



December 20, 2016

22nd Century Group Announces Major Scientific Collaboration with University of Virginia

22nd Century granted exclusive rights to commercialize Industrial Hemp Plants and Medically Important Cannabinoids that result from the alliance.

CLARENCE, N.Y.--(BUSINESS WIRE)-- 22nd Century Group, Inc. (NYSE MKT:[XXII](#)), a plant biotechnology company that is a leader in tobacco harm reduction, announced today that the Company has entered into a sponsored research agreement with the University of Virginia ("UVA") and an exclusive license with the University of Virginia Patent Foundation d/b/a University of Virginia Licensing & Ventures Group ("UVA LVG"). Over the next three years, the Company will invest approximately \$1,100,000 in this major scientific collaboration with UVA. The goals of the research agreement include: (i) creating unique industrial hemp plants with guaranteed levels of THC below the legal limits (thus eliminating the risk to growers of having to destroy non-conforming hemp crops) and (ii) optimizing other desirable hemp plant characteristics to improve the plant's suitability for growing in Virginia and in similar legacy tobacco regions.

This groundbreaking alliance will also involve the development and study of medically important cannabinoids to be extracted from the Company's unique hemp plants. UVA and 22nd Century will conduct all activities in this scientific collaboration within the parameters of state and federal licenses and permits held by UVA for such work. These landmark agreements grant 22nd Century exclusive rights to commercialize all results of the collaboration in consideration of royalty payments by the Company to UVA LVG.

22nd Century has now solved one of the most significant problems that has plagued U.S. research on industrial hemp plants. Currently, the only hemp plants available in the U.S. for research and development are either (i) plants from Canada that are small in size and unsuitable for fiber production or other industrial uses, and (ii) "research only" plant material from Europe, which limits researchers to one plant generation, except only under onerous terms from European suppliers (which makes such plants virtually useless for research and development of improvements). By contrast, 22nd Century has established an exclusive network of fully licensed, legal owners and growers of industrial hemp plants in the U.S. who have agreed to provide research, development and commercialization rights to the Company. Accordingly, 22nd Century will provide superior plant materials to UVA for use in this unique collaboration. In fact, the specially-selected starting plant materials already exhibit highly desirable traits and characteristics which 22nd Century believes will significantly accelerate production of viable, reliably true-breeding industrial hemp in the U.S.

Dr. Michael Timko, the principal scientific investigator at UVA for this project, stated, "We are very excited by the groundbreaking opportunities afforded by this important collaboration with 22nd Century. We believe that this partnership will yield great results for the Commonwealth of Virginia and its agricultural and medical industries. UVA looks forward to becoming a leader in Virginia in these fields."

Dr. Paul Rushton, the Vice President of Plant Biotechnology for 22nd Century, remarked, "We share UVA's enthusiasm for our new collaboration. 22nd Century also looks forward to entering into additional scientific alliances with other academic and scientific research institutions. The unique new plants and intellectual property being developed and protected by 22nd Century will continue to advance our Company's position in the emerging legal medical marijuana and industrial hemp markets."

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 and www.botanicalgenetics.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, 2015, filed on February 18, 2016, 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.

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