The classical Cauchy integral is a fundamental object of complex analysis whose analytic properties are intimately related to the geometric properties of its supporting curve. In this talk I will begin by reviewing the most relevant features of the classical Cauchy integral. I will then move on to the (surprisingly more involved) construction of the Cauchy integral for a hypersurface in \mathbb{C}^n ; I will conclude by presenting new results joint with E. M. Stein concerning the regularity properties of this integral and their relations with the geometry of the hypersurface.