



**UNIVERSITÀ DEGLI STUDI DI NAPOLI  
“FEDERICO II”**



**DOTTORATO IN SCIENZE VETERINARIE  
XXIX CICLO**

**TESI**

**“Nociception in the cephalopod mollusc *Octopus vulgaris*:  
a contribution to mapping putative nociceptors  
in the octopus arm”**

**Candidato**  
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**Nociception in the cephalopod mollusc *Octopus vulgaris*:  
a contribution to mapping putative nociceptors in the octopus arm**

Dottorando: Giulia Di Cristina

Tutor: Dr. Graziano Fiorito

I studied nociception in the cephalopod mollusc *Octopus vulgaris* by using a transcriptome-analysis, gene expression and immunohistochemistry with the aim of identifying putative nociceptors and possible pathways within the octopus arm. The analysis of the transcriptome allowed me also to identify a number of selected transcripts (> 30) and I evaluated predicted expression levels in silico in central and peripheral nervous system. My data, allow to identify fibres and cells suggested to be involved in nociceptive neural pathways for the first time in the arm of *O. vulgaris*.