

**THE UNIVERSITY OF WESTERN ONTARIO  
BIOLOGICAL AGENTS REGISTRY FORM**  
Approved Biohazards Subcommittee: October 14, 2010  
Biosafety Website: [www.uwo.ca/humanresources/biosafety/](http://www.uwo.ca/humanresources/biosafety/)

This form must be completed by each Principal Investigator holding a grant administered by the University of Western Ontario (UWO) or in charge of a laboratory/facility where the use of Level 1, 2 or 3 biological agents is described in the laboratory or animal work proposed. The form must also be completed if any work is proposed involving animals carrying zoonotic agents infectious to humans or involving plants, fungi, or insects that require Public Health Agency of Canada (PHAC) or Canadian Food Inspection Agency (CFIA) permits.

This form must be updated at least every 3 years or when there are changes to the biological agents being used.

Containment Levels will be established in accordance with Laboratory Biosafety Guidelines, 3rd edition, 2004, Public Health Agency of Canada (PHAC) or Containment Standards for Veterinary Facilities, 1<sup>st</sup> edition 1996, Canadian Food Inspection Agency (CFIA).

Completed forms are to be returned to Occupational Health and Safety, (OHS), (Support Services Building, Room 4190) for distribution to the Biohazards Subcommittee. For questions regarding this form, please contact the Biosafety Officer at extension 81135 or [biosafety@uwo.ca](mailto:biosafety@uwo.ca). If there are changes to the information on this form (excluding grant title and funding agencies), contact Occupational Health and Safety for a modification form. See website: [www.uwo.ca/humanresources/biosafety/](http://www.uwo.ca/humanresources/biosafety/)

PRINCIPAL INVESTIGATOR DR. PETER MERRIFIELD  
 DEPARTMENT ANATOMY & CELL BIOLOGY  
 ADDRESS MEDICAL SCIENCES BLDG., Rm 428  
 PHONE NUMBER 661-2111 x 86819  
 EMERGENCY PHONE NUMBER(S) 433-9873 (HOME)  
 EMAIL pmerrifi@uwo.ca

Location of experimental work to be carried out: Building(s) MSB Room(s) 427

\*For work being performed at Institutions affiliated with the University of Western Ontario, the Safety Officer for the Institution where experiments will take place must sign the form prior to its being sent to the University of Western Ontario Biosafety Officer (See Section 15.0, Approvals).

FUNDING AGENCY/AGENCIES: NSERC  
 GRANT TITLE(S): CELLULAR AND MOLECULAR BASIS OF MUSCLE  
FIBRE DEVELOPMENT

List all personnel working under Principal Investigators supervision in this location:

Name	UWO E-mail Address	Date of Biosafety Training
<u>PASQUALE VECCHIO</u>	<u>pvecchio@uwo.ca</u>	<u>SEPTEMBER, 2009</u>

**Please explain the biological agents and/or biohazardous substances used and how they will be stored, used and disposed of. Projects without this description will not be reviewed.**

Established rodent cell lines - C2C12 and L6 myoblasts - will be used in these studies.

These cell lines have been obtained from ATCC and are currently stored frozen as aliquots at  $-70^{\circ}\text{C}$ . Aliquots of cells are thawed as needed. All cell manipulations are conducted under a laminar flow hood. All supplies used to handle the cells are autoclaved before disposal.

**Please include a one page research summary or teaching protocol.**

Skeletal muscle development, or myogenesis, represents an ideal model system for studying cellular processes such as cell migration, cell signaling, cell cycle regulation and cell differentiation.

Understanding myogenesis is extremely important, since  $myoD^{-/-}$ ,  $myf5^{-/-}$  deficient mice which lack normal muscle development die at birth, and mutant mice lacking muscle specific stem cells (or satellite cells) cannot regenerate muscle in response to injury. This NSERC Discovery grant will elucidate the cell signaling and epigenetic mechanisms which commit muscle precursor cell to specific myogenic lineages and the role of specific myogenic lineages in the development and regeneration of different muscle fibre types. Specifically, I will use various rodent models (ex. normal and GFP expressing/nude rats, normal and Pax 7  $-/-$  KO mice) to explore six major themes, including 1) the role of embryonic signalling molecules (such as Shh, Wnts and BMPs) in programming muscle precursor cells into either fast or slow myogenic lineages 2) the epigenetic mechanisms involved with myogenic lineage specification 3) the ability of over-expression of fibre type specific genes (such as calcineurin, Sox6 and Six1/eya1) to dictate the fibre type of muscle satellite 4) the importance of p38 signaling in determining myogenic lineage specification 5) the role of satellite cells in the regeneration of specific muscle fibre types following injury and 6) the ability of slow-lineage specified muscle satellite cells to become functionally integrated in vivo following direct injection into adult rat myocardium. The experimental approaches used to pursue these objectives will include cell culture/ transduction, cell injection/ immunolocalization, immunoprecipitation /western blot analysis, RT/real time PCR and microarray analysis. Discovering the molecular basis for these signaling and epigenetic mechanisms will improve our understanding of how normal and diseased muscle adapt, regenerate and age.

## 1.0 Microorganisms

1.1 Does your work involve the use of biological agents?  YES  NO  
 (non-pathogenic and pathogenic biological agents including but not limited to bacteria and other microorganisms, viruses, prions, parasites or pathogens of plant or animal origin)? If no, please proceed to Section 2.0

Do you use microorganisms that require a permit from the CFIA?  YES  NO

If YES, please give the name of the species. \_\_\_\_\_

What is the origin of the microorganism(s)? \_\_\_\_\_

Please describe the risk (if any) of escape and how this will be mitigated:

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Please attach the CFIA permit.

Please describe any CFIA permit conditions:

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1.2 Please complete the table below:

Name of Biological Agent(s)* (Be specific)	Is it known to be a human pathogen? YES/NO	Is it known to be an animal pathogen? YES/NO	Is it known to be a zoonotic agent? YES/NO	Maximum quantity to be cultured at one time? (in Litres)	Source/Supplier	PHAC or CFIA Containment Level
	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No			<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 2+ <input type="radio"/> 3
	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No			<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 2+ <input type="radio"/> 3
	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No			<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 2+ <input type="radio"/> 3
	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No			<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 2+ <input type="radio"/> 3

\*Please attach a Material Safety Data Sheet or equivalent from the supplier.

## 2.0 Cell Culture

2.1 Does your work involve the use of cell cultures?  YES  NO

If no, please proceed to Section 3.0

2.2 Please indicate the type of primary cells (i.e. derived from fresh tissue) that will be grown in culture:

Cell Type	Is this cell type used in your work?	Source of Primary Cell Culture Tissue	AUS Protocol Number
Human	<input type="radio"/> Yes <input checked="" type="radio"/> No		Not applicable
Rodent	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Non-human primate	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Other (specify)	<input type="radio"/> Yes <input checked="" type="radio"/> No		

2.3 Please indicate the type of established cells that will be grown in culture in:

Cell Type	Is this cell type used in your work?	Specific cell line(s)*	Containment Level of each cell line	Supplier / Source of cell line(s)
Human	<input type="radio"/> Yes <input checked="" type="radio"/> No			
Rodent	<input checked="" type="radio"/> Yes <input type="radio"/> No	MOUSE C127 MYOBLAST RAT L6 MYOBLAST	1	ATCC
Non-human primate	<input type="radio"/> Yes <input checked="" type="radio"/> No			
Other (specify)	<input type="radio"/> Yes <input checked="" type="radio"/> No			

\*Please attach a Material Safety Data Sheet or equivalent from the supplier. (For more information, see www.atcc.org)

2.4 For above named cell types(s) indicate PHAC or CFIA containment level required  1  2  2+  3

### 3.0 Use of Human Source Materials

3.1 Does your work involve the use of human source materials?  YES  NO  
If no, please proceed to Section 4.0

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

Human Source Material	Source/Supplier /Company Name	Is Human Source Material Infected With An Infectious Agent? YES/UNKNOWN	Name of Infectious Agent (If applicable)	PHAC or CFIA Containment Level (Select one)
Human Blood (whole) or other Body Fluid		<input type="radio"/> Yes <input type="radio"/> Unknown		<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 2+ <input type="radio"/> 3
Human Blood (fraction) or other Body Fluid		<input type="radio"/> Yes <input type="radio"/> Unknown		<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 2+ <input type="radio"/> 3
Human Organs or Tissues (unpreserved)		<input type="radio"/> Yes <input type="radio"/> Unknown		<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 2+ <input type="radio"/> 3
Human Organs or Tissues (preserved)		Not Applicable		Not Applicable

### 4.0 Genetically Modified Organisms and Cell lines

4.1 Will genetic modifications be made to the microorganisms, biological agents, or cells described in Sections 1.0 and 2.0?  YES  NO If no, please proceed to Section 5.0

4.2 Will genetic modification(s) involving plasmids be done?  YES, complete table below  NO

Bacteria Used for Cloning *	Plasmid(s) **	Source of Plasmid	Gene Transfected	Describe the change that results from transformation or tranfection

\* Please attach a Material Data Sheet or equivalent if available.

\*\* Please attach a plasmid map.

**Designations:** L6  
**Depositors:** D Schubert  
**Biosafety Level:** 1  
**Shipped:** frozen  
**Medium & Serum:** [See Propagation](#)  
**Growth Properties:** adherent  
**Organism:** Rattus norvegicus (rat)  
**Morphology:** myoblast



**Source:** Tissue: skeletal muscle  
 Cell Type: myoblast myoblast;

**Cellular Products:** myosin

**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.

**Applications:** transfection host ([Nucleofection technology from Lonza Roche FuGENE® Transfection Reagents](#))

**Comments:** The L6 myogenic line was isolated originally by Yaffe from primary cultures of rat thigh muscle maintained for the first two passages in the presence of methyl cholanthrene. [22581]  
 L6 cells fuse in culture to form multinucleated myotubes and striated fibers. The extent of cell fusion declines with passage and the cells should be frozen at low passage and periodically recloned with selection for fusion competent cells.  
 Tested and found negative for ectromelia virus (mousepox).

**Propagation:** **ATCC complete growth medium:** The base medium for this cell line is ATCC-formulated Dulbecco's Modified Eagle's Medium, Catalog No. 30-2002. To make the complete growth medium, add the following components to the base medium: fetal bovine serum to a final concentration of 10%.

**Atmosphere:** air, 95%; carbon dioxide (CO<sub>2</sub>), 5%

**Temperature:** 37.0°C

**Growth Conditions:** The myoblastic component of this line will be depleted rapidly if the cells are allowed to become confluent.

**Subculturing:** **Protocol:** Subculture before the cells become confluent to retard the loss of differentiating ability that is observed as the cells are passaged.

1. Remove and discard culture medium.
2. Briefly rinse the cell layer with 0.25% (w/v) Trypsin- 0.53 mM EDTA solution to remove all traces of serum that contains trypsin inhibitor.
3. Add 2.0 to 3.0 ml of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes).  
 Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal.
4. Add 6.0 to 8.0 ml of complete growth medium and aspirate cells by gently pipetting.
5. Add appropriate aliquots of the cell suspension to new culture vessels.
6. Incubate cultures at 37°C.

**Subcultivation Ratio:** A subcultivation ratio of 1:20 to 1:40 is recommended

**Medium Renewal:** 2 to 3 times per week

**Preservation:** **Freeze medium:** Complete growth medium supplemented with 5% (v/v) DMSO  
**Storage temperature:** liquid nitrogen vapor phase

**Related Products:** Recommended medium (without the additional supplements or serum described under ATCC Medium): ATCC 30-2002

## Info on Cell Line(s)

[Make a Deposit](#)

[Frequently Asked Questions](#)

[Material Transfer Agreement](#)

[Technical Support](#)

[Related Cell Culture Products](#)

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[Product Information Sheet](#)

Designations: C2C12  
 Biosafety Level: 1  
 Shipped: frozen  
 Medium & Serum: [See Propagation](#)  
 Growth Properties: adherent  
 Organism: *Mus musculus* (mouse)  
 Morphology: myoblast



Source: Tissue: muscle  
 Strain: C3H  
 Cell Type: myoblast;

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.

Applications: transfection host ([Nucleofection technology from Lonza Roche FuGENE® Transfection Reagents](#))

Comments: This is a subclone (produced by H. Blau, et al) of the mouse myoblast cell line established by D. Yaffe and O. Saxel. [22903]  
 The C2C12 cell line differentiates rapidly, forming contractile myotubes and producing characteristic muscle proteins. [22953]  
 Treatment with bone morphogenic protein 2 (BMP-2) cause a shift in the differentiation pathway from myoblastic to osteoblastic. [23427]  
 Tested and found negative for ectromelia virus (mousepox).

**Propagation:** **ATCC complete growth medium:** The base medium for this cell line is ATCC-formulated Dulbecco's Modified Eagle's Medium, Catalog No. 30-2002. To make the complete growth medium, add the following components to the base medium: fetal bovine serum to a final concentration of 10%.  
**Temperature:** 37.0°C

**Subculturing:** **Protocol:** IMPORTANT - DO NOT ALLOW CULTURES TO BECOME CONFLUENT.  
 Cultures must not be allowed to become confluent as this will deplete the myoblastic population in the culture.  
 Myotube formation is enhanced when the medium is supplemented with 10% horse serum instead of fetal bovine serum.

1. Remove and discard culture medium.
2. Briefly rinse the cell layer with 0.25% (w/v) Trypsin- 0.53 mM EDTA solution to remove all traces of serum which contains trypsin inhibitor.
3. Add 2.0 to 3.0 ml of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes).  
 Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal.
4. Add 6.0 to 8.0 ml of complete growth medium and aspirate cells by gently pipetting.
5. Add appropriate aliquots of the cell suspension to new culture vessels.  
 Inoculate at a cell concentration between 1.5 X 10<sup>5</sup> and 1.0 X 10<sup>6</sup> viable cells/75 cm<sup>2</sup>.
6. Incubate cultures at 37°C.

**Medium Renewal:** Every two to three days

**Preservation:** **Freeze medium:** Complete growth medium supplemented with 5% (v/v) DMSO  
**Storage temperature:** liquid nitrogen vapor phase

**Related Products:** Recommended medium (without the additional supplements or serum described under ATCC Medium): ATCC [30-2002](#)  
 recommended serum: ATCC [30-2020](#)

**References:** 22903: Yaffe D, Saxel O. Serial passaging and differentiation of myogenic cells isolated from dystrophic mouse muscle. Nature 270:

## Related Links



[NCBI Entrez Search](#)

[Cell Micrograph](#)

[Make a Deposit](#)

[Frequently Asked Questions](#)

[Material Transfer Agreement](#)

[Technical Support](#)

[Related Cell Culture Products](#)

## Login Required



[Product Information Sheet](#)

4.3 Will genetic modification(s) of bacteria and/or cells involving viral vectors be made?

YES, complete table below     NO

Virus Used for Vector Construction	Vector(s) *	Source of Vector	Gene(s) Transduced	Describe the change that results from transduction

\* Please attach a Material Safety Data Sheet or equivalent.

4.4 Will genetic sequences from the following be involved?

- ◆ HIV  YES, please specify \_\_\_\_\_  NO
- ◆ HTLV 1 or 2 or genes from any Level 1 or Level 2 pathogens  YES, specify \_\_\_\_\_  NO
- ◆ SV 40 Large T antigen  YES  NO
- ◆ E1A oncogene  YES  NO
- ◆ Known oncogenes  YES, please specify \_\_\_\_\_  NO
- ◆ Other human or animal pathogen and or their toxins  YES, please specify \_\_\_\_\_  NO

4.5 Will virus be replication defective?  YES  NO

4.6 Will virus be infectious to humans or animals?  YES  NO

4.7 Will this be expected to increase the containment level required?  YES  NO

### 5.0 Human Gene Therapy Trials

5.1 Will human clinical trials be conducted involving a biological agent?  YES  NO  
 (including but not limited to microorganisms, viruses, prions, parasites or pathogens of plant or animal origin)  
 If no, please proceed to Section 6.0

5.2 If YES, please specify which biological agent will be used: \_\_\_\_\_  
 Please attach a full description of the biological agent.

5.2 Will the biological agent be able to replicate in the host?  YES  NO

5.3 How will the biological agent be administered? \_\_\_\_\_

5.4 Please give the Health Care Facility where the clinical trial will be conducted: \_\_\_\_\_

5.5 Has human ethics approval been obtained?  YES, number: \_\_\_\_\_  NO  PENDING

### 6.0 Animal Experiments

6.1 Will live animals be used?  YES  NO    If no, please proceed to section 7.0

6.2 Name of animal species to be used \_\_\_\_\_

6.3 AUS protocol # \_\_\_\_\_

6.4 Will any of the agents listed in section 4.0 be used in live animals  YES, specify: \_\_\_\_\_  NO

6.5 Will the agent(s) be shed by the animal:  YES  NO, please justify:  
 \_\_\_\_\_  
 \_\_\_\_\_

## 7.0 Use of Animal species with Zoonotic Hazards

7.1 Will any animals with zoonotic hazards or their organs, tissues, lavages or other body fluids including blood be used (see list below)?  YES  No If no, please proceed to section 8.0

7.2 Will live animals be used?  YES  No

7.3 If yes, please specify the animal(s) used:

- ◆ Pound source dogs  YES  NO
- ◆ Pound source cats  YES  NO
- ◆ Cattle, sheep or goats  YES, please specify species \_\_\_\_\_  NO
- ◆ Non-human primates  YES, please specify species \_\_\_\_\_  NO
- ◆ Wild caught animals  YES, please specify species & colony # \_\_\_\_\_  NO
- ◆ Birds  YES, please specify species \_\_\_\_\_  NO
- ◆ Others (wild or domestic)  YES, please specify \_\_\_\_\_  NO

7.4 If no live animals are used, please specify the source of the specimens:  
\_\_\_\_\_

## 8.0 Biological Toxins

8.1 Will toxins of biological origin be used?  YES  NO If no, please proceed to Section 9.0

8.2 If YES, please name the toxin(s) \_\_\_\_\_  
Please attach information, such as a Material Safety Data Sheet, for the toxin(s) used.

8.3 What is the LD<sub>50</sub> (specify species) of the toxin \_\_\_\_\_

8.4 How much of the toxin is handled at one time\*? \_\_\_\_\_

8.5 How much of the toxin is stored\*? \_\_\_\_\_

8.6 Will any biological toxins be used in live animals?  YES, Please provide details: \_\_\_\_\_  NO

\*For information on biosecurity requirements, please see:

[http://www.uwo.ca/humanresources/docandform/docs/healthandsafety/biosafety/Biosecurity\\_Requirements.pdf](http://www.uwo.ca/humanresources/docandform/docs/healthandsafety/biosafety/Biosecurity_Requirements.pdf)

## 9.0 Insects

9.1 Do you use insects?  YES  NO If no, please proceed to Section 10.0

9.2 If YES, please give the name of the species. \_\_\_\_\_

9.3 What is the origin of the insect? \_\_\_\_\_

9.4 What is the life stage of the insect? \_\_\_\_\_

9.5 What is your intention?  Initiate and maintain colony, give location: \_\_\_\_\_  
 "One-time" use, give location: \_\_\_\_\_

9.6 Please describe the risk (if any) of escape and how this will be mitigated:  
\_\_\_\_\_  
\_\_\_\_\_

9.7 Do you use insects that require a permit from the CFIA permit?  YES  NO

If YES, Please attach the CFIA permit & describe any CFIA permit conditions:

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## 10.0 Plants

10.1 Do you use plants?  YES  NO If no, please proceed to Section 11.0

10.2 If YES, please give the name of the species. \_\_\_\_\_

10.3 What is the origin of the plant? \_\_\_\_\_

10.4 What is the form of the plant (seed, seedling, plant, tree...)? \_\_\_\_\_

10.5 What is your intention?  Grow and maintain a crop  "One-time" use

10.6 Do you do any modifications to the plant?  YES  NO

If yes, please describe: \_\_\_\_\_  
\_\_\_\_\_

10.7 Please describe the risk (if any) of loss of the material from the lab and how this will be mitigated:

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10.8 Is the CFIA permit attached?  YES  NO

If YES, Please attach the CFIA permit & describe any CFIA permit conditions:

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## 11.0 Import Requirements

11.1 Will any of the above agents be imported?  YES, please give country of origin \_\_\_\_\_  NO  
If no, please proceed to Section 12.0

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

11.3 Has an import permit been obtained from CFIA for animal or plant pathogens?  YES  NO

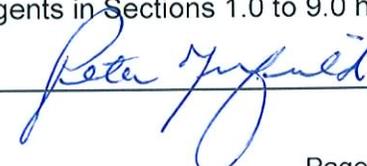
11.4 Has the import permit been sent to OHS?  YES, please provide permit # \_\_\_\_\_  NO

## 12.0 Training Requirements for Personnel Named on Form

All personnel named on the above form who will be using any of the above named agents are required to attend the following training courses given by OHS:

- ◆ Biosafety
- ◆ Laboratory and Environmental/Waste Management Safety
- ◆ WHMIS (Western or equivalent)
- ◆ Employee Health and Safety Orientation

As the Principal Investigator, I have ensured that all of the personnel named on the form who will be using any of the biological agents in Sections 1.0 to 9.0 have been trained.

SIGNATURE 

**13.0 Containment Levels**

13.1 For the work described in sections 1.0 to 9.0, please indicate the highest HC or CFIA Containment Level required.  1  2  2+  3

13.2 Has the facility been certified by OHS for this level of containment?  
 YES, date of most recent biosafety inspection: \_\_\_\_\_  
 NO, please certify  
 NOT REQUIRED for Level 1 containment

13.3 Please indicate permit number (not applicable for first time applicants): \_\_\_\_\_

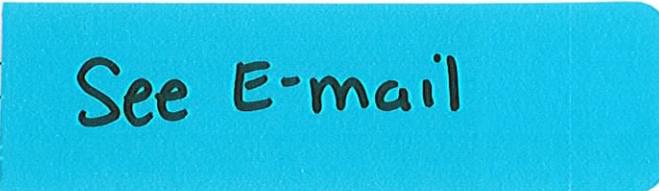
**14.0 Procedures to be Followed**

14.1 Please describe additional risk reduction measures will be taken beyond containment level 1, 2, 2+ or 3 measures, that are unique to this agent.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

14.2 Please outline what will be done if there is an exposure to the biological agents listed, such as a needlestick injury or an accidental splash:

\_\_\_\_\_  
\_\_\_\_\_



14.3 As the Principal Investigator, I will ensure that this project complies with the UWO Biosafety Procedures Manual for Containment Level 1 & 2 Laboratories (see Appendix 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 *Peter Zhold* Date: APRIL 26, 2011

**15.0 Approvals**

1) UWO Biohazards Subcommittee: SIGNATURE: \_\_\_\_\_  
Date: \_\_\_\_\_

2) Safety Officer for the University of Western Ontario  
SIGNATURE: \_\_\_\_\_  
Date: \_\_\_\_\_

3) Safety Officer for Institution where experiments will take place (if not UWO):  
SIGNATURE: \_\_\_\_\_  
Date: \_\_\_\_\_

Approval Number: \_\_\_\_\_ Expiry Date (3 years from Approval): \_\_\_\_\_

Special Conditions of Approval:

**Subject:** Re: Biological Agents Registry Form: Merrifield  
**From:** Peter Merrifield <Peter.Merrifield@schulich.uwo.ca>  
**Date:** Tue, 03 May 2011 15:00:03 -0400  
**To:** Jennifer Stanley <jstanle2@uwo.ca>

Hi Jennifer,

Sorry for the oversight. Please see my answer to question 14.2 below:

Dr. Peter Merrifield  
Associate Professor  
Dept. of Anatomy and Cell Biology  
Medical Sciences Building, Rm 428  
University of Western Ontario  
London, Ontario, Canada N6A 5C1

Phone: (519) 661-2111 x 86819  
FAX: (519) 661-3936

[pmerrifi@uwo.ca](mailto:pmerrifi@uwo.ca)

<http://www.uwo.ca/anatomy/department/merrifieldp/pmerrifield.html>

>>> Jennifer Stanley <jstanle2@uwo.ca> 5/3/2011 2:13 PM >>>  
Hi Dr. Merrifield -

Thanks for your recent submission.

I noticed that the following question was not answered; please respond by e-mail:

Question 14.2

Please outline what will be done if there is an exposure to the biological agents listed, such as a needlestick injury or an accidental splash.

**Exposure to material in contact with established cell lines will be minimized by all personnel wearing lab coats and disposable gloves. In the event of a needlestick, the affected area will be cleaned and disinfected and the person involved referred to our local first aid provider - Ms. Glenda Ogilvie. An workplace injury report will also be filed.**

Peter Merrifield

Regards  
Jennifer



E-mail