

### Editorial

#### **“A University a place of Holistic Learning and Cultural Crucible so essential for our Medical Research”**

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A university is a place where new ideas germinate, strike roots and grow tall and sturdy. It is a unique space, which covers the entire universe of knowledge. It is a place where creative minds converge, interact with each other and construct visions of new realities. Established notions of truth are challenged in the pursuit of knowledge. Keeping this definition of University do we have such atmosphere of vertical and horizontal integration where there is intradepartmental and interdepartmental meeting of scientific minds? Only few universities do have such cooperative learning and research orientation.

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A positive cooperation between basic fundamental and clinical research will help develop the core of medical research. The development of basic fundamental research depends upon the availability of knowledge base, physical facilities and adequate funds.

For modern experimental research to take place we need a standard animal house, tissue culture set up, knock out or transgenic mice with experts to maintain them. To make such facilities affordable and available universities or institute of higher education could think of a common animal house with a trained staff to breed and maintain experimental animals or tissue culture facilities to encourage and undertake meaningful research work. A common University Research Laboratory with all equipment facilities and maintenance department could be formed which could cater to the needs of research workers within the university as well as from other universities. This will minimize the cost; avoid

duplication and maintenance of instruments. Even such services could be offered for nominal costs to outside research workers who conduct their research in their respective colleges with minimum facilities. Such an approach will help develop fundamental research and as well as promote research within the university as well as to affiliated colleges.

eLearning, virtual Library and video-conferencing are the latest trends followed in many higher centers of education. Hospitals and Medical Schools do follow such computer based system for medical records, medical imaging, diagnostics, teaching and treatment. Therefore eLearning may become a part of routine medical education. The networking library facilities, journals and documentation centre are another area of great concern. A city with so many universities could cooperate with each other ( including the deemed universities) to have a common library with different sections of learning providing ready reference material, journals and documentation to all those who seek for such help.

Another important area is a good statistical centre where thousands of students with their project work could submit their work for statistical evaluation as well as attend short term courses to get acquainted with the computed statistical packages available such as SPSS.

The hue and cry to start higher centers of learning like Indian Institutes of Technology, All Indian Institute of Medical Sciences in every city will add to the existing concrete structures without proper knowledge base. Knowledge base requires competent research scientists, teachers and research workers who could develop existing centers into institutions of excellence. Particularly it is true of basic medical and clinical research in our medical universities and medical colleges.

Apart from such physical facilities we need clinical teachers who could teach as well as help research in our medical institutions.

One must understand teaching is a learning process. Learning involves three steps: remembering information, thinking, which is the rearrangement of information, and learning which is making use of the learned information in a thought process until the person becomes fluent. Therefore a true teacher works with individuals and helps them in their efforts to learn how to learn. Abraham Flexner<sup>2</sup> laid emphasis on scientific basis of medical practice paving the way to kindle intellectual curiosity in the learner's mind.

With time there is now a great transformation from clinical practice to research.

It was the integration of investigative research with teaching and patient care that made the field of medicine dynamic. The shift from patient care to molecular events helped develop medical research at the cost of clinical teaching to laboratory research.<sup>3</sup> This is followed by the economic need wherein to generate revenue the physician was forced to provide care for paying patients. This has resulted in eroding the time span spent by the clinical teachers for teaching. Therefore, one must realize the importance of responsible clinical teaching which is so vital for medical students to become *accomplished, responsible* and service minded. To accomplish this goal, medical education need to balance knowledge, skills and values inculcated during their period of learning with teaching and research.<sup>4</sup>

**References:**

1. Cheah J T L Clinical academics should and must teach. Lancet 2010;375:376.
2. Flexner. I. I remember. The autobiography of Abraham Flexner, New York, Simon, Schuster, 1940.
3. Berger TJ, Ander DS, Terrell ML, Berle DC. The impact of demand for clinical productivity on student teaching in academic emergency departments. Acta Emerg Med 2004;11:1364-1367.
4. Ludmerer K. Learning to heal. The development of American Medical Education. Trans Am Clin Climatol Assoc 2003;114:2410253.
5. D.S.Sheriff, Medical teachers must have an open mind. The Hindu, Daily From India, 2000,Sep.29
6. Sheriff DS and Roberts, Medical Education, Health Education and societal needs of India- a general perspective. Meducator 2001;1:16-18.

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