

(Off): 91-1662-255407
Mob: +91-9416346306

E-mail: hodmbbb@gmail.com

DEPARTMENT OF MOLECULAR BIOLOGY, BIOTECHNOLOGY & BIOINFORMATICS
College of Basic Sciences & Humanities,
CCS HARYANA AGRICULTURAL UNIVERSITY
HISAR- 125 004, INDIA

Dr. Pushpa Kharb

D.O.# MBB&B/19/ 125-225

Prof. & Head

Dated: 23.4.18

Dear Sir/Madam,

It is my pleasure to inform you that the Department of Molecular Biology, Biotechnology & Bioinformatics is organizing following training courses during the year 2019-20. The courses are open for all professionals who are interested in research and training on various aspects of Biotechnology.

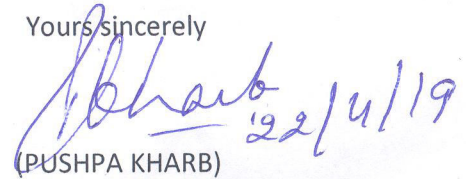
Applications are invited from the interested participants for the above training courses at least The last date of receipt of applications is June 18, 2019.

S.No.	Course	Duration	Period	Fee (Rs.)
1-	Crop Improvement through biotechnological tools and techniques.	3 weeks	19.6.2019 to 10.7.2019	Student: 2,000 Faculty : 3,000
2-	Use of Plant Tissue Culture and molecular approaches for sustainable agriculture	6 weeks	19.6.2019 to 1.8.2019	Student: 3,000 Faculty : 4,000

The participants will be required to deposit the required fee in cash on the first day of training in the office of MBB&B. Student participants will be required to make their own arrangements for stay during the training programme. For details about the trainings visit our website <http://www.hau.ac.in> or contact Course Director (Dr. Pushpa Kharb) Ph.No.01662-255407.

With kind regards,

Yours sincerely


(PUSHPA KHARB) 22/4/19

Application Form

1. Full Name: _____
2. Designation: _____
3. Sex: _____ 4. Date of birth _____
5. Present address: _____

6. Tel No. _____ (office) _____ (Res)
Mobile: _____
7. Email address _____
8. Teaching/ research /professional experience along with the posts held (during last five years)

Post held	Institution	Period	Nature of duty

9. Academic records

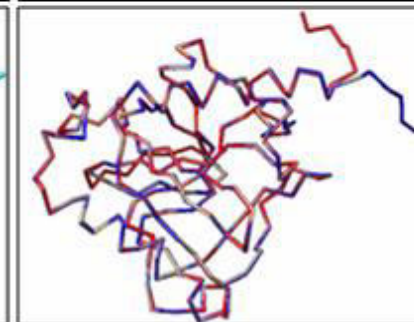
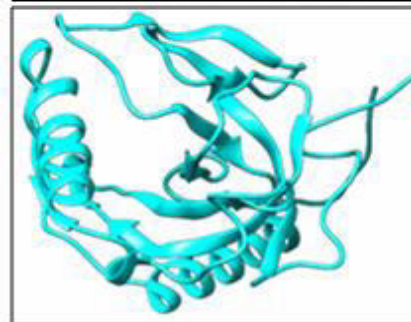
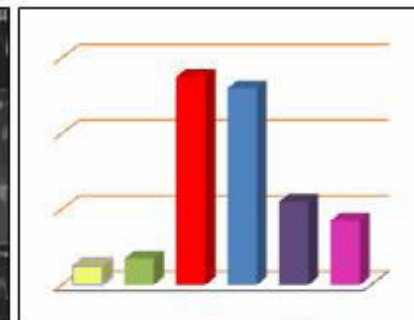
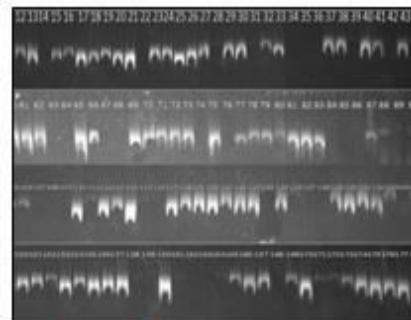
Exam Passed	Subjects	Year of passing	Percent/ OGPA	University
Ph.D.				
Masters degree				
Bachelors degree				

Signature of the applicant

10. Date: _____
11. Place: _____

12. Recommendation of Head of forwarding institution/organization:

Three weeks training course on *Crop Improvement through Biotechnological Tools and Techniques* June 19 to July 10, 2019



Course Director
Dr (Mrs) Pushpa Kharb

Course Coordinators
Drs. V K Sikka, Upendra Kumar and Neeru Redhu

Organized By
Department of Molecular Biology, Biotechnology & Bioinformatics
CCS Haryana Agricultural University, Hisar, Haryana

Hisar: It is located 165 Km from Delhi and 320 Km from Jaipur. It is well connected to Delhi, Jaipur and other cities of Haryana and neighboring states by train and/or bus.

Duration -Three weeks: *June 19 to July 10, 2019*

Course Fees: Participants are requested to pay (Student: Rs.2,000 & Faculty: Rs.3,000) the registration fee that can be deposited in cash in advance or at the time of registration on **June 19, 2019**

Laboratory and computing facilities: The departmental laboratories are well equipped and advanced facilities for bioinformatics analysis are available.

Lodging and Boarding: Arrangements for the stay of the student participants during the training program will have to be made by the students on their own. Faculty from the Govt. institutes/Univ. or ICAR may be accommodated in faculty house/ trainees hostel of the university on payment basis.

Number of Participants: The maximum number of participants will be 20.

Eligibility: Participants (faculty and graduate students) are invited from ICAR Institutes/ SAUs/ State Governments/Private Organizations.

How to apply: The application for participation may be sent on prescribed format, duly forwarded by Head of the institution. It should reach the Course Director latest by **June 18, 2019** by post, fax or email. TA & DA of the participants will be borne by participants/sponsoring institutions/ organizations etc. The participants will be selected on 'first come first serve' basis and shall be registered on **June 19, 2019**.

All correspondence may please be addressed to

Dr. (Mrs) Pushpa Kharb

Course Director and Professor & Head

Dept of Molecular Biology, Biotechnology & Bioinformatics,

CCS Haryana Agricultural University, Hisar 125004

Phone no. 01662-285407,

Email: hodmbbb@gmail.com

Photocopy of the application form can be used

Training course on Crop Improvement through Biotechnological Tools and Techniques

Biotechnology and Bioinformatics encompassing areas of plant tissue culture, transgenic development, linkage mapping, marker-assisted selection, and structural and functional genomics have provided us ample opportunities for mass propagation, genome analysis, genetic improvement and value addition in plants and microbes. It is believed that the next revolution in agriculture can be achieved only by the effective application of biotechnological/ genomic tools. To meet the increasing demand, strategies for agricultural research have to be reoriented. Both conventional and biotechnological tools have to be used in conjunction to not only improve the crop productivity but also the nutritional quality and industrial utility of crop species. The present era of 'Biotechnology' requires skilled human resources in this high throughput area.

The Department of Molecular Biology, Biotechnology & Bioinformatics, CCS Haryana Agricultural University, Hisar, Haryana, is organizing three weeks hands-on-training on '***Crop Improvement through Biotechnological Tools and Techniques***'. The proposed training has been designed keeping in view the needs of the teachers and researchers from ICAR/SAU/State Univ. & Colleges and Graduate college students. The training programme will include lectures as well as practical classes.

Course contents

- Plant tissue culture and genetic transformation.
- Molecular markers, linkage mapping, marker-assisted selection and various aspects of molecular breeding.
- Structural and functional genomics

Hands-on-training

- Plant regeneration and transformation
- Isolation of plasmid DNA and genomic DNA & RNA.
- PCR using specific primers, resolution by gel electrophoresis and data analysis
- RT-PCR
- Bioinformatics tools in structural and functional genomics

Application Form

1. Full Name: _____
2. Designation: _____
3. Sex: _____ 4. Date of birth _____
5. Present address: _____

6. Tel No. _____ (office) _____ (Res)

Mobile: _____

7. Email address _____

8. Teaching/ research /professional experience along with the posts held
(during last five years)

Post held	Institution	Period	Nature of duty

9. Academic records

Exam Passed	Subjects	Year of passing	Percent/ OGPA	University
Ph.D.				
Masters degree				
Bachelors degree				

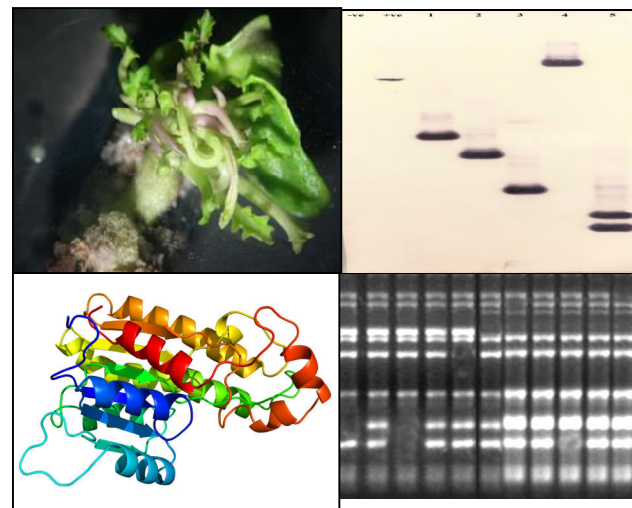
Signature of the applicant

10. Date: _____

11. Place: _____

12. Recommendation of Head of forwarding institution/organization:

Six weeks hands on practical training course on *Use of Plant Tissue Culture and Molecular Approaches for Sustainable Agriculture* June 19 to August 01, 2019



Course Director
Dr (Mrs) Pushpa Kharb

Course Coordinators:
Drs. N.R.Yadav, Shikha Yashveer and Navjeet Ahlawat

Organized By
Department of Molecular Biology, Biotechnology & Bioinformatics
CCS Haryana Agricultural University, Hisar, Haryana

Hisar: It is located 165 Km from Delhi and 320 Km from Jaipur. It is well connected to Delhi, Jaipur and other cities of Haryana and neighboring states by train and/or bus.

Duration -Six weeks: June 19 to Aug 01, 2019

Course Fees: Participants are requested to pay (Student: Rs.3,000 & Faculty: Rs.4,000) the registration fee that can be deposited in cash in advance or at the time of registration on **June 19, 2019**

Laboratory and computing facilities: The departmental laboratories are well equipped with modern equipments and other facilities.

Lodging and Boarding: Arrangements for the stay of the student participants during the training program will have to be made by the students on their own. Faculty from the Govt. institutes/Univ. or ICAR may be accommodated in faculty house/ trainees hostel of the university on payment basis.

Number of Participants: The maximum number of participants shall be 20.

Eligibility: Participants (faculty and graduate students) are invited from ICAR Institutes/ SAUs/Basic Science Institutes/ State Governments/Private Organizations.

How to apply: The application for participation may be sent on prescribed format, duly forwarded by Head of the institution. It should reach the Course Director latest by **June 18, 2019** by post, fax or email. TA & DA of the participants will be borne by participants/sponsoring institutions/ organizations etc. The participants will be selected on 'first come first serve' basis and shall be registered on **June 19, 2019**.

All correspondence may please be addressed to

Dr. (Mrs) Pushpa Kharb

Course Director and Professor & Head

Dept of Molecular Biology, Biotechnology & Bioinformatics,

CCS Haryana Agricultural University, Hisar 125004

Phone no. 01662-285407,

Email: hodmbbb@gmail.com

Photocopy of the application form can be used

Training course on '*Use of Plant Tissue Culture and Molecular Approaches for Sustainable Agriculture*'

Biotechnology and Bioinformatics encompassing areas of plant tissue culture, transgenic development, linkage mapping, marker-assisted selection, and structural and functional genomics have provided us ample opportunities for mass propagation, genome analysis, genetic improvement and value addition in plants and microbes. It is believed that the next revolution in agriculture can be achieved only by the effective application of biotechnological/ genomic tools. To meet the increasing demand, strategies for agricultural research have to be reoriented. Both conventional and biotechnological tools have to be used in conjunction to not only improve the crop productivity but also the nutritional quality and industrial utility of crop species. The present era of 'Biotechnology' requires skilled human resources in this high throughput area.

The Department of Molecular Biology, Biotechnology & Bioinformatics, CCS Haryana Agricultural University, Hisar, Haryana, is organizing three weeks hands-on-training on '*Use of Plant Tissue Culture and Molecular Approaches for Sustainable Agriculture*'. The proposed training has been designed keeping in view the needs of the teachers and researchers from ICAR/SAU/State Univ. & Colleges and Graduate college students. The training programme will include lectures as well as practical classes.

Course contents

- Plant tissue culture and genetic transformation.
- Molecular markers, linkage mapping, marker-assisted selection and various aspects of molecular breeding.
- Structural and functional genomics

Hands-on-training

- Plant regeneration and transformation
- Isolation of plasmid DNA and genomic DNA & RNA.
- PCR using specific primers, resolution by gel electrophoresis and data analysis
- RT-PCR
- Bioinformatics tools in structural and functional genomics
- Three weeks mini-project on plant tissue culture/ genetic transformation/ marker technology/ microbial biotechnology/ bioinformatics tools.