



The Clinician Scientist Training Program in Iran: Catalyzing Clinical Science Advancements

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The Clinician Scientist Training Program (CSTP) is a transformative educational initiative that combines clinical training with scientific research, producing a unique cohort of physician-scientists. In Iran, the CSTP has emerged as a catalyst for propelling clinical science forward¹. By equipping medical professionals with the skills to bridge the gap between research and clinical practice, this program is revolutionizing healthcare, fostering innovation, and contributing to significant advancements in clinical sciences. CSTP represents a paradigm shift in medical education in Iran by emphasizing the integration of clinical practice and scientific inquiry. It recognizes the intrinsic value of research in enhancing patient care, and, thus, cultivates a cohort of physician-scientists capable of seamlessly navigating both domains. By blending clinical training with rigorous research experience, the program nurtures a new generation of medical professionals who can effectively address complex healthcare challenges through a comprehensive understanding of clinical practice and cutting-edge scientific knowledge.

Impact of CSTP on clinical science in Iran is remarkable. Although there are no reports on outcomes of CSTP or views from program directors, physician-scientists trained through this program play a pivotal role in advancing medical knowledge, exploring disease mechanisms, and developing innovative therapeutic interventions. The ability to straddle the two worlds of clinical practice and scientific research facilitates uncovering novel insights, contributing to breakthrough discoveries in fields such as molecular biology, genomics, pharmacology, and epidemiology. These advancements translate into tangible benefits for patients, improving diagnosis, treatment options, and overall healthcare outcomes.

One of the core strengths of the CSTP lies in its emphasis on translational research. By facilitating collaborations between basic scientists, clinical practitioners, and industry partners, this program accelerates the translation of scientific discoveries into clinical applications. Clinician-scientists trained through the CSTP act as crucial mediators, ensuring that research findings are effectively implemented at the bedside. This synergy between research and clinical practice leads to development of innovative diagnostics, therapies, and preventive strategies, ultimately transforming patient care in Iran. Furthermore, CSTP has played a pivotal role in bolstering research infrastructure in Iran. By producing a cohort of highly skilled physician-scientists, the program promotes research excellence, fosters collaborations, and establishes multidisciplinary research teams. This investment in research infrastructure enhances the capacity of research institutions, attracts funding opportunities, and positions Iran as a hub for cutting-edge clinical research. The long-term effects of this strengthened research ecosystem are far-reaching, fueling continuous advancements in clinical science and contributing to the overall development of the healthcare sector.

CSTP nurtures a culture of inquiry and scientific curiosity among medical professionals in Iran. By integrating research training into medical education, the program inspires aspiring physicians to embrace evidence-based practice and pursue scientific careers. The exposure to rigorous research methodologies and critical thinking instills a lifelong commitment to advancing medical knowledge and continually improving patient care. This cultural shift fosters a vibrant community of medical professionals dedicated to pushing the boundaries of clinical science, promoting collaboration, and inspiring future generations of clinician-scientists. The Clinician Scientist Training Program in Iran is revolutionizing clinical science by empowering clinician-scientists with a unique blend of clinical expertise and research acumen. This integration is driving advancements in medical knowledge, fostering translational research, strengthening research infrastructure, and cultivating a culture of scientific inquiry. As Iran continues to invest in CSTP, it positions itself at the forefront of clinical science, poised to make significant contributions to global healthcare advancements while addressing the unique healthcare challenges of the nation.

References

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