

Dr. Manmohan Singh Chauhan
Director,
ICAR- Central Institute for Research on Goats,
Makhdoom, Mathura (UP)

Brief Profile and Contribution:

A. Academic Qualifications: MSc., PhD. (1986)

B. Academic Fellowship:

1. Fellow of National Academy of Agricultural Sciences (**FNAAS**), New Delhi
2. Fellow of National Academy of Dairy Science (**FNADS**), India
3. Fellow of Society for Extension Education

C. Awards/ Recognition:

1. Rafi Ahmad Kidwai Award by ICAR, 2015 New Delhi
2. ICAR Best Team Award in Animal Sciences, 2014, ICAR, New Delhi
3. VASVIK Industrial Award in Agricultural Science Research, 2015, Mumbai
4. Dr. Labhshweta Award by ISSRF, India 2015
5. Department of Biotechnology Overseas Fellowship (Long Term) Award by the DBT (Govt. of India), in 1997.
6. Certificate of Merit Award for Exemplary Research by Virginia Tech., USA in 1999.
7. Erasmus Mundus Scholarship Awarded by EM-ABG, European Union in 2009.
8. Prof. G.P. Talwar Middle Career Scientist Award by ISSRF, New Delhi.
9. President of Indian Society for Sheep & Goat Production & Utilization (ISSGAPU), Avikanagar (Registered)
10. Certificate of Recognition by Hon'ble DG, ICAR, New Delhi.
11. Appreciation Letter by Hon'ble DG, ICAR, New Delhi on production of cloned calf Garima II.
12. Appreciation Letter by Hon'ble Agriculture Minister on production of cloned calf Garima & Mahima.
13. Member of Board on Management NDRI, Karnal and Institute Management Committee, NRC-E, Hisar.
14. Nominee of His Excellency Governor of Punjab for selection of Faculty for PAU, Ludhiana.
15. Eight best posters/oral presentation awards in National & International Conferences.
16. Task Force Member of 4 committees in Department of Biotechnology (Govt. India), New Delhi.
17. Member of Indo-US committee, Department of Science & Technology (Govt. India), New Delhi.

D. Significant achievements/ Contribution:

1. Produced World's First buffalo Cloned calf.
2. Produced buffalo cloned calf "Garima-II" from embryonic stem cells.
3. Produced India's first OPU-IVF Sahiwal calf.
4. Produced OPU-IVF yak in a collaborative project with NRC-Yak, Dirang (Arunachal Pradesh)
5. Produced reproducible cloned buffalo "Garima-II", delivered *Mahima and Karishma*.
6. Developed Hand guided cloning technology in goat and buffalo and in buffalo produced many superior genetically cloned buffalo calves (*Garima, Shresth, Swarn, Purnima, Lalima, Rajat, Swarupa*).
7. Produced cloned calf "Deepasha" from endangered wild buffalo of Chhattisgarh.
8. Produced 5 Embryonic Stem Cell lines in buffalo. These are the only lines available in the world, so far.
9. Produced GFP expressed cloned transgenic Goat and Buffalo embryos.

These achievements brought the 'Name & Fame' to ICAR & India.

E. Technologies developed:

1. In vitro embryo production (IVF) Technology in goat, Buffalo & yak, implemented in all over the country.
2. Developed new protocol of Semen cryopreservation using Egg Yolk -Tris diluents in Jamunapari Goat.
3. Developed technology for Transgenic embryo production in Goat and Buffalo using hand guided cloning.
4. Developed hand guided Cloning Technology in Goat and Buffalo.
5. Developed Embryonic Stem Cell Culture Technology in Goat and Buffalo.
6. Ovum -Pick up Technology in Cattle.
7. Developed Protocol for Freezing of Goat Semen & Artificial Insemination and commercialized.

These technologies brought the 'Name & Fame' to ICAR & India.

F. Research & Development -Projects handled: 19 (as Principal Investigator (PI): 12, Co-Pi: 9)

1. Principal Investigator (PI) of Department of Biotechnologies (Govt. of India) funded projects; 10

2. National Agricultural Innovation Projects (ICAR): 2, (PI:1, Co-Pi: 1)
3. National Fund Project: 3, (PI:1, Co-Pi: 2)
4. Indo- German project granted by DST (Govt. of India & Germany)Co-Pi: 1
5. DBT (Govt. India) & other agency: 5

G. Multi-disciplinary and multi-Institute research/network programmes:

1. Inter Institutional Research Projects (Collaborative project with: IISC, Bangalore: AAU Guwahati, GADVASU, Ludhiana, CIRC, Meerut, ICAR, RC Barapani,): 5
2. Inter National project collaboration (FBN Dormstoff, Germany): 1
3. Monitoring DBT project as a Task Force member of Committee: 3

H. Foreign Visits: Foreign deputation (USA, Germany, Canada)- 4 times as different capacities

I. Inter disciplinary programmes and participation in research activities

1. PI of 11 out funding research projects (DBT, DST, NAIP, National Fund, ICAR)
2. Task Force Member of 3 Research & Development Committees of Department of Biotechnology (Govt. of India), New Delhi from 2012 onwards.
3. Member of a Team Constituted by Hon'ble DG, ICAR, New Delhi for development Booklet on Agricultural Biotechnology for Hon'ble Member of Parliament.
4. Reviewer of all the reputed journals- Theriogenology, Cellular Reprogramming, Reproduction of Domestic Animals and Indian Journal- Ind. J. Animal Sciences, Ind. J. Experimental Biology, Ind. J. of Biotechnology.

J. Teaching & Guidance:

1. Guided 10 PhD & 9 Master degree students in Reproductive Biotechnology area..
2. Taught 22 courses (PhD & MVSc) at NDRI, IVRI.
3. Developed 5 New Courses
4. Mentor in DST sponsored INSPIRE programme in Biological Sciences.
5. Evaluated 21 PhD thesis of different universities.
6. Delivered 35 lecture in INSPIRE (DST, Govt. of India) program.

K. Conference Organized:

1. **Chairman & Convener** of National Seminar on Small Ruminants, CIRG, Makhdoom 2018
2. **Organizing Secretary** of 12th Agricultural Science Congress (over 1800 participants)
3. **Organizing Secretary** of one International Conferences (**ISSRF-2011**) and over 900 participants have attended.
4. **Organizing Secretary** one National Conference Reproductive Biology, 2012 (**ISSRF**) (over 500 participants)
5. Organized 5 Training programmes on Reproductive technologies (21 days) for faculty/ scientists. From SAUs, Vet. Univ., CAUs, Universities.
6. Delivered Key note address (7) and lead lectures (29) and act as Chairman Scientific Session (6) in many International Conferences, National Conferences.

L. Training Organized/ imparted:

1. Organised 9 National Trainings for faculty/ Scientists (Course Director of 6 Training programme and Co-Course Director of 5 Training Programme)
2. Developed 5 Training manuals.
3. Course Director of 18 Training Programmes (45 days each) for Biotechnology students from different Institution/ universities and trained 514 students.

M. Funds Generated/ Mobilization of Fund (as Principal Investigator and Co- PI): 3087.76Lakh

As PI: 306.058 Lakhs fund has been generated from the 8 out funding projects granted to me as PI by Department of Biotechnology (DBT), (Govt. of India), New Delhi; Rs.755 lakh from NAIP & NFBSFARA; over 32 lakh through consultancy.

N. Publications: Total Publications: 138 (<http://www.ncbi.nlm.nih.gov/pubmed/?term=chauhan+MS+Karnal>) Popular articles: 32, Books: 6, Manuals /Technical Bulletin: 11 , Compendium: 7

O. Recognized as '*Kisano ke Mahanayk*' by Delhi Doodarshan:

<https://www.youtube.com/watch?v=u4JLO-kLw9k&list=PLKANlcNm49aXobbMpXDITjCepQS9IJaOd&index=18>