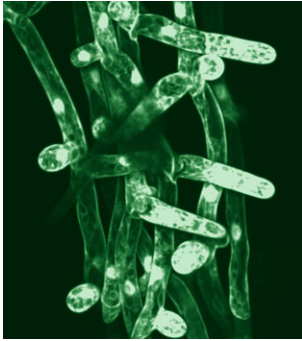
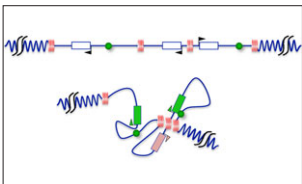


Development



Cover: Confocal image of *Physcomitrella* protonemal filaments differentiating into secondary chloronemata and expressing YFP-tagged DIAGEOTROPICA (DGT) protein in their nuclei and cytoplasm. The high efficiency of homologous recombination in *Physcomitrella* enables the expression of recombinant proteins at their endogenous loci. **See Research article by Lavy et al. on p. 1115.**



The nuclear protein CTCF when bound to insulator sequences can prevent undesirable crosstalk between genomic regions, and it can also shield particular genes from enhancer function. Here, Rainer Renkawitz and colleagues discuss the mechanisms underlying developmentally regulated CTCF-dependent transcription. **See Primer on p. 1045.**

PRIMER

- 1045** CTCF: insights into insulator function during development
Herold, M., Bartkuhn, M. and Renkawitz, R.

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- 1059** The hypoblast (visceral endoderm): an evo-devo perspective
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- 1083** PRMT5 and the role of symmetrical dimethylarginine in chromatoid bodies of planarian stem cells
Rouhana, L., Vieira, A. P., Roberts-Galbraith, R. H. and Newmark, P. A.
- 1095** The CDC25B phosphatase shortens the G2 phase of neural progenitors and promotes efficient neuron production
Peco, E., Escude, T., Agius, E., Sabado, V., Medevielle, F., Ducommun, B. and Pituello, F.

RESEARCH REPORTS

- 1105** ETTIN (ARF3) physically interacts with KANADI proteins to form a functional complex essential for integument development and polarity determination in *Arabidopsis*
Kelley, D. R., Arreola, A., Gallagher, T. L. and Gasser, C. S.
- 1110** Mirror represses *pipe* expression in follicle cells to initiate dorsoventral axis formation in *Drosophila*
Andreu, M. J., González-Pérez, E., Ajuria, L., Samper, N., González-Crespo, S., Campuzano, S. and Jiménez, G.

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- 1115** The cyclophilin DIAGEOTROPICA has a conserved role in auxin signaling
Lavy, M., Prigge, M. J., Tigyí, K. and Estelle, M.
- 1125** Role of motoneuron-derived neurotrophin 3 in survival and axonal projection of sensory neurons during neural circuit formation
Usui, N., Watanabe, K., Ono, K., Tomita, K., Tamamaki, N., Ikenaka, K. and Takebayashi, H.
- 1133** An essential role for a mammalian SWI/SNF chromatin-remodeling complex during male meiosis
Kim, Y., Fedoriw, A. M. and Magnuson, T.
- 1141** The metalloproteinase inhibitor Reck is essential for zebrafish DRG development
Prendergast, A., Linbo, T. H., Swarts, T., Ungos, J. M., McGraw, H. F., Krispin, S., Weinstein, B. M. and Raible, D. W.
- 1153** SIK3 is essential for chondrocyte hypertrophy during skeletal development in mice
Sasagawa, S., Takemori, H., Uebi, T., Ikegami, D., Hiramatsu, K., Ikegawa, S., Yoshikawa, H. and Tsumaki, N.
- 1164** Molecular mechanism underlying the regulatory specificity of a *Drosophila* homeodomain protein that specifies myoblast identity
Busser, B. W., Shokri, L., Jaeger, S. A., Gisselbrecht, S. S., Singhanía, A., Berger, M. F., Zhou, B., Bulyk, M. L. and Michelson, A. M.

- 1175** Differential distribution of competence for panplacodal and neural crest induction to non-neural and neural ectoderm
Pieper, M., Ahrens, K., Rink, E., Peter, A. and Schlosser, G.
- 1188** Morphogen-based simulation model of ray growth and joint patterning during fin development and regeneration
Rolland-Lagan, A.-G., Paquette, M., Tweedle, V. and Akimenko, M.-A.
- 1198** Cartilage-specific RBP κ -dependent and -independent Notch signals regulate cartilage and bone development
Kohn, A., Dong, Y., Mirando, A. J., Jesse, A. M., Honjo, T., Zuscik, M. J., O'Keefe, R. J. and Hilton, M. J.
- 1213** RIPPLY3 is a retinoic acid-inducible repressor required for setting the borders of the pre-placodal ectoderm
Janesick, A., Shiotsugu, J., Taketani, M. and Blumberg, B.
- 1225** Erratum