

February 24th, 2021

Re: Written testimony in support of the New York State Stem Cell Science (NYSTEM) program

Dear Sir / Madame:

It is my great opportunity to write this testimonial letter to emphasize how important and helpful NYSTEM has been to support cutting-edge science at the state. NYSTEM has helped New York recruit and develop a world-class scientific workforce and community. Actually, NYSTEM is one of major factors for me to take the offer from Columbia University to start my own laboratory in 2013. NYSTEM has supported over 400 research projects at many top universities and institutions including our Columbia Stem Cell Initiative at the state. Since I started my own lab, we have collaborated with Dr. Vunjak-Novakovic, the pioneer in the field of bioengineering and stem cells, in order to develop human engineered heart tissue platform. NYSTEM has supported our collaboration to investigate a genetic cardiac arrhythmia, long QT syndrome, to elucidate the molecular and cellular mechanism underlying the severe arrhythmia and to identify therapeutic targets to save patients suffering from long QT syndrome. If New York State decide to eliminate the NYSTEM program, research progress will be halted in many institutes, talented scientists may relocate their laboratories to other states where actively support research are available such as California State's CIRM program.

NYSTEM has also supported education as well as research programs. Two of my current graduate students received NYSTEM stem cell training grants. Thanks to the training grants from NYSTEM, these students also obtained research progress and publications as well as other funding opportunity. We have really appreciated NYSTEM training grant for our stem cell research. Different from other training grants such as NIH, NYSTEM training grant does not restriction of nationality and resident status. Therefore, NYSTEM training grants could successfully support international pre-doc and post-doc trainees in our community as well. Eliminating NYSTEM will significantly damage our scientific workforce and community because NYSTEM training grants provide opportunities for young scientists including me to begin their careers in New York State, creating an important pipeline for up-and-coming research talent.

I truly hope that you will reconsider terminating the NYSTEM program and further invest into this NY state's unique program. I believe this will pursue economic and public health recovery from the pandemic.

Sincerely,

Masayuki Yazawa, PhD

Assistant Professor, Columbia Stem Cell Initiative

Department of Rehabilitation and Regenerative Medicine,

Molecular Pharmacology and Therapeutics, Columbia University Irving Medical Center

New York Resident: 531 West 112th Street Apt 7A, New York, NY10025 my2387@columbia.edu tel: 646-589-4604