A classical question in graph theory is to find sufficient conditions which guarantee that a graph $G$ contains a given spanning subgraph $H$. A colourful variant of this problem has graphs $G_1, \ldots, G_s$ on the same vertex set, where $s \geq e(H)$ and we think of each graph as having a different colour, and the goal is to find a transversal (or rainbow) copy of $H$ that contains at most one edge from each graph $G_i$. I will survey this area and its proof techniques, and will discuss some joint work with Yangyang Cheng on regularity tools in this setting.