2004060919
18 OCT 2004

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
30 October 2003 (30.10.2003)

PCT

(10) International Publication Number
WO 03/089460 A1

(51) International Patent Classification[7]: C07K 14/00, A61K 39/00, 38/00, 38/03

(21) International Application Number: PCT/CA03/00502

(22) International Filing Date: 7 April 2003 (07.04.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/373,914 19 April 2002 (19.04.2002) US

(71) Applicant: **THE GOVERNING COUNCIL OF THE UNIVERSITY OF TORONTO** [CA/CA]; Room 106, Simcoe Hall, 27 King's College Circle, Toronto, Ontario M5S 1A1 (CA).

(72) Inventors: **ST. GEORGE-HYSLOP, Peter**; 6 Queen's Park Crescent West, Toronto, Ontario M5S 3H2 (CA). **MCLAURING, Joanne**; 30 Hillsboro Avenue, #1702, Toronto, Ontario M5R 1S7 (CA).

(74) Agent: **RAE, Patricia, A.,**; Sim & McBurney, 330 University Avenue, 6th Floor, Toronto, Ontario M5G 1R7 (CA).

(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, 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, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(regional)*: ARIPO patent (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).

**Published:**
— *with international search report*

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



*162162*



*ACTION*

WO 03/089460 A1

(54) Title: IMMUNOLOGICAL METHODS AND COMPOSITIONS FOR THE TREATMENT OF ALZHEIMER'S DISEASE

(57) Abstract: The present invention relates to immunogenic compositions and peptides comprising residues 4-10 (FRHDSGY) of the amyloid peptide Abeta42. The invention further relates to antibodies that bind to the Abeta(4-10) antigenic determinant. The invention provides methods for treating Alzheimer's disease and for reducing the amyloid load in Alzheimers patients. The invention also relates to methods for designing small molecule inhibitors of amyloid deposition.