Program schedule for the 6th International Workshop on Angiostrongylus and Angiostrongyliasis

Sunday, 5 January 2020

2:00 pm to 5:00 pm  | Early check-in

Monday, 6 January 2020

7:00 am to 8:20 am  | Check-in
8:30 am to 9:00 am  | Oli; Opening remarks by Lieutenant Governor Josh Green, MD. Introduction to Workshop Committee Chairs by Dr. Sue Jarvi.
9:00 am to 9:20 am  | Clinical Session Begins. Chairs: Dr. Vernon Ansdell and Dr. Praphathip Eamsobhana.
          Presentation: Mark LeRoy and Maya Parish (USA)
         Surviving Rat Lungworm Disease: Front Line Perspectives of a Patient and Caregiver
9:40 am to 10:00 am | Presentation: Dr. Chad Meyer (USA)
          Chronic Neuroangiostrongyliasis, a neglected aspect of the disease, with long term case reviews from Hawaii, and recommendations for both retrospective and ongoing studies
9:40 am to 10:00 am | Presentation: Dr. Kittisak Sawanyawisuth (Thailand)
           A systematic review on treatment of eosinophilic meningitis
10:00 am to 10:20 am | Presentation: Dr. Sarah Strong (USA)
          A clinical review of traditional and alternative therapies in the treatment of Angiostrongylus cantonensis infection
10:20 am to 10:40 am | Coffee/tea break
11:00 am to 11:20 am | Resume clinical session. Chairs: Dr. Jon Martell and Dr. Kittisak Sawanyawisuth
          Presentation: Dr. Vernon Ansdell (USA)
11:00 am to 11:20 am | Angiostrongylus cantonensis (Neuroangiostrongyliasis) in travelers
          Presentation: Dr. Hung-Chin Tsai (Taiwan)
11:20 am to 11:40am | Dexamethasone downregulates the expressions of MMP-9 and oxidative stress in mice with eosinophilic meningitis caused by Angiostrongylus cantonensis infection
11:40 am to 12:00 pm | Presentation: Dr. Praphathip Eamsobhana (Thailand)
Sandwich dot-immunogold filtration assay (DIGFA) for specific immunodiagnosis of active neuroangiostrongyliasis

Presentation: Kirsten Snook, MSPH (USA)

12:00 pm to 12:20 pm

Serologic detection (ELISA) of *A. cantonensis* exposure in humans using a 31 kDa antigen isolated from Hawai’i Island nematodes

Presentation: Dr. John Jacob (USA)

12:20 pm to 12:40 pm

Pharmaceutical intervention of *A. cantonensis*: in vitro drug tests

Conclusion of Clinical Session.

12:40 to 2:20

Lunch

Begin Veterinary Session. Chairs: Dr. Richard Malik and Dr. Alfred Mina

2:20 pm to 2:40 pm

Further studies of neuroangiostrongyliasis in Australian dogs: 78 new cases (2010-2019)

Presentation: Dr. Richard Malik (Australia)

2:40 pm to 3:00 pm

Magnetic Resonance Imaging findings in 5 dogs with neuroangiostrongyliasis

Presentation: Dr. Matthew Wun (Australia)

3:00 pm to 3:20 pm

First documented cases of canine neuroangiostrongyliasis due to *Angiostrongylus cantonensis* in Hawaii

Presentation: Dr. Jenee Odani (USA)

3:20 to 3:40 pm

Coffee/tea break

3:40 pm to 4:00 pm

Confirmed cases of RLWD in dogs of East Hawai‘i

Presentation: Kirsten Snook, MSPH (USA)

4:00 pm to 4:20 pm

Real-time PCR detection of *Angiostrongylus cantonensis* DNA in peripheral blood of domestic animals

Presentation: Dr. Matthew Wun (Australia)

4:20 pm to 4:40 pm

Gross, microscopic, radiologic, echocardiographic and haematological findings in rats experimentally infected with *Angiostrongylus cantonensis*

Presentation: Dr. Barbora Feckova (Czech Republic)

4:40 pm to 5:00 pm

Pathology of *Angiostrongylus cantonensis* infection in model bird species

Conclusion of Veterinary Session.

5:00 pm to 6:30 pm

Break

6:30 pm to 8:00 pm

Poster session: Biomedical research at University of Hawaii (heavy appetizers provided; no-host bar)

### Tuesday, 7 January 2020

**8:30 am to 8:40 am**

Day 2: Remarks by Dr. Susan Jarvi

Genetics and Epidemiology Session. Chairs: Dr. Robert Cowie and Dr. Jan Šlapeta

**8:40 am to 9:00 am**

Presentation: Dr. Robert Cowie (USA)

How many species of *Angiostrongylus* are there?
9:00 am to 9:20 am
Presentation: Dr. Jan Šlapeta (Australia)
The mitochondrial genome of *Angiostrongylus mackerrasae* is distinct from *A. cantonensis* and *A. malaysiensis*.

9:20 am to 9:40 am
Presentation: Dr. Luis Solorzano (Ecuador)
Phylogenetic analysis of *A. cantonensis* from different regions of Ecuador.

9:40 am to 10:00 am
Presentation: Dr. Noppadol Aekphachaisawat (Thailand)
A web-based surveillance model of eosinophilic meningitis: future prediction and distribution patterns.

10:00 am to 10:20 am
Presentation: Dr. Kittisak Sawanyawisuth (Thailand)
An ecological study on eosinophilic meningitis caused by *Angiostrongylus cantonensis*.

10:20 am to 10:40 am
Coffee/tea break.

10:40 am to 11:00 am
Presentation: Dr. Heather Walden (USA)
*Angiostrongylus cantonensis* in Florida, USA: current status.

11:00 am to 11:20 am
Presentation: Dr. David Modrý (Czech Republic)
The role of L3 larvae released to environment in *A. cantonensis* transmission.

11:20 am to 11:40 am
Presentation: Randi Rollins, MS (USA)
*Angiostrongylus cantonensis* infection prevalence and intensity in its intermediate gastropod hosts: the impact of host species and environmental variables.

11:40 am to 12:00 pm
Presentation: Lisa Kaluna, MS (USA)
*Angiostrongylus cantonensis* in slugs and snails of east Hawai‘i island and Kauai: a comparison of infection levels with neuroangiostrongyliasis hotspots.

Genetics and Epidemiology Session concludes.

12:00 pm to 1:40 pm
Lunch.

Transmission Dynamics, Prevention, and Education Session begins.

Chairs: Dr. Christopher Niebuhr and Dr. Heather Walden

1:40 to 2:00 pm
Presentation: Randi Rollins, MS (USA)
Species identity and host size are associated with rat lungworm infection in gastropods.

2:00 pm to 2:20 pm
Presentation: Dr. Christopher Niebuhr (New Zealand)
Investigations into rat lungworm (*Angiostrongylus cantonensis*) infections in wildlife populations in Hawai‘i.

2:20 pm to 2:40 pm
Presentation: Dr. Vachel Gay Paller (Philippines)
Intensive farming: implication for zoonotic parasite emergence.

2:40 pm to 3:00 pm
Presentation: Dr. Lorrin Pang (USA)
An effective electrified metal barrier to control *P. martensi*.

3:00 pm to 3:20 pm
Coffee/tea break.

3:20 pm to 3:40 pm
Presentation: Lindsay Hamilton, MS (USA)
X-ray irradiation for control of semi-slugs and rat lungworm disease.

3:40 pm to 4:00 pm
Presentation: Lisa Kaluna, MS (USA)
Efficacy of rainwater catchment sediment filters against infective (L3) *A. cantonensis* larvae, a pilot study.

4:00 pm to 4:20 pm
Presentation: Yaeko Tagami (USA)
Mortality rates of the infective (L3) stage *Angiostrongylus cantonensis* larvae following ultraviolet-C (UVC) irradiation

**Presentation:** Dr. Argon Steel (USA)

Evaluation of prospective vegetable washes for killing *A. cantonensis* larvae

**Presentation:** Kay Howe, MS (USA)

Engaging students in citizen science through the prevention of rat lungworm disease

Transmission Dynamics, Prevention, and Education Session concludes.

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**Wednesday, 8 January 2020**

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<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:30 am to 10:20 am</td>
<td><strong>Round Table Discussion: Clinical and Veterinary</strong> (Dr. Vernon Ansdell, Dr. Jon Martell, and Dr. Richard Malik moderating)</td>
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<td>10:20 am to 10:40 am</td>
<td>Coffee/ tea break</td>
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<tr>
<td>10:40 am to 11:50 am</td>
<td><strong>Round Table Discussion: Genetics, Transmission Dynamics, Epidemiology, Ecology, Prevention, and Education</strong> (Dr. Rob Cowie, Dr. Kittisak Sawanyawisuth, and Dr. Chris Niebuhr moderating)</td>
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<tr>
<td>11:50 am to 12:00 pm</td>
<td>Closing discussion and remarks</td>
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