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**School of Life and Medical Sciences**

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# **Stem Cell Niche**

**Methods and Protocols**

**Second Edition**

Edited by

**Kursad Turksen**

*Ottawa Hospital Research Institute, Ottawa, ON, Canada*

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*Editor*

Kursad Turksen  
Ottawa Hospital Research Institute  
Ottawa, ON, Canada

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## Preface

The idea that there is a specialized microenvironment—the so-called stem cell niche—that regulates hematopoietic stem cell function was first proposed by Ray Schofield over three decades ago. As interest in stem cell biology has exploded over the last 10 years, so too has interest in the stem cell niche. Over the last several years, intense effort has been underway to characterize the cellular-molecular-biochemical elements of not only the hemopoietic stem cell niche but also the niches for other stem cells. To recognize and build upon the advances achieved since the initial volume on the topic of stem cell niches, I have collected a series of updates as well as new protocols for this new volume.

The protocols gathered here are faithful to the mission statement of the *Methods in Molecular Biology* series. They are well established and described in an easy-to-follow, step-by-step fashion so as to be valuable for not only experts but also novices in the stem cell field. That goal is achieved because of the generosity of the contributors who have carefully described their protocols in this volume, and I am grateful for their efforts.

My thanks as well go to Dr. John Walker, the Editor in Chief of the *Methods in Molecular Biology* series, for giving me the opportunity to create this volume and for supporting me along the way.

I am also grateful to Patrick Marton, the Executive Editor of *Methods in Molecular Biology* and Springer Protocols series, for his continuous support from idea to completion of this volume.

I would like to thank David C. Casey, Senior Editor for *Methods in Molecular Biology*, for his outstanding editorial work during the production of this volume.

Finally, I would like to thank the production crew for putting together an outstanding volume.

*Ottawa, ON, Canada*

*Kursad Turksen*

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## Contributors

- CRISTINA C. BARRIAS • *i3S – Instituto de Investigação e Inovação em Saúde, University of Porto, Porto, Portugal; INEB – Instituto de Engenharia Biomédica, University of Porto, Porto, Portugal; ICBAS – Instituto de Ciências Biomédicas Abel Salazar, University of Porto, Porto, Portugal*
- CHANDRA S. BHOL • *Department of Life Science, National Institute of Technology Rourkela, Rourkela, Odisha, India*
- SUJIT K. BHUTIA • *Department of Life Science, National Institute of Technology Rourkela, Rourkela, Odisha, India*
- SÍLVIA J. BIDARRA • *i3S – Instituto de Investigação e Inovação em Saúde, University of Porto, Porto, Portugal; INEB – Instituto de Engenharia Biomédica, University of Porto, Porto, Portugal*
- NATHALIE BROUARD • *Unité Mixte de Recherche - S1255 Recherche Plaquettes Sanguines: Hémostase, Thrombose, Transfusion, Université de Strasbourg, INSERM, Etablissement Français du Sang-Alsace, Fédération de Médecine Translationnelle de Strasbourg, Strasbourg, France*
- MADÉLINE CAMPBELL • *Sydney Medical School, University of Sydney, Sydney, NSW, Australia*
- SUSANA CARDOSO • *Instituto de Engenharia de Sistemas de Computadores – Microsystems and Nanotechnology (INESC–MN), Lisboa, Portugal*
- MAMTA CHABRIA • *Roche Pharma Research and Early Development, Roche Innovation Center Basel, F. Hoffmann-La Roche Ltd., Basel, Switzerland*
- BÉNÉDICTE CHAZAUD • *Institut NeuroMyoGène, Univ Lyon, Université Claude Bernard Lyon 1, INSERM U1217, CNRS UMR5310, Lyon, France*
- MARTA H. G. COSTA • *Department of Bioengineering and IBB-Institute for Bioengineering and Biosciences, Instituto Superior Técnico, Universidade de Lisboa, Lisboa, Portugal*
- CLÁUDIA L. DA SILVA • *Department of Bioengineering and IBB-Institute for Bioengineering and Biosciences, Instituto Superior Técnico, Universidade de Lisboa, Lisboa, Portugal; The Discoveries Centre for Regenerative and Precision Medicine, Lisbon Campus, Instituto Superior Técnico, Universidade de Lisboa, Lisboa, Portugal*
- BEATRIZ DE LUCAS • *Universidad Europea de Madrid, Madrid, Spain; Instituto de Investigación Hospital 12 de Octubre (I+12), Madrid, Spain*
- MATTHEW R. EBER • *Department of Cancer Biology and Comprehensive Cancer Center, Wake Forest School of Medicine, Winston-Salem, NC, USA*
- DAVID M. FELICIANO • *Department of Biological Sciences, Clemson University, Clemson, SC, USA*
- FREDERICO CASTELO FERREIRA • *Department of Bioengineering and IBB-Institute for Bioengineering and Biosciences, Instituto Superior Técnico, Universidade de Lisboa, Lisboa, Portugal; The Discoveries Centre for Regenerative and Precision Medicine, Lisbon Campus, Instituto Superior Técnico, Universidade de Lisboa, Lisboa, Portugal*
- GEMMA A. FIGTREE • *Sydney Medical School, University of Sydney, Sydney, NSW, Australia*
- BEATRIZ G. GÁLVEZ • *Universidad Europea de Madrid, Madrid, Spain; Instituto de Investigación Hospital 12 de Octubre (I+12), Madrid, Spain*



- CARMINE GENTILE • *Sydney Medical School, University of Sydney, Sydney, NSW, Australia; Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA, USA; Kolling Institute, Royal North Shore Hospital, Sydney, NSW, Australia*
- JOYDEEP GHOSH • *Department of Medicine, Indiana University School of Medicine, Indianapolis, IN, USA*
- AVIVA J. GOEL • *Department of Cell, Developmental, and Regenerative Biology, Icahn School of Medicine at Mount Sinai, New York, NY, USA*
- CHENG-HU HU • *State Key Laboratory of Military Stomatology, Center for Tissue Engineering, School of Stomatology, Fourth Military Medical University, Xi'an, Shaanxi, China; Research and Development Center for Tissue Engineering, Fourth Military Medical University, Xi'an, Shaanxi, China; Xi'an Institute of Tissue Engineering and Regenerative Medicine, Xi'an, Shaanxi, China*
- DAVID JOHANNES HUELS • *LEXOR, Center for Experimental and Molecular Medicine, Amsterdam UMC, University of Amsterdam, Cancer Center Amsterdam, Amsterdam, Netherlands; Oncode Institute, Amsterdam, Netherlands*
- YAN JIN • *State Key Laboratory of Military Stomatology, Center for Tissue Engineering, School of Stomatology, Fourth Military Medical University, Xi'an, Shaanxi, China; Research and Development Center for Tissue Engineering, Fourth Military Medical University, Xi'an, Shaanxi, China; Xi'an Institute of Tissue Engineering and Regenerative Medicine, Xi'an, Shaanxi, China*
- JOAQUIM M. S. CABRAL • *Department of Bioengineering and IBB-Institute for Bioengineering and Biosciences, Instituto Superior Técnico, Universidade de Lisboa, Lisboa, Portugal; The Discoveries Centre for Regenerative and Precision Medicine, Lisbon Campus, Instituto Superior Técnico, Universidade de Lisboa, Lisboa, Portugal*
- LAURA KEROSUO • *Department of Health and Human Services, Neural Crest Development and Disease Unit, National Institute of Dental and Craniofacial Research, National Institutes of Health, Bethesda, MD, USA; Biochemistry and Developmental Biology, Faculty of Medicine, University of Helsinki, Helsinki, Finland; Single-Cell Quantitative Biology Lab, Department of Biochemistry and Developmental Biology, Faculty of Medicine, University of Helsinki, Helsinki, Finland; Neural Crest Development and Disease Unit, National Institute for Dental and Craniofacial Research, National Institutes of Health, Bethesda, MD, USA*
- ALEKSANDAR BURYANOV KIROV • *LEXOR, Center for Experimental and Molecular Medicine, Amsterdam UMC, University of Amsterdam, Cancer Center Amsterdam, Amsterdam, Netherlands; Oncode Institute, Amsterdam, Netherlands*
- ROBERT S. KRAUSS • *Department of Cell, Developmental, and Regenerative Biology, Icahn School of Medicine at Mount Sinai, New York, NY, USA*
- CLAIRE LATROCHE • *San Raffaele Telethon Institute for Gene Therapy, Milan, Italy*
- ANTTI LIGNELL • *Single-Cell Quantitative Biology Lab, Department of Biochemistry and Developmental Biology, Faculty of Medicine, University of Helsinki, Helsinki, Finland*
- KEWAL K. MAHAPATRA • *Department of Life Science, National Institute of Technology Rourkela, Rourkela, Odisha, India*
- JAN PAUL MEDEMA • *LEXOR, Center for Experimental and Molecular Medicine, Amsterdam UMC, University of Amsterdam, Cancer Center Amsterdam, Amsterdam, Netherlands; Oncode Institute, Amsterdam, Netherlands*
- SAFA F. MOHAMAD • *Department of Microbiology and Immunology, Indiana University School of Medicine, Indianapolis, IN, USA*

- SOFIE MOHLIN • *Division of Pediatrics, Department of Clinical Sciences, Lund University, Lund, Sweden*
- TIAGO S. MONTEIRO • *Instituto de Engenharia de Sistemas de Computadores – Microsystems and Nanotechnology (INESC-MN), Lisboa, Portugal*
- MARY C. MORTON • *Department of Biological Sciences, Clemson University, Clemson, SC, USA*
- PRAJNA P. NAIK • *Department of Life Science, National Institute of Technology Rourkela, Rourkela, Odisha, India; PG Department of Zoology, Vikram Deb (Auto) College, Jeyapore, Odisha, India*
- VICTORIA N. NECKLES • *Department of Biological Sciences, Clemson University, Clemson, SC, USA*
- DEBASNA P. PANIGRAHI • *Department of Life Science, National Institute of Technology Rourkela, Rourkela, Odisha, India*
- SUN H. PARK • *Department of Cancer Biology and Comprehensive Cancer Center, Wake Forest School of Medicine, Winston-Salem, NC, USA*
- SRIMANTA PATRA • *Department of Life Science, National Institute of Technology Rourkela, Rourkela, Odisha, India*
- LAURA M. PÉREZ • *Universidad Europea de Madrid, Madrid, Spain; Instituto de Investigación Hospital 12 de Octubre (I+12), Madrid, Spain*
- LIUDMILA POLONCHUK • *Roche Pharma Research and Early Development, Roche Innovation Center Basel, F. Hoffmann-La Roche Ltd., Basel, Switzerland*
- PRAKASH P. PRAHARAJ • *Department of Life Science, National Institute of Technology Rourkela, Rourkela, Odisha, India*
- PRASHANTHI RAMESH • *LEXOR, Center for Experimental and Molecular Medicine, Amsterdam UMC, University of Amsterdam, Cancer Center Amsterdam, Amsterdam, Netherlands; Oncode Institute, Amsterdam, Netherlands*
- SARBARI SAHA • *Department of Life Science, National Institute of Technology Rourkela, Rourkela, Odisha, India*
- YUSUKE SHIOZAWA • *Department of Cancer Biology and Comprehensive Cancer Center, Wake Forest School of Medicine, Winston-Salem, NC, USA*
- EDWARD F. SROUR • *Department of Medicine, Indiana University School of Medicine, Indianapolis, IN, USA; Department of Microbiology and Immunology, Indiana University School of Medicine, Indianapolis, IN, USA*
- DAISUKE SUGIYAMA • *Department of Research and Development of Next Generation Medicine, Faculty of Medical Sciences, Kyushu University, Fukuoka, Japan; Center for Clinical and Translational Research, Kyushu University Hospital, Fukuoka, Japan; Incubation Center for Advanced Medical Science, Kyushu University, Fukuoka, Japan; Department of Clinical Study, Center for Advanced Medical Innovation, Kyushu University, Fukuoka, Japan; Kyushu University, Station for Collaborative Research1 4F, Fukuoka, Japan*
- BING-DONG SUI • *State Key Laboratory of Military Stomatology, Center for Tissue Engineering, School of Stomatology, Fourth Military Medical University, Xi'an, Shaanxi, China; Research and Development Center for Tissue Engineering, Fourth Military Medical University, Xi'an, Shaanxi, China*
- RUSSELL S. TAICHMAN • *Department of Periodontics and Oral Medicine, University of Michigan School of Dentistry, Ann Arbor, MI, USA*
- KEAI SINN TAN • *Institute of Biomedical and Pharmaceutical Sciences, Guangdong University of Technology, Guangzhou, China*

MICHÈLE WEISS-GAYET • *Institut NeuroMyoGène, Univ Lyon, Université Claude Bernard  
Lyon 1, INSERM U1217, CNRS UMR5310, Lyon, France*

PAN ZHAO • *State Key Laboratory of Military Stomatology, Center for Tissue Engineering,  
School of Stomatology, Fourth Military Medical University, Xi'an, Shaanxi, China;  
Research and Development Center for Tissue Engineering, Fourth Military Medical  
University, Xi'an, Shaanxi, China*

BIN ZHU • *State Key Laboratory of Military Stomatology, Center for Tissue Engineering,  
School of Stomatology, Fourth Military Medical University, Xi'an, Shaanxi, China;  
Research and Development Center for Tissue Engineering, Fourth Military Medical  
University, Xi'an, Shaanxi, China*