

# The Origin of Man, Language and Languages (OMLL)

European Science Foundation Eurocores Programme

## Workshop: "Phylogeny and Ontogeny of Human Communication"

- *From primates to humans: what evolution says on communication*
- *Action, imitation and communication development in infants*
- *Genes and language evolution*

**Dates and location: Ferrara, Italy, 2-4 June 2005, Sala dell'Arengo, Palazzo Municipale.**

### **Scientific topics and structure of the discussion:**

This meeting will bring together experts using different approaches to address the same problem, i.e. the origin of language. The proposed program is organized around three themes, all aiming at identifying the biological and behavioral prerequisites of the linguistic capacity of modern humans. More precisely, the "biological ingredients" necessary to develop the linguistic capacity will be investigated by discussing the available evidence and the future research perspectives about (i) the neurological substrates in human and non-human primates, (ii) the relationships between genetic and linguistic diversity, and (iii) the limited genetic data on linguistic ability. The pre-linguistic behavioral landmarks common to human and non human primates will be analyzed through talks on imitation and pragmatic abilities, in infants and monkeys. Presentations coming from different fields will be intermixed during the workshop to allow a common discussion among scientists with different backgrounds and points of view. Each session of talks will be followed by a discussion animated by project leaders of OMLL projects or by principal investigators designated by them. The conference will be video-recorded and published as CD-ROM together with participants PDFs or slides. The possibility to broadcast via Internet the sessions and the discussions will be explored too.

### **Confirmed speakers:**

Amunts (Juelich); Barbujani (Ferrara); De Knijff (Leiden); Fadiga (Ferrara); Fisher (Oxford); Fitch (St. Andrews); Gergely (Budapest); Goldin Meadow (Chicago); Hari (Helsinki); Mehler (Paris/Trieste); Muysken (Leiden); Nadel (Paris); Nespors (Ferrara); Pallier (Paris); Rizzolatti (Parma); Savage-Rumbaugh (Atlanta); Schubotz or Wolfensteller (Leipzig); Visalberghi (Rome); Volterra (Rome); von Hoffsten (Uppsala); Zuberbuehler or Slocombe (St. Andrews)

### **Confirmed discussants (OMLL members):**

Barbujani, Fadiga, Gallese, Laka, Mehler, Moral, Nazzi, Nespors, Schwartz, van der Veen, Vigne, Volterra, Zuberbuehler or Slocombe.

### **Program:**

#### **2 June, Thursday**

14h15 Introduction and welcoming

- **Genes and Language Evolution**

14h30 Barbujani (Ferrara): How are genomic and linguistic changes related?

15h15 Fisher (Oxford): Language and FoxP2 gene.

16h00 Discussants: van der Veen and Moral

16h30 *Coffee break*

- **Action, Imitation and Communication Development**

17h00 von Hoffsten (Uppsala): Goals and predictivity in infants.

17h45 Pallier (Paris): The critical period for language acquisition.

18h30 Discussants: Nazzi and Volterra

20h00 *Dinner*

### 3 June Friday

- **From Primates to Humans: what Evolution says on Communication**

9h00 Rizzolatti (Parma, OMLL): Mirror neurons and the evolution of language

9h45 Fitch (St. Andrews): Why monkeys do not speak?

10h30 Discussants: Schwartz and Zuberbuehler

*11h10 Coffee break*

- **Action, Imitation and Communication Development**

11h30 Nadel (Paris): Imitation in infants.

12h15 Gergely (Budapest): What do infants imitate?

13h00 Discussants: Mehler and Gallese

*Lunch break*

- **From Primates to Humans: what Evolution says on Communication**

15h00 Fadiga (Ferrara, OMLL): The mirror-neuron system in humans.

15h45 Hari (Helsinki): The role of the inferior frontal gyrus in imitation and communication

16h30 Schubotz (Leipzig): Cognitive functions of human premotor cortex.

*17h15 coffee break*

17h45 Zuberbuehler (St. Andrews): Communication in primates.

18h30 Discussants: Nazzi and Schwartz

*20H00 Conference Dinner*

### 4 June Saturday

- **Genes and Language Evolution**

9h00 Muysken (Leiden): Creolization.

9h45 De Knijff (Leiden): The Himalayan paradigm.

10h30 Discussants: Nespors, Vigne and Laka

*11h10 Coffee break*

- **From Primates to Humans: what Evolution says on Communication**

11h30 Amunts (Juelich): Human language cortical areas

12h15 Visalberghi (Rome): Imitation in monkeys?

13h00 Discussants: Fadiga and van der Veen

*Lunch break*

- **Action, Imitation and Communication Development**

15h00 Goldin Meadow (Chicago): Non verbal communication.

15h45 Volterra (Rome, OMLL): Actions, gestures and words in infancy: old and new evidence.

16h30 Nespors and Mehler (Ferrara/Trieste, OMLL): Language in newborns?

*17h15 coffee break*

17h45 Savage-Rumbaugh (Atlanta): Do other animals speak?

18h30 Discussants: Barbujani and Gallese

19h00 Conclusion

*20H00 Dinner*