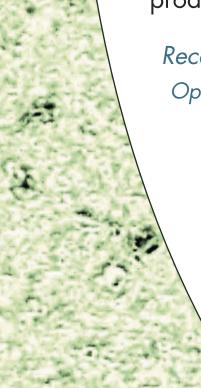
## **Douglas A. Melton Stem cells** to create a pancreas and recreate diabetes

Howard Hughes Medical Institute Lecture For Undergraduates Thursday, March 18th 4–5 pm, WI-110 Whitehead Auditorium

**Developmental biologists** seek an understanding of how specialized cells and organs are made during normal development. This understanding forms the basis for regenerative medicine: the science of repairing and replacing tissues that have been damaged by injury or disease. Recent advances in human stem cell biology have made it possible to pursue this goal and studies on the pancreas and its insulinproducing beta cell represent a clear test case.



Dr. Douglas Melton is a developmental biologist. His laboratory studies how cell differentiation is directed during develop-



## Reception to Follow Open to undergraduates; others welcome.



ment and the role of stem cells in tissue maintenance. A particular focus is the study of genes and cells that make pancreatic tissue with the goal of the work being to make pancreatic cells for transplantation into people with diabetes. This challenging project involves understanding how cells, including embryonic stem cells, can be directed to make pancreatic beta cells, the cells that make insulin.

Dr. Melton is the Thomas Dudley Cabot Professor of the Natural Sciences at Harvard University and a Howard Hughes Medical Institute Investigator. He is also Co-Chair of the Department of Stem Cell and Regenerative Biology and Co-director of the Harvard Stem Cell Institute.