



The University of Western Ontario
 Approved Level 3 Access Approval Form
 Approved: Biohazard Sub-Committee, January 2011

The Biohazard Subcommittee is mandated by the University Biosafety Committee to review requests for access of all personnel working in the Level 3 Facility. Upon approval by the Sub-committee, personnel must be trained by the Biosafety Coordinator (and if applicable ACVS staff) on Level 3 protocols prior to card access being authorized.

1. Name of Personnel Requiring Access (Please Print): DIKEAKOS, DIMITRIOS (Jimmy)

Name of Personnel Requiring Access (Signature): [Signature]

Supervisor (Please Print): BHAGIRATH SINGH

Supervisor's Signature: [Signature]

Request to Access Level 3 Facility located in: DSB Biotron
 Reason for entry: Research Animal Care Maintenance
 After-Hours Access Required: Yes No

2. Completion of the Following Training:

- WHIMIS (renewed every 3 years) Date: July 6, 2012
- Biosafety Date: ~~will attend August 18, 2012~~
July 19, 2012
- Biosafety Reading:
- Level 3 Biosafety SOP Manual Date: July 20, 2012
- Laboratory Biosafety Guidelines (2004) Date: July 20, 2012
- Laboratory Safety and Waste Management Date: ~~July 19, 2012~~ Aug 15-17, 2012
- New Employee Orientation Date: July 6, 2012
- Other(s)**? _____ Date: _____

** Example: Radiation training, ACVS animal training, etc.

3. Entry into the Mandatory Level 3 Medical Surveillance Program:

Date Completed: July 20/12 Confirmed by: [Signature]

4. Approved by Biohazard Subcommittee: Chair: _____
 Date: _____

5. Completion of Security Check (Complete attached form and submit it to Michael Mics, Manager Campus Police Service):

Date Completed: 12-8-16 Confirmed by: [Signature]

6. Completion of Level 3 Training: Date: _____
 Given by: _____

7. Completion of Level 3 Animal Training: Date: _____
 Given by: _____

JIMMY DIMITRIOS DIKEAKOS

(Canadian citizen)

946 Marigold Street

London, ON N5X 4N8 USA

Tel.: 519.850.2302

Email: ddikeako@uwo.ca

PROFILE

- Molecular virologist with doctoral training in vesicular trafficking and structural biology possessing masterful knowledge of the cell biology of viral-mediated immune modulation.
- Specific interest in the ability of the HIV-1 protein Nef to hijack the host cellular machinery and drive AIDS-disease.
- Discoverer of a novel temporally regulated molecular switch utilized by Nef to modulate the immune system via two distinct molecular pathways.
- Development of methods to study Nef-mediated immune modulation including vesicular trafficking, cell signaling and use of novel anti-retroviral compounds.
- Devoted passion in training young scientists both in the classroom and in the laboratory.

EDUCATION

Ph.D. in Biochemistry, November 2008

Université de Montréal, Montréal, Québec

Department of Biochemistry

Dissertation Title: *Structural determinants of prohormone convertase sorting to dense core secretory granules.*

B.Sc. Biochemistry, September 1999 - May 2002

McGill University, Montréal, Québec

Faculty of Science

PROFESSIONAL EXPERIENCE

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- **Assistant Professor**, July 2012 – present

Western University

Department of Microbiology and Immunology

London, Ontario

Supervisor: Prof. Gary Thomas

- **CIHR Postdoctoral Fellow**, November 2008 – June 2012

Vollum Institute

Oregon Health and Science University

Laboratory of Gary Thomas

Portland, Oregon

JIMMY DIMITRIOS DIKEAKOS

Supervisor: Prof. Gary Thomas

Research Area: Determination of the mechanism used by the HIV-1 protein Nef to evade the immune system by downregulating the cell surface levels of MHC-I.

As a fellow, I identified a prototypical small molecule inhibitor capable of blocking the interaction of Nef with a host cellular kinase. This small molecule inhibitor allowed me to discover how Nef integrates two independent and temporally linked pathways to evade immune surveillance in infected T-cells.

- **Graduate Student**, September 2002 – November 2008

Clinical Research Institute of Montréal (IRCM)
Biochemistry of Hypertension and Biomolecular NMR Spectroscopy Sections
Université de Montréal, Montréal, Québec

Supervisors: Prof. Timothy Reudelhuber and Prof. James Omichinski

Research Area: Determination of the mechanisms targeting proteins to dense core secretory granules.

As a graduate student, I discovered that a family of enzymes, the prohormone convertases, use a canonical alpha-helical targeting signal for dense core secretory granule delivery. My studies also elucidated the first high-resolution three-dimensional NMR structure of a secretory granule targeting motif in the presence of membrane lipids.

RESEARCH AWARDS

- Title: Novel AIDS Therapeutics Targeting the Nef-SFK Interaction
Source: Collins Medical Trust
Type of Award: Pilot Operating Grant
Dates: February 2011 to June 2011
Amount: \$30,000
- Title: Role of PACS-2 in HIV-induced pathogenesis
Source: Canadian Institute of Health Research (CIHR)
Type of Award: Postdoctoral Fellowship
Dates: January 2009 – December 2011
Amount: \$150,000 (\$50,000/year)
- Title: Role of PACS-2 in colorectal cancer
Source: National Cancer Institute of Canada (NCIC)
Type of Award: Postdoctoral Fellowship
Dates: January 2009 – December 2011
Amount: \$120,000 (\$40,000/year); Award declined due to overlap
- Title: Role of PACS-2 in HIV-induced pathogenesis
Source: Québec Fund for Scientific Research (FRSQ)
Type of Award: Postdoctoral Fellowship
Dates: January 2009 – December 2010
Amount: \$60,000 (\$30,000/year); Award declined due to overlap
- Title: Structure and Function of Prohormone Convertase 1
Source: Québec Fund for Scientific Research (FRSQ)

JIMMY DIMITRIOS DIKEAKOS

Type of Award: Doctoral Fellowship
Dates: May, 2005 – May, 2008
Amount: \$60,000 (\$20,000/year)

- Title: Structure and Function of Prohormone Convertase 1
Source: Université de Montréal
Type of Award: Award for Academic Excellence
Dates: May, 2005 – May, 2008
Amount: \$12,000 (\$4,000/year)

PROFESSIONAL SKILLS

- **Virology and Immunology:**
Lentiviral and HIV-1 production and infection;
FACS analysis of cell surface receptors;
Viral replication assays;
Membrane trafficking of major histocompatibility complex I receptors;
Antibody uptake by immunofluorescence;
Cell culture of primary CD4⁺ T-cells, monocytes, dendritic cells and macrophages.
- **Nuclear Magnetic Resonance Spectroscopy (NMR):**
High resolution structure determination of proteins;
Studies of protein-lipids interactions.
- **Protein production and purification:**
Bacterial protein over-expression and purification by HPLC, FPLC.
Protein interactions by ITC and in vitro binding.
- **Genetics:**
Protein interaction analysis by yeast-two-hybrid.
- **Imaging:**
Confocal microscopy and protein interaction detection using biomolecular immuno fluorescence (Bifc).

TEACHING EXPERIENCE

- Lecturer for Section on Intracellular Trafficking: Neuroscience 6205 Class, Oregon Health and Science University, Winter 2009;
- Undergraduate Thesis Supervisor: Mrs. Ivy Musharimi, Reed College, Portland, OR;
- Independent Study Supervisor: Mrs. Grace Kwan, Washington State University, Vancouver, WA.

PEER REVIEW

Ad hoc reviewer for *Cell Host and Microbe*, *Journal of Neurochemistry*, *Traffic*, *Journal of Molecular Biology*, *Clinical and Experimental Metastasis* and *FEBS Journal*.

PROFESSIONAL DEVELOPMENT

Organizer-in-chief of the Vollum Seminar Series: Academic Year 2009-10.

HONOURS AND AWARDS

- Shire Research Award, IRCM Research Day, 2008;
- Pfizer Canada Research Award, IRCM Research Day, 2006;
- Université de Montréal Research Award, IRCM Research Day, May 2005;
- Merck Frosst Research Award, IRCM Research Day, September 2004;
- Astra-Zeneca Research Award, Conférence Simon Noël, March 2004;
- Astra-Zeneca Research Award, IRCM Research Day, May 2003.

PUBLICATIONS

Dikeakos JD, Atkins KM, Thomas L, Thomas G. (2010) "Nef-mediated immune evasion". Editor in Chief Invited review for the *Journal of Virology* (In Preparation);

Wernerburg NW, Bronk SF, Guicciardi ME, Thomas L, **Dikeakos JD**, Thomas G, Gores GJ (2012) "TRAIL Protein-induced Lysosomal Translocation of Proapoptotic Effectors is Mediated by PACS-2", *J Biol Chem* 287: 24427-37 PMID: 22645134;

Dikeakos JD, Thomas L, Kwan G, Elferich J, Shinde U, Thomas G. (2012) "An interdomain binding site on HIV-1 Nef interacts with PACS-1 and PACS-2 on endosomes to downregulate MHC-I", *Mol. Biol. Cell* 23: 2184-97 PMID: 22496420;

Dikeakos JD, Atkins KM, Thomas L, Wortman MD, Byeon IL, Jung J, Emert-Sedlak L, Kukull B, Saito H, Koizumi H, Williamson DM, Hiyoshi M, Barklis E, Takiguchi M, Suzu S, Gronenborn AM, Smithgall TE, Thomas G. (2010) "Small Molecule Inhibition of HIV-1-induced MHC-I Downregulation Identifies a Temporally Regulated Switch in Nef Action", *Mol. Biol. Cell* 21: 3279-92 [PMID: 20702582](#);

Dikeakos JD, Di Lello P, Lacombe M-J, Ghirlando R, Legault P, Reudelhuber TL and Omichinski JG. (2009) "Functional and Structural Characterization of a Dense Core Secretory Granule Sorting Domain from the PC 1/3 Protease", *Proc Natl Acad Sci USA* 106, 7408-13. [PMCID: PMC2678656](#);

Dikeakos JD, Lacombe MJ, Mercure C, Seidah NG, Reudelhuber TL. (2007) "PC1/3, PC2 and PC5A/6 are Targeted to Dense Core Secretory Granules by a Common Mechanism", *FEBS Journal* 274, 4094-102. [PMID: 17645548](#);

JIMMY DIMITRIOS DIKEAKOS

Rabah N, Gauthier D, **Dikeakos JD**, Reudelhuber TL, Lazure C. (2007) "The C-terminal region of the proprotein convertase 1/3 (PC1/3) exerts a bimodal regulation of the enzyme activity in vitro", *FEBS Journal* 274, 3482-91. [PMID: 17565604](#);

Dikeakos JD, Reudelhuber TL. (2007) "Sending proteins to dense core secretory granules: still a lot to sort out", *J Cell Biol* 177, 191-196. [PMID: 17438078](#);

Di Lello P, Jenkins LMM, Jones TN, Nguyen BD, Hara T, Yamaguchi H, **Dikeakos JD**, Appella E, Legault P, Omichinski JG. (2006) "Structure of the Tfb1/p53 Complex: Insights into the Interaction between the p62/Tfb1 Subunit of TFIID and the Activation Domain of p53", *Molecular Cell* 22, 731-740. [PMID: 16793543](#);

Dikeakos JD, Lacombe MJ, Mercure C, Mireuta M, and Reudelhuber TL. (2007) "A Hydrophobic Patch in a Charged alpha-Helix Is Sufficient to Target Proteins to Dense Core Secretory Granules", *J Biol Chem* 282, 1136-1143. [PMID: 17092937](#);

Lacombe MJ, Mercure C, **Dikeakos JD**, Reudelhuber TL. (2005) "Modulation of Secretory Granule Efficiency by Cis and Trans Compounding Signals", *J Biol Chem* 280, 4803-4807. [PMID: 15569678](#).

PRESENTATIONS

Dikeakos JD, Atkins KM, Thomas L, Wortman M and Thomas G. (May 2010) "Small Molecule Inhibition of HIV-1-Induced MHC-I Downregulation Identifies a Temporally Regulated Switch in Nef Action", *Annual Symposium of the Center for HIV Protein Interactions*, Pittsburgh, USA (Poster Presentation);

Atkins KM, **Dikeakos JD**, Thomas L and Thomas G. (February 2010). "Chemical Inhibition of HIV-1 Nef-mediated MHC-I Downregulation by Targeting Multi-kinase Complex Assembly", *17th Conference on Retroviruses and Opportunistic Infections*, San Francisco, USA (Poster Presentation);

Dikeakos JD, Atkins KM, Thomas L, Wortman M and Thomas G. (January 2010) "Small Molecule Inhibition of HIV-1-Induced MHC-I Downregulation Identifies a Temporally Regulated Switch in Nef Action", *Keystone Symposia on HIV Pathogenesis*, Santa Fe, USA (Poster Presentation);

Dikeakos JD. (November 2009) "The PACS proteins and Nef Pathogenesis", *Department of Molecular Microbiology and Genetics, University of Pittsburgh*, Pittsburgh, USA (Invited Oral Presentation);

Dikeakos JD, Di Lello P, Lacombe MJ, Legault P, Reudelhuber TL and Omichinski JG. (August 2008) "Functional Anatomy of a Secretory Granule sorting Domain: an Up-Close Look at the C-terminal domain of PC1/3", *XXIIIth ICMRBS*, San Diego, USA (Poster Presentation);

Dikeakos JD. (July 2008) "Proteins are targeted to secretory granules by discrete soluble domains", *Gordon Research Conference, Proprotein processing and secretion*, New London, NH (Invited Oral Presentation);

Dikeakos JD, Di Lello P, Lacombe M-J, Seidah NG, Legault P, Reudelhuber TL and Omichinski JG. (September 2007) "The NMR Solution Structure of the C-terminal Sorting Domain of PC1

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Reveals a Calcium Binding Site". *Moot NMR Meeting*, Sainte-Adèle, Canada (Poster Presentation);

Dikeakos JD, Lacombe M-J, Mercure C, Seidah NG and Reudelhuber TL. (May 2006) "PC1/3, PC2 and PC5A/6 enter Dense Core Secretory Granules by a Common Mechanism", *IRCM Student Research Day*, Montréal, Canada (Poster Presentation; 1st Prize);

Dikeakos JD, Lacombe MJ, Mireuta M and Reudelhuber TL. (May 2005) "An exposed hydrophobic patch in a charged helix targets protein to secretory granules", *IRCM Student Research Day*, Montréal, Canada (Poster Presentation; 2nd Prize);

Dikeakos JD, Lacombe M-J, Mireuta M and Reudelhuber TL. (December 2004) "Structural Determinants on Alpha Helical Structures Sorting to Secretory Granules", *44th Annual American Society of Cell Biology*, Washington DC, USA (Poster Presentation);

Dikeakos, JD and Reudelhuber TL. (October 2005) "Phosphatidic Acid is a Candidate Lipid in Regulated Secretion", *2nd CIHR Group Protease Meeting*, Cornwall, Canada (Oral Presentation);

Dikeakos JD, Lacombe M-J, Mireuta M, Basak A, Chrétien M, Seidah NG and Reudelhuber TL. (September 2004) "An Exposed Alpha Helix is Sufficient to Target Proteins to Dense Core Secretory Granules", *IRCM Student Research Day*, Montréal, Canada (Oral Presentation; 2nd Prize);

Dikeakos JD, Lacombe M-J, Mireuta M, Basak A, Chrétien M, Seidah NG and Reudelhuber TL. (March 2004) "Une hélice alpha exposée est suffisante pour cibler les protéines dans les vésicules de sécrétions denses", *Journée Simon Pierre-Noel, Département de Biochimie, Université de Montréal*, Montréal, Canada (Oral Presentation; 1st Prize);

Dikeakos JD and Reudelhuber TL. (May 2003) "The ability of PC1 to bind membrane lipids". *IRCM Student Research Day*, Montréal, Canada (Poster Presentation; 1st Prize).



London Police Service
POLICE INFORMATION CHECK

(This search is not intended for persons working with children or the vulnerable sector)

RECEIVED

JUL 24 2012

Applicants Information <small>Must print legibly Under Each Heading</small>	Date of Request (yyyy/mm/dd)
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Last Name DIKEAKOS	First Name DIMITRIOS	Middle Name
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Maiden Name or other (Sur)names used	Maiden Name or other (Sur)names used
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# and Street Name 946 MARIGOLD STREET	Apt/Unit #
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City LONDON	Province ON	Postal Code NSX4N8	Date of Birth (yyyy/mm/dd) 1980/01/07	Place of Birth MONTREAL, QC	Gender M
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Address History - include all addresses where you have resided in the past 5 years					
# and Street Name	Apt/Unit #	City	Province		
946 MARIGOLD ST		LONDON	ON		
2006 NE HANCOCK		PORTLAND	OREGON, USA		
1164 MONTELLIER		MONTREAL	QC		

Reason for Request (state below) **Self-Declaration of Criminal Record**

Reason & Agency Name: (If other, please specify) <input type="checkbox"/> Volunteer <input checked="" type="checkbox"/> Employment <input type="checkbox"/> Other	<input type="checkbox"/> Attached <input checked="" type="checkbox"/> No Record
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Description of the Position: PROFESSOR - Access Level III Containment FACILITY AT UNIVERSITY OF WESTERN ONT.	Extra copy (Additional Fees Apply):	Reason for each copy requested:
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Identification - one form MUST be Government Issued that includes the applicant's name, date of birth, signature and photo.

Type of I.D. produced PASSPORT	ID number WR 060947
Type of I.D. produced ONTARIO DRIVERS LICENSE	Proof of London Address # D4275-16908-00107 DL

Contact Information

Res. Phone 519-204-2096	Bus. Phone 519-850-2302	Cell Phone 519-639-5421
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The Police Information Check will include the following information as it exists on the date of the search:

- Outstanding entries, such as charges and warrants, judicial orders, Peace Bonds, Probation and Prohibition orders
- Criminal convictions (summary and indictable) from CPIC and/or local databases.
- Absolute and conditional discharges.
- Family court restraining orders.
- Criminal charges resulting in dispositions including, but not limited to, Withdrawn, Dismissed, and cases of Not Criminally Responsible by Reason of Mental Disorder as listed on local indices.
- Police contacts including but not limited to theft, weapons, sex offences, or violent, harmful and threatening behaviour.

1. I hereby release and discharge the London Police Services Board and all members and employees of the London Police Service from any and all actions, claims and demands for damages, loss or injury howsoever arising which may hereafter be sustained by myself as a result of the disclosure of information by the London Police Service. I hereby authorize the London Police Service to inquire into and disclose the results of any police records to me including: outstanding entries, such as charges and warrants, judicial orders, peace bonds, probation and prohibition orders; criminal convictions (summary and indictable); absolute and conditional discharges; family court restraining orders; criminal charges resulting in dispositions including, but not limited to, withdrawn, dismissed, and cases of not criminally responsible by reason of mental disorder; police contacts including but not limited to theft, weapons, sex offences, or violent, harmful and threatening behavior and to conduct a local police contact search with any Police Service in Canada.

2. I certify that the information provided by me in this application is true and correct to the best of my knowledge and belief. I have read this consent, understand it and agree to it in its entirety.

Applicant's Signature: *D. Dikeakos* **Date:** July 22, 2012

UNIT 1. TO BE COMPLETED BY APPLICANT

**London Police Service
POLICE INFORMATION CHECK**

(This search is not intended for persons working with children or of the vulnerable sector)

Application Verified by:
358923
(Print Name)

[Signature]
(Signature)

UNIT 2 - POLICE USE ONLY

Applicant Information

Last Name <u>Dikeakos</u>	First Name <u>Dimitrios</u>	Middle Name	Date of Birth <u>9/10/74</u>	Gender <u>M</u>
Request and Fee received by: <u>358923</u>		Fee: <u>4000</u>	Paid by: <u>K</u>	

RESULTS FOR RCMP NATIONAL REPOSITORY CRIMINAL RECORD CHECK

<input checked="" type="checkbox"/>	NEGATIVE <i>(not confirmed by prints)</i>	Based solely on the name(s) and date of birth provided and the criminal record information declared by the applicant, a search of the RCMP National Repository of Criminal Records did not identify any records with the name(s) and date of birth of the applicant. Positive identification that a criminal record does or does not exist at the RCMP National Repository of Criminal Records can only be confirmed by fingerprint comparison. Delays do exist between a conviction being rendered in court, and the details being accessible on the RCMP National Repository of Criminal Records. Not all offences are reported to the RCMP National Repository of Criminal Records.
<input type="checkbox"/>	NEGATIVE <i>(confirmed by prints)</i>	Based on the fingerprints, name(s), and date of birth submitted by the applicant, this message certifies that a search of the RCMP National Repository of Criminal Records did not identify any records associated with the applicant that may be disclosed in accordance with federal laws. Delays do exist between a conviction being rendered in court, and the details being accessible on the RCMP National Repository of Criminal Records. Not all offences are reported to the RCMP National Repository of Criminal Records.
<input type="checkbox"/>	CRIMINAL RECORD <i>(not confirmed by prints)</i>	Based solely on the name(s) and date of birth provided and the criminal record information declared by the applicant, a search of the RCMP National Repository of Criminal Records has resulted in a possible match to a registered criminal record. Positive identification that a criminal record does or does not exist at the RCMP National Repository of Criminal Records can only be confirmed by fingerprint comparison. As such, the criminal record information declared by the applicant does not constitute a Certified Criminal Record by the RCMP. Delays do exist between a conviction being rendered in court, and the details being accessible on the RCMP National Repository of Criminal Records. This document may not contain all criminal record convictions associated with the applicant.
<input type="checkbox"/>	CRIMINAL RECORD <i>(confirmed by prints)</i>	Based on the fingerprints, name(s), and date of birth submitted by the applicant, this message certifies that a search of the RCMP National Repository of Criminal Records identified that the fingerprints submitted by the applicant were certified as identical to fingerprints registered under criminal FPS Number _____. Delays do exist between a conviction being rendered in court, and the details being accessible on the RCMP National Repository of Criminal Records. Not all offences are reported to the RCMP National Repository of Criminal Records. This document may not contain all criminal record convictions associated with the applicant.

RESULTS FOR LOCAL CRIMINAL RECORD OR LOCAL POLICE INFORMATION

NEGATIVE – No information was revealed that can be disclosed in accordance with federal laws and CPIC policies.

POSITIVE – Local Criminal Record **POSITIVE** – Local Police Information

Date of Search: July 27/12 Clerk #: 30271

**NOT VALID UNLESS EMBOSSED BY
LONDON POLICE SEAL**

Response(s) have not been received from all police agencies in relation to previous addresses.

A police record check is current as of the date it is completed. Your completed record check will remain available for 6 months from the date it was completed. Any police record check not picked up by that date will be destroyed. The London Police service will not reprocess these record checks or refund any fees. It is your employer/prospective employer or organization's function to determine if the record check is current enough to be accepted for the position applied for. The London Police Services Board, its officers, agents and employees, shall have no responsibility or obligation to make such a determination.

Personal information contained on this form is collected pursuant to the Municipal Freedom of Information and Protection of Privacy Act, s.28(2), s.32(b) and the Police Services Act, s.41 for the purpose of processing this police record check. Questions concerning this collection should be directed to London Police Service, Records Screening Unit, 601 Dundas St. London ON, N6B 1X1

See ___ attached page(s)