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**Review article:
Translational research in physiology: Review**

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**Abstract:**

Translational research is dynamic and multidisciplinary research approach applies discoveries from basic science to applied to increase quality of human health. Translational research is seen as an important area of finding clinical practical applications. This has been attempted particularly in medicine. It refers to a process by which the findings of basic research are extended to the clinical research setting (bench to bedside) and then to clinical practice and eventually health policy (bedside to community). The concept of translational physiology applies the translational research model to the physiological sciences. It differs from the traditional areas of integrative and clinical physiology by its broad investigative scope of basic research to community health. Translational physiology offers exciting opportunities, but presently is under-developed. This will allow bidirectional physiological investigation throughout the translational continuum . Basic research observations can be studied up to the population level, and mechanisms can be assessed by 'reverse translation' in clinical research settings and preclinical models based on initial observations made in populations. Translational physiology provides a novel framework for physiology programs and an investigational platform for physiologists to study function from molecular events to public health. It holds promise for enhancing the completeness and societal impact of our work, while further solidifying the critical role of physiology in the biomedical research enterprise. Behind writing this review, our aim is to systematically highlight this under developed and less cited topic.

**Keywords:** Translational research, Applied Physiology, Human health