



IDP-NAHEP Pantnagar Updates

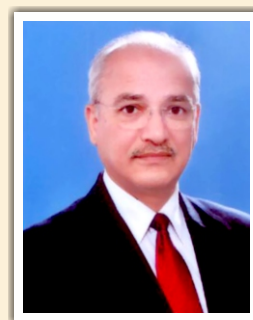
G. B. Pant University of Agriculture & Technology
Pantnagar 263145, Uttarakhand

No. 5
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Message of IDP Leader, GBPUAT, Pantnagar

Global Outlook and Outreach Requires Extensive Networking

In 1960, GB Pant University of Agriculture and Technology was established as the first land grant pattern agricultural university in India with the guidance and support of University of Illinois, USA. An experienced team of administrators and agriculture scientists came to Tarai region and stayed here for few years to establish the University. With time, the country witnessed more than 70 state agricultural universities, central universities and deemed universities spread across the nation. In the present times, each institute has its unique capacities and strengths. The agricultural development of the country needs strong synergy between these institutes to build over the capabilities of each other. As the pioneer university of the country, Pantnagar has paved the way of teaching, research and extension. The University needs to spread and integrate with other institutes to foster stronger linkages and enhanced synergy for multidisciplinary researches in niche areas. Fruitful collaborations emerge when each faculty of the University starts looking towards aligning partners across the globe for research and development, and this is how University can build the strength to emerge as a global institution of upcoming era.



(Tej Partap)

International Training on Simulation Modelling in Agriculture Organized by IDP Pantnagar

Dr. Serge Savary, Director Research, INRAE, France Mentored the Trainees

A 28 hours training on contemporary modelling techniques in agriculture was organized by the Agri-Informatics Team of IDP Pantnagar. This international training was led by a renowned plant pathologist and researcher Dr. Serge Savary who is currently working with National Research Institute for Agriculture, Food and Environment (INRAE), France as Director Research. The training was held from January 9-14, 2020 and was titled as *International Training on System Thinking & Modelling in Agriculture*. The training basically dealt with crop simulation modelling using the STELLA Architect software programme. Over the years, crop simulation modelling has emerged a critical technique to study crop growth processes including several weather and soil related variables.



The inaugural session of the training programme witnessed the presence of Vice-Chancellor, GBPUAT, Pantnagar, Dr. Tej Partap; Dean, College of Agriculture, Dr. J. Kumar; PI, IDP-NAHEP Dr. S.K. Kashyap; and Coordinator, Agri-Informatics Team Dr. A.S. Nain. The session was marked by the wise words

of Dr. Tej Partap, as he said that information may be available with an individual but it evolves into knowledge and wisdom only through one's potential, perseverance, and practice. Hence, he advised all the participants to explore and understand the techniques of utilizing agricultural information and creating models which have practical utility. Dr. J. Kumar, then emphasized on the significance of the discipline of agri-informatics and how IDP Pantnagar is playing a crucial role in advancing the knowledge and skill of Pantnagar students in this area. The



insight and learning generated through such trainings was further highlighted by Dr. S.K. Kashyap. He suggested all the participants to learn as much as possible from the vast experience of Dr. Serge Savary, and interact with him informally, since it is a rare opportunity to spend time with a scientist of such repute. Towards, the closing of the inaugural session, Dr. A.S. Nain discussed about the present scenario of agricultural simulation models in India and world as well as its future prospects.

Dr. Serge Savary initiated the technical session of the training with an eye-opening lecture on the global assessment of crop diseases and impact of plant diseases on food security. Students were engrossed with the basic understanding about threat to food security that is being imposed upon by

various pest and diseases. The students were acquainted about how system simulation and modelling is an appreciative aid in predicting the disease epidemics and understanding the science behind occurrence of disease and crop yield losses due to numerous parameters in a precise and quantitative manner. Beginning from the basic introduction and history about simulation models, the technical definition of systems, models and simulation alongwith with preliminary examples; the training sessions stretched up to the uses and limitations of simulation modelling. The practical



sessions further included hands on experience on preliminary simulation models and STELLA environment. Participants were divided into six groups and assigned with different modelling projects for deeper and critical understanding of the expert based assessment of crop health and contributing parameters.

The training concluded on a collaborative and appreciable note. Dr. Serge Savary praised the learning approach of the participants and consented to guide and mentor few of them as interns in his lab at Toulouse, France. Dr. R.K. Singh, member of Agri-Informatics Team gave the concluding remarks and admired the humbleness of Dr. Serge Savary despite being such a great scholar. He also appreciated the efforts and consistency of all the participants.

Brief Profile of Dr. Serge Savary

Dr. Serge Savary is currently working with National Research Institute for Agriculture, Food and Environment (INRAE), France as Director Research. By profession he is a Plant Pathologist, Editor Journal of Springer journals and member of different scientific associations such as French Society of Plant Pathology, the British Society of Plant Pathology, the American Society of Plant Pathology (Tropical Plant Pathology Committee Chair, 2003), etc. He is also the Vice President of the International Society of Plant Pathology (ISPP). His main fields of interest are plant disease epidemiology; crop loss assessment; the impacts of plant diseases and pests at a range of scales, from local to global; the implications of crop losses towards food security; and the application of systems analysis approaches to crop health management. Much of his research has been conducted in the developing world, including West Africa (1980-1990), Tropical and Sub-Tropical Asia (1990-1999, and 2008-2011), Central America (2000-2002), but he also has conducted research in France (2005-2008, and 2011- present).



Uttarakhand's Prominent Wildlife Veterinarian Shares His Insights With Pantnagar Students

Wildlife behaviour has always aroused an element of fear amongst common people, but is full of thrill, suspense and wonderful experiences for the professionals connected with wildlife rescue operations. On January 17, 2020 the undergraduate students of Pantnagar got a chance to listen to some of the unique experiences of the first wildlife veterinarian of Uttarakhand state, Dr. Yogesh Bhardwaj. His interactive talk on wildlife management held at IDP building was indeed interesting. Being a veterinarian by academic knowledge, Deputy Chief Veterinary Officer, Government of Uttarakhand by profession and wildlife enthusiast by interest, Dr. Bhardwaj focussed on orienting the participants about all aspects of managing the wildlife. During the deliberations, he very interestingly touched upon the aspects of work, roles and responsibilities of a wildlife veterinarian in rescue centers, sterilization centers, in-situ and ex-situ settings. In order to

make the participants understand the challenges faced by wildlife veterinarians, he quoted incidents from his professional life. He also made an attempt to provide hands-on experience to the participants of handling the portable tools and equipments used during the rescue operation of wild cats in the forest. The talk was also attended by Dr. S.K. Kashyap, PI, IDP-NAHEP; Dr. S.K. Guru, Nodal Officer, Academic; and Dr. S.K. Sharma, Assistant Professor, College of Veterinary and Animal Sciences. The concluding note of the even was given by Dr. S.K. Sharma, who accentuated the need to understand the temperament and management aspects of undomesticated animals, and applauded the efforts taken by Dr. Bhardwaj throughout his professional career. Also, the participants were highly inspired by the words of Dr. Bhardwaj and could connect with the thought and feeling of protecting the wildlife which forms an important part of our biodiversity.



Brief Profile of Dr. Yogesh Bhardwaj

Popularly known as '*Panther of Uttarakhand*', due to his ability to deal with any wildlife animal, Dr. Yogesh Bhardwaj is a veterinary graduate of G.B Pant University of Agriculture and Technology, Pantnagar (Batch 1990). Presently, serving as the Deputy Chief Veterinary Officer in Department of Animal Husbandry, Government of Uttarakhand, he has been trained as a wildlife veterinarian from Zoological Society, London as well as Wildlife Institute of India (WII). Dr. Bhardwaj has successfully undertaken about 400 rescue operations of different wildlife animals including tigers, leopards, and elephants. He holds dual experience of working with captive as well as free wild animals. He is an expert laparoscopic sterilization surgeon and has accomplished more than 1000 surgeries of Rhesus Macaque. Looking towards his immense contribution, he was awarded the Best Wildlife Veterinarian Award 2018 and State Forest Award 2018 for performing first successful rescue operation of a tiger in the shortest possible time period ever in any state of India. He is the driving force behind the initiation of Breeding Programme of Red Panda and Blue Sheep, which has been successfully implemented in some countries of the world.



Series of Meetings Held to Strengthen Industry Collaborations, Entrepreneurial Handholding and International Academic Linkages

- On January 16, 2020, Dr. S.K. Kashyap, PI, IDP-NAHEP, Pantnagar and Dr. Sanjay Kumar, Professor, College of Veterinary and Animal Sciences and member of industry-collaboration team, IDP, met Shri J.P Narayan, CEO, Century Pulp and Paper at industry office Lalkua to discuss the final IDP-Agroforestry proposal with an affirmation of integrating the industry partners to strengthen industry-academia interface and need based research in the University. With an encouraging outlook on submitted project proposal, the finance team of Century Pulp and Paper Industry visited IDP-NAHEP, Pantnagar office on January 21, 2020 to discuss the terms and conditions of future transactions with PI, IDP-NAHEP, Pantnagar. The Century Pulp and Paper team accepted the project proposal for integrated IDP-Agroforestry research under their expert patronship.
- Mr. Sachin Joshi, Project Head, Bhartiya Yuva Shakti Trust, Bajaj Group, Aurangabad and Mr. P.K. Kaul, Project Head, NCR with his team of officials had a meeting with PI, IDP-NAHEP, Pantnagar on January 19, 2020 in context of generating tie-ups and partnerships with Innovation and Incubation Cell of IDP, NAHEP, Pantnagar. Bhartiya Yuva Shakti Trust supports entrepreneurship development ventures and had a decade long experience in this context so they proposed to provide industry exposure and required handholding in various business aspects in order to support selected incubatees under Innovation and Incubation Cell.
- The IDP team Pantnagar had a meeting with Dr. Meenakshi from University of Melbourne on January 19, 2020 with a vision of exploring and strengthening student and faculty exchange prospects between Pantnagar University and University of Melbourne, Australia.
- On January 22, 2020, Hon'ble Vice Chancellor, Dr. Tej Partap; PI, IDP-NAHEP, Pantnagar Dr. S.K. Kashyap; and Nodal Officer (Academic), Dr. S.K. Guru along with core IDP team members had a meeting with Prof. Basant Maheshwari from Western Sydney University, Australia and Dr. Dharma Hagare, International PI, SPARC, regarding generation of long term relationship with Western Sydney University. Agenda conceptualizing the international student and faculty exchange programme, sandwich programme and dual degree programme was also discussed and a project proposal was submitted vis-à-vis the abovementioned programmes.
- Former Dean of College of Veterinary and Animal Science, Pantnagar and currently Vice-Chancellor of Pandit Deendayal Upadhyaya Veterinary Science University and Cattle Research Institute, Mathura Dr. G.K. Singh visited the IDP Building premises on January 31, 2020. He was thrilled about the infrastructure development that has taken place and he was further detailed about the project activities by Dr. A.K. Upadhyay, Coordinator, Innovation and Incubation Cell, IDP, Pantnagar, and Dr. D.P. Tiwari, Professor, College of Veterinary and Animal Sciences. He even interacted with Dr. Manisha Rani, Procurement Officer, IDP Pantnagar, as well as with research associates of the project. This visit resulted in finalization of academic visit of veterinary scientists of his university to Pantnagar.



Innovation cum Incubation Centre Nurturing Future Entrepreneurs at Pantvarsity

The Innovation cum Incubation Centre of IDP-NAHEP, Pantnagar has created a buzz among the University students. It aims to identify students who are truly passionate about their pursuits and give them the freedom to express their ideas without boundaries, providing tangible resources, appropriate guidance, resourceful networks, and democratic environment such that ideas have a chance to flourish and create an impact in future. Selected students will be provided comprehensive support for nurturing their entrepreneurial ideas. Several students from different colleges of the University have submitted their start-up proposals, and as of now two teams have been shortlisted for mentoring under the Innovation cum Incubation Cell under two professors of the University. The team consisting of four students, viz. Anuj Banola, Abhijeet Kumar, Yogesh Rawal, and Taranjeet Singh is working under Dr. Lalit Bhatt, JRO, Department of Vegetable Science, and their project is titled as *IoT Enabled Hydroponic Setup*. The project intends to build an IoT (Internet of Things) enabled hydroponic

gizmo that could serve fresh flowers, vegetables and herbs at homes, resorts, restaurants and hotels. The primary objective is to enable urban dwellers to relish fresh food grown at their edifices on IoT enabled gizmos aided by mobile application, which would allow monitoring the growth of the crops with minimal human intervention. Another team with Kartikeya Kotnala and Neha Deorari as team members have been selected which will working under the mentorship of Dr. Ravi Saxena, Associate Professor, Department of Electrical Engineering and Dr. Vipul Gupta, Associate Professor, Department of Fish Harvest and Processing Technology. Their project titled *Smart Aquaculture System: IoT Based Monitoring and Automation System* aims to create pearls under simulated conditions similar to that of the ocean and then monitoring the process through smart IOT systems integrated with mobile application. These teams will be provided working space, funding, networking opportunities, and other required support from industry and academia professionals.

GBPUAT, Pantnagar Forging into the Domain of Digital Education

The e-Content Development Team of IDP Undertakes the Enormous Task

The e-Content Development component of the IDP project has taken the enormous and rigorous task of development of digital course material as well as designing digital courses. Initially, the digital content of 50 undergraduate ICAR accredited courses would be prepared in the form of text and video modules. This initiative of e-content development will bring forth several benefits associated with digital learning including ease of access, flexibility in learning, catering to needs of different learners, multidisciplinary learning opportunities, etc. Eventually, all this would facilitate improvement in quality of higher education in agriculture.

The execution of e-content development has already begun and till date, it has been supported and guided by several experts from academia. Regular in-house meetings are also organized by the e-content development team for planning and monitoring the e-content development process. In the same context, a meeting was

organized on January 17, 2020 in College of Fisheries for the content writers of the e-content development team. The meeting had the presence of Deans of different colleges, PI, IDP-NAHEP, Pantnagar, and e-Content Development Coordinators of different colleges. Important concerns pertaining to systemic and functional aspects of preparing digital content were primarily discussed. These included time based work assignment, utilizing workbook format for content creation, expert reviewing, plagiarism check, and other related issues. The content writers were thus given guidelines to create content which is learner-centric and ensures maximum retention of learners.



Students' Verses

1. It was a great experience to work under the guidance of eminent epidemiologist Dr. Serge Savary. The training was amazing and full of new experience and to implement such an innovative technology for development of agriculture will be a great contribution towards nation as well. This international training on System Thinking and Modelling in Agriculture has helped all the young intellectual minds to come up with new ideas.



- Anurag Rana, College of Agriculture, IVth year

2. My experience with international training on System Thinking and Modelling in Agriculture was great. The classroom environment was exceptionally good. What has been taught to us was totally new for us and very interesting as well. The training gave us a great exposure to the advanced agricultural studies.



- Huidrom Lakshmi Devi, College of Agriculture, IVth year

3. The training was very beneficial to enhance the knowledge of simulation modelling and developing a prototype that can physically connect all the possible factors which lead to the development of any problem in real world. As a student of plant pathology, I am highly benefited from this training; infact it was a great opportunity for us to work with Dr. Serge Savary. I am thankful to IDP-NAHEP for providing such great opportunity and I wish that the similar programmes of modern tools in agriculture will be organized in future.



- Vijay Joshi, College of Agriculture, PhD IInd year

4. Being a part of IDP guest lecture was very good for me. I learnt a lot about wildlife, darts, types of barrels, its cost. We got hands-on experience of how to use, hold and project the equipments. Such events enhance our knowledge set.



- Parul Arora, College of Veterinary and Animal Sciences, Ist year

5. Today NAHEP's programme on wildlife management was very interesting. Wildlife is adventurous in itself, and whatever Sir told us was very good. We got to learn new things about wildlife equipments. His personal experience were indeed inspiring.



- Aditi Parmar, College of Veterinary and Animal Sciences, IIIrd year

6. Today's guest lecture on wildlife management by Dr. Yogesh Bhardwaj was extremely enriching. Both his technical knowledge and personal insights were commendable. It was even an opportunity for us to have an experience working with wildlife equipments. Overall, it was a great learning.



- Pramod Siraw, College of Veterinary and Animal Sciences, Ist year

IDP Pantnagar Initiates Weekly Radio Programme

A weekly radio programme called *IDP Diary* has been initiated by IDP Pantnagar. The programme will be broadcasted through Pantnagar Janvani 90.8 FM, the Community Radio Station of Pantnagar. The programme is meant to create awareness about the events of IDP Pantnagar, activities at IDP Building premises, and other initiatives for student and faculty capacity building. The radio programme will be an avenue to connect with all the stakeholders of IDP across the University and also receive feedback from the participants of IDP events. This way, impact analysis will also be possible at a larger scale. Speaking about the programme, PI, IDP-NAHEP Dr. S.K. Kashyap reflected that the

programme will enable two-way connection and communication with the clients of IDP in a broader manner. The programme shall also provide a facility of phone-in through which the students may ask for any new subject area to be covered under IDP for skill development and also the participants may freely provide any feedback or comments for the events they have attended earlier or any suggestions for upcoming events. It will also include the perspective of the organisers and the facilitators. The radio programme had its first broadcast on January 18, 2020 and thereafter, the programme would be broadcasted on every Saturday from 7:00 - 7:30 pm.

Team Building Workshop Organized for IDP Pantnagar Staff

A team building workshop was held for IDP project team including research associates, e-content developers, project assistants, and office staff on the occasion of beginning of year 2020. Through this interactive workshop, the purpose and vision of IDP was made accessible and personalized. Also, several exercises were conducted for enhancing interpersonal communication and team working. The workshop was facilitated by Dr. S.K. Kashyap, PI, IDP- NAHEP, Pantnagar and it focused on aspects of planning, delegation, liaisoning, strategizing, conflict handling, and meaningfulness of work. Dr. S.K. Kashyap suggested that for any initiative to fulfil its desired objectives, it is essential for its executors to generate an ownership which would eventually motivate them to stretch beyond their comfort zone and break forth self-made boundaries. Even, the staff members shared their work experiences and revealed that how through the project they got an opportunity to hone their multiple skill sets. They all shared a common feeling of cohesion and reflected that so far they

have got an avenue to know different people and work in a team with desired autonomy and creativity, and over time they have developed mutual trust and respect. Overall, 25 staff members were a part of this workshop which concluded with insightful remarks of Dr. Manisha Rani, Procurement Officer, IDP-NAHEP, Pantnagar that we all must relish what we do without any burden of action and outcomes. This would ultimately result in excellence and quality of work.



Main Events of February 2020

S.No.	Event	Proposed Date	Venue	Nodal Unit	Convener
1	Hands-on Training on System Cell Therapy and Regenerative Medicine by Dr. G. Taru Sharma, Dr. Sujoy Dhara and Dr. Amarpal (IVRI, Izzatnagar)	13-02-2020 to 16-02-2020	IDP Office, University Centre 2 nd Floor	Academic Team	Dr. Aman Kamboj, College of Veterinary and Animal Sciences
2	Re-inventing the Bicycle Design	15-02-2020	IDP Office, University Centre 2 nd Floor	Innovation & Incubation Cell	Dr. A.K. Upadhyay, College of Veterinary and Animal Sciences
3	Leadership Skills Workshop by Mr. Ramanuj Mishra, Co-Founder, Cinque Education	20-02-2020	IDP Office, University Centre 2 nd Floor	Academic Team	Dr. S.K. Guru, College of Basic Sciences and Humanities
4	Entrepreneurship Workshop by Mr. Ramanuj Mishra, Co-Founder, Cinque Education	21-02-2020	IDP Office, University Centre 2 nd Floor	Academic Team	Dr. S.K. Guru, College of Basic Sciences and Humanities
5	Wall Painting Contest on Cultural Heritage	29-02-2020	IDP Office, University Centre Ground Floor	Project Team	Dr. A.K. Upadhyay, College of Veterinary and Animal Sciences

Providing Comprehensive Support System for Student Entrepreneurial Initiatives

Dr. S.K. Kashyap

Professor and Head, Agricultural Communication/PI, IDP-NAHEP, Pantnagar

The IDP initiatives are primarily targeted to strengthen the innovation culture of the University. The virtual classroom, language labs, foreign exchange programmes, industry internships, innovation and incubation centre, skill based trainings, and many other student activities aim to nurture University students with an innovation based outlook. In this series of efforts by IDP team, the activities of Innovation and Incubation Centre have started gaining popularity among Pantnagar student fraternity. Students have been submitting various entrepreneurial proposals which cater to the need of various stakeholders of agriculture, including farmers, suppliers, retailers, customers, extension agencies, scientists, and academicians. The shortlisted proposals will be provided guidance by both academic and industry experts, along with financial, technical, and market related support. I would urge all students to utilize these unique opportunities and enrich their learning experiences with an exclusive blend of industry, academia, and research portfolios. It is a chance for us to make Pantnagar brand strengthened, more demanded, and more reliable.



Top 10 Scorers of IDP Golden Points Till January 2020



Yogesh Pandey
ID: 50192
College of Basic Sciences and Humanities
Points Earned : 325



Estuti Joshi
ID: 51463
College of Agriculture
Points Earned : 200



Sarthak Kothiyal
ID: 51662
College of Agriculture
Points Earned : 250



Mudit Joshi
ID: 49908
College of Agriculture
Points Earned : 200



Shaurya Dumka
ID: 49766
College of Veterinary and Animal Sciences
Points Earned : 225



Pranshi Gupta
ID: 51667
College of Home Science
Points Earned : 200



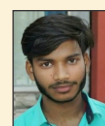
Lokesh Chadhuary
ID: 49844
College of Agriculture
Points Earned : 202



Shruti Kashyap
ID : 51436
College of Agriculture
Points Earned : 200



Chinmay Gupta
ID: 49787
College of Veterinary and Animal Sciences
Points Earned : 200



Suraj Kumar
ID : 53417
College of Technology
Points Earned : 177

Website: <http://www.gbpuat.ac.in/events.html>

Email: nahep.idp.pantnagar@gmail.com

Keep visiting the University Centre for updates !