

SAMMY'S

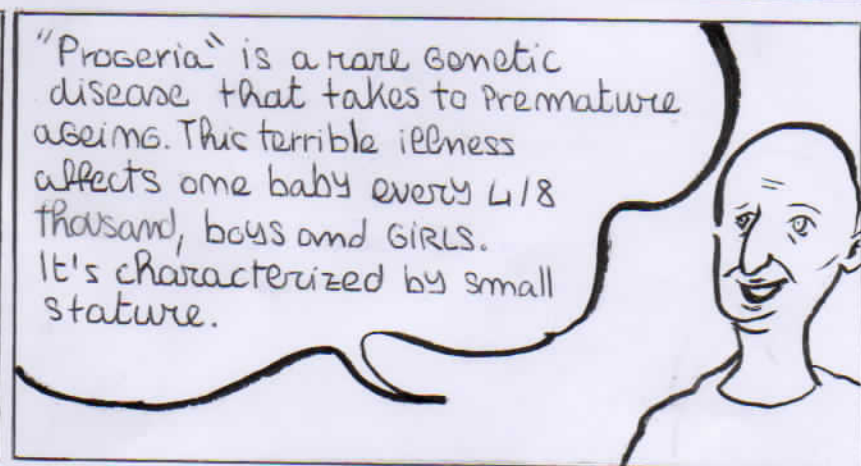
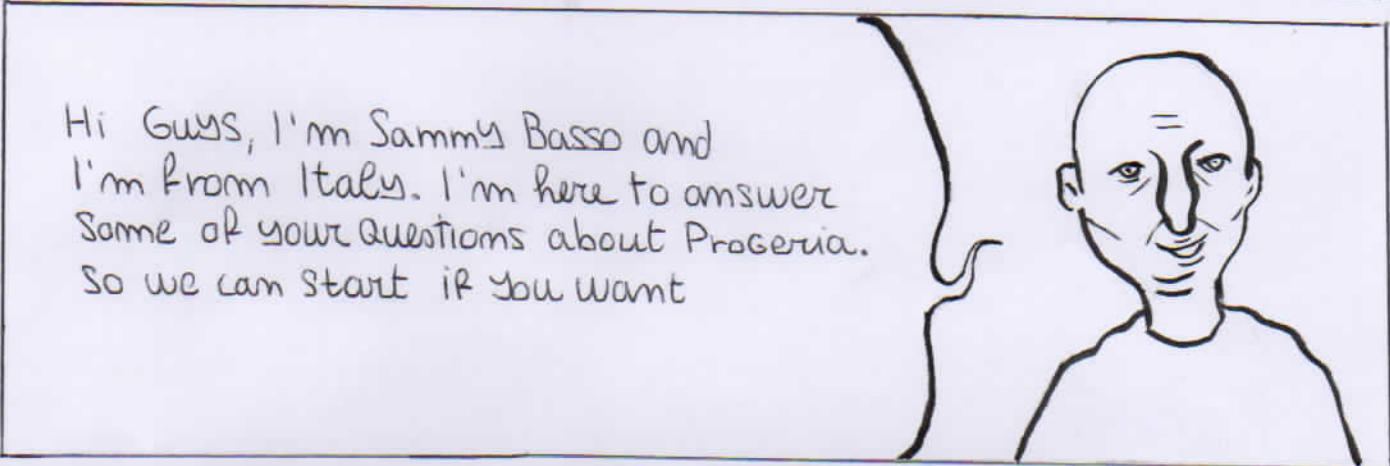
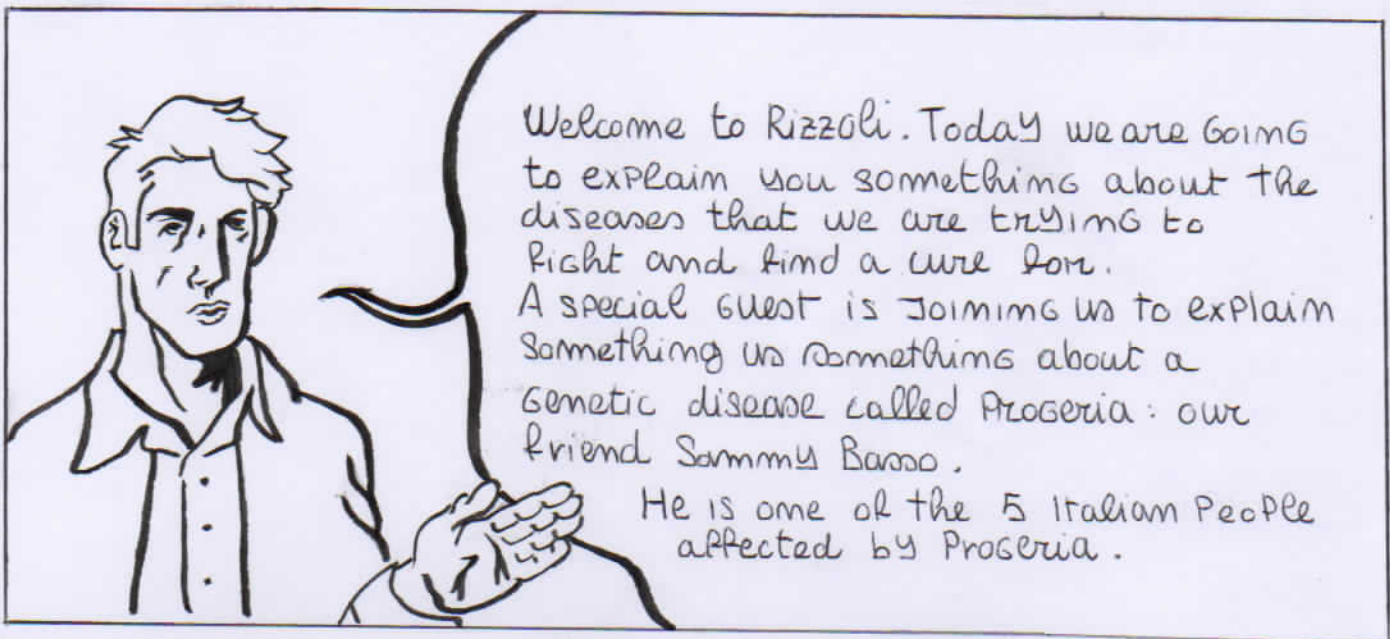


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WORLD







Progeria, or Hutchinson-Gilford syndrome, is a rare disease that causes premature aging, even though it doesn't affect the human mind, which is the only sign of the actual age of the person affected. It causes in the child the typical illnesses caused by age and it takes the person to an early death.

Progeria is a genetic disease that happens because of a *de novo* mutation and it's rarely hereditary.

It's caused by a sporadic mutation during the first phases of the embryonic development



In human cells, the nucleus is delimited by the nuclear envelope, which consists of an outer nuclear membrane (structurally and functionally similar to the membrane of endoplasmic reticulum), an internal nuclear membrane, and the nuclear membrane.

In mammals there are at least 7 types of lamins that are coded by 3 genes (A, B, C). The gene involved in the disease is the LMNA, which encodes the prolamins A.

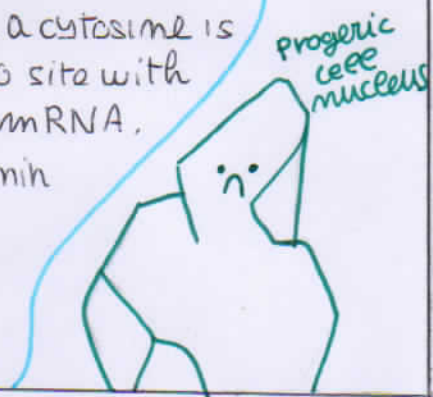


healthy cell nucleus

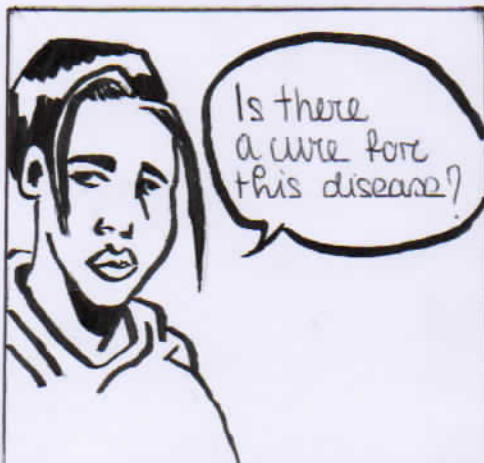
In 2003, it was discovered that the cause of Progeria is a point mutation in position 1824 of the LMNA gene, where a cytosine is replaced by a thymine. This mutation creates a splicing site with exon 11, resulting in a brief and abnormal mature mRNA.

During translation, an abnormal variant of the prolamins protein is produced.

Unlike "accelerated aging diseases" (such as Werner syndrome or pigmentous xeroderma), Progeria is not caused by defective DNA repair.



Progeric cell nucleus




No treatment has yet proven effective.

Most treatment options have focused on reducing complications with surgeries, but as there is no known cure, few people with Progeria go over 13 years of age.

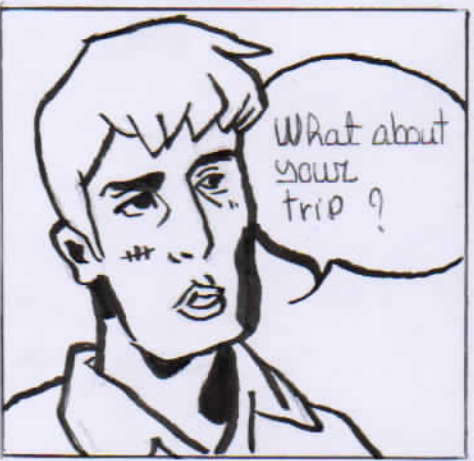






NO, I'm Grateful to Progeria, because it made me who I am. I don't live my problem like a condemnation, or a judgement from God and I wouldn't change anything in my life, because I take my disease for what it is and I think it's unique.




Of course! I went on a trip on the "route 66" in the USA, I'm attending University, studying natural science in Padova, and I wrote a book! I did everything I wanted and I'm very lucky, because I can dedicate my self to something more really important. Moreover my parents are always by my side, they help me and I can talk with them about everything.



After my final exams, I went to the USA, and there a documentary called "Sammy's Journeys" was filmed and later transmitted on "the national Geographic channel".

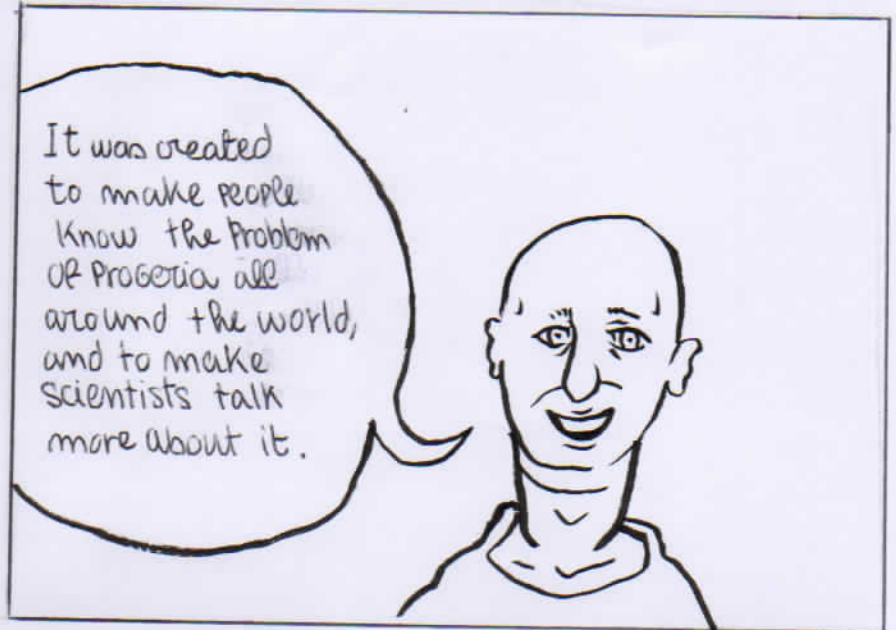


25 days we started the trip from Chicago and we arrived in Santa Monica, where the big ferris wheel is.





What about your network?



It was created to make people know the problem of Progeria all around the world, and to make scientists talk more about it.



Thank you very much for staying with us and for listening to Sammy and his story. Heartfelt thanks to our important and amazing friend who came only for us.

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