PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : C12N 15/00 | A1

(11) International Publication Number: WO 00/09674

(43) International Publication Date: 24 February 2000 (24.02.00)

(21) International Application Number: PCT/US99/18118

(22) International Filing Date: 10 August 1999 (10.08.99)

(30) Priority Data:

60/096,078	11 August 1998 (11.08.98)	US
60/133,970	13 May 1999 (13.05.99)	US

(71) Applicant: UNIVERSITY OF HAWAII [US/US]; Suite 280, 2800 Woodlawn Drive, Honolulu, HI 96822 (US).

(72) Inventor: YANAGIMACHI, Ryuzo; 1425 Ward Avenue 17W, Honolulu, HI 96822 (US).

(74) Agents: ARNDT, Barbara, E. et al.; Jones, Day, Reavis & Pogue, North Point, 901 Lakeside Avenue, Cleveland, OH 44114 (US).

(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published
With international search report.

(54) Title: MAMMALIAN TRANSGENESIS BY INTRACYTOPLASMIC SPERM INJECTION

(57) Abstract

Coinjection of unfertilized mouse oocytes with sperm heads and exogenous nucleic acid encoding a transgene results in transgene–expressing embryos, reflecting nucleic acid–sperm head association before coinjection. Nonselective transfer to surrogate mothers of embryos resulting from coinjection produced offspring expressing the integrated transgene.