

CAREER CHOICE

Burden of Proof

Moumita Chaudhuri on the emerging discipline that is forensic science

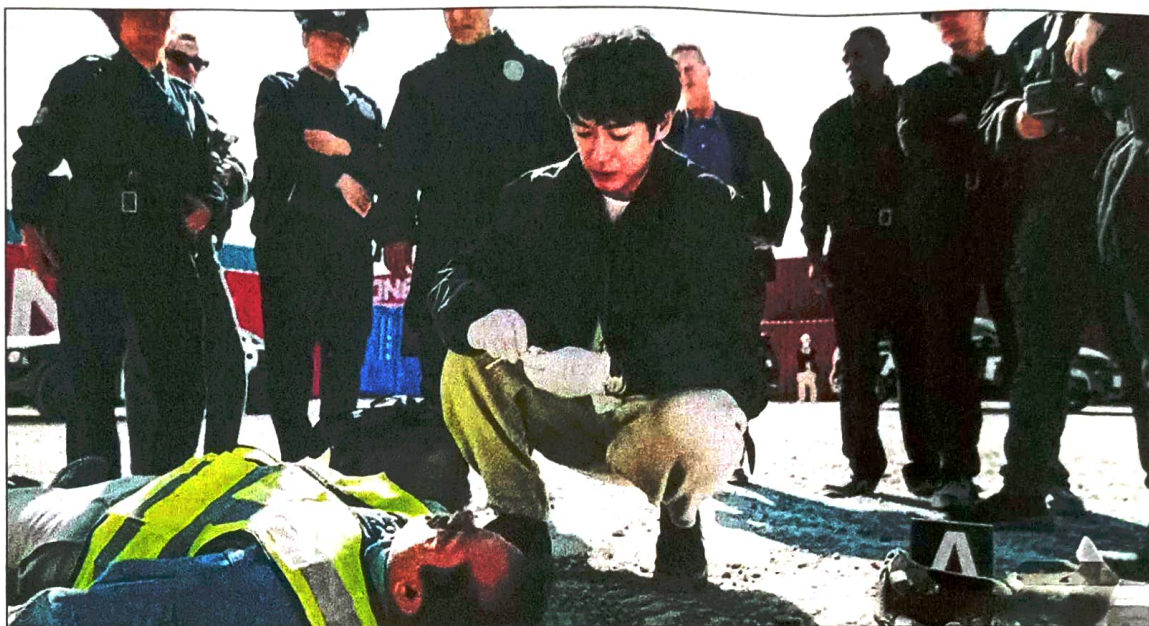
Till about two decades ago, a college student in India could not get a degree in forensic science at the undergraduate or postgraduate level. In 2009, the first university for forensic science was set up in Gujarat's Gandhinagar. It was then called the Gujarat Forensic Sciences University. Almost a decade later, it was renamed National Forensic Sciences University (NFSU). Today, there are 15 such NFSUs across India.

Sandip Ghosh, who is assistant director of the DNA biology division of the State Forensic Science Laboratory in Calcutta, says, "Forensic science is not a new thing, it was always used in solving crime, but now there are specific courses that can be pursued. With technical advancement, crimes have become sophisticated. Hence, the need for such a field of study."

Forensic science is different from forensic medicine. Dr Somnath Das, who is the head of the department of forensic medicine and toxicology at Bankura Sammilani Medical College and Hospital, says, "People called in to conduct autopsies are supposed to have an MBBS degree and be registered medical practitioners. Forensic medicine is the application of medical knowledge in the administration of justice. Forensic science, on the other hand, is the expertise that involves collecting and interpreting forensic evidence from the crime scene."

To apply to the NFSUs, students must have read physics, chemistry, biology and mathematics at the Plus Two level.

Dr Das explains, "Chemistry is the most crucial subject, it provides the foundation for forensic toxicology and analysis of drugs. Then physics, which helps in understanding ballistic details and the mechanics of instruments used in crime. Someone who has studied biology is able to do



The Japanese TV series *Loved One*, now showing on Netflix, revolves around forensic pathologist Masumi Mizusawa and other members of a newly setup forensic lab tasked with helping police investigate all ambiguous deaths. "Loved one" is how the forensic pathologists respectfully refer to the dead

things such as DNA profiling. It is also necessary for forensic anthropology, which is an analysis of human bones, and pathology. Mathematics is required for digital forensics and cryptography."

Monideepa Gupta is a third-year undergraduate student of forensic science at a private institution in Calcutta. She says, "Mine is a four-year degree programme. I can apply to posts concerned with crime scene management. The field is emerging."

Monideepa is aware that there are about seven central government forensic laboratories in India; there are laboratories under the state government and regional laboratories too. She adds, "I can also apply to investigative agencies. There are opportuni-

ties in private companies too."

Ghosh says, "With cyber crime on the rise, there are opportunities in the banking sector. Then there are accounting frauds that need to be investigated." A graduate in forensic science can work as a forensic auditor or forensic accountant.

He continues, "Forensic science now covers many subjects such as criminal psychology, clinical psychology, forensic accounting. In fact, a student who has completed his LLB might opt for a special paper in forensic science if he wants to pursue criminal cases."

Forensic science might not be a new concept. Dr A.K. Gupta, a retired forensic medicine expert, says, "I have come across cases where medical science can explain the reason for death, but forensic science is needed

for the investigation."

He argues that in cases where the corpse does not reveal any clues, forensic scientists almost always find something from fingerprints, skin cells that might have come off due to rubbing one's hand against clothes, or footprints and other touch marks.

Monideepa says, "A fresher can start out as a laboratory assistant or a laboratory technician. One can also be a sub-inspector in the investigative agencies."

But if a student completes her masters in forensic science, she can start off as an assistant scientific officer or even a senior scientific officer.

Monideepa adds, "And if someone wants to pursue higher studies and do a PhD, there are plenty of opportunities. And they can later apply for teaching roles."