**Patrice Codogno** is a research director at INSERM. His group at the Institut Necker-Enfants Malades (INEM) in Paris is interested in the regulation and role of autophagy in response to physiological stress situations (nutritional stress, mechanical stress) and oncogenic stress. Three major projects are developed along this line: 1. The role membrane dynamics during autophagosome biogenesis with a focus on the role of membrane contact sites (see Nascimbeni et al 2017 EMBO J online May 26)- 2. The role of autophagy in intra and inter organ communications. Along this line on axis is dedicated to the interplay between autophagy and the primary cilium to integrate fluid shear in the kidney (see Orhon and Dupont et al 2016 Nat Cell Biol 18, 657-67). 3. The role of autophagy and lysosomes in the self-renewal of cancer stem cells with a focus on the role of lysosomes in iron metabolism in stemness and as potential target of novel generation of iron chelators (see Mai, Hamaï, Hienzsch et al 2017 Nat Chem online May 16).