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Nota di contenuto	Cell and molecular biology and imaging of stem cells : stem cells from the amniotic fluid and placenta / Amritha Kidiyoor, Sean V. Murphy, and Anthony Atala -- Biomaterials as artificial niches for pluripotent stem cell engineering / Kyung Min Park and Sharon Gerecht -- Low-intensity ultrasound in stem cells and tissue engineering / Byung Hyune Choi, Kil Hwan Kim, Mrigendra Bir Karmacharya, Byoung-Hyun Min, and So Ra Park -- Mammalian neo-oogenesis from ovarian stem cells in vivo and in vitro / Antonin Bukovsky and Michael R. Caudle -- Oct4-EGFP transgenic pigs as a new tool for visualization of pluripotent and reprogrammed cells / Monika Nowak-Imialek and Heiner Niemann -- Regulation of adult intestinal stem cells through thyroid hormone-induced tissue interactions during amphibian metamorphosis / Atsuko Ishizuya-Oka -- Stem cell therapy for veterinary orthopedic lesions / Anna Paula Balesdent Barreira and Ana Liz Garcia Alves -- Sex steroid combinations in regenerative medicine for brain and heart diseases : the vascular stem cell niche and a clinical proposal / Antonin Bukovsky and Michael R. Caudle -- Hair follicle stem cells / Hilda Amalia Pasolli -- The potential of using induced pluripotent stem cells in skin diseases / Shigeki Ohta, Ophelia Veraitch, Hideyuki Okano, Manabu Ohyama, and Yutaka Kawakami -- Mitochondrial differentiation in early

	embryo cells and pluripotent stem cells / Heide Schatten, Qing-Yuan Sun, and Randall S. Prather -- The role of centrosomes in cancer stem cell functions / Heide Schatten.
Sommario/riassunto	A comprehensive and timely review of developments in the field, Cell and Molecular Biology of Stem Cell Imaging features original and review articles written by experts in their fields. Chapters cover a broad spectrum of the field, from novel imaging with multiphoton flow cytometry for the identification of biomarkers and applications, to embryoid bodies and the central nervous system, and the role of centrosomes in stem cell division and differentiation. The text is a must-read for graduate students and academic and industry professionals in the expanding field of stem cell biology.