

# XXIV RABIES IN THE AMERICAS INTERNATIONAL MEETING

*Rabies Elimination in a Changing World:  
The Environmental and Socio-Economic  
Challenges to Rabies Prevention and Control*



PROGRAMME AND SCHEDULE  
PROGRAMME ET CALENDRIER  
PROGRAMA Y CALENDARIO  
PROGRAMA E PROGRAMAÇÃO

HYATT REGENCY HOTEL  
TORONTO, ONTARIO, CANADA  
OCTOBER 27<sup>TH</sup> – 31<sup>ST</sup>, 2013

## WELCOME!

On behalf of the Centre for Public Health and Zoonoses (CPHAZ), I welcome you to the 24th Rabies in the Americas International Meeting (RITA). This year's conference theme is "Rabies Elimination in a Changing World: The Environmental and Socio-Economic Challenges to Rabies Prevention and Control". This meeting provides an opportunity for researchers, health professionals, international, national and local managers of rabies programs, wildlife biologists, laboratory personnel and other people interested in advancing knowledge of rabies surveillance, prevention and control, to meet each other, to share their successes and also to discuss the challenges to be met.

The organizers would like to thank our invited speakers, as well as all those individuals and groups who responded to our call to present their work at RITA 2013 as presentations and posters. In addition, we would like to thank all of our sponsors for helping make this event a success.

Overall, we hope that this meeting will challenge the way you think, provide lasting tangible benefits, and ultimately lead to the elimination of rabies. Special greetings to those of you who are visiting Toronto for the first time. I trust you will enjoy your stay, and hope that you have the opportunity to explore this city while you are here.

Best wishes for an enjoyable and informative meeting.



**Jan M. Sargeant**

Director, Centre for Public Health and Zoonoses,  
and  
Professor, Department of Population Medicine,  
Ontario Veterinary College, University of Guelph

On behalf of the International Steering Committee, welcome to the 24th Annual International Conference on Rabies in the Americas (RITA).

The RITA is a major international event, sharing a myriad of topics, including the surveillance, diagnostics, pathobiology, prevention and control of this zoonosis, focusing upon humans, domestic animals and wildlife, drawing from a world renowned group of experts.

We thank the organizers for all of their valiant efforts, and look forward to an exciting program, sharing knowledge, renewing long term contacts, initiating collaborative projects, and making new acquaintances, in a wonderful venue.

Sincerely,

**Charles E. Rupprecht**

**Charles E. Rupprecht**, VMD, MS, PhD

President

RITA, Inc.

and

Director of Research

Global Alliance For Rabies Control

[charles.rupprecht@rabiesalliance.org](mailto:charles.rupprecht@rabiesalliance.org)

<http://rabiesalliance.org/>

## BIENVENUE!

Au nom du Centre pour la santé publique et de lutte contre les zoonoses (CPHAZ), je vous souhaite la bienvenue à la 24e conférence internationale sur la Rage dans les Amériques (RITA). Le thème de la conférence de cette année est «L'élimination de la rage dans un monde en mutation: les défis environnementaux et socio-économiques sur la prévention et de la lutte contre la rage». Cette réunion est l'occasion pour les chercheurs, les professionnels de la santé, les gestionnaires internationaux, nationaux et locaux, les responsables des programmes contre la rage, les biologistes de la faune, le personnel de laboratoire et d'autres personnes qui s'intéressent à l'avancement des connaissances de la surveillance de la rage, de prévention et de contrôle, de se rencontrer, de partager leurs réussites et aussi de discuter des défis à relever.

Les organisateurs tiennent à remercier nos conférenciers invités, ainsi que tous les individus et groupes qui ont répondu à notre appel pour présenter leur travail à RITA 2013, des présentations ainsi que les affiches. En outre, nous tenons à remercier tous nos commanditaires pour leur aide en rendant cet événement un succès.

Dans l'ensemble, nous espérons que cette réunion relèvera le défi sur la mise à jour des connaissances, de fournir des avantages tangibles et durables, et finalement conduire à l'élimination de la rage. Salutations spéciales à ceux et celles d'entre vous qui visitent Toronto pour la première fois. J'espère que vous apprécierez votre séjour, et j'espère que vous aurez l'occasion de découvrir la Ville Reine pendant que vous êtes ici.

Meilleurs souhaits pour une réunion agréable et stimulante.



**Jan M. Sargeant**  
Directrice du Centre for Public Health and  
Zoonoses  
et  
Professeure, Department of Population Medicine,  
Ontario Veterinary College, University of Guelph

Au nom du Comité directeur international, bienvenue à la 24e Conférence internationale annuelle sur la Rage dans les Amériques (RITA).

Le RITA est un événement d'envergure internationale, le partage d'une myriade de sujets, y compris la surveillance, le diagnostic, la pathobiologie, la prévention et le contrôle de cette zoonose, en se concentrant sur les humains, les animaux domestiques et sauvages, et en s'appuyant sur un groupe de renommée mondiale d'experts dans le domaine.

Nous remercions les organisateurs pour tous leurs vaillants efforts, et nous nous réjouissons de présenter un programme passionnant, le partage des connaissances, le renouvellement des contacts à long terme, le lancement de projets collaboratifs, et faire de nouvelles connaissances, dans un lieu merveilleux.

Cordialement,

**Charles E. Rupprecht**

**Charles E. Rupprecht, VMD, MS, PhD**

Président  
RITA, Inc.  
et  
Directeur de la recherche  
Global Alliance For Rabies Control  
[charles.rupprecht@rabiesalliance.org](mailto:charles.rupprecht@rabiesalliance.org)  
<http://rabiesalliance.org/>

## ¡BIENVENIDOS!

A nombre del Centro de Salud Pública y Zoonosis (CPHAZ), le doy la más cordial bienvenida a la Vigésimo Cuarta Reunión Internacional de Rabia en las Américas (RITA). Este año, el tema de la conferencia es “Eliminación de la Rabia en un Mundo Cambiante: Los Retos Socio-Económicos y Ambientales para la Prevención y Control de la Rabia”. Esta Reunión ofrece a investigadores, profesionales de la salud, directores de programas de rabia internacionales, nacionales y locales, biólogos de vida silvestre, personal de laboratorio y otras personas interesadas en el conocimiento avanzado de la vigilancia, la prevención y control de la rabia, la oportunidad de reunirse con otros especialistas, de intercambiar sus logros pero también de conversar sobre los nuevos retos.

Como organizadores queremos agradecer a nuestros expositores invitados, así como a todas las personas y grupos que respondieron a nuestro llamado para presentar sus trabajos en la RITA 2013 ya sea como sesiones orales o en carteles. Adicionalmente, queremos también agradecer a todos nuestros patrocinadores por ayudarnos a hacer realidad este evento.

Por encima de todo, esperamos que esta reunión desafíe sus pensamientos, le provea de los más recientes beneficios y los avances más recientes para la eliminación de la rabia. Nuestra especial felicitación a todos aquellos que visitan Toronto por primera vez. Confío en que ustedes disfrutarán su estancia y espero que tengan oportunidad de recorrer la ciudad durante su estancia.

Mis mejores deseos para que disfruten una informativa reunión.



**Jan M. Sargeant**  
Directora del Centre for Public Health and  
Zoonoses  
y  
Profesora del Department of Population Medicine  
Ontario Veterinary College, University of Guelph

A nombre del Comité Directivo Internacional, les doy la bienvenida a la Vigésimo Cuarta Conferencia Anual Internacional de Rabia en las Américas (RITA).

La RITA es el mayor evento internacional, para compartir una infinidad de temas incluyendo vigilancia, diagnóstico, patología, prevención y control de esta zoonosis y enfocándose a aspectos en humanos, animales domésticos y silvestres desde la perspectiva de un renovado grupo mundial de expertos.

Agradecemos a los organizadores por todos sus decididos esfuerzos y esperamos una muy interesante agenda para compartir conocimientos, renovar contacto con viejos amigos, iniciar proyectos de colaboración y hacer nuevos valiosos contactos en una maravillosa sede.

Afectuosamente.

*Charles E. Rupprecht*

**Charles E. Rupprecht, VMD, MS, PhD**  
Presidente  
RITA, Inc.  
y  
Director de Investigación  
Global Alliance For Rabies Control  
[charles.rupprecht@rabiesalliance.org](mailto:charles.rupprecht@rabiesalliance.org)  
<http://rabiesalliance.org/>

## BEMVINDOS!

Em nome do Centro de Saúde Pública e Zoonoses (Centre for Public Health and Zoonoses (CPHAZ)), bem vindo ao 24th Rabies in the Americas International Meeting (RITA). Este ano o tema da conferência é "Rabies Elimination in a Changing World: The Environmental and Socio-Economic Challenges to Rabies Prevention and Control". Este encontro fornece uma oportunidade para que pesquisadores, profissionais de saúde, gerentes de programas nacionais e internacionais de raiva, biólogos de animais silvestres, técnicos de laboratório e outras pessoas interessadas no monitoramento, prevenção e controle da raiva se conhecem, a fim de compartilhar seus sucessos e também para discutir os desafios que serão encontrados.

Os organizadores agradecem os palestrantes, bem como todas as pessoas e grupos que vão apresentar pôsteres e que farão apresentação oral no RITA 2013. Além disso, gostaríamos de agradecer todos os patrocinadores que estão ajudando a fazer este evento um sucesso.

No geral, eu espero que este encontro crie novos desafios, forneça benefícios duradouros e nos leve a eliminação da raiva. Saudações especiais a aqueles que estão visitando Toronto pela primeira vez. Acredito que vocês vão aproveitar sua estadia e espero que vocês tenham a oportunidade de conhecer a cidade enquanto estiverem aqui.

Os melhores votos para uma reunião agradável e informativa.



**Jan M. Sergeant**  
Diretora, Centre for Public Health and Zoonoses,  
e  
Professor, Department of Population Medicine  
Ontario Veterinary College, University of Guelph

Em nome do Comitê de Coordenação Internacional, bem vindo ao 24th Annual International Conference on Rabies in the Americas (RITA).

O RITA é um evento internacional que compartilha diversos tópicos, incluindo monitoramento, diagnóstico, patobiologia, prevenção e controle desta zoonose, com foco nos humanos, animais domésticos e silvestres, com o conhecimento de pessoas de todos o mundo.

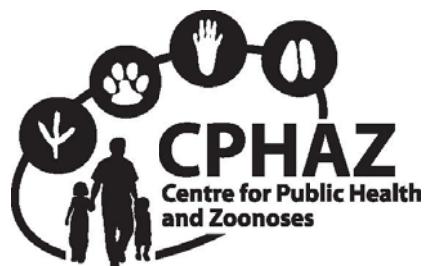
Nós agradecemos os organizadores por todo o trabalho, e esperamos ter um programa prazeroso, onde possamos compartilhar conhecimentos, realizar novos contatos, iniciar projetos e fazer novas amizades , neste local maravilhoso.

Sinceramente,

**Charles E. Rupprecht**

**Charles E. Rupprecht**, VMD, MS, PhD  
Presidente  
RITA, Inc.  
e  
Diretor de Pesquisa  
Global Alliance For Rabies Control  
[charles.rupprecht@rabiesalliance.org](mailto:charles.rupprecht@rabiesalliance.org)  
<http://rabiesalliance.org/>

**CONFERENCE HOST**  
HÔTE DE LA CONFÉRENCE/ ANFITRIÓN DE LA CONFERENCIA/  
ANFITRIÃO DA CONFERÊNCIA



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Matson's Laboratory  
PO Box 308  
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Est. 1969

## Acknowledgements

*The organizing committee would like to thank everyone who participated in the organization and the success of RITA XXIV.*

*In particular, we would like to express our sincere gratitude to the following people for their involvement:*

- **Administration and organization:** Sam Deelen, Danielle Julien, Sally MacLachlan and Ashley Whiteman
  - **Translation:** Andreia Arruda, Rose-Marie Bernardo, Michel Deilgat, Christine Fehlner-Gardiner, Juliana Ferreira, Juan Antonio Montaño Hirose, Eric Lavigne and Luis Lecuona
- 

## Remerciements

*Le comité organisateur tient à remercier tous ceux et celles qui ont participé à l'organisation et la réussite de RITA XXIV.*

*Nous tenons à exprimer particulièrement notre sincère gratitude aux personnes suivantes pour leur participation:*

- **Administration et organisation:** Sam Deelen, Danielle Julien, Sally MacLachlan et Ashley Whiteman
  - **Traduction:** Andreia Arruda, Rose-Marie Bernardo, Michel Deilgat, Christine Fehlner-Gardiner, Juliana Ferreira, Juan Antonio Montaño Hirose, Eric Lavigne et Luis Lecuona
-

## Agradecimientos

*El Comité Organizador desea expresar su agradecimiento a todos aquellos que participaron en la organización y el éxito de la RITA XXIV.*

*En particular, nos gustaría expresar nuestro sincero agradecimiento a las siguientes personas por su participación:*

- **Administración y organización:** Sam Deelen, Danielle Julien, Sally MacLachlan y Ashley Whiteman
  - **Traducción:** Andreia Arruda, Rose-Marie Bernardo, Michel Deilgat, Christine Fehlner-Gardiner, Juliana Ferreira, Juan Antonio Montaño Hirose, Eric Lavigne y Luis Lecuona
- 

## Agradecimentos

*A comissão organizadora gostaria de agradecer a todos que participaram da organização e o sucesso de RITA XXIV.*

*Em particular, gostaríamos de expressar a nossa sincera gratidão às seguintes pessoas por seu envolvimento:*

- **Administração e organização:** Sam Deelen, Danielle Julien, Sally MacLachlan e Ashley Whiteman
  - **Tradução:** Andreia Arruda, Rose-Marie Bernardo, Michel Deilgat, Christine Fehlner-Gardiner, Juliana Ferreira, Juan Antonio Montaño Hirose, Eric Lavigne e Luis Lecuona
-

## **Local Organizing Committee 2013**

*Peter Buck  
Sam Deelen  
Michel Deilgat  
Dennis Donovan  
Christine Fehlner-Gardner  
Catherine Filejski  
Erin Leonard  
Zvonimir Poljak  
Catherine Rotor  
Jan Sargeant (Chair)  
Beverly Stevenson  
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Alan Jackson  
Ted Leighton  
Susan Nadin-Davis  
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Zvonimir Poljak  
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Hugh Whitney  
Heidi Wood*

## **International Steering Committee 2013**

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*Charles Rupprecht  
Global Alliance for Rabies Control  
Manhattan, Kansas, USA*

### **Vice-President**

*Ivanete Kotait  
Instituto Pasteur,  
São Paulo, SP, Brasil*

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Services, Harlingen, Texas, USA*

### **Secretary**

*Christine Fehlner-Gardiner  
Canadian Food Inspection Agency  
Ottawa, Ontario, Canada*

## **International Scientific Committee Members 2013**

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Academia de Medicina de Brasilia  
Brasilia, DF, Brasil*

*Richard B. Chipman  
USDA-APHIS Wildlife Services  
Concord, New Hampshire, USA*

*Dennis Donovan  
Ontario Ministry of Natural Resources  
Peterborough, Ontario, Canada*

*Juan Antonio Montaño Hirose  
Centro Nacional de Servicios de Diagnóstico en Salud Animal/SENASICA  
Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación  
México, D.F., México*

*Alan C. Jackson  
University of Manitoba Health Sciences Centre  
Winnipeg, Manitoba, Canada*

*Jane Megid  
UNESP-Universidade Estadual Paulista Julio de Mesquita Filho  
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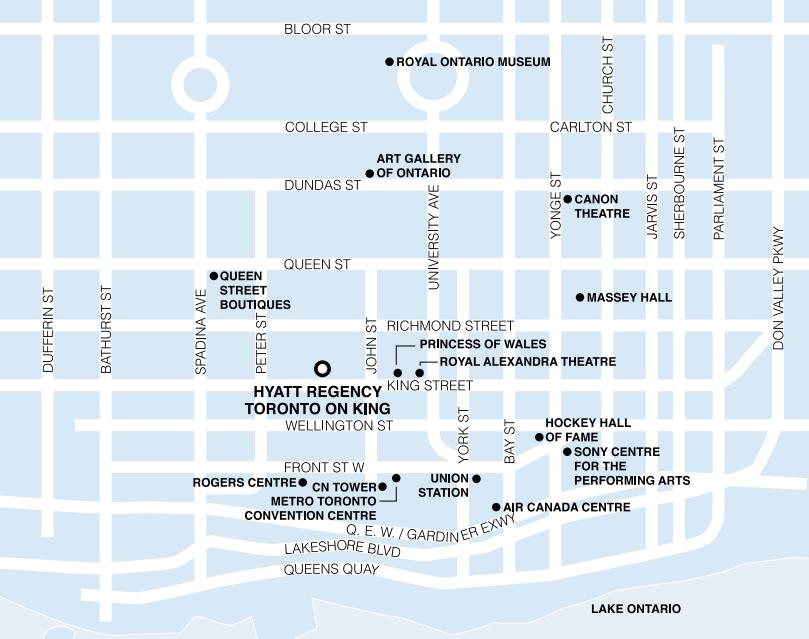
# PROGRAMME AT A GLANCE

TIME	SUNDAY, OCT. 27	MONDAY, OCT. 28	TUESDAY, OCT. 29	WEDNESDAY, OCT. 30	THURSDAY, OCT. 31
07:30 – 08:00		Registration (CL)	Registration (CL)		
08:00 – 08:30				Registration (CL)	
08:30 – 09:00		Hilary Koprowski Tribute Chaired by Charles Rupprecht (KB)	Oral Session (Pathogenesis) (KB)		Registration (CL)
09:00 – 09:30				Oral Session (Epidemiology and Modelling) (KB)	Oral Session (Approaches to Rabies Control and Outbreak Response) (KB)
09:30 – 10:00		Technological Keynote Address (KB)	Morning Break & Poster Session (RB)		
10:00 – 10:30		Morning Break & Poster Session (RB)	Environmental Keynote Address (KB)	Morning Break & Poster Session (RB)	Morning Break & Poster Session (RB)
10:30 – 11:00		Oral Session (Lyssavirus Diagnostics and Emerging Technologies) (KB)	Oral Session (Bats and Lyssaviruses: Host and Virus Diversity) (KB)	George M. Baer Latin American Investigator Award Chaired by Charles Rupprecht (KB)	Oral Session (Approaches to Rabies Control and Outbreak Response) (KB)
11:00 – 11:30				Economic and Political Keynote Address (KB)	
11:30 – 12:00				Poster Session (RB)	Social and Cultural Keynote Address (KB)
12:00 – 12:30		Lunch <b>12:00-13:15</b> (75 minutes) (OS)	Lunch (90 minutes) (OS)		Oral Session (Cultural Aspects of Rabies (Past and Present)) (KB)
12:30 – 13:00			<b>ISC LUNCH</b> (OS)		
13:00 – 13:30				Lunch (90 minutes) (OS)	Lunch (90 minutes) (OS)
13:30 – 14:00		Oral Session <b>(13:15)</b> (Human Rabies, Prophylaxis, and Treatment) (KB)	Oral Session (Wildlife and Domestic Animal Rabies) (KB)		
14:00 – 14:30	Partners for Rabies Prevention Meeting <b>Open to ALL</b>			Oral Session (Regional and Trans-boundary Updates)	Round Table Discussion (Wrap-Up Discussion) Chair: Chris Davies

14:30 – 15:00	(SB)		Afternoon Break & Poster Session (RB)	(KB)	(KB)
15:00 – 15:30		Afternoon Break & Poster Session (RB)	Oral Session (Wildlife and Domestic Animal Rabies) (KB)	Social Activity and/or Free time	Organizing Committee 2014 RITA XXV – Mexican Delegates (KB)
15:30 – 16:00		Oral Session (Immunology and Vaccines) (KB)	Round Table (Biomedical Conundrums) Chair: Richard Chipman (KB)		Closing Ceremony Jan Sargeant and Charles Rupprecht (KB)
16:00 – 16:30					
16:30 – 17:00					
17:00 – 17:30	Conference Registration (KS Foyer)			Gala & Auction (Auctioneer: Rich Chipman) (KB)	
17:30 – 18:00					
18:00 – 18:30	Welcome Reception (KS)				
18:30 – 19:00		North American Rabies Management Meeting <b>By Invitation Only</b> (SB)	Ontario Rabies Advisory Committee Meeting <b>By Invitation Only</b> (SB)		
19:00 – 19:30					
19:30 – 20:00	Opening Ceremony (KB)				
20:00 – 20:30					
20:30 – 21:00					
21:00 – 21:30					
21:30 – 22:00					
22:00 – 23:00					

SESSION COLOUR KEY	
Oral Session	
Breaks & Poster Session	
Round-Table Discussion	
Lunch Break	
Key Note Address	
Social	
Additional Meetings	
Registration	

ROOM KEY	
KB	= King Ballroom
RB	= Regency Ballroom
KS	= King Street Social
CL	= Colonnade
SB	= Studio B
OS	= Off-Site

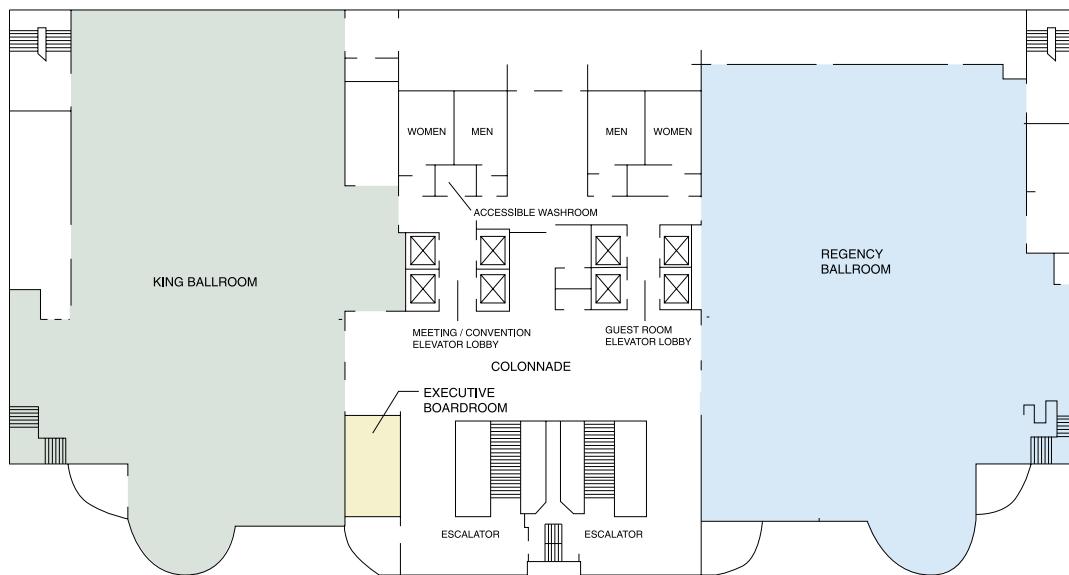


## Hyatt Regency Toronto on King

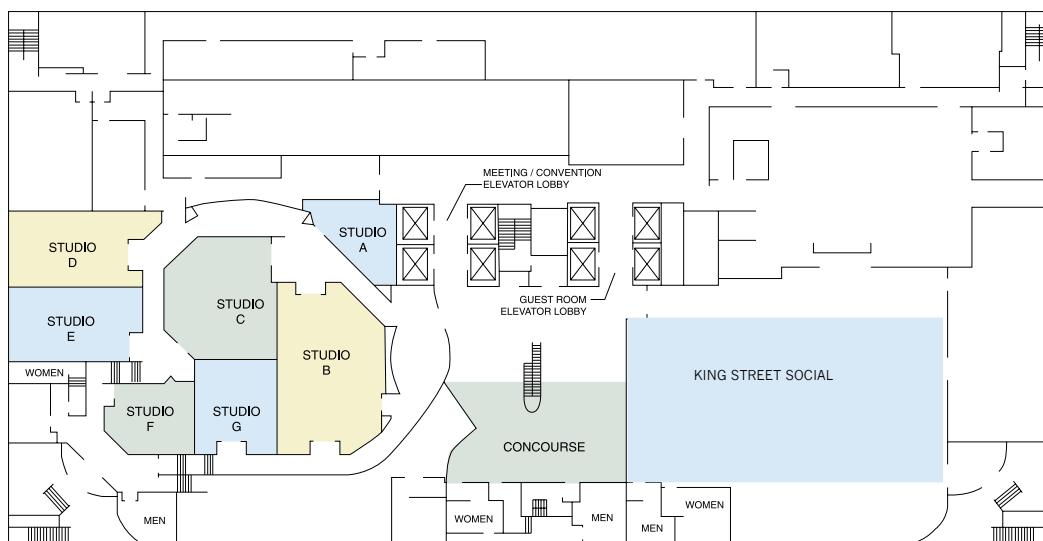
### DIRECTIONS

Travelling from the east on the Don Valley Parkway or from the west on the QEW (both turn into the Gardiner Expressway). From Gardiner Expressway (QEW), take downtown and exit on Spadina Avenue. Go north to Adelaide Street and turn right. Go three blocks to Widmer Street, turn right. Hotel is on the right.

CONVENTION LEVEL



CONFERENCE LEVEL



## Diagram of the poster presentations

## Diagramme des présentations des affiches

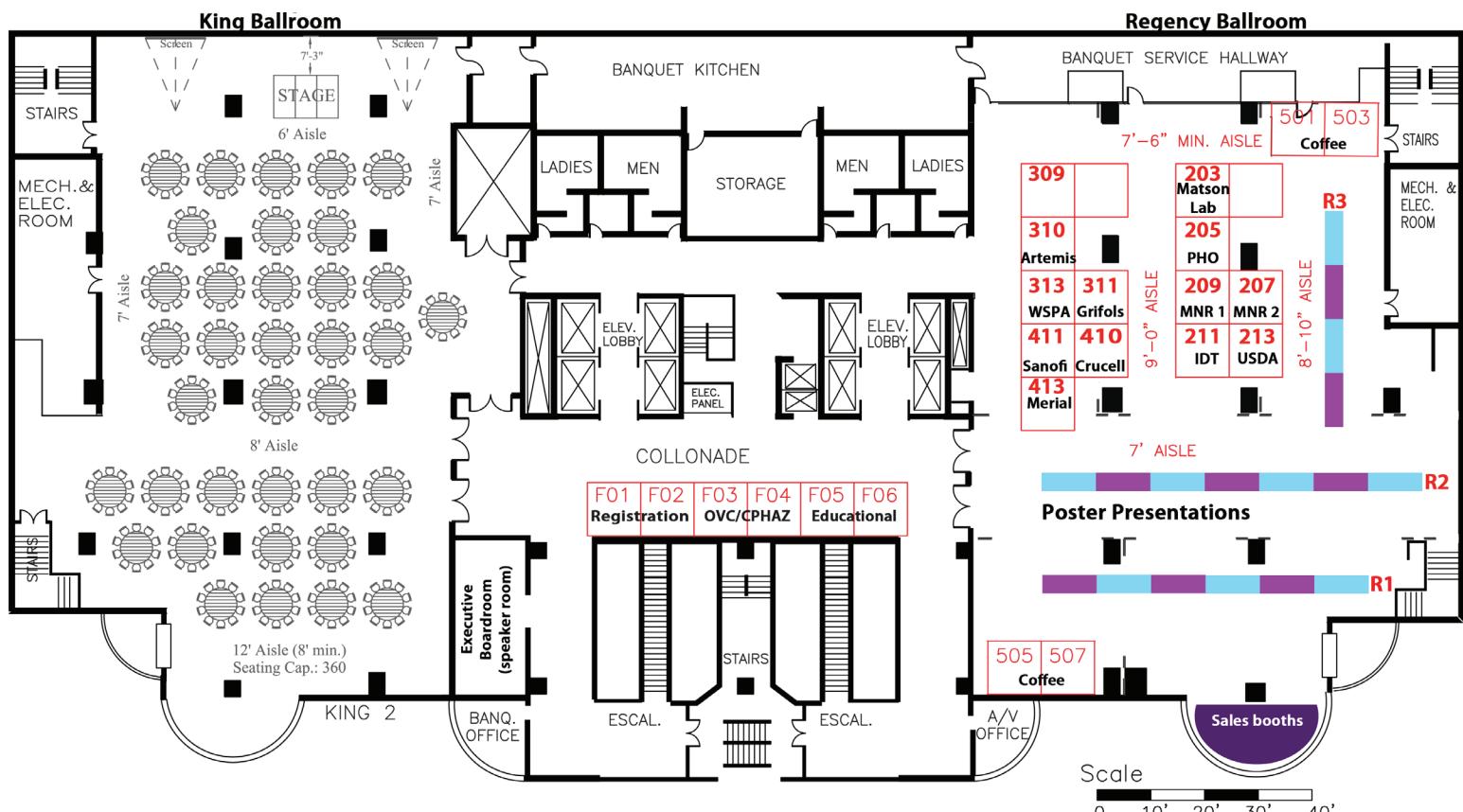
## Distribución de carteles en el área de exhibición

## Diagrama das apresentações de pôsteres

PP058	PP060	PP061	PP062	PP063
PP051	PP069	PP054	PP055	PP064

Reserved	PP005	PP006	PP009	PP010	PP011	PP004	PP002	PP001	PP003	PP065	PP066	PP067
PP013	PP014	PP016	PP021	PP015	PP017	PP018	PP020	PP019	PP023	PP022	PP024	PP025

PP027	PP028	PP030	PP031	PP029	PP035	PP033	PP034	PP032	PP040	PP036	PP037	R1
PP038	PP047	PP039	PP041	PP042	PP043	PP044	PP046	PP048	PP049	PP070		



## PROGRAMME/PROGRAMA

### Sunday October 27th

**14:00-15:00**

#### PARTNERS FOR RABIES PREVENTION MEETING

Organized by the Global Alliance for Rabies Control  
Room: Studio B - Open to ALL

**17:00-18:00**

#### REGISTRATION

Room: King Street Social Foyer

**18:00-19:30**

#### WELCOME RECEPTION

Room: King Street Social

**19:30-21:00**

#### OPENING CEREMONIES

Room: King Ballroom

Co-Chaired by: Jan Sargeant and Charles Rupprecht

### Monday October 28th

**07:30-08:30 REGISTRATION**

**08:30-09:30**

#### HILARY KOPROWSKI TRIBUTE

Organized by Charles Rupprecht

**09:30-10:00**

#### TECHNOLOGICAL KEYNOTE ADDRESS

Zhen F. Fu  
University of Georgia, College of Veterinary Medicine

**10:00-10:30 MORNING BREAK & POSTER SESSION**  
Regency Ballroom

**10:30-12:00**

#### LYSSAVIRUS DIAGNOSTICS AND EMERGING TECHNOLOGIES

Chairs: Christine Fehlner-Gardiner and Andres Velasco-Villa

#### OP001

MAPPING ANIMAL RABIES DIAGNOSTIC CAPABILITIES WITHIN THE WEST AND THE CENTRAL AFRICA VETERINARY LABORATORY NETWORKS: CONSTRAINTS AND THE WAY FORWARD

*Angélique Angot*

*Istituto Zooprofilattico sperimentale delle Venezie*

**OP002**

DEVELOPMENT OF AN ELISA ASSAY FOR THE  
DIAGNOSIS OF RABIES IN ANIMALS

*Elena Rota Nodari*

*Istituto Zooprofilattico Sperimentale delle Venezie*

**OP003**

EUROPEAN COMPARATIVE ASSAY OF  
FLUORESCENT ANTIBODY TEST RESULTS USING  
VARIOUS ANTI-RABIES CONJUGATES

*Emmanuelle Robardet*

*French Agency for Food, Environmental and  
Occupational Health & Safety (ANSES)*

**OP004**

COMPARISON OF MICRONEUTRALIZATION AND  
HIGH-THROUGHPUT MICRONEUTRALIZATION  
TESTS WITH THE RAPID FLUORESCENT FOCUS  
INHIBITION TEST FOR MEASURING RABIES  
VIRUS NEUTRALIZING ANTIBODIES

*Todd Smith*

*Centers for Disease Control and Prevention*

**OP005**

COMPARISON OF THE STANDARD BRAIN TISSUE  
SAMPLING METHOD FOR RABIES DIAGNOSTICS  
WITH MULTIPLE ALTERNATE METHODS USING  
REAL TIME RT-PCR FOR RABIES VIRAL RNA  
DETECTION.

*Michelle Dupuis*

*NYSDOH/Wadsworth Center/Griffin Laboratory*

**OP006**

INTER-LABORATORY COMPARISON AMONG THE  
OIE NETWORK OF RABIES REFERENCE  
LABORATORIES OF THE DIRECT RAPID  
IMMUNOHISTOCHEMICAL TEST (DRIT) FOR  
THE DIAGNOSIS OF RABIES

*Charles Rupprecht*

*Global Alliance for Rabies Control*

**13:15-15:00**

**HUMAN RABIES, PROPHYLAXIS, AND  
TREATMENT**

Chairs: Alan Jackson and Rosely Oliveira

**OP007**

RACCOON RABIES VIRUS VARIANT  
TRANSMISSION THROUGH SOLID ORGAN  
TRANSPLANTATION WITH A LONG INCUBATION  
PERIOD

*Neil Vora*

*Centers for Disease Control and Prevention*

**OP008**

**SPECIAL REPORT**

*Alan Jackson*

*University of Manitoba Health Sciences Centre*

**OP009**

POTENT IMMUNOTHERAPEUTIC AGENTS FOR  
VERSATILE RABIES INTERVENTIONS

*Charles Rupprecht*

*Global Alliance For Rabies Control*

**OP010**

SINGLE-VISIT BOOSTER REGIMENS FOR RABIES  
POST-EXPOSURE TREATMENT IN PREVIOUSLY  
VACCINATED INDIVIDUALS

*Terapong Tantawichien*

*Chulalongkorn University*

**OP011**

COMPARISON OF IN VIVO AND IN VITRO  
TRANSFECTION OF ANTIBODIES AGAINST  
RABIES

*Keila Iamamoto*

*Pasteur Institute, São Paulo*

**12:00-13:15 LUNCH BREAK**

**OP012**

CLINICAL AND IMMUNE EVALUATION OF MICE EXPERIMENTALLY INFECTED WITH RABIES VIRUS VARIANTS 2 AND 3 AND TREATED WITH SHORT-INTERFERING RNAs

*Camila Michele Appolinario Harary  
UNESP- São Paulo State University*

**OP065**

SURVIVOR OF RABIES ENCEPHALITIS IN CHILE

*Sergio Galvez  
Hospital Gustavo Fricke, Viña del Mar*

**15:00-15:30 AFTERNOON BREAK & POSTER SESSION**  
Regency Ballroom

**15:30-17:30**

**IMMUNOLOGY AND VACCINES**

Chairs: Monique Lafon and Jane Megid

**OP013**

INVESTIGATING THE ANTIGENIC DIVERSITY OF THE LYSSAVIRUSES

*Jennifer Evans  
Animal Health and Veterinary Laboratories Agency/University of Warwick*

**OP014**

T CELL-INDEPENDENT ANTIBODY RESPONSES INDUCED BY AN EXPERIMENTAL RABIES VIRUS-BASED VACCINE

*James McGettigan  
Thomas Jefferson University*

**OP015**

WHY LATE-STAGE POST-EXPOSURE PROPHYLAXIS FAILS: LIVE-ATTENUATED BUT NOT KILLED RABIES VIRUS VACCINES INDUCE THE TYPE OF IMMUNE RESPONSE REQUIRED FOR RABIES VIRUS CLEARANCE FROM NEURAL TISSUES

*D. Craig Hooper  
Thomas Jefferson University*

**OP016**

ANTIBODY QUALITY AND PROTECTION FROM LETHAL EBOLA VIRUS CHALLENGE IN NHP IMMUNIZED WITH RABIES VIRUS BASED BIVALENT VACCINE

*Matthias Schnell  
Thomas Jefferson University*

**OP018**

A ROLE FOR RECOMBINANT ADENOVIRUS VACCINES IN RABIES PROPHYLAXIS?

*Charles Rupprecht  
Global Alliance For Rabies Control*

**OP019**

TOWARD A SINGLE SHOT CONTRACEPTIVE RABIES VACCINE

*Bernhard Dietzschold  
Thomas Jefferson University*

**OP020**

VALIDATION AND ADOPTION OF THE FAVN TEST AS A SEROLOGICAL POTENCY ASSAY TO REPLACE THE IN-VIVO POTENCY TESTS OF INACTIVATED RABIES VACCINE FOR VETERINARY USE

*Alexandre Servat  
French Agency for Food, Environmental and Occupational Health & Safety (ANSES) Nancy*

**OP017**

FIELD EVALUATION OF ORAL VACCINATION  
WITH SAG2 DOG BAITS IN MOROCCO

*Philippe Mahl  
Virbac*

**18:30-20:00**

**NORTH AMERICAN RABIES MANAGEMENT  
MEETING**

Room: Studio B - By Invitation Only

**POSTERS**

**PP001**

SOLUBILIZATION OF THE RABIES VIRUS  
GLYCOPROTEIN USING DIFFERENT  
DETERGENTS

*Iana Suly Katz  
Instituto Pasteur, São Paulo*

**PP002**

EASTERN EQUINE ENCEPHALITIS VIRUS  
ISOLATION IN VERO, BHK-21 AND N2A CELL  
CULTURES

*Keila Iamamoto  
Instituto Pasteur, São Paulo*

**PP003**

ASSESSING AUTOMATION IN MOLECULAR  
RABIES DIAGNOSTICS USING THE QIAGEN  
QIASYMPHONY® SP/AS SYSTEM

*Michelle Dupuis  
NYSDOH/Wadsworth Center/Griffin Laboratory*

**PP004**

IS THE "IN VIVO" TRANSFECTION OF  
ANTIBODIES AGAINST RABIES VIRUS A  
POTENTIAL MECHANISM FOR RABIES  
TREATMENT?

*Keila Iamamoto  
Pasteur Institute, São Paulo*

**PP005**

NEUTRALIZING ANTIBODIES IN SERUM AND  
CSF IN ANTEMORTEM DIAGNOSIS OF  
SUSPECTED CASES OF RABIES RECEIVED IN  
THE LABORATORY DIAGNOSIS OF RABIES AT  
THE PASTEUR INSTITUTE FROM JANUARY 2011  
TO APRIL 2013.

*Luciana Botelho Chaves  
Instituto Pasteur, São Paulo*

**PP006**

DETERMINANTS OF DELAY IN INITIATING  
POST-EXPOSURE PROPHYLAXIS FOR RABIES  
PREVENTION AMONG ANIMAL BITE CASES

*Jessy Joseph  
University College of Medical Sciences and Guru  
Teg Bahadur Hospital*

**PP009**

TEN YEARS RETROSPECTIVE STUDY OF DOG  
BITE CASES REPORTED TO ZONAL VETERINARY  
CLINIC, UMUAHIA, ABIA STATE, NIGERIA

*A.B. Ogunkoya  
Ahmadu Bello University Clinic*

**PP010**

CURRENT PRACTICES AND REMAINING  
PROBLEMS OF RABIES POST-EXPOSURE  
MANAGEMENT OF 644 GOVERNMENT  
HOSPITALS IN THAILAND

*Suda Sibunruang  
Queen Saovabha Memorial Institute*

**PP011**

AMÉLIORATION DE L'ACCESSIBILITÉ À LA PROPHYLAXIE POST EXPOSITION EN AFRIQUE FRANCOPHONE : EXPÉRIENCE DE 3 PAYS MEMBRES D'AFROREB

*Issaka Tiembre*

*Institut National d'Hygiène Publique/AfroREB*

**PP013**

ORAL VACCINATION AND PROTECTION OF STRIPED SKUNKS (MEPHITIS MEPHITIS) AGAINST RABIES USING ONRAB®

*Lucy Brown*

*Ontario Ministry of Natural Resources (MNR)*

**PP014**

HEMOLYSIS IN SERUM SAMPLES AS A FACTOR OF PRE ANALYTICAL VARIABILITY IN THE EVALUATION OF RABIES VIRUS NEUTRALIZING ANTIBODIES BY THE RAPID FLUORESCENT FOCUS INHIBITION TEST (RFFIT)

*Karin Corrêa Scheffer*

*Instituto Pasteur, São Paulo*

**PP015**

CUT-OFF VALUES FOR RABIES SEROLOGY METHODS—ARE THEY INTERCHANGEABLE?

*Susan Moore*

*Kansas State University/KSVDL Rabies Laboratory*

**PP016**

EVALUATION OF NEUTRALIZING ANTIBODIES IN CATS PRIME VACCINATED FOR RABIES

*Karin Corrêa Scheffer*

*Instituto Pasteur, São Paulo*

**PP017**

RABIES VIRUS NEUTRALIZATION ASSAYS: COMPARISON OF THREE FLUORESCENT INHIBITION TESTS IN CELL CULTURES.

*Juliana da Silva Ferreira*

*Instituto Pasteur- São Paulo*

**PP018**

FIRST DEVELOPMENT OF ANTIRRABIES VACCINE USING THE CANARYPOX VECTOR PLATFORM IN LATIN AMERICAN

*Matías Ariel Micucci*

*Administración Nacional de Laboratorios e Institutos De Salud (ANLIS)*

**PP019**

PROBIOTIC INCREASE THE ANTIRABIES IMMUNE RESPONSE IN CATTLE AFTER VACCINATION

*Neusa Maria Frazatti-Gallina*

*Instituto Butantan*

**PP020**

INDUCTION OF NEUTRALIZING ANTIBODIES IN BALB/C MICE USING VACCINE STRAIN BRUCELLA ABORTUS S19 TO DELIVER A EUKARYOTIC EXPRESSION PLASMID FOR THE RABIES VIRUS G GLYCOPROTEIN.

*Nidia Gary Pazos Salazar*

*Facultad de Ciencias Químicas, Benemérita Universidad Autónoma de Puebla*

**PP021**

DEFICIENCY IN THE HUMORAL IMMUNE RESPONSE TO VACCINE RABIES VIRUS IN DOMESTIC DOGS PRIME VACCINATED.

*Karin Corrêa Scheffer*

*Instituto Pasteur, São Paulo*

**PP022**

RABIES VIRUS REPLICATION IN DIFFERENT BIOREACTORS

*Vivien Lantieri*

*Instituto Butantan*

**PP023**

COMPARATIVE STUDY BETWEEN TWO IMMUNIZATION SCHEMES USING RABIES VACCINE ASSOCIATED WITH BPMPLA-SE ADJUVANT

*Neuza Maria Frazatti-Gallina*

*Instituto Butantan*

**PP024**

PERSISTENCE AND SHEDDING OF ONRAB® RABIES VACCINE IN CAPTIVE AND FREE-RANGING MAMMALS IN ONTARIO, CANADA

*Aaron Walpole*

*Ontario Ministry of Natural Resources*

**PP025**

PRELIMINARY RESULTS OF A RETROSPECTIVE ANALYSIS ON FACTORS AFFECTING SEROLOGICAL RESPONSE OF DOGS TO RABIES VACCINATION IN ITALY

*Elena Rota Nodari*

*Istituto Zooprofilattico Sperimentale delle Venezie*

**PP065**

IDENTIFICATION OF RACCOON IMMUNOGLOBULINS AND IMMUNOREGULATORY MOLECULES TO INVESTIGATE IMMUNE MECHANISMS INVOLVED IN RESISTANCE AND IMMUNITY AGAINST RABV

*Bernd Köllner*

*Institute of Immunology, Friedrich-Loeffler-Institute*

**PP066**

IDENTIFICATION OF IMMUNOGLOBULINS AND IMMUNOREGULATORY MOLECULES OF THREE EUROPEAN BAT (EPTESICUS, MYOTIS AND NYCTALUS) TO INVESTIGATE IMMUNE MECHANISMS INVOLVED IN RESISTANCE AND IMMUNITY AGAINST LYSSAVIRUSES

*Bernd Köllner*

*Institute of Immunology, Friedrich-Loeffler-Institute*

**PP067**

CLONING OF IFN-KAPPA AND OMEGA FROM EUROPEAN BAT, EPTESICUS SEROTINUS AND FUNCTIONAL CHARACTERIZATION OF ANTI-VIRAL RESISTANCE MECHANISMS IN BATS INVESTIGATED IN VITRO

*Bernd Köllner*

*Institute of Immunology, Friedrich-Loeffler-Institute*

Tuesday October 29th

07:30-08:00 REGISTRATION

08:00-09:30

## PATHOGENESIS

Chairs: Zhen Fu and Noel Tordo

**OP021**

RABIES VIRUS PHOSPHOPROTEIN TRIGGERS  
MITOCHONDRIAL DYSFUNCTION IN CVS  
INFECTED MOUSE NEUROBLASTOMA CELLS

*Wafa Kammouni  
University of Manitoba*

**OP022**

CHARACTERISATION OF IKOMA LYSSAVIRUS:  
VACCINE CONFERRED PROTECTION AND  
RESERVOIR HOSTS

*Ashley Banyard  
Animal Health and Veterinary Laboratories  
Agency (AHVLA), Department for the  
Environment, Food & Rural Affairs (Defra)*

**OP023**

PRESENCE OF VIRUS NEUTRALIZING  
ANTIBODIES IN CEREBRAL SPINAL FLUID  
CORRELATES WITH NON-LETHAL RABIES IN  
DOGS

*Zhen F. Fu  
University of Georgia, College of Veterinary  
Medicine*

**OP024**

RABIES DERIVED PEPTIDES INTERACT WITH  
NEURONAL NICOTINIC RECEPTORS AND ALTER  
BEHAVIOR IN MICE

*Karsten Hueffer  
University of Alaska Fairbanks*

**OP025**

COMPARISON OF GLYCOPROTEIN-RELATED  
PATHOGENICITY FUNCTIONS OF LYSSAVIRUSES  
*Tobias Nolden*

*Friedrich-Loeffler-Institute*

**OP026**

PATHOLOGICAL STUDY ON THE CENTRAL  
NERVE SYSTEM OF DDY MICE  
INTRAMUSCULARLY INFECTED WITH STREET  
RABIES VIRUS (1088 STRAIN)

*Park Chunho  
KITASATO University*

09:30-10:00 MORNING BREAK &  
POSTER SESSION

Regency Ballroom

10:00-10:30

## ENVIRONMENTAL KEY ADDRESS

Brock Fenton  
Professor Emeritus, University of Western Ontario

10:30-12:00

## BATS AND LYSSAVIRUSES: HOST AND VIRUS DIVERSITY

Chairs: Susan Nadin-Davis and Maria Luiza  
Carrieri

**OP027**

TRACING THE ORIGINS AND DISSEMINATION  
HISTORY OF VAMPIRE BAT-ASSOCIATED RABIES  
IN THE AMERICAS

*Andres Velasco-Villa  
Centers for Disease Control and  
Prevention/NCEZID*

**OP028**

HOST SHIFTS OF BAT RABIES VIRUSES TO CARNIVORES IN NORTH AMERICA, AND AN ABILITY OF THE EXISTING SURVEILLANCE SYSTEM TO DETECT SUCH EVENTS

*Ivan Kuzmin*

*Global Alliance for Rabies Control*

**OP029**

A PHYLOGEOGRAPHIC ANALYSIS OF THE RABIES VIRUS VARIANTS HARBOURED BY MYOTIS BATS IN CANADA

*Susan Nadin-Davis*

*Canadian Food Inspection Agency*

**OP030**

MOLECULAR DIAGNOSTICS FOR THE DETECTION OF BOKELOH BAT LYSSAVIRUS IN A BAT FROM BAVARIA, GERMANY

*Thomas Mueller*

*Friedrich-Loeffler-Institut*

**OP031**

MOLECULAR DETECTION OF RABIES VIRUS IN LASIURUS EGA AND LASIURUS CINEREUS FROM MONTERREY, NUEVO LEÓN, MÉXICO

*Efren Jaramillo*

*Laboratorio Estatal de Salud Pública - Secretaría de Salud del Estado de Nuevo León*

**OP032**

EGYPTIAN FRUIT BAT (*ROUSSETTUS AEGYPTIACUS*) AS THE HOST OF A SPECIFIC LINEAGE OF LAGOS BAT VIRUS IN KENYA.

*Ivan Kuzmin*

*Global Alliance for Rabies Control*

**13:30-14:30**

**WILDLIFE AND DOMESTIC ANIMAL RABIES**

Chairs: Dennis Donovan and Juan Montano Hirose

**OP033**

POTENTIAL ECONOMIC BENEFITS OF ELIMINATING CANINE RABIES

*Stephanie Shwiff*

*USDA/WS/National Wildlife Research Center*

**OP034**

INSIGHT INTO A RABID BRAIN

*Vythegi Srithayakumar*

*Trent University*

**OP035**

DETECTION OF RABIES VIRUS ANTIBODIES IN FREE-LIVING JAGUARS (*PANTHERA ONCA*) IN THE PANTANAL OF MATO GROSSO, BRAZIL

*Luciana Botelho Chaves*

*Instituto Pasteur, São Paulo*

**OP036**

POSITIVITY AND CLASSIFICATION OF BATS SUBMITTED FOR RABIES DIAGNOSIS AT PASTEUR INSTITUTE OVER THE PERIOD FROM 2007 TO 2012

*Karin Corrêa Scheffer*

*Instituto Pasteur, São Paulo*

**14:30-15:00 AFTERNOON BREAK &**

**POSTER SESSION**

Regency Ballroom

**12:00-13:30 LUNCH BREAK**

**15:00-16:00**

**WILDLIFE AND DOMESTIC ANIMAL RABIES  
CONTINUED**

**OP037**

A HISTORICAL PERSPECTIVE OF RACCOON  
RABIES CONTROL IN THE UNITED STATES  
(1992-2012)

*Joanne Maki  
Merial*

**OP038**

IMMUNOGENETIC COMPARISONS OF ARCTIC  
FOX ACROSS MULTIPLE RABIES ZONES IN  
ALASKA

*Caroline Drago  
Trent University*

**OP039**

THE NORTH AMERICAN RABIES MANAGEMENT  
PLAN—THE FIRST FIVE YEARS AND A LOOK  
TOWARD THE FUTURE

*Dennis Slate  
USDA/WS/APHIS*

**OP062 (formerly PP045)**

THE EVOLVING HISTORY OF TEXAS GRAY FOX  
RABIES CONTINGENCY ACTIONS: TEXAS  
WILDLIFE SERVICES RABIES RESPONSES

*Michael Bodenchuk  
USDA-APHIS-Wildlife Services*

**16:00-17:00**

**ROUND TABLE  
BIOMEDICAL CONUNDRUMS**

Moderator:

Richard Chipman  
USDA-APHIS Wildlife Services

Participants:

Dieter Gniel  
Rosely Cerqueira de Oliveira  
Catherine Filejski  
Charles Rupprecht

On a daily basis, a variety of professionals perform complicated risk assessments related to rabies management in scenarios fraught by a curiosity of incongruous epidemiological, pathobiological, and biomedical circumstances. This Roundtable on Rabies Conundrums provides an enlightened discussion with a diversity of global opinion leaders reflective of different perspectives hailing from academia, government, and industry, with active audience participation.

**18:30-21:00**

**ONTARIO RABIES ADVISORY COMMITTEE  
MEETING**

Room: Studio B - By Invitation Only

## POSTERS

### PP027

ENHANCEMENT OF BBB PERMEABILITY AND REDUCTION IN THE EXPRESSION OF TIGHT JUNCTION PROTEINS ARE NOT DUE TO RABIES VIRUS INFECTION PER SE BUT VIRUS-INDUCED CYTOKINES/CHEMOKINES

*Qingqing Chai  
University of Georgia*

### PP028

INDISSOCIABILIDADE DA PRESENÇA DE CORPÚSCULOS DE NEGRI E DA INFLAMAÇÃO PARENQUIMATOSA EM AMOSTRAS DE SISTEMA NERVOSO CENTRAL DE HERBÍVOROS ACOMETIDOS PELA RAIVA

*Samira Achkar  
Instituto Pasteur de São Paulo*

### PP029

CORRELATION BETWEEN RABIES VIRUS NUCLEOPROTEIN GENE QUANTIFICATION AND LETHALITY RATE OF DIFFERENT VIRAL VARIANTS

*Camila Michele Appolinario Harary  
UNESP- São Paulo State University*

### PP030

HEMATOLOGY OF RABIES INFECTION IN MICE

*Balarabe Magaji Jahun  
Ahmadu Bello University Zaria*

### PP031

CONSTRUCTION OF FULL-LENGTH GENOME PLASMIDS FOR THE CHIMERIC KGH STRAIN: FOR IDENTIFICATION OF THE HOST IMMUNE RESPONSE AND PATHOGENICITY

*Jun-Sun Park  
National Institute of Health, Korea Centers for Disease Control & Prevention*

### PP032

MOLECULAR TECHNIQUES FOR RABIES VIRUS DETECTION IN ORGANS OF FRUGIVOROUS BATS

*Karin Corrêa Scheffer  
Instituto Pasteur, São Paulo*

### PP033

CAPTURE AND TREATMENT OF COLONY DESMODUS ROTUNDUS STRATEGIES AND ACTION OF DEFENSE SERVICE

*Hellen Nubia C. Miranda Maciel  
Ministério da agricultura, pecuária e abastecimento*

### PP034

UPDATE OF TECHNIQUES FOR PATHOGEN INACTIVATION AND CONSEQUENT LONG TERM PRESERVATION OF BAT SPECIMENS

*Douglas Green  
Centers for Disease Control and Prevention*

### PP035

CLINICAL DISEASE AND IMMUNE RESPONSE IN THE CENTRAL NERVOUS SYSTEM OF MICE INFECTED WITH RABV VARIANTS ISOLATED FROM DIFFERENT ANIMAL SPECIES

*Camila Michele Appolinario Harary  
UNESP- São Paulo State University*

### PP036

MONITORAMENTO DE MORCEGO NÃO HEMATÓFAGO E A RAIVA NO ESPAÇO URBANO - PERNAMBUCO - BRASIL

*Ana Cláudia Ramos de Araújo  
Laboratório Central de Pernambuco - LACEN/PE  
/ Laboratório Nacional Agropecuário em Pernambuco (LANAGRO/PE)*

**PP037**

DIFFERENT CLINICAL MANIFESTATIONS OBSERVED IN MICE INOCULATED WITH SEVERAL RABIES VIRUS VARIANTS IN SOUTHEAST BRAZIL

*Avelino Albas*

*Sao Paulo Agency of Agrobusiness Technology (APTA)*

**PP038**

PHYLOGEOGRAPHY OF THE RABIES VIRUSES CIRCULATING IN THE RECENT ITALIAN EPIDEMIC AND EVALUATION OF THE AFFECTED FOX POPULATION DYNAMICS THROUGH MICROSATELLITE ANALYSIS

*Angélique Angot*

*Istituto Zooprofilattico sperimentale delle Venezie*

**PP039**

CANINE AND WILDLIFE ENHANCED RABIES PREVENTION IN ISRAEL (2009-2013)

*Boris Yakobson*

*Kimron Veterinary Institute*

**PP040**

DIVERSITY OF BATS SPECIES SENT FOR RABIES DIAGNOSIS TO PASTEUR INSTITUTE OVER THE PERIOD FROM 2009 TO 2012

*Karin Corrêa Scheffer*

*Instituto Pasteur, São Paulo*

**PP041**

RECOMBINANT ERAG3G STRAIN CONSTRUCTED BY REVERSE GENETIC SYSTEM INDUCES PROTECTIVE IMMUNITY IN RACCOON DOGS

*Jin-Ju Nah*

*Animal and Plant Quarantine Agency*

**PP042**

PRIMER AISLAMIENTO DE VIRUS RABICO VARIANTE ANTIGENICA 3 EN UN PERRO DE LA ZONA URBANA DE GUAYAQUIL, ECUADOR EN 2012

*Hugo Diaz*

*Instituto nacional de investigacion en salud publica*

**PP043**

A RAIVA EM MORCEGOS NO AMBIENTE URBANO DE PERNAMBUCO, NORDESTE DO BRASIL

*José Lindemberg Martins Machado*

*Laboratório Central de Pernambuco (LACEN/PE)*

*Laboratório Nacional Agropecuário em Pernambuco (LANAGRO/PE)*

**PP044**

PARADIGM SHIFT IN WILDLIFE RABIES SURVEILLANCE TO SUPPORT ORAL RABIES VACCINATION

*Kathy Nelson*

*USDA/APHIS/Wildlife Services*

**PP046**

RABIES IN NEW MEXICO: RECENT EPIZOOTICS AND HISTORICAL PERSPECTIVES.

*Rolan Davis*

*Kansas State University*

**PP047**

PHYLOGEOGRAPHIC ANALYSIS OF RABIES VIRUS CIRCULATING IN BOVINES IN THE STATE OF MATO GROSSO, BRAZIL

*Angélique Angot*

*Istituto Zooprofilattico sperimentale delle Venezie*

**PP048**

CURRENT RESEARCH ON RABIES AT THE NATIONAL WILDLIFE RESEARCH CENTER OF USDA/APHIS/WILDLIFE SERVICES

*Kurt VerCauteren*

*USDA/APHIS/WS/National Wildlife Research Center*

**PP049**

NOVEL INSIGHTS INTO THE GENETIC COMPOSITION OF ATTENUATED ORAL RABIES VACCINES

*Conrad Freuling*

*Friedrich-Loeffler-Institut*

**PP070**

EXPERIMENTAL INFECTION OF ARTIBEUS spp WITH RABIES VIRUS

*Cirani Obregón*

*Instituto Mexicano del Seguro Social CMN Siglo XXI UIMI*

**Wednesday October 30th**

**08:00 – 08:30 REGISTRATION**

**08:30-10:00**

**EPIDEMIOLOGY AND MODELLING**

Chairs: Denise Belanger and Sergio Recuenco

**OP042**

RIGHT PLACE, WRONG SPECIES: CROSS-SPECIES TRANSMISSION OF RABIES VIRUS VARIANTS ASSOCIATED WITH TERRESTRIAL MAMMALS IN THE UNITED STATES

*Ryan Wallace*

*Centers for Disease Control and Prevention*

**OP043**

SITUATION OF RABIES IN HERBIVORES – BRAZIL- 2012

*Ellen Laurindo*

*Federal University of Paraná, Ministry of Agriculture. Livestock and Food Supply - Brazil*

**OP063 (formerly PP052)**

SURVEILLANCE FOR RABIES IN BATS BY THE ANIMAL HEALTH SERVICE OF THE PARANA STATE GOVERNMENT – BRAZIL (2011-2012)

*Ellen Laurindo*

*Ministry of Agriculture. Livestock and Food Supply - Brazil*

**OP044**

RABIES IN NIGERIA: A NEW PARADIGM SHIFT?

*Balarabe Jahun*

*Ahmadu Bello University Zaria Nigeria*

**OP045**

AN EVALUATION OF RABIES VACCINATION RATES AMONG ANIMALS INVOLVED IN BITING INCIDENTS IN THE WELLINGTON-DUFFERIN-GUELPH PUBLIC HEALTH UNIT

*Zvonimir Poljak*

*University of Guelph*

**OP046**

ANALYSIS OF CL184 NEUTRALIZING CAPACITY AGAINST INDIAN RABIES VIRUS ISOLATES AS PART OF EPIDEMIOLOGICAL SURVEILLANCE

*Wilfred Marissen*

*Crucell Holland BV*

**11:30 – 12:30 POSTER SESSION**

Regency Ballroom

**12:30 – 14:00 LUNCH BREAK**

**14:00 – 15:00**

**REGIONAL AND TRANS-BOUNDARY UPDATES**

Chairs: Rich Chipman and Laura Robinson

**OP047**

RABIES IN CANADA - 2012

*Christine Fehlner-Gardiner*

*Rabies Center of Expertise, Canadian Food Inspection Agency*

**OP048**

TOWARDS THE ELIMINATION OF HUMAN RABIES TRANSMITTED BY DOGS IN LATIN AMERICA AND THE CARIBBEAN: SUMMARY OF THE XIV MEETING OF DIRECTORS OF NATIONAL PROGRAMS FOR RABIES CONTROL IN LATIN AMERICA (REDIPRA).

*Alfonso Clavijo*

*Pan American Health Organization, Veterinary Public Health Unit, Health Surveillance and Disease Prevention and Control*

**OP049**

EPIDEMIOLOGY OF RABIES IN AZERBAIJAN: A CROSS DISCIPLINARY INTERNATIONAL COLLABORATION.

*Daniel Horton*

*Animal Health and Veterinary Laboratories Agency*

**10:00 – 10:30 MORNING BREAK & POSTER SESSION**

Regency Ballroom

**10:30 – 11:00**

**GEORGE M. BAER LATIN AMERICAN INVESTIGATOR AWARD**

Presented by Charles Rupprecht

**OP061**

ECOLOGY AND GEOGRAPHY OF TRANSMISSION OF TWO BAT-BORNE RABIES LINEAGES IN CHILE

*Luis E. Escobar*

*Universidad Andres Bello*

**11:00 – 11:30**

**ECONOMIC AND POLITICAL KEYNOTE ADDRESS**

Dennis Slate

Science Advisor to the USDA Wildlife Services Rabies Management Program

**OP064 (formerly PP056)**

PUBLIC HEALTH AND VETERINARY  
IMPLICATIONS OF RABIES IN ETHIOPIA  
*Asefa Deressa Hundera*  
*Addis Ababa University*

**PP055**

RABIES IN THE AMERICAS: A REGIONAL  
SURVEY TO NATIONAL PROGRAMME  
DIRECTORS

*Victor Javier Del Rio Vilas*  
*Pan American Health Organization, Veterinary  
Public Health Unit, Health Surveillance and  
Disease Prevention and Control*

**PP069**

MODELING RABIES TRANSMISSION IN THE  
ARCTIC FOX: TOWARD A COMPREHENSIVE  
PICTURE OF RISK EXPOSURE FOR DOGS AND  
PEOPLE IN THE CANADIAN ARCTIC.

*Audrey Simon*  
*University of Montreal*

**18:00 – 23:00**

**GALA & AUCTION**

King Ballroom

18:00 Silent Auction & Cocktails  
18:30 Entertainment  
19:45 Dinner  
21:30 Live Auction

Auctioneer: Richard Chipman

**POSTERS**

**PP051**

SPATIO-TEMPORAL DISTRIBUTION OF RABIES  
CASES IN WILD AND DOMESTIC ANIMALS IN  
THE CANADIAN ARCTIC: 1985-2012

*Audrey Simon*  
*University of Montreal*

**PP054**

MONITOREO EPIZOOTIOLOGICO: UNA  
SOLUCIÓN  
*Eduardo Carlos Bautista*  
*Secretaría de Salud del Estado de Puebla*

**Thursday October 31st**

**08:30 – 09:00 REGISTRATION**

**09:00 – 10:00**

**APPROACHES TO RABIES CONTROL AND OUTBREAK RESPONSE**

Chair: Hugh Whitney and Fernando Pino

**OP057**

A COMPREHENSIVE STEPWISE ONE HEALTH APPROACH TOWARDS RABIES CONTROL AND PREVENTION IN HAITI

*Richard Franka*

*Centers for Disease Control and Prevention*

**OP051**

POBLACIÓN EN RIESGO DE SER AGREDIDA POR QUIRÓPTERO HEMATÓFAGO AL HABITAR EN LOCALIDADES DENTRO DEL ÁREA DE VUELO DE ÉSTOS EN EL NORTE DE JALISCO.

*Angélica de la Asunción González López*

*Secretaría de Salud Jalisco*

**OP053**

NEW APPROACHES TO VAMPIRE BAT RABIES PREVENTION AND CONTROL

*Sergio Recuenco*

*Centers for Disease Control and Prevention*

**OP066 (formerly PP059)**

SEROLOGIC SURVEY OF CATTLE AND ANTIBODY RESPONSE TO TWO COMMERCIAL RABIES VACCINES IN GUATEMALA

*Amy Gilbert*

*NWRC/APHIS/USDA*

**10:00 – 10:30 MORNING BREAK & POSTER SESSION**  
Regency Ballroom

**10:30 – 11:30**

**APPROACHES TO RABIES CONTROL AND OUTBREAK RESPONSE  
CONTINUED**

**OP054**

THE EVOLUTION OF WILDLIFE RABIES CONTROL TACTICS

*Rick Rosatte*

*Ontario Ministry of Natural Resources*

**OP055**

RACCOON RABIES & CHAINS OF INFECTION GIVEN HABITAT AND DISEASE CONTROL

*Bruce Pond*

*Ontario Ministry of Natural Resources*

**OP056**

POTENTIAL INCREASED ROLE AND BENEFITS OF HEALTH IMPACT ASSESSMENT IN WILDLIFE RABIES AND DISEASE MANAGEMENT

*Timothy Algeo*

*USDA, APHIS, Wildlife Services*

**OP058**

SURVEILLANCE OF HUMAN RABIES BY NATIONAL AUTHORITIES - A GLOBAL SURVEY

*Louise Taylor*

*Global Alliance for Rabies Control*

**11:30 – 12:00**

**SOCIAL AND CULTURAL KEYNOTE**

Deborah Briggs

Global Alliance for Rabies Control

**12:00 – 12:30**

**CULTURAL ASPECTS OF RABIES (PAST AND PRESENT): CHALLENGES TO COMMUNICATION AND OUTREACH**

Chairs: Louise Taylor and Marco Vigilato

**OP059**

5 CLAVES PARA PREVENIR MORDEDURAS DE PERROS, PAQUETE DE MATERIALES PARA PROFESORES DE ESCUELA

*Melania Gamboa*

*World Society for the Protection of Animals (WSPA)*

**OP060**

A CROSS-SECTIONAL SURVEY TO EVALUATE KNOWLEDGE, ATTITUDES AND PRACTICES (KAP) REGARDING ZOONOSIS WITH REFERENCE TO RABIES AMONG VETERINARY PROFESSIONALS OF HAITI

*Jessie Dyer*

*Centers for Disease Control and Prevention*

**14:00 – 15:00**

**ROUND TABLE**

**WRAP-UP DISCUSSION**

Moderator:

Chris Davies

Ontario Ministry of Natural Resources

Participants: A four member panel with representatives from Industry, Government, Research, and a Non-Governmental Organization (Membership TBA)

This closing Round Table session will provide an opportunity for the Panel to present their respective views on information shared at RITA XXIV that could include: unanswered questions; hot issues; emerging issues; discrepancies/disagreements; challenges; knowledge gaps; areas for future work/ research. An open discussion to follow presentations.

**15:00 – 15:30**

**ORGANIZING COMMITTEE**

**2014 RITA XXV MEXICO**

**15:30 – 16:30**

**CLOSING CEREMONY**

Co-Chaired by: Jan Sargeant and Charles Rupprecht

**12:30 – 14:00 LUNCH BREAK**

## POSTERS

### PP058

FIELD TRIALS WITH ONRAB ORAL RABIES VACCINE IN RACCOONS IN THE UNITED STATES: 2011-2012

*Richard Chipman*

*USDA/APHIS/Wildlife Services*

### PP060

INVESTIGATION A OF AN IMPORTED HUMAN RABIES CASE WITH SYMPTOM ONSET WHILE IN FEDERAL CUSTODY, SOUTH TEXAS, 2013

*Ryan Wallace*

*Centers for Disease Control and Prevention*

### PP061

SHARING CROSS-REGIONAL KNOWLEDGE AND STRATEGIC PARTNERSHIPS IN CANINE RABIES CONTROL

*Beryl Muttonono-Watkiss*

*The World Society for the Protection of Animals (WSPA)*

### PP062

NOVEL APPROACH TO RISK MITIGATION - AUSTRALIAN BAT LYSSAVIRUS IN TWO HORSES

*Janine Barrett*

*Biosecurity Queensland, Department of Agriculture, Fisheries and Forestry*

### PP063

COMPORTAMIENTO DURANTE Siete AÑOS DE LAS AGRESIONES A HUMANOS POR MURCIÉLAGOS HEMATÓFAGOS EN EL NORTE DE JALISCO, MÉXICO, POSTERIOR A LA IMPLANTACIÓN DE UNA CAMPAÑA INTENSIVA PARA CONTROLAR SU POBLACIÓN Y SU RELACIÓN CON LA EXISTENCIA DE REFUGIOS CERCANOS.

*Angélica de la Asunción González López*

*Secretaría de Salud Jalisco*

### PP064

EL PROGRAMA COMUNIDADES SALUDABLES COMO APOYO A LA PREVENCION Y CONTROL DE LA RABIA EN LA REGIÓN DE LA COSTA GRANDE DE GUERRERO, MÉXICO

*Lorena Dorantes*

*Secretaría de Salud Guerrero*

**RESTAURANT SUGGESTIONS**

309 Dhaba Indian Excellence 309 King Street West Toronto, ON M5V 1J5 (416) 740-6622 <a href="http://www.dhaba.ca">www.dhaba.ca</a>	Fresh on Spadina 147 Spadina Avenue Toronto, ON M5V 2L7 (416) 599-4442 <a href="http://www.freshrestaurants.ca">www.freshrestaurants.ca</a>	Quiznos Sub 228 Wellington Street West Toronto, ON M5V 3W1 (416) 977-0997 <a href="http://www.quiznos.ca">www.quiznos.ca</a>
Big Daddy's Bourbon Street Bistro & Oyster Bar 212 King Street West Toronto, ON M5H 1K5 (416) 599-5200 <a href="http://www.bigdaddys.ca">www.bigdaddys.ca</a>	Fusaro's Kitchen 147 Spadina Avenue Toronto, ON M5V 2L7 (416) 260-8414 <a href="http://www.fusaros.com">www.fusaros.com</a>	Ravi Soups 322 Adelaide Street West Toronto, ON M5V 1P7 (647) 435-8365 <a href="http://www.ravisoup.com">www.ravisoup.com</a>
Burger Brats 254 Adelaide Street West Toronto, ON M5H 1X6 (647) 352-4786 <a href="http://www.burgerbrats.ca">www.burgerbrats.ca</a>	Khao San Road 326 Adelaide Street West Toronto, ON M5V 1P7 (647) 352-5773 <a href="http://www.khaosanroad.ca">www.khaosanroad.ca</a>	Second Cup 287 King Street West Toronto, ON M5V 1J5 (416) 340-9888 <a href="http://www.secondcup.com">www.secondcup.com</a>
Charlie Condos 430 King W Toronto, ON M5V 1L5 (647) 348-0430 <a href="http://www.charliecondos.com">www.charliecondos.com</a>	Kit Kat Italian Bar & Grill 297 King Street West Toronto, ON M5V 1J5 (416) 977-4461 <a href="http://www.kitkattoronto.com">www.kitkattoronto.com</a>	Shoeless Joe's Sports Grill 276 King Street West Toronto, ON M5V 1J2 (416) 596-4203 <a href="http://www.shoelessjoes.ca">www.shoelessjoes.ca</a>
Cora - Blue Jays Way 277 Wellington Street West Toronto, ON M5V 3E4 (416) 598-2672 <a href="http://www.chezcora.com">www.chezcora.com</a>	Marcel's Bistro & Lounge 315 King St W Toronto, ON M5V (416) 591-8600 <a href="http://www.marcel's.com">www.marcel's.com</a>	Smoke's Poutinerie 218 Adelaide Street West Toronto, ON M5H 1W7 (416) 599-2873 <a href="http://www.smokespoutinerie.com">www.smokespoutinerie.com</a>
Corned Beef House 270 Adelaide Street West Toronto, ON M5H 1X6 (416) 977-2333 <a href="http://www.corndbeefhouse.com">www.corndbeefhouse.com</a>	McDonald's 160 Spadina Avenue Toronto, ON M5T 2C2 (416) 703-7401 <a href="http://www.mcdonalds.ca">www.mcdonalds.ca</a>	Starbucks 370 King Street West Toronto, ON M5V 1J9 (416) 595-9213 <a href="http://www.starbucks.ca">www.starbucks.ca</a>
Dunn's Famous Delicatessen 284 King Street West Toronto, ON M5V 1J2 (416) 599-5464 <a href="http://www.dunnsfamous.com">www.dunnsfamous.com</a>	N'Awlins 299 King Street West Toronto, ON M5V 0C4 (416) 595-1958 <a href="http://www.nawlins.ca">www.nawlins.ca</a>	Sushi Oniwa 214 King Street West Toronto, ON M5J 2H5 (416) 971-9222
Elephant & Castle 212 King Street West Toronto, ON M5H 1K5 (416) 598-4455 <a href="http://www.elephantcastle.com">www.elephantcastle.com</a>	Paese Ristorante 333 King Street West Toronto, ON M5V 1J5 (416) 599-6585 <a href="http://www.paeseristorante.com">www.paeseristorante.com</a>	Thai Princess Restaurant 387 King Street West Toronto, ON M5V 1K1 (416) 977-8222 <a href="http://www.thai princess.ca">www.thai princess.ca</a>

Fred's Not Here Restaurant 321 King W Toronto, ON M5V 1J5 (416) 971-9155 <a href="http://www.fredsnothere.com">www.fredsnothere.com</a>	Penelope Restaurant 225 King Street West Toronto, ON M5V 3C6 (416) 351-9393 <a href="http://www.penelopes.com">www.penelopes.com</a>	Tim Hortons 322 King Street West Toronto, ON M5V 1J2 (416) 642-1430 <a href="http://www.timhortons.com">www.timhortons.com</a>
IL FORNELLO 214 King Street West Toronto, ON M5H 3S6 (416) 977-2855 <a href="http://www.ilfornello.com">www.ilfornello.com</a>	Pizza Rustica 270 Wellington Street West Toronto, ON M5V (416) 260-0200 <a href="http://www.pizzarustica.ca">www.pizzarustica.ca</a>	Verona Ristorante 335 King St W Toronto, ON M5V 1J5 (416) 593-7771 <a href="http://www.verona.sites.toronto.com">www.verona.sites.toronto.com</a>
Jack Astor's 133 John Street Toronto, ON M5V 2E4 (416) 595-9100 <a href="http://www.jackastors.com">www.jackastors.com</a>	Quesada Mexican Grill 234 Wellington Street West Toronto, ON M5V 3C6 (416) 644-0876 <a href="http://www.quesada.ca">www.quesada.ca</a>	Wayne Gretzky's 99 Blue Jays Way Toronto, ON M5V 9G9 (416) 348-0099 <a href="http://www.gretzkys.com">www.gretzkys.com</a>



# visitor guide

## ATTRACTIOnS

★★★★★  
Canada's Walk of Fame  
[canadasmwalkoffame.com](http://canadasmwalkoffame.com)

29 CN Tower  
301 Front St. W.  
[cntower.ca](http://cntower.ca)

29 Ripley's Aquarium of Canada  
288 Bremner Blvd.  
[ripleyaquariumofcanada.com](http://ripleyaquariumofcanada.com)  
(Opening 2013)

33 Steam Whistle Brewery  
255 Bremner Blvd.  
[steamwhistle.ca](http://steamwhistle.ca)

33 Toronto Railway Heritage Centre  
255 Bremner Blvd.  
[trha.ca](http://trha.ca)

## HOTELS & ACCOMMODATIONS

6 Canadiana Backpackers Inn  
42 Widmer St.  
[canadianalodging.com](http://canadianalodging.com)

16 The Clarence Park  
7 Clarence Square  
[theclarencetpark.com](http://theclarencetpark.com)

30 Delta Toronto (Future)  
(Opening Fall 2014)  
[deltahotels.com](http://deltahotels.com)

24 Fairmont Royal York  
100 Front St. W.  
[fairmont.com/royalyork](http://fairmont.com/royalyork)

9 Hilton Garden Inn  
92 Peter St.  
[hiltongardeninn.com](http://hiltongardeninn.com)  
[hilton.com](http://hilton.com)

14 Hôtel Le Germain  
30 Mercer St.  
[germantoronto.com](http://germantoronto.com)

31 Hôtel Le Germain  
Maple Leaf Square  
75 Bremner Blvd.  
[germainmapleleafsquare.com](http://germainmapleleafsquare.com)

10 Hyatt Regency Toronto  
370 King St. W.  
[hyatregency.com](http://hyatregency.com)

26 InterContinental Toronto Centre  
255 Front St. W.  
[ichotelsgroup.com](http://ichotelsgroup.com)

20 Residence Inn Toronto  
Downtown/  
Entertainment District  
255 Wellington St. W.  
[marriott.com](http://marriott.com)

27 Renaissance  
Toronto Downtown  
1 Blue Jays Way  
[marriott.com](http://marriott.com)

21 The Ritz-Carlton, Toronto  
181 Wellington St. W.  
[ritzcarlton.com/toronto](http://ritzcarlton.com/toronto)

18 The Rosemont Residences  
50 John St.  
[ros蒙特residences.ca](http://ros蒙特residences.ca)

7 Shangri-La  
188 University Ave.  
[shangri-la.com](http://shangri-la.com)

19 SoHo Metropolitan  
318 Wellington St. W.  
[metropolitan.com](http://metropolitan.com)

8 Templar Hotel  
348 Adelaide St. W.  
[templarhotel.com](http://templarhotel.com)

## THEATRE, ARTS & CULTURE

1 401 Richmond  
401 Richmond St. W.  
[401richmond.net](http://401richmond.net)

22 Beauchamp  
Art Gallery  
55 Simcoe St.  
[galeriebeauchamp.com](http://galeriebeauchamp.com)

4 Four Seasons Centre  
for the Performing Arts  
Canadian Opera Company & The National Ballet of Canada  
145 Queen St. W.  
[fourseasonscentre.ca](http://fourseasonscentre.ca)

23 Glenn Gould Studio  
250 Front St. W.  
[cbc.ca/glenngould](http://cbc.ca/glenngould)

12 Princess of Wales Theatre  
300 King St. W.  
[mirvish.com](http://mirvish.com)

15 Roy Thomson Hall  
Toronto Symphony & Toronto Mendelsohn Choir  
60 Simcoe St.  
[roythomson.com](http://roythomson.com)

13 Royal Alexandra Theatre  
260 King St. W.  
[mirvish.com](http://mirvish.com)

25 Metro Toronto Convention Centre  
North Building  
255 Front St. W.  
South Building  
222 Bremner Blvd.  
[mtcc.com](http://mtcc.com)

17 The Second City  
51 Mercer St.  
[secondcity.com](http://secondcity.com)

11 TIFF Bell Lightbox  
350 King St. W.  
[tiff.net](http://tiff.net)

12 Toronto Antiques on King  
284 King St. W.  
[torontoantiquesonking.com](http://torontoantiquesonking.com)

3 Yuk Yuk's Comedy Club  
224 Richmond St. W.  
[yukyuk.com](http://yukyuk.com)

## MEDIA

2 Bell Media  
MuchMusic, Bravo, etalk, The Marilyn Denis Show, MTV, BNN, CP24, SPACE, E!, CHUM FM 104.5, FLOW 93.5  
299 Queen St. W.  
[bellmedia.ca](http://bellmedia.ca)

23 Canadian Broadcasting Corporation  
250 Front St. W.  
[cbc.ca](http://cbc.ca)

10 The Score Sports Network  
370 King St. W.  
[thescore.com](http://thescore.com)

## MEETINGS, EVENTS & SPORTS VENUES

32 Air Canada Centre & Maple Leaf Square  
Toronto Maple Leafs, Toronto Raptors & Rock Lacrosse  
40 Bay St.  
[theaircanadacentre.com](http://theaircanadacentre.com)

26 Rogers Centre  
Toronto Blue Jays & Toronto Argonauts  
1 Blue Jays Way  
[rogerscentre.com](http://rogerscentre.com)

28 Roundhouse Park  
Van de Water Cres.  
Ross St.  
Lakeshore Blvd W  
Gardiner Expressway

100 Lower Simcoe Ave  
Mariner Terrace  
Bremner Blvd  
Lower Simcoe St  
Grand Trunk Cres.

100 Harbourfront  
CN Tower  
Ripley's Aquarium of Canada  
Olympic Park  
Union Station  
VIA Rail (viarail.ca)



toronto  
entertainment  
district

[torontoed.com](http://torontoed.com)

W Walk-in medical clinics

PH Pharmacies

BPS Bike Parking Station

BIXI Bike Locations

Go Transit ([gotransit.com](http://gotransit.com))

TTC Stations ([ttc.ca](http://ttc.ca))

VIA Rail ([viarail.ca](http://viarail.ca))

P Parking ([torontoed.com/map/parking](http://torontoed.com/map/parking))



TORONTO, ONTARIO, CANADA

OCTOBER 27<sup>th</sup> – 31<sup>st</sup>, 2013