



March 23, 2017

## 22nd Century Produces Zero THC Industrial Hemp at Anandia Labs

### *22nd Century announces further medical marijuana and industrial hemp investments*

CLARENCE, N.Y.--(BUSINESS WIRE)-- 22nd Century Group, Inc. (NYSE MKT:[XXII](#)), a plant biotechnology company that is focused on tobacco harm reduction and cannabis research, announced today that the Company's research collaboration with strategic partner Anandia Laboratories, Inc. in Vancouver, Canada, has resulted in new industrial hemp plants that have zero tetrahydrocannabinol (THC), the principal psychoactive constituent in cannabis.

*Cannabis sativa* (marijuana, hemp) has been used for millennia as a source of fiber, food (oil and protein), medicine and as a recreational psychoactive drug. Drug type cannabis (marijuana) that is typically used for medical and recreational purposes contains high levels of THC and is defined as a Schedule 1 narcotic by the Drug Enforcement Agency (DEA). Accordingly, the presence of THC in industrial hemp is one of the biggest challenges facing the industrial hemp industry. Hemp crops are tested for THC levels; under U.S. federal law, crops containing above 0.3% THC are required to be destroyed. Currently, farmers cannot obtain crop insurance to protect against this risk. 22nd Century has developed a solution to this problem by creating industrial hemp plants that contain zero THC.

In order to build on the Company's success with its THC-free hemp, the Company's wholly-owned subsidiary, Botanical Genetics LLC ([www.botanicalgenetics.com](http://www.botanicalgenetics.com)), has approved an additional investment of approximately \$800,000 in further cannabis research with Anandia Labs. The Company's new investment in Anandia Labs will be product-oriented and will focus on developing a range of next generation industrial hemp plants that contain optimized levels of important cannabinoids such as CBD, CBC, and CBG.

22nd Century will provide these proprietary hemp plants to the Company's university research partners for optimization in various climates around the world. THC-free cannabis is an ideal agricultural crop and an excellent source of medically important cannabinoids; 22nd Century has the exclusive rights to commercialize the plants arising from this collaborative project in the United States.

This successful cannabinoid research at Anandia Labs is the result of one of many of the Company's research activities relating to industrial hemp plants and to the extraction of medically-important cannabinoids for medical research. In conducting research in this field, Botanical Genetics operates its own laboratories in New York and collaborates with third-party research universities, commercial laboratories, and hemp/cannabis growers that possess all necessary licenses and permits to conduct their activities.

"We are delighted that our exciting research with Anandia Labs has created zero THC plants and altered levels of cannabinoids suitable for both industrial hemp and medical marijuana," explained Dr. Paul Rushton, 22nd Century's Vice President for Plant Biotechnology. "We anticipate that our zero THC hemp plants will form the basis of a new generation of industrial hemp and medical marijuana varieties. These markets are projected to be multi-billion dollar markets in the near term."

Jonathan Page, Ph.D., President and CEO of Anandia Labs, stated, "We are pleased that our initial project with 22nd Century has been such a success. These exciting results will help create hemp varieties that reduce the significant regulatory challenges around THC in the U.S. and position 22nd Century to be at the forefront of the renaissance in hemp production."

### **About Botanical Genetics**

Botanical Genetics is at the forefront of cannabis biotechnology. In partnership with Anandia Labs, a leading Canadian cannabis research company, and in collaboration with several major universities and hemp/cannabis companies, Botanical Genetics is able to legally conduct a full spectrum of cutting edge cannabis research. This includes development of proprietary cannabis strains for novel, safe and effective medical applications and

production of very low THC industrial hemp varieties that may be legally grown in the U.S. and around the world as an agricultural crop and/or as a source for the extraction of cannabinoids for medical research purposes by third-parties with the proper permits and licenses. Visit [www.botanicalgenetics.com](http://www.botanicalgenetics.com) for information about the Company's activities in the rapidly evolving areas of legal industrial hemp and legal medical marijuana.

#### **About 22nd Century Group, Inc.**

22nd Century is a plant biotechnology company focused on technology which allows it to increase or decrease the level of nicotine in tobacco plants and the level of cannabinoids in cannabis plants through genetic engineering and plant breeding. The Company's primary mission is to reduce the harm caused by smoking. 22nd Century currently owns or exclusively controls more than 200 issued patents and more than 50 pending patent applications around the world. Visit [www.xxiicentury.com](http://www.xxiicentury.com) for more information.

#### **About Anandia Laboratories Inc.**

Anandia Labs is a Health Canada licensed company focused exclusively on cannabis breeding and testing, with the aim of bringing the best of modern science to the cannabis industry for the benefit of growers and consumers. Anandia Labs provides a full suite of third-party independent cannabis testing services to clients within Canada's legal medical cannabis industry. Visit [www.anandalabs.com](http://www.anandalabs.com) for more information.

*Cautionary Note Regarding Forward-Looking Statements: This press release contains forward-looking information, including all statements that are not statements of historical fact regarding the intent, belief or current expectations of 22nd Century Group, Inc., its directors or its officers with respect to the contents of this press release, including but not limited to our future revenue expectations. The words "may," "would," "will," "expect," "estimate," "anticipate," "believe," "intend" and similar expressions and variations thereof are intended to identify forward-looking statements. We cannot guarantee future results, levels of activity or performance. You should not place undue reliance on these forward-looking statements, which speak only as of the date that they were made. These cautionary statements should be considered with any written or oral forward-looking statements that we may issue in the future. Except as required by applicable law, including the securities laws of the United States, we do not intend to update any of the forward-looking statements to conform these statements to reflect actual results, later events or circumstances, or to reflect the occurrence of unanticipated events. You should carefully review and consider the various disclosures made by us in our annual report on Form 10-K for the fiscal year ended December 31, 2016, filed on March 8, 2017, including the section entitled "Risk Factors," and our other reports filed with the U.S Securities and Exchange Commission which attempt to advise interested parties of the risks and factors that may affect our business, financial condition, results of operation and cash flows. If one or more of these risks or uncertainties materialize, or if the underlying assumptions prove incorrect, our actual results may vary materially from those expected or projected.*

View source version on businesswire.com: <http://www.businesswire.com/news/home/20170323005456/en/>

22nd Century Group  
Investor Relations:  
IRTH Communications  
Andrew Haag, 866-976-4784  
[xxii@irthcommunications.com](mailto:xxii@irthcommunications.com)  
or  
Anandia Laboratories Inc.  
Jonathan Page, 604-822-0253  
President and CEO  
[jpage@anandalabs.com](mailto:jpage@anandalabs.com)

Source: 22nd Century Group, Inc.