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Nota di contenuto	ROLE OF THE SARCOPLASMIC RETICULUM IN SMOOTH MUSCLE; Contents; Participants; Chair's introduction; Role of the sarcoplasmic reticulum in uterine smooth muscle; Discussion; Relationship between the sarcoplasmic reticulum and the plasma membrane; Discussion; General discussion I The role of calmodulin in smooth muscle contraction; Ca(2+) signalling and Ca(2+)-activated K(+) channels in smooth muscle; Discussion; Additional fluxes of activator Ca(2+) accompanying Ca(2+) release from the sarcoplasmic reticulum triggered by InsP(3)-mobilizing agonists; Discussion

Molecular candidates for capacitative and non-capacitative Ca(2+) entry in smooth muscle; Regulation of Ca(2+) entry pathways by both limbs of the phosphoinositide pathway; Discussion; Calcium release by ryanodine receptors in smooth muscle; Discussion; Organization of Ca(2+) stores in vascular smooth muscle: functional implications; Discussion; Molecular basis and physiological functions of dynamic Ca(2+) signalling in smooth muscle cells; Discussion; Calcium release events in excitation-contraction coupling in smooth muscle; Discussion; Sarcoplasmic reticulum, calcium waves and myometrial signalling; Discussion; Sarcoplasmic reticulum and membrane currents; Discussion; Sarcoplasmic reticulum function and contractile consequences in ureteric smooth muscles; Discussion; General discussion II The physiological significance of smooth muscle Ca(2+) stores; The sarcoplasmic reticulum and smooth muscle function: evidence from transgenic mice; Discussion; The sarcoplasmic reticulum in disease and smooth muscle dysfunction: therapeutic potential; Discussion; The sarcoplasmic reticulum: then and now; Discussion; Final general discussion; Index of contributors; Subject index

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### Sommario/riassunto

Smooth muscle contraction is a vital component of the functioning of blood vessels, the uterus, airways and the bladder. Its malfunction can lead to serious pathological conditions, such as hypertension and pre-term labour. The calcium ion plays a central role in smooth muscle function, increasing in concentration for contraction and decreasing for relaxation. Calcium entry into the cell is facilitated by the sarcoplasmic reticulum (SR). This book explores the latest research on the role of the sarcoplasmic reticulum (SR) in smooth muscle function. It examines the control and modulation of t

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