

## SPECIAL SECTION

# Repair and regeneration

### INTRODUCTION

**1020** Repair and regeneration

### REVIEWS

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**1026** Inflammation and metabolism in tissue repair and regeneration *S. A. Eming et al.*

**1031** Regenerating optic pathways from the eye to the brain *B. Laha et al.*

**1035** Cardiac regeneration strategies: Staying young at heart *E. Tzahor and K. D. Poss*

SEE ALSO ▶ PERSPECTIVE P. 1014 ▶ REPORTS PP. 1072 & 1076 ▶ VIDEO

### ON THE COVER



lost cardiac muscle regenerates in zebrafish in 30 to 60 days, with minimal scarring. From single cells to mammalian organ systems, the ravages of disease and injury are often, but not always, countered by repair and regeneration mechanisms. See the special section beginning on page 1020. Image: Amy L. Dickson and Kenneth D. Poss, Duke University

A regenerating zebrafish heart, 7 days after injury to the apex of the ventricle (bottom). Red stain, epicardial cell layer; green stain, transgenic *ctgfa* reporter expression; blue stain, cell nuclei. Unlike in humans,

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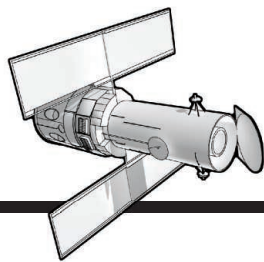
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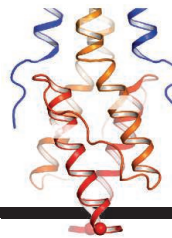
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Immune cells recognize organ-specific cues during repair processes *By T. Bouchery and N. L. Harris*  
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[dx.doi.org/10.1126/science.aah6345](http://dx.doi.org/10.1126/science.aah6345)

#### 1044 IMMUNOGENOMICS

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*P. See et al.*

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