

Modification Form for Permit BIO-RRI-0021

Permit Holder: Gregory Dekaban

Approved Personnel

(Please stroke out any personnel to be removed)

Bryan Au
 Xizhong Zhang
 Sonali deChickera
 Christy Willert
 John Barrett
 Ryan Buensuceso

Additional Personnel

(Please list additional personnel here)

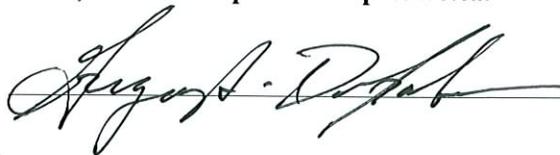
	Please stroke out any approved Biohazards to be removed below	Write additional Biohazards for approval below. *
Approved Microorganisms	E. coli (DH5 alpha), E. coli (Top 10)	Stable 2, Stable 4 strains of E. coli used in transformations.
Approved Cells	Human (established), Rodent (established), Rodent (primary), HEK 293, HEK 293FT, CP1, CP2	① Ad5 expressing inducible fusion protein consisting of N-terminus 1/2 of CD40 fused in intracellular domain of MyD88 *
Approved Use of Human Source Material	Peripheral Blood Mononuclear cells (adult), Human cord blood cells, bone marrow	② Lentiviral plasmids pDYLVI:CD40 + i:CD40:MyD88
Approved GMO	lentiviral vector backbone (Virapower), adenovirus-backed vectors (Ad 5), rAd5 GFP, proto-oncogene HER2/neu, wild type myxoma virus, recominant myxoma carry mRFP and or HER2/neu,,	
Approved use of Animals	rodent C57B1/6, NOD SCID, GFP	CB17 **
Approved Toxin(s)		

* impact permit requested.
 ** ANS^{has} approved this modification.

* PLEASE ATTACH A MATERIAL SAFETY DATA SHEET OR EQUIVALENT FOR NEW BIOHAZARDS.
** PLEASE ATTACH A BRIEF DESCRIPTION OF THE WORK THAT EXPLAINS THE BIOHAZARDS USED AND HOW THEY WILL BE USED.

As the principal investigator, I have ensured that all of the personnel named on the form have been trained. I will ensure that this project will follow the Western Biosafety Guidelines and Procedures Manual for Containment Level 1 2 Laboratories (and the Level 3 Facilities Manual for Level 3 projects). I will ensure that UWO faculty, staff and students working in my laboratory have an up-to-date Hazard Communication Form, found at <http://www.wph.uwo.ca>.

Signature of Permit Holder:



Classification: 2+

Date of Last Biohazardous Agents Registry Form: May 29, 2007

Date of Last Modification (if applicable): Sep 25, 2009

BioSafety Officer(s): _____

Chair, Biohazards Subcommittee: _____

Project description:

The requested reagents will be used to support various aspects of my dendritic cell-based vaccine research projects funded by the OICR and the Terry Fox Foundation. The adenovirus and lentivirus constructs expressing a fusion protein between CD40 and MyD88 along with control vectors originated in the laboratory of David Spencer, Baylor College of Medicine. An import permit for the Ad has been received from CFIA and I am still waiting for the permit from Health Canada. The lentiviral vectors were sent to the laboratory of Jeffrey Medin at UHN where they have been modified. The modified lentiviral backbone (has to do with improved packaging and into a backbone that results in a self-inactivating replication defective recombinant virus) are now being supplied to us by the Medin laboratory under an MTA that requires the approval of this Biohazard modification before UWO legal will sign off on it. These vectors will allow us to transduce ex vivo prepared dendritic cells so as to enhance their activation phenotype in order to create more effective antigen presenting cells. Once transduced the cells are injected into mice in order to determine if this immunization paradigm actually works. All procedures will be done under level 2 or level 2 plus 3 conditions as appropriate in the Robarts external barrier mouse rooms.

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(Please list additional personnel here)

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Approved GMO	lentiviral vector backbone (Virapower), adenovirus-backed vectors (Ad 5), rAd5 GFP, proto-oncogene HER2/neu, wild type myxoma virus, recombinant myxoma carry mRFP and or HER2/neu,	Tanapox Virus (TPV)* Tanapox Virus gfp (TPVgfp)* Yaba Monkey Tumor Virus (YMTV)* Yaba Monkey Tumor Virus gfp (YMTVgfp)* } †
Approved use of Animals	rodent C57B1/6, NOD SCID, GFP	
Approved Toxin(s)		

* There is no MSDS currently available for these viruses from Health Canada, ATCC or CDC. The only available pox virus MSDS is for vaccinia virus which we have attached for your information.

† all four viruses will be used under level II conditions. These viruses will be tested in various mammalian cell lines only to measure replication efficiency.

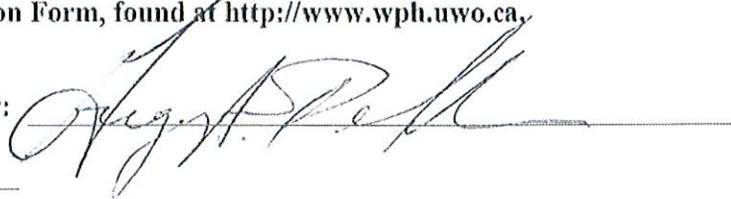
Thursday, September 17, 2009 Page 1 of 2

* PLEASE ATTACH A MATERIAL SAFETY DATA SHEET OR EQUIVALENT FOR NEW BIOHAZARDS.

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Signature of Permit Holder:



Classification: 2+

Date of Last Biohazardous Agents Registry Form: May 29, 2007

Date of Last Modification (if applicable): Sep 9, 2009

BioSafety Officer(s): JL Tunney Sept 25/09

Chair, Biohazards Subcommittee: G.M. Kildner



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Vaccinia virus - Material Safety Data Sheets (MSDS)

[Material Safety Data Sheets - Index]

MATERIAL SAFETY DATA SHEET - INFECTIOUS SUBSTANCES

SECTION I - INFECTIOUS AGENT

NAME: *Vaccinia virus*

SYNONYM OR CROSS REFERENCE: Poxvirus, smallpox vaccine

CHARACTERISTICS: *Poxviridae*; 230 x 400 nm, complex coat and capsid, dsDNA

SECTION II - HEALTH HAZARD

PATHOGENICITY: Virus disease of skin induced by inoculation for the prevention of smallpox - vesicular or pustular lesion, area of induration or erythema surrounding a scab or ulcer at inoculation site; major complications encephalitis, progressive vaccinia (immunocompromised susceptible), eczema vaccinatum - a localized or systemic dissemination of vaccinia virus, fetal vaccinia; minor complications - generalized vaccinia with multiple lesions; auto-inoculation of mucous membranes or abraded skin, benign rash, secondary infections; complications are serious for those with eczema or who are immunocompromised; death is most often the result of postvaccinial encephalitis or progressive vaccinia

EPIDEMIOLOGY: Routine vaccination is no longer carried out as smallpox has now been eradicated; only used in armed forces and laboratories

HOST RANGE: Humans

INFECTIOUS DOSE: Vaccines have potency of 10^8 pock-forming units/mL; infectious dose unknown

MODE OF TRANSMISSION: Virus may be transmitted to contacts of individuals who have been vaccinated recently

INCUBATION PERIOD: 1 week after vaccination (lesion at point of inoculation); generalized vaccinia 5-10 days

COMMUNICABILITY: Communicable to unvaccinated contacts

SECTION III - DISSEMINATION

RESERVOIR: Humans; held in restricted stocks

ZONOSIS: None

VECTORS: None

SECTION IV - VIABILITY

DRUG SUSCEPTIBILITY: N/A

SUSCEPTIBILITY TO DISINFECTANTS: Susceptible to 1% sodium hypochlorite, 2% glutaraldehyde, formaldehyde

PHYSICAL INACTIVATION: Heat-labile antigen destroyed at 60° C, heat-stable antigen withstands 100° C (both may be present in infected tissue)

SURVIVAL OUTSIDE HOST: Lyophilized vaccinia virus maintains potency for 18 months at 4-6° C, may be stable when dried onto inanimate surfaces

SECTION V - MEDICAL

SURVEILLANCE: Monitor for symptoms; confirmation by identification of vaccinia pocks, isolation of virus, serology

FIRST AID/TREATMENT: Vaccinia immune globulin and methisazone may be of value in treating complications

IMMUNIZATION: Smallpox vaccine is indicated for laboratory workers directly involved with vaccinia and vaccinia virus recombinants

PROPHYLAXIS: See Treatment

SECTION VI - LABORATORY HAZARDS

LABORATORY-ACQUIRED INFECTIONS: 18 reported variola laboratory infections and 2 reported infections of laboratory workers with recombinant vaccinia virus

SOURCES/SPECIMENS: Lesion fluids or crusts, respiratory secretions or tissues of infected hosts

PRIMARY HAZARDS: Ingestion, parenteral inoculation, droplet or aerosol exposure of mucous membranes or broken skin with infectious fluids or tissues

SPECIAL HAZARDS: Some poxviruses are stable when dried

SECTION VII - RECOMMENDED PRECAUTIONS

CONTAINMENT REQUIREMENTS: Biosafety level 2 practices, containment equipment and facilities for all activities involving the manipulation of this virus (with vaccination); primary containment devices and biological safety cabinets are recommended

PROTECTIVE CLOTHING: Laboratory coat; gloves and gown when working with agent

OTHER PRECAUTIONS: Immunization of staff working directly with vaccinia

SECTION VIII - HANDLING INFORMATION

SPILLS: Allow aerosols to settle; wearing protective clothing, gently cover spill with paper towel and apply 1% sodium hypochlorite, starting at perimeter and working towards the centre; allow sufficient contact time before clean up (30 min)

DISPOSAL: Decontaminate before disposal; steam sterilization, incineration, chemical disinfection

STORAGE: In sealed containers that are appropriately labelled

SECTION IX - MISCELLANEOUS INFORMATION

Date prepared: May, 2001

Prepared by: Office of Laboratory Security, PHAC

Although the information, opinions and recommendations contained in this Material Safety Data Sheet are compiled from sources believed to be reliable, we accept no responsibility for the accuracy, sufficiency, or reliability or for any loss or injury resulting from the use of the information. Newly discovered hazards are frequent and this information may not be completely up to date.

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Health Canada, 2001.

Date Modified: 2001-09-25

Modification Form for Permit BIO-RR1-0021

Permit Holder: Gregory Dekaban

Approved Personnel

(Please stroke out any personnel to be removed)

- Bryan Au
- Xizhong Zhang
- Sonali deChickera
- Christy Willert
- John Barrett
- Ryan Buensuceso

Additional Personnel

(Please list additional personnel here)

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Approved Cells	Human (established), Rodent (established), Rodent (primary), HEK 293, HEK 293FT, CP1, CP2	
Approved Use of Human Source Material	Peripheral Blood Mononuclear cells (adult), Human cord blood cells, bone marrow	
Approved GMO	lentiviral vector backbone (Virapower), adenovirus-backed vectors (Ad 5), rAd5 GFP, proto-oncogene HER2/neu, wild type myxoma virus, recombinant myxoma carry mRFP and or HER2/neu	wildtype raccoonpox virus, recombinant raccoonpox virus, vMyxgfp, vMyx135KO <i>Ad MyD88' cD4U</i>

* PLEASE ATTACH A MATERIAL SAFETY DATA SHEET OR EQUIVALENT FOR NEW BIOHAZARDS.

** PLEASE ATTACH A BRIEF DESCRIPTION OF THE WORK THAT EXPLAINS THE BIOHAZARDS USED AND HOW THEY WILL BE USED.

Classification: 2+

Date of last Biohazardous Agents Registry Form: May 29, 2007

Signature of Permit Holder: *Gregory Dekaban*

BioSafety Officer(s): *W. Tanaka Sept 7/09*

Chair, Biohazards Subcommittee: *G.M. Kilder*

Modification Form for Permit BIO-RR1-0021

Permit Holder: Gregory Dekaban

Approved use of
Animals

rodent C57B1/6, NOD SCID, GFP

Approved Toxin(s)

* PLEASE ATTACH A MATERIAL SAFETY DATA SHEET OR EQUIVALENT FOR NEW BIOHAZARDS.
** PLEASE ATTACH A BRIEF DESCRIPTION OF THE WORK THAT EXPLAINS THE BIOHAZARDS USED AND HOW THEY WILL BE USED.

Classification: 2+

Date of last Biohazardous Agents Registry Form: May 29, 2007

Signature of Permit Holder: *See page 1*

BioSafety Officer(s): *J. Stanley Sept 9/09*

Chair, Biohazards Subcommittee: *G.H. Kilder*

Raccoonpox virus is considered to be raccoon-specific. It is not harmful or pathogenic to humans. We are planning to use this virus in various mammalian cell lines to study host range and immune evasion strategies. As well, we are planning to sequence the genome. Towards this goal we will be growing the virus to high titres (10^8 - 10^9 pfu/ml) and also producing recombinant versions in which we will add fluorescent tags (EGFP and RFP) so that we can monitor infection. We know that this virus will grow in common monkey cells including Vero and BGMK cells and in rabbit kidney cells (RK13).

Dekaban

>> -----Original Message-----
>> From: Permit-Permis [mailto:permitpermis@phac-aspc.gc.ca]
>> Sent: August 14, 2009 1:31 PM
>> To: dekaban
>> Subject: Raccoonpox virus
>>
>> Dear Dr. Gregory A. Dekaban
>>
>> We do not regulate Raccoonpox virus as we consider this as a RG1,
>> please contact your Canadian distributor and they will send you this
>> pathogens without any documentation required form us.
>>
>> Regards
>>
>> Josee Davies
>> A/Regulatory Technologist/ technologiste en réglementation
>> Office of Laboratory Security/Bureau de la sécurité des laboratoires
>> Public Health Agency of Canada/ Agence de santé publique du Canada
>> 100 ch. Colonnade Rd. AL: 6201A Ottawa, Ontario, Canada K1A 0K9
>> Tel: (613) 957-1779
>> Fax: (613)941-0596
>>
>> *****Register Now*****
>>
>> A new law passed by Parliament requires all persons responsible for
>> human
>> pathogens of risk group 2, 3 or 4 or toxins on Schedule 1 of the Act
>> to
>> register their laboratory or facility before midnight of September
>> 21,
>> 2009. You must register, even if you already hold an Import Permit
>> or
>> Compliance or Certification Letter. The registration website can be
>> found
>> at: <http://www.phac-aspc.gc.ca/ols-bsl/pathogen/register-eng.php>.
>> Please
>> submit both Form 1 and 2.
>>
>> *****Enregistrez-vous dès maintenant*****
>>
>> Une nouvelle loi adoptée par le Parlement exige que toutes les
>> personnes
>> qui sont responsables d'agents pathogènes humains de groupe de
>> risque
>> 2, 3
>> ou 4 ou des toxines dans l'annexe 1 inscrivent leur laboratoire ou
>> leur
>> établissement avant minuit le 21 septembre 2009. Vous devez vous
>> enregistrer, même si vous détenez un permis d'importation, une
>> lettre de
>> conformité ou de certification. L'information concernant
>> l'inscription se
>> retrouve à l'adresse suivante :
>> <http://www.phac-aspc.gc.ca/ols-bsl/pathogen/register-fra.php>. S'il
>> vous
>> plaît, assurez-vous de soumettre le Formulaire 1 et le Formulaire 2.
>>



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Before submitting an order you will be asked to read and accept the terms and conditions of ATCC's [Material Transfer Agreement](#) or, in certain cases, an MTA specified by the depositing institution.

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[Print this Page](#)

Animal Viruses and Antisera

ATCC® Number: VR-838™ Price: \$325.00

Classification: Poxviridae, Orthopoxvirus

Agent: Raccoonpox virus deposited as Raccoonpox virus, Orthopoxvirus

Strain: Herman

Original Source: Isolated by Y.F. Herman from respiratory tract of raccoon with no clinical symptoms, Maryland, USA, 1964

Depositors: JH Hakano

Biosafety Level: 2 **Shipped:** frozen

Permits/Forms: In addition to the [MTA](#) mentioned above, other [ATCC and/or regulatory permits](#) may be required for the transfer of this ATCC material. Anyone purchasing ATCC material is ultimately responsible for obtaining the permits. Please [click here](#) for information regarding the specific requirements for shipment to your location.

Related Products

Host Organism : LLC-MK2 cells (ATCC [CCL-7](#)); Vero (ATCC [CCL-81](#))
Vero cells (ATCC [CCL-81](#)); LLC-MK2 cells (ATCC [CCL-7](#)); CAM; suckling mouse

Incubation : Temperature: 35.5°C
Duration: 3-4 days

Effect : Yes, in vitro effects: Cytopathic effects (large plaques and giant cell syncytia) in Vero cells
Yes, in vivo effects: paralysis in suckling mouse
Yes, in vivo effects: pinpoint pocks on chorioallantoic membranes

Comments : The virus does not grow well on chorioallantoic membranes after 2 to 3 passages.
The virus cross-reacts serologically with the Connaught strain of vaccinia virus.
Raccoons inoculated with RPV show no apparent clinical symptoms; however, their sera demonstrate strong HAI reactions.

Does not grow well on CAM after 2-3 passages. Cross-reacts with Connaught strain on vaccinia virus. Raccoons inoculated with RPV show no apparent clinical symptoms; however, their sera demonstrate strong HAI reactions.

References : 33948: Thomas EK, et al. Further characterization of Raccoonpox virus. Arch. Virol. 49: 217-222, 1975. PubMed: [813616](#)
33949: Herman YF. Bact. Proc. 64th Annual Meeting, ASM : 117, 1964.

[Return to Top](#)

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All prices are listed in U.S. dollars and are subject to change without notice. A discount off the current list price will be applied to most cultures for nonprofit institutions in the United States. Cultures that are ordered as test tubes or flasks will carry an additional laboratory fee. Fees for permits, shipping, and handling may apply.

[Back to my Search](#)

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Permit Holder: Gregory Dekaban

Approved Personnel

(Please stroke out any personnel to be removed)

~~Philippe Alexander Gilbert~~
~~Carmen Sinedrea~~

Additional Personnel

(Please list additional personnel here)

*Christy Willett
 Sonali DeChicKova
 Xichang Zhang
 John Barrett
 Bryan Au, Taw Timenez*

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Approved GMO	lentiviral vector backbone (Vincovect), adenovirus-backed vectors (Ad 5), Ad5 GFP, proto-oncogene HER2/neu	<i>wild type myxoma virus & recombinant myxoma carry mRFP used for HER2/neu.</i>
Approved use of Animals	rodent C57BL/6, NOD SCID, GFP	

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Date of last Biohazardous Agents Registry Form May 29, 2007

Signature of Permit Holder: *Gregory Dekaban*
 BioSafety Officers: *Carol Roberts* *Stanley*
 Chair, Biohazards Subcommittee: *G.M. Kildner*



RECEIVED
11/06/07

BIO-PR.I-0021 (2+)
BIO-UWO-0031 (3)

BIOHAZARDOUS AGENTS REGISTRY FORM

Reviewed by Biosafety Subcommittee: February 2006

This form must be completed by each Principal Investigator when completing a grant application or grant renewal to be administered by the Robarts Research Institute, if the use of biohazardous and/or infectious agents is proposed. For any proposed animal work involving the use of biohazardous agents or animals carrying zoonotic agents infectious to humans, this form must also be completed.

COMPLETED FORMS ARE TO BE RETURNED TO BIOSAFETY SUBCOMMITTEE CHAIR, ROOM 3-34.1.

If there are any changes to the information on these forms (excluding grant title and funding agencies) a new form must be completed and sent to the Biosafety Subcommittee Chair BEFORE implementation of these changes can occur.

If multi-team grants are being applied for, each individual investigator of the team must submit a Biohazardous Agents Registry Form to the Biosafety Subcommittee Chair.

Containment Levels will be required in accordance with Health Canada (HC), Laboratory Biosafety Guidelines, 3rd edition 2004, or Canadian Food Inspection Agency (CFIA), Containment Standards for Veterinary Facilities, 1st edition 1996

For questions regarding this form, please contact Biosafety Subcommittee Chair at ext. 34125.

1.0 Contact Information

PRINCIPAL INVESTIGATOR

SIGNATURE

DATE

DEPARTMENT

ADDRESS

TELEPHONE

E-MAIL

Location of experimental work to be carried out

Building(s)

Room(s)

*For work being performed at institutions affiliated with the Robarts Research Institute, the Safety Officer for the Institution where experiments will take place must sign the form prior to it being sent to Robarts Research Institute, Biosafety Subcommittee Chair. See Section 13.6, Approvals

GRANT TITLE(S)

ATTACH A BRIEF DESCRIPTION OF YOUR WORK, SUCH AS THE RESEARCH GRANT SUMMARY(S) EXPLAINING THE BIOHAZARD(S) USED.

FUNDING AGENCY/AGENCIES: Ontario Cancer Research Network

Anticipated Grant End Date: March 2009

Names of all personnel working under Principal Investigator's supervision in this location:

<u>Greg DeGabor</u>	<u>Student to be named</u>
<u>Peta O'Connell</u>	
<u>Paula Foster</u>	
<u>Carmen Simedrea</u>	
<u>Tim Su</u>	
<u>Matilda Leon Pente</u>	
<u>Josette Sarr</u>	

Note: A list of human pathogens categorized according to Risk Group can be obtained by calling the Office of Laboratory Security directly at (613) 957-1779 or accessing their Web site: <http://www.phac-aspc.gc.ca/pls-bsl/index.html>

2.0 Microorganisms

2.1 Does your work involve the use of microorganisms? YES NO
If NO, please proceed to Section 3.0

2.2 Please complete the table below

Name of Microorganism	Is microorganism a known human pathogen? YES/NO	Is microorganism a known animal pathogen? YES/NO	Is microorganism a known zoonotic agent? YES/NO	Maximum quantity to be cultured at one time?	Health Canada or CFIA Containment Level (select one)
<u>E. coli DH5α</u> <u>uptake stable?</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>1-2L</u>	<input type="radio"/> 10 <input type="radio"/> 20 <input type="radio"/> 30
					<input type="radio"/> 10 <input type="radio"/> 20 <input type="radio"/> 30
					<input type="radio"/> 10 <input type="radio"/> 20 <input type="radio"/> 30

3.0 Cell Culture

3.1 Does your work involve the use of cell cultures? YES NO
 If NO please proceed to Section 4.0

3.2 Please indicate in the table below the type of cells that will be grown in culture.

Cell Type	Is this cell type used in your work? YES / NO	Established or Primary *	Supplier of Primary Cell Culture Tissue
Human	Y/NO	Both	Dr. Jacques Galipeau;
Rodent	Y/NO (mouse)	Both	
Non-human primate			
Other (specify)			

* i.e. derived from fresh tissue

3.3 Complete the following table.

Specific Cell Line	Source / Supplier	HC or CFIA Containment Level (select one)		
HEK 293, HEK293FT	Invitrogen as purchased	1 <input type="radio"/>	2 <input checked="" type="radio"/>	3 <input type="radio"/>
CP.1 and CP.2*	Dr. Brad Wilson, U.B.C	1 <input type="radio"/>	2 <input checked="" type="radio"/>	3 <input type="radio"/>
		1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>

* Express proto-oncogene HcR2/HEK and a dominant negative form of p53

4.0 Use of Human Source Materials

4.1 Does your work involve the use of human source materials? YES NO
 If NO, please proceed to Section 5.0

4.2 Indicate in the table below the Human Source Material to be used.

Human Source Material	Specify Source, or Not Applicable (NA)	Is Human Source Material known to be infected with an infectious agent? YES/NO	Name of Infectious Agent	HC or CFIA Containment Level (select one)
Human Blood (whole) or other Body Fluid				1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>
Human Blood (fraction) or other Body Fluid	PBM C (a buff) and blood cells bone marrow	NO		1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/>
Human Organs (unpreserved)				1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>
Human Tissues (unpreserved)				1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

* To be supplied by Dr. Jacques Galipeau (Montreal) or via David Hess as part of a collaboration.

5.0 Genetically Modified Organisms and Cell Lines

5.1 Will genetic modifications be made to the organism, virus or cell line? YES NO
If NO, please proceed to Section 6.0

5.2 Will genetic sequences from any of the following be involved?

- HIV YES NO

If YES, specify Lentiviral vector backbone

- HTLV 1 or 2 YES NO

If YES, specify: _____

- Other human or animal pathogen and/or their toxins YES NO

If YES, specify: _____

5.2 Will intact genetic sequences be used from:

- SV 40 Large T antigen YES NO

- Adeno E1A YES NO

- Known or suspected oncogenes YES NO

If YES, specify: oncogenic dominant negative form of p53

5.4 Will a live vector(s) (viral) or bacterial be used for gene transduction? YES NO

If YES, name vector: Adeno virus-based vectors; Lentiviral vector

5.5 List specific vector(s) to be used: Delta power lentiviral vector, Ad5

5.6 Will vector be replication defective? YES NO

5.7 Will vector be infectious to humans or animals? YES NO

5.8 Will this be expected to increase the Containment Level required? YES NO
2+3

6.0 Human Gene Therapy Trials

6.1 Will human clinical trials using the vector(s) in 5.5 be conducted? YES NO
If NO, please proceed to Section 7.0
If YES, attach a full description of the make-up of the virus.

6.2 Will vector be able to replicate in the host? YES NO

6.3 How will the vector be administered? _____

6.4 Please give the Health Care Facility where the clinical trial will be conducted:

6.5 Has human ethics approval been obtained? YES NO

Approval # _____

7.0 Animal Experiments

7.1 Will any of the agents listed be used in live animals?
If NO, please proceed to section 8.0

YES

NO under

7.2 Name of animal species to be used: CS7B1/6 ; No D SCID

Peta O'Connell.

7.3 AUS protocol # pending and 2006-118-10 for rept's

7.4 If using murine cell lines, have they been tested for murine pathogens? YES NO

not involving virus vectors and NO D SCID mice.

8.0 Use of Animal species with Zoonotic Hazards

8.1 Will any of the following animals or their organs, tissues, lavages or other bodily fluids including blood be used?

- Pound source dogs YES NO
- Pound source cats YES NO
- Sheep or goats YES NO
- Non- Human Primates YES NO

If YES specify species _____

- Wild caught animals YES NO

If YES specify species _____

9.0 Biological Toxins

9.1 Will toxins of biological origin be used?
If NO, please proceed to Section 10.0
If YES, please name the toxin _____

YES

NO

9.2 What is the LD₅₀ (specify species) of the toxin? _____

10.0 Import Requirements

10.1 Will the agent be imported?
If NO, please proceed to Section 11.0
If YES, country of origin _____

YES

NO

10.2 Has an Import Permit been obtained from HC for human pathogens? YES NO

10.3 Has an import permit been obtained from CFIA for animal pathogens? YES NO

10.4 Has the import permit been sent to Biosafety Subcommittee Chair? YES NO

If YES, Permit # _____

11.0 Training Requirements for Personnel Named on Form

All personnel named in section 1.0 of this form who will be using any of the above named agents are required to attend the following training courses given by OH&S.

- Biosafety
- Laboratory and Environmental/Waste Management Safety
- WHMIS

As the Principal Investigator, I have ensured that all of the personnel named on the form who will be using any of the biohazardous agents in Sections 2.0 to 10.0 have been trained as required.

SIGNATURE

[Handwritten Signature]

12.0 Containment Levels

12.1 For the work described in sections 2.0 to 10.0, select the highest HC or CFIA Containment Level required. 1 2 + 3

12.2 Has the facility been certified by Biosafety Subcommittee Chair for this level of containment?
YES NO

If YES, give date: June 26, 2006 and permit number: 2006-06 (2-12.2)

13.0 Approvals

~~Robarts Research Institute~~ UWO Biohazards Subcommittee

Signature G. H. Kistner Date 29 May '07

Biosafety Officer for the Institution where experiments will take place

Signature [Handwritten Signature] Date May 28/07

Biosafety Officer of Robarts Research Institute (if different than above)

Signature _____ Date _____

Note: This permit will be in effect from _____ to _____

subject to annual facility re-certification