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Interactions of experience and plasticity: what can face processing studies tell us about the functional adaptation of a highly specialized visual process?

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## **ABSTRACT OF THE TALK**

Adults' are experts at recognizing faces. Face recognition abilities, however, vary across face types, as demonstrated by effects known as the other-race and the other-species effect. Recent evidence has shown that the age of faces is another dimension that can affect adults' performance in face recognition tasks, giving rise to an other-age effect (OAE). We first documented this effect as a difference in the perceptual processes used by adults when recognizing adult faces vs. the faces of newborn infants. In my talk, I will outline our investigations of the OAE that we carried out in populations of varying age and of varying experience with newborn infant faces. These investigations revealed age-related changes in the plasticity of visual face recognition system, and highlight how experience can serve to modulate the OAE at different stages of life. Most importantly, our findings indicate that experience acquired early in life can preserve the face processing system from the loss of plasticity that would otherwise take place between childhood and adulthood. These data have exciting implications for the study of plasticity within the visual cortex.