

Data analysis and mining to study research aptitude of medical students in India

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Indian Council of Medical Research



Research Grants

1. Extramural Research Grant

- ✓ Task Force Projects
- ✓ Adhoc Schemes
- ✓ Centres for Advanced Research
- ✓ Fellowships
- ✓ Cancer Registry
- ✓ Human Reproductive Research Centres

2. Emeritus Medical Scientist Scheme

3. ICMR International Fellowship Programme for Indian Biomedical Scientists

4. ICMR International Fellowships for Biomedical Scientists from Developing Countries

5. Short Term Research Studentship(STS)

6. ICMR Talent Search Scheme for MD/MS-PhD Programme

STS Programme

- **For undergraduate medical students**
- **Started in 1979**
- **To promote interest and aptitude for research**
- **To familiarize them with research methodologies and techniques**
- **To provide incentives to choose research as career**
- **Received good response from students**

STS Programme Advertisement



SHORT TERM STUDENTSHIP (2010)

STS 2010

APPLICATION PROCESS

General Information

Announcement

Instructions

DOWNLOAD

- Attestation Form

- Sample Application Form

RESULT

REPORT SUBMISSION INSTRUCTIONS

General Instruction

Preparation of Report

ONLINE Report Submission Form

Self Checklist

Writing STS Report

DOWNLOAD

- Report Attestation Form

- Sample Report Submission Form

Terms & Conditions

CONTACT INFORMATION

[HOME](#)

[UG Medical Students' Regional Research Conference](#)
Date: October 23-25, 2010

Note: Certificates of STS-2008 & STS 2009 students have been posted to the Principal's Office. The students who participated in STS-08 & STS-09 are requested to collect their certificates from the college office.

1. The Indian Council of Medical Research initiated the Short Term Studentship Program in 1979 in order to promote interest and aptitude for research among medical undergraduates. The main objective of this program is to provide an opportunity to undergraduate medical students to familiarize themselves with research methodology and techniques by being associated for a short duration with their seniors on ongoing research program or by undertaking independent projects. This may serve as an incentive for them to take up research as a career in the future. The Institution must provide the student with all facilities for carrying out research.
2. During the last 30 years, medical undergraduate students of various medical colleges in the country have shown keen interest in Council's Short Term Research Studentship program. The Council has decided to continue this program by awarding limited number of studentships to deserving undergraduate students during the vacation for the year 2010.
3. **For any queries please contact :**

Head (BMS)
Indian Council of Medical Research
V. Ramalingaswami Bhawan
Ansari Nagar
New Delhi - 110029

or

Dr. Roli Mathur, Scientist 'C',
Division of BMS
Indian Council of Medical Research
V. Ramalingaswami Bhawan
Ansari Nagar
New Delhi - 110029

Telephone No. : 26588895, 26588980, 26589794, 26589336, 26588707 Extn. 215

or

Email : sts.icmr@gmail.com

Sample Form

APPLICATION FOR SHORT TERM STUDENTSHIP STS 2010

INDIAN COUNCIL OF MEDICAL RESEARCH

Note: Forms which are complete in all respects will only be accepted for review and rest will be automatically rejected

Your Login: admin_sts Your Reference ID: 2010-04000

A. ENCLOSURES/ ATTACHMENTS

ATTESTATION FORM (Attachment)

[View - Uploaded Attested Form](#)

1. Ethics Committee Approval (IEC or IAEC)
(Attachment)

[View - Uploaded Ethics Committee Approval](#)

2. Informed Consent Form (Attachment)

No Details Uploaded

3. Case Study Form (Attachment)

No Details Uploaded

4. Study Questionnaire (Attachment)

No Details Uploaded

B. DETAILS OF THE APPLICANT

Name in Block Letters	: MISS JUGEET KAUR KANWAL
Sex	Female
Date of Birth (dd/mm/yyyy)	01/09/1988
Class	MBBS II Prof
Title	"Study of the effect of Metformin on Ethanol induced hepatic dysfunction in rats" [A part of ongoing study for which IAE approval has been obtained]
Subject Area	Pharmacology
Name of the Department	Pharmacology
Name of the Medical College	Bharati Vidyapeeth University Medical College Pune
Address for Correspondence (change in address at a later date to be avoided)	C/o Mrs. Kanchan D. Borole Department of Pharmacol
City	Pune
State	Maharashtra
Pin	411043
Mobile	9049184864

[Cont...](#)

Sample Form

Telephone	Residence	STD Code	Tel Ph	
		020	25436811	
	Office	STD Code	Tel Ph	If,Extn
		020	24373226	226
Email	kanchan_brl@yahoo.com			

D. DETAILS OF THE PROPOSED STS-2010 PROJECT

1. Is this re-application of STS 2009 project if project not completed last year: No

2. Research Proposal

[View - Research Proposal](#)

Administrator's page

SHORT TERM STUDENTSHIP

Administrator's Page - LoginID:

Applicant's Details

Close

Logout

SINo.	Reference ID	Name	Subject	Status	Reviewer
1	2010-00004	AVRITI BAVEJA	Reproductive Health	FORWARDED	Malabika Roy , Nomita Chandhiok
2	2010-00005	PANKHURI AGARWAL	Epidemiology	FORWARDED	M.L.Mathur , Prabhdeep Kaur
3	2010-00006	MAYANK PAHUJA	Social and Preventive Medicine	FORWARDED	M.L.Mathur , Prabhdeep Kaur
4	2010-00008	SONAM GUPTA	Social and Preventive Medicine	FORWARDED	Kamlesh Sarkar , Dipika Sur
5	2010-00009	SHEEBA BHARDWAJ	Reproductive Health	FORWARDED	Shalini Singh , R.S.Sharma
6	2010-00010	REENA SINGH	Child Health	FORWARDED	Prashant Mathur , Vasantha Thavaraj
7	2010-00011	SANGEETA MAURYA	Epidemiology	FORWARDED	Kamlesh Sarkar , Dipika Sur
8	2010-00013	SHILPY SINGH	Surgery	FORWARDED	Rupinder Singh Dhaliwal , Neeta Kumar
9	2010-00015	ANKUR PANDEY	Epidemiology	FORWARDED	C.Kolappan , S.M.Mehendale
10	2010-00017	SHWETA GAUR	Surgery	FORWARDED	Vasantha Thavaraj , Prashant Mathur
11	2010-00019	AMIYA PANDEY	Social and Preventive Medicine	FORWARDED	C.Kolappan , Kishor Chaudhry
12	2010-00022	VIKAS KUMAR SHARMA	Social and Preventive Medicine	FORWARDED	S.M.Mehendale , Vidva Ramachandran
13	2010-00023	SUGANDHI SHARMA	Surgery	FORWARDED	Kishor Chaudhry , Rupinder Singh Dhaliwal
14	2010-00025	ANUP SINGH	Ophthalmology	FORWARDED	Rupinder Singh Dhaliwal , Ashoo Grover
15	2010-00029	SHWETA BHARDWAJ	Surgery	FORWARDED	Neeta Kumar , Vasantha Thavaraj
16	2010-00031	rdtfguhij	ENT	REJECTED	
17	2010-00032	KM. SHRADDHA GANGWAR	Epidemiology	FORWARDED	Vidva Ramachandran , Jyoti Thulkar
18	2010-00039	ANUBHAV BAVEJA	Surgery	FORWARDED	Prashant Mathur , Kishor Chaudhry
19	2010-00043	ANCHIT GOEL	Orthopedics	FORWARDED	Prashant Mathur , Rupinder Singh Dhaliwal

Reviewer's page

SHORT TERM STUDENTSHIP

Reviewer's Page : mathurp@icmr.org.in

Technical Review - List of Proposals to be Evaluated

Close

- A. Introduction/ Background
- B. Objectives
- C. Methodology
- D. Implications
- E. New Idea for research

SlNo.	Reference ID	Research Proposal	Case Study Form	Study Questionnaire	Max. Marks					Submit
					10	10	20	5	5	
					A	B	C	D	E	
1	2010-00898	View	NIL	NIL	8	6	15	3	3	SENT
2	2010-00811	View	NIL	NIL	6	7	12	3	3	SENT
3	2010-03921	View	NIL	View	6	6	14	3	3	SENT
4	2010-01116	View	View	View	7	7	12	4	5	SENT
5	2010-00085	View	NIL	View	6	6	15	3	3	SENT
6	2010-00144	View	NIL	NIL	6	6	14	3	2	SENT
7	2010-00506	View	NIL	NIL	6	5	9	1	1	SENT
8	2010-00706	View	View	NIL	5	3	10	3	2	SENT
9	2010-00183	View	NIL	View	7	6	15	2	3	SENT
10	2010-00533	View	NIL	View	5	5	15	2	3	SENT
11	2010-00255	View	NIL	View	7	7	14	3	3	SENT
12	2010-00436	View	View	View	7	6	13	3	3	SENT
13	2010-01004	View	View	NIL	6	5	8	2	1	SENT
14	2010-00947	View	View	NIL	6	5	10	2	1	SENT

STS Result Announcement

Indian Council of Medical Research

Short Term Studentship (STS 2010)

Result

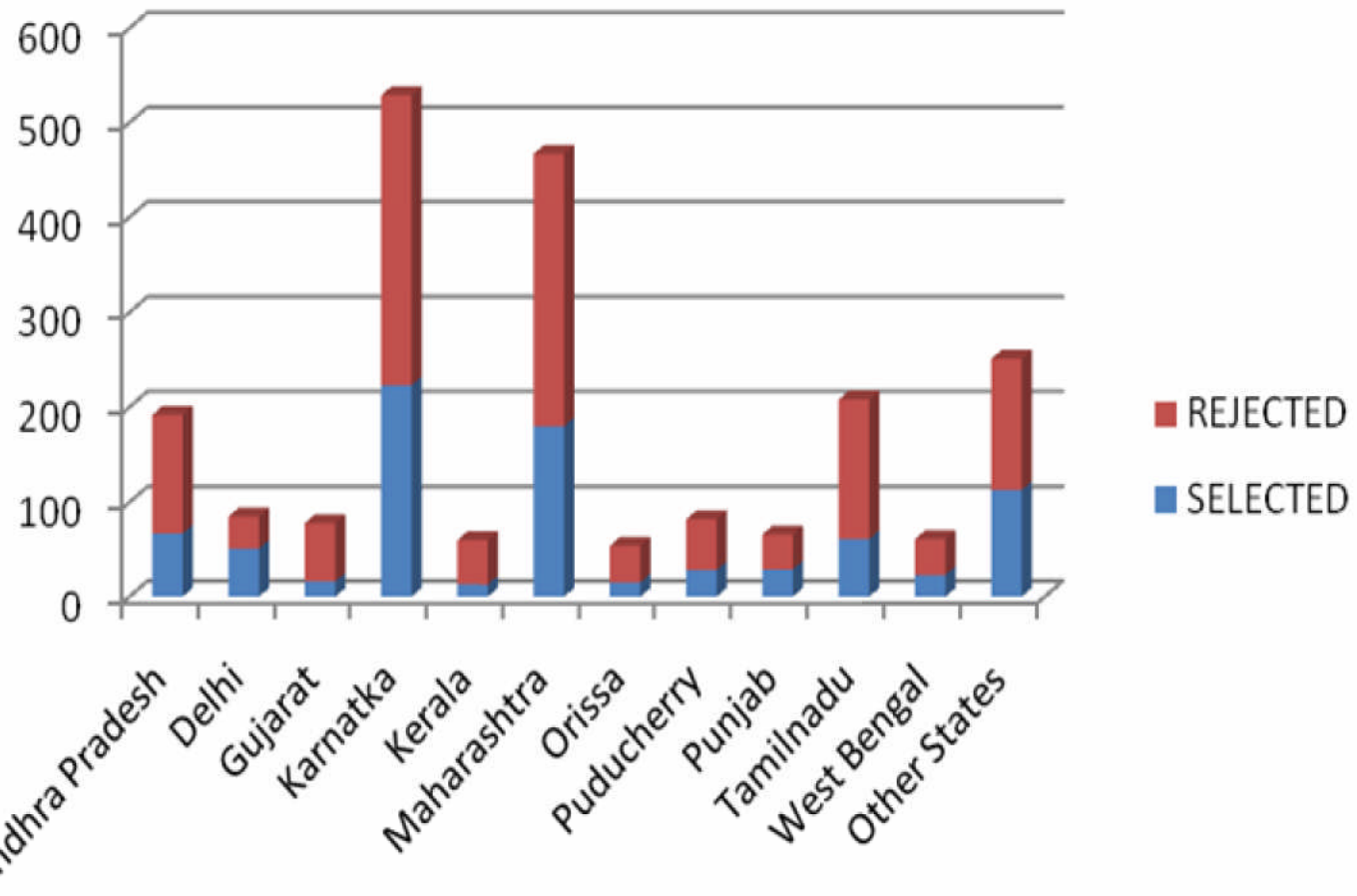
List of Students selected for STS 2010

Sl.No.	Student Ref. ID	Student Name
1	2010-00004	AVRITI BAVEJA (*WL)
2	2010-00009	SHEEBA BHARDWAJ
3	2010-00019	AMIYA PANDEY
4	2010-00032	SHRADDHA GANGWAR
5	2010-00043	ANCHIT GOEL
6	2010-00047	PULKIT KAUSHAL
7	2010-00049	KIRAN GOUD BURRA
8	2010-00052	SUDHIR BADLANI
9	2010-00064	Y.ARAVIND
10	2010-00066	RONAK R MANKODI
11	2010-00069	NEHA AHLUWALIA
12	2010-00073	ANAND NATH
13	2010-00076	BHATTAD VENUGOPAL BRIJMOHAN
14	2010-00084	BHUVANESWARI K
15	2010-00085	NONITA DHIRAR
16	2010-00086	JAI RANJAN
17	2010-00088	SUPRITHA VELMURUGAN

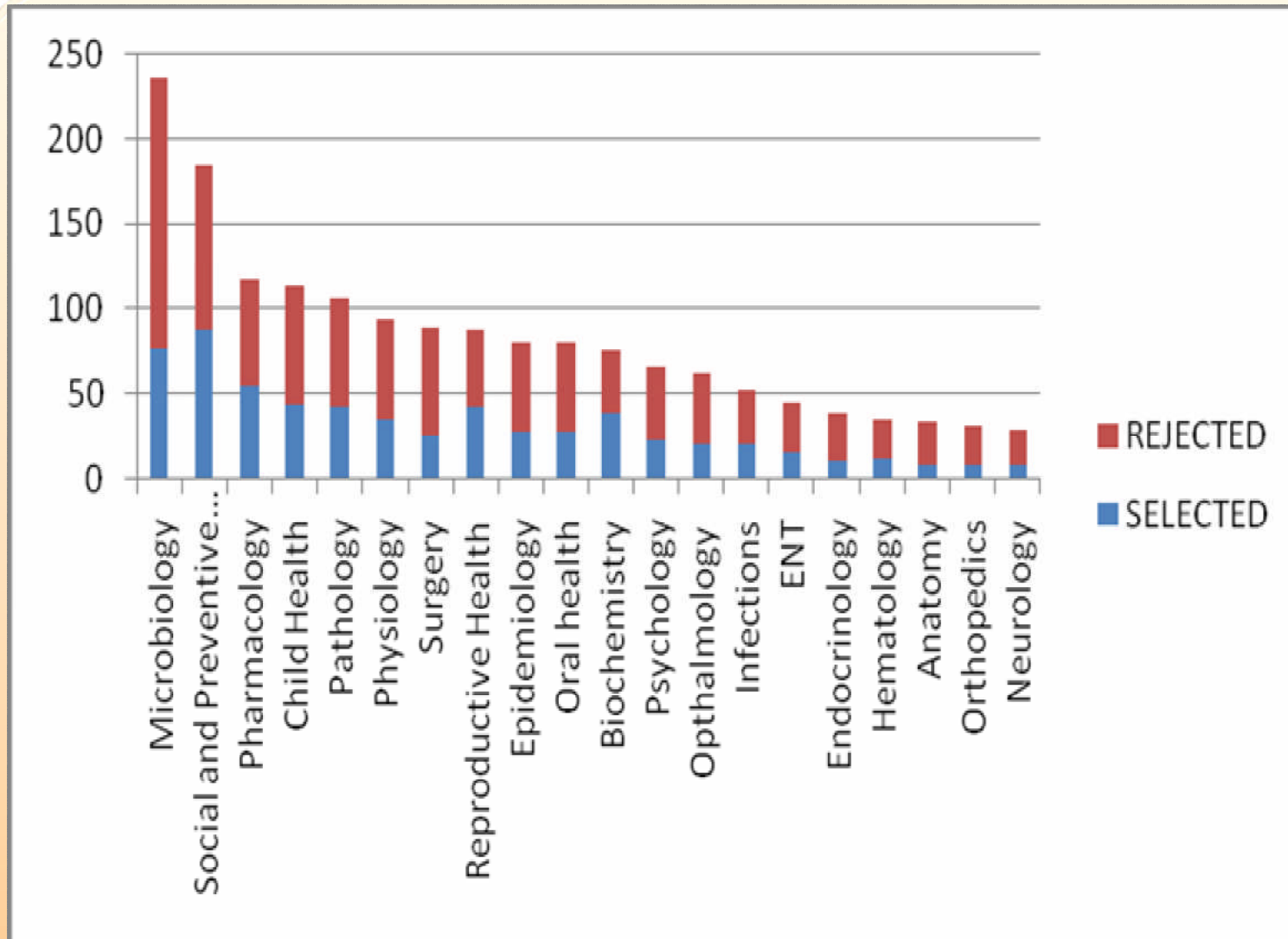
Data Cleansing

- **Students sent dummy (junk data) and duplicate applications**
- **Wrong attachments**
- **Names of Medical colleges written differently**
- **State and City of residential address used as address for correspondence**
- **Discrepancy in evaluation by Reviewers**

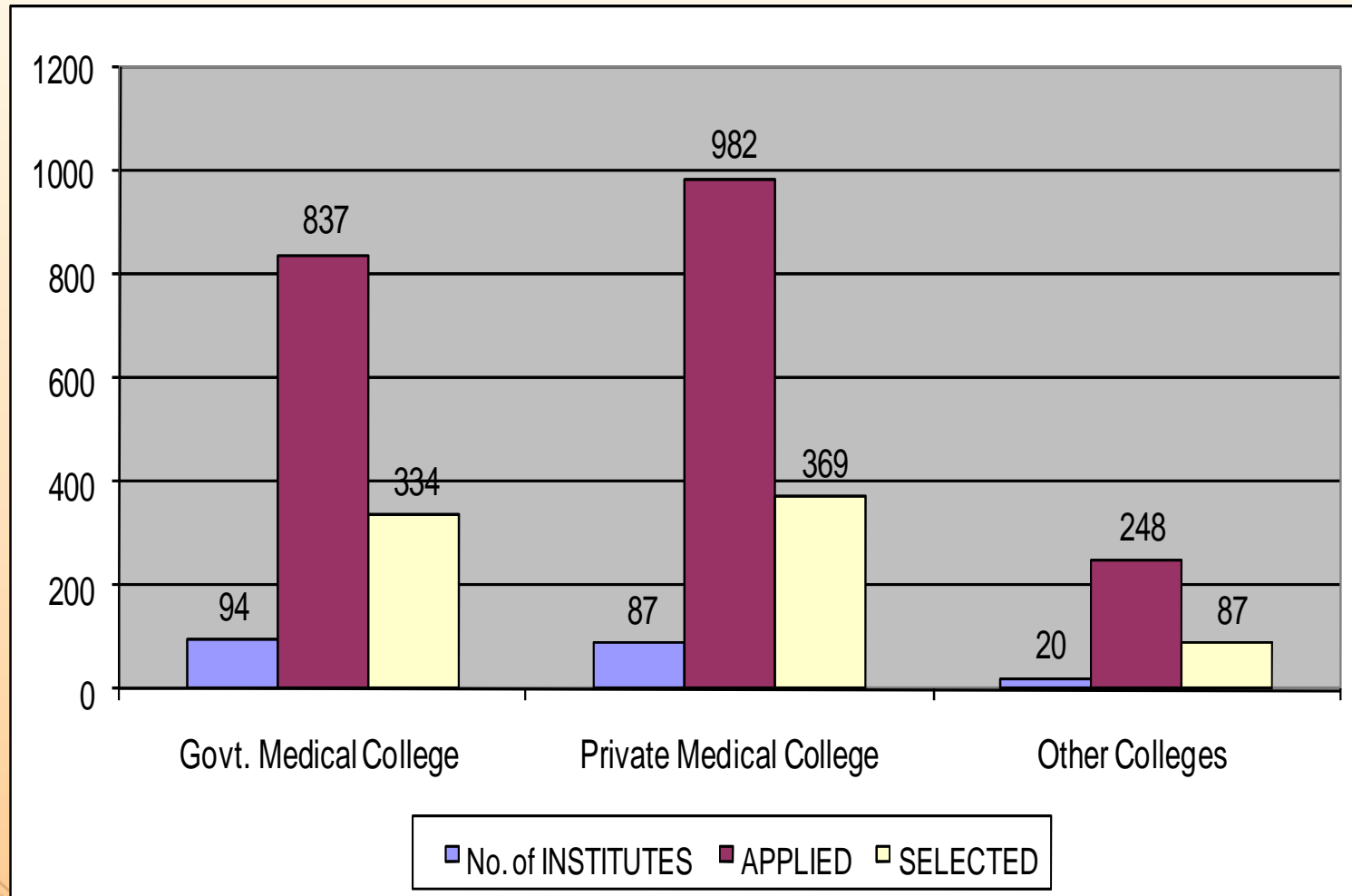
Applications Received (State-wise)



Applications Received (Subject-wise)



Applications Received by Category of Institutes



Representation of Data by Category of Institutes and States Compared with Extramural Projects

Total Applications
 Institutes: 201
 Students: 2067
 ICMR Projects: 1740

Govt. Medical College
 Institutes: 94
 Students: 837
 ICMR Projects: 670

Private Medical College
 Institutes: 87
 Students: 982
 ICMR Projects: 221

Other Research Institute
 Institutes: 20
 Students: 248
 ICMR Projects: 849

STATE	AP	DE	KA	MA	TN	UP	WB	OT	AP	GU	KA	MA	PO	PU	TN	OT	KA	OR	PO	TN	OT
INST	10	4	8	15	15	7	8	27	11	3	24	18	3	7	5	17	2	2	1	3	12
STUD	98	83	67	297	85	30	55	122	90	69	432	168	45	51	42	85	30	31	30	81	76
PROJ	3	194	4	74	13	255	24	103	12	1	140	31	1	11	2	23	0	1	1	20	827

Representation of Data by Category of Institutes, States and Male/Female

Total Applications
Institutes: 201
Male: 933
Female: 1134

Govt. Medical Colleges
Institutes: 94
Male: 434
Female: 403

Private Medical Colleges
Institutes: 87
Male: 392
Female: 590

Other Research Institutes
Institutes: 20
Male: 107
Female: 141

State	AP	DE	KA	MA	TN	UP	WB	OT	AP	GU	KA	MA	PO	PU	TN	OT	KA	OR	PO	TN	OT
Inst	10	4	8	15	15	7	8	27	11	3	24	18	3	7	5	17	2	2	1	3	12
Male	48	50	28	136	42	11	40	79	29	33	169	73	18	18	15	37	13	18	10	26	40
Female	50	33	39	161	43	19	15	43	61	36	263	95	27	33	27	48	17	13	20	55	36

Representation of Data by Category of Institutes, Subjects and type of Study

Total Applications
 Clinical: 1059
 Epidemiology: 624
 Laboratory: 384

Govt. Medical Colleges
 Clinical: 403
 Epidemiology: 291
 Laboratory: 143

Private Medical Colleges
 Clinical: 522
 Epidemiology: 273
 Laboratory: 187

Other Research Institutes
 Clinical: 134
 Epidemiology: 60
 Laboratory: 54

Subject
 Clinical
 Epidemiology
 Laboratory

CHI	MIC	PAT	PHA	PHY	PSY	SOC	OT
28	37	19	24	17	15	29	263
23	15	11	21	15	23	52	183
3	44	11	7	7	0	3	71

CHI	MIC	ORA	PAT	PHA	PHY	SOC	SUR	OTH
27	32	38	26	26	25	26	28	292
18	9	21	10	11	7	47	9	14
4	61	8	14	9	9	2	4	76

Small Data

Representation of Extramural Research data by Category of Institutes, Subjects and type of Study

Total Applications
 Clinical: 272
 Epidemiology: 32
 Laboratory: 564
 Others: 142

Medical Colleges
 Clinical: 80
 Epidemiology: 5
 Laboratory: 39
 Others: 26

Research Institutes
 Clinical: 127
 Epidemiology: 11
 Laboratory: 224
 Others: 41

Others
 Clinical: 65
 Epidemiology: 16
 Laboratory: 301
 Others: 75

Subject
 Clinical
 Epidemiology
 Laboratory
 Others

	CON	MAT	MIC	ONC	VIR	OTH
Clinical	7	14	5	12	7	35
Epidemiology	0	0	1	0	3	1
Laboratory	1	0	4	3	0	31
Others	2	5	0	1	0	18

	MED	NUT	ONC	PHA	VIR	OTH
Clinical	0	3	13	2	17	92
Epidemiology	0	1	0	0	5	5
Laboratory	26	15	16	39	11	117
Others	2	1	3	1	2	32

Small Data

Conclusions

- ✓ Number of students applying for STS has increased from around 800 last year to over 2,000 this year. Access of information through Internet and Online submission facility were main reasons.
- ✓ The application form to be made more specific to get cleaner data for analysis.
- ✓ Statistical tools will be used to minimize bias in review process.
- ✓ Microbiology and SPM were popular subjects. Short duration of project is possible reason.
- ✓ A large number of students from private medical colleges applied.
- ✓ Students from many new medical colleges applied for STS. Most of these colleges had no research background.
- ✓ Only a few students from some of the well established medical research institutes applied for STS.

Cont...

Conclusions

- ✓ More number of female students applied in comparison to males, especially from private medical colleges.
- ✓ More than 50% of the students applied for Clinical projects as they are involved with clinical work at that stage of studies.
- ✓ Comparing with Extramural Projects, Biomedical Research Institutes are more active in research in comparison to medical colleges. These institutes are more inclined towards Laboratory studies.
- ✓ As part of STS programme, workshops are arranged to train medical students in learning research methodologies.
- ✓ STS data in digitized form for a few years will be required to find how many students opted for research career.