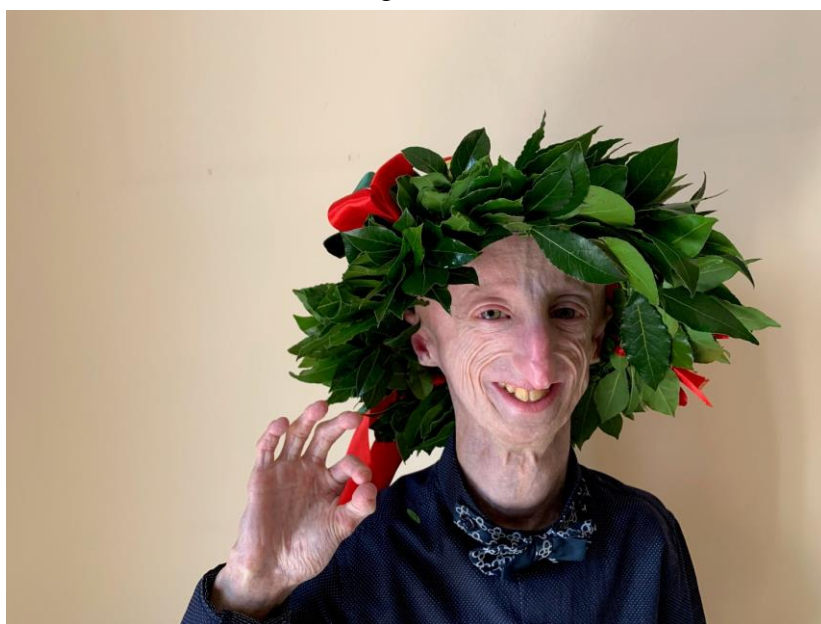


Padova, 25 marzo 2021

## **SAMMY BASSO DOTTORE A PADOVA IN MOLECULAR BIOLOGY**

**Siamo molto fieri di annunciare il grande traguardo raggiunto dal Dott. Sammy Basso che si è laureato oggi 24 marzo 2021 in Molecular Biology presso il Dipartimento di Biologia dell'Università di Padova.** La seduta di laurea si è svolta in modalità telematica e diretta streaming sul canale youtube del Dipartimento di Biologia. Sammy ha difeso una tesi dal titolo "Crosstalk between Lamin A and Interleukin 6 under stress conditions and in premature ageing".

Sammy dopo aver seguito il corso di Cell Biology tenuto dalla Prof. Chiara Rampazzo (Università di Padova), ha svolto il suo tirocinio sotto la guida della Dott.ssa Lattanzi e della Dott.ssa Capanni che studiano la Progeria presso l'Istituto di Genetica Molecolare del Consiglio Nazionale delle Ricerche (Sede di Bologna).



*Sammy Basso*

Questo quello che scrive Sammy nei suoi ringraziamenti verso i suoi relatori di tesi.

«I want to thank Giovanna Lattanzi and Cristina Capanni for following me during the drafting of this thesis, for transmitting me their passion and for the long collaboration matured during years! Their constant presence, their sympathy and their little slice of craziness are not only important for the many projects we do together, but also essential for our beautiful friendship. I'm so proud to have worked with them and I want to thank them for giving this possibility and, more important,

for being so close to me despite the difficult time of the pandemic! Thanks to them the lockdown time was amazing and I will remember it with pleasure...that is great, they really rock!

I want to thank my prof Chiara Rampazzo for the great amount of knowledge she gave me during this Master's Degree Course, a knowledge that make me growth and that was a starting point for making this thesis. I want to thank her for guiding me but also for letting me express me scientifically and humanly.»

### Abstract della tesi:

Hutchinson-Gilford Progeria Syndrome (HGPS) is a very rare genetic disease given by a mutation of the LMNA gene that causes accumulation of an aberrant form of pre-lamin A called progerin in the cell nuclei. HGPS causes premature ageing in children. This thesis is a project proposal aimed at unraveling the relationship between pre-lamin A and Interleukin 6 during stress conditions

and the role of their interplay in premature ageing. In particular, the objectives of our proposed study are 1) to test the role of interleukin 6 and stress conditions on progerin expression and accumulation in cells and 2) to test the efficacy of a treatment with an interleukin 6-targeted monoclonal antibody, tocilizumab, for counteracting senescence pathways related to Interleukin 6 (IL-6) activity. We present preliminary results showing that tocilizumab treatment greatly improves the HGPS phenotype in mice. Based on these promising results, the aim of the proposal presented in the thesis is to obtain mechanistic insights into mechanisms and pathways that link progerin decrease and rescue of progeroid phenotypes to inhibition of IL6 activity.