Life, Face, and Brain

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Life on planet Earth has evolved to generate ever more complex systems. The pinnacle of this complexity, arguably, is assumed by animal societies, like those of humans and other primates, composed of members with recognizable identity. And here, in the myriad of social interactions taking place daily, it is the face that plays a pivotal role, both by its structure and its dynamics, to provide diverse and nuanced social information. The face is closely coupled to specific circuits in the brain controlling its movements. And, similarly, the visual information emanating from the faces, is processed, within the primate brain's visual system, by dedicated brain circuits. These specialized circuits have enabled researchers to extract important insights into the principles of organization, function, and computation within the complex primate brain. Yet the power of faces goes deeper than vision and movement, they powerfully drive emotional, mnemonic, and cognitive processes, some of which, processed again by specialized circuits, have been uncovered. This lecture will explore the interactions between faces and brains that shape the lives of social animals like us.