Medical students, residents, and faculty from a range of different disciplines conduct hospital/field-based research studies on biomedical, clinical and public health issues. However, most young researchers are unaware of the ethical guidelines that govern the conduct of research. As a result, naïve researchers may fall prey to ethical misconduct unknowingly. Therefore, before conducting research, especially those studies that involve human subjects, it is essential that all investigators familiarize themselves with standard internationally recognized norms related to conduct of research, and with the specific ethical policies of his/her institution. This not only helps the researcher avoid misconduct pitfalls, but importantly enables the researcher to meet his/her obligation to society to conduct research under an ethical and moral compass.

While the significance of the role of ethical norms in appropriate conduct of research need hardly be emphasized, some specific points are mentioned here. Firstly, norms promote the aims of research, such as imparting knowledge, truth, and avoidance of error. For example, prohibitions against fabricating, falsifying, or misrepresenting research data promote the truth and avoid error. Secondly, since research often involves a great deal of cooperation and coordination among people from various disciplines, ethical standards promote the values that are crucial for collaborative work, such as trust, accountability, mutual respect, and fairness. For example, many ethical norms in research, such as guidelines for authorship, copyright and patenting policies, data sharing policies, and confidentiality rules in peer review, are designed to protect intellectual property interests while encouraging collaboration. Most researchers want to receive credit for their contributions and want to avoid idea theft or premature disclosure. Thirdly, many of the ethical norms help ensure that researchers are held accountable to the public. For instance, national guidelines for research ethics policies on research misconduct, conflicts of interest, human subject protections, and policies on animal care and use are necessary in order to ensure that researchers who are funded by public money can be held accountable to the public who is often partially or fully responsible for funding the research. Fourthly, ethical norms in research also help to build public support for research. People are more likely to support government expenditure of public funds on future research projects if they can trust the quality and integrity of research. Finally, many of the norms of research promote a variety of other important moral and social values, such as social responsibility, human rights and animal welfare, compliance with the law, and health and safety. Ethical lapses in research can significantly harm human and animal subjects, students, and the public. For example, the fabrication of data by a researcher during the conduct of a clinical trial, could lead to guidelines that are not truly evidence-based, and thus leading to therapies, prevention strategies, or public health approaches that could be harmful rather than beneficial. A researcher who fails to abide by regulations and guidelines relating to radiation or biological safety may jeopardize not only one's own health and safety but also the health and safety of other staff, students, and/or study participants.

As medical science continues to advance, in areas such as genetics, neuroscience, organ and tissue transplantation, new questions arise regarding the ethical acceptability of techniques, procedures and treatments for which there are no ready-made answers. Identifying approaches to these challenges that are consistent with fundamental ethical principles is critical so that the benefits of scientific inquiry can be realized without compromising ethical standards. Some long-standing issues still generate rigorous ethical debate, for example, the placement of placebo treatments in a clinical trial; one-size-fits-all answers to these debates
are rarely appropriate nor are they often desirable. Rather, such issues often require case-by-case scrutiny and discussion as how to accommodate them within the ethical norms. Despite the challenges, medical research is a valuable and rewarding activity for physicians and medical students as well as for the research subjects themselves. Newer research finding can shed light into unsolved medical matters and can serve society. Indeed, Medical academic professional/physicians and medical students should consider serving as research subjects so that they can appreciate the other side of the researcher-research subject relationship. Strong institutional support for the establishment of ethical review committee for review of research protocols, and/or centers of bioethics can provide support for researchers as they grapple with ethical challenges in the course of their research.