

# Translational Research In Surgical Field

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The field of genomics is a study of complete genome while proteomics is the interaction of protein synthesis and cell processes.<sup>1</sup> Advances in technology in genomic and proteomics helped in better understanding of biological processes and development of drugs etc.<sup>2</sup> In this context translational medicine coordinates evidence based research with clinical practices. This helps in getting insight into pathological processes, development of diagnostic techniques and provision of new treatment modalities.<sup>3</sup>

In this fast moving world, research in medical sciences has advanced tremendously. Our understanding has improved and newer technologies are incorporated in the treatment of diseases. However surgical specialties are not keeping pace with this progress though role of surgeons in this context is highlighted in different articles.<sup>4</sup> The present residency curriculum is focused on clinical teaching and training and research component hardly find any place in it. The need of introducing translational research in surgical field is increasingly recognized. Oncology is one such field.<sup>5</sup> Other fields include thoracic surgery, vascular surgery, pediatric surgery, organ transplant etc.<sup>6</sup> In some of the surgical training programs both basic and advance concepts are incorporated into the curriculum so as to sensitize surgical residents. This may generate interest and some may seek career in this emerging field, which ultimately is the future. As an example University of Leiden in Holland, which has its foundation since 1575 is actively involved in research activities, and translational medicine is one of them. Various courses have been designed to promote biomedical translational research in the field of surgery. They have devised course objectives, competencies, teaching and learning methodologies, and assessment so as to enhance knowledge of in the first and second year of bachelor course.<sup>7</sup> It is suggested that different surgical

associations should collaborate with Higher Education Commission (HEC) of Pakistan, medical universities and College of Physicians & Surgeons Pakistan so as to develop a research based curriculum and stimulate critical thinking which may generate interest in basic biomedical aspects of different surgical conditions amongst residents and faculty members, which will ultimately change our approach to surgical conditions.

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How to cite this article:

Akhtar J. Translational research in surgical field. *J Surg Pakistan.* 2018;23 (2):44. Doi:10.21699/jsp.23.2.1.