



A gene regulatory network for pigment cell precursors in zebrafish

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Fate specification from the neural crest is a paradigmatic example of fate choice in an *in vivo* stem cell. It is usually thought to occur via a progressive fate restriction mechanism. Neural crest cells generate multiple pigment cells, all considered to derive from a shared progenitor. In particular, black melanocytes and shiny iridophores are thought to derive from a (bipotential?) melanoiridoblast. I will describe how we are using a combination of genetic studies and an iterative mathematical modelling approach to define a core iridophore network. I will also briefly introduce a single cell transcriptomic approach to assess neural crest derived cells *in vivo*.