

Cancer therapy of the future



Since 2013, PXi X-Ray Systems has been providing scientists with x-ray systems for cellular and small animal research. Here, PXi's solutions are playing an important role in the development of new cancer therapies for the future. A success story that got started thanks to a partnership with Comet X-Ray technologies.

When Brian Dermott founded PXi X-Ray Systems, he had no idea that 9/11 would have such an impact on the Life Science Research market and the future development of his new company. In the wake of the attack, the American authorities sharply increased security regulations and outlawed the use of radioisotopic irradiators. This initiated a long journey to replace the market standard cesium isotope based irradiators with new and technology-forward x-ray based irradiators. Despite initial market concerns regarding acceptance and reliability of this new technology, the superior stability of the metal-ceramic x-ray tubes like the Comet MXR-321 proved ideal for the radiation treatment of small animals and cell tissue. PXi continues to enjoy steady growth and is confident that this trend will continue.

PXI TODAY

Today, PXi concentrates on research applications and ensures ever-improved standards in the safe radiation treatment of cells and animals with its X-RAD product line.

The company is also actively involved in collaboration with the authorities in the replacement of cesium irradiation sources that could potentially be used as dirty weapons. PXi maintains an extensive service network all over the world as well as licensing and development agreements with universities. In this collaborative work, scientists are researching revolutionary solutions for human radiation therapies.

TALKING ABOUT INNOVATION CAPACITY

At PXi, quality and security are paramount both for users as well as for employees. This is of enormous importance with new products and innovations. Thanks to this innovative strength, PXi is the global leader in the field of biological irradiation. Brian Dermott explains: "The close collaboration with academic and industrial development partners opens up an ever-increasing number of opportunities to customers engaged in research. All of this is based on a highly motivated team of engineers, physicists, and service personnel."

Brian Dermott, founder of PXi (left)
Bill McLaughlin, President PXi (right)



The PXi irradiation systems are used for research purposes in universities, hospitals, biotech, and pharmaceutical companies. Their research is primarily concerned with better understanding of the efficacy of short-term and long-term therapy forms in the treatment of cancer. "In this area, radiotherapy protocols are undertaken in more than 60% of the cases. The treatments are often combined with surgical interventions or chemotherapy", says Brian Dermott, elaborating on the practical applications. PXi supplies safe, high-precision X-ray applications for research and the accompanying tests.

WHAT A PERFORMANCE

At the heart of the PXi X-Ray Systems is the Comet X-Ray tubes in combination with the iVario Generator. "We can depend unreservedly on the Comet X-Ray technology. The performance consistency enables us to provide future-oriented solutions for researchers," says Brian Dermott. Other Comet X-Ray bonus points include the long service life of Comet X-Ray products, the warranty services and the speedy repairs. All these factors go to strengthen PXi's market-leading position. "Cheaper alternatives are also increasingly appearing in our sector".

REQUESTS, VISIONS, TRENDS

Brian Dermott is looking forward to advances in the collaboration with Comet X-Ray: "When it comes to developing even more efficient radiation systems, we always encounter a willingness to listen to our requests and a highly dependable partner at Comet X-Ray." Promising prospects for all involved: "The latest developments by Comet X-Ray are exactly what we need. We are convinced that the undesirable side-effects in radiation therapy will soon be consigned to the history books."

WELL PROVEN: IVARIO GENERATORS

The collaboration between PXi and Comet X-Ray is based on a deep-seated trust in the superior product quality and personal support of the highest order. This is based on reciprocity: "We are proud to have been able to help accompany the newly developed iVario generators through important tests", says Brian Dermott about the close collaboration. "And we are looking forward to employing iVario in different x-ray systems." Great praise too for the Comet USA team in Shelton. The support provided – particularly by Service Manager Paul Lukaniec and Sales Manager Nils Hase – is outstanding.

A few years ago, Brian Dermott visited the Comet X-Ray production facilities and he remains impressed to this day: "The experience of seeing with my own eyes the degree of attention paid by the craftsmen to individual details has strengthened my mindset: I can unreservedly and with a clear conscience recommend the x-ray tubes from Comet X-Ray to all end-users."

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