**Life History and Learning: Childhood as a solution to explore-exploit tensions**

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I will argue for the hypothesis that the evolution of our life history with its distinctively long, protected human childhood allows an early period of broad hypothesis search, exploration and creativity, before the demands of goal-directed action set in. I will present several studies showing a surprising pattern. Not only can preschoolers learn abstract higher-order principles from data, but younger learners are actually better at inferring unusual or unlikely principles than older learners and adults. In addition, I will present new data directly testing explore-exploit trade-offs. Iwill relate this pattern to computational ideas about search and sampling,  to neuroscience findings about the negative effects of frontal control on wide exploration and to phenomenological and neuroscientific studies of consciousness under the influence of psychedlics, which are strikingly analogous to childhood cognition and brain function.