



Seventh International Conference
**Strategic Partnership between Diaspora
and Homeland**

March 21, 2015

O'Donnell Hall

New Mexico State University (NMSU)

Las Cruces, NM, 88003

Nepalese Student Association

New Mexico State University

Funding: ASNMSU, Art and Science Council, Department of Chemistry and Biochemistry, Department of Mathematical Science, Graduate Dean Office, International Border Program of New Mexico State University & All Times Tax, Dallas, Texas.

NeSA Seventh International Conference

NeSA Seventh International Conference

Strategic Partnership between Diaspora and Homeland

Keynote Speaker

Gyanu Lamichhane, PhD
Johns Hopkin School of Medicine
Assistant Professor, Division of Infectious Diseases
lamichhane@jhu.edu



Gyanu Lamichhane originates from Chitwan, Nepal. He did his Bachelors in Chemistry from Wabash College, Indiana, and graduated Magna Cum Laude in 1996 after his high school education from Budhanilkantha School, Kathmandu. In 11th grade, his grandfather passed away after losing a battle with chronic multi-drug resistant TB. Since this event, Lamichhane set his sight on working to understand this disease with the aim to develop better cures. After his BS from Indiana, he moved to the Johns Hopkins University School of Medicine and completed his PhD degree in 2004 in molecular medicine. Then he worked as a post-doctoral trainee in Johns Hopkins University, Center for TB Research in 2005. In 2006 he started his career as instructor in medicine in the Johns Hopkins University and since 2006 he started his independent research career as Assistant professor in the same university. In the recognition of his ideas and work, National Institute of Health honored Dr. Lamichhane with the coveted New Innovator Award-2011 on September 19 along with a direct funding of \$1.5 million. Dr. Lamichhane's research group was the first to discover and demonstrate that LD-transpeptidases are required for growth and virulence of Mtb (*Mycobacterium tuberculosis*). This study was accepted as landmark achievement as for the first time they demonstrated a non-classical pathway for synthesis of peptidoglycan. Dr. Lamichhane is an energetic young researcher and would be a very capable candidate for the health education and other health related issues for south Asia especially in the field of TB because TB (drug resistant TB bacteria) is one of the serious problem of this part of the world. He has some projects that he wants to work with in Nepal but he did not disclose to us at this time.

NeSA Seventh International Conference

Guest Speaker

Madan Raj Poudel, PhD
1736 Camino Del Sol
Gallup, NM 87301

Dr. Madan Raj Poudel is continuing his professional works as a senior health administrator, planner, researcher, and evaluator. He has 30+ years of work experience in the areas of health and public health with proven ability and skills in decision-making, project management, creative problem solving, grant writing and grant reviewing. During this period he has hold several key positions such as health director, health service administrator, program director, program manager, health planner, research director, training director and evaluator. Dr. Poudel is a certified grant writer and certified grant reviewer. He has written 120+ grants mostly in the field of health and public health areas and over 50% of them were funded. He has earned a Ph.D. and two master's degrees in the areas of health and education planning and administration. He also has received advance training in many planning and management related areas. During mid 70s and early 80s, Dr. Poudel was employed by the Family Planning and MCH Project and Integrated Community Health Pilot Project in Nepal. The successful completion of the Bara/Kaski Integrated Community Health Pilot Project initiated the establishment of Public Health infrastructure/offices in all 75 districts in Nepal. Since 1992 till 2013, he was employed by the Navajo Tribal Health Department, Window Rock, Arizona. Dr. Poudel is currently working as a public health consultant/grant writer for the Fort Defiance Indian Hospital Board, Fort Defiance, Arizona. Professionally, Dr. Poudel has served as a public health consultant to many international, national regional and local organizations and committees such as World Health Organization, United Nations Fund for Population Activities, Canadian International Development Agency, Tribhuvan University (Nepal), University of Arizona - Rural Health Office, SAMHSA, NIH, Dine Center for Substance Abuse Treatment Policy Steering Committee, Navajo Nation Community Assessment Support Team, Navajo Health Care Design Team, Navajo Welfare Reform Team, Office of Cultural Opportunity (UNM), Local Empowerment Planning Taskforce, Managed Health Care Task force, Navajo Nation Data Resource Center, National Public Health Accreditation Advisory Committee, and National Health Research Advisory Committee. Dr. Poudel received many awards, recognitions, honors, and scholarships for his academic excellence and outstanding job performance. Dr. Poudel is the author and co-authors of over 150 published and unpublished books, articles, manuals, grants, reports, profiles and other publications

NeSA Seventh International Conference

Guest Speaker

Doleswar Bhandari, PhD
University of New Mexico

Research Scientist, Bureau of Business and Economic Research

NMSU Student Ambassador Program: Linking Higher Education with Employers



Dr. Doleswar Bhandari has been working at the University of New Mexico's (UNM) Bureau of Business and Economic Research (BBER) since July 2008. His research focus has been economic impact analysis, economic modeling, statistical analysis and health related studies. At BBER he has been involved in various projects related to economic and fiscal impact analyses, econometric and statistical analyses, conducting surveys and analyzing survey data. After joining BBER, Dr. Bhandari has conducted research for a number of federal, state, local and private agencies including New Mexico Office of Recovery and Reinvestment, Los Alamos National Lab, Air Force Research Lab, New Mexico Breastfeeding Task Force, New Mexico Mortgage Finance Authority, University of New Mexico, Albuquerque Public Schools, Bernalillo County, the City of Albuquerque, City of Las Cruces, Santa Fe County, New Mexico Loan Fund, New Mexico Highlands University and Federal Highway Administration. Dr. Bhandari is a part-time faculty in the Department of Economics at UNM. He teaches regional and urban economics, introductory macroeconomics, microeconomics, and econometrics.

Dr. Bhandari has a unique mix of expertise in regional economics, participatory development, statistical analysis, and business management. He has expertise in statistical and econometric tool kits including economic forecasting, spatial econometrics, simultaneous equation modeling, factor analysis, qualitative and limited dependent variable technique, multivariate analysis, linear mixed modeling, non-linear modeling, analysis of variance (ANOVA), and panel data and time series analysis. He has 10 years of experience working with SAS programming to manipulate, summarize, and produce reports from multiple large, complex data sets and conducting econometric analysis. He is also familiar with other econometric and statistical package including R, Geoda and SPSS.

NeSA Seventh International Conference

Before joining BBER, Dr. Bhandari earned his PhD in Agricultural Economics at the University of Missouri, Columbia. He obtained a double master's degree in Agricultural Economics from Louisiana State University, Baton Rouge and Master of Management in Agribusiness Management from the University of Philippines, Los Banos.

Guest Speaker

Paras Mandal, PhD, SMIEEE

University of Texas at El Paso

Assistant Professor, Department of Electrical & Computer Engineering

Director, Power & Renewable Energy Systems (PRES) Lab

NEPALESE ELECTRIC POWER SECTOR: A BURDEN BEYOND BEARING

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Dr. Mandal was born in Kathmandu, Nepal. He is currently working as an Assistant Professor of Electrical and Computer Engineering and a director of Power & Renewable Energy Systems (PRES) Lab at the University of Texas at El Paso (UTEP) since 2011. He received his Ph.D. degree (power system) from the University of the Ryukyus, Japan in 2005, Master degree in Energy Economics and Planning from Asian Institute of Technology, Thailand, and Bachelor degree in Electrical and Electronics Engineering from Kuvempu University, India. In the past, he worked as a JSPS Postdoctoral Fellow at University of the Ryukyus; Research Professor at Yonsei University, South Korea; Research Fellow at University of Tasmania, Australia; and Postdoctoral Research Fellow at University of Calgary and University of New Brunswick, Canada. His research interests include intelligent energy forecasting and optimization, power system operations and markets, wind and solar energy resources, energy storage systems, smart grid/micro grid, and intelligent systems applications to power and renewable energy systems. Dr. Mandal a Senior Member of IEEE and a Secretary of IEEE Power & Energy Education Committee (PEEC) - Life Long Learning Subcommittee (LLLSC). He is also a Member of other subcommittees of IEEE, such as Power

NeSA Seventh International Conference

System Operation Committee - Electricity Market Economics subcommittee; Power System Analysis, Computing, and Economics Committee - Intelligent Systems Subcommittee working group on modern heuristic optimization. Dr. Mandal is a recipient of several awards including the best paper award by IEEE Industry Applications Society and Young Engineer award by the Institute of Electrical Engineers of Japan. He is a reviewer of different scientific journals and conferences, and an author of several technical publications.

Guest Speaker

Steven Archambault, PhD

Assistant Professor

Department of Agricultural Economics and Agricultural Business

New Mexico State University

sarchamb@nmsu.edu



Steven Archambault is an Assistant Professor in the Department of Agricultural Economics and Agricultural Business at New Mexico State University. He has a BS in Biology, MS in Environmental Management and Policy, and a PhD in Economics from the University of New Mexico.

His expertise is in the fields of: Natural Resources and Environmental Economics, Development Economics, and International Trade and Finance. His research interests include food security, renewable energy, water resources, sustainable development, valuation of ecosystem services, role of technology in development, microfinance, and foreign direct investment. He is proficient in econometric analysis, household survey development, spatial analysis (using GIS tools), and constrained optimization.

Dr. Archambault has authored academic articles appearing in several international journals, and has written numerous social science articles published in reference texts. He has experience studying and working in several countries outside of the United States including Sweden, Uganda, the Federated States of Micronesia, and Italy. He has worked with international agencies, including the United Nations World Food Program.

NeSA Seventh International Conference

Guest Speaker

Ramesh Giri, PhD
Assistant Professor
Department of Chemistry and Chemical Biology
University of New Mexico

Copper-Catalyzed Cross-Couplings for Carbon-Carbon Bond Formation



Dr. Giri was born in Chitwan, Nepal and graduated from Tribhuvan University (Nepal) with an MSc in Organic Chemistry in 2000 under the supervision of Prof. S. M. Tuladhar. He received his MPhil in Bioorganic Chemistry in 2003 from the University of Cambridge (UK) with Prof. J. B. Spencer. He earned his PhD in Chemistry from one of the best research institute in the field of chemistry; the Scripps Research Institute in 2009 with Prof. Jin-Quan Yu, where he studied Pd-catalyzed C-H functionalization. He did his postdoctoral research with Prof. John F. Hartwig at UC Berkeley. In 2012, he joined the faculty of the Department of Chemistry and Chemical Biology at the University of New Mexico as an Assistant Professor. As a young researcher, Dr. Giri has a great potential which can be directly or indirectly helpful for the Nepalese diaspora. Dr. Giri has published more than 30 publication on various peer reviewed journals.

Guest Speaker

Basant Giri, PhD

Center for Analytical Sciences

Kathmandu Institute of Applied Sciences

A young scientist's perspective on Challenges and Opportunities of Scientific Research in Nepal



Dr. Giri completed his PhD in analytical chemistry from University of Wyoming, WY, USA. At present, he is a scientist at the Center for Analytical Sciences, Kathmandu Institute of Applied Sciences, Kathmandu, Nepal. Currently, he is working towards developing low-cost and easy to use miniaturized analytical methods (e.g., paper-analytical devices) for various applications that are especially appropriate in resource limited settings. His previous research involved the fabrication of glass microfluidic devices for highly sensitive enzyme-linked immunosorbent assays. Dr. Giri has published several high impact research papers in peer-reviewed journals.

Schedule of Events:

08:15-08:45 Conference Check-in and Registration

Opening Session (8:45 -9:35)

08:45 - 08:55 Preparation and proceeding to the conference hall

08:55 - 09:05 Speech by Provost of International Border Program, Dr. Cornell Menking

09:05 - 09:15 Speech by Department Head, Dept. of Chemistry and Biochemistry, Dr. William Quintana

09:15 - 09:25 Speech by Graduate School Dean, Dr. Loui Reyes

09:25 - 09:30 Welcome speech by NeSA Advisor, Dr. Ram N. Acharya

09:30 - 09:35 Welcome by NeSA President Rajan Koirala

Session I (9:35 -12:05) (Morning Session)

09:35 - 9: 50 Eshan Dahal, NMSU, Dept. of Chemistry and Biochemistry
Palladium Nanocubes as an Apoptosis Inducing Agent

09:50 - 10:05 Rafael Pérez Peña and R. N. Acharya, NMSU, Dept. of Agriculture Economics and Business
Biofuel Feedstock in Latin America and the Caribbean: A Comparative Advantage Approach

10:05 -10:20 Sarvesh Dhakal and R. S. Ashtiani, UTEP, Dept. of Civil Engineering
Effect of different levels of moisture intrusion on dynamic modulus and tensile properties of dense graded hot mix asphalt using cyclic Moisture Induced Stress Tester

10:20 -10:35 Zheng (David) Wei, NMSU, Dept. of Mathematical Sciences
Statistics with Copulas-"An Invitation to Modern Statistics"

10:35 -10:50 Sharma.T. Sanjay, M. Dou and X.J. Li, UTEP, Dept. of Chemistry
A Paper/PMMA Hybrid Microfluidic Microplate for ELISA

10:50 -11:05 Rishi Sapkota, NMSU, Dept. of Chemistry and Biochemistry
Lysosome targeting new class of fluorescent compounds

11:05 -11:20 Melody Handali, NMSU, Dept. of Chemistry and Biochemistry
Identification and Characterization of a Zn-specific ABC Transporter Substrate Binding Protein from Paracoccus denitrificans

11:20 -11:35 Roshani Rajbanshi, NMSU, Curriculum and Instruction, College of Education.
SEMAA—an Afterschool Program and Its Effects

NeSA Seventh International Conference

- 11:35 -11:50 Sudip Gaire & Alvaro Romero, NMSU, Dept. of Entomology, Plant Pathology & Weed Science
Quantifying the toxicity of essential oil components on the Turkestan cockroach, Blatta lateralis (Blattodea: Blattidae)
- 11:50-12:05 Mukunda Acharya and B. Aryal, UTEP, Dept. of Physics
A Study of r-Magnitude Dependence in the Spatial Orientation of Spin Vectors of SDSS Galaxies having Redshift 0.19 to 0.20

Session II (12:05 - 12:55) (Lunch Break/Posters)

- Erika Y. Monroy, NMSU, Dept. of Chemistry and Biochemistry
Synthetic Approach Towards Calcaripeptides A-C
- Chris Frydenlund, NMSU, Dept. of Chemistry and Biochemistry
Cellular, Molecular and Biochemical Characterization of a Novel Fluorescent Estrogen

Session III (12:55 -16:55) (Afternoon Session)

- 12:55 -13:10 Deepak Basyal, NMSU, Dept. of Mathematical Sciences
Mystery from History: A 1933 Arithmetic and Astrology Book Śṭsubodha Taraṅgiṅī from Nepal
- 13:10 -13:25 Menuka Karki, NMSU, Dept. of Biology
Establishment of Endowment Scholarship Fund to Educate and Empower Girls in Remote Nepal

Guest Speakers

- 13:25-13:50 Dr. Basanta Giri, Kathmandu Institute of Science and Technology, Nepal
Challenges and Opportunities of Scientific Research in Nepal
- 13:50-14:15 Dr. Ramesh Giri, UNM, Dept. Of Chemistry
Copper-Catalyzed Cross-Couplings for Carbon-Carbon Bond Formation
- 14:15-14:35 Coffee Break
- 14:35-15:00 Dr. Doleshwor Bhandari, UNM, Dept. of Economics
NMSU Student Ambassador Program: Linking Higher Education with Employers
- 15:00-15:25 Dr. Paras Mandal, UTEP, Dept. of Electrical & Computer
Engineering Nepalese Electric Power Sector: A Burden Beyond Bearing
- 15:25-15:50 Steven Archambault, NMSU, Dept. of Agricultural Economics and Agricultural Business

NeSA Seventh International Conference

15:50-16:15 Dr. Madan R. Paudel, Gallup, NM
Health Care Management

Keynote Speaker

16:15-17:00 Dr. Gyanu Lamichhane, JHU, School of medicine
National Development: Challenges and Opportunities for Diaspora

18:00- 20:15 Felicitation to Speakers, Closing Remarks and Dinner

Note: All abstracts for presentation, posters and exhibits are posted in our website.
Please visit web.nmsu.edu/~nesa for more information.

Acknowledgements:

Our sincere acknowledgement goes to Dr. Loui Reys, Dean of Graduate School; Dr. Cornell Menking, Provost, International Border Program; Dr. William Quintana, Department Head, Department of Chemistry & Biochemistry and Dr. Joseph D Lakey, Department Head, Department of Mathematical Sciences for their support.

We express our gratitude to the entire faculty, staff, students and the presenters who have tirelessly worked in making the “Seventh NeSA NMSU International Conference” a success. The program would not have reached this point without all of your contributions. We are grateful to the Campus Activity, the Building Manager of the O’Donnell for providing the space and all the necessary equipment for this conference. Finally, we want to thank Sodexo for providing the dinner.

Organizing Committee:

1. Rishi R Sapkota: Conference Coordinator
2. Rajan Koirala
3. Uttar Shrestha
4. Vijaya K. Pandey
5. Deepak Basyal

Join us for dinner at 6:00 pm
Venue: Corbett Senate Gallery, 3rd
Floor

NeSA Seventh International Conference