



IDP-NAHEP Pantnagar Updates

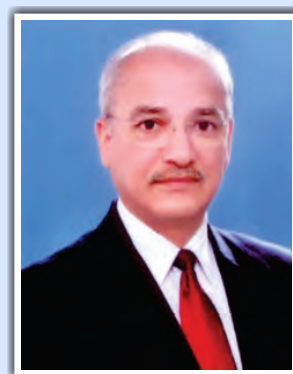
G. B. Pant University of Agriculture & Technology
Pantnagar 263145, Uttarakhand

No. 10
July 2020

Message of IDP Leader, GBPUAT, Pantnagar

It is Time to Initiate Evolutionary Academic Reforms

The historical G.B. Pant University of Agriculture and Technology, Pantnagar, was established in 1960 on the Land Grant Pattern. The Land Grant Pattern originated in the USA. With passage of time, it is clear and evident that the pattern and structure of Land Grant Pattern academic institutes of the USA have actually changed according to the changing needs, economic reforms and emerging technologies. The 19th century University of Illinois, our mother institute is also a Land Grant Pattern institute but has evolved dynamically as leading global institute with multidisciplinary academic structure having college of liberal arts and sciences, college of applied and fine arts, college of media, college of law, and other colleges and schools along with agricultural sciences. The institutes have to evolve and transform with age looking into the requirement and demand. The Land Grant Pattern institutes of India also need to look towards similar academic reforms to emerge as the leaders of the country. The mandates of teaching, research, and extension have provided a basic thrust of agriculture and rural development. However, the institutes need to carve out radical changes into their academic system and structure for which an in depth study of the predecessor Land Grant Pattern institutes of USA needs to be done and the learning must be applied in the Indian context in order to evolve and remain relevant in the present age.



(Tej Partap)

Microsoft Teams Training Provided to University Faculty Members

The University has taken up all its academic activities in the digital mode and rigorous efforts are being made at all junctures to ensure smooth and effective transition. Under the IDP team leadership and consistent support, the University has decided to implement the Microsoft Teams software application to conduct all its academic activities including regular classes, research seminars, viva-voce, examinations, guest lectures, workshops, and all other related tasks. This implementation process was led by the IDP team where initially licensed Microsoft Teams account were activated for all faculty members and students of the University, following which extensive hands on training was provided to all the faculty members of the University. The training programme was conducted college wise and in small groups for effective learning



outcomes. Till date, more than 200 hours have been invested in generating this University wide single system of teaching-learning, along with trainings and personal counselling for faculty members. In coming days, a similar training structure would be created to train the students of the University.

Workshop Organized on Qualitative Research Methods in Social Science Research

Qualitative methods used by social science researchers are scientific and are focused more on the meaning of different aspects of peoples' lives, and on their accounts of how they understand their own and others' behaviour and beliefs. To put some light on the same aspect, IDP-NAHEP, Pantnagar organized a workshop on June 22, 2020. Dr. Birendra Kumar (Ex-Director Resident Instruction-cum-Dean, PGS, Bihar Agriculture University, Sabour), a passionate teacher and a researcher was the expert for the workshop. He emphasized the importance of social science research through qualitative approaches in order to explore several areas of human behaviour. He discussed about the positivist and constructivist ontologies while highlighting the complex nature of social science research. Dr. Kumar too admitted that qualitative researches require more patience and expertise. Qualitative research occurs in a natural setting and the researcher develops a sense of high involvement with the actual experiences.



Clearly demarcating the differences between quantitative and qualitative methods, he swiftly shifted towards ethnographic research. Use of in-depth interviews, participant observation, key informants, case-studies and success stories, recordings, documentaries were also explored.

According to Dr. Kumar, documentation of real life experiences is an initial critical component which can be done through field jotting, field diary, log book, field notes etc. Dr. M. A. Ansari, Professor, Department of Agricultural Communication, added to the discussion and talked about the projective techniques used in social science researches. Further, Dr. Neelam Bhardwaj, Professor, Department of Agricultural Communication, expressed her words of gratitude to the expert as well as to the participants. Dr. S.K. Kashyap, PI, IDP-NAHEP, Pantnagar (also, Dean Agriculture) appreciated Dr. B. Kumar for sparing time to connect with the present generation and inspiring students for pluralistic research.

Research Scholars Trained in Crafting Effective Research Articles

Academic writing is different from other forms of writing as it demands scientific rigour along with thoughtful creation. Thus, the skill of creating effective research articles is gained after enough training. IDP-NAHEP, Pantnagar organized an online training on *Challenges of Research Paper Writing* in association with PG Society and College of Technology, Pantnagar on June 23, 2020. The expert for the webinar was a renowned academician from IIT Bhilai, Dr. B.K. Panigrahy. Initially, the expert explained about the categories of research i.e., basic, applied, exploratory, descriptive, etc. and then emphasized on the purpose and outcomes of publishing research work. Dr. Panigrahy explicitly stated that being a researcher one needs to understand the minute difference between the technical terms like copyright, plagiarism and fabrication for practicing research ethics. Further, elucidating the principles of academic research and writing research paper, he put forth the perspectives of both a researcher as well as a reviewer. Dr. Panigrahy then briefly provided an overview of the issues, challenges and common mistakes that one can avoid while designing each



section of a research article. Concludingly, he suggested some best practices of writing effective research articles.

The training was attended by more than 400 participants from all over the country which mostly included young faculty members and doctoral students. In the valedictory session, Dr. Alakhnanda Ashok, Dean Technology appreciated the efforts of the University to organize training on such crucial issues. Dr. K.P Raverkar, Dean PGS, Dr. Jyothi Prasad, Joint Coordinator, PGS, Dr. Arpita Sharma, Staff Counsellor, PG Society and Dr. H.J. Shiva Prasad, Professor, College of Technology were also present.

IDP Pantnagar Organized Workshop on Using Robotics to Manage COVID-19 Pandemic

Individuals, organizations, and governments around the world are striving to create solutions to fight the COVID-19 global pandemic. This pandemic demands innovative technology based solutions to cater to the erupting challenges. Robotics technology has proven to be helpful in certain aspects of dealing with COVID-19 crisis. To further discuss and deliberate on the prospects of this technology, two days workshop was organised on *Critical Robotic Services for Handling Corona Pandemic* by IDP-NAHEP, Pantnagar. The workshop was held from June 19-20, 2020 and was guided by Ms. Neelima Mishra, Director, First Automation, Jaipur. First Automation is a research and manufacturing company of robots situated in Jaipur. Recently, the company developed and deployed its service robots in COVID-19 isolation wards of Sawai Man Singh (SMS) Hospital, Jaipur. This initiative was taken to support the doctors of the hospitals who were on continuous duty for long hours.

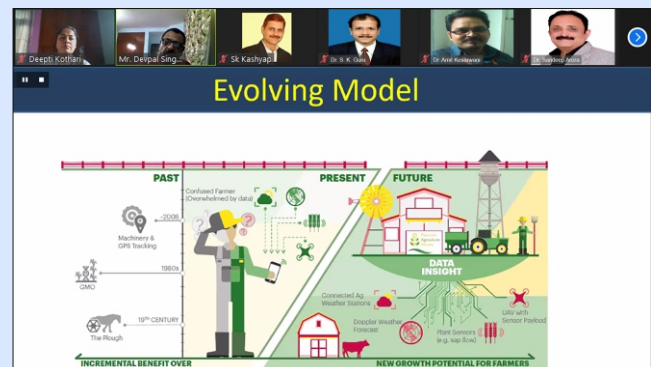
Taking this insight forward, Ms. Mishra conducted the two days workshop, discussing about the varied possibilities of using robot services. On day one of the workshop, she focused towards the fundamentals of robotics technology and the different service sectors having scope of developing and deploying robots. Thereafter, she introduced the Eli robot which is currently supporting the frontline COVID-19 workers in hospitals of Jaipur. This robot has



features of thermal screening, mask detection, alarm alert, taking attendance by face or retina detection, and automatic sanitizer spray. Thus, with all these features, Eli robot can provide preliminary support to the medical staff which is otherwise a hectic task. On day two, Ms. Mishra elaborated on the design, development, and working of Eli robot. She depicted different categories of ultraviolet rays and showed how these rays can be used in robots to sanitize the surroundings and belongings of individuals. She even displayed some videos wherein Eli robot was effectively functioning in the hospital premises. She also briefly discussed the usage of robotics in agriculture segment as well. Concludingly, Ms. Mishra suggested the participants to learn and develop robots in the University laboratories, as the world ahead will be largely driven by this technology.

Smart City Expert Delivered Guest Lecture on Internet of Things in Agriculture

With the use of technological advancement in performing agricultural operations, the profession of agriculture is in the process of transforming itself into a lucrative industry in the Indian context. IDP-NAHEP, Pantnagar made an attempt to aid the people associated with the discipline of agriculture and allied sciences learn more on the aspect of making the practice of farming smart, by means of a guest lecture on June 14, 2020. The online lecture on *Smart Farming, Exploring IoT in Agriculture* was led by Pantnagar alumnus Mr. Devpal Singh, Senior Vice President, Smart City and ICT Services, Niveshan Technologies, New Delhi and was attended by more than 100 participants. During the presentation, the expert duly highlighted that Indian



economy needs to work upon the concept of smart or digital agriculture for catering the growing demand of food consumption in light of population growth, urbanization and changing consumption pattern. He

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Vet Entrepreneur Deliberated on Zoonotic Fundamentals for Small Animals

Zoonotic aspect of diseases has been recognized as an important aspect for animal health. An online guest lecture on Small Animal Dermatological Diseases and Their Zoonotic Importance was held on June 1, 2020 and was delivered by a renowned animal dermatologist from Suvridha Vet Care and Derma Centre from Jammu, Dr. Anisha Tiwari. She has received her professional training from the European School of Advanced Veterinary Studies and holds various accolades in the field of dermatology, and since last one decade she is running her personal pet care clinic catering to almost all common dermatological diseases in small pet animals. Initiating the talk, the expert comprehensively elaborated on the clinical signs and symptoms, identification, diagnosis, treatment and management practices to be followed especially in diseases like pruritis, scabies, pyoderma and demodecosis amongst dogs and cats. She stated that whenever any case arrives, it is important for the professional vets to follow a protocol for diagnosis of the disease. Talking about her way of practice, she stated that she has made it a habit to not blindly believing on the clinical signs of the ill animal, rather she puts the sample under the microscope, studies it, goes for the trends in scientific research and pharma regarding the disease



and then recommends the treatment to the animal. She stated that there is a very thin line between the behaviour of an animal, reactions due to food allergy and the prevalence of any dermatological disease in the animal and being a veterinarian, one must understand this for their professional growth as well as for the well-being of the animal. The session benefitted almost 100 participants most of which were veterinarians of the country. Dr. Sanjay Sharma, Project Scientist, Industry Collaboration Team, IDP-NAHEP, Pantnagar coordinated the session and stated that such insightful programmes have a very crucial role to play in exposing the professional students to opt for initiating one's own pet care unit and derive two way satisfaction of serving the animals and also achieving heights in professional area.

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hinted that smart agriculture driven by data insights, has the power to explore new growth potential for the producers by enabling them to make informed decisions. He also discussed about the layout of smart farm which is created by mapping an IT network of farm to ensure that every agricultural operation is controlled and directed towards increasing yield, minimizing use of inputs and maximizing the profit margins. He explained that IoT in agriculture finds application in water management, soil monitoring, field monitoring, environment assessment right from sowing till post-harvesting by use of sensor technology, powerful data analytics, predictive algorithms and machine learning. The career opportunity in smart agriculture in the university, industry and public sector for the agricultural graduates was also briefed by Mr. Devpal. The queries of the participants on sensor technology, cost-benefit ratio of smart farm,

difference between smart farming and precision farming, etc. were also taken up by the expert at the end of the session.

Dr. S.K. Kashyap, PI, IDP-NAHEP, Pantnagar expressed that such informative guest lectures provide the perspective of industry towards smart farming. He emphatically added that the University in days to come is looking forward to implement, democratize and demonstrate such disruptive technologies by using synergistic approach for revolutionizing the next generation agricultural education. Dr. Sandeep Arora, Dean CBSH also appreciated IDP-NAHEP for providing platforms for such knowledgeable talks. Dr. S.K. Guru, Nodal Officer (Academic), IDP-NAHEP stated that interacting with such industry professionals not only enriches our knowledge on technological innovations but also opens our minds to the future opportunities and challenges.

Brainstorming Session of Innovation and Incubation Centre Held with BoM Member

The Innovation and Incubation Centre team of IDP-NAHEP, Pantnagar organized a brainstorming session to discuss about the innovative projects and new solutions across industries which can translate into sustainable business proposition in the present scenario. The session was held on June 15, 2020 under the eminent guidance of Mr. Sudhir Chadha, a renowned agri-entrepreneur and member, Board of Management, GBPUAT, Pantnagar, Dr. S.K. Kashyap, PI, IDP-NAHEP, Pantnagar and Dr. A.K. Upadhyay, Coordinator, Innovation and Incubation Centre. The core team of Innovation and Incubation Centre along with 22 faculty members of the University and the post doctoral fellows of IDP-NAHEP participated in this brainstorming session.

Mr. Sudhir Chadha talked about his vast experience in floriculture and fruit production and shared his insights of working with organizations of Netherlands, Holland, Taiwan, and Belgium. Faculty members present for the meeting also shared their research experience, details of the projects they are associated with and probable innovative ideas related to their discipline which can be established as



sustainable business propositions. The recommendations of the session included exploring possible thrusts areas of innovation within the University framework, identifying viable and marketable technologies existing in the University, recognizing the possibilities of potential technologies on which multidisciplinary teams from University could work, exploring the possibilities of industry collaboration for innovation based multidisciplinary efforts including faculty members and students, and setting up technology display, showcasing and conversions of business propositions in Innovation and Incubation Centre unit of NAHEP building.

Interactive Session held on Opportunities in Agro Processing Sector

Entrepreneurship opportunities in food processing sector are numerous. The young graduates of Pantnagar University also got to understand the same perspective by means of an online interactive session on *Entrepreneurial Opportunities in Agro Food Processing Sectors for Agricultural Engineers* held under IDP-NAHEP, Pantnagar on June 17, 2020. The expert of the session was Dr. Hridyesh Pandey who is presently working as Head of Department, Food Processing Technology, College of Food Processing Technology and Bioenergy at Anand Agriculture University, Gujarat. During the two hours session, he talked about the concept of entrepreneurship, the opportunities in agro and food processing industries and the processing technologies in a detailed manner. Further, explaining about the process of entrepreneurship, Dr. Pandey stated that benefits of being an entrepreneur are numerous as it leverages experience, makes you independent and a



boss of your own, gets recognition and creates fruitful wealth for self and the nation. He also mentioned about several food processing startups operating in India, their beginning journeys, struggles, and achievements. During the session, the programme and policy framework of the government to promote start-up and the existing start-up ecosystem in the country was also discussed with the participants. Towards the end of the session, participants asked various questions which were rationally answered by the expert. The session was coordinated by Dr. U.C. Lohani, Project Scientist (Academic), IDP-NAHEP, Pantnagar. Dr. S.K. Guru, Nodal Officer (Academic), IDP-NAHEP, Pantnagar stated that the session by Dr. Pandey has sensitized the young graduates towards the concept of start-up in context of agro-food processing industry, especially in the era when the question of employability is at the stake in view of the emerging crisis situation.



Sensitization Session on IPR held for Faculty Members and Students of Pantvarsity

The University recognizes the importance of improving the awareness of its faculty members and students regarding intellectual property rights, and cover the inventions and innovations coming out of the research projects under the IPR regime. An online sensitization was organized under IDP-NAHEP exclusively for the faculty members and students of the University on June 12, 2020 on the topic *Intellectual Property Rights and Patent Design Specifications*. The expert of the session Mr. Ashish Sharma is a registered Indian Patent Agent and also serving as an IPR consultant in IDP-NAHEP, Pantnagar. Mr. Ashish Sharma briefed the participants about fundamental definitions and concept of IPR and designing the draft of patent. The expert initiated with the definition of what an intellectual property is and what all comes under the regime of intellectual property. Mr. Sharma by quoting an example of mobile phone technology elaborated that we should not confuse with considering a particular technology to come under only one category of IP but can come under many intellectual property rights. The expert also elaborated on the concept of patent, patentability and its benefits to the society. Stating



that design is the core of patent filing, he told about the pre-grant oppositions, post-grant oppositions, renewal fees, licensing system, patent draft of agricultural research outputs and other laws and legal procedures of patent filing. He also highlighted that often individuals indulge in unethical practices such as use of technical jargons in naming the patent which must be avoided as per patent ethics. Mr. Sharma responded to the queries of the participants on PCT, procedure of filing patent in different patent offices of the world, time period of getting patent approved, requirement of research publication for research patent and many others. Dr. S.K. Guru, Nodal Officer (Academic), IDP-NAHEP, Pantnagar stated that the knowledge of IP is extremely determining especially for a dynamic academic institute and hence regular trainings will now be organized in this regard. Dr. S.K. Kashyap, PI, IDP-NAHEP, Pantnagar also stated that it is high time for our University to start thinking in putting rigorous efforts for filing patent for making our presence visible to the world. Dr. Shefali Massey and Dr. U.C. Lohani, Project Scientists (Academic), IDP-NAHEP also contributed in successful completion of the session.

Training Organized on Creating Online Courses using OER

The use of online educational resources has gained prominence amongst the teaching learning fraternity around the globe. IDP-NAHEP, Pantnagar and College of Technology organized two days training session on July 1-2, 2020 to equip the faculty members and students in online content creation skills. Ms. Archana Thakran, OER Expert, Faculty Trainer, Industry Academia Partnership Specialist, Amity University, Noida, was the expert of the session. During the session, the expert focused upon the fundamental concept and philosophy of open educational resources (OERs), historical background, initiatives around the world to increase the reach and access of open resources. She also expressed on the type of OER, Creative Common licensing in OER and the components of OER. She briefed that in order to create open educational content, various platforms like OER Commons, Google Advance Search, Creative



Commons Search, Khan Academy, MIT OCW, Wikipedia, Connexions and Saylor academy, etc. can be put into use by content creators. Ms. Thakran during her session elaborated that as content creators, we need to customize the courses using the sources from the online and offline sources keeping in consideration the licensing associated with it. She concluded by saying that creating online content needs the writer to be clear about the licensing, citing the source, making the content adaptable and accessible and creating content by remixing the work of others and using open content. Dr. S.K. Guru, Nodal Officer (Academic), IDP-NAHEP, Pantnagar expressed that the session will definitely serve the purpose of the University to move one step ahead in creating online content and improving teacher-taught interaction. Dr. R.S. Jadoun, Director, Placement and Counselling, GBPUAT gave heartfelt thanks to the expert.

Students' Verses

1. I attended an online workshop on Critical Robotic Services for Handling Corona Pandemic. Ms. Neelima Mishra, gave us detailed insights about robot functioning. What I found most interesting was that, the Eli robot navigates on its own and uses Internet of Things as its main framework. She also gave us interesting information on various other ways AI can be made into practical use, in times of need. She was the torchbearer and cleared many of doubts related to safety of introduction of robots within the ambience of the sick.



- Ananya Mathur, College of Agriculture, IVth Year

2. The skill workshops of IDP-NAHEP expose us to all new domains of our academic discipline. I really appreciate the way they have been engaging us with both knowledge based and skill based workshops. For instance, the workshop on robotics services was though provoking. The expert was really good in providing all the information related to it and I am glad that I was a part of this workshop.



- Shivangi Singh Chauhan, College of Home Science, IInd Year

3. I am very thankful to IDP-NAHEP for organizing various kinds of online training programmes and lectures amidst COVID-19 to keep the students awake and motivated. The recent veterinary related trainings were quite useful from the perspective of generating practitioner insight which we often miss during our indepth theoretical curriculum. However, the IDP-NAHEP events have fulfilled this long lasting gap in an effective way.



- Shreya Bhatt, College of Veterinary and Animal Sciences, IVth Year

The Main Events of July 2020

S. No.	Event	Proposed Date	Venue	Nodal Unit	Convener
1.	Two Months NAHEP Online Internship for UG Students	10-07-2020 to 10-09-2020	Online	Academic Team	Dr. S.K. Guru, College of Basic Sciences and Humanities
2.	Guest Lecture on Geo-Informatics and Its Applications in Fisheries Resource Management	11-07-2020	Online	Academic Team	Dr. S.K. Guru, College of Basic Sciences and Humanities
3.	Webinar with Indigram Labs Foundation	Third Week of July, 2020	Online	Innovation and Incubation Centre Team	Dr. A.K. Upadhyay, College of Veterinary and Animal Sciences
4.	Microsoft Teams Training for University Faculty Members	Third and Fourth Week of July, 2020	Respective Colleges	e-Governance Team	Dr. S.K. Kashyap, Dean, College of Agriculture
5.	Skill Development Workshops for UG Students	Third and Fourth Week of July, 2020	Online	Academic Team	Dr. S.K. Guru, College of Basic Sciences and Humanities



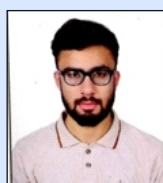
University Fraternity Applauding the Efforts of IDP Team

Dr. S.K. Kashyap
Dean, College of Agriculture/PI, IDP-NAHEP, Pantnagar

The Institutional Development Plan (IDP) of G.B. Pant University of Agriculture and Technology, Pantnagar has entered into the next phase of its implementation. Initially, the plan focussed towards infrastructure and renovation developments to meet out the mandate of the project. Now, the project has picked up its greater roles in equipping and empowering the major stakeholders of the University i.e. faculty members, students, and administrative staff towards digital platforms, advancement in educational technology and pedagogical reforms in online teaching-learning. Two phases of training of all faculty members from all colleges of the University have been completed, and is also getting supported with 24x7 personal counselling through IDP experts. A common online platform is being provided to all faculty members and students of the whole University in this phase. Now IDP has entered into training of faculty members in proper utilization of digital classrooms which have been established across the colleges under IDP infrastructural renovation endeavours. Thus, IDP Pantnagar looks towards future roles in a big way, making substantial reforms in soft skill development plans, capacity building of faculty members, alumni networking, international collaborations, patent acquisition, and generating innovation based ecosystem. The planning, targets, and efforts to fulfil these bigger roles has already begun, the impact has started becoming visible day by day and the entire University fraternity is acknowledging and relishing the timely and strategic interventions of the IDP team.



Top Scorers of IDP Golden Points Till June 2020



Yogesh Pandey
ID : 50192
College of Basic Sciences and Humanities
Points Earned : 680



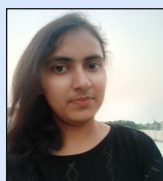
Sumit Tiwari
ID : 52963
College of Agriculture
Points Earned : 480



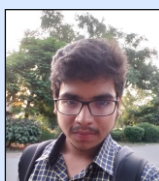
Sarthak Kothiyal
ID : 51662
College of Agriculture
Points Earned : 605



Rekha Bhandari
ID : 52961
College of Agriculture
Points Earned : 455



Varsha Kamboj
ID : 53217
College of Home Science
Points Earned : 605



Samyak
ID : 53589
College of Technology
Points Earned : 455



Yanshi
ID : 49758
College of Veterinary and Animal Sciences
Points Earned : 605



Shaurya Dumka
ID : 49766
College of Veterinary and Animal Sciences
Points Earned : 405



Shubham Singh
ID : 53734
College of Technology
Points Earned : 480



Chinmay Gupta
ID : 49787
College of Veterinary and Animal Sciences
Points Earned : 400