



**Cover:** Immunohistochemistry of an 11-year-old human thymus showing epithelial cell pan-cytokeratin staining (green), Notch ligand Jag1 expression (red) and nuclei staining (Topro3, blue). Jag1 expression defines the thymic medullary area. Low nuclear staining density and enlarged perivascular spaces are characteristic of thymic involution. See Research article by García-León et al. (dev165597).

## EDITORIAL

Human development: recent progress and future prospects  
**Pourquié, O. and Brown, K.**  
dev170738

## SPOTLIGHTS

Gene editing in human development: ethical concerns and practical applications  
**Rossant, J.**  
dev150888

On the origin of the human germline  
**Kobayashi, T. and Surani, M. A.**  
dev150433

Developmentally inspired human 'organs on chips'  
**Ingber, D. E.**  
dev156125

## REVIEW

Human lung development: recent progress and new challenges  
**Nikolić, M. Z., Sun, D. and Rawlins, E. L.**  
dev163485

## HUMAN DEVELOPMENT

Single-cell analysis of progenitor cell dynamics and lineage specification in the human fetal kidney  
**Menon, R., Otto, E. A., Kokoruda, A., Zhou, J., Zhang, Z., Yoon, E., Chen, Y.-C., Troyanskaya, O., Spence, J. R., Kretzler, M. and Cebrián, C.**  
dev164038

Modeling human somite development and fibrodysplasia ossificans progressiva with induced pluripotent stem cells  
**Nakajima, T., Shibata, M., Nishio, M., Nagata, S., Alev, C., Sakurai, H., Toguchida, J. and Ikeya, M.**  
dev165431

Understanding human fetal pancreas development using subpopulation sorting, RNA sequencing and single-cell profiling  
**Ramond, C., Beydag-Tasöz, B. S., Azad, A., van de Bunt, M., Petersen, M. B. K., Beer, N. L., Glaser, N., Berthault, C., Gloyn, A. L., Hansson, M., McCarthy, M. I., Honoré, C., Grapin-Botton, A. and Scharfmann, R.**  
dev165480

Dynamic regulation of NOTCH1 activation and Notch ligand expression in human thymus development  
**García-León, M. J., Fuentes, P., de la Pompa, J. L. and Toribio, M. L.**  
dev165597

Three-dimensional induction of dorsal, intermediate and ventral spinal cord tissues from human pluripotent stem cells  
**Ogura, T., Sakaguchi, H., Miyamoto, S. and Takahashi, J.**  
dev162214

Neural differentiation, selection and transcriptomic profiling of human neuromesodermal progenitor-like cells *in vitro*  
**Verrier, L., Davidson, L., Gierliński, M., Dady, A. and Storey, K. G.**  
dev166215

Integrin  $\alpha 2$  marks a niche of trophoblast progenitor cells in first trimester human placenta  
**Lee, C. Q. E., Turco, M. Y., Gardner, L., Simons, B. D., Hemberger, M. and Moffett, A.**  
dev162305

Distinct prophase arrest mechanisms in human male meiosis  
**Jan, S. Z., Jongejan, A., Korver, C. M., van Daalen, S. K. M., van Pelt, A. M. M., Repping, S. and Hamer, G.**  
dev160614