

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
17 June 2004 (17.06.2004)

PCT

(10) International Publication Number
WO 2004/051265 A2

(51) International Patent Classification⁷: **G01N 33/50**,
A61K 49/00, A01K 67/027, C12Q 1/68

[CA/GB]; 7330 Cambridge Research Park, Landbeach,
Cambridge, Cambridgeshire CB5 9TN (GB).

(21) International Application Number:
PCT/GB2003/005239

(74) Agents: **WALTON, Seán, M.** et al.; Mewburn Ellis, York
House, 23 Kingsway, London, Greater London WC2B 6HP
(GB).

(22) International Filing Date: 1 December 2003 (01.12.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0228093.1 2 December 2002 (02.12.2002) GB

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, EG, 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, MA, MD, MG, MK,
MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT,
RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(71) Applicant (*for all designated States except US*): **DAN-
IOLABS LIMITED** [GB/GB]; 7330 Cambridge Research
Park, Landbeach, Cambridge, Cambridgeshire CB5 9TN
(GB).

(84) Designated States (*regional*): ARIPO patent (BW, GH,
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA,
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **GOLDSMITH,
Paul** [GB/GB]; 7330 Cambridge Research Park, Land-
beach, Cambridge, Cambridgeshire CB5 9TN (GB). **FLEMING,
Angeleen, Louise** [GB/GB]; 7330 Cam-
bridge Research Park, Landbeach, Cambridge, Cam-
bridgeshire CB5 9TN (GB). **RICHARDS, Andrew,
John, McGlashan** [GB/GB]; 7330 Cambridge Research
Park, Landbeach, Cambridge, Cambridgeshire CB5 9TN
(GB). **JONES, Derek, Thomas, Edward** [GB/GB]; 7330
Cambridge Research Park, Landbeach, Cambridge, Cam-
bridgeshire CB5 9TN (GB). **HARRIS, William, Anthony**

Published:

— *without international search report and to be republished
upon receipt of that report*

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: FISH DISEASE MODELS AND USES THEREOF

(57) Abstract: Generation and use of disease models, for instance in assays to identify and investigate genes and substances involved in disease and disease treatment, identification and use of drug targets. In particular, the present invention relates to generation and use of disease models in fish such as zebrafish. Gradable phenotypes may be generated in fish, allowing for degree of correction or alteration of an activity or effect of a treatment, gene or mutation to be assayed. Competing stimuli may be applied to fish in screens assaying for ability to affect an activity or effect of a treatment, gene or mutation. Example include any combination of an addictive drug, a visual stimulus, an audible startle stimulus, a temperature gradient, an electric shock, an aversive compound, a threatening shape or a dark area.



WO 2004/051265 A2