edu.np/>

PROFESSIONAL MEMBERSHIPS -----

1. President and Founder of Microbiology Research Society (MRS), Nepal (*since March 2017*)
2. Lifetime Member of Biotechnology Society of Nepal (BSN), Nepal (*since Jan 2014*)
3. International Associate Member of Microbiology Society, UK (*since Nov 2014*)
4. Full International Member of Society for Applied Microbiology (SfAM), UK (*since Dec 2014*)
5. Global Outreach Member of American Society for Microbiology (ASM), USA (*since Dec 2012*)
6. Member of International AIDS Society (IAS), Switzerland (*since Oct 2015*)
7. Member of International Society for Infectious Diseases (ISID), USA (*since Oct 2014*)
8. Member of National Academy of Young Scientists (NAYS), Pakistan (*since Jan 2014*)
9. Member of Scientific Council of ICRG (International Collaborative Research Group), India
10. Member of International Youth Council, Nepal
11. Member of Rotaract Club of Kathmandu North East, Nepal
12. Member of ISME, Netherland.

EDITORIAL EXPERIENCES -----

1. **“SXC Journal of Science and Technology”** (Official Journal of St. Xavier’s College)
Founder and Managing Editor
2. **“Nepal Journal of Bio-Technology”** (<http://bsn.org.np>)
Editor
3. **“Microbiology Info- Online Microbiology Notes”** Website, (<http://microbiologyinfo.com>)
Founder and Author
4. **"Microbiology Notes"** Website (<https://microbenotes.com>)
Founder, Author and Webmaster

PUBLICATIONS -----

1. **Aryal S**, Karki G, Pandey S. 2015. Microbial Diversity in Freshwater and Marine Environment. *Nepal Journal of Biotechnology*. 3(1): 68-70. DOI: <http://dx.doi.org/10.3126/njb.v3i1.14236>
2. **Aryal S**, Poudel M and Pandey S. 2015. Antibiotic Resistance: A Rising Threat. *International Journal of Research in Science & Engineering*. 1(1):1-5.
3. **Aryal S**, Bhandari S, Thapa S, Karn S, Shrestha S, Rijal M. 2015. Detection of *Vibrio cholerae* from water samples collected from different areas of Kathmandu Valley, Nepal. *SXC Journal of Science and Technology*. 1(1):21-24.
4. **Aryal S**. 2017. Chapter 2- Food Security and Microbes. *Global Food Security and Biodiversity*. First Edition. Lulu publication, USA. ISBN 9781387071258.
5. Rijal M, Neupane B, Bhandari P, **Aryal S**. 2015. Asymptomatic Bacteriuria in Elderly Patients with Diabetes Attending a Tertiary Care Center. *J Trop Dis* 3:162. DOI: <http://dx.doi.org/10.4172/2329-891X.1000162>.
6. Rai M, **Aryal S**, Parajuli P. 2017. Characterization and activity of antimicrobial polypeptide of *Bacillus* spp from wastelands of Kathmandu valley. *Annals of Applied Bio-Sciences*. 4(1): A50-57. DOI: 10.21276/AABS.2017.1316.
7. Baniya A, Singh S, Singh M, Nepal P, Adhikari M, **Aryal S**, Adhikari A. 2018. Isolation and Screening of Antibiotics Producing *Streptomyces* spp from the Soil Collected around the Root of *Alnus nepalensis* from Godawari. *Nepal Journal of Biotechnology*. 6(1): 46-56. DOI: <https://doi.org/10.3126/njb.v6i1.22337>
8. Gautam B, Pokhrel P, **Aryal S**, Basnet A. 2017. Efficacy of toothpaste in reducing micro-flora isolated from toothbrush. *Kathmandu University Journal of Science, Engineering and Technology*. 13(2):71-78.
9. Ahmad T, Zohaib, Daud M, Zaman Q, Saifullah, Jadoon MA, Ismail M, Tariq M, Hussain A, Haroon, Murtaza B, **Aryal S**, Pandey S, Muhammad F and Muhammad R. 2015. Prevalence of Tuberculosis Infection in General Population of District Dir (Lower) Pakistan. *Middle-East Journal of Scientific Research*. 23(1):14-17. DOI: 10.5829/idosi.mejsr.2015.23.01.91145.

ON GOING RESEARCH -----

1. Extraction and Identification of Antibacterial Secondary Metabolites from Actinomycetes isolated from soil samples.
2. Extraction and Identification of Antibacterial Secondary Metabolites from Myxobacteria isolated from soil samples.
3. Molecular epidemiology, genetic characterization of *O. tsutsugamushi* and host's immune response from Typhus patients.
4. Screening and quantification of Broadly Neutralizing Antibody in Serum of HIV-infected individuals from Bir Hospital.

PARTICIPATIONS -----**CONFERENCES**

- 1. Annual Applied Microbiology Conference 2018 (Organized by SfAM, UK)**
July 9-11, 2018, 97-99 Kings Road, Brighton BN1 2FW, United Kingdom (UK)
Participation
- 2. Annual Applied Microbiology Conference 2017 (Organized by SfAM, UK)**
July 3-6, 2017, Gateshead, England, UK
Invited Speaker (Workshop): Communicating science through website and social media
- 3. Green Chemistry for Sustainable Development: Issues, Challenges and Prospects**
January 20-21, 2017, Secunderabad, India (Loyola Academy)
Guest Speaker (Oral Presentation): Biogas as a potential and alternative source of energy in Nepal: present condition and future challenges
- 4. International Meeting on Emerging Diseases and Surveillance (IMED) 2016**
November 4-7, 2016, Vienna, Austria
Poster Presentation (No. 19.130): Molecular characterization of multidrug-resistant *Mycobacterium tuberculosis* isolated from different hospitals in Kathmandu valley
- 5. 5th National Conference on Microbiology**
Nov 15-16, 2014, Kathmandu, Nepal
Poster Presentation: Detection of *Vibrio cholerae* from water samples collected from different areas of Kathmandu Valley, Nepal
- 6. 1st World Congress and Expo on Applied Microbiology 2015**
August 18-20, 2015, Frankfurt, Germany
Media Partner and Participation
- 7. 1st International Conference on Bioscience and Biotechnology (ICBB2016)**
February 4 – 6, 2016, Hotel Yellow Pagoda, Kantipath, Kathmandu, Nepal
Media Partner and Participation
- 8. 1st Annual Conference of Neuroscience Society of Nepal (NSN)**
February 13-14, 2016, Hotel Country Villa, Nagarkot, Kathmandu, Nepal
Media Partner and Participation

SYMPOSIUM

- 1. “Envision-Life Science and Medicine”** Mini Symposium, Kathmandu, Nepal
- 2. Nepal – China Symposium on “Biotechnology” Infection and Immunity**, NAST, Khumaltar, Nepal
- 3. Microbiology and One Health Concept in Nepal**, Sept 3, 2016, Orchid Hotel, Kathmandu, Nepal
- 4. “Envision-Life Science and Medicine-II”** Mini Symposium, Kathmandu, Nepal

EXHIBITOR

- 1. 1st PABSON & Ambition Exhibition and Education Fair-2014**, Dhangadhi, Kailali, Nepal
- 2. 18th SET Exhibition**, St. Xavier’s College, Kathmandu, Nepal
- 3. World DNA Day 2015**, Poster Presentation, NAST, Khumaltar, Nepal

PERSONAL SKILLS -----

Mother tongue Nepali

Other languages English, German, Hindi

Organizational Skills 1. Organizer of International Young Microbiologist Competition 2014
2. Organizing Committee and Event Promoter of St. Xavier's College MELA
3. Organizing Committee of Scientific Talk Series (STS), a monthly talk program

Computer skills 1. Good Command of Microsoft Office Tools, Internet Marketing, Social Media Marketing, Web Designing and Graphic Designing.
2. Developing Applications with MySQL and PHP as well as Android App.
3. Good Command in using data analyzing software such as SPSS, Basic Bioinformatics and Primer Designing.

Other skills 1. Using sophisticated tools such as thermal cycler, Gel Doc, Spectrophotometer, ELISA Reader, Electrophoresis unit's horizontal as well as vertical, inverted microscope, carbon dioxide incubator.
2. Strong Social Entrepreneurship skills, initiative and dedication
3. Good at sports especially Cricket, Basketball and Football.
4. Volunteer on Microbiological Conferences, ASM Workshops, Health Camps, Blood Donation Program, St. Xavier's College SET Exhibition and SET Cycle Rally.

REFEREES -----

Dr. Dev Raj Joshi, Ph.D.

Assistant Professor
Central Department of Microbiology
Tribhuvan University
Email: joshi_devraj@hotmail.com

Prof. Dr. Rameshwar Adhikari, Ph.D.

Executive Director,
Research Centre for Applied Science and Technology (RECAST),
Email: nepalpolymer@yahoo.com

Mr. Sudhakar Pant

Head, Department of Microbiology,
St. Xavier's College, Kathmandu, Nepal
Email: sudhakar@sx.edu.np

I certify that all information stated in this CV is true and complete to the best of my knowledge.

Sagar Aryal

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