Editorial:

Admirable Son of Iran

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From this issue and with the beginning of the eleventh year of publication, Shiraz E Medical Journal is honoured to have Dr. Shahriar Koochekpour, a distinguished Iranian cancer biologist from the international scientific community as a member of the editorial board. Dr. Koochekpour graduated from school of medicine, Shiraz University of Medical Sciences, Shiraz, Iran in 1990. After graduation from medical school he was awarded with a scholarship in University of London, UK and obtained his Ph. D degree in Cellular and Molecular Oncology at King's College, London. Then he did a four year postdoctoral fellowship at National Institute of Health (NIH)/National Cancer Institute (NCI) and finished his training in molecular oncology of oncogenes and tumor suppressor genes under leadership of internationally recognized legendary cancer scientist, Professor George Vande

woude (a pioneer in cellular transformation and carcinogenesis and scientific advisor to the Director of NCI) and also by Professor R. Klausner (former director of NCI and a top candidate for the position of Chancellor of Harvard University and lately as the CEO of Global Health Foundation). Finally, he joined Louisiana State University and completed another postdoctoral fellowship and then become a faculty at LSU School of Medicine. His distinguished works covers education, research, biotechnology industry, translational research, clinical oncology, and stem cell use in medicine. About his discovery in prostate cancer, Louisiana Cancer Research Consortium 2006 Annual Report says:

When he first started his independent research career in 2002, he was a bit of a rebel in the scientific world.
He had a hunch about the involvement of a particular molecule in the development of prostate cancer. The molecule, prosaposin, wasn't new to science or literature. It had been studied for approximately 40 years and was known to play a role in the normal growth and development of the central and peripheral nervous system, but no one was looking at its possible involvement in cancer.

His interest in this molecule was sparked by the publication of a research article illustrating that the total deficiency of the prosaposin gene or protein in mice leads to premature death and abnormal development of the nervous system and the male reproductive organs, including atrophy of the prostate gland.

In a pilot study, he examined a number of tissue samples from patients with high-grade prostate tumors and found this molecule to be present in much higher amounts in the cancerous tissues than in normal prostate tissue or even tissue from patients who have a type of non-cancerous prostate condition called BPH (benign prostatic hyperplasia). Continued examination showed that prosaposin is exclusively expressed at higher levels in advanced metastatic or clinically incurable hormone-refractory prostate tumors compared to the low grade or less aggressive tumor cell lines. Additionally, he found that prosaposin or its active molecular derivatives stimulate proliferation, survival, motility, and the metastatic potential of prostate cancer cells. He next examined 22 different type of tumors (cell lines and tissues) and found an elevated expression level for prosaposin in breast, lung, ovarian, brain, skin, bladder, cervical, pancreatic, and uterine cancers, as well as lymphomas and leukemias. He became more confident that the involvement of this molecule is not limited to prostate cancer and extends to almost all other types of tumors.

He says: "When I began my research, other than my own work, there was no clear scientific basis for looking at prosaposin’s involvement in cancer, and so my manuscripts were returned unpublished and my requests for funding were repeatedly denied. No one was willing to support the notion that this molecule might play a role in cancer. If it weren’t for the support I received from LSUHSC, the Stanley S. Scott Cancer Center, and from the Louisiana Cancer Research Consortium, I could never have come this far. The encouragement I received is very important to young scientists and for new discoveries. Now, we can say that this molecule’s potential relationship to cancer in general and to prostate cancer in particular was discovered for the first time here in New Orleans, and we are producing unique data that other scientists around the world will follow."

He has presented his findings at national meetings and has published several peer-reviewed original research articles. Within the last several years, his research in this field has stimulated other investigators around the world to dissect the role of this molecule in cancers. He has obtained his first US and international patent for using prosaposin as a molecular target for treatment of benign and malignant disorders in 2008. In addition, he has received several NCI/NIH grants to further investigate the role of this molecule in prostate cancer and to
translate his data into clinical settings. In a review article, he has shown the presence of a short linear amino-acid sequence of prosaposin in a number of endemic or pandemic infectious agents such as HIV, influenza, Bacillus anthracis, salmonella, shigella, spirochetes, and malaria which provide a potential to target them for therapeutic interventions. In addition to his contribution to Archives of Iranian Medicine (AIM) and International Journal of Nephrology and Urology, Dr. Koochekpour has served as editor, editorial board member, and reviewer for more than 25 peer-reviewed cancer-related journals and he has authored and co-authored 40 research articles. He is also an active member of American Urological association, American Association for Cancer Research, and Society for Basic Urologic Research.

Because of his overwhelming love to his beloved country, people, and the Iranian science and art heritage, he suggested to open a new column in the journal to introduce distinguished Iranian scientists who have dedicated their life to scientific discoveries for the welfare of mankind. His great suggestion was most welcome and made him to start a comprehensive research about Ave Sina, ending in an outstanding article titled ‘Abu Ali Sina: The Great Persian Physician with Encyclopedic Knowledge’ which would be published in 4 parts in this journal soon.

Dear readers, let’s welcome Dr. Shahriar Koochekpour, a physician-scientist and a faculty from the departments of Urology, Genetics, and Microbiology and Immunology at Louisiana State University Health Sciences Center (LSUHSC) to our editorial board.

Shiraz E Medical Journal also takes the opportunity to send you the greetings for Christmas and New Year. May God bless us with health, happiness and love.