

Bhupal Govinda Shrestha, PhD

Date of Birth -2nd September 1972

Nationality - Nepali

Department Of Biotechnology

School of Science,

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ACADEMIC QUALIFICATION

Ph D (Apr'04-Mar'07)

Tokyo Univ. of Agriculture, Japan

M Sc. (Apr'00-Mar'02)

Tokyo Univ. of Agriculture, Japan

Research Student (Jul'99-Mar'00)

Tokyo Univ. of Agriculture, Japan

B Tech.(Food) ('91-'96)

Tribhuvan University, Nepal

CURRENT STATUS

**Associate Professor, in Department of Biotechnology, School of Science, at
Kathmandu University, Nepal.**

WORK EXPERIENCE

Regional Surveillance Asst.(Oct'96-Oct'97) HMG/WHO Project, Nepal

Volunteer (Jun'98-Sep'98) SKMT, Nepal

Technical Officer (Sep'98-Nov'98) Kathmandu Dairy, Nepal

Technical Officer (Nov'98-Jul'99) Gold Beverages Ltd

Res. Associate (Apr'02-Mar'04) Tokyo Univ of Agr., Japan

Post Doctoral Fellow (Jul'07-May'08) UBC, Vancouver, Canada

Assistant Professor (Feb '09- May '18) Kathmandu University, Nepal

Scientific Consultant (Oct '10- Jan '13) Everest Biotech Company, UK/Nepal

Post Doctoral Fellow (Jan'13-Jun'13) DKFZ/Univ of Heidelberg, Germany

Trainee (Aug'13-Sept'13) ICGEB, New Delhi

Associate Professor (May '18-till present) Kathmandu University, Nepal

KEY AREAS OF EXPERTISE

Molecular Biology

Energy Research

Medicinal Plant and Cancer Research

Nutritional Biochemistry

GRANTS

- ❖ International Foundation of Science, Sweden, To study the anti cancer effect of medicinal Plants of Nepal.
- ❖ NORAD, Norway, To study potentiality of using agriculture wastes as source of bioethanol and using it as biofuel, which has Everest Biodiesel Company as its Industry partner.
- ❖ NAST/ADB grant for bioethanol project
- ❖ NARTC grant for medicinal plants research
- ❖ UGC Collaborative Research Grant for Medicinal plants and Cancer Research
- ❖ TWAS Grant for Medicinal plants and Cancer Research

AWARDS and HONORS

- ❖ Salt Trading stipend during Bachelor's Degree
- ❖ Rotary Scholarship during Masters Degree
- ❖ Japanese Govt. (Monbukagakusho) Scholarship during PhD degree
- ❖ First, Oratory Contest, Dharan Jaycees, Nepal
- ❖ 4th at SAARC Quiz contest

PROFESSIONAL AND ACADEMIC SERVICE, TRAININGS

- ❖ Reviewer, Journal of Food Science and Technology, Nepal.
- ❖ Member, Biotechnology Society of Nepal
- ❖ Treasurer, Nepal Food Technology Students Association, 1991-92
- ❖ Executive Member, Nepalese Students Association in Japan, 2005-06
- ❖ Member, Editorial Board, Journal of Tropical Life Science
- ❖ Chief Editor, Nepal Journal of Biotechnology

- ❖ Ex Comm Member, Nepal Food Scientists and Technologists Association(NEFOSTA), 2012-2014
- ❖ Ex Comm Member, Nepal University Teachers Association(NUTA), 2012-
- ❖ Three Weeks Training in Stockholm, Sweden regarding Intellectual Property Rights, Nov-Dec, 2015, organized by WIPO and SIDA.

ORAL and POSTER PRESENTATIONS

- ❖ 'Geriatrics and their Nutritional requirements', TU, Nepal, '94
- ❖ 'Nutritional Study of Mustard oil', Tokyo Univ. of Ag, Japan, '02
- ❖ 'Physiological Study of Mustard Oil', Japan Nutr Society, Japan, '02
- ❖ 'Biotechnology: Understanding the molecular mechanism of life', Knowledge transfer seminar, NESAJ, Japan, '05
- ❖ 'Identification and characterization of molecular interactions between Mortalin/mthsp70, Bclxl and Bcl2: significance in p53 function and drug resistance', IUBMB, Japan, '06
- ❖ 'Molecular interactions between Mortalin/mthsp70 and Bclxl and its functional significance', Lorne Cancer Conference, Australia, '07
- ❖ 'Identification and characterization of molecular interactions between Mortalin/mthsp70, Bclxl and Bcl2: significance in p53 function and drug resistance' Tokyo Univ. of Agr., '07
- ❖ 'An introduction to Cancer Biology and functional significance of Mortalin-Bclxl interaction'. JUSAN, Nepal, '07
- ❖ 'Study of molecular interactions between Mortalin/mthsp70, Bclxl and Bcl2: significance in p53 function', INBS, Nepal '07
- ❖ 'Induction of senescence in human cancer cells by management of Mortalin', 2nd Intl Workshop on cell regulations in division and arrest, Japan, '07
- ❖ 'To study the potentiality of agriculture wastes as a source of xylose/glucose for production of ethanol and using it as biofuel' Renewable Energy Conference, Nepal 2012
- ❖ ' Merger of medicinal plants and biotechnology based research: Pathway analysis and molecular mechanism of action, Natural Product Conference, Nepal, 2012
- ❖ 'Characterization and functional significance of cellulolytic and xylanolytic microbes isolated from Nepal and their utilization for lignocellulosic biomass degradation' Renewable Energy Conference, Nepal 2013
- ❖ Invited Speaker, 'Characterization and functional significance of cellulolytic and xylanolytic microbes isolated from Nepal and their utilization for lignocellulosic biomass degradation' Bio-Energy Conference, Nepal 2014.

- ❖ Invited Speaker, 'International Seminar on Natural Resource Utilization' India, 2015
- ❖ Invited Speaker 'Intellectual Property Rights', BSN, Nepal, 2016
- ❖ Invited Speaker, South Asian Biotechnology Conference, Colombo, Sri Lanka, 2018
- ❖ Keynote Speaker, St Xavier College, Nepal, Oct 2018

PUBLICATIONS

Anil Singh Basnyat , Abhimanyu Jha , R Pathak , **Bhupal Govinda Shrestha**, ' Study of Serum Lactate Dehydrogenase and Gamma-Glutamyl Transpeptidase in Breast Cancer Patients Receiving Chemotherapy'. The journal of tropical life science. , April 2017, Vol. 7, No. 1, pp. 128 – 132

Jaya Bhandari, Pratiksha Thapa, Prasodhan Niraula, Nita Thapa, Nikita Shrestha, **Bhupal Govinda Shrestha** Study of Phytochemical, Anti-Microbial, Anti-Oxidant, Phytotoxic, and Immunomodulatory Activity Properties of Bauhinia variegata The journal of tropical life science, January 2017; Vol. 7, No. 1, pp. 83 – 90,

Anil Singh Basnyat, Prabin Gyawali, Abimanyu Jha, Prabodh Risal, **Bhupal Govinda Shrestha**. Evaluation of Serum Lipids and C-peptide among Breast Cancer Patients with Chemotherapy. ACCLM 2016;2(2):8-14

Jaya Bhandari, BushraTaj Muhammad, Pratiksha Thapa and **Bhupal Govinda Shrestha**. Study of phytochemical, anti-microbial, anti-oxidant, and anti-cancer properties of Allium wallichii. BMC Complementary and Alternative Medicine (2017) 17:102.

Nita Thapa, Pratiksha Thapa, Jay Bhandari, Prasodhan Niraula, Nikita Shrestha, **Bhupal G. Shrestha**. Study of Phytochemical, Antioxidant and Antimicrobial Activity of Artocarpus heterophyllus. Nepal Journal of Biotechnology, Dec. 2016; Vol.4;No.1:47-53

Gunjan Bisht, Sagar Rayamajhi, Biplab KC, Siddhi Nath Paudel, Deepak Karna and **Bhupal G. Shrestha**; Synthesis, Characterization, and Study of In Vitro Cytotoxicity of ZnO-Fe₃O₄ Magnetic Composite Nanoparticles in Human Breast Cancer Cell Line (MDA-MB-231) and Mouse Fibroblast (NIH 3T3); Nanoscale Research Letters; 2016; 11;537

Sanjaya Ghimire, Shakep Bhattarai, Sailesh Phuyal, Bimal Thapa and **Bhupal Govinda Shrestha**, Isolation and Screening of Potential Cellulolytic and Xylanolytic Bacteria from Soil Sample for Degradation of Lignocellulosic Biomass. Nov 2016, J of Tropical Life Science; 6(3); 165-169

Biplab KC, Siddhi Nath Paudel, Sagar Rayamajhi, Deepak Karna, Sandeep Adhikari, **Bhupal G. Shrestha** and Gunjan Bisht, Enhanced preferential cytotoxicity through surface modification: synthesis, characterization and comparative in vitro evaluation of TritonX-100 modified and unmodified zinc oxide nanoparticles in human breast cancer cell line (MDA-MB-231), Apr 2016; *Chemistry Central Journal*, 10:16

Pritish Shrestha, Manisha Bista, Prativa Sharma, Shristi Shrestha, Basanta Lamichhane, Sandeep Adhikari, Binayak Raj Pandey, **Bhupal Govinda Shrestha**; Phytochemical Screening, Antimicrobial Activity and Cytotoxicity of Nepalese Medicinal Plants, *Swertia chirayita* and *Dendrobium amoenum* ; Nepal Journal of Biotechnology. Dec. 2015; Vol. 3, No.1:48-54

Pritish Shrestha , Sandeep Adhikari, Basanta Lamichhane, **Bhupal Govinda Shrestha**; Phytochemical Screening of the Medicinal Plants of Nepal; IOSR Journal of Environmental Science, Toxicology and Food Technology 1(6):11-17

S Adhikari, B Lamichhane, P Shrestha, **BG Shrestha**, 'Effect of Invitro Zinc (II) supplementation on Normal and Cancer Cell lines.' International Journal for Research in Applied Science & Engineering Technology; Volume 3 Issue I, Jan 2015

Jaya Bhandari, Asma Naqvi, Prasodhan Niraula , Pratikshya Thapa, Nita Thapa , Nikita Shrestha and **Bhupal Govinda Shrestha** 'Phytochemical screening, antioxidant assay of juniperus recurva and study of it's in vitro cytotoxicity against breast cancer cell lines' International Journal of Pharma and Bio Sciences; 6(3): 1134 – 1145, July 2015

Pranita Kaphle, Srishti Rana, Jay Bhandari, Asha Bhandari, Richa Aishwarya, Tika Bahadur Karki, **Bhupal Govinda Shrestha**, Isolation and Optimization of Cellulolytic and Xylanolytic Microbes from Nepal and their Utilization for Lignocellulosic Biomass Degradation; International Journal of Interdisciplinary and Multidisciplinary Studies (IJIMS), 2014, Vol 1, No.4, 1-10.

Basanta Lamichhane, Sandeep Adhikari, Pritish Shrestha, **Bhupal Govinda Shrestha** 'Study of phytochemical, antioxidant, antimicrobial and anticancer activity of Berberis Aristata' Journal of tropical Life Science, Vol 4, No 1, 2014.

Pranita Kaphle, Asha Bhandari, Srishti Rana, Sandeep Adhikari, Tika Bahadur Karki, **Bhupal Govinda Shrestha**, 'Characterization and functional significance of cellulolytic and xylanolytic microbes isolated from Nepal and their utilization for lignocellulosic biomass degradation'. Rentech Symposium, Compendium, Vol 3, Sept 2013

Pranita Kaphle, Asha Bhandari, Srishti Rana, Sandeep Adhikari, Tika Bahadur Karki, **Bhupal Govinda Shrestha**, 'To study the potentiality of agriculture wastes as a source of xylose/glucose for production of ethanol and using it as biofuel'. Rentech Symposium, Compendium, Vol 2, Dec 2012

Srishti Rana, Sandeep Adhikari, Tika Bahadur Karki, **Bhupal Govinda Shrestha**, 'To study the potentiality of agriculture wastes as a source of xylose/glucose for production of ethanol and using it as biofuel'. Rentech Symposium, Compendium, Vol 1, Mar 2012

Raunak Shrestha, Rubin Narayan Joshi, Kriti Joshi, Bal Hari Poudel and **Bhupal Govinda Shrestha**, 'Analysis of KatG Ser315Thr Mutation in Multidrug Resistant

Mycobacterium tuberculosis and SLC11A1 Polymorphism in Multidrug Resistance Tuberculosis in Central Development Region of Nepal Using PCR-RFLP Technique: A Pilot Study', Nepal Journal of Biotechnology, Jan 2011, Vol. 1, No 1:14-21.

N Widodo, Y Takagi, **BG Shrestha**, Tetsuro Ishii, SC Kaul and R Wadhwa, 'Selective killing of cancer cells by leaf extract of Ashwagandha: Components, activity and pathway analyses', **Cancer Lett.** 2008 Jan 9.

BG Shrestha, CC Deocaris, Y Yamamoto, T Tadokoro, R Wadhwa and SC Kaul, 'Identification and characterization of molecular interactions between Mortalin/mthsp70, Bclxl and Bcl2: significance in p53 function and drug resistance', submitted.

BG Shrestha, A Teramoto, Ken-Ichi Kobayashi, Y Yamamoto, and T Tadokoro, 'Physiological Study of Mustard Oil feeding of rats', **J for the Integrated Study of Dietary Habits**, Vol. 19, No. 4, 2009:334-340.

CC Deocaris, N Widodo, K Kaur, K Yamazaki, **BG Shrestha**, SC Kaul and R Wadhwa, 'Mortalin sensitizes Human cancer cells to MKT-077 induced senescence', **Cancer Lett** 2007 Jul 18;252(2):259-269.

N Widodo, K Kaur, **BG Shrestha**, A Nagpal, Y Takagi, SC Kaul and R Wadhwa, 'Selective Killing of Cancer Cells by Leaf Extract of Ashwagandha: Identification of a Tumor Inhibitory Factor and The First Molecular Insights to its Effect', **Clinical Cancer Res**, 2007 Apr1;13(7):2298-306.

CC Deocaris, **BG Shrestha**, DC Kraft, K Yamazaki, SC Kaul, SIS Rattan, and R Wadhwa, 'Geroprotection by Glycerol, Insights to its mechanism and Clinical potentials', **Ann NY Acad Sci**, 1067:488-492(2006)

BG Shrestha, T Iijima, Y Yamamoto, A Maekawa and T Tadokoro, 'Evaluation of mustard seed and oil varieties as grown or used in Nepal', **J for the Integrated Study of Dietary Habits**, Vol. 14, No. 2, 2003