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# NAVS NEWSLETTER

(Quarterly)

*For Private Circulation Only*  
New Delhi



**Editor: Prof. Dr. R.N. Kohli**

**NATIONAL ACADEMY OF VETERINARY SCIENCES (INDIA)**

Office: G-4, A Block, NASC, Dev Prakash Shastri Marg, New Delhi-110 012



## **CH. 1: NAVS GENERAL INFORMATION**

### **1.1: Governing Council (2017- 2019)**

#### **Office Bearers**



**President**  
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E-mail : [shrikant28@hotmail.com](mailto:shrikant28@hotmail.com)



**Vice-President**  
Dr. D.V.R. Prakasha Rao  
Chairman and Managing Director  
Prakash Food & Feed Mills (P) Ltd, Chennai  
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**Secretary General**  
Dr. S.K. Gupta  
Ex-Dean, COVS, LUVAS  
206, Defence Colony, Hisar - 125 001  
Cell : 09896068399  
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**Treasurer**  
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SKE-218, Shipra Krishna Vista  
Plot 14, Ahimsa Khand  
Indrapuram, Gaziabad - 201 014 (U.P)  
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Vasant Kunj,  
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## **MEMBERS (ELECTED)**

Dr. B.N. Tripathi, Hisar: [bntripathi1@yahoo.co.in](mailto:bntripathi1@yahoo.co.in)  
Dr. Sanjeev Kumar, Izatnagar: [skgcari@yahoo.co.uk](mailto:skgcari@yahoo.co.uk)  
Dr. Minakshi Prasad, Hisar: [minakshi.abt@gmail.com](mailto:minakshi.abt@gmail.com)  
Dr. S.K. Srivastava, Izatnagar: [sksrivastava1093@gmail.com](mailto:sksrivastava1093@gmail.com)  
Maj. Gen. Dr. M. L. Sharma, Delhi: [gensharma1950@yahoo.com](mailto:gensharma1950@yahoo.com)  
Dr. Ravindra Sharma, Hisar: [rsharma698@gmail.com](mailto:rsharma698@gmail.com)  
Dr. V.D.P. Rao, Vijaywada: [raovdp@rediffmail.com](mailto:raovdp@rediffmail.com)  
Col. Dr. R. P. Garg, VSM, NCR, Noida, U.P.: **email ID not available**  
Dr. S.N. Singh, Bangalore: [snsingh.2006@gmail.com](mailto:snsingh.2006@gmail.com)  
Dr. S.K. Saha, Izatnagar: [subodhksaha@yahoo.com](mailto:subodhksaha@yahoo.com)  
Dr. A.B. Mandal, Izatnagar: [drab.mandal@gmail.com](mailto:drab.mandal@gmail.com)  
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Dr. Mandeep Sharma, Palampur: [mandeepsharma289@hotmail.com](mailto:mandeepsharma289@hotmail.com)  
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Dr. S. K. Tiwari, Durg: [drtiwarisurgery@gmail.com](mailto:drtiwarisurgery@gmail.com)

## **MEMBERS (PERMANENT EX-OFFICIO)**

Incumbents holding following Official Govt. of India Positions are permanent Ex-Officio members: DG RVS; *DDG (A.S.)*, ICAR; *AHC (GOI)*; and *President VCI*

### **1.2: INSTITUTIONAL/CORPORATE LIFE MEMBERS**

#### **INSTITUTIONAL LIFE MEMBERS**

LUVAS (Lala Lajpat Rai University of Veterinary & Animal Sciences), Hisar,  
Haryana.  
CKVU (Chattisgarh Kamdhenu Veterinary University), Raipur / Durg,  
Chattisgarh.  
MAFSU (Maharashtra Animal & Fisheries Sciences University), Nagpur,  
Maharashtra  
RAJUVAS (Rajasthan University of Veterinary & Animal Sciences), Bikaner,  
Rajasthan  
DUVASU (Deen Dayal Upadhadhaya Veterinary and Animal Sciences University,  
Mathura, U.P.  
KCVAS (Khalsa College of Veterinary & Animal Sciences), Amritsar, Punjab  
Sri Venkateshwara Veterinary University, Tirupati, A.P.  
Kamdhenu University, Gandhinagar-382010, Gujrat  
Bihar Animal Sciences University, Patna (Bihar)  
Karnataka Animal, Fishery & Veterinary Sciences University (KAFVSU),  
Nandinagar, Bidar (Karnataka)

## **CORPORATE LIFE MEMBERS**

M/S Indian Herbs, Saharanpur  
M/S Ayurved Limited

### **1.3: PAST OFFICE BEARERS OF THE ACADEMY**

#### **Presidents:**

- \* Dr. C.M. Singh - 1993 - 2004 (Founder President)
- Dr. S.K. Ranjhan - 2004-2007
- Dr. S.C. Adlakha - 1/7/2007 - 28-2-2008
- Dr. R.R. Shukla - 28/2/2008 - 31/10/2010
- Dr. M.P. Yadav - 31/10/2010 - 31/12/2013
- Dr. K.M.L. Pathak 1/1/2014 - 22/4/2017

#### **Vice-Presidents:**

- \*Dr. R.P.S. Tyagi -1993 - 2004
- Col. (Dr.) V.K. Bhatnagar- 2004-2007
- Dr. R.R. Shukla - 1/7/2007 - 28-2-2008
- Dr. P.N. Khanna - 28-2-2008 - 31/10/ 2010
- Col. (Dr.) V.K. Bhatnagar- 31/10/2010 - 31/12/2013
- Maj. Gen. (Dr.) Shri Kant Sharma 1/1/2014 - 22/4/2017

#### **Secretary Generals:**

- Dr. P.N. Bhatt -1993 - 2004
- \* Dr. K.L. Sahani -2004-2007
- \* Dr. B.S. Nanda - 1/7/2007 - 23-5-2008
- Dr. N.N. Pathak - 23-5-2008 - 6/7/2009
- Dr. R.N. Kohli - 6/7/2009 - 31/10/2010
- Dr. Gaya Prasad - 31/10/2010 - 31/12/2013
- Dr. Rishendra Verma - 1/1/2014 - 22/4/2017

#### **Treasurers:**

- Dr. A. Ahmad and Dr. B.S. Malik} -1993 - 2004
- Dr. P.N. Khanna - 2004-2007
- Dr. Lal Krishna - 2007 to - 22/4/2017

#### **Editors:**

- Dr. R.N. Kohli - 6/7/2009 to Present Date (Founder Editor);

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\* Since deceased

#### **1.4: CHRONOLGY OF NAVS CONVOCATIONS-CUM-CONVENTIONS**

1. First NAVS Convocation: 18<sup>th</sup> December 1996 at Vigyan Bhawan, New Delhi
2. Second NAVS Convocation: 30<sup>th</sup> January 2000 at Pragati Maidan, New Delhi
3. Third NAVS Convocation: 16<sup>th</sup> April 2002 at IVRI, Izatnagar, U.P.
4. Fourth NAVS Convocation: 7<sup>th</sup> May 2005 at GBPUAT, Pantnagar, Uttrakhand
5. Fifth NAVS Convocation: 5<sup>th</sup> May 2006 at JNKVV, Jabalpur, M.P.
6. Sixth NAVS Convocation: 28<sup>th</sup> June 2007 at KVAFSU, Bangalore, Karnataka
7. Seventh NAVS Convocation: 16 May 2008 at SKUAST, Jammu, J. & K.
8. Eighth NAVS Convocation: 23<sup>rd</sup> January 2009 at SVVU, Tirupati, Andhra Pradesh
9. Ninth NAVS Convocation: 30<sup>th</sup> October 2010 at NDRI, Karnal, Haryana.
10. Tenth NAVS Convocation: 12<sup>th</sup> November 2011 at RAJUVAS, Bikaner, Rajasthan.
11. Eleventh NAVS Convocation: 2<sup>nd</sup> November 2012 at DUVASU, Mathura, U.P.
12. Twelfth NAVS Convocation: 28<sup>th</sup> January 2014 at LUVAS, Hisar, Haryana
13. Thirteenth NAVS Convocation: 28<sup>th</sup> February 2015 at CGKV, Durg, Chhatisgarh
14. Fourteenth NAVS Convocation: 4<sup>th</sup> November, 2015 at IVRI, Izatnagar, U.P.
15. Fifteenth NAVS Convocation held on 22 October, 2016 at KCVAS, Amritsar, Punjab
16. Sixteenth NAVS Convocation held on 4-5 November 2017 at Tirupati, A.P.
17. Seventeenth NAVS Convocation held on 19-20 December 2018 at OUAT, Bhubaneswar. Odissa.
18. Eighteenth NAVS Convocation held on 26-27 December 2019 at Gandhinagar, Gujarat, on “Futuristic Technologies in Animal Health and Production”, Organized by Kamdhenu University.

#### **1.5: DECEASED NAVS FELLOWS**

##### **A REQUEST TO OUR READERS FOR HELP**

We have compiled the above tentative updated list of deceased fellows of the Academy which is regularly being revised with the help of our readers who are requested to kindly help us in this process by providing us the required information that may be available with them or their colleagues. List of all the fellows can be found in the NAVS Handbook 2016 which is also posted on [www.navsindia.org](http://www.navsindia.org) Kindly email your suggestions to: [rnkohli@gmail.com](mailto:rnkohli@gmail.com).

1. Ahuja, Dr. Kanhaya Lal, Fellow Elected 1997
2. Baishya, Dr. Gajen, Fellow Elected 2005-06
3. Bajpai, Dr P.K., Fellow Elected 1996

4. Balain, Daya Singh, Fellow Elected 1996
5. Batta, Dr. Satish K, Fellow Elected 2006-07
6. Bhardwaj, Dr Madan Behari Lal, Fellow Elected 1996
7. Bhasin, Dr. Nek Ram, Honorary Fellow Elected 2011
8. Bujarbarua, Dr J.M., Fellow Elected 1996
9. Butuchaiah, G., Fellow Elected 1996
10. Chandna, I.S., Fellow Elected 2000-01
11. Chaudhary, Dr. Amrit Lal, Fellow Elected 1996
12. Gupta, Dr. Shiv Kumar, Fellow Elected 2000-01
13. George, Dr. P. O., Fellow Elected
14. Harbola, Dr P.C., Fellow Elected 1998-99
15. Jhala, Dr. V.M., Fellow Elected 1996
16. Kanwar, Lt. Gen. N.S., Fellow Elected 2010-11
17. Katoch, Dr. R.C., Fellow Elected 2005-06
18. Krishna, Gopal, Fellow Elected 2005-6
19. Krishnaswamy, Dr. S., Fellow Elected 2007-08
20. Kukreti, Dr. J.P., Hon. Fellow Elected 2012
21. Kumaran, Dr. Jay S., Fellow Elected 2007-08
22. Lal, Dr S.M., Fellow Elected 2000-01
23. Manickram, Dr R., Fellow Elected 1999
24. Mathur, Dr P.B., Fellow Elected 1996
25. Misra, Dr. Sarat Chandra, Fellow Elected 2006-07
26. Nair, Dr. P.G., Fellow Elected 1996
27. Nanda, Dr. B.S, Fellow Elected 2007-08
28. Padmanabhan, Dr.V. D., Fellow Elected 1996
29. Pandey, Dr J.N., Fellow Elected 2000-01
30. Pandey, Dr. Ramayan, Fellow Elected 1996
31. Pathak, Dr. Ramesh Chandra, Fellow Elected 1996
32. Pathak, Dr. S.C., Fellow Elected 1997
33. Prasad, Dr. Gaya, Fellow Elected 1999
34. Rajya, Dr. Bhagwan Saran. Fellow Elected 1996
35. Ramachandran, Dr S., Fellow Elected 1996
36. Rao, Dr B.U., Panda, Dr. Bhagabat, Fellow Elected 1996
37. Fellow Elected 1996
38. Rao, Dr. C. Krishna, Fellow Elected 1996
39. Rao, Dr. Rama Mohan, Fellow Elected 1996
40. Rao, Dr. R.L.N., Fellow Elected 1999
41. Rastogi, Dr Anil K., Fellow Elected 2007-08
42. Sahni, Dr K.L., Fellow Elected 1996

43. Salam, Dr. Abdus, Fellow Elected 1996
44. Sen, Dr. G. P., Fellow Elected 1996
45. Sharma, Dr. Deepak, Fellow Elected 2010-11
46. Sharma, Dr. Gopal, Fellow Elected 1996
47. Singh, Dr A. K., Fellow Elected 2005-06
48. Singh, Dr. Balwant, Fellow Elected 1996
49. Singh, Dr. Bhanu Pratap, Fellow Elected 1996
50. Singh, Dr. C.M., Founder President 1996
51. Singh, Dr. Nagendra Prasad, Fellow Elected 1996

## **NATIONAL ACADEMY OF VETERINARY SCIENCES (INDIA)**

### **CONTACT US**

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**SECRETARY GENERAL** Prof. Dr. S.K. Gupta, LUVAS, Hisar (Haryana).

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## **2: FROM THE PRESIDENT'S DESK**

Upon culmination of the year 2019, I wish to take this opportunity to share earnest efforts made by the Governing Council during the year.

The Academy during my tenure as President strived hard to play its role and responsibilities with dexterity in promoting the Veterinary and Animal Sciences to address various issues pertaining to veterinary professionals, academia and livestock sector.

### **Recognition of the NAVS (I) Fellowship:**

I would like to apprise the learned readers about the stupendous efforts put in for recognition of the Fellowship. As you are aware that since inception of the Academy during year 1993, NAVS Fellowship was not recognised by the ASRB and it was a cause of heart-burn among deserving veterinary professionals/academicians. As President, I along with GC members met Dr. AK Srivastava, acting Chairman of ASRB and the Chairman Dr. Aditya Misra and made a fervent appeal for recognition of the Fellowship. This was followed by my DO letters giving full justification of parity of our fellowship with that of NAAS. I am very glad to share that NAVS fellowship has been recognised by the ASRB - indeed a milestone in the history of the Academy. Today, the NAVS' relevance /value is recognized and the same as may be gauged by the higher number of applicants for its fellowships and memberships received during last year to join the vibrant Academy. The number of aspirants is likely to grow further in view of two marks awarded to the Fellowship of our Academy in the score card. We express our sincere gratitude to our dynamic colleagues, Dr. Aditya Misra and Dr. AK Srivastava, for acceding to our genuine request for the betterment of the profession.

Indian Council of Veterinary Research (ICVR): NAVS has taken lead role in creation of Indian Council of Veterinary Research (ICVR) during year 2018. The Academy drafted a proposal for creation of ICVR with full justification and submitted the same to Sh. Radha Mohan Singh Ji, Hon'ble Minister of Agriculture and Farmers Welfare on 04 Oct 2018 who assured to look into the matter. A DO letter was also written to Sh. Giriraj Singh Ji, Hon'ble Union Minister for Fisheries, Animal Husbandry and Dairying on 11 June, 2019 for creation of Indian Council of Veterinary and Fishery Research (ICVFR) on the lines of Indian Council of Medical Research (ICMR). The case for the same was also presented to Dr. Jitendra Singh Ji, MoS in PMO, vide my DO dated 11 Nov 2019.

A delegation of the Academy met with MoS Dr. Sanjiv Balyan during the month of June 2019 who assured the delegation of full cooperation in making ICVFR a reality.

It is pertinent to mention that since establishment of ICAR during the year 1926, its Director General has always been an agriculture scientist except on one occasion when a fishery scientist (Dr S. Ayyappan) became DG, ICAR. A veterinarian has never been appointed as DG ICAR. Preference has always been given to crop sector over the livestock, poultry and fishery sub-

sectors thereby undermining the substantial contributions of livestock in Agricultural GDP.

During the month of Dec 2019, I approached the Hon'ble PM, Sh Narendra Modi Ji through a DO letter justifying formation of ICFVR. Creation of ICFVR will not only give impetus to the animal husbandry, fisheries and dairy sectors *per se* but will also pave the way for ICAR to have a focused approach in improving primarily the agricultural sector without getting burdened in managing the animal husbandry, dairying and fisheries sectors - a task, which in any case ICAR has failed to do justice. Further, the council will work in close coordination with Indian Council of Medical Research (ICMR) and ICAR in the realization of the "One Health Concept" and "Nutritional Security and Food Safety concepts" for the welfare of our people.

**National Seminar on Paravets:** On the initiative of the Academy, one day national seminar on Paravets education and services in India was organised by Govt of India, Min of Agri and Farmers welfare in collaboration with NAVS (I) on 16 April 2019 in which Additional Chief Secretary Govt of Haryana, Directors of Animal Husbandry of various states, Ministry officials, GC members of the Academy, officers of Indian Army (RVC), and Skill Council of India participated. The Academy helped the DAHD in formulating guide lines for paravet educational standards and practices -a significant step towards strengthening of rural livestock development.

**Financial Assistance:** Presently the Academy is not getting any financial support from any quarter. We are pursuing the case vigorously for financial support to the Academy as in case of NAAS and NAMS which are receiving approximately rupees two crores each from ICAR and Ministry of Health and Family Planning respectively. To support and justify the demand for financial assistance from the Ministry of Fishery, Animal Husbandry and Dairying, the NAVS has finalised the calendar of activities for the next year along with requisite staff for the office.

**An Appeal:** Through this newsletter, I appeal to the Vice-Chancellors of those Veterinary/ Animal Husbandry universities which are still not the institutional life members of the Academy to come forward and take the lead in becoming members of this august body in the interest of veterinary and animal husbandry profession.

I am pleased to invite all the Fellows to take an active part in the upcoming NAVS (I) election of new President, Vice-President, Secretary General, Treasurer and 15 Governing Council members for the next 3 years for which nominations are being invited separately. My sincere request to all the learned Fellows is to elect only those having impeccable professional integrity and excellent spoken reputation who can work for the Academy with zeal and zest.

Wishing all the fellows/members/associate member/readers a very happy and prosperous NEW YEAR!

JAI HIND

## **CH. 3. EDITOR'S NOTE**

**(FREE, FAIR & FEARLESS)**



### **2019: The Year That Was**

#### **3.1. Profession's Remarkable Year**

After wishing our valued readers a very Happy New Year 2020, we must confess that the last year (2019) was indeed a remarkable year for the Veterinary, Animal Husbandry, Dairying, and Fisheries professionals of the country.

The second quarter of 2019 witnessed a feverish national election which culminated into the formation a Central Government by National Democratic Alliance (Bhartiya Janata Party (B.J.P.) and its alliance partners) who had won with a thumping overall majority in the Parliament. The new government headed by the Prime Minister Shri. Narendra Modi made a land mark move for the country's Animal Husbandry, Dairy & Fisheries sector for the first time in the history of India and formed an Independent Ministry of Animal Husbandry, Dairy & Fisheries to meet this long standing demand of the professionals of Veterinary Sciences, Animal Sciences, Dairying, and Fisheries. The new ministry is headed by the Union Minister Shri. Giriraj Singh and has two ministers of state - Dr. Sanjeev Kumar Balyan and Pratap Chand Sarangi. We must acknowledge this to be the most welcome development of the year. The President headed a delegation of the National Academy of Veterinary Sciences which met the honorable ministers on 11 June 2019 in Delhi and conveyed the Academy's sincere gratitude for formation of the new Ministry. It is pertinent to mention here that the Academy has been consistently raising the issue for creation of Indian Council of Veterinary Research (ICVR) at various forums. It is also noteworthy that the new cabinet, in its initial move, approved the National Animal Disease Control Programme for Foot and Mouth Disease (FMD) and Brucellosis on 31 May 2019 as a new Central Sector Scheme for a total outlay of Rs 13,343/- Crores for five years (2019-2024). NAVS (I) heartily welcomed this initiative by the new Government of India.(Also see Chapter 2: Presidents Desk)

#### **3.2: Viewpoints we published in 2019**

3.2.1: National Agricultural Policy: *A critical appraisal on the constraints and opportunities in its implementation*: Prof. Dr. Rama Kumar V., Former Secretary, Veterinary Council of India

3.2.2: Post Graduate Institutions (PGI) of Veterinary and Animal Sciences in India: Dr. Jitendra Singh Bhatia,, Former ADG (Education) ICAR

3.2.3: A teacher is meant to effectively deliver: Dr J.S Bhatia, Former ADG (Education)

3.2.4: Regarding Veterinary Internship: Dr. Raghu Nath Kohli, Founder Editor, NAVS (India)

**3.2.5: Prediction and Present Possibilities of Filmless X-Ray: Dr. Rama Kumar V, Former Secretary, Veterinary Council of India.**

**3.2.6: Implementation of the Decision to Establish Indian Council of Veterinary Research for Dovetailing Research & Development with the Department of Animal Husbandry & Dairying: Dr. Rama Kumar V., Former Secretary, Veterinary Council of India**

**3.2.6: Rights and Duties of Persons who are enrolled on the Indian Veterinary Practitioners Register: Dr. Rama Kumar V, Former Secretary, Veterinary Council of India.**

**3.2.6: Buffalo - the harbinger of prosperity in rural India: Dr. Inderjeet Singh, Central Institute for Research on Buffaloes, Hisar- 125001, Haryana ([inderjeet.dr@gmail.com](mailto:inderjeet.dr@gmail.com))**

### **3.3: What we reported about Science & Health in 2019**

#### **3.3.1: Stem cells restore body's ability to produce insulin**

In an amazing study published in the *Journal of the American Medical Association*, a team of researchers treated patients with stem cells and 87% of the patients saw their body's ability to produce insulin COMPLETELY restored. But that's not the amazing part. The researchers took blood tests 5 years later and the patients STILL maintained healthy levels of insulin and blood sugar. This one stem cell treatment banished blood sugar worries for 5 full years! "I wouldn't use the word cure," said lead researcher Dr. Richard Burt. "But it appears we changed the natural history of blood sugar control. It's the first therapy that leaves the patients treatment-free for almost five years."

(Source: [<alsearsmd@send.alsearsmd.com>](mailto:alsearsmd@send.alsearsmd.com))

#### **3.3.2: Untreatable High Blood Pressure and Sleep Apnea Connection Discovered:**

If you have high blood pressure that just will not go down no matter what you do (diet, exercises, drug), chances are high that it is caused by sleep apnea. And if you say, "I don't have sleep apnea", there is a 94% chance you're wrong – especially if you snore. This is according to new research published in the *American Heart Association's journal Circulation*.

(by [Christian Goodman](#) | Feb 6, 2019)

(Details: [Blue Heron Health News bhsupport@blueheronhealthguides](#))

#### **3.3.3: Cancer rates predicted to fall in the EU**

A new study predicts that 1.4 million people will die of cancer in the European Union this year, a roughly 5 percent decrease in overall cancer mortality rates since 2014. Scientists looked at patterns in cancer deaths from 1970 through 2014 to project for 2019. Lung cancer rates, for example, are expected to increase by 4 percent in women, while breast cancer rates in women are expected to decrease by up to 16 percent in some age groups. And even though the forecast points to a positive trend, "any prediction should always be considered with caution," the study authors wrote.

[<newsletter@statnews.com>](mailto:newsletter@statnews.com) Mar 19, 2019,

### **3.3.4: World's First Complete Parent Wise Genome Assembly of Buffalo developed by NDDB**

BUILDING UPON THE SUCCESSFUL LAUNCH OF INDUSCHIP, a customized genotyping chip for indigenous cattle and their crosses, NDDB has achieved another milestone with the development of complete de novo genome assembly named "NDDB ABRO Murrah" of riverine buffaloes. To ensure better accuracy, for the first time a totally different approach i.e. trio binning has been used for separating haplotypes of a buffalo using a father-mother-offspring trio. The genome assembly developed by NDDB has achieved more than 99% genome coverage. Shri Dilip Rath, Chairman, NDDB said that this newly developed genome assembly would provide more insights about buffalo genome and desired impetus for implementing Genomic Selection programme in buffaloes to achieve faster genetic progress in Indian buffalo population. It may be worth mentioning here that buffaloes are contributing more than 50% of India's milk production.

### **3.3.5: Zapping brain with electricity boosts working memory in older adults, study finds**

Shooting electrical current into the brain of older adults reversed the decline in working memory that comes with aging, a new study finds. Researchers tested the approach in two groups of 42 people, one with people ages 20-29 and the other with people ages 60-76. The older group correctly answered questions in a memory test roughly 80% of the time — compared to the younger groups' 90% — but quickly caught up to the younger groups' rate after getting 25 minutes of alternating current that was delivered through a cap embedded with electrodes. The results are still preliminary, and additional research will be needed to determine how often stimulation would have to be given, and whether the artificial lab task translates into real-world benefits. (STAT: Morning Rounds <[newsletter@statnews.com](mailto:newsletter@statnews.com)>)

### **3.3.6: World's first malaria vaccine set for field trial**

After over three decades in development and almost \$1 billion in investment, the cutting-edge field trial will be rolled out in Malawi's capital Lilongwe and later in Kenya and Ghana. Large scale pilot tests will spearhead for the world's most advanced experimental malaria vaccine (RIS, S/ASO1, trade name Mosquitrix). The trial aims to immunize 1,20,000 children aged two years and under to assess the effectiveness of the pilot vaccine. Four successive doses of this first and only injectable vaccine targets P. falciparum, the most prevalent strain in Africa, must be administered on a strict timetable. According to World Health Organization the vaccine show partial protection from malaria infection in four of 10 children who received four doses over a four-year period. Globally 219 million malaria cases were recorded in 2017, approximately 80% of which are found in India and 15 African nations. (AFP | April 23, 2019)

### **3.3.7: UAE woman wakes up after 27 years in a coma**

A woman from the United Arab Emirates (UAE) who was seriously injured in a traffic accident in 1991 has made a seemingly miraculous recovery after emerging from a 27-year-long coma. Munira Abdulla, who was aged 32 at the

time of the accident, suffered a severe brain injury after the car she was travelling in collided with a bus on the way to pick up her son from school. Omar Webair, who was then just four years old, was sitting in the back of the vehicle with her, but was left unscathed as his mother cradled him in her arms moments before the accident. Ms Abdulla - who was being driven by her brother-in-law - was left seriously injured, but last year regained consciousness in a German hospital. Omar has opened up about the accident and about his mother's progress following years of treatment in an interview with the UAE-based newspaper The National. "I never gave up on her because I always had a feeling that one day she would wake up," Omar told the newspaper. "The reason I shared her story is to tell people not to lose hope on their loved ones; don't consider them dead when they are in such a state," he added. "My mother was sitting with me in the back seat. When she saw the crash coming, she hugged me to protect me from the blow."

**3.3.8: India Bans E-cigarette; Acting FDA commissioner also told US lawmakers that the agency should have acted sooner.**

Prime Minister Narendra Modi on September 29, 2019 said e-cigarettes have been banned to ensure this new form of intoxication does not destroy the demographically young country. In his monthly radio programme, Mann Ki Baat, Modi said a "myth" has been spread that e-cigarettes pose no danger. He said that these cigarettes do not spread odour as harmful fragrant chemicals are added to them. The latter pose a health hazard.

In a related news, speaking in front of a House subcommittee hearing in USA, the FDA acting Commissioner Ned Sharpless told lawmakers that the agency "should have acted sooner" to regulate the e-cigarette industry. He said the agency would "catch up," including by releasing a guidance document in the coming weeks to "dramatically impact" the flavored e-cigarettes market. Among the actions under agency consideration: sending warning letters to companies marketing flavored vaping products and fining companies for failure to remove products from shelves. Juul also made headlines ahead of the hearing: The e-cigarette giant said it plans to suspend advertising in the U.S., and that it won't lobby against a proposed ban on flavored vaping products. [newsletter@statnews.com](mailto:newsletter@statnews.com)

### **3.4: An Obituary of 2019: We lost an NAVS Veterinary Legend**

Dr Sohan Singh Rathore, an eminent veteran Fellow of the Academy left us for his heavenly abode on 1st February 2019 at Jaipur. A great teacher and clinician, he was your Editor's B.V.Sc. class-mate at Bikaner (first batch 1954-58) and subsequently a colleague at Bikaner and Ludhiana Colleges. He was also the founder Dean of Apollo College of Veterinary Medicine, Jaipur. Dr. Rathore was born in Kishengarh, Rajasthan on 14.12.1933 and got his M.S. from Michigan State University, USA, and his Ph.D. degree from Utrecht University (Netherlands) in 1968. May his soul continue to rest in peace.

## CH.4: LETTERS TO THE EDITOR

Dear Prof. Kohli: With my complements and greetings, I write to convey that after completion of my term as Vice Chancellor, DUVASU, Mathura, I have settled at my new address as follows: Prof K.M.L.Pathak, Tower B2, Flat No 2204, Cleo County, Sector 121, Noida 201301, Gautam Budhnagar, U P. I request you to please update my mailing residential address so that I may continue to receive information from NAVS (I) by post and email: [pathakkml@yahoo.co.in](mailto:pathakkml@yahoo.co.in). My mobile number (9412286214) will remain the same.

I am aware that with limited resources you are doing excellent work for the Academy and publishing the NAVS Newsletter regularly without any break since my time as President, NAVS. I read it regularly and found that you put lot of your efforts and input to make it informative and educative. My heartiest congratulations, Kudos and warm regards:  
Prof K M L Pathak, Formerly: Vice-Chancellor, DUVASU, Mathura; Deputy Director General (AS), ICAR; President, National Academy of Veterinary Sciences (India); President, Indian Association for Advancement of Veterinary Parasitology.

Thanks for updating us with the news through the October issue of NAVS Newsletter. Sir, I found the name of Dr Gaya Prasad in the list of deceased members of NAVS, it may be corrected, with regards, Dean Veterinary Science <[deanvety@sdau.edu.in](mailto:deanvety@sdau.edu.in)> **(Editor responds:** Thank you for your mail. The Late Dr. Gaya Prasad mentioned in the list was a different person and not the one who was Ex-Secretary General of NAVS (2010 - 2013). The latter is very much alive and we wish him a long happy healthy life ahead. His wife is currently an active member of NAVS Governing Council and has the distinction of being the first woman to be in that position. Both Dr. Gaya Prasad and Dr. (Mrs) Minakshi Prasad are well known to me and I would never wish them to be in that list during my lifetime. Our purpose of requesting the readers for help to update the list of deceased fellows was to locate the deceased ones about whom we are unaware. The fellows listed in the circulated list are unfortunately, but certainly, no more. May pray for their souls to continue to rest in peace)

Dear Dr. Kohli: Thanks a lot. I was eagerly awaiting for this newsletter. Regards: Diwakar Srivastava, Practice Head, MIS, NDDDB-Dairy Services, NDDDB House, Safdarjung Enclave, New Delhi-110 029. Ph. +91-11-4988 3000, Extn.109; Mobile: +91 9871859091;  
<[Diwakar.Srivastava@nddbdairyservices.com](mailto:Diwakar.Srivastava@nddbdairyservices.com)>

Thank you for taking lot of pains in providing very informative Newsletter with beautiful cover page. Dr. VRB Sastry <[vrbsastry@gmail.com](mailto:vrbsastry@gmail.com)>

Dear Dr. Kohli ji, Thank you so much for sharing the NAVS newsletter and inclusion of our ILRI news item in the newsletter. Regards:

Dr. H. Rahman, <[hricar@gmail.com](mailto:hricar@gmail.com)> International Livestock Research Institute, Block-C, First Floor, NASC Complex, CG Centre, DPS Marg, Pusa, New Delhi -110 012. [r.habibar@cgiar.org](mailto:r.habibar@cgiar.org);

Dear Dr. R.N. Kohli: Thanks a lot for sending me the October issue of NAVS Newsletter. It definitely helps me to keep in touch with the activities of NAVS and other news related to Veterinary and Animal\_Sciences. With best regards Dr. Tej Krishan Walli, [tkaywalli@gmail.com](mailto:tkaywalli@gmail.com)

Dear Dr Kohli: Thank you for the October issue of NAVS News letter which has a wide range of news covered. Please find attached a news brief of World Rabies Day 2019 that was observed at Veterinary College Bangalore.

Prof. Suresh Honnappagol, Veterinary College, KVAFSU, Hebbal-Bangalore, 560024; Mobile: 9868248530; Email: [sskvafsu@yahoo.co.in](mailto:sskvafsu@yahoo.co.in); (Former: Animal Husbandry Commissioner, Dept. of Animal Husbandry, Dairying & Fisheries, Ministry of Agriculture, Govt of India, Krishi Bhavan, New Delhi 110 001, India)

Thank you, Kohli Sir, for your extreme hard work in compiling the Newsletter with quality content and timely opinions and contexts to enrich us. With kind regards: Dr. R.K. Singh, Director/Vice Chancellor, Indian Veterinary Research Institute (Deemed University), Izatnagar-243 122, India; Phone:+91-581-2300096; Fax-no. +91-581-2303284; email: [directorivri@gmail.com](mailto:directorivri@gmail.com); [rks\\_virology@rediffmail.com](mailto:rks_virology@rediffmail.com);

Dear Dr Kohli: We all very much appreciate and rather wait to receive the next issue of NAVS Newsletter. Dr I.P. Singh from US has informed that somehow he did not receive the October, 2019 issue. You are requested to kindly resume to send the Newsletter to him and also ensure that his email ID is included in the list. I am endorsing a copy of this mail to Dr I.P. Singh. With seasonal greetings and best regards: Prof. (Dr.) M. P. Yadav, Former President, NAVS (I)

**(Editor's Responds:** Dear Dr. M.P. Yadav/Dr. I.P. Singh: Thank you Dr. Yadav for your kind words. Another copy of the October 2019 issue is attached with this mail. It is regularly being sent to all the listed recipients, including you both. Often the reasons of non-receipt of a particular issue are due to the fullness of recipients' email-box or some problem with the internet service providers (e.g. aol.com).etc. Ed.)

Dear Prof. Dr. Kohli: I have gone through all the 2019 issues of NAVS Newsletter. I am overwhelmed by the amount of your contribution for the Academy. I hold you in high esteem. Warm regards: Dr. J. L. Vegad, PhD (New Zealand), Visiting Professor. (USA), FNAVS, FIAMP; Email: [jawaharlalvegad@gmail.com](mailto:jawaharlalvegad@gmail.com)



## **CH. 5: NAVS NEWS**

**NATIONAL ACADEMY OF VETERINARY SCIENCES (INDIA)**

**G-4, A BLOCK, NASC COMPLEX, DPS MARG, NEW DELHI -110 012**



### **5.1: NAVS Representatives Meet the Secretary DAHD, Ministry of Fisheries and Animal Husbandry**

A meeting was recently arranged between Sh Atul Chaturvedi, Secretary DAHD, Ministry of Fisheries, Dairying and Animal Husbandry and some NAVS (I) NAVS (I) representatives of at the request of President NAVS (I). The Academy



was represented by Maj Gen Shri Kant, the President and Maj Gen ML Sharma, GC Member. Dr MP Yadav former Vice-Chancellor and Director IVRI Izatnagar was also invited. After formal introduction and briefing on the aims and objectives of the Academy, discussion was held on following issues:-

A request was made to establish Indian Council of Veterinary and Fishery Research (ICV&FR).

Representation of the Academy in ICV&FR when established Representation of the

Academy in VCI. The Secretary appreciated the idea and suggested us to write to the department in this regard. It was impressed upon to revisit the VCI Act which needs certain amendments urgently. Suggestions in this regard from the Academy were invited.

- (iii) Financial assistance to the Academy as is given by ICAR to the NAAS. A request in writing in the form of DO letter would follow from the President.
- (iv) NAVS in collaboration with the Ministry and with support of Ayurved wish to organise a national seminar on Antimicrobial resistance (AMR) for which the Secretary concurred. The details are being worked out by Maj Gen ML Sharma in consultation with Animal Husbandry Commissioner and Ayurved Executives.
- (v) Restart of continuous Veterinary Education wherein the Academy can play a vital role since it has pool of intellectuals from the Veterinary profession. The secretary informed that election for the VCI would be organised shortly.

The Academy appreciates the quality time given by the Secretary for the discussion.

## 5.2: Meeting with Chairman Rashtriya Kamdhenu Aayog



The President, NAVS (I) Maj Gen( Dr.) Shri Kant organized a meeting with Chairman, Rastriya Kamdhenu Aayog, Govt. of India, Dr. Vallbhbhai Kathiria, a very famous Onco-surgeon of our country, to discuss strategic interventions to improve health and production potential of indigenous cattle. Governing Council Members, Maj Gen (Dr.) M.L. Sharma and Dr. Ravindra Sharma, were also present in the meeting. Dr. Ravindera Chaudhry from UP also joined the deliberation. The meeting was facilitated by Dr. Azad Kaushik, a renowned Immunologist from University of Guelph, Canada who also participated actively in deliberations.

The President of the Academy briefly apprised the Chairman regarding contribution of NAVS as a think tank in policy formulations and to uplift Livestock sector as well as veterinary profession. He assured the Chairman that the Academy will provide technical support to the Commission in its endeavour for promotion and welfare of cattle. He further requested Dr. Kathiria to help the Academy in realization of the proposal regarding establishment of Indian Council of Veterinary and Fishery Research (ICVFR).

## 5.3: 18<sup>th</sup> NAVS Convocation-cum-Scientific Convention held at Kamdhenu University, Gandhinagar:

The 18<sup>th</sup> Convocation-cum-Scientific convention of National Academy of Veterinary Sciences (I) was organized in collaboration with Kamdhenu University, Gandhinagar at INFLIBNET Centre, Gandhinagar, Gujarat on 26<sup>th</sup> and 27<sup>th</sup> December, 2019. Prior to the function, the Governing Council meeting was held on 25.12.2019 at 9.30 P.M. in the Committee Room of Gujarat National Law University, Ahmedabad. Some of the decisions taken in this meeting include : i) Change in the nomenclature of the following awards of the Academy : Member to be Associate Fellow and Associate Member to be Member; ii) Organization of NAVS (I) office keeping in view the organizational set up of NAAS and National Academy of Medical Sciences (NAMS) offices, to begin with nine posts are being planned and projected to the Ministry of Fisheries, Animal Husbandry and Dairying ; iii) Approval of the calendar of

activities of the Academy for the next year : It includes brain storming sessions on thematic areas of national importance related to veterinary/animal sciences; iv) Revision and updating of rules and regulations of NAVS (I); v) Institutional Life Membership of the Academy at concessional fee to the Brooke-a NGOs/Charitable Organizations associated with Animal Welfare and not involved in any type of commercial activities; vi) The request of the Vice-Chancellor, RAJUVAS for holding the next Convocation-cum-Scientific Convention of the NAVS (I) was discussed and all the members were of the view that the same may be held at Jaipur Campus of RAJUVAS.



During the INAUGURAL SESSION on 26.12.2019, Shri. Kunvarjibhai Bavaliya, Hon'ble Minister, Animal Husbandry, Water Supply and Rural Housing, Govt. of Gujarat was the Chief Guest, whereas, Dr. Vallabhbhai Kathiria, Chairman, Rashtriya Kamdhenu Aayog, New Delhi, Lt. Gen. P. R. Venkatesh, SM, Director General, Remount Veterinary Services, Prof. A. K. Srivastava, Member, Agricultural Sciences Recruitment Board, New Delhi were the Guests of Honour. The function was presided over by Prof. N. H. Kelawala, Hon'ble Vice Chancellor, Kamdhenu University. The inaugural session was followed by KEYNOTE LECTURES SESSION in which Prof. Srivastava delivered his lecture on 'The saga of Artificial Insemination' and Prof. Suresh Honnappagol delivered the lecture on 'Futuristic Technologies in Animal Health and Production'.

THE SCIENTIFIC CONVENTION consisted of the following six technical sessions which ran on 26.12.2019 and 27.12.2019:

Technical Session-I: Cutting edge technologies for improvement of animal production & reproduction

Technical Session-II: Innovative technologies for disease diagnosis

Technical Session-III: New generation vaccines for animal disease control

Technical Session-IV: Futuristic technologies for improvement of animal health

Technical Session-V: Poster session

Technical session-VI: Oral presentation

ABOUT 100 DELEGATES REGISTERED FOR THESE SESSIONS OF THE NAVS SCIENTIFIC CONVENTION.

## THE CONVOCATION CEREMONY:

Following academicians duly elected as Fellows, Members and Associate Members of the Academy for the year 2018 -19 were formally inducted into the Academy:

### A. FELLOWSHIP

1. Prof. A. M. Paturkar, Vice Chancellor, Maharashtra Animal & Fishery Sciences University, Futala Lake Road, NAGPUR- 440 001 (Maharashtra).

E-mail ID: [vcmafsu@gmail.com](mailto:vcmafsu@gmail.com)/[ashishpaturkar@gmail.com](mailto:ashishpaturkar@gmail.com);

Phones: 0712-2511088, Mob. 09820201522

2. Lt Gen PR Venkatesh, SM, Director General, Remount Veterinary Services, Dte Gen RVS, IHQ of MoD (Army), West Block - 3, RK Puram, New Delhi - 110 066 E-mail ID [latavenky\\_01@yahoo.co.in](mailto:latavenky_01@yahoo.co.in)/[supremevet-1779@nic.in](mailto:supremevet-1779@nic.in); Phones: (Office) : 011 - 26103832, Mob: 08017926616

3. Dr. Manish Kumar Chatli, Professor and Head, Department of Livestock Products Technology, College of Veterinary Science, Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana-141004 (Punjab).

E-mail: [manishchatlilpt@gmail.com](mailto:manishchatlilpt@gmail.com) / [hodlptgadvasu@gmail.com](mailto:hodlptgadvasu@gmail.com);

Phones: 0161-2414025 (office); Mob: 9463640437; 6280107771

4. Dr. Rajender Kumar, National Fellow-cum-Principal Scientist, ICAR-National Research Centre on Equines, Sirsa Road, Hisar -125 001 (Haryana), E-mail ID : [rkg.nrce@gmail.com](mailto:rkg.nrce@gmail.com); Phones: (O) 01662-282518, Mob.: 9467160705; 7015508962

5. Dr. S. D. Kharche, Principal Scientist and Incharge, Animal Physiology & Reproduction Division, ICAR- Central Institute for Research on Goats, Makhdoom, PO Farah-281122, Mathura (UP)E-mail ID: [kharche62@gmail.com](mailto:kharche62@gmail.com), Mobile: 8630345074/ 9897987074

6. Dr. D. B. Patil, Director of Research & Dean PG Studies, Kamdhenu University, Karmayogi Bhavan, Block-1, Wing-B1, 3rd Floor, Sector-10A, Gandhinagar-382010, Gujarat E-mail ID: [db1608@gmail.com](mailto:db1608@gmail.com)/[dr@ku-guj.com](mailto:dr@ku-guj.com) Tel : 079-232-20714, Mob: 9825427650

7. Dr. R.K. Chandolia, Professor & Head, VGO -cum- Comptroller, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar - 125 004 (Haryana) E-mail ID : [chandolia2003@gmail.com](mailto:chandolia2003@gmail.com) Tel: (off) 01662 256112; Mob.: 09896104626

8. Dr. Rajeswari Shome, Principal Scientist, ICAR-National Institute of Veterinary Epidemiology and Disease Informatics, Ramagondanahalli, Post Box No. 6450, Yelahanka, Bengaluru- 560 064 (Karnataka). E-mail : [rajeswarishome@gmail.com](mailto:rajeswarishome@gmail.com) Tel : 080-23093111, Mob: 9480520541
9. Dr. A.R. Sen, Principal Scientist, ICAR Mahatma Gandhi Integrated Farming Research Institute, Pipra Kothi, MOTIHARI – 845 429 (Bihar) E-mail : [senarup68@gmail.com](mailto:senarup68@gmail.com)/ [senarup@rediffmail.com](mailto:senarup@rediffmail.com) Tel: 0612-2223956, Mob : 8420108024
10. Col Amit Kumar, Colonel (RVS) Technical, Directorate General, RVS, QMG's Branch, 1HQ of MoD (Army), RK Puram, New Delhi 110 066 E-mail ID : [rastogiamit2001@rediffmail.com](mailto:rastogiamit2001@rediffmail.com) Tel: 011-26173367, Mob: 8859807576
11. Dr. B.P. Mishra, Joint Director (Research), Indian Veterinary Research Institute, Izatnagar, Bareilly - 243 122 (UP) E-mail ID : [bpmishra\\_1@hotmail.com](mailto:bpmishra_1@hotmail.com) Tel: 0581-2300361, Mob: 9456947467
12. Dr. Rajveer Singh Pawaiya, Principal Scientist, Division of Animal Health, Central Institute for Research on Goats, Makhdoom, P.O. Farah-281122 Distt. Mathura (UP) Email [Rajveer.pawaiya@icar.gov.in](mailto:Rajveer.pawaiya@icar.gov.in) / [rvspawaiya@gmail.com](mailto:rvspawaiya@gmail.com);  
Tel : [0565-2763380](tel:0565-2763380), Mob: 9410844980, 09045828870
13. Prof. K. Sarjan Rao, Dean of Student Affairs, Sri Venkateswara Veterinary University, Tirupati-517502, Distt. Chittoor (A.P.)  
E-mail: [kapasarjanreddy@gmail.com](mailto:kapasarjanreddy@gmail.com)/[dsa\\_svvutpt@yahoo.com](mailto:dsa_svvutpt@yahoo.com) Mob: 9989051544
14. Dr. Sadhan Bag, Principal Scientist, Physiology & Climatology Division, Indian Vety. Research Institute, Izatnagar, Bareilly-243 122 (UP). E-mail ID : [bag658@gmail.com](mailto:bag658@gmail.com) Mob: 7983562432

#### B. MEMBERSHIP:

1. Dr. Swaraj Rajkhowa, National Research Centre on Pig, Rani, Guwahati- 781 131, Assam, E-mail ID: [swaraj.rajkhowa@gmail.com](mailto:swaraj.rajkhowa@gmail.com)  
Phone : 0361 -2847195, Mob : 9435732488
2. Dr. Anish Yadav, National Fellow, Division of Veterinary Parasitology, Faculty of Vety. Sciences and Animal Husb., R.S. Pura, Jammu-181102 (J&K), E-mail:[anishyadav25@gmail.com](mailto:anishyadav25@gmail.com) Mob:9419145424

3. Dr. Swaran Singh Randhawa, Professor, Dept. of Veterinary Medicine, Guru Angad Dev Veterinary and Animal Sciences University Ludhiana – 141 004 (Pb) E-mail ID : [drswaran68@gmail.com](mailto:drswaran68@gmail.com) Tel : 0161-2414008, Mob : 94632-42612

4. Dr. N.S. Maan, Professor & Head, Department of Animal Nutrition, College of Veterinary Sciences, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar – 125 004 (Haryana) E-mail ID : [narendermaan108@gmail.com](mailto:narendermaan108@gmail.com) Mob: 9467865800

5. Col Sukhbir Singh, Commanding Officer, 32 Mil Vet Hosp Cl-I, Near Dogra Mandir Complex, Meerut Cantt (UP). PIN-250001, E-mail ID : [sukhbirvet@rediffmail.com](mailto:sukhbirvet@rediffmail.com) Mob : 09877713805 and 09456003608

#### C. ASSOCIATE MEMBERSHIP :

1. Dr. Girish Patil, S. Principal Scientist, National Research Centre on Meat, PB No 19, Boduppall Post, Chengicherla, Hyderabad– 500092 (Telangana),  
E mail: [girishlpt@gmail.com](mailto:girishlpt@gmail.com); Mobile: 9401262522
2. Dr. Thirumala Rao Talluri, Senior Scientist, Equine Production Campus, National Research Centre on Equines, P.O.Box. 80, Jorbeer, Bikaner – 334001 (Rajasthan) E-mail ID: [raotalluri79@gmail.com](mailto:raotalluri79@gmail.com), Mob: 9783902831
3. Dr. Jonali Devi, Professor & Head, Division of Vety. Physiology & Biochemistry, Faculty of Veterinary Sciences & Animal Husbandry, R.S. Pura, Jammu-181102 (J&K) Mob: 9419112466 / 7889949261  
E-mail: [devi.jonali@yahoo.com](mailto:devi.jonali@yahoo.com)
4. Dr. Kamal Sarma, Professor, Division of Veterinary Anatomy, Faculty of Veterinary Sciences & Animal Husbandry, R.S.Pura, Jammu – 181102(J&K) E-mail ID: [kamalsarma73@yahoo.com](mailto:kamalsarma73@yahoo.com) / [kamalsarma73@gmail.com](mailto:kamalsarma73@gmail.com), Mob: 9419112492 / 9682166287
5. Dr. Rajib Deb, Scientist, Division of Cattle Genetics and Breeding, ICAR-Central Institute for Research on Cattle, Grass Farm Road, Meerut Cantt 250 001 (U.P). E-mail [Rajib.Deb@icar.gov.in](mailto:Rajib.Deb@icar.gov.in) / [drrajibdeb@gmail.com](mailto:drrajibdeb@gmail.com); Tel:0121-2656021, Mob: 7060385213
6. Dr. Pankaj Kumar, Senior Scientist, Veterinary Medicine, Division of Livestock and Fisheries Management, ICAR- Research Complex for Eastern Region, P.O B V College, Patna-800 014 (Bihar), E-mail: [pankajvet@gmail.com](mailto:pankajvet@gmail.com) Mob: 9162040567, 9473353323

7. Dr. Nihar Ranjan Sahoo, Sr. Scientist (AG&B) and In-charge, Swine Production Farm, LPM Section, ICAR-Indian Veterinary Research Institute, Izatnagar, UP-243122, E-mail ID : [vet.nihar@gmail.com](mailto:vet.nihar@gmail.com), [nihar.sahoo@icar.gov.in](mailto:nihar.sahoo@icar.gov.in) Tel : 0581- 2302498 (O), Mob: 07351894553
8. Dr. Simranpreet Kaur, Asstt. Professor, Department of Veterinary Public Health and Epidemiology, School of Public Health and Zoonoses, College of Veterinary Sciences, Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana, (Punjab) 141004.  
E-mail ID: [simranthind18@gmail.com](mailto:simranthind18@gmail.com) Mob: 95018-04499
9. Dr Harkirat Singh, Assistant Professor, Department of Veterinary Parasitology, College of Veterinary Science, Guru Angad Dev Veterinary & Animal Sciences University (GADVASU) Ludhiana-141004 Punjab, E-mail id: [drharkiratsingh@hotmail.com](mailto:drharkiratsingh@hotmail.com);  
Phones: Tel. No: Office: 0161-2414029 Mobile: 9530565200
10. Dr. Jaswinder Singh, Assistant Professor, Department of Veterinary & Animal Husbandry Extension Education, College of Veterinary Sciences, Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana, Punjab 141004; E-mail ID: [jaswindervet@rediffmail.com](mailto:jaswindervet@rediffmail.com) Mob : 9915007594
11. Dr. Devendra Pathak, Assistant Scientist, Department of Veterinary Anatomy, College of Veterinary Sciences, Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana, Punjab 141004. E-mail ID: [drdevendra@gmail.com](mailto:drdevendra@gmail.com) Mob: 9417786237 and 7814367828
12. Dr. Manoj Kumar Singh, Scientist, SSAnimal Biotechnology Center, ICAR-National Dairy Research Institute, Karnal-132001 Haryana, E-mail : [drmanojvet@gmail.com](mailto:drmanojvet@gmail.com) Mob: 9896213121
13. Dr. Pawan Kumar Verma, Division of Veterinary Pharmacology & Toxicology, Faculty of Veterinary Science & Animal Husbandry, SKUAST-Jammu, R.S. Pura, Jammu 181102 (J & K) E-mail: [drpawankv@yahoo.co.in](mailto:drpawankv@yahoo.co.in) Mob : 9419111332
14. Dr. Sonika Ahlawat, Division of Animal Biotechnology, National Bureau of Animal Genetic Resources (NBAGR), Makrampur Campus, GT Road Bye Pass, Near Basant Vihar, P.O. Box No. 129, Karnal – 132 001 (Haryana), Email id: [sonika.ahlawat@gmail.com](mailto:sonika.ahlawat@gmail.com) Mob :9416161369
15. Dr. B H Manjunatha Patel, Principal Scientist (LPM), Indian Veterinary Research Institute, Hebbal Bengaluru – 560 024 (Karnataka), E-mail: [mpatellpm@gmail.com](mailto:mpatellpm@gmail.com) Mobile : 9412120824

#### **5.4. Governing Council and General Body Meetings of the Academy held at Gandhinagar in December 2019**

The meetings of the Governing Council and the General Body of the Academy were also held at Gandhinagar during the NAVS Convocation-cum-Convention held recently in December 2019.

The Governing Council Meeting of National Academy of Veterinary Sciences (India) was held on 25.12.2019 (Wednesday) in the Committee Room of Gujarat National Law University, Ahmedabad (Gujarat), and the General Body (GB) meeting of NAVS (I) was held on 27.12.2019 (Friday) in the Training Lab. No.2 of INFLIBNET Centre, Gandhinagar (Gujarat). Both the meetings were held under the Chairmanship of Maj Gen Shri Kant SM, VSM (Retd), President of NAVS (I). **The Minutes of these meetings are being posted on the NAVS (I) website.**

Dr. Suresh Honnappagol, the former Animal Husbandry Commissioner, Government of India is to be the **Returning Officer for conducting Elections to the next Governing Council of NAVS (I):**

As the term of the present Governing Council of the Academy expires on 21.04.2020, a new Council has to take over on 22.04.2020. It was agreed upon to appoint Dr. Suresh Honnappagol, Department of Animal Reproduction, Gynaecology and Obstetrics, Veterinary College, Hebbal, Bengaluru as the Returning Officer to conduct the election of new GC. He has been authorized to appoint the assistant Returning Officers and other staff as per the requirement.





## CH.6: VET TRACK

### 6.1: Award: Dr. P.K. Gupta Documented in UP Book of Records

Prof. Dr. P K Gupta Prof (Dr) PK Gupta, former Head of the Division of Pharmacology and Toxicology, Indian Veterinary Research Institute, Izatnagar and Former Advisor World Health Organization, writes to inform us that he has been awarded by UP Book of Records for excellent contribution and documentation to make the study of toxicology simple and understandable through illustrations, images, custom made drawings, self-explanatory tables, and use of questions and answers (3400). The author's own experience in different branches of toxicology including environmental and veterinary toxicology has been abstracted in this document. We congratulate him for this achievement.

We have another good news for the Veterinary Profession for which Prof. Gupta deserves appreciations and congratulations. He has offered a limited number of free copies of his new book entitled "Concepts and Applications in Veterinary Toxicology: An Interactive Guide" 2019 Edition, published by Springer Nature, Switzerland, to Veterinary Toxicologists/ Toxicologists who are Fellows of the Academy of Sciences for Animal Welfare. They should Contact Dr PK Gupta (author) email ID: [drpkg1943@gmail.com](mailto:drpkg1943@gmail.com) for this free NEW BOOK (market price approx. Indian Rs 10,000/-). The details of the book are provided below.

### 6.2: BOOK(S) BY VETERINARIANS

6.2.1: NEW BOOK; Entitled "Concepts and Applications in Veterinary Toxicology: An Interactive Guide" Authored by Gupta, Pawan Kumar.

Copyright2019, published by Springer International Publishing, Springer Nature Switzerland AG, pp 350; Having 25 b/w illustrations, 75 illustrations in colour. Cost eBook101,14 € and Hardcover124,79 €



This book covers a broad spectrum of topics related to students specializing in veterinary toxicology and for veterinary medical practitioners. Since the major emphasis of the book is to teach veterinary students, therefore more attention has been given to common toxicants to which several species are exposed including pet animals. The subject of veterinary toxicology is complicated greatly by the wide variations in responses of domestic, companion, aquatic, wild, and zoo species to toxicants. Therefore, emphasis has also been given to species variation and diagnostic toxicology including

clinical management that is more relevant to veterinary profession.

#### Key Features

Highlights specialized topics essential for veterinary specialists.

· Covers a variety of common toxicants to which several species including pet animals are exposed.

· Includes sample questions and answers that are extremely valuable for students, clinical pharmacists, teachers, and academicians in preparing for their board and other examinations.

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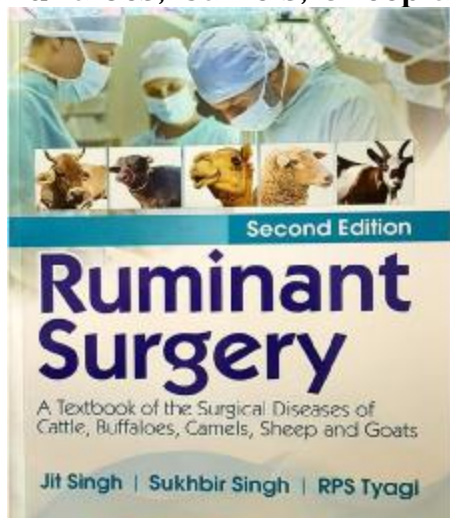
1. Servet update: Main Endocrine Disorders of The Adrenal And Thyroid Axis In Dogs And Cats. by Castillo v (isbn : 9788417225384 1st edition- 2018)

2. Servet update: Clinical Cases In Small Animal Dermatology (Isbn : 9788417225278, 1st Edition - 2018) By Diaz.

They are also inviting the potential authors to submit their manuscripts for consideration for publication. Address: THE NATIONAL BOOK DEPOT. Opp. Wadia Children Hospital, Parel, Mumbai - 400 012; Tel No : - 022 - 24131354/ 24131362; Mobile - 9757001960 /9757001961; Email : - [nationalbook55@gmail.com](mailto:nationalbook55@gmail.com); Website : - [www.nationalbookdepot.com](http://www.nationalbookdepot.com)

#### 6.2.3: STOP PRESS: JUST RELEASED:

Ruminant Surgery - A Text Book of the Surgical Diseases of Cattle, Buffaloes, Camels, Sheep and Goats, 2nd Edition, 2019, CBS



## **CH. 7: VIEW POINT**

### **7.1: Feed Technology and Crop Residue Burning**

**Rama Kumar V**

**Founder Secretary, Veterinary Council of India (Retired)**

**Feed Technology:** It is a common knowledge that dairy plants are run by dairy technologists, sugar plants by sugar technologists; but a feed plant is managed either by an engineer or a veterinarian without training. No feed technologists are available as the universities are not having a feed technology syllabus or training course. Therefore the feed plants are contained to use traditional mixing, grinding and pelleting. So no one appreciates the merit on nutritive value for a feed manufactured in a modern feed plant or a home mix. The development of feed technology would go a long way in processing feeds to increase the digestibility, metabolisibility and productivity. In India where crop residues are the main stay of feeding regimen processing them would reduce the possible competition between man and animal for land in future. It is very essential that ICAR/universities would encourage feed technology researches to support the feed industry. Furthermore at this moment when country launches a remarkable program of food security that envisages a three fold food production restricting land only for grain production necessitates zero land based dairying.

**Crop Residue Burning:** Recently it has come to light that burning of crop residues in the border states of UP and Haryana is a major cause of air pollution in Delhi. Though an erstwhile an Animal husbandry Commissioner (AHC) govt. of India (Dr P.N. Bhatt) once suggested work to investigate the possibility of delignification of crop residues to prepare feed, Feed technology has not found priority in any research institutions of ICAR; As agriculture specialists handle research in nutrition in many agriculture institutes, an effective R&D in feed technology had never received the required priority it deserves. Feed technology is tagged with animal nutrition. While in crop production, most favorable factors of the past growth can no more be tapped, diversion of land for forage production may not be acceptable. Improved feeding and feed technology would be the sole way.

The preparation of silage is practiced in pockets where excess green fodder is available. Haylage is a material that can be made out of digestion of any or all lignified materials including dry leaves. Converting residues to haylage of 55% moisture can be achieved by coating sugar syrup mixed with probiotics. The materials get cured when they are stored in airtight bales for one month. The process increases the dry matter digestibility of the fodder, increase the ME value and also helps the formation of bacterial protein with VFA. The treated Haylage is very aromatic, palatable and become good fodder. The above technology is a combination silage and straw treatment in a plant. ME = Metabolizable Energy; VFA= volatile fatty Acid [see also annexure 1].

The potential of animal resource development (ARD) is innumerable if not infinite. (Source: Veterinary Educationists' Forum, October 22, 2019)

## 7.2: Veterinary Education for Sustainable Food Security: *The Road Ahead.*\*

Prof. Moti L. Madan

### **Evolving Veterinary education**

Veterinary education has evolved with the changing times and will continue to do so to in the years to come. Over the sixty four years of my association with veterinary education, I can envision four distinct Phases or periods in this evolution. To begin with, in First Phase, from 1940's to 1960's, education was mainly a class dictation exercise. There possibly was no alternative as there were no books available for a student and his information/knowledge base was these nicely bound registers only.. The Second Phase started with the introduction of Land Grant system of education and introduction of trimester system in 1960 involving courses, credits, load and a GPA. This introduction brought a sea change in class learning and hands on training. However, students and teachers compromised the system on several counts and the system was changed over to semester system of education and evaluation. In its wake so many distortion were brought in that we virtually crippled the system. The Third Phase started in late 1980's with the formation of Indian Veterinary Council (IVC). The IVC act, made with lot of thought and logic proved water shed for the profession and the learning process leaped to a high level of uniformity and efficiency across the country. The Fourth Phase, in which we are currently in, has come as a compromise and has left many students and teachers baffled and debating as to why an excellent futuristic program, then exiting has been given a go by. Could be be due to our incapacity to deliver the curriculum ?. There is concern that the best craft of modern veterinary education curriculum has been left out, and taken back to a system, discarded several decades ago, and has little conformity suiting the current professional veterinary scenario. Concern is also expressed over loss of time envisaged to have been spent in a calendar year for professional learning.

### **Veterinary Education Today**

Veterinary Education today stands on crossroads. On one hand is a rich heritage of a structured, tightly conjured sequence of credits and courses. On the other hand, under the curse of inadequacy, is our curriculum possessed with an archaic course content made into compartments of Department, departmental course load and departmental credits, miss cued learning objectives, inadequate skill delivery and a faulty support to production and health activity. Veterinary science has remarkably changed and now new roads and avenues are available. We have a new world of subject matter consolidation, integrated learning, delivery of skills with a robust system of evaluating a young veterinarian for competence in skills and their delivery. Our future path should produce a professional who is endowed and competent in state of art modern techniques and technologies to lead us from

disease to health, from antisepsis to asepsis, from low to high and efficient productivity and to quality biosafe value added livestock products.

Having had a long association with veterinary science teaching, research, extension education and its professional delivery, I believe that we have come a long way from where we started from around the middle years of last century. However, in spite of the proud performance of the sector with a rich past, a feeling of disappointment creeps in for the way we have progressed in the last few decades as compared to the veterinary science delivery in most of western world. This feeling sinks deeper when you realize how advanced skills and innovative technology is being translated fast into clinical practice and also how to augment the productive performance of livestock. We need to educate our professional graduates and postgraduates, in a manner different than what we have been doing, to empower them to face the challenges being posed and convert each of them into opportunities.

### **Current Trends**

The advances in vet science are truly mind-boggling. Current trends in veterinary health management presents a picture in which more and more of the veterinarians you see are women. Graduating classes from vet colleges are now about 55% female. Corporate house, drug companies and sales people are veterinarians with expertise in newer products and equipment advances. The veterinary industry has changed dramatically since the inception of the digital age. Computer software systems, advanced medical technologies and fancy web marketing strategies, specialty veterinary software, a website with web support and a social media company in place. Way back, even in late eighties (1980) practice was started with a note book and a microscope. Today, even small hospitals must have all its information supported basic practice support of X-ray, radiography, all blood machines and ultrasound technology in-house. There is a huge emphasis in modern vet medicine to acknowledge and alleviate pain. Along with traditional modalities such as drugs and physical therapy, lasers are being used more and more to lessen pain, relieve joint dysfunction and promote healing. The concept of Veterinary Technician and Veterinary Nurse has become a practicality in terms of job requirement and economics of veterinary practice. Unfortunately our education systems just touch the fringes by introducing the terms in a curriculum but do not deliver expertise.

### **One Health Interconnectedness**

'One Health' is not a 'stand-alone' subject that can be taught as a single entity within the medical or veterinary undergraduate degree program. Rather, it is a concept which recognizes the interconnectedness between medicine, veterinary medicine, epidemiology, biomedicine and other sciences in human and animal health. It should be a continuous seam of knowledge running throughout the curriculum in medical and veterinary education and where the ethos of One Health be an integral part of education leading to most significant advances in human and animal medicine. Again, the fact is that, as of now, we

just 'stand alone', when the education curriculum across the medical and vet syllabus should have the required element of course integration.

Previously, a traditional, instructor-centered lecture with a PowerPoint presentation was best to prepare students for an examination. Now, the trend is to use a blended education delivery system, which places less importance on having an instructor convey all the educational content, in favor of emphasizing multiple methods for students to obtain information. As students learn differently, so now we've come from a curriculum that comes from 'telling' to a multimodal one taken at a pace where you demonstrate mastery. Future of veterinary education will involve greater use of online resources. Survey of Online Learning that found the number of students enrolled in at least one online course has increased to millions. Some of these sites allow users to create student groups or offer to send resumes of top-performing users to potential employers.

### **Major Challenges in Professional Veterinary Education**

Some of the major challenges which our professionals have to face currently, involve several major facets of education, curriculum, class engagement, skill testing, diagnostic instrumentation, so as to empower them to deliver health and production through use of latest technology and in a humane manner. In the New National Resurgence of the Profession, these issues need identification so as to be able to convert each of the challenges into opportunities in a newly created environment, the like of which has not been seen before. We are aware of a series of acute disparities that exist in our colleges. Though each of these colleges are differently endowed, and the respective State support ranks to be very poor, it is an opportune time to talk of a new veterinary paradigm.

It is most appropriate, therefore, to do this exercise now, when a fresh wind has blown in the country and we have come under a fresh spell of oxygenated air, allowing and capacitating us to a new life, new program, new expectations, new policy, new direction and a new horizon. The recent development of the profession coming under a new independent Ministry of Fisheries, Animal Husbandry and Dairying is bound to lift us from an era of neglect, despise, rejection and acute resource deprivation to an era of resolve, commitment and resource endowment of a level neither seen nor even ever heard before. The issues can be identified as follows;

- 1. Educational disconnect, great difference among colleges, their structure and function.*
- 2. Faculty paucity and acute shortage of SMS, teaching competence.*
- 3. Re- structuring of VCI, reviewing its functioning Charter and regulating veterinary practice.*
- 4. Curriculum 'Learning principles' and study program structuring to societal needs.*
- 5. Concept of Universal Vet be changed to graduates tracking their interests/ specialization.*

6. *Academic disparity, seamless curriculum delivery, integration of subject matter.*
7. *Restructure teaching process with ability to find and use information than the accumulation of facts.*
8. *Private-Public partnership in college education.*
9. *'One Health' not a standalone preposition, one health interconnectedness.*
10. *Infrastructure and instrumentation; teaching labs , clinical/health labs and production enterprises*
11. *Engendering the course program- Blue to Pink.*
12. *Expertise and delivery of new knowledge, new insights, new skills, and new applications like Robotic surgery, Artificial intelligence, biosensor technology, bio-prospecting, regenerative medicine and genetic engineering as also in urban/rural marketing.*
13. *Acute teacher inbreeding, standard of teaching and ability to engage with students.*
14. *A common National Professional Competence Evaluation (NPCE) for skills in clinical and production sciences and National Monitoring of Quality of Services delivered (NMQS).*
15. *Development of State of Art clinical diagnostics and Animal Management facilities and specialized labs for Orthopedics, Ophthalmology, Dentistry, Oncology, Medical imaging, genetic engineering and regenerative medicine.*
16. *Off campus clinical centre for institutions who have a poor footfall of patients.*
17. *Developing Expertise in VETERINARY SERVICE INDUSTRY*
18. *A new thrust for Research support*

### **National strategy for veterinary education**

The light of the issues enumerated above, and the ever changing as well as demanding public service sector, it has necessitated re-look into the all aspects of veterinary education. Considering the present status and the future need there is no alternative but to restructure our education program. Earlier facing the same dilemma in the traditional universities, the UGC had set up an 'Education Commission' for similar purpose among traditional universities. Due to the fact that we have a new Govt. in action which is committed to the primacy of animal husbandry for national economy and food security, it is high time that we should set up an Education Commission composed of eminent academician, industry leaders and stake holders to review, examine the professional demands and restructure the total veterinary education in the country.

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*\*Abstracted from the inaugural Lecture delivered by Dr. Moti L. Madan at the National Symposium on "Livestock Sustainability for Food Security in India" held during 22-23, August, 2019 at LUVAS, Hisar*



## CH. 8: NATIONAL & INTERNATIONAL VETERINARY NEWS

### 8.1 43rd Annual ISVS Congress held at LUVAS, Hisar

The 43rd Annual Congress of Indian Society for Veterinary Surgery (ISVS) and National Symposium on

“Recent Advances on Amelioration of Anaesthetic and Surgical Stress in Farm and Companion Animals” was held at Lajpat Rai University of Veterinary and Animal Sciences (LUVAS) Hisar from 14 -16 November, 2019. The congress was inaugurated by Dr. Gurdial Singh, the youthful Vice-Chancellor of the University, who was also the chief guest at the function. The College of Veterinary Sciences happens to be the birthplace of Indian Society for Veterinary Surgery. Hence the congress was attended by many founder members of the society, leading academicians and clinicians in veterinary surgery and more than 350 delegates from every part of the country. Two professors of veterinary surgery from the University of Malaysia, Kelantan also attended the conference and participated in the scientific deliberations. Dr S, Thilagar, former Vice-chancellor of TANUVAS, Chennai, presented the ‘Dr R P S Tyagi Oration award’ lecture 2019 on “Immuno-Modulatory Effects of Surgical Interventions: What we can Learn from Human”. Dr B. V. Shivaprakash, Director of Research, Karnatka Veterinary, Animal and Fishery Sciences University, Bidar, spoke at length on various aspects of the aforesaid theme of the symposium. Seventeen lead papers were presented by the experts. Out of 474 Research/Clinical papers received for presentation, 295 papers were presented in various scientific/poster/ award sessions during three day deliberations. All the scientific presentations were followed by constructive interactions among delegates. At the Cultural evening, the students of the Veterinary college, presented a very entertaining programme depicting the glimpses of Haryana Culture. The congress was a grand success.

The Annual Congress and National Symposium were **attended by 450 delegates** including academicians, researchers, field veterinarians, pharmaceutical organizations, NGO’s and students. Two foreign delegates from Department of Clinical Studies, Faculty of Veterinary Medicine, University Malaysia Kelantan, Kota Bharu, Malaysia and one foreign delegate from Mauritius also attended the symposium. The President ISVS bestowed Fellowships of Indian Society for Veterinary Surgery to the worthy recipients. There were twelve technical sessions at which 295 papers were presented. A total 475 abstracts published in the compendium.



The awards for various technical sessions were announced which will be bestowed upon the recipients during 44<sup>th</sup> Annual Congress of ISVS at Pantnagar (Uttarakhand).

**Following office bearers were elected to the New Executive Committee (2019-20)**

President: Dr. Simrat Sagar Singh  
Vice-Presidents: Dr. S.V. Upadhaye, Dr. S. Dharmaceelan, Dr. Ashok Kumar, Dr. V.S. Dabas and Dr. R.M. Tripathi.  
Executive Secretary: Dr. D.B. Patil  
Joint Secretary: Dr. Prem Singh  
Treasurer: Dr. Deepak Kumar Tiwari  
Zonal Secretaries: Dr. Neeraj Arora (North), Dr. S. Sooryadas (South), Dr. Shobha Jawre (Central), Dr. Bedanga Konwar (East) and Dr. Divyesh N. Kelawala (West)  
Corporate Member: Dr. Samar Mahendran  
Chief Editor: Dr. Amarpal  
Editor: Dr. Hari Prasad Aithal  
Associate Editor: Dr. Abhishek Chandra Saxena

The NAVS Editor regrettably missed the event (despite having made prior commitment to be there) due to age and health related issues. The participants and organizers (many of whom are the eminent readers of NAVS Newsletter) may kindly accept his apology for absence. We are very pleased that all the participants appreciated the organizers for their excellent hospitality.

## 8.2: World Rabies Day Celebrated at KVAFSU-Bidar: Vaccinate to Eliminate



World Rabies Day 2019 with the theme of 'Vaccinate to Eliminate' was observed on 28<sup>th</sup> September, 2019 at Veterinary College, Bangalore, of the KVAFSU-Bidar in a befitting way. The college under the guidance of Hon'ble Vice Chancellor Prof H D Narayana Swamy and former Vice Chancellor & Commissioner Animal Husbandry Prof Suresh S Honnappagol, organised free anti rabies vaccination for dogs and cats at veterinary college hospital, Hebbal as well as at college hospital, Yelahanka.

Awareness about Rabies and its prevention was displayed by way of video shows and posters. Special additional commissioner of BBMP Mr Randeep graced the program along with Joint Director and other veterinary officers. Director ICAR-NIVEDI Dr Parimal Roy, Joint Director ICAR-IVRI Dr Sanyal and Scientists also participated. Dr Nagendra, KVC president and Hon'ble member of Board Management, KVAFSU, representatives from KARUNA, CUPA, faculty of the college and PG & UG students actively involved in the programme. Prof H A. Upendra, Head Division of Clinical sciences, KVAFSU welcomed the gathering and briefed about the significance of World Rabies Day. Prof ML Satyanarayana in charge Dean of the college graced the occasion. BMUL and Bangalore Vet Pharma supported this program by way of providing necessary vaccine and refreshment. More than 100 dogs and cats were immunised against Rabies free of cost and general health check-up was also conducted.

### **8.3: ICAR and ILRI launch a Project on Backyard Poultry Genomics**

The Indian Council of Agricultural Research and International Livestock Research Institute launched the collaborative project on “Backyard Poultry Genomics” at the ICAR-Directorate of Poultry Research, Hyderabad on 29 August 2019.



Dr. Habibar Rahman, Regional Representative, South Asia briefed about the project's genesis and importance. He also highlighted the native chicken breeds' importance and their improvement for the rural poultry farmers' benefit. He also stated about the modalities and logistics in the execution of ILRI funded projects and also deliberated the ILRI's role in enhancing the food security through the adoption of scientific programmes across the Globe.

Dr. R.N. Chatterjee, Director, ICAR-DPR, Hyderabad briefed about the native chicken's role in uplifting the socio-economic and nutritional status of the rural people across the country.

The project is being executed by Dr. Olivier Hanotte and Dr. Dessie Tadelle (ILRI, Nairobi); Dr. T.K. Bhattacharya, Dr. R.N. Chatterjee, Dr. S.P. Yadav, and Dr. Chandan Paswan (ICAR-DPR), Hyderabad and Dr. Anil Rai, and Dr. A.R. Rao (ICAR-IASRI).

## 8.4: The launching of Animal Disease Economics Project

(Engaging non-scientists in the scientific process: India project employs 'participatory system dynamics modelling' to improve control of livestock diseases in the country)

The Indian Council of Agricultural Research (ICAR) and the International Livestock Research Institute (ILRI) are conducting a collaborative project on use of participatory methods in animal disease economic studies. These methods help officials refine their understanding of the economic losses caused by diseases in livestock and also inform policies developed and implemented to better control these diseases.

*'Participatory modeling is a purposeful learning process for action that engages the implicit and explicit knowledge of stakeholders to create formalized and shared representation(s) of reality. In this process, the participants co-formulate the problem and use modeling practices to aid in the description, solution, and decision-making actions of the group. . . . The participants structure the problem, describe the system, create a computer model of the system, use the model to test policy interventions, and propose one or more solutions.'* —Wikipedia



Habibar Rahman (second from left), ILRI regional representative for South Asia welcomes guests to the training workshop

At a workshop to train 15 scientists in these participatory methods, held 24–26 Jul 2019 and hosted by ILRI at its regional office in New Delhi, Dr Habibar Rahman, ILRI's Regional Representative for South Asia, said that fully 35 per cent of the losses occurring in India's agricultural and livestock sectors is due to diseases and pests. Dr Joykrushna Jena, ICAR's Deputy Director General (AS@Fy Sci), ICAR, responded that India should focus on reducing not only such direct losses but also the indirect losses caused by livestock diseases.

Participants of the training workshop explored the application of 'system dynamics modelling' to aid policy interventions in disease control. Sirak Bahta, an ILRI Agricultural Economist, instructed the 15 Indian scientists in use of STELLA Architect software in system dynamic modelling and guided them in how to conduct participatory sessions with various livestock value chain actors. This instruction was part of 'group model building', which helps scientists to obtain relevant information and to 'parameterize' relationships that exist in a given livestock system. The participants were exposed to the scripts of group model building sessions, which included the



hopes and fears expressed by livestock value chain actors. The more technical aspects of this training covered concept model, variable elicitation, reference modes elicitation, structure elicitation, reflector feedback and transferring group ownership from one image to another.

Team photo at the training workshop

Discussing the best ways forward for the collaborative ICAR-ILRI project, the participants agreed to take an approach based on case studies. Such an approach is grounded in considerable primary fieldwork to compare control strategies and their economic impacts across different regions and kinds of livelihoods. This project will employ participatory system dynamics modeling in its analytical platform and will provide typologies for intervention options along different economic, livelihood and agro-ecological dimensions. Activities in the first two years of the project will focus on peste des petits ruminants (PPR), with the focus broadening in the following two years to include one or two additional diseases, such as haemorrhagic septicemia and brucellosis.

### 8.5: Model Training Programme Concludes at ICAR-NIANP, Bengaluru

A Model Training Course on “Integrated Nutrient Management Strategies for Smallholder Crop Livestock Production System” sponsored by Directorate of Extension, Department of Agriculture, Cooperation & Farmers Welfare, Ministry of Agriculture & Farmers Welfare, New Delhi was held from 12-19<sup>th</sup> September 2019 at ICAR- National Institute of Animal Nutrition and Physiology, Bengaluru for extension functionaries, working in agriculture and allied departments of states in the country. Seventeen participants from various States attended the training program. The training program designed



with both lectures and practical classes focused on i) Improved methods of fodder production and conservation ii) Alternate feed resources and technologies for their safe use in livestock feeding iii) Mineral supplementation technologies iv) Ration balancing tools for ruminant animals feeding v) Integrated poultry nutrition and production system vi) Micro-climate modification for enhancing performance of dairy cattle vii) Nutrient management strategies – Bypass

nutrients for sustainable livestock production viii) Management of ruminants production during stresses ix) Fish as a component of integrated farming x) Intensive feeding of sheep for mutton production etc. Dr. DT Pal was the Course Director and Dr. Anjumoni Mech and Dr. G Letha Devi were the course coordinators. In his address to participants, Dr. Raghavendra Bhatta, Director, ICAR-NIANP highlighted the importance of nutrient management in feeding of livestock for improving their efficiency of production. While describing the various technologies developed by the Institute, he stressed on the crucial role of field Veterinarians and extension officers for the effective transfer of technologies among the livestock farmers. He mentioned that by adoption of technologies farmers would be able to double their income. Dr D.N. Hegde, Director, Animal Husbandry, Karnataka Milk Federation was the Chief Guest and Dr. Raghavendra Bhatta, Director, ICAR-NIANP presided during the valedictory function. After distributing the participation certificates, Dr. D. N. Hegde, highlighted the need for field application and propagation of effective technologies among farmers to improve the productivity of livestock. In his address, he mentioned that KMF got tremendous benefits from the technology of NIANP such as area-specific mineral mixture which has been adopted in large scale in Karnataka state and advised to the participants to adopt the same technology in their respective states. With his vast experience, he apprised the benefits of some more technologies for improving the livestock productivity.

## **CH. 9: DAIRY NEWS**

### **9.1: INDIA Celebrates National Milk Day 2019**



#### **9.1.1: National Milk Day Celebrated at IDA House, New Delhi**

India Celebrates the National Milk Day every year on the birth anniversary of Dr. Kurien on 26th November. At a get together this year at the headquarters of the Indian Dairy Association in New Delhi, the IDA President, Dr. G.S. Rajorhia, welcomed and greeted the participants and expressed satisfaction over the placement of outcome of the milk survey report in public domain by the Food Safety and Standards Authority of India (FSSAI). However, he cautioned the industry that the survey has reported the presence of some antibiotics and Aflatoxin M1 in milk samples. During a recent meeting of FSSAI, this issue was discussed and a working group has been formed to formulate standards for cattle feed and fodders. FSSAI will write to all the cattle feed manufacturers and other concerned to remain cautious in future. FSSAI has written to the Ministry of Health and Family Welfare to get the cattle feeds incorporated in the FSS Act. During his recent trip to Assam and Ludhiana (Punjab), he has been assured that many farmer members are interested to join IDA, which is encouraging news for all of us.

Speaking at the occasion, Prof. (Dr.) R.N. Kohli, Editor, NAVS (I) said that he was a great admirer of Dr. Kurien. Despite not being a Dairy Scientist, (Dr. Kurien was a Mechanical Engineer) he was asked to take up the job via which he ultimately revolutionized the dairying in India by utilizing his inherent organizational ability to organize the dairy sector in the country by creating a model like Amul, which has been replicated not only all over the India but also in some of the other developing countries.

Mr. Sangram Chaudhary, Managing Director, Mother Dairy raised the issue of school milk programme. He requested the President-IDA to take up this issue with the Govt. of India for initiating school milk programme in all the states. Currently, this programme is implemented in some of the states that also for few days in a week. Citing the example of Gujarat state, Mr. Chaudhary informed the members that 35 lakh children are being given milk every day in

state under school milk programme. We should also make efforts to replicate this in other states. Children should get the milk in the school on daily basis. He also raised a very important issue of challenges faced by the industry under RCEP. He said, "How long we will get protection from the Govt.? We will have to pay attention towards quality to boost export." We have to live with crossbred but continue to promote indigenous breeds. Mr. Chaudhary lauded the great contribution made by Dr. Kurien to the dairy sector which has impacted socio-economic status of the dairy farmers in a big way.

Mr. A.K. Khosla, Vice President-IDA, while supporting the concept of school milk programme said that if this programme is implemented at national level in each and every state with the support of Govt. of India, then the problem of lean and flush season of dairy sector will not remain as an issue. Second advantage of the school milk programme could be that nutritional need of the children can be taken care of. Milk producer will also be benefitted by higher price of their produce throughout the year. Price of SMP will also remain stable. Mr. Khosla also remembered the great work done by Dr. Kurien in creating basic infrastructure for the dairy sector.

Dr. Omveer Singh, Managing Director, NDDB Dairy Services raised the issue of cost of milk production. He said that rising cost of fodder, no rain, high rain and maintenance of unproductive animals are the various issues, which have not been focused, so far. Cost of milk production is rising day by day. Milk producers are not getting appropriate price for their produce. Dr. Singh also said that few years back, farmers were able to sell their unproductive animals, however nowadays, due to the new laws, one cannot sell his/her animals in an open market. Even transportation of animals from one state to other is also a big issue. Lots of permission / sanctions are needed to do the same, nowadays.

Dr. Sushil Kumar, former Director, NDRI and Chairman, Scientific Committee of FSSAI said that 70% milk production has been contributed by the small and landless farmers of the country. 75% milk is handled by the unorganized sector and credit goes to all household ladies who have the habit of boiling the milk, even if it is pasteurized. Unfolding a report assessed by him, Dr. Kumar said that no farmer goes for suicide having milch animal at his door. So every farmer must be supported to keep one or two milch animal at his home.

Dr. Ram Chandra Chaudhury, Chairman, Ajmer Milk Union raised the issue of male calf. He said there should not a ban on trading of animals. He also enquired about the availability of sex semen. Dr. Omveer Singh assured that in the next 6 months sex semen will be easily available as they are working on this project for the last few years. While remembering Dr. Kurien, Dr. Ram Chandra Chaudhury said that 70 million farmers are getting their livelihood in the dairy sector. He also sought help of the President-IDA in creating National Milk Grid under the National Dairy Development Board, which was operational during Operation Flood. He said that through National Milk Grid, milk can be supplied evenly in every states.

Mr. S.K. Bhalla, Consultant, Mother Dairy informed that during the National Milk Survey, antibiotics and Aflatoxin M1 were found in milk because of bad practices of compounded cattle feeding. There is problem of storage of silage. Fusarium and Aspergillus, along with Penicillium and Mucor, are common molds that cause problems. These silages have the highest potential for molding. He also raised the issue of excessive use of antibiotics in order to control mastitis and FMD. We can follow good farm practices to minimize the use of antibiotics to control these diseases. He also advocated that Food Safety Training and Certification (FoSTaC) should be made compulsory for each and every dairy/other food product plants.

Tributes to Dr, Kurien: While paying respect to the Dr. Kurien, Dr. Rajorhia said that Amul model, created by the legend dairyman – Dr. Kurien, is the most creative farmer cooperative leadership model in the global food system. His work has been applauded the world over for not only changing the dairy value chain in India but also throughout the developing and developed world. This movement has given economic freedom to the farmers and empowerment to women dairy farmers as they are largely involved with the dairy sector.

The dairy industry owes to Dr Kurien the values of integrity, dedication and commitment, the values he lived by and expected others to imbibe in letter and spirit. The greatest tribute the nation ought to pay him is to instill and reinforce these core values in the entire gamut of cooperative governance for the economic and social upliftment of the farmers, especially the small and marginal.

While concluding the event, Dr. Rajorhia said that industry is not reacting to the FoSTaC course positively and we have already approached Mr. Pawan Kumar Agarwal, CEO, FSSAI in this regard. He also thanked the participants and assured them that issues raised during this auspicious day will be taken up with Shri Giriraj Singh, Hon'ble Cabinet Minister for Animal Husbandry, Dairying and Fisheries, Govt. of India and Secretary, Animal Husbandry and Dairying, Govt. of India, Shri Atul Chaturvedi.

Among the participants were Mr. S.S. Mann, Chairman, IDA North Zone; Mr. K.L. Arora, MAXCARE Marketing & Technical Services; Mr. Parveen Sharma, Scientific and Digital Systems; Mr. Manish Pandey, Everest Instruments; Dr. G.C. Das; Ms. Aparna Bhargava, M.M. India Pvt. Ltd.; Mr. Sarabjeet Singh, NCDFI; and Mr. Avinash Ranjan and Mr. S.M. Louis from Indian Immunological Ltd. who also shared their views on the occasion.

#### 9.1.2: GADVASU and IDA (Punjab State Chapter)

National Milk Day was celebrated at Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana to commemorate the birth anniversary of Dr. Verghese Kurien, father of White Revolution in India. The occasion was celebrated with a glittering function and a national seminar on the theme “Milk – Nectar of Life” which was attended by approx. 200 delegates from dairy industry, Dairy Department Punjab, students and & faculty of the university.



The function was jointly organized by the College of Dairy Science & Technology in association with Punjab Chapter of Indian Dairy Association at Silver Jubilee auditorium of GADVASU. Experts from dairy industry, academia and Govt. Dairy Department delivered their talks covering various contemporary issues and challenges faced by dairy sector in Punjab. Speaking on the occasion Dr. Naveen Dham, DGM of Baani Milk producers Company talked about 'Concept of New Generation Cooperatives and Baani's experience in this regards'. Discussing about the strength and concerns of dairy sector in Punjab Dr. Inderpreet Kaur, Dairy Economist stressed on the need of species wise separate milk collection and processing for better price realization while, Dr. P.K. Singh, Assistant Professor of Dairy Technology at GADVASU emphasized about the importance of quality awareness, skilled manpower and traceability at farm level into food safety of dairy based foods.

Dr. G.S. Rajorhia, President Indian Dairy Association, New Delhi was the Chief Guest while Dr. S.K. Uppal, Dean College of Dairy Science & Technology was guest of honor. The function started with the inaugural remarks and welcome address of Chairman IDA (Punjab Chapter), Dr. B.M. Mahajan. On this occasion the association also honored S. Inderjit Singh, Director, Dairy Development Department, Punjab, for his efforts in establishing the IDA Punjab Chapter and bringing all the stake holders at one platform. Dr A S Nanda, Vice Chancellor, GADVASU congratulated the organizers for celebrations of National Milk Day-2019. The function was coordinated by Dr. Amandeep Sharma, General Secretary and Treasurer IDA (Punjab Chapter). He also extended vote of thanks to all delegates and sponsors for making this event successful.

### 9.1.3: National Milk Day at PUSA, New Delhi

The Union Minister for Fisheries, Animal Husbandry & Dairying Shri Giriraj Singh addressed entrepreneurs, milk producer farmers, academia and media on the occasion of National Milk Day 2019 at Pusa in New Delhi. Addressing the august gathering Shri Singh thanked Prime Minister Shri Narendra Modi for protecting interest of 10 Crore farmers by not joining Regional Comprehensive Economic Partnership (RCEP). He said that Prime Minister has always given the prime importance to the betterment of "Gaon Gareeb Kisaan" and RCEP was not in favour of farmers (Kisaan). Shri Singh further added that PM Modi had said that he cannot turn away from the needs of India's farmers.

Shri Giriraj Singh stated that milk production has increased significantly from 137.7 million tonnes in 2013-14 to 187.75 million tonnes in 2018-19, thereby indicating an increase by 36.35%. Similarly, the per capita availability of milk increased from 307 grams in 2013-14 to 394 grams in 2018-19. Annual growth rate of Milk Production during the period 2009-14 was 4.2%, which has increased to 6.4% during 2014-19. The annual growth rate of world milk production has increased by 1.2% during 2014-19. The Union Minister added that India is the ray of hope of the global dairy industry with opportunities

galore for the entrepreneurs globally. Since last 20 years, India continues to be the largest producer of milk in the world. This phenomenal increase is due to several measures initiated by the Union Government to increase the productivity of livestock.



Shri Singh also said that Livestock sector contributes significantly towards livelihoods and security net for the landless and marginal farmers. About 70 million rural households are engaged in dairying in India with 80% of total cow population. During the last 15 years, Milk Cooperatives have converted about 20% of milk procured into traditional and value added products that offers about 20% higher revenue. This share of value-added products is estimated to increase to 40% by 2023-24.

Addressing the gathering, Minister of State for Animal Husbandry, Dairy and Fisheries, Shri Sanjeev Kumar Balyan said that the 6.5% growth rate is still low due to the base effect but this will change as the Ministry is ensuring all policies and schemes are being formulated for improving the quality of livestock and quantity of milk. Shri Balyan thanks PM Modi for setting up a separate Ministry for Fisheries, Animal Husbandry & Dairying so that emphasis can be laid on their development. He said that resources of the Government are limited and private sector should also support the initiatives of the Government. Shri Balyan also said that there is a perception in the minds of the people about milk adulteration and it needs to be changed.

Minister of State for Animal Husbandry, Dairying and Fisheries and Micro, Small and Medium Enterprises, Shri Pratap Chandra Sarangi said that technology should be harnessed properly for improvement of the sector overall.

He said that breed improvement can be done with innovative ways. He also said that policies should be made favourably to ensure both quality and quantity of domestic production, consumption and exports can be improved.

The Secretary, Department of Animal Husbandry and Dairying emphasized that Government has initiated a number of dairy development schemes in order to meet enhanced demand of milk through domestic sources by laying special emphasis on raising milk production through improved productivity and health of our dairy animals. In this direction a new scheme has been launched by the Prime Minister called “National Animal Disease Control Programme (NADCP)” with an allocation of Rs. 13343 crores for complete control of Foot and Mouth Disease (FMD) and Brucellosis in the country. Nationwide Artificial Insemination Programme for enhancing AI coverage thereby increasing milk production and productivity was also launched by the Prime Minister along with Start-up challenges. The Department is also working on convergence of schemes with the schemes of other Departments and Ministries so as to double farmers’ income.

**9.1.4: Anand — The Milk City celebrates National Milk Day in style**  
Milk City Anand celebrated 98th birth anniversary of India’s milkman – Dr. Verghese Kurien – in style. Birth anniversary of Father of India’s White Revolution, is also celebrated as National Milk Day. After traversing 2,500 km-long journey that had started from Varanasi, a group of 50 bikers reached Anand which had acted as Kerala-born Kurien’s ‘karmabhoomi’ during his lifetime.



The purpose of the motorbike rally, which was the third edition introduced by the Gujarat Co-operative Milk Marketing Federation (GCMMF), was to meet people and visit places created and inspired by Dr. Kurien, who is credited for turning milk deficient India into world’s largest milk producer.

The last leg of the rally was flagged off from Amul Dairy and reached the campus of the National Dairy Development Board (NDDDB) where the young bikers were given a grand welcome amidst the tunes of trumpets and drums.

NDDDB Chairman Shri Dilip Rath while eulogizing Dr. Kurien's legacy recollected his contributions to strengthen economic status of millions of farmers and milk producers of India.

GCMMF's Managing Director Dr. R.S. Sodhi remembered the era when youth were so inspired by revolution of rural development brought by Dr. Kurien that they dreamt of walking in his footsteps by joining the Institute of Rural Management, Anand (IRMA) which was set up by Dr. Kurien.

The group of bikers included six women riders, who had been part of previous editions of National Milk Day rally 1.0 and 2.0. They were given the responsibility of mentoring the new riders who had joined from across the country. The 50 riders represented 20 out of 28 states of the country.

### **9.2: Ninth International Conference on Fermented Foods organized at SMC College of Dairy Science, Anand**

Swedish South Asian Network on Fermented Foods (SASNET-FF) in association with SMC College of Dairy Science, Anand Agricultural University; Indian Dairy Association, (Gujarat State Chapter); Lund University; Sweden; Copenhagen University, Denmark, Probiotic Association of India; Gut Microbiota and Probiotic Science Foundation (India); Dr. Verghese Kurien Centre of Excellence, IRMA, India organized the 9th International Conference on "Fermented Foods, Health Status and Social Well-being" during 13-14th December, 2019. The theme of the conference was "Probiotic Food Products and Gut Microbiota".

The conference focused on research work related to these aspects and to help in establishing the role of probiotic and fermented foods in maintaining health status and social well-being. More than 400 delegates including academicians, scientists, researchers, students, dairy and food professionals and nutritionists from India and abroad attended the seminar. The seminar had speakers from Sweden, Egypt, Ireland, Hongkong, Indonesia, Japan, Denmark and Netherlands.

### **9.3: India Food Safety Summit 2019**

A two-day India Food Safety Summit 2019 was organized by Synnex Group during 5-6 December, 2019 at Hotel Vivanta by Taj, Dwarka, New Delhi.

The summit brought the entire ecosystem of the Food Safety and Food Processing industry of F&B manufacturers, regulators, analytical services and testing companies, consultants etc. at one global platform to network, gain insight, share knowledge and discuss the best practices in food quality and safety systems with FSSAI's initiatives.

Amongst the industry leaders Mother Dairy Fruit and Vegetable Pvt. Ltd.; Dudhsagar Dairy; Hatsun Agro; ITC Foods Ltd.; Nestle India Pvt. Ltd.; Britannia Industry Ltd., Ananda Dairy; Patanjali; Heritage Foods Ltd., Parag

Milk Foods Ltd.; Haldiram Snacks Pvt. Ltd., Sunfresh Agro Industry Pvt. Ltd.; Cargill India, etc. participated in the event.

During the two-day Summit, President-IDA Dr. G.S. Rajorhia was requested to Chair a session titled “CEO Panel – Dairy Safety and Quality – Where are we?” Dr. Rajorhia talked about the outcome of the National milk survey conducted by the FSSAI. He expressed that only 17% raw milk samples were found adulterated against the publicity given to milk quality by press and media. He also informed that an advisory was issued after the survey that efforts should be made to standardize pasteurized milk to avoid any addition of water in the milk at plant level. Under National Dairy Plan – II (NDP-II), it has been proposed to use the funds towards extending the capacity of cattle feed plants and developing infrastructure for the dairy sector. He also talked about the challenges being faced by the dairy industry in milk production as there is an issue of productivity per animal and increasing input cost of milk production.

#### **9.4: Controversial New Milk Shakes Up Big Dairy: Mike Cherney**

**SYDNEY:** An upstart milk company’s success in marketing a controversial type of milk that is supposed to be easy to digest has some big dairy companies setting aside their skepticism to introduce their own versions.

New Zealand-based Fonterra Co-operative Group Ltd.—the world’s biggest dairy exporter, which sells Anchor butter and Mainland cheese in the U.S.—said in February it would start producing A2 milk, which contains only the A2 beta-casein protein, after years of dismissing it as a gimmick. That same month, Nestlé SA began selling a new infant-formula powder in China based on A2 milk, hoping to boost sales in a market that has been lucrative for foreign dairy companies after the 2008 tainted-milk scandal.

Both are following the success of a2 Milk Co., a New Zealand-based company that has found fans in its home country, as well as Australia and China, and has recently entered the U.S. market. The company’s revenue is expected to grow some 70% in the year ending in June, according to S&P Global Market Intelligence. It already has more than 10% of the milk market in Australia. A similar share in the U.S. would be about \$1.5 billion in annual sales, according to Euromonitor International.

A2 milk differs from regular milk because the latter contains both A1 and A2 proteins. Supporters of A2 milk contend it is the A1 protein that causes indigestion for many people, a problem that lactose-free milk won’t solve. Skeptics say there hasn’t been enough independent research to show there is any real benefit to A2 milk, which is naturally produced by cows with a particular set of genes. A DNA test can determine which cows in a herd produce A2-only milk.

Although the science behind so-called A2 milk remains disputed, the entry of big companies into the market shows how changing consumer preferences create new opportunities that dairy giants can’t afford to ignore—especially as profits have been eroded in recent years by everything from almond milk to

dairy-free ice cream. In the U.S., traditional milk sales have fallen about 7% annually on average over the last four years, according to the most recent data from Nielsen.

Betting on A2 milk to make up for the decline isn't without risks.

"When your value proposition is based on science, there's always that risk" that future research disproves the claims, said Michael Harvey, senior dairy analyst at Rabobank. Nonetheless, "what you're seeing is consumers more and more recognizing the A2 story."

A study published in October of 600 adults in China found that participants, who claimed to be lactose intolerant, had fewer stomach issues after drinking A2 milk compared with regular milk. Other recent research, backed in part by the New Zealand government, concluded that a small group of lactose-intolerant women didn't feel nauseated after drinking A2 milk. Both studies, however, received some funding from a2 Milk Co.

"There is no current scientific evidence that A2 milk has nutrition and health benefits beyond regular milk," Greg Miller, chief science officer at the National Dairy Council in the U.S., said in a statement.

As recently as 2012, Fonterra executives said there wasn't enough evidence to back up the A2 theory. When asked why Fonterra, which plans to begin producing A2 milk in partnership with a2 Milk Co., had changed its stance, a representative said that "consumers like to have choices" and recent sales growth in a2 Milk Co. products "shows the potential."

A spokesperson for Wyeth Nutrition, the Nestlé business that is selling the new A2 infant formula in China, said the product was "designed to support babies' digestive comfort" and has received "very positive market feedback so far."

A2 Milk Co., founded in 2000, is expanding its U.S. business into the Northeast, and its milk is available at retailers like Wegmans, ShopRite and Stop & Shop, according to Chief Executive Geoffrey Babidge. The milk is already sold in other parts of the country, including in California, where it launched in 2015, and the Southeast and at some Whole Foods stores.

"We're the first to say there should be ongoing, continued investment and support for further research into the science," Mr. Babidge said in an interview. "But our view would be there's sufficient scientific information and consumer engagement which would indicate the benefits of the product."

Investors have been bullish on a2 Milk Co.'s prospects, and the company's shares—dual-listed in New Zealand and Australia—more than tripled in value last year. Still, there is a debate over whether it will ultimately be able to compete with global food giants if more decide to launch A2 milk products, given their existing distribution networks and well-known brands. Shares fell nearly 8% in Australia on the day investors learned of Nestlé's A2 infant formula.

But Mr. Harvey, the Rabobank analyst, said the embrace by the bigger players of the A2 idea "certainly gives another level of validity to the concept."

*(Source: The Wall Street Journal. April 25, 2018; Brendon O'Hagan/Bloomberg News)*

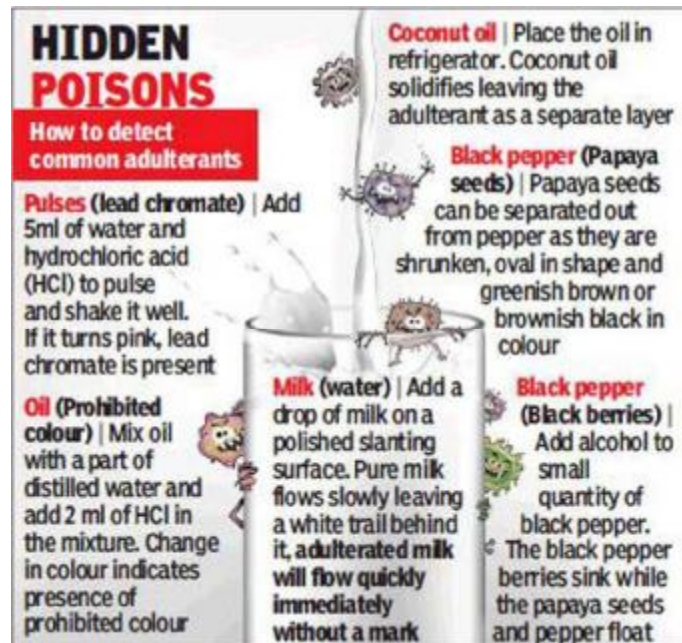
## 10. SCIENCE, HEALTH & SOCIETY

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### 10.1: Nearly 40% of young children have never had their vision tested by a doctor

New data from the CDC finds that more than a third of children between the ages of 3 and 5 had never had their eyes checked by a physician. The U.S. Preventive Services Task Force recommends that children in this age group get a vision test at least once to check for lazy eye (called amblyopia) and promptly begin treatment. Looking at data between 2016 - 2017, researchers found that 64% of children aged 3-5 had ever had an eye test. At the same time, vision tests weren't as common among certain groups: Hispanic children were less likely to have had a vision test, as were children who had some form of public insurance or who were uninsured. Children who hadn't had a regular health checkup in the previous year were also less likely to have gotten their eyes checked.

### 10.2: Hidden Poisons: How to Detect Common adulterants;



Source: Dairy Pulse 94th Edition (15th to 30th September, 2019)

## 11. FORTHCOMING EVENTS

### Calendar of Conferences, Conventions and Symposia in India and abroad

Get your event listed in this section by mailing complete details to the Editor: [rnkohli@gmail.com](mailto:rnkohli@gmail.com)

11.\_: XXVI Annual Convention & National Conference of Indian Society for Veterinary Immunology & Biotechnology (ISVIB) on “Transforming Livestock Economy through Innovations in Immunology and Biotechnology” during **20-22 January 2020** at **ICAR-Indian Veterinary Research Institute, Izatnagar**. For details: **Dr. Yashpal S. Malik**, Organizing Secretary VIBCON-2019, & ICAR-National Fellow, ICAR-IVRI, Izatnagar;  
**Phone: 7500777999, 9410938913.**

Emails: [malikyps@gmail.com](mailto:malikyps@gmail.com); [malikyps@ivri.res.in](mailto:malikyps@ivri.res.in); [vibcon2019@gmail.com](mailto:vibcon2019@gmail.com).

11.\_: XXXIII Annual Conference of the Indian Association of Veterinary Microbiologists, Immunologists and specialists in Infectious Diseases (IAVMI) at **ICAR-Indian Veterinary Research Institute, Izatnagar** on **February 6-7, 2020** on the **Theme** “Challenges & Threats of Microbes to Animals and Humans”. For details contact: **Dr. Ashok K. Tiwari**, General Secretary, IAVMI, & Head, Division of Biological Standardization, Indian Veterinary Research Institute, Izatnagar-243 122 UP, INDIA ; Telefax: +91-581-2302757; Fax: +91-581-2303294; Cell No. +91-9457357425; E-Mail: [<aktiwari71d@gmail.com>](mailto:<aktiwari71d@gmail.com>)

11.\_: Feed Tech Expo, **GADVASU, LUDHIANA, 7- 8 February 2020**; For details contact: Email: [feedtechexpo@gmail.com](mailto:feedtechexpo@gmail.com); Web: [www.feedtechexpo.com](http://www.feedtechexpo.com)

11.\_: Kolkata International Poultry Fair, **Eco Park, Kolkata, 12-14 February**, For details contact: Email: [wbpoultryfederation@yahoo.com](mailto:wbpoultryfederation@yahoo.com)

11.\_: International Conference on Virology - **VIROCON, 18-20, February, 2020**; Organized by Indian Virological Society. Theme: Evolution of Viruses and Viral diseases.

For details Contact: Organizing Secretary **Dr. V.K. Baranwal**, +91 9818756899, or Co-organizing Secretaries: [virology.ivs.net.in](http://virology.ivs.net.in); [www.virocon2020.com](http://www.virocon2020.com)

11.\_: 48<sup>th</sup> Dairy Industry Conference, **20 - 22, February, 2020, Birla Auditorium, Jaipur, Rajasthan**. Organized by IDA (North Zone) on the Theme: “Dairying for Health and Wealth”. For More Information: [jaipur48dic@yahoo.com](mailto:jaipur48dic@yahoo.com).



11.\_: 36th World Veterinary Association Congress 2020, **6-8 April, 2020**, in **Auckland, New Zealand**. It will be hosted in conjunction with the highly successful NZVA Annual Conference and will bring veterinarians from all over the world to Auckland to share ideas, learn and to have fun. The congress will explore and seek solutions to some of the biggest animal health and welfare challenges facing all species in the fast changing world.

The WVAC 2020 programme will focus primarily on clinical veterinary medicine, veterinary public health, animal welfare and academic research across all domestic species. Other topics to be covered include companion animal nursing, large animal veterinary technicians and equine. At the World Veterinary Association Congress 2020 in Auckland there will be a specific space for academic posters where researchers and clinicians can share their findings in a poster session.

Contact for details: <https://www.wvac2020.com/>

11.\_: VIV Meat & Poultry Russia, **May 9-11, 2020, Moscow, Russia**. For details Contact: Email: [infomeatindustry.ru](mailto:infomeatindustry.ru); Web: [meatindustry.ru](http://meatindustry.ru)

11.\_: IDF World Dairy Summit 2020, **Cape Town, South Africa, September 28-October 1, 2020**, Contact for details: <https://idfwds2020.com>



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