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COMMENT

Early Career Investigator—August 2020

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I was born and brought up in Naples in Southern Italy. I graduated in medicine with distinction and first rank at the Second University of Naples, Italy in 2009, and undertook clinical training in Paediatrics in Naples and Great Ormond Street Hospital, London.

Since I was a child, I dreamt of becoming a paediatrician. However, my interest in neonatology began only later whilst I was attending the NICU and I witnessed the unexpected situation of an infant born after placental abruption. This experience harnessed my interest in neonatal neurology and enhanced my desire to help to improve the outcome of infants with neonatal encephalopathy (NE).

I immediately became fascinated and inspired by the use of advanced neuroimaging techniques and how these could be used for prognostication of neonates with brain injury. In 2014, I won a traineeship from the Second University of Naples to pursue my interest in neonatal research and joined the Imperial College London as a clinical research fellow. There, I found an inspiring and enthusiastic group of researchers who made me thrive. I then became MARBLE study lead; a large international study recruiting encephalopathic infants from the UK and the US.

However, I soon realised there was a major unmet need for rapid disease-stratification so that personalised neuroprotection can be developed in NE. Hence, I obtained an MRC doctoral research fellowship to explore the potential of using whole-blood gene expression in NE under the mentorship of Dr. Sudhin Thayyil, Dr. Jethro Herberg and Dr. Myrsini Kaforou, and I demonstrated for the first time that infants with NE had a unique host gene expression profile.

In the last few years, my research interest has continued to be on improving the identification of high-risk infants who develop adverse outcomes after NE. With regard to this, I recently showed that glucose homoeostasis represents a key point in the management of NE, and it is possible to track glucose levels continuously in these neonates.

Having completed my Ph.D. and clinical training, I now split my time between my clinical activity as neonatologist at the University of Campania "Luigi Vanvitelli" and my research activity in neuro-genomics at Imperial College London to develop a rapid disease-stratification test in NE.

I think that my driving force in research has been dedication and persistence along with the courage to take on new challenges. Finally, I am grateful for the support along the way from my mentors, colleagues and friends who constantly encourage my development and from my family and girlfriend who provide unending inspiration.

ADDITIONAL INFORMATION

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