



YASIR IQBAL

▲ Students at the SET (Skills, E-Learning, Telemedicine) facility in AIIMS

MEDICAL **1** ALL INDIA INSTITUTE OF MEDICAL SCIENCES, NEW DELHI
No

FORMULA FOR EXCELLENCE

Be a good human being, be empathetic and dedicated to your calling—this is at the core of all courses taught at AIIMS

By Dr Randeep Guleria

The All India Institute of Medical Sciences, at its core, is a culture. Sixty years ago, the founding fathers of the institute developed a culture of excellence, in education, research, academics and patient care, which ultimately depended on its faculty. I am very proud and happy to say that this culture has endured and grown over the years. AIIMS gets a lot of support from the government in terms of funding, but what really sets it apart is its dedicated faculty. Immensely dedicated and involved, they make AIIMS a premier institution.

For students seeking the AIIMS experience, I would like to draw their attention to the rapidly evolving field of medicine. Fundamental changes—never witnessed before in the history of medical science—have taken place in the past two decades. These changes have made it essential for us to change our curriculum and training methods and arm

TOP 10 COLLEGES

- 1** ALL INDIA INSTITUTE OF MEDICAL SCIENCES (AIIMS)
New Delhi
- 2** CHRISTIAN MEDICAL COLLEGE & HOSPITAL (CMC)
Vellore
- 3** ARMED FORCES MEDICAL COLLEGE (AFMC)
Pune
- 4** MAULANA AZAD MEDICAL COLLEGE (MAMC)
New Delhi
- 5** JAWAHARLAL INSTITUTE OF POSTGRADUATE MEDICAL EDUCATION AND RESEARCH (JIPMER)
Puducherry
- 6** KING GEORGE'S MEDICAL UNIVERSITY
Lucknow
- 7** INSTITUTE OF MEDICAL SCIENCES, BANARAS HINDU UNIVERSITY
Varanasi
- 8** UNIVERSITY COLLEGE OF MEDICAL SCIENCES (UCMS)
Delhi
- 9** LADY HARDINGE MEDICAL COLLEGE
New Delhi
- 10** KING EDWARD MEMORIAL HOSPITAL AND SETH GORDHANDAS SUNDERDAS MEDICAL COLLEGE
Mumbai

TOP 5 COLLEGES

COST OF THE BEST

RANK	COLLEGE	TUITION FEES FOR THE ENTIRE COURSE (₹)
1	ALL INDIA INSTITUTE OF MEDICAL SCIENCES <i>New Delhi</i>	8,140
2	CHRISTIAN MEDICAL COLLEGE & HOSPITAL <i>Vellore</i>	75,000
3	ARMED FORCES MEDICAL COLLEGE <i>Pune</i>	0
4	MAULANA AZAD MEDICAL COLLEGE <i>New Delhi</i>	17,300
5	JAWAHARLAL INSTITUTE OF POSTGRADUATE MEDICAL EDUCATION AND RESEARCH <i>Puducherry</i>	29,350

AVERAGE TUITION FEES GOVERNMENT VS PRIVATE

	GOVT	PVT	OVERALL
AVERAGE TUITION FEES	₹2,10,340	₹38,89,710	₹18,14,168

ZONE-WISE TUITION FEE

ZONE	AVERAGE TUITION FEES (In Rs for the entire course)
EAST	9,82,004
WEST	20,30,107
NORTH	14,65,446
SOUTH	24,70,841
OVERALL	18,14,168

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YEARS, THE AVERAGE AGE OF TOP 10 MEDICAL COLLEGES

our students with the knowledge and expertise to cope with the changes and challenges on the expanding frontiers—be it technology or diagnostic tests, the rise of new pathogens or emerging diseases. Always, keeping in mind the needs of the Indian society—from lifestyle, non-communicable

diseases that were not there 20 years ago to the rising threat of antibiotic resistance and the need to use antibiotics judiciously.

In medicine, students learn a lot of things through theory, books and lectures, but when we look at students, we look at a number of things. We



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▲ MD students going through practical training at the ICU

think that there's an enormous need for skill development. Hence, we have set up a skill lab at AIIMS. A virtual simulation lab, here they can acquire a variety of experiences and procedures by using mannequins and models. From simple procedures like putting an IV line or incubating a patient to complex procedures like a laparoscopic surgery.

From practising on cadavers at the wet lab to trying out animal models (say practising a key-hole surgery on a pig model), we are trying to make learning a whole new experience for students. We have organs and parts in cold storage. Students can take those out, study, practise and become more confident. Such facilities are open through the week and even late in the night. It is possible for

RATIO OF MALE TO FEMALE STUDENTS

RANK	RATIO
TOP 10	1.3
TOP 25	1.2



students to come after-hours and work. They can even book their slots online.

We are building a new platform to get lectures uploaded online. A core group is developing e-teaching modules. We have the 'flip classrooms', where we post teaching material online. The anatomy department is already doing this. Students can see the lecture before going to the classroom, where it can then be more of a discussion session than a chalk-and-board talk. Students can see their assignments online and are encouraged to give their feedback.

We also believe that students who are about to become doctors, need to be skilled in patient management. With the rising tension among doctors and patients, from the Emergency to the ICU,

we have decided to teach our students effective doctor-patient communication. Medicine has always been a noble profession with a service component to it. The bond between doctors and patients is sacrosanct. Our teachers had told us exactly this, but 20 years ago that was considered almost natural in medicine. Now as society becomes more transactional and money-based, we need to introspect and get the values back. At AIIMS, we are working to develop a curriculum keeping this in mind.

AIIMS is fundamentally a research institute. At a time when our profession is increasingly focusing on practice, the research component needs to be nurtured—especially, research relevant to India. It is our duty to show students, who are research-oriented, the avenues and opportunities.

Recently, when we organised an open session with our students, on how to develop a curriculum, they expressed keenness about elective courses. We are exploring all the possibilities: can we offer an elective course in humanities, ethics, public health or research methodology? Or, perhaps, in biomedical engineering? We are engaging with the Indian Institutes of Technology to find out if we can send our students to the various IITs to get a different exposure. Perhaps, they could work on small projects for some weeks during summer or interact with engineering students or come up with a device or an app for better patient care, along with their peer groups in the IITs? Can we have more integrated courses, perhaps combined PhD programmes with them? These are some of the new things we are looking at.

We would like to encourage our students to join institutes where they can carry on with the AIIMS tradition. A lot of AIIMS-like institutes and teaching hospitals are coming up. Our students can develop similar structures at these places so that the load from AIIMS is distributed to other places. As these are run by people trained at AIIMS, patients will have faith in these hospitals. That is

ZONE-WISE TOP PRIVATE COLLEGES

ZONE	NATIONAL RANK
NORTH	
DAYANAND MEDICAL COLLEGE & HOSPITAL, Ludhiana	23
CHRISTIAN MEDICAL COLLEGE, Ludhiana	26
ERA'S LUCKNOW MEDICAL COLLEGE, Lucknow	29
SHRI RAM MURTI SMARAK INSTITUTE OF MEDICAL SCIENCES, Bareilly	32
EAST	
SIKKIM MANIPAL INSTITUTE OF MEDICAL SCIENCES, Gangtok	30
SOUTH	
CHRISTIAN MEDICAL COLLEGE & HOSPITAL (CMC), Vellore	2
KASTURBA MEDICAL COLLEGE, Manipal	12
ST JOHN'S MEDICAL COLLEGE, Bengaluru	14
SRI RAMACHANDRA MEDICAL COLLEGE & RESEARCH INSTITUTE, Chennai	15
M.S. RAMAIAH MEDICAL COLLEGE, Bengaluru	22
WEST	
DR D.Y. PATIL MEDICAL COLLEGE, Kolhapur	33
M.G.M. MEDICAL COLLEGE & HOSPITAL, Aurangabad	34
GUJARAT ADANI INSTITUTE OF MEDICAL SCIENCES, Bhuj	39

NB: The above tables have been prepared based on objective data submitted by colleges

one career model that we are keen on. A lot of our students are aware of the demand they have among the general public and in corporate hospitals. Once they get trained at AIIMS, they are the best. If you look around you will find that people doing very well in private and corporate hospitals have either worked in AIIMS or have been trained here.

We have already developed a patent cell at AIIMS. And now we are trying to develop facilities to encourage startups. If a student with a brilliant idea after research wants to take it to the next level, we should be able to help by developing a mechanism to engage the industry and help them become successful entrepreneurs. We are trying to develop a common

bio-park with the IITs, where it will be possible to do collaborative work in nanotechnology, new drug delivery system, point-of-care tests, and so on.

Finally, some words of advice to budding doctors: Be a good human being, be empathetic and dedicated to your calling. You need to understand that you must be willing to have a service component in your work if you wish to be a doctor. Medicine demands that. When you go out, put yourself in your patient's shoes and then take a decision. Above all, it is essential to have basic values in place. That is the foundation of medicine. ■

The author is Director, All India Institute of Medical Sciences. He spoke to Damayanti Datta

MEDICAL / TOP 35 COLLEGES

OVERALL RANK 2018	NAME OF COLLEGE	INTAKE QUALITY & GOVERNANCE	ACADEMIC EXCELLENCE	INFRASTRUCTURE & LIVING EXPERIENCE	PERSONALITY & LEADERSHIP DEVELOPMENT	CAREER PROGRESSION & PLACEMENT	OBJECTIVE SCORE	PERCEPTUAL SCORE	OVERALL SCORE
		300	300	240	180	180	1,200	800	2,000
1	ALL INDIA INSTITUTE OF MEDICAL SCIENCES, NEW DELHI	270.4	253.8	211.6	149.7	175.6	1061.1	800	1,861.1
2	CHRISTIAN MEDICAL COLLEGE & HOSPITAL (CMC), VELLORE	237.6	266.5	171.1	161.4	167	1003.6	763	1,766.6
3	ARMED FORCES MEDICAL COLLEGE (AFMC), PUNE	255.1	238.2	186.1	160.8	153.8	994	768.1	1,762.1
4	MAULANA AZAD MEDICAL COLLEGE (MAMC), NEW DELHI	242.3	229.9	165.6	136.2	134.7	908.7	766.6	1,675.3
5	JIPMER, PUDUCHERRY	245	211.2	178.1	114.9	132.7	881.9	749.4	1,631.3
6	KING GEORGE'S MEDICAL UNIVERSITY, LUCKNOW	233.7	221.8	174.9	130.1	117.5	878	753.1	1,631.1
7	INSTITUTE OF MEDICAL SCIENCES, BHU, VARANASI	235.8	241.2	187.2	86.5	111.8	862.5	725.3	1,587.8
8	UNIVERSITY COLLEGE OF MEDICAL SCIENCES (UCMS), DELHI	264.6	196.4	167.2	130.6	106.3	865.1	714	1,579.1
9	LADY HARDINGE MEDICAL COLLEGE, NEW DELHI	227.2	188.5	156.7	127.4	120.9	820.7	747	1,567.7
10	KING EDWARD MEMORIAL HOSPITAL AND SGS MEDICAL COLLEGE, MUMBAI	219.5	212.4	157.5	128.8	135.5	853.7	680	1,533.7
11	GRANT MEDICAL COLLEGE, MUMBAI	198.6	184.9	152	109.7	142.9	788.1	728.6	1,516.7
12	KASTURBA MEDICAL COLLEGE, MANIPAL	169.6	177.4	181.4	148.4	116.7	793.5	686.1	1,479.6
13	VARDHMAN MAHAVIR MEDICAL COLLEGE, NEW DELHI	222.1	211.2	161.6	96.6	108.6	800.1	638.9	1,439
14	ST JOHN'S MEDICAL COLLEGE, BENGALURU	168.6	209.9	196	127.4	130.9	832.8	603.7	1,436.5
15	SRI RAMACHANDRA MEDICAL COLLEGE & RESEARCH INST., CHENNAI	150.4	206.2	166.6	141.4	112.4	777	659	1,436
16	GOVERNMENT MEDICAL COLLEGE & HOSPITAL, CHANDIGARH	226.5	180.7	180.6	113.6	100.3	801.7	623.3	1,425
17	LOKMANYA TILAK MUNICIPAL MEDICAL COLLEGE, MUMBAI	172.2	208.8	175.8	136.7	115.4	808.9	614	1,422.9
18	JAWAHARLAL NEHRU MEDICAL COLLEGE, AMU, ALIGARH	194.8	179.7	163	146.1	118.2	801.8	615.3	1,417.1
19	R.G. KAR MEDICAL COLLEGE AND HOSPITAL, KOLKATA	187.2	184.9	184.2	147.9	103.4	807.6	596.1	1,403.7
20	GANDHI MEDICAL COLLEGE, HYDERABAD	206.1	127.3	148.7	102	137.5	721.6	644	1,365.6
21	MEDICAL COLLEGE AND HOSPITAL, KOLKATA	160.1	174.5	127.9	126	125.9	714.4	642.2	1,356.6
22	M.S. RAMAIAH MEDICAL COLLEGE, BENGALURU	147.6	187.5	179.7	137.9	128.9	781.6	565.7	1,347.3
23	DAYANAND MEDICAL COLLEGE & HOSPITAL, LUDHIANA	192.1	205.8	160.2	112	89.7	759.8	555.3	1,315.1
24	AMRITA SCHOOL OF MEDICINE, KOCHI	100.4	206.8	196.6	118.9	102.9	725.6	582.2	1,307.8
25	ARMY COLLEGE OF MEDICAL SCIENCES, NEW DELHI	182.2	148.3	163.1	110.4	95.5	699.5	569.4	1,268.9
26	CHRISTIAN MEDICAL COLLEGE, LUDHIANA	131.7	180.6	182.9	110.1	84.3	689.6	568.3	1,257.9
27	KASTURBA MEDICAL COLLEGE, MANGALURU	163.8	148.6	143.3	109.5	117.5	682.7	575.1	1,257.8
28	K.S. HEGDE MEDICAL ACADEMY, MANGALURU	89.4	182.1	164.5	114.8	91.3	642.1	506.6	1,148.7
29	ERA'S LUCKNOW MEDICAL COLLEGE, LUCKNOW	82.7	162.5	175.6	122.1	106.4	649.3	488.8	1,138.1
30	SIKKIM MANIPAL INSTITUTE OF MEDICAL SCIENCES, GANGTOK	79	154.1	153.1	124.5	60.7	571.4	537	1,108.4
31	SRIRAMA CHANDRA BHANJA MEDICAL COLLEGE, CUTTACK	192.2	122.5	153.7	111.3	92.9	672.6	413.1	1,085.7
32	SHRI RAM MURTI SMARAK INST. OF MEDICAL SCIENCES, BAREILLY	92.7	121.9	168.9	110.7	75.5	569.7	456.5	1,026.2
33	DR D.Y. PATIL MEDICAL COLLEGE, KOLHAPUR	112.2	105.9	102.2	120.1	83	523.4	426.7	950.1
34	M.G.M. MEDICAL COLLEGE & HOSPITAL, AURANGABAD	99.4	139.3	150.5	82.6	95.1	566.9	377.8	944.7
35	BELAGAVI INSTITUTE OF MEDICAL SCIENCES, BELGAUM	131.5	73.4	138.6	81.2	81.4	506.1	201	707.1

All scores have been rounded off to one decimal place. Those colleges not ranked during perceptual survey have got nil marks in perceptual score