Ribonucleic acid (RNA) is a molecule of great interest, as it may have played a crucial role in the origin of life on Earth, is present in all forms of life, and is essential for the proper functioning of every cell. RNA molecules are intrinsically dynamic, adopting multiple conformational states to achieve functionality—from subtle changes in base-pairing to large-scale motions of entire subdomains. Over the years, our laboratory has adopted an integrative structural biology approach to study a small ribozyme, aiming to deepen our understanding of RNA structure, dynamics, and engineering. We employ a range of structural biology methods, including NMR spectroscopy, small-angle X-ray scattering (SAXS), and cryo-electron microscopy (cryo-EM), complemented by molecular dynamics simulations as well as biochemical and biophysical techniques. Through a divide-and-conquer approach, we have characterized the structure and dynamics of a model system, the Neurospora VS ribozyme. In this lecture, I will review the main techniques we used and provide an update on our results investigating the structure, dynamics, and engineering of this model system.