



## University of Iowa and IBA to collaborate on ultra-high precision Proton Therapy

Iowa City, Iowa; Louvain-la-Neuve, Belgium; September 16<sup>th</sup>, 2014, IBA (Ion Beam Applications SA), the world's leading provider of proton therapy solutions for the treatment of cancer, announces that University of Iowa and IBA have signed a research collaboration agreement and a technology license agreement to develop ultra-high precision IMPT(\*). This agreement includes an exclusive license on the Dynamic Collimation System (DCS)(\*\*) recently developed and presented by the University of Iowa at the American Association of Physicists in Medicine (AAPM) meeting in Austin, Texas.

The Dynamic Collimation System is an innovative device developed by University of Iowa Carver College of Medicine faculty members (\*\*\*) to improve dose conformity in IMPT. The applications for the DCS could extend to many tumor sites and is expected to improve hypo-fractionated treatments in Proton Therapy on a five-year horizon.

**Frédéric Genin, Executive VP Product Development and Management commented:** "As soon as we saw the Dynamic Collimation System, we were amazed by its power and its simplicity. The team at University of Iowa impressed us by their creativity and by their approach to the possibilities of Proton Therapy. We are therefore delighted to partner with them on this project."

**Daniel Hyer, Ph. D., Proton Therapy Technical Director and Clinical Assistant Professor of Radiation Oncology, added:** "Pencil Beam Scanning (PBS) provides the ability to magnetically shape dose distributions to match the target volume, but the conformity of these distributions can still be improved with the addition of collimation. Over the last two years, we have developed a novel device, called the Dynamic Collimation System (DCS), which is capable of providing layer-by-layer collimation. The DCS is also designed with a much smaller footprint than an MLC, allowing for a small air gap to maximize the benefits of collimation in proton therapy. We are excited to be working with IBA on this project to further improve proton therapy."

**Zev Sunleaf, executive director of the University of Iowa Research Foundation,** concluded: "We are pleased to be working with IBA to advance this UI research in order to improve patient's outcomes in Iowa and around the world."

(\*)Intensity Modulated Proton Therapy

(\*\*) These features are under development and subject to review by competent authorities and/or notified bodies before marketing.

(\*\*\*)Daniel Hyer, Ph.D., Proton Therapy Technical Director and Clinical Assistant Professor of Radiation Oncology; Patrick Hill, Ph.D., Assistant Researcher in the Department of Human Oncology (University of Wisconsin); Dongxu Wang, Ph.D., Assistant Professor of Radiation Oncology; Ryan Flynn, Ph.D., Clinical Associate Professor of Radiation Oncology; and their team.

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## Notes to Editors

### About IBA

IBA (Ion Beam Applications S.A.) is a cancer diagnostics and treatment equipment company, and the worldwide technology leader in the field of proton therapy, the most advanced form of radiotherapy available today.

The Company's primary expertise lies in the development of next generation proton therapy technologies that provide oncology care providers with premium quality services and equipment. IBA's proton therapy solutions are scalable and adaptable, offering universal full scale proton therapy centers as well as next generation compact, single room solutions. IBA also focuses on the development and supply of dosimetry solutions for Quality Assurance of medical equipment and increased patient safety as well as particle accelerators for medical and industrial applications.

Headquartered in Belgium and employing more than 1,000 people worldwide, IBA currently has installed systems across Europe and the US and is expanding into emerging markets. The Company is focused on building sustainable global growth for investors, providing solutions in the fight against cancer.

IBA is listed on the pan-European stock exchange EURONEXT. (IBA: Reuters IBAB.BR and Bloomberg IBAB.BB) and more information can be found at: [www.iba-worldwide.com](http://www.iba-worldwide.com)

### About the University of Iowa

With just over 30,000 students, the University of Iowa is one of the nation's top public research universities, a member of the Big Ten conference since 1899, and an Association of American Universities member since 1909. Iowa is known around the world for its balanced commitment to the arts, sciences, and humanities. It's home to one of the nation's largest academic medical centers, the pioneering Iowa Writers' Workshop, and hundreds of options for affordable, accessible education. More at <http://www.uiowa.edu/>.

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