



Model Systems for Heart Regeneration

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Message from the Guest Editors

Dear Colleagues,

Innate heart regeneration is a carefully orchestrated process that requires multiple cell types to enable cardiomyocyte proliferation after injury. Prior work indicates that a heart regeneration program is conserved from zebrafish to mammals. However, while this program is active in neonatal mammals, adult mammals lack the capacity for meaningful heart regeneration. A better understanding of the signals that enable and repress heart regeneration is fundamental to realize therapeutic heart regeneration.

This Special Issue of *JCDD* focused on “Model Systems for Heart Regeneration” provides a critical appraisal of pre-clinical platforms for studying innate cardiac regenerative programs. We hope to capture state-of-the-art techniques for studying regeneration, including tools for tracing cell fates, deconvolving growth niches, and identifying new molecular regulators of heart regeneration. We are seeking novel discussions of regenerative models, including but not limited to zebrafish, salamanders, mice, pigs, and humans.

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