The faculty are drawn from various specialities. The current heads of various departments of IAM are:

1. Air Commodore (Dr) Vipin Sharma, MD (Aerospace Medicine), Principal and Commandant
2. Gp Capt SS Mahapatra (Dr), MD (Aerospace Medicine), Dean and Chief Instructor
3. Group Captain (Dr) Rahul Pipraiya, MD (Aerospace Medicine), Chief Research Officer
4. Group Captain (Dr) Piush Renjhen, MD (Aerospace Medicine), President, Medical Evaluation Centre
5. Surgeon Captain (Dr) Rajan Sarkar, MD (Aerospace Medicine), HOD (High Altitude Physiology & Hyperbaric Medicine)
6. Wing Commander (Dr) Y Dinker, MD (Internal Medicine), HOD (Internal Medicine)
7. Lieutenant Colonel (Dr) Binu Sekhar, MD (Aerospace Medicine), HOD (Human Engineering)
8. Wing Commander (Dr) Stuti Mishra, MD (Aerospace Medicine), HOD (Space Medicine)
9. Wing Commander (Dr) B Bhowmick, MD (Aerospace Medicine), HOD (Acceleration Physiology & Spatial Orientation)
10. Wing Commander (Dr) SS Fatima, MS (ENT), HOD (ENT)
11. Wing Commander (Dr) Vinita Binny, MD (Radiology), HOD (Radiology)
12. Wing Commander (Dr) Namita Choudhary, MS (Ophthalmology), HOD (Ophthalmology)
13. Dr. B Sinha, PhD, Scientist ‘F’, HOD (Space & Environmental Physiology)
14. Dr. CHN Sowgandhi, PhD, Scientist ‘F’, HOD (Aviation Psychology)
15. Dr. SR Santhosh, PhD, Scientist ‘F’, HOD (Aviation Pathology & Toxicology)