



# Dr. Gurdev Singh Khush Foundation for Advancement of Agricultural Sciences

Punjab Agricultural University, Ludhiana-141004

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Newsletter

No. 6

Dr Gurdev Singh Khush Foundation for Advancement of Agricultural Sciences was established in 2010 at the Punjab Agricultural University (PAU) with the generous donation by Dr G.S.Khush.

Dr Khush is a PAU alumnus and a world renowned Geneticist and Plant Breeder who worked at the International Rice Research Institute (IRRI), Manila, Philippines for 35 years (1967-2002). More than 300 rice varieties developed under his leadership are grown on 60 percent of the world rice land. Dr Khush is considered the main architect of the Green Revolution in rice. His contributions have been recognized globally with 19 national and 13 international awards, which include Japan Prize, World Food Prize, Rank Prize (UK), Borlaug Award, Wolf Prize in Agriculture (Israel), Golden Sickle Award (Thailand), Mahathir Science Award (Malaysia), and Honorary Doctorate degree from 16 universities, including Cambridge University (UK), Ohio State University (USA), McGill University (Canada). PAU was the first university to confer Honorary Doctorate Degree on Dr Khush in 1987. Dr Khush is fellow of 12 scientific academies including Foreign Associate, US National Academies of Sciences (1989) and Royal Society of London (1995).

The Foundation has been recognized as a charitable society under section U/S 12 AA (1) b (i) of the IT Act 1961 as issued by the Commissioner of Income Tax vide letter No. CIT-III/JB/LDH/12A/307/2012-13 dated 24.08.2012.

Details about the GS Khush Foundation can be found on its [website www.khushfoundation.org/](http://www.khushfoundation.org/)

## Foundation Objectives

The main objectives of the Foundation are to provide financial support to promote education, research and training in agriculture. These include:

1. To provide scholarships to needy and meritorious students of PAU, GADVASU, and other academic institutions, especially those belonging to rural areas of Punjab State.
2. To award travel grants for participation of young scientists and post-graduate students in scientific conferences.
3. To support team award for scientific excellence in transfer of technology to farmers.
4. To invite eminent scientists for delivering lectures and sharing their knowledge and experience with the faculty and students of PAU and GADVASU.
5. To support research by providing grants on selected topics.

## Foundation Activities

### Awards

The Foundation bestows the following awards:

- 1) **GS Khush Merit Scholarship** is awarded to undergraduate meritorious students of PAU and GADVASU with a focus on students from rural areas. Each scholarship carries an amount of Rs. 18,000 per annum and a certificate. The scholarships are awarded to undergraduate (UG) students of 7 B.Sc programmes of the 5 constituent colleges of PAU and 3 UG programmes of 3 constituent colleges of GADVASU. In addition, the Foundation in its 11th Annual Governing Body meeting held on March 15, 2023, approved for award of one scholarship amounting Rs. 10,000/- per annum to the meritorious student at PAU Model High School, Kaoni which is running under the administration of Dean, College of Community Science, PAU, Ludhiana.



Dr. GS Khush, Chairman, Khush Foundation, Dr. SS Gosal, VC, PAU, Dr. BS Gill, Renowned Wheat Cytogeneticist distributing scholarships to the meritorious students of CoA (Left), CoBSc (Middle) & CoHF (Right)

## Number of scholarships awarded by Khush Foundation (2012-13 to 2022-23)

Programme	2012-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Total
<b>PAU, Ludhiana</b>								
B.Sc Agri. (Hons.) 6-year	40	12	16	16	16	16	16	132
B.Sc Agri. (Hons.) 4-year	34	6	8	8	8	8	8	80
B.Sc. Biotech (Hons.) 4-year	24	4	5	6	5	4	4	52
B.Tech. Food Tech 4-year	12	2	3	4	4	4	4	33
B.Tech (Agri. Engg) 4-year	25	4	3	3	4	3	3	45
B.Sc. (Home Science) 4-year	25	6	8	10	8	7	4	68
B.Sc. (Horti.) 4-year	--	---	---	--	2	3	4	9
M.Sc. (Integrated) 5-year	23	6	9	9	8	8	2	65
<b>GADVASU, Ludhiana</b>								
B.V.Sc&A.H: 5-year	12	6	6	8	8	6	8	54
B.F.Sc. 4-year	7	3	5	3	2	3	2	25
B.Tech (Dairy Tech) 4-year	8	5	3	6	5	3	2	32
<b>Total</b>	<b>210</b>	<b>54</b>	<b>66</b>	<b>73</b>	<b>70</b>	<b>65</b>	<b>57</b>	<b>595</b>

The first scholarship was awarded to B.Sc (Agri) Hons student in 2011. Since then, Foundation has awarded 595 merit scholarships over the academic years: 2012-13 to 2022-23 (Table) and has approved 61 more scholarships which will be awarded in its annual function on March 19, 2024.

- 2) **GS Khush travel grant** is awarded for participation in scientific conferences held in India and abroad to the post-graduate (PG) students and young faculty to share their research findings and interact with other participants. The Foundation has awarded 85 travel grants (2014-15 to 2022-23) and has approved 31 grants for the year 2023-24 to the students and scientists, who participated in conferences held in Australia, Canada, Thailand and in India (Haryana, Assam, Jammu & Kashmir, Karnataka, Tamil Nadu, Rajasthan, Maharashtra).
- 3) **GS Khush Team Award** for scientific excellence in transfer of technology to farmers with the objective of

strengthening linkages with the farming community. The Foundation awards a cash prize of Rs 50,000 /- and a citation to the best performing extension team of PAU. The Foundation has awarded four team awards (2014-15 to 2021-22).

The Selection Committee for each type of award comprises of Deans of the constituent colleges, Dean Post-graduate studies, Director Research, Director Extension Education, and representatives of Khush Foundation.

#### 4) **Dr Darshan Singh Brar Award in Agriculture**

Dr. Darshan Singh Brar was an outstanding Geneticist and a Biotechnologist. He was a faculty member at Punjab Agricultural University (PAU) from 1973 to 1987. While at PAU, he started the biotechnology research and



Dr. GS Khush, Dr. SS Gosal, Dr. HS Banga, KS Pannu, Dr. KS Gill & other dignitaries distributing scholarships to the meritorious students of CoCSc (Left) & Veterinary Sciences (Right)



Dr. GS Khush and Dr. SS Gosal along with other dignitaries awarding GS Khush travel grant cheque to one of the participant



teaching program, and trained numerous students and young scientists. He motivated and supported hundreds of students to pursue Ph.D. degrees in advanced laboratories not only in India but also globally. He was a kind, humble and generous person. Dr. Brar joined the International Rice Research Institute (IRRI) as a Plant Breeder in 1987 and served as Head, Division of Plant Breeding, Genetics and Biotechnology at IRRI from 2007-2012. After retiring from IRRI in 2012, Dr. Brar re-joined his alma mater PAU where he served as an Honorary Adjunct Professor and continued his zeal for teaching and mentoring students and young scientists. He was also the founder secretary of G S Khush Foundation. His demise on March 11, 2020, came as a great loss to his family, friends, and the scientific community worldwide.

To keep his memory alive, family members, friends, well-wishers and the Khush Foundation established Dr. Darshan Singh Brar Award in Agriculture. The award carried a cash amount of Rs. 3 Lakh and a plaque. A committee of international scientists selected Dr. Surinder Singh Banga (FNAAS, DAE, Raja Ramanna Fellow, Professor (Honorary Adjunct), PAU, Ludhiana and Former ICAR - National Professor) as first recipient of the Award. Dr. Darshan Singh Brar Award in Agriculture. Dr Sanghamitra Samantaray, Principal Scientist, Crop Improvement Division, ICAR-National Rice Research Institute, Cuttack was awarded 2<sup>nd</sup> Dr Darshan Singh Brar Award in Agriculture. Dr Samantaray was awarded a cash award of Rs. 3.0 lakh and a plaque during the annual awards function, held on March 15, 2023 at PAU Ludhiana. Dr Samantaray thanked the foundation and delivered a lecture on her contributions in research.



Dr. GS Khush, Dr. SS Gosal and Dr. BS Gill conferring plaque and cheque of Dr. DS Brar Award in Agriculture to Dr. Sanghamitra Samantaray

### 5) Dr Darshan Singh Brar Young Scientist Award in Agriculture

During the meeting of Annual Governing Body of the Khush Foundation held on August 19, 2022, it was decided to institute Dr Darshan Singh Brar Young Scientist Award for a young faculty member of PAU of less than 45 years of age. The award is given annually to a staff member for his/her outstanding contributions in teaching, research, or extension. The award consists of a cash amount of Rs. 50,000.00 (fifty thousand) and a plaque. A committee of PAU dignitaries comprising of Director of Research, Director of Extension Education, and Deans of all the constituent colleges evaluated the applications and selected Dr Manpreet Singh Mavi,

Senior Soil Chemist, Department of Soil Science, PAU Ludhiana as the first awardee. Dr Manpreet Singh Mavi was presented an award of Rs 50,000 (Fifty thousand) and a plaque during the annual awards day function held on March 15, 2023, at PAU.



Dr. GS Khush, Dr. SS Gosal and Dr. BS Gill conferring plaque & cheque of Dr. DS Brar Young Scientist Award in Agriculture to Dr. Manpreet Singh Mavi

### Financial assistance to Needy Students

Chairman of the Foundation was receiving several requests for supporting the economically weaker students also. Though the Foundation has supported several needy students all these years, as and when any request was forwarded to the Chairman of the Foundation. The Foundation in its Annual Governing Body Meeting held last year decided to provide financial assistance at a maximum value of Rs 25,000 (Twenty-five thousand only) each year to the needy students. In the last Annual Award Function, the Foundation provided one assistantship of Rs 25,000/- to a B. Tech (Biotech) student at School of Agricultural Biotechnology to partially meet her tuition fee expenses. Currently the Foundation has approved financial assistantship to 5 students of different programmes of PAU which will be awarded in its Annual Award function.

### Additional support

- Foundation provided partial financial assistance to eleven students who needed support for the study; also supported the workshop at PAU's Regional Research Centre located in Kandi area.
- A special grant (Rs 3.0 Lakh ) was given to the Plant Breeding & Genetics Department to upgrade the laboratory facilities for molecular breeding research.
- Dr Kuldip Singh Dhir , Professor, Punjabi university, Patiala was honored with a cash prize (Rs 25,000/-) and a certificate of appreciation. Dr Dhir has made outstanding contributions in dissemination of science to the rural masses through publication in Punjabi language.

### Guest Lectures

The Foundation has organized seven guest lectures in a series by eminent scientists on topics of general interest to the faculty and students of PAU and GADVASU. These lectures are attended by more than 350 students, staff and other dignitaries.

**First guest lecture:** Dr Ashok Gulati (Chairman of the Commission on Agricultural Costs and Prices, Ministry of

Agriculture, Govt. of India, New Delhi) delivered a lecture in 2014 entitled "**Agricultural Growth: Role of Policy and Technology**".

**Second guest lecture:** Dr RS Paroda Chairman, Trust for Advancement of Agricultural Sciences (TAAS) and former Director General, ICAR, New Delhi gave a lecture in 2015 on "**Challenges Before Indian Agriculture: The Way Forward**".

**Third guest lecture:** Dr SS Johl, a world-renowned economist and Chancellor, Central University of Punjab, Bathinda delivered the lecture in 2016 on "**Socioeconomic Stress in Rural Sector: Some Policy Options**".

**Fourth guest lecture:** Dr RA Mashelkar, FRS, National Research Professor, former Director General, CSIR, New Delhi gave presentation in 2017 on "**Agricultural Innovation Ecosystem: From Best to Next Practice**".

**Fifth guest lecture:** Dr Montek Singh Ahluwalia, a renowned economist and former Deputy Chairman of the Planning Commission, Govt of India gave a lecture in 2018 on "**Challenges in Agriculture: Some Policy Options**".

**Sixth guest lecture:** Dr Harinder Singh Bedi, Chief Consultant, Cardio-vascular and Thoracic Sciences, Shalby Hospital, Mohali (former Head, CTVS Department, CMC & Hospital, Ludhiana) delivered a lecture in 2019 on "**Heart Problems in India: How to being Heart Smart-the Punjab Connection**".

#### **Nobel Prize Series India 2019**

PAU along with Dr Gurdev Singh Khush Foundation, National Agri-Food Biotechnology Institute (NABI), Mohali, in partnership with Department of Biotechnology (DBT), Govt of India and the Nobel Foundation organized a "Nobel Prize Series" with the theme: Teaching and Learning on September 12, 2019 at PAU. The event comprised of lectures, student round table discussion and exhibition. Nobel Laureate Professor Serge Haroche gave lecture on "**How basic and applied science nurture each other**". Dr Juleen Zierath member of the Royal Swedish Academy and Nobel Assembly spoke on "**The Nobel Prize in Physiology/ Medicine: reflections from behind closed doors**". A large number of school students, teachers, faculty, educationists, medical doctors attended the event. Interaction with Nobel Laureate provided unique opportunity and motivation to the young generation to stimulate innovation and creative thinking in different disciplines of higher learning and education.

#### **Symposium in the Honour and memory of Dr Darshan Singh Brar**

The Khush Foundation and Punjab Agricultural University also organized a two-day symposium on August 17-18, 2022 on the theme "Transforming the Green Revolution Hub of India: Innovations in Crop Breeding, Resource Management and Policy". Distinguished scientists from abroad and India, students from different agricultural institutes of the country attended the symposium. The symposium concurred and shared ideas in the form of expert lectures and panel discussions among agricultural stalwarts while also actively engaging the younger generation of researchers and

students in the discussions. A copy of the proceeding of the symposium including summary of lectures from the stalwarts and research of the participants has been kept in the Dr. GS Khush Museum, Gurdev Singh Khush Institute of Genetics, Plant Breeding and Biotechnology, PAU.

#### **Dr. G.S. Khush Distinguished Professor Award**

The award is presented in recognition of a distinguished teacher in College of Agriculture, PAU, in view of excellence in research, teaching or extension activities. The award was established in year 1990 from a donation of Rs 1.0 lakh by Dr G S Khush. Till date, the thirteen scientists of PAU has been conferred with this award (Table).

#### **Dr. G.S. Khush Distinguished Professor Awardees from 1990-2019**

Sr. No.	Name of the Professor	From	To
1.	Dr. S.S. Prihar	03.05.1990	16.05.1990
2.	Dr. T.H. Singh	01.12.1990	30.11.1993
3.	Dr. O.P. Meelu	01.12.1993	31.05.1995
4.	Dr. D.R.C. Bakheta	29.02.1996	28.09.1999
5.	Dr. G.S. Nanda	29.09.1999	31.08.2002
6.	Dr. J.S. Hundal	01.09.2002	31.01.2003
7.	Dr. S.S. Sokhi	01.02.2003	30.04.2004
8.	Dr. Lal Singh Brar	15.07.2004	30.06.2006
9.	Dr. Yadvinder Singh	01.07.2006	30.06.2009
10.	Dr. T.S. Thind	01.10.2010	10.01.2012
11.	Dr. D.S. Cheema	19.12.2011	01.04.2013
12.	Dr. S.S. Kukal	01.03.2013	29.02.2016
13.	Dr. (Mrs) Parveen Chhuneja	01.03.2016	28.02.2019

#### **Dr. G.S. Khush Distinguished Professor Chair**

With an additional donation of Rs 3.0 lakh by Dr G S Khush, Dr. G.S. Khush Distinguished Professor Chair has been established at PAU in place of Dr. GS Khush Distinguished Professor Award. The award is presented in recognition of a distinguished teacher in College of Agriculture and College of Horticulture & Forestry, PAU, in view of excellence in research, teaching or extension activities. The first recipient of this chair was Dr O P Choudhary, Principal Soil Chemist, PAU.

#### **Annual award function 2024**

The Annual Award Function for conferring GS Khush Merit Scholarships, 3rd Dr D S Brar Award in Agriculture-2024, 2nd Dr D. S. Brar Young Scientist Award-2024 is going to held on March 19, 2024. A total of 61 scholarships, 31 travel grants and five assistantship will be awarded during the function.

The function will held at Pal Auditorium, Punjab Agricultural University, Ludhiana.

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