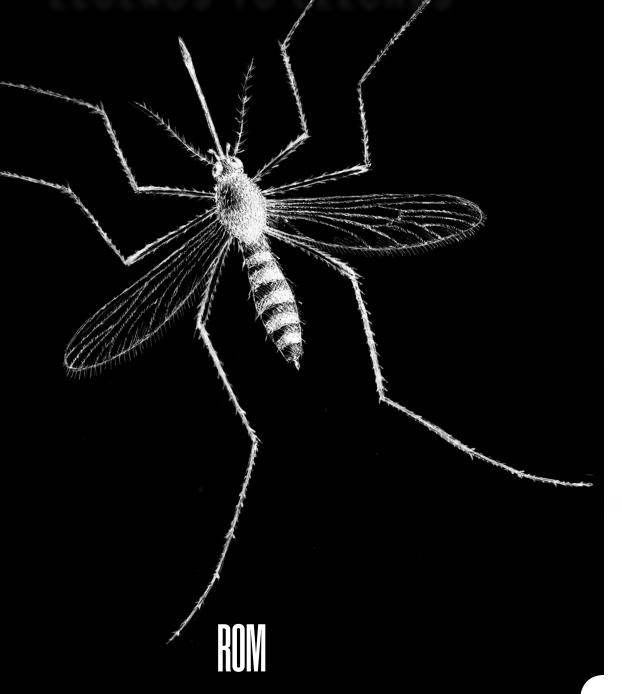
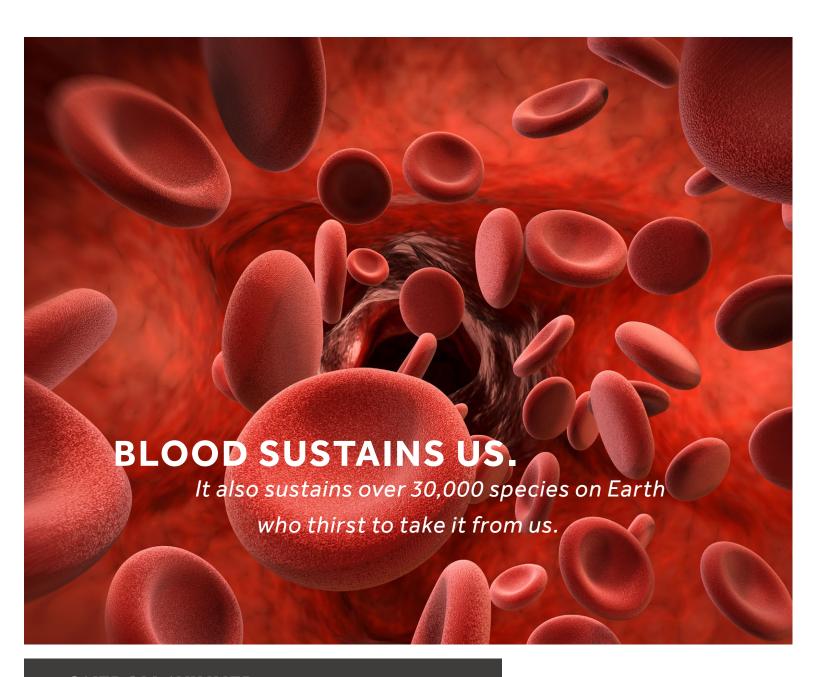
# BLOODSUCKERS

LEGENDS TO LEECHES



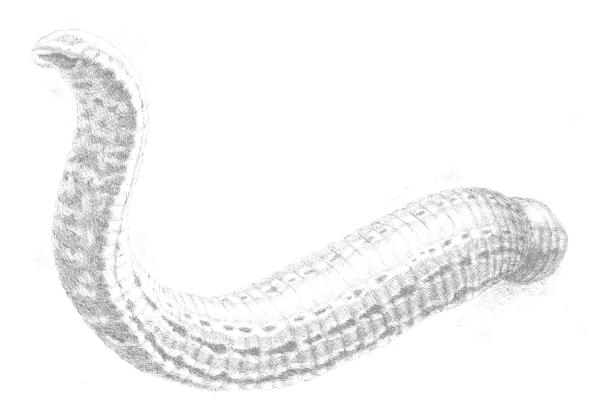


## **OVERALL WINNER**

American Alliance of Museums **2019 Excellence in Exhibition Awards** 

**2021 MERIT AWARDS** 

Society for Experiential Graphic Design **2021 Global Design Awards** 



LEECHES, MOTHS, FLIES, FISHES, BATS, BIRDS, AND MORE HAVE EVOLVED TO TAKE ADVANTAGE OF THIS ABUNDANT RESOURCE. HOW THEY DO THIS IS INTRICATE, DIVERSE, AND, FRANKLY, QUITE IMPRESSIVE. WHAT'S MORE, BLOODFEEDING ANIMALS ARE VITAL TO THE HEALTH OF THEIR ECOSYSTEMS.

STILL, WE ARE OFTEN AFRAID OF THEM. FEAR OF CREATURES WHO DRINK OUR BLOOD HAS SPAWNED BELIEF IN THE UNDEAD AROUND THE WORLD, BE THEY CHILLING OR CHARMING. BUT BLOODFEEDERS HAVE INSPIRED US TOO—FROM MEDICAL TREATMENTS TO STORYTELLING, WE HAVE RELIED ON BLOODSUCKING ANIMALS FOR MILLENIA.

AS MUCH AS THEY BUG US, BLOODFEEDERS ARE FASCINATING. AND WHILE YOU MAY NEVER LOVE THEM, SOME KNOWLEDGE AND UNDERSTANDING MAY HELP YOU LIVE WITH THEM.



Intersecting the worlds of nature, science, culture, & art...

**Bloodsuckers: Legends to Leeches** presents visitors with a one-of-a-kind opportunity to learn about and experience the world of bloodfeeders. With an approach that is conversational, suspenseful, and fun, it takes visitors on a journey that explores bloodfeeding through different perspectives—from their value in ecosystems to the inspiration they have offered cultures across the globe.



Fully immersive, this exhibition plunges visitors into the real—and legendary—worlds of bloodfeeders.

#### **VISITORS WILL:**

- **SEE** a variety of organisms and mechanisms in detail, to understand the evolution and diversity, intricacies and interconnectedness of bloodfeeding in nature;
- **♦ FEEL** both the revulsion and inspiration that bloodfeeders have offered to humanity throughout time and across cultures;
- **DEVELOP** confidence to live with bloodfeeders and appreciate that they are important to nature and culture.









SECTION 1 Blood

# Blood sustains life—for us and for the animals that feed on it.

What is in blood that makes it so important and nutritious? Why do organisms need blood? This section defines and explains the inherent importance of blood to all animals.

SECTION 2 Evolution of Bloodfeeding

# Bloodfeeding evolved multiple times independently.

This section reveals the impressive evolution of bloodfeeding — how many times it appeared, how long ago it evolved, and what we can learn from beautiful amber fossils.



### SECTION 3 Feeding on Blood

# Bloodfeeders have evolved strategies to:

- find blood
- get to the blood
- keep the blood flowing

Looking (incredibly) closely at the mouthparts and physiology of bloodfeeders, this section illustrates the intricate details of how these animals feed on blood—and how they get away with it.







SECTION 4 Diversity of Bloodfeeders

Bloodfeeders are abundant and diverse, and many play critical roles in their ecosystems.



Visitors encounter an expansive display of some of the 30,000 bloodfeeding species, from taxidermy birds to mounted insects and an array of jarred leeches.

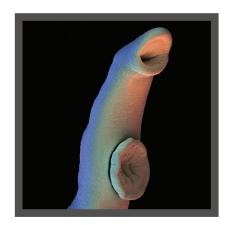
# SECTION 4 Diversity ... CONTINUED















Interactive screens and key live specimens engage visitors of all ages.





















### **SECTION 5** The Truth about Vampires

Stories about fantastical bloodfeeders abound. This section explores legends from across the globe by dissecting the origin stories of vampires (Europe), the Yara-Ma-Yha-Who (Australia), and the Chupacabra (Central America).

### SECTION 6 Imagining Bloodsuckers

Bloodfeeding features prominently in our imaginations. Here, visitors see an array of creative expressions of bloodfeeders in popular culture—even the comical ones.



# Bloodfeeders inspire our imaginations — through fear and fantasy.







# Bloodfeeders have been influential in medicine for over 3,000 years.

SECTION 7 Bloodletting

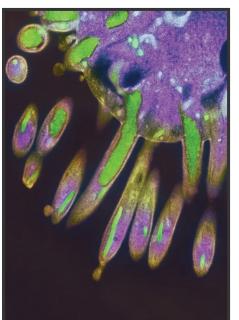
Leeches have been used in medical treatments for centuries. Here, visitors learn about historic bloodletting practices and medical applications for leeches today.











SECTION 8 Overcoming Disease

Exploring the medical implications of bloodfeeding, this section describes advancements in our battle against malaria, and answers previously-submitted questions from the public about Lyme disease, Zika, West Nile, and vector-borne diseases overall.

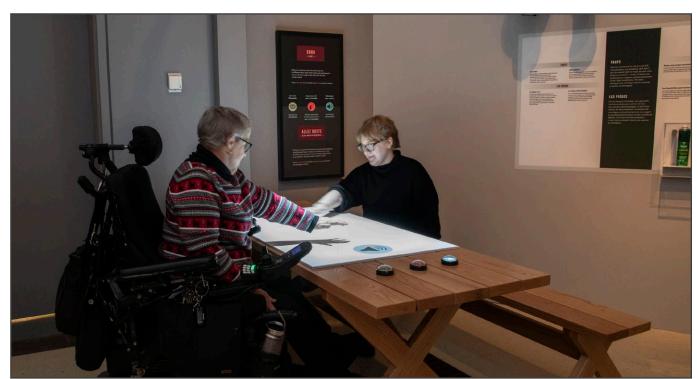
## SECTION 9 How To Live with Bloodfeeders

# We can live together with confidence.

Assuaging fears and misconceptions, this section reveals which blood-feeders live in your area and what really works to identify them, avoid them, remove them, and protect yourself. Visitors also learn about the effects of climate change on black flies in the Arctic.

Here, hosting venues have an opportunity to feature their own local content.

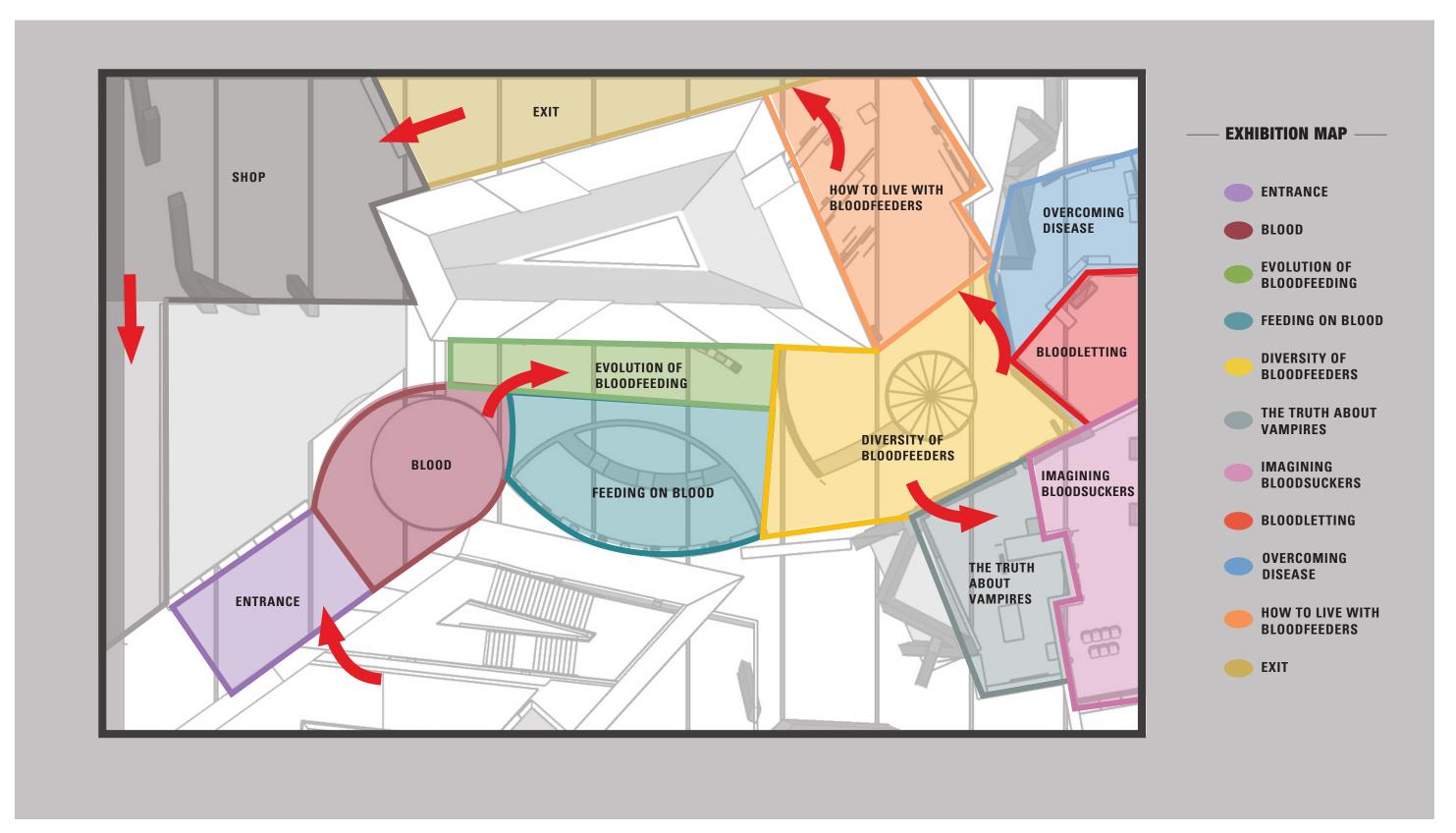








### **EXHIBITION FLOOR PLAN**











# THE CURATORS

#### DR. SEBASTIAN KVIST

PH.D., Richard Gilder Graduate School, American Museum of Natural History (2012)

Working on evolutionary biology, Dr. Kvist is interested in the forces that shape biodiversity and drive evolution. His research focuses mainly on tackling questions regarding the diversity, phylogeny, and distributions of annelids, a rather large animal phylum with over 17,000 currently recognized species. This phylum includes representatives of three major groups — Polychaeta (bristle worms), Oligochaeta (earthworms and their relatives), and Hirudinea (leeches).

Although Dr. Kvist's research aims at understanding the full spectrum of evolutionary change within the phylum, one of his main topics of interest is the evolution of bloodfeeding in leeches as it pertains to morphology and molecules.

#### DR. DOUG CURRIE

PH.D., Entomology, University of Alberta (1988)

Dr. Currie's Ph.D. dissertation, Morphology and Systematics of Primitive Simuliidae, examined the early evolutionary relationships of black flies — a notorious pest of birds and mammals. His research interests are focused on the systematics and comparative biology of aquatic insects, with special reference to black flies and their bloodsucking relatives.

Dr. Currie continues to study the morphology and systematics of the world's black flies, but now includes cutting-edge approaches to help address long standing species-identity problems. His current research focuses on the diversity and biogeography of Gondwanan black flies, based on material collected from major expeditions in Australia and Africa.

# **AT A GLANCE**

This bilingual exhibition (English and French) contains the following components:

#### **OBJECTS**

Over 100 objects including:

- wet, mounted, and taxidermy specimens
- larger-than-life-sized models of the mouthparts of a mosquito, leech, and black fly
- bloodletting instruments and physician's tools, archival prints, and first edition books from the 17th-19th centuries
- 20th-century objects pertaining to bloodfeeders in popular culture

#### **EXPERIENCES**

- 11 digital and mechanical interactives, including microscopes, a responsive Kinect experience, a touchscreen game, tactile models and labels, and interactive text panels
- 11 audio-visual stations with in-depth information on the exhibition's themes
- 8 highlight experiences and integrated immersive areas where visitors can take photos to share on social media, such as a glowing column of giant red blood cells, a retro movie theatre, a historic bloodletting shop, a surprise vampire appearance, and a room of buzzing mosquitoes

#### **LOAN FEE**

available upon request

#### **FEE INCLUDES**

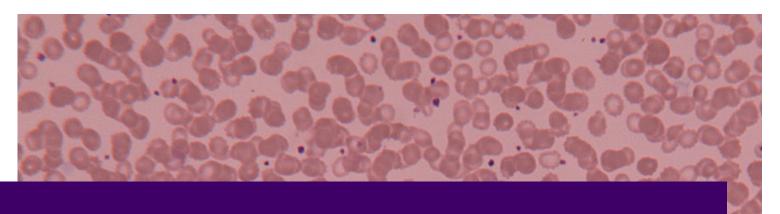
- custom-made casework, platforms, and consoles
- wall text, atmospheric background murals, large-scale images, and multimedia provided in electronic format
- terraria and aquaria
- all mounts and hanging systems
- audio-visual equipment
- installation crew to oversee installation and de-installation (installation: 3 weeks est.; de-installation: 3 weeks est.)

#### **ADDITIONAL VENUE COSTS INCLUDE**

- inbound shipping, in-transit and on-site insurance
- 1 case
- sourcing live animals and their associated costs
- all staffing, production, construction, and promotional costs associated with the dis-/mounting and maintenance of the exhibition, including aquaria/terraria

#### SIZE

approximately 8,000 sf

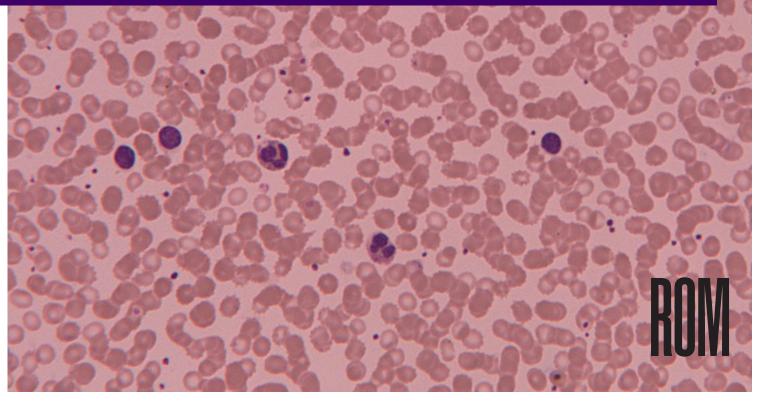


# **SCHEDULE**

**Available from Summer 2022** 

#### **Contact:**

e: travellingexh@rom.on.ca | t: 416.586-5539



#### **IMAGE CREDITS**

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