# 3. Evaluative Report of the Department (Department Concerned)

- 1. Name of the Department: **Biostatistics and Medical Informatics**
- 2. Year of establishment: Initially setup as Computer Centre in 1988, elevated to department in 2005.
- 3. Is the Department part of a School/Faculty of the university? **No**
- 4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.) **NA**
- 5. Interdisciplinary programmes and departments involved: NA
- 6. Courses in collaboration with other universities, industries, foreign institutions, etc. NIL
- 7. Details of programmes discontinued, if any, with reasons NA
- 8. Examination System: Annual/Semester NA
- 9. Participation of the department in the courses offered by other departments **Teaching of Biostatistics at UG level**
- 10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	0	0	1 (Retired in 2010)
Associate Professors	1	0	0
Asst. Professors	1	0	0
Others (Senior Resident)	NA	NA	NA

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

Name	Qualifica- tion	Designation	Specialization	Experience (Years)
Dr. A. Indrayan	PhD	Professor (Retired in 2010)	Biostatistics	More than 30 yrs

- 12. List of senior Visiting Fellows, adjunct faculty, emeritus professors NIL
- 13. Percentage of classes taken by temporary faculty programme-wise information NA
- 14. Programme-wise Student Teacher Ratio NA
- 15. Number of academic support staff (technical) and administrative staff: Sanctioned filled actual

<b>Academic Support Pos</b>	<u>st</u>			
2	2		2	
Technical Post				
8	7		7	
Others (MPW, Helper)				
2		2		2

- 16. Research thrust areas as recognized by major funding agencies **Bio-statistical Applications in Medical Data**
- 17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise

### Academic (non-vacational) Staff:

**Dr AK Bansal** 

**Co- Investigator**: Vitamin D supplementation for Severe Pneumonia in under Five Children: A Double blind Randomized Placebo Controlled Trial. (2012-2015). Funded by ICMR, 49 Lakhs.. Ongoing

## Project.

- Inter-institutional collaborative projects and associated grants received NIL
   a) National collaboration
   b) International collaboration
- 19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received **NIL**
- 20. Research facility / centre with
  - state recognition No
  - national recognition No
  - international recognition No
- Special research laboratories sponsored by / created by industry or corporate bodiesNo
- 22. Publications: (List of Publications enclosed as Annexure I)
  - Number of papers published in peer reviewed journals (national /international) 18
  - \* Monographs Nil
  - Chapters in Books Nil
  - \* Edited Books Nil
  - Books with ISBN with details of publishers NA
  - Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) - NA
  - Citation Index range / average

- \* SNIP -
- \* SJR -
- Impact Factor range / average
- \* h-index NA
- 23. Details of patents and income generated NIL
- 24. Areas of consultancy and income generated **Bio-statistics**, **free of cost**
- 25. Faculty selected nationally / internationally to visit other laboratories / institutions/ industries in India and abroad **NA**
- 26. Faculty serving in
  - a) National committees b) International committees c) Editorial Boards d) any other (please specify) **NA**
- 27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs). **NA**
- 28. Student projects NIL
  - percentage of students who have done in-house projects including interdepartmental projects - NA
  - percentage of students doing projects in collaboration with other universities/ industry / institute - NA
- 29. Awards / recognitions received at the national and international level by -
  - Faculty

# Academic (non-vacational) Staff:

#### **Dr AK Bansal**

- Best Paper Award to "Library Circulation System" by Computer Society of India.
- Best Paper Award to "Model for clustering of longitudinal data sets over a period of time" by the South-East Region of the **Decision Science Institute**, Hilton Head, S.C., U.S.A.
- Chaired a session on "Kaplan Meir, Cox regression model and Quantile Regression" at 32<sup>nd</sup> Annual National Conference of **Indian Society for Medical Statistics**, Jammu University, Jammu, India, November 2014.
- Invited for a plenary talk on "Statistical Cartography in studying Dynamics of Suicide Rates in India" at 2<sup>nd</sup> International Conference on Medical Negligence and Litigation in Medical Practice and recent advances in Forensic Medicine and Toxicology, Bardez, Goa, India, February 2011.
- Treasurer Computer Society of India
- Vice President All India Association of ICT Professionals
- Treasure Indian Society for Medical statistics
- Biostatistical Reviewer for <u>Indian Journal of Medical Research</u> and <u>Indian Journal of Orthopedics</u>
- Doctoral / post doctoral fellows NIL

- Students NA
- 30. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any **NIL**
- 31. Code of ethics for research followed by the departments **No**
- 32. Student profile programme-wise: NA

Name of the	1 ''	Selected		Pass percentage	
Programme (refer to question no. 4)		received	Male	Female	Male

33. Diversity of students - NA

Name of the	% of	% of students	% of students	% of
Programme (refer to question no. 4)	students from the same u niversity	from other universities within the S tate	from universities outside the State	students from other countries

- 34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise **NA.**
- 35. Student progression NA

Student progression	Percentage against enrolled
UG to PG	
PG to M.Phil.	
PG to Ph.D.	
Ph.D. to Post-Doctoral	
<ul> <li>Employed</li> <li>Campus selection</li> <li>Other than campus recruitment</li> <li>Entrepreneurs</li> </ul>	

36. Diversity of staff - NA

Percentage of faculty who are graduates	
of the same university	
from other universities within the State	
from universities from other States	
from universities outside the country	

- 37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period **NIL**
- 38. Present details of departmental infrastructural facilities with regard to
  - a) Library Available (very small).
  - b) Internet Facilities for Staff and Students Available
  - c) Total Number of Class rooms NA
  - d) Class Rooms with ICT Facility NA
  - e) Students' laboratories NA
  - f) Research Laboratory 1
- 39. List of doctoral, post-doctoral students and Research Associates NA
  - a) from the host institution/university -
  - b) from other institutions/universities -
- 40. Number of post graduate students getting financial assistance from the university NA
- 41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology. **NA**
- 42. Does the department obtain feedback from NA
  - a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback? **NA**
  - b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback? **NA**
  - c. alumni and employers on the programmes offered and how does the department utilize the feedback? **NA**
- 43. List the distinguished alumni of the department (maximum 10) NA

- 44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts **NA**
- 45. List the teaching methods adopted by the faculty for different programmes **NA**
- 46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored? **NA**
- 47. Highlight the participation of students and faculty in extension activities NA
- 48. Give details of "beyond syllabus scholarly activities" of the department NA
- 49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details **No**
- 50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied **through books**, **Journals and Internet**.
- 51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department –

Strength: It was the first of its kind among medical colleges in Delhi and provide bio-statistical consultation of the international level.

Weakness: Shortage of Faculty and Staff.

Opportunities: Lot of intricate and diverse medical data for research.

Challenges: To handle the protocol/thesis workload of more than 150 students

52. Future plans of the department – **To enable the campus with Wi-Fi facility** 

#### **Publications**

- 1. Bansal A.K., Bansal A., Aggarwal N.K. & Kanan A.T.: Does Trends of Suicide Rate Cluster Geographically in India? A Spatial Analysis Based on Method of Dissimilarity Coefficients for Longitudinal Dataset, Int J Life Sc Med Res, 2(4):1-7, Dec 2012.
- 2. Bansal A.K.: Consensual and Visual Approach to obtain Clusters of Longitudinal dataset through Cross-sectional Methods in proceedings of National Conference on Medical Statistics (ISMSCON 2012), Dayanand Medical College & Hospital, Ludhiana, Punjab, October 2012.
- **3.** Agarwal K.N., Agarwal D.K. & **Bansal A.K**.: Choice of growth curves for Indian children, Paediatrics Today, XV(1), 2012.
- **4.** Kailash Nath Agarwal, Dev K. Agarwal, Arti Gupta, **Ajay Kr Bansal**: Relationship of Exclusive Breast Feeding for 6 mo to Linear Growth up to 18 mo of Age, Indian Journal of Pediatrics, January 2013, Volume 80, Issue 1, pp 11-15
- 5. Bansal A.K.: An easier way of obtaining clusters of longitudinal time trends using confidence interval of mean on health data from 1995 to 2011" in proceedings of International Conference on Soft Computing, Artificial Intelligence, Pattern Recognition, Biomedical Engineering and Associated Technologies (SAP-BEATS 2013), MBM Engineering College, JNV University, Jodhpur, Rajasthan, February 2013.
- **6. Bansal A.K.:** Unethical Practices in Collection and Analysis of Clinical Data in proceedings of 32<sup>nd</sup> Annual National Conference of Indian Society for Medical Statistics, Jammu University, Jammu, India, November 2014.
- **7. Bansal A.K.**, Sharma S.D.: Reliability of the model for clustering of longitudinal data sets of infant mortality rate in India, COBRA Preprint Series. Article 57. <a href="http://biostats.bepress.com/cobra/ps/art57">http://biostats.bepress.com/cobra/ps/art57</a>, August 2009.
- **8.** Indrayan A, **Bansal AK**: The methods of Survival Analysis for Clinicians, Indian Pediatrics, 47:743-748, Sep 2010.
- **9.** Dehghani A, Bhasin SK, Dwivedi S, **Kumar R**. Influence of comprehensive life style intervention in patient of CHD. Global journal of health science 2015:7:6-10.
- **10.** Chhabra SK, **Kumar R**, Gupta U, Rahman M, Dash DJ. Prediction equations for spirometer in Adults from Northern India. The Indian journal of chest disease & Allied Sciences 2014;56: 221-229.
- **11. Kumar R** Maroof A, Chatterjee P. Types of observational studies in medical research. Astrocyte 2014: 1; 154-159.
- **12.** Marrof A, **Kumar R**, Chatterjee P. Understanding the basic statistical questions that disturb a medical researcher. Astrocyte 2014:1; 62-66.
- **13. Kumar R**, Chhabra P. Cautions required during planning, analysis and reporting of multivariable logistic regression. Current Medicine Research Practice 2014:4:31-39.
- **14. Kumar R**. Improper reporting of multivariable logistic regression. Indian journal of psychological Medicine 2014;36: 102-3.
- **15.** Mittal H, Rai S, Shah D, Madhu SV, Mehrotra G, **Malhotra RK**, Gupta P. 300,000 IU or 600,000 IU of Oral Vitamin D3 for Treatment of Nutritional Rickets: *A Randomized Controlled Trial*. **Indian Pediatr** 2014;51:265-272.
- **16.** Rajat Thawani, Pooja Dewan, M M A Faridi, Shilpa Khanna Arora, Rajeev Kumar. Estimation of Gestational Age, Using Neonatal Anthropometry: A Cross-sectional

- Study in India. Journal of Health Population and Nutrition 2013; 31(4):523-30.
- 17. Kumar R, Indrayan A, Chhabra P. Reporting quality of multivariable logistic regression in selected Indian medical journals. **Journal of Postgraduate Medicine** 2012.58:123-6.
- **18. Kumar R**, Indrayan A. Receiver operating characteristic (ROC) curve for medical researchers. **Indian Pediatr**.2011;48:277-87