HANDLE - Developmental pathway towards autonomy and dexterity in robot in-hand manipulation

Objectives:
Understanding how humans perform the manipulation of objects in order to replicate grasping and skilled in-hand movements with an anthropomorphic artificial hand, and move robot grippers from current best practice towards more autonomous, natural and effective articulated hands, addressing:

- Characterization of object affordances
- Learning and imitation of human strategies in handling tasks
- Improving skills through 'babbling'
- Autonomous in-hand dextrous manipulation
- Future artificial hands as 'plug-in' devices

Reference FP7-ICT-2008-1-231640
Duration 2009 – 2013
Funding EC FP7
Partners UPMC (France), Shadow (UK), UC3M (Spain), FCTUC (Portugal), KCL (UK), ORU (Sweden), UHAM (Germany), CEA (France), IST (Portugal)
Website http://www.handle-project.eu/