



Prof. Nanda Bahadur Singh, PhD
Former Vice-Chancellor, Mid-West University, Surkhet, Nepal
Medical genomics (Genes and Diseases)
Ethnogenetics, Ecology & Ethnobiology
Central Department of Zoology (Life Sciences)
Tribhuvan University, Kirtipur, Katmandu, Nepal

Prof. Nanda Bahadur Singh, PhD (Medical Ethno-genomics from The University of Tokyo, Japan)

Domains of contribution:

I can contribute to two domains of research, teaching, supervision and publication as I have been teaching and supervising M.Sc and PhD students for the last 28 years. I can teach by using all sorts of multi-media including the smart board. It is fun in teaching and research.

The 1st domain of my research is in Medical genomics, especially molecular analysis of genes and diseases. My specialization includes Molecular human genetics, Population genetics, Proteomics, Bioinformatics, Biochemistry, Medical genomics, Genes and disease, Genetic and academic counseling etc. I can also design innovative course of study for B.Sc., M.B.B.S and M.Sc. and PhD level which I have already done for Tribhuvan University (TU), Nepal, Mid-West University, Surkhet, Nepal and College of Medicine, Henan University, China where I was invited by the college of Medicine, Henan University to teach medical genetics to M.B.B.S students and do research. I spent one year there as a visiting professor of medical genetics and pre-clinical biology.

Recently (March 28, 2017), Zoology subject committee passed a new discipline named “Genomics and Molecular Biology” as a specialization subject for M.Sc and PhD students to be started at TU under my initiation. I was the single man to design the whole micro-syllabi for six special papers, namely (i) Genomics and proteomics, (ii) Molecular biology and bionanotechnology, (iii) Bioinformatics and molecular systems biology, (iv) Molecular biochemistry, (v) Molecular immunology and (vi) Applied medico-genomics etc. Highly interested in nomadic and marginalized ethnic groups as I have been working with the only and the last nomadic “Raute tribe” in Nepal for the last 33 years.

The 2nd domain of my research is in Ecology, Environment, Biodiversity, Natural resource management, Climate change, Medical Ethnobiology and Indigenous knowledge system etc as I did my M.Sc in Ecology and Environment at Central Department of Zoology, Tribhuvan University, Kirtipur, Kathmandu, Nepal.

Policy Innovation: I can work for innovative policy for over all University and society, specifically for converting whole university modus operandi system into a vibrant academic hub, specifically setting up of an innovative genomic cum molecular Laboratory, designing new syllabi for undergraduate, graduate and postgraduate level and supervising M.Sc, and PhD students. My motto as university professor is to create a knowledge-based society in the 21st century.

Qualifications

Basic Degrees

<u>Degree</u>	<u>Major Subjects</u>	<u>Division</u>	<u>Years</u>	<u>School/College/Un</u>
I.Sc.	Biology	First	1985	ASCOL, Nepal
B.Sc.	Biology	First	1988	ASCOL, Nepal
M.Sc	Zoology (Ecology)	First class first	1993	T.U, Nepal
		(Gold medalist)		
PhD	Ethno-molecular genetics		2002	The Univ. of Tokyo, Japan

(Monbukagakusho Fellow i.e., Japanese Government fellow selected for PhD research through global competition. The research topic for PhD is Ethno-genomics and Mol. Ethnobiology of Six Indigenous Ethnic Groups in Nepal, 2002: Especially ethno-resistant genes against Malaria, Cancer, HIV, Human skin Pigmentation and Alcoholism)

Extra Degrees:

B.A	Major English
B.L.	Environment Law
B.Ed	English linguistics.

Employments

- 1. Professor:** Central Department of Zoology, Tribhuvan University (T.U.), Kathmandu, Nepal (Since April 19, 2015~present).
- 2. “Chief consultant”** for setting up “the Central Police Forensic Science Laboratory (CPFSL)” at Maharajgunj in Kathmandu, Nepal
- 3. “Single man Designer”** for establishing a New Genomic and Molecular Laboratory at Central Department of Zoology, Tribhuvan University (CDZ,TU), Kirtipur, Kathmandu, Nepal from 2017 to 2018 funded by World Bank.
- 4. “Single man Designer”** for ‘DNA Learning Carrel’ in 2018 funded by B.P. Koirala Memorial, Planetarium Observatory and Science Museum Development Board, Ministry of Science, Education and Technology, Government of Nepal.
- 5. Member** of the “Research Committee” and “Subject Committee” to supervise all research related activities of BSc, MSc and PhD researchers at CDZ, TU and throughout Nepal since 2014.
- 6. Main architect** of new courses of study like Genomics and molecular biology, Biostatistics, Bioinformatics, Ethnobiology, Ecology, Ecosystem, Ecosystem services, Climate Change. Biological Invasion, Biodiversity etc for B.Sc and M.Sc levels under CDZ, TU, Kathmandu, Nepal for B.Sc, M.Sc and PhD since 2014.
- 7. Associate Professor (Reader):** Central Department of Zoology, Tribhuvan University (T.U.), Kathmandu, Nepal (Since June 4, 2009~present).
- 8. Lecturer (Asst. Professor):** Central Department of Zoology, Tribhuvan University (T.U.), Kathmandu, Nepal (Since May, 1997~June 4, 2009).

9. **Co-ordinator:** ASEED, Asia (Action for Solidarity, Equality, Environment & Development, Asia) is an international network and has its Asia-Pacific regional office in Kathmandu, Nepal, 1996-97).
10. **Founder Global Co-ordinator:** Global Research Carrel for Ethnobiology, Nepal (GLORECA ETHNOBIOLOGY, Nepal, 1997), a research institute dedicated to ethnobiology of the indigenous peoples in Nepal.
11. **Coordinator of the Affiliation Committee: Nominated** by "Kalikot District Development Committee", Government of Nepal for the affiliation of the proposed "*Tila-Karnali Multiple Campus*" to Tribhuvan University, Kirtipur, Nepal in the academic year of 2005. I have already been felicitated by Management Committee of the Campus in April, 2019.
12. **Founder Executive director:** Everest Genomics and Molecular Ethnobiology of Nepal (Everest "GENE"): a research institute established in Kathmandu, Nepal in 2006~ present.
13. **Member:** Academic and Administrative Taskforce, Mid-Western University (Madhya Pachshimanchal University), Surkhet, Nepal in August 16, 2010.
14. **Director:** Dr. Imamura Memorial Institute of Medical Sciences (IMIMS), Kathmandu, Nepal from December, 2010-present.
15. **Member:** Selection committee for **National Conservation Award, Ministry of Forest and Soil Conservation**, Government of Nepal Since August 15, 2014.
16. **Member:** School Management Committee, **Laboratory Higher Secondary English Boarding School**, Kirtipur, Kathmandu, Nepal Since February 9, 2015-present.
17. **Expert Member:** Genetic Research Sub-committee, **Nepal Health Research Council, Ministry of Health (NHRC)**, Government of Nepal since October, 2015-present.
18. **Member:** Biological Sciences Sub-committee, **Nepal Academy of Science and Technology (NAST)**, Government of Nepal since February, 2016.
19. **Expert Member:** Science & Technology Cluster Committee, **University Grants Commission (UGC)** for the period of two year effective from 17th April, 2017-April, 2019.
20. **Chief Advisor:** Mountain Television operated under Padma Media Group, Kupondole, Nepal effective from 17th Sep, 2018-March, 2019.
21. **Convener:** "**The Taskforce**", nominated by **Hon'ble Education, Science and Technology Minister Giriraj Mani Pokhrel, Nepal** on July 20, 2020 for submitting a report on "**Genomic Study, Research, Structural layout and the legal status**" in Nepal within a period of three months.
22. **Member:** **The 8th National Science Day Celebration Main Organizing Committee 2020**" nominated by its **Convener Hon'ble Education, Science and Technology Minister Giriraj Mani Pokhrel, Nepal** on August 14, 2020.
23. **Member:** **The High-Level Steering Committee of University Grants Commission (UGC)** nominated on Sep. 25, 2020 and to be coordinated by the UGC Chairman with a view to draft a newly proposed World Bank funded project entitled "Nurturing Higher Education in Nepal".

PhD Thesis Supervision:

Five PhD candidates are carrying out their PhD researches in biomedical and molecular area under my supervision:

Two of 5 PhD Scholars have already completed two PhD researches:

- **Geeta Shrestha**, an associate professor of Mechi Multiple College, Ilam, Nepal was carrying out her PhD research on the topic "Biomedical and Genetic Analysis of Beta-thalassemia Disease in the Kochila Tharu and Koch Rajabhanshi Ethnic Groups in Eastern Nepal since April 13, 2016.
- **Mr. Pit Nepali**, the head of Zoology, Palpa Campus was doing his PhD research on the topic "Study on Herpeto-fauna of Six District of Lumbini Province, Nepal" since January 24, 2016.
- **Mr. Dharmaraj Thapa**, Lecturer of Mid-western University, Surkhet is doing his his PhD research on the topic "Biomedical and Genetic Analysis of Sickle Cell Anaemia in Tharu Ethnic Group of Western Parts of Nepal since 2015.
- **Mr. Dibya Dahal** is doing his PhD research on the topic "Elevational diversity of bats and predicting their distribution in Nepal" since September, 2019.
- **Mr. Ganesh Tamang** is doing his PhD research on the topic "Ecology of Asian Openbill (*Anastomus oscitans*, Boddaert, 1783) in low and mid-land of Province No. 1 and 2 of Eastern Nepal" since September, 2019.

PhD Thesis Co-supervision of Foreign researcher in Medical Science:

- Co-supervisor for Ms Anna Durrance-Bagale for her PhD research topic entitled "**Spillover: Mixed methods study to examine the anthropogenic drivers of zoonotic disease in Nepal**" under the **Supervisors:** Dr Natasha Howard (Social scientist, LSHTM, UK; lead supervisor); Professor Steve Belmain (Professor of Ecology, Natural Resources Institute, University of Greenwich, UK; co-supervisor); and Professor Nanda Bahadur Singh (Professor of Zoology, Tribhuvan University, Kathmandu, Nepal; co-supervisor) since October, 2019.

M.Sc. dissertations Supervision in Biomedical and Genetic Science:

Altogether more than **60 dissertations** have been supervised under my mentorship for M.sc level for the last 28 years. They are specifically as follows:

- **Five dissertations** on Legal Aspects of Genetic Resource-Conservation in Nepal by Hussein, Morphological and genetic analysis of Bats in Nepal by Sanjan Thapa, and Biochemical detection of Sickle cell trait in Tharu and Magar Ethnic Groups in Dang District of Nepal by Bibek Sunar, Detection of G6PD deficiency in Ethnic Group in Kailali District in Nepal by Himaj Joshi between 2005 to 2019.

Forty-five M.Sc. dissertations Supervision in Biology:

- Completed supervising about **forty five (45) dissertations** of graduate students of M.Sc. Zoology (Ecology) on the topics *entitled "Ethnobiology, Medical Ethnobiology and Indigenous Knowledge System of about 40 different ethnic groups like Balami*

(Nuwakot), Bote, Chepang, Danuwar (Chitwan District), Danuwar (Kavre), Darai, Gaine, Gurung, Hayu, Kisan (Jhapa), Kumal (Gorkha), Kumal (Palpa), Lapchas (Ilam), Limbus (Taplejung), Lohar, Magar, Meche, Mushar, Pahari, Rajbanshi (Jhapa), Raji (Surkeht), Sarki, Satar, Tamang, Tharu (Dang), Tharu (Chitwan), Bankariya, Magar (Parbat), Mirgratory Tangbeton (Mustang), Rai (Bhojpur), Newar of Khokana Village (Lalitpur) living in different ecological niches in Nepal in between the academic years of 1995 and 2019.

- About **ten dissertations** on Biodiversity of Birds in Rupa lakes in Pokhara by Sushma Koirala, Water analysis of Bagmati rivers at five locations by Meena Barakoti, Human-wild life conflict in Gaurishankar Conservation Area in Nepal by Balaram Awasthi, Learning Behavior of Horse Colts: A Case Study of Nepal Cavalry Barrack, Singha Durbar, Kathmandu, Nepal by Kamal KC and Habitat selection and Seasonal Diet Analysis of Himalayan Musk deer and Livestock in Mustang District by Kiran Maski, Human-Wildlife Conflict in Koshi Tapu wildlife reserve by Dip Narayan Shah, Distribution of Nilgai by Shrijana Khanal, Status and Distribution of Sarus crane in Bank District in Nepal by Shraddha Tiwari, Bird diversity and Seasonal variation of Dhaneshwori Foresty of Kavre have already been completed in the academic year of 2005-2019.

Publications:

(a) International Publications

1. Dahal Dibya Raj, Sanjan Thapa, Suraj Baral, Tej Bahadur Thapa and **Nanda Bahadur Singh (2022)**: First record of East Asian tailless leaf-nosed bat (*Coelops frithii*) from Nepal and extension of its global range. *Mammalia (De-gruyter)*. First Online: April 22. (Q2)
2. Dahal Dibya Raj, Sanjan Thapa, Delip Singh Chand & **Nanda Bahadur Singh (2022)**: Distribution records of Dormer's Bat *Scotozous dormeri* (Dobson, 1875) (*Mammalia: Chiroptera: Vespertilionidae*) in Nepal. *Journal of Threatened Taxa*. 14(4): 20903–20907. 26 April. (Q3)
3. Dahal, Dibya Raj Sanjan Thapa, Rameshower Ghimire, Gabor Csorba, **Nanda Bahadur Singh (2022)**: First records of the Hairy-winged bat (*Harpiocephalus harpia*) from Nepal. *Journal of Bat Research & Conservation* 49 Volume 15 (1). 10 October.
4. Shah Dip Narayan, Srijana Khanal, **Nanda Bahadur Singh (2021)**: Addressing Patterns of Human-Wildlife Conflict in Sunsari District of Nepal. *Academic Journal of Research and Scientific Publishing* | Vol 2 | Issue 21. 5 January.
5. Nepali Pit Bahadur, **Nanda Bahadur Singh (2021)**: Documentation of Herpetofaunal

Diversity in Nawalparasi District, Nepal. Uttar Pradesh Journal of Zoology. 41(24): 56-70. 28 January.

6. Gita Shrestha, **Nanda Bahadur Singh**, Priti Shrestha and Chitra Baniya (2021): Detection of Common β -Globin Gene Mutation in Eastern Nepal by Multiplex Amplification Refractory Mutation System Polymerase Chain Reaction System. Natural/Human Health/Research NJST | Vol 20 | No. 1 | Jan-Jun. Nepal Academy of Science and Technology.
7. Nepali A, Khanal S, Sapkota S, **Nanda BS (2021)**: Seasonal Variation of Bird Diversity in Dhaneshwor Baikiwa Community Forest, Kavrepalanchowk District, Nepal. J Biodivers Manage Forestry 10:3. 21 March.
8. Nepali Pit Bahadur, **Nanda Bahadur Singh (2021)**: New Records of The Sikkimese Caecilian, *Ichthyophis Sikkimensis* Taylor 1960 (Amphibia: Gymnophiona: Ichthyophiidae), in Nepal. Reptiles & Amphibians. 28(1):86–88. April.
9. Nepali Pit Bahadur, **Nanda Bahadur Singh (2021)**: Documentation of Herpetofaunal Diversity in Nawalparasi District, Nepal. Uttar Pradesh Journal of Zoology. 41(24): 56-70, ISSN: 0256-971X (P).
10. Shrestha Gita, **Nanda Bahadur Singh (2020)**: Distribution of Thalassemia and Hemoglobinopathy in the Koch Rajbanshi ethnic group of Jhapa, Nepal. International Research Journal of Biological Sciences. ISSN 2278-3202 Vol. 9(2), 35-38, May (2020) Int. Res. J. Biological Sci.
11. Nepali, P.B. & **Singh, N. B. (2020)**: Species diversity and habitat preferences of amphibian fauna in Gulmi district, Nepal. International journal of zoology and research (IJZR), 10(1): 1-14 www.tjprc.org.
12. Srijana Khanal, Dip Narayan Shah, **Nanda Bahadur Singh (2019)**: People Perceptions About the Compensation of Human-Wildlife Conflict: Mitigation Approach. **IJRAR , Volume 6, Issue 2. June.**
13. Shrestha, G and **Singh, NB (2019)**: Distribution of Thalassemia and Hemoglobinopathies in the Koch Rajbanshi Ethnic Group of Jhapa, Nepal. International Research Journal of Biological Sciences: ISCA-IRJBS-2019-084 Date 20-08-2019. The 9th International Science Congress from 8th to 9th December, Bhilai Institute of Technology, Durg, Chhattisgarh, India.

14. Nepali, P. B. & **Singh, N. B.**(2019): Documentation of snake species richness in Palpa, Nepal. *International journal of innovative science and research technology(IJISRT)*, 4: 11. <http://ijisrt.com>.
15. Khanal Srijana, Achyut Aryal, Craig G. Morley, Wendy Wright, **Nanda Bahadur Singh (2017): Challenges of Conserving Blue Bull (Boselaphus tragocamelus) Outside the Protected Areas of Nepal.** Springer on Proceedings of the Zoological Society, pp 1–11. First Online: 18 May. (Q4)
16. Tiwari Shraddha, Dikpal Krishna Karmacharya, **Nanda Bahadur Singh (2017):** Population Status and Habitat Suitability of Sarus Crane (*Grus antigone antigone*, Linnaeus, 1758) in Banke District, Nepal. IJSR, Volume 6, Issue 9: September.
17. Khanal Srijana, **Nanda Bahadur Singh (2017):** Human-Wild Boar (*Sus scrofa*, Linnaeus, 1758) Conflict in Western Nepal. Springer on Proceedings of the Zoological Society, pp 1–8. First Online: 10 October. (Q4)
18. Thapa, S., Subedi, P., **Singh, N.B.** and Pearch, M.J. (2012): The first record of *Scotozous dormeri* Dobson, 1875 from Nepal with new locality records of *Pipistrellus coromandra* (Gray, 1838) and *P. tenuis* (Temminck, 1840) (Chiroptera: Vespertilionidae). *Journal of Threatened Taxa* 4(4): 2481–2489. (Q3)
19. Thapa, S., Shrestha, S., Dahal, S., Daniel, B.A. and **Singh N.B.** (2012). Monitoring and Conservation of Bats in the Kathmandu Valley, Nepal. *Asian Journal of Conservation Biology* Vol. 1 No. 1, pp.1-4. (Q4)
20. Tenzin Gayden, Alicia M. Cadenas, Maria Regueiro, **Nanda B. Singh**, Lev A. Zhivotovsky, Peter A. Underhill, Luigi L. Cavalli-Sforza, and Rene J. Herrera (2007): *The Himalayas as a Directional Barrier to Gene Flow.* *American Journal of Human Genetics*, vol.80 No.5, May. (Q1)
21. **Singh, N.B (2007): Thumbnail Sketch of Genetic Engineering in the world and Nepal. Status of R & D and Commercial Approvals: National Regulatory Regime in Nepal.** A country paper presented at “A South Asian Regional Workshop on Genetic Engineering in Agriculture” organized by *All Nepal Peasants Federation and South Asian Alliance for Poverty Eradication held in Kathmandu, Nepal on July 31~August 1, 2007.*
22. A.M. Cadenas, M. Regueiro, T. Gayden, **N. Singh**, L.A. Zhivotovsky, P.A. Underhill, R.J. Herrera (2006): *Male amelogenin dropouts: phylogenetic context, origins and implications.* *Forensic Sci. Int. June 16, Vol.166:155-163.* (Q1)
23. **Singh, NB;** Takao, S; and Ishida, T (2002): *Serological Survey for the Infection of Hepatitis B Virus, Hepatitis C Virus, Human Immuno-deficiency Virus and Human T-*

Lymphotropic Virus-1 among Isolated Ethnic Groups in Nepal. Anthropological Science 110 (2), 179-183. (Q2)

(b) National Publications

1. Nepali Pit Bahadur and **Nanda Bahadur Singh (2022)**: Species diversity of reptiles in Palpa District, Nepal. Nepalese Journal of Zoology. Vol.6, Issue S1. December. (NepJOL)
2. Gita Shrestha and **Nanda Bahadur Singh (2021)**: Role of red cell Indices in the screening of Beta thalassemia and Hemoglobinopathies. Biodiversity in a Changing World. ISBN-978-9937-0-9119-0. Central Department of Zoology. Tribhuvan University. Kathmandu.
3. Shah Ganga, Jose D. Anadon, Pramod Kumar Jha and **Nanda Bahadur Singh (2019)**: Distribution of vulture species and their nesting in Chitwan-Annapurna Landscape (CHAL), Nepal. Volume 8, Bird Conservation Nepal.
4. Nepali Pit Bahadur and **Nanda Bahadur Singh (2018)**: Status Of Herpetofauna In Rupandehi and Arghakhanchi Districts, Nepal.J. Nat. Hist. Mus. Vol. 30, 2016-18 221-233. (NepJOL)
5. **Poudel, M. & Singh, NB (2016)**: Medical Ethnobiology and Indigenous Knowledge System Found In Darai Ethnic Group of Chitwan, Nepal: *Journal of Institute of Science and Technology*, Vol.21, Number 1, pp 103~111, T.U., Kirtipur, Kathmandu, Nepal. (NepJOL)
6. **Niroula, G. & Singh, NB (2015)**: *Religion and Conservation: A Review of Use and Protection of Sacred Plants and Animals in Nepal. Journal of Institute of Science and Technology*, Vol.20, Number 2, pp 61~66, T.U., Kirtipur, Kathmandu, Nepal. (NepJOL)
7. **Kamal, KC. & Singh, NB (2015)**: *Learning Behavior of Horse Colts: a Case Study of Nepal Cavalry Barrack, Singha Durbar, Kathmandu, Nepal. Journal of Institute of Science and Technology*, Vol.20, Number 2, pp 76~79, T.U., Kirtipur, Kathmandu, Nepal. (NepJOL)
8. **Awasthi, B. & Singh, NB (2015)**: *Status of Human-Wildlife Conflict and Assessment of Crop Damage by Wild Animals in Gaurishankar Conservation Area, Nepal. Journal of Institute of Science and Technology*, Vol.20, Number 1, pp 107~111, T.U., Kirtipur, Kathmandu, Nepal. (NepJOL)
9. **Singh, NB (2015)**: *Ethno-genetics of AIM1 gene relating to Human Skin Pigmentation among Six Indigenous Nationalities in Nepal. Journal of Institute of Science and Technology*, Vol.20, Number 2, pp 90~93, T.U., Kirtipur, Kathmandu, Nepal. (NepJOL)
10. **Rai, R. & Singh, NB (2015)**: *Medico-ethnobiology in Rai Community: A Case Study from Baikunthe Village Development Committee, Bhojpur, Eastern Nepal. Journal of*

Institute of Science and Technology, Vol.20, Number 1, pp 127~132, T.U., Kirtipur, Kathmandu, Nepal. (NepJOL)

11. **Tamang, P. & Singh, NB (2014):** *Medical Ethnobiology and Indigenous Knowledge System of the Lapcha of Fikkal VDC of Ilam, Nepal. Journal of Institute of Science and Technology*, Vol.19, Number 2, pp 45~52, T.U., Kirtipur, Kathmandu, Nepal. (NepJOL)
12. **Timilsina, SH & Singh, NB (2014):** *Ethnobiology and Indigenous Knowledge about Medicinal Animals and Plants in the Balami Ethnic Group in Nepal. Journal of Institute of Science and Technology*, Vol.19, Number 2, pp 79~85, T.U., Kirtipur, Kathmandu, Nepal. (NepJOL)
13. **Singh, NB (2014):** *Occurrence of CCR5 Heterozygous 32 bp deletion in Nepali Ethnic Groups. Journal of Institute of Science and Technology*, Vol.19, Number 2, pp 105~108, T.U., Kirtipur, Kathmandu, Nepal. (NepJOL)
14. **Singh, NB (2014):** *Distribution of Alcohol Related ALDH2 Genotypes among Six Ethnic Groups of Nepal. Journal of Institute of Science and Technology*, Vol.19, Number 1, January: pp 52~56, T.U., Kirtipur, Kathmandu, Nepal. (NepJOL)
15. **Paudyal R. & Singh, NB (2014):** *Ethno-medicinal Uses of Animals and Plants among the Migratory Tangbetons of Pokhara, Nepal. Journal of Institute of Science and Technology*, Vol.19, Number 1, January: pp 145~149, T.U., Kirtipur, Kathmandu, Nepal. (NepJOL)
16. **Singh, NB (2013):** *Molecular Analysis of Ethno-resistant p53 Gene against Cancer among Some Ethnic Groups of Nepal. Journal of Institute of Science and Technology*, Vol.18, Number 2, November & October: pp 23~27, T.U., Kirtipur, Kathmandu, Nepal. (NepJOL)
17. **Niroula, G. & Singh, NB (2013):** *Medical Ethnobiology and Indigenous Knowledge System of the Limbu People of Khejenim VDC, Taplejung, Nepal. Journal of Institute of Science and Technology*, Vol.18, November & October: pp 65~71, T.U., Kirtipur, Kathmandu, Nepal. (NepJOL)
18. **Singh, NB (2013):** *Medicines for Tomorrow: Ethnogenomics, Individualized Genomic Medicine, and Nanomedicine. Trinity SciTech & Mgmt Review Issue II (Vol.2)*, January: pp 3~4, Trinity International College Dillibazar Height, Kathmandu, Nepal.
19. **Ban, S. & Singh, N.B. (2013):** *Population Status of Blackbuck (Antelope cervicapra) and Anthropogenic Disturbances in Blackbuck Conservation Area at Khairapur, Bardia, Nepal. Journal of Institute of Science and Technology*, Vol.18, November & October: pp 112~115, T.U., Kirtipur, Kathmandu, Nepal. (NepJOL)

20. **Singh, NB (2013):** *Ethnobiology and Indigenous Peoples*. In: "Environment and Natural Resources" Nepalpedia Series No.1: Pp 165~170. Nepal Academy of Science and Technology (NAST), Khumaltar, Lalipur and supported by Worldwide Fund for Nature (WWF-Nepal), Baluwatar, Kathmandu, Nepal. (NepJOL)
21. **Ban, S. & Singh, N.B. (2012):** *Seasonal Habitat Use Pattern of Blackbuck (Antelope cervicapra) at Khairapur, Bardia, Nepal*. *Journal of Natural History Museum*, Vol.26: pp 224~229, T.U., Kathmandu, Nepal. (NepJOL)
22. **Ban, S. & Singh, N.B. (2012):** *Crop Loss by Blackbuck (Antelope cervicapra) at Khairapur, Bardia, Nepal*. *Hamro Sampada National Monthly, Year 12, Number 5, September/October*: pp 92~95, Anamnagar, Kathmandu, Nepal.
23. **Singh, NB (2012):** *Ethnobiology and Indigenous Peoples: Global Perspectives and Nepali Reality*. *Nepali Journal of Contemporary Studies*, Vol.XII, No.2, September: pp 79~89, Nepal Centre for Contemporary Studies (NCCS), Sanepa, Lalitpur, Nepal.
24. **Singh, NB (2004):** *Molecular biodiversity conservation in the Himalayas for people's prosperity. ANPA Souvenir for Food Sovereignty (November)*. Central Publication Department of All Nepal Peasant's Association (ANPA), Balkhu, Kathmandu, Nepal.
25. **Dhakal, N & Singh, NB (2004):** *Ethno-medicinal uses of animals and plants among the Magars of Thimure VDC, Palpa District in Nepal*. *RITAMBHARA: the quarterly research magazine (7thYear, 10th volume)* by the Research Center of Mahendra Sanskrit University, Basantapur, Kathmandu, Nepal.
26. **Singh, NB (1996):** *The Endangered Nomadic Tribal Raute's Way of Life & its Ethnobiology*. "A Tree", Vol.3, Issue 1, an international magazine published from Kathmandu, Nepal.

Visiting Professor, National and International Guest Speaker:

- **China:** invited as a full Professor by College of Medicine, Henan University, People's Republic of China to teach medical genetics, biochemistry and pathology for MBBS in the academic year of September, 2005~July, 2006 under the MOU signed between Tribhuvan University in Nepal and Henan University in China.
- **Nepal:** visiting professor of "Human Genetics" for BS/MD Medical Students" at Gems Higher Education Institute affiliated with "Angeles University" based in the Philippines since 2009-2010.
- **South Korea:** Invited as a guest speaker at **Kangwon National University, Samchoek city, South Korea to deliver a lectured on a topic entitled "Ethnogenetics and Ethnobiology"**

of Six Indigenous Nationalities in Nepal” on February 20, 2008 at the invitation by Prof. Dr. Won Duck Kim, Vice-president of the University”.

- **Japan:** invited as a visiting Scholar by Tohoku University of Arts & Design, Yamagata, Japan and delivered lectures on the "*Ethnobiology* of Nepalese Nomadic Raute Tribe and Others" in 1997.
- **Nepal:** visiting professor of “Ethnobiology” at the Central Department of Environmental Science, Tribhuvan University, Kirtipur, and Kathmandu, Nepal since 2003-2013.
- **Nepal:** visiting professor of “Ethnobiology” at the College of Applied Science (CAS), affiliated with Tribhuvan University located at Anamnagar Kathmandu, Nepal since 2007-2011.
- **Japan:** Invited as one of four international guest speakers at Graduate School of Languages and Cultures, Nagoya University, Nagoya, Japan on a topic entitled "**Minority Situations and the Discourse of Symbiosis in the 21th Century**" from March 7-8, 2011 at the invitation by Dean, Michiko Maeno of the University.
- **India:** Invited as a Resource Person/Chief Guest/keynote speaker for the International Conference on “**Recent Trends in Life Sciences**” organized by P.G. Department of Zoology, Modern College affiliated to Savitribai Phule Pune Universtiy, Shivajinagar, Pune, India held from **the 2nd to 3rd of February, 2018.**
- **India:** Invited as a Resource Person for the International Conference on “**Sustainable Materials for Advanced Research in Technology**” organized by Baburaoji Gholap College affiliated to Savitribai Phule Pune Universtiy, Shivajinagar, Pune, India held from **the 5th to 6th of February, 2019.**

Awards

- **NAST Science and Technology Talent Award 2005:** awarded the prize on June 29, 2005 for the innovative research on ethno-resistant genes against malaria, AIDS, Cancer, Human skin pigmentation, alcoholism and four viruses (HBV, HCV, HIV and HTLV-1) among six indigenous populations in Nepal.
- **Doctoral Student Award:** An abstract entitled “Ethno-molecular surgery of human resistant genes against malaria and HIV/AIDS infections among six indigenous populations in Nepal” was awarded at 5th Human Genome Organization (HUGO) Pacific Meeting & 6th Asia-Pacific Conference on Human Genetics held in Biopolis, Singapore, Nov. 17~20, 2004.
- **Nepal Vidhya Bhushan Class “B” Gold medal** was conferred on Feb.24, 1996 for outstanding performance at M.Sc level (*first class first*).

- **Nepal Vidhya Bhushan Class “A” Gold medal** was conferred on Feb. 24, 2003 for the innovative research in the field of ethno-resistant genes in indigenous groups in Nepal.
- **Nepal Education Award 2024: Best Vice-Chancellor of the Year 2024** awarded on Feb 18, 2024 by Right Hon’ble Chairman of the National Assembly of Nepal Ganesh Prasad Timalsina to Prof. Dr. Nanda Bahadur Singh, the Vice-Chancellor of Mid-West University organized College Readers, English Magazine, Nepal.

Other involvement:

- Invited as an expert by “**Natural Resource and Means Committee**” in the Interim-Parliament of Nepal in order to address the committee (about 20 minutes) and thereby have the exchange of views relating to the policy making process on the only nomadic “Raute” tribe in Nepal in 2006.
- Invited as an expert by “**State Restructuring Committee of the Constituent Assembly of Nepal**” to deliver a lecture on “Development of Rural Area and Inclusion” on December 7, 2008 in order to facilitate the constitution drafting process in Nepal.
- **Expert trainer** of “National Police Academy” in Kathmandu, Nepal” to give training to police officers related to criminal investigation on topics entitled “DNA Profiling and Sample Handling in Criminal Investigation” since 2008-present.
- **Spokesperson/General Secretary:** The 77 Years Senior Citizen Mt. Everest Expedition, Nepal 2008 (SECEE, Nepal, 2008), the mission has already succeeded at the cost of about Rs. 70 lacs in which Late. Mr. Min Bdr. Sherchan has broken the world record and became the oldest man to climb Mount Everest in 2008: www.mteverest2008.org.np
- **Country representative and Coordinator of e-Learning programme in Nepal conducted by “Biopolitics International Organization (B.I.O.)”**, an international organization based in Greece since May, 2008.
- **Secretary (2008~2009) and Vice-president (2009~2010):** Rotary Club of Jawalakhel, Club No.62759, and Lalitpur, Nepal. RI District. 3292.
- **President:** Nepal Zoological Society (NZS) from April, 2014 - 2020.

Book Author:

- “*The Endangered Raute Tribe: Ethnobiology & Biodiversity*”, published in 1997.

Book Co-author:

- “*Nepal Tomorrow: Voices and Visions*” edited by D. B. Gurung, published by Koselee Prakashan 2003, Kathmandu, Nepal.

Language:

- Nepali, Hindi, English, Japanese, French, Russian, Spanish, Little Knowledge on Chinese and Esperanto as well.

Country Visited:

- Japan, People's Republic of China, India, Bangladesh, Thailand, South Korea, Singapore, Malaysia, UAE, Bahrain, Qatar, Netherlands, Norway, UK etc

Five Academic Referees:

- (1) Dr. Ranjana Gupta: Professor and Head, Central Department of Zoology, Tribhuvan University(T.U.), Kirtipur, Kathmandu, Nepal, Former Coordinator of Science and Technology Cluster, University Grants Commission (UGC), Sanothimi, Bhaktapur, Nepal. E-mail: drgupta.ohm@gmail.com
- (2) Dr. P.K.Jha: Professor Emeritus, and Former Head of Central Department of Botany, T.U., Kirtipur, Kathmandu, Nepal; Academician of Nepal Academy of Science and Technology (NAST), Khumaltar, Lalitpur, Nepal; and Coordinator of Science and Technology Cluster, University Grants Commission (UGC), Sanothimi, Bhaktapur, Nepal. E-mail: pkjhaprof@gmail.com
- (3) Dr. Tulsi Pathak: Professor and Former Head of Central Department of Chemistry, T.U., Kirtipur, Kathmandu, Nepal; Former Executive Director of Research Center for Applied Science and Technology (RECAST), TU, Nepal; Member of Academic Council of Mid-Western University, Surkhet, Nepal; Member of Science and Technology Cluster, University Grants Commission (UGC), Sanothimi, Bhaktapur, Nepal. E-mail: tulsipathak@wlink.com.np
- (4) Dr. Anjana Singh: Professor and Former Head of Central Department of Microbiology, T.U., Kirtipur, Kathmandu, Nepal; Academician of Nepal Academy of Science and Technology (NAST), Khumaltar, Lalitpur, Nepal; and member of Science and Technology Cluster, University Grants Commission (UGC), Sanothimi, Bhaktapur, Nepal. E-mail: anjanas67@gmail.com
- (5) Dr. Kumar Sapkota: Head of Examination Unit and Professor of Molecular biology, Central Department Zoology, Tribhuvan University, Kiritpur, Kathmandu, Nepal. E-mail: sapkotak@hotmail.com