

## **BIOL S-100a. Biochemistry: Structure and Function of Proteins (CRN: 31300)**

*David Dressler PhD, Lecturer on Biochemistry, Oxford University*

Basic principles of the enzymatically catalysed reaction: metabolism, energy production, and the physiological processes of living cells and organisms will be discussed in terms of proteins functioning as molecular machines. Proteins as catalysts, hormonal signaling agents, receptors, architectural elements, and immune system antibodies will be explored. The roles of the four major classes of macromolecule--proteins, carbohydrates, lipids and membranes, and, briefly, nucleic acids--will be delineated in terms of their medically and physiologically relevant biological chemistry. May be taken concurrently with BIOL S-100b.