## Q&A with Nicola Vannini

THE LEUKEMIA AND LYMPHOMA SOCIETY HAS AWARDED NICOLA VANNINI WITH THE TRANSLATIONAL RESEARCH PROGRAM AWARD 2024.

Doctor Vannini is a stem cell biologist whose innovative research focuses on understanding the impact of aging on the efficacy of CAR-T cell therapy.

Can you tell us about your journey in the field of cancer research and what inspired you to pursue this career path?

As a background, I'm a stem cell biologist, and initially, I became interested in the application of stem cell therapy for cancer treatment. Afterwards, realized that my background gave me the opportunity to look at cancer biology from a different angle, bringing in variables that are often overlooked and could help us better understand cancer biology and the basis of treatment failures.

> "Aging is the primary factor associated with cancer"

Can you tell us about the award you have received from the Leukemia Lymphoma Society?



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Indeed, it's about variables. We introduced the variable of aging in the context of CAR-T cell therapy. Aging is the primary factor associated with cancer, and in this project, we aim to understand how aging affects CAR-T cell efficacy.

How does your research stand out in the current landscape of leukemia and lymphoma studies?

This award will help us better characterize the biological

processes of T cell aging and identify targets that can be modulated to improve the fitness of 'old' T cells and the efficacy of 'old' CAR-T cells. The idea is to bring our approach into 'real life' and translate our discoveries into improved treatments for patients.

## What are some emerging trends in oncology research that excite you?

The increased interest in the impact of aging on cancer development and treatment resistance is surely one. In general, all the new approaches that are bringing in the game factors that reflect the real etiology of cancer in patients, which П believe being foundamental for developing effective treatments.







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