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Nota di contenuto	Introduction by Friedemann Kiefer -- Transcriptional control of lymphatic endothelial cell type specification by Ying Yang and Guliermo Oliver -- Mechanosensing in developing lymphatic vessels by Lara Planas-Paz and Eckard Lammert -- Plasticity of airway lymphatics in development and disease by Li-Chin Yao and Donald M. McDonald -- Regulation of lymphatic vasculature by extracellular matrix by Sophie Lutter and Taija Makkinen -- Interplay of mechanotransduction, FOXC2, connexins and calcineurin signaling in lymphatic valve formation by Amélie Sabine and Tatiana V. Petrova -- Development of secondary lymphoid organs in relation to lymphatic vasculature by Serge A. van de Pavert and Reina Mebius -- Platelets in lymph vessel development and integrity by Steve P. Watson, Kate Lowe and Brenda A. Finney -- Interactions of immune cells and lymphatic vessels by Raghu P. Kataru, Yulia G. Lee and Gou-Young Koh -- Lymphatic vessels in the development of tissue and organ rejection by Denis Hos and Claus Cursiefen.- The role of neuropilin-1 / semaphorin 3A signaling in

lymphatic vessel development and maturation by Alexandra M. Ochsenbein, Sinem Karaman, Giorgia Jurisic and Michael Detmar -- A fisheye view on lymphangiogenesis by Andreas van Impel and Stefan Schulte-Merker -- Visualization of lymphatic vessel development, growth and function by Cathrin Pollmann, René Hägerling, and Friedemann Kiefer -- Clinical disorders of primary malfunctioning of the lymphatic system by Carlo Bellini and Raoul C.M. Hennekam -- Subject index.

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## Sommario/riassunto

For decades, lymphatic vessels were considered to be of “lesser significance” than blood vessels, and the fundamental importance of lymphatic vessels for physiological tissue homeostasis and their involvement in many pathological processes have only recently been fully appreciated. It is clear by now that all higher vertebrates possess a lymphatic vessel system, and that malfunctioning of the lymphatic vasculature has severe pathophysiological consequences. Still, many central aspects of the developmental origin, growth control and regulation of lymphatic vessels are not sufficiently understood. This volume of “Advances in Anatomy, Embryology, and Cell Biology” focuses on the lymphatic vascular system from a developmental point of view, presenting exciting recent advances in elucidating the development and molecular control of lymphatic vessels. A collection of focused reviews, written by respected experts, describes ostensibly how advanced genetic models and state-of-the-art imaging are being used to decipher the action of transcriptional programs, growth factors and matrix components in the regulation of lymphatic endothelial cell behavior. A synopsis is provided for each chapter, concisely highlighting the main points. This collection provides both an ideal introduction to lymph vessel biology for newcomers and an invaluable resource for experts.

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