

# RESUME

## **PERSONAL DETAILS**

Pushpinder Pal Kaur  
 Graduate Research Assistant (Masters Student)  
 Texas Tech University  
 Department of Plant and Soil Science  
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**RESEARCH PROJECT:** Molecular basis of complementary, synergistic or antagonistic Interactions determining the full potential of Drought Tolerance QTL effects in Rice

## **ACADAMICS DETAILS**

YEAR	DEGREE/CERTIFICATE	UNIVERSITY/SCHOOL,CITY	OCPA/ (%)
2011-2015	B.Sc. (Hons.) in Biotechnology	School of Agricultural Biotechnology, Punjab Agricultural University, Ludhiana	7.75/10
2011	Class XII (MEDICAL)	St. Kabir Convent School, Bathinda	67%
2009	Class X	St. Soldier international Public School, Sec-28B, Chandigarh	84%

- GRE SCORE-Overall 297 (Quantitative-151 and Verbal-146), Toefl Score-102

## **SKILL PROFICIENCY**

### ➤ **Molecular Biology Techniques:**

- DNA extraction
- Quantification of DNA
- RNA Extraction
- Small RNA Library Preparation
- Quantitative PCR Analysis
- PCR analysis, Genotyping , Phenotyping, Allele mining
- Gel Electrophoresis and Gel documentation
- DNA Sequencing

### ➤ **Field crop breeding techniques and Cytogenetic analysis**

### ➤ **Microscopy Techniques:**

- Optical Microscopy
- Electron Microscopy: Sample preparation and Handling of SEM and TEM

### ➤ **Tissue Culture Techniques:**

- Callus, Pollen, Anther and Ovary Culture and Embryo rescue and culture
- Plant Genetic Transformation: *Agrobacterium* and Particle gun bombardment
- Micropropagation

### ➤ **Computer Basics and Bioinformatics:**

- Handling of tools and databases: Artemis, Jalview, Clustal-X, CD-HIT, Genome Specific Primers(GSP), Primer3, Perl Primer, Powermaker, Darwin, QTL Mapmaker, QTL Cartographer, ClustalW, Treeview, RasMol, Chimera,

Modeller, BLAST(online and standalone), EMBL, ENSEMBLE, NCBI, UniPort, PDB, DDBJ, Genbank, PubMed.

- Proficient in MS office: Excel, Word and Power Point and working knowledge in as LINUX operating system, Html and Perl languages

➤ **Accessory Techniques:**

- Handling of Spectrophotometer, Autoclave and other basic instruments
- Cell Culture and Microbiological analysis
- Basic Agricultural field techniques

## **RESEARCH INTERESTS**

- Epigenetics
- Transcriptomics
- Proteomics

**GENERAL INTERESTS:** Reading science journals and magazines; watching videos on newyorker.com, Discovery channel etc.

## **ACCOMPLISHMENTS**

### **Professional:**

- Development of Structure Based Web Resource of *Triticum* - providing the information (local user ) about 3D models of Wheat Proteins
- Visit for professional interaction regarding research infrastructure and project activities:
  - ICRI SAT (International Crops Research Institute for the Semi-Arid Tropics) and DuPont, Hyderabad
  - TNAU (Tamil Nadu Agriculture University), Coimbatore
  - CCMB (Centre for Cellular and Molecular Biology), Hyderabad
  - Wheat Research Station, Wellington, Tamil Nadu
  - NABI (National Agri - Food Biotechnology Institute), Mohali
  - DWR and ICAR-CSSRI, Karnal

### **Extracurricular Activities:**

- Certificate in Interactive Skills and Personality Enhancement Course
- Certificate in Management of conference at University
- Certificate from University of Delhi for performing on the issue of 'Farmer Suicide' in "Manthan 2014" which is India's largest Street play Festival
- Actively inaugurated and participated in the event "Unleash Empower Achieve" for lending a helping hand to the children living in slums facing very harsh social and economic conditions
- Performed Flash Mob against 'Female foeticide' during Kisan Mela (Farmers fair)
- Donating Blood from previous two years to Department of Immunohaematology and Blood Transfusion at Dayanand Medical College and Hospital
- Attended various seminars regarding consumer awareness, pollution, road safety, and global warming etc.
- Active voluntary participant in National Service Scheme(NSS)

