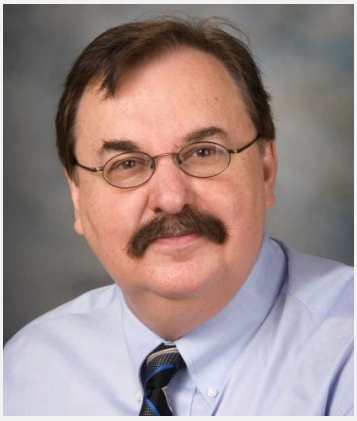
LXXIX JCET LECTURE, 13.06.2016

Drug Discovery in Academia: Integrating Basic and Translational Research



Prof. Waldemar Priebe
The University of Texas
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The coordinated, methodical, long-term, academically-based efforts combining both basic and translational research that spans a range of disciplines have a significant chance to lead to the discovery and development of novel therapeutic agents and complement efforts of pharmaceutical industry in bringing new treatments to patients in need.

Presentation will focus on a personal experience in the development of novel therapeutics including attempts to address the unique properties of the Central Nervous System (CNS) which contribute to the difficulties in treating CNS malignancies.

Specifically, the design and development of small molecule drugs targeting DNA and the discovery of novel potent metabolic inhibitors. We will focus in greater detail on the discovery of Berubicin (WP744), the first blood-brain barrier penetrating topoisomerase II poison and its preclinical and clinical development.

Analysis of the drug development process in academia and identification of the critical steps of the translational research process that lead to the success or failure will also be discussed.

Curriculum Vitae

Prof. Waldemar Priebe

Currently at the Department of Experimental Therapeutics, The University of Texas MD Anderson Cancer Center, Houston, TX, USA.

Education:

- M.Sc., University of Warsaw, 1971;
- Ph.D., (Prof. A. Zamojski - advisor) Institute of Organic Chemistry, Polish Academy of Sciences, Warsaw, Poland, 1978;
- Postdoctoral Training, Ohio State University 1979-1981;
- In the US since Dec. 7th, 1981.

Fields of interest:

Drug discovery and development, cancer biology, translational research, carbohydrate chemistry and metabolism. His research merges biology with chemistry and focuses on the design and development of drugs that selectively target DNA and inhibitors of signaling and metabolic pathways important to tumor progression and survival.

>200 publications, > 65 patents. More > 45 postdoctoral fellows and visiting scientists from Poland.

Achievements/Memberships/Awards:

Founder/founding scientist of 5 biotech companies in the USA with 3 listed on Nasdaq after successful IPOs; 5 new WP drugs reached clinical studies and two are in advanced preclinical stage. The University of Texas Graduate School of Biomedical Sciences Dean's Excellence Award, 1995. American Chemical Society, Division of Carbohydrate Sciences - Chairman Elect, 2002 – 2004; Chairman, 2004-2006; Past Chairman, 2006-2008; Alternate Counselor 2009-present. Honorary Membership of The Sociedad Argentina de Investigaciones en Quimica Organica (SAIQQ), 1999. The Award of T. Sendzimir Gold Medal, Association of Polish Inventors, May, 2005. Melville L. Wolfrom Award, Washington DC, Awarded by American Chemical Society, Carbohydrate Division, 2009;

Order of Polonia Restituta, Officer's Cross class, Official recognition by Polish Government and President of Poland, 2013; The Polish Academy of Sciences Medal, 2013; Member of National Development Council of Poland (Narodowa Rada Rozwoju) appointed by the President of Poland, 2015; Wybitny Polak (The "Outstanding Polish Scientist" award), Fundacja Polskiego Godła Promocyjnego-Teraz Polska, 2015.

President of the Texas Chapter of the Kosciuszko Foundation – present. Trustee and board member of the Kosciuszko Foundation in New York- present.