



ERAD and Ubiquitination 2.0

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Message from the Guest Editor

ERAD (endoplasmic reticulum-associated degradation) has been identified as a cellular pathway of the protein quality control system in the ER, in which proteins in the ER specifically recognized as being misfolded or unassembled undergo retrograde transport out of the ER lumen and into the cytosol, where they are ubiquitinated and then degraded by proteasomes. Ubiquitination in ERAD plays a central role in the degradation of ERAD substrates by proteasomes but also functions as a recognition signal for retro-translocation and adjustment signals between ERAD-related molecular machinery. Disorders of ERAD-related ubiquitination result from activation of the UPR (unfolded protein response), and recent investigations have revealed that the UPR plays substantial roles in tumor progression, immunity, development, and aging. In this Special Issue of IJMS, we will address the role of ubiquitination in ERAD. This Special Issue will highlight the expansion in our understanding of the numerous roles of ERAD-related ubiquitination in various processes ranging from cellular homeostasis to individual homeostasis and development.





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Message from the Editor-in-Chief

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