



**STATE OF HAWAII**  
DEPARTMENT OF HEALTH  
P. O. Box 3378  
Honolulu, HI 96801-3378  
doh.testimony@doh.hawaii.gov

**LATE**

**Testimony in SUPPORT of SB 2516  
RELATING TO RAT LUNGWORM DISEASE**

SENATOR MIKE GABBARD, CHAIR  
SENATE COMMITTEE ON WATER, LAND, AND AGRICULTURE  
SENATOR ROSALYN H. BAKER, CHAIR  
SENATE COMMITTEE ON COMMERCE, CONSUMER PROTECTION, AND HEALTH  
Hearing Date: February 5, 2016 Room Number: 224

- 1 **Fiscal Implications:** Appropriates \$1,000,000 to UH Hilo, \$200,000 to the Department of
- 2 Health and \$200,000 to the Department of Land and Natural Resources.
  
- 3 **Department Testimony:** The Department of Health supports SB2516 as long as it does not
- 4 adversely impact the priorities set forth in the Executive Biennium Budget. Angiostrongyliasis
- 5 (or rat lungworm), a parasitic infection caused by *Angiostrongylus cantonensis*, is one of several
- 6 emerging diseases of public health concern. Specifically, this bill would provide funding to
- 7 increase outreach to and education of the general public and Hawaii healthcare providers on
- 8 angiostrongyliasis. Education of the public and Hawaii healthcare providers is critical to raise
- 9 awareness of emerging diseases such as angiostrongyliasis and known risk factors for infection
- 10 through providing evidence-based information regarding these diseases, reliable diagnostic tests,
- 11 and proven prevention methods. We welcome the opportunity to work with partners on
- 12 improving public health education about this important concern.
  
- 13 Thank you for the opportunity to testify.



UNIVERSITY  
of HAWAII®  
HILO

LATE

Rosayln H. Baker  
Chairman of the Senate Commerce Consumer Protection and Health Committee

Re: SB 2516, Hearing 5 Feb 2016 @2:45 pm.

Aloha,

My name is Marta deMaintenon, and I am a professor in Marine Science at UH Hilo. Though I am in Marine Science, my specialty is snails and slugs, and I am working with Kaye Howe, whose master's thesis research is on rat lungworm disease. I am testifying in support of SB 2516 because the need for funding for research and education on rat lungworm disease in Hawaii is critical. You have heard of rat lungworm. Rat lungworm is a parasitic roundworm that, when it inadvertently gets into a human, can grow up to an inch in length in the brain and central nervous system, and cause potentially fatal eosinophilic meningitis. In Hawaii, rat lungworm disease costs people their lives, livelihoods, savings, health, and well-being.

It is very easy to look at this problem and say, 'that won't happen to anybody I know'. Unfortunately, that point of view is folly at best. Rat lungworm is everywhere here in Hilo. As a researcher who studies snails and slugs, my specialty is anatomy. The student I am advising, Kaye Howe, has been sectioning slugs to see where the worms occur in the slugs' bodies. What we've been seeing is that the rat lungworm can be found in concentrations of over 100 in a 1-inch long semi-slug, and they curl up in a ball in a pocket in the tissues of the slug and wait for that slug to be eaten, so that the worm is passed on to its adult host.

Slugs, as we all know, are slimy animals. The mucus cells in the skin of these slugs are quite deep in the tissues, such that the worms, microscopic at that stage, can easily burrow into a mucus cell and be passed from the slug to the mucus on its skin. Imagine your young child picking up a slug and then, even if the child drops the slug, becoming infected by sticking his hand in his mouth. I live in a condo in town in Hilo, next to the high school; we tested two non-native semi-slugs crawling on my porch, and at least one had lungworms. If you live in a place on Hawaii Island that has slugs, you may very well be living with lungworms. Your pets may have lungworms. You yourself, or your family may be carrying a few more or less asymptotically (they cause more severe problems in larger numbers). I have heard anecdotally that one third of the population of Puna has lungworms. As you can imagine, I do not touch slugs nor eat locally grown leafy vegetables.

I am supporting SB 2516 because rat lungworm is a severe problem; much more so than dengue, if not as charismatic. It is essential that adequate funding be allocated for research and education on rat lungworm disease, and a program is developed for the control of the vectors that carry lungworms.

Sincerely,  
Marta J. deMaintenon  
Marine Science, University of Hawaii at Hilo  
808-932-7591

Jill N. Tokuda  
Chairman of the Senate Ways and Means Committee  
sentokuda@capitol.hawaii.gov

Rosayln H. Baker  
Chairman of the Senate Commerce Consumer Protection and Health Committee  
senbaker@Capitol.hawaii.gov

Mike Gabbard  
Chairman of the Senate Water, Land, and Agriculture Committee  
sengabbard@capitol.hawaii.gov

Regarding  
SB2516

Date/Time of hearing:  
Feb. 5, 2016 @ 2:45 pm

Aloha,

My name is Karen Molina. I am testifying in support of SB 2516 as the need for funding for research and education in Hawaii for rat lungworm disease is essential. The rat lungworm is a microscopic, parasitic worm that grows up to an inch in length in your brain and central nervous system, and the damage this parasite can cause is why this disease is so devastating. In Hawaii, rat lungworm disease is costing people their lives, livelihoods, savings, health, and well-being.

In the past 15-years cases of rat lungworm disease have been increasing in number and severity in the Hawaii, particularly on Hawaii Island and Maui. According to the CDC and the Hawaii State Department of Health, severe cases are supposed to be rare. However, each year we are having more and more serious cases, some resulting in permanent disability, coma, and even death and suicide. Many victims have reported being misdiagnosed or turned away from hospitals for treatment because doctors don't know about rat lungworm disease. Education of the medical community is imperative.

Research and education for rat lungworm disease is crucial to Hawaii's efforts to become food secure, and if we are to support local farmers, school garden projects, and the Farm to School Program. As infection is most often from eating contaminated food, it is essential that everyone involved with food, including farmers, gardeners, food handlers, grocers, and consumers, be educated about the disease and understand the proper measures that must be taken to minimize the risk of contamination. Infection can also occur from ingesting contaminated water. A great number of people on Hawaii Island rely on rainwater catchment for their household water supply, particularly in the Puna, Kau, South Kona, and Hamakua Districts. It is critical for Hawaii Island residents and farmers using catchment for agriculture water to be aware of the importance of maintaining their rainwater catchment systems and filters, as infected slugs and snails can crawl into catchment tanks can contaminate water with the parasites.

In conclusion, I am supporting SB 2516 because rat lungworm disease is preventable, and the severity of the disease can be mitigated if diagnosed and treated early. Ignoring this important problem has and will continue to hurt our farmers, our residents and visitors, and Hawaii's reputation as a tropical vacation paradise. It is essential that adequate funding be allocated for research and education on rat lungworm disease, and a program is developed for the control of the vectors that carry this horrible disease.

**LATE**

Sincerely,  
Karen Molina

808-633-6991  
714A Pelenaka Pl.  
Makawao, HI 96768

## Rock Riggs

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**From:** baker5 - Kyra  
**Sent:** Friday, February 05, 2016 9:54 AM  
**To:** WLA Testimony  
**Subject:** FW: SB2516 Rat Lungworm

**Categories:** Blue Category

**LATE**

**From:** Melinda Jarman [mailto:mjarman126@gmail.com]  
**Sent:** Wednesday, February 03, 2016 11:44 AM  
**To:** Sen. Roz Baker  
**Subject:** SB2516 Rat Lungworm

**Re:**  
SB2516  
Date/Time of hearing: Feb. 5, 2016 @ 2:45 pm

Aloha,

My name is Melinda Jarman. I am testifying on SB 2516 relating to rat lungworm disease. I am testifying in support of SB 2516 (list reasons).....

My brother, David Danglo, was diagnosed with Rat Lungworm 5 years ago. He has not been the same since. When David's symptoms began, he went to his primary physician in Hawaii 3 times and was sent home. He then packed a backpack with minimal essentials, knowing something was wrong and checked into Hilo Hospital ER. Hilo transferred David to Honolulu by life flight and he was on the neurological floor for a month. He had meningitis; he was not able to communicate with his family. We talked to the doctors and nurses. A 30 year friend of David's came and stayed with David for 2 weeks and David did not remember his friend, Brian. He actually saw two of him. He also saw animals running across the room, which never happened. Then David was flown from Honolulu to Jacksonville Florida to a rehab facility, with the assistance of a nurse the whole trip. The rehab and my sister took care of David on a daily basis as he had to learn how to walk and talk again. He is on disability now and will be for the rest of his life. He is not the same brother I knew and loved before the disease hit him. He had double vision; still has balancing issues and many other after effects from this horrific disease. We are blessed to still have David in our life.

Please get the funding needed for the disease. I applaud Kay Howe for her support of this bill and being so involved especially since her son, Graham, had rat lungworm. Kay is fighting for the people who can't fight.

In conclusion, I am supporting SB 2516 because.....

My brother, David Danglo, will never be the same again. He was healthy and working before Rat Lungworm took his health, and now each day is a challenge. Please allow funding for this bill.

Thank you.

Sincerely,

Melinda Jarman & Julie Brown, David's sisters, Jeff Danglo, brother & Nick Jarman, nephew

636-866-1303

## Rock Riggs

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**From:** baker5 - Kyra  
**Sent:** Friday, February 05, 2016 9:53 AM  
**To:** WLA Testimony  
**Subject:** FW: SB2516

**Categories:** Blue Category

**LATE**

**From:** Patrick Hart [mailto:pjhart@hawaii.edu]  
**Sent:** Thursday, February 04, 2016 8:35 AM  
**To:** Sen. Roz Baker  
**Subject:** SB2516

**Rosalyn H. Baker**

**Chairman of the Senate Commerce Consumer Protection and Health Committee**

**Regarding**

**SB2516**

**Date/Time of hearing:**

**Feb. 5, 2016 @ 2:45 pm**

Dear Senator Baker

My name is Patrick Hart and I am a Professor of Biology at UH Hilo. I am testifying in support of SB 2516 as the need for funding for research and education in Hawaii for rat lungworm disease is essential.

In the past 15-years cases of rat lungworm disease have been increasing in number and severity in the Hawaii, particularly on Hawaii Island and Maui. According to the CDC and the Hawaii State Department of Health, severe cases are supposed to be rare. However, each year we are having more and more serious cases, some resulting in permanent disability, coma, and even death and suicide. Many victims have reported being misdiagnosed or turned away from hospitals for treatment because doctors don't know about rat lungworm disease. Education of the medical community is imperative.

Research and education for rat lungworm disease is crucial to Hawaii's efforts to become food secure, and if we are to support local farmers, school garden projects, and the Farm to School Program. As infection is most often from eating contaminated food, it is essential that everyone involved with food, including farmers, gardeners, food handlers, grocers, and consumers, be educated about the disease and understand the proper measures that must be taken to minimize the risk of contamination. Infection can also occur from ingesting contaminated water. A great number of people on Hawaii Island rely on rainwater catchment for their household water supply, particularly in the Puna, Kau, South Kona, and Hamakua Districts. It is critical for Hawaii Island residents and farmers using catchment for agriculture water to be aware of the importance of maintaining their

rainwater catchment systems and filters, as infected slugs and snails can crawl into catchment tanks can contaminate water with the parasites.

In conclusion, I am supporting SB 2516 because rat lungworm disease is preventable, and the severity of the disease can be mitigated if diagnosed and treated early. Ignoring this important problem has and will continue to hurt our farmers, our residents and visitors, and Hawaii's reputation as a tropical vacation paradise. It is essential that adequate funding be allocated for research and education on rat lungworm disease, and a program is developed for the control of the vectors that carry this horrible disease.

Sincerely,

Patrick Hart

1533 Puia Rd. Hilo Hawaii, 96720

808-987-2858



## Rock Riggs

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**From:** baker5 - Kyra  
**Sent:** Friday, February 05, 2016 9:52 AM  
**To:** WLA Testimony  
**Subject:** FW: I am testifying in support of SB 2516

**Categories:** Blue Category

**LATE**

**From:** Timo Sullivan [mailto:timosull@gmail.com]  
**Sent:** Thursday, February 04, 2016 11:16 AM  
**To:** Sen. Roz Baker  
**Subject:** I am testifying in support of SB 2516

Attention:

Rosayln H. Baker

Chairman of the Senate Commerce Consumer Protection and Health Committee

[senbaker@Capitol.hawaii.gov](mailto:senbaker@Capitol.hawaii.gov)

Aloha,

My name is Timothy Sullivan and I am with the Tropical Conservation Biology and Environmental Science Department at UH Hilo and the Big Island Invasive Species Committee. I am testifying in support of SB 2516 as the need for funding for research and education in Hawaii for rat lungworm disease is essential. The rat lungworm is a microscopic, parasitic worm that grows up to an inch in length in your brain and central nervous system, and the damage this parasite can cause is why this disease is so devastating. In Hawaii, rat lungworm disease is costing people their lives, livelihoods, savings, health, and well-being.

In the past 15-years cases of rat lungworm disease have been increasing in number and severity in the Hawaii, particularly on Hawaii Island and Maui. According to the CDC and the Hawaii State Department of Health, severe cases are supposed to be rare. However, each year we are having more and more serious cases, some resulting in permanent disability, coma, and even death and suicide. Many victims have reported being misdiagnosed or turned away from hospitals for treatment because doctors don't know about rat lungworm disease. Education of the medical community is imperative.

Research and education for rat lungworm disease is crucial to Hawaii's efforts to become food secure, and if we are to support local farmers, school garden projects, and the Farm to School Program. As infection is most often from eating contaminated food, it is essential that everyone involved with food, including farmers, gardeners, food handlers, grocers, and consumers, be educated about the disease and understand the proper measures that must be taken to minimize the risk of contamination. Infection can also occur from ingesting contaminated water. A great number of people on Hawaii Island rely on rainwater catchment for their household water

supply, particularly in the Puna, Kau, South Kona, and Hamakua Districts. It is critical for Hawaii Island residents and farmers using catchment for agriculture water to be aware of the importance of maintaining their rainwater catchment systems and filters, as infected slugs and snails can crawl into catchment tanks can contaminate water with the parasites.

In conclusion, I am supporting SB 2516 because rat lungworm disease is preventable, and the severity of the disease can be mitigated if diagnosed and treated early. Ignoring this important problem has and will continue to hurt our farmers, our residents and visitors, and Hawaii's reputation as a tropical vacation paradise. It is essential that adequate funding be allocated for research and education on rat lungworm disease, and a program is developed for the control of the vectors that carry this horrible disease.

Sincerely,

Timothy Sullivan

University of Hawaii: TCBES; BIISC

65-1334 Kawaihae Road, Kamuela, HI, 96743

--

**Timothy Sullivan**

Early Detection Program Technician  
Big Island Invasive Species Committee  
23 East Kawili Street  
Hilo, HI 96720  
Cell: (808) 989-1397



'Fred, where is north?'

'North? North is there, my love.  
'The brook runs west.'

'West-running Brook then call it.'  
(West-Running Brook men call it to this day.)  
'What does it think it's doing running west  
When all the other country brooks flow east  
To reach the ocean? It must be the brook  
Can trust itself to go by contraries  
The way I can with you -- and you with me --  
Because we're -- we're -- I don't know what we are.  
What are we?'

'Young or new?'

'We must be something.'

## Rock Riggs

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**From:** baker5 - Kyra  
**Sent:** Friday, February 05, 2016 9:52 AM  
**To:** WLA Testimony  
**Subject:** FW: SB2516

**Categories:** Blue Category

**LATE**

**From:** pjs@cybermesa.com [mailto:pjs@cybermesa.com]  
**Sent:** Thursday, February 04, 2016 11:41 AM  
**To:** Sen. Roz Baker  
**Subject:** SB2516

Regarding  
SB2516

Date/Time of hearing:  
Feb. 5, 2016 @ 2:45 pm

Aloha,  
My name is (insert name) and I am with (insert group or organization name if any). I am testifying in support of SB 2516 as the need for funding for research and education in Hawaii for rat lungworm disease is essential. The rat lungworm is a microscopic, parasitic worm that grows up to an inch in length in your brain and central nervous system, and the damage this parasite can cause is why this disease is so devastating. In Hawaii, rat lungworm disease is costing people their lives, livelihoods, savings, health, and well-being.

In the past 15-years cases of rat lungworm disease have been increasing in number and severity in the Hawaii, particularly on Hawaii Island and Maui. According to the CDC and the Hawaii State Department of Health, severe cases are supposed to be rare. However, each year we are having more and more serious cases, some resulting in permanent disability, coma, and even death and suicide. Many victims have reported being misdiagnosed or turned away from hospitals for treatment because doctors don't know about rat lungworm disease. Education of the medical community is imperative.

Research and education for rat lungworm disease is crucial to Hawaii's efforts to become food secure, and if we are to support local farmers, school garden projects, and the Farm to School Program. As infection is most often from eating contaminated food, it is essential that everyone involved with food, including farmers, gardeners, food handlers, grocers, and consumers, be educated about the disease and understand the proper measures that must be taken to minimize the risk of contamination. Infection can also occur from ingesting contaminated water. A great number of people on Hawaii Island rely on rainwater catchment for their household water supply, particularly in the Puna, Kau, South Kona, and Hamakua Districts. It is critical for Hawaii Island residents and farmers using catchment for agriculture water to be aware of the importance of maintaining their rainwater catchment systems and filters, as infected slugs and snails can crawl into catchment tanks can contaminate water with the parasites.

In conclusion, I am supporting SB 2516 because rat lungworm disease is preventable, and the severity of the disease can be mitigated if diagnosed and treated early. Ignoring this important problem has and will continue to hurt our farmers, our residents and visitors, and Hawaii's reputation as a tropical vacation paradise. It is essential that adequate funding be allocated for research and education on rat lungworm disease, and a program is developed for the control of the vectors that carry this horrible disease.

Sincerely,

(name)Patrick Sullivan\_\_\_\_\_

(organization if any)\_\_\_\_\_

(contact number or address)\_8089650171\_\_\_\_\_

## Rock Riggs

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**From:** baker5 - Kyra  
**Sent:** Friday, February 05, 2016 9:51 AM  
**To:** WLA Testimony  
**Subject:** FW: Testimony in support of SB 2516

**Categories:** Blue Category

**LATE**

**From:** Doran Vaughan [mailto:doranvaughan@gmail.com]  
**Sent:** Thursday, February 04, 2016 11:54 AM  
**To:** Sen. Roz Baker  
**Subject:** Testimony in support of SB 2516

Aloha Senator Baker,

My name is Doran Vaughan and I am a resident of Pahoehoe on Hawaii Island. I am testifying in support of SB 2516 due to the desperate need for funding to provide research and education throughout the state of Hawaii regarding rat lungworm disease. Rat lungworm is a microscopic, parasitic worm that grows up to an inch in length and if ingested by a person in food or water, numbers in the hundreds to thousands due to their source in slugs. Because the parasite enters the brain and central nervous system, the resulting disease is devastating and even life threatening. In Hawaii, rat lungworm disease is costing citizens their livelihoods, savings, health, well-being, and in some cases their lives.

During the past 15 years, cases of rat lungworm disease have been increasing in number and severity in Hawaii, particularly on Hawaii Island and Maui. According to the CDC and the Hawaii State Department of Health, severe cases are supposedly rare, however each year we are experiencing an increase in the number and severity of cases, some resulting in permanent disability, coma, death, and suicide. Many victims have reported being misdiagnosed or turned away from hospitals for treatment because doctors are unfamiliar with rat lungworm disease. Education of the medical community is absolutely imperative.

Research and education regarding rat lungworm disease is crucial to Hawaii's efforts to become food secure and food safe through our support of local farmers, school garden projects, and the Farm to School Program. Infection most often occurs from eating food contaminated with the parasite. It is essential that everyone involved with food, including farmers, gardeners, food handlers, grocers, and consumers, all be educated about the disease and understand the proper measures required to minimize the risk of contamination.

Infection can also occur from ingesting contaminated water. A large number of people on Hawaii Island rely on rainwater catchment for their household water supply, particularly in the Puna, Kau, South Kona, and Hamakua Districts. It is critical for Hawaii Island residents and farmers using catchment water to be aware of the importance of maintaining their rainwater catchment systems and filters, as infected slugs and snails can crawl into catchment tanks and contaminate the water with the parasites.

I support SB 2516 because rat lungworm disease is preventable through research and education and the severity of the disease can be mitigated if diagnosed and treated early. Ignoring this important problem has and will continue to seriously harm farmers, residents,

and visitors to Hawaii as well as Hawaii's tourism industry. Adequate funding for research and education regarding rat lungworm disease and a program for controlling the vectors ie rats and slugs that carry this disease is imperative in order to control and eventually prevent the spread of this devastating disease. Please support SB 2516!

Sincerely,

Doran Vaughan

PO Box 1256

Pahoa, HI 96778

808-936-3109

## Rock Riggs

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**From:** baker5 - Kyra  
**Sent:** Friday, February 05, 2016 9:51 AM  
**To:** WLA Testimony  
**Subject:** FW: SB 2516

**Categories:** Blue Category

**LATE**

**From:** Nick Jarman [mailto:nick.jarman@deltaoutsourcegroup.com]  
**Sent:** Thursday, February 04, 2016 12:07 PM  
**To:** Sen. Roz Baker  
**Subject:** SB 2516

Date/Time of hearing: Feb. 5, 2016 @ 2:45 pm

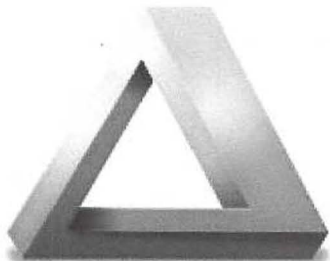
Aloha,  
My name is Nick Jarman and my uncle fell victim to rat lungworm disease several years ago when living in Hawaii. I am testifying on SB 2516 relating to rat lungworm disease. I am testifying in support of SB 2516 because this disease has impacted his life severely as he went from a fully functional, extremely intelligent, and healthy man to now needing supervision, loss of motor functions, and completely disabled all due to contracting this horrible disease.

I am in full support of SB 2516.

Sincerely,  
Nick Jarman  
(636) 233-9779  
1024 Pleasant Meadow Dr.  
Lake St. Louis, MO 63367

**Nick Jarman**  
President & COO | Delta Outsource Group, Inc.  
Board of Directors | ACA International

**Office:** (800) 364-1895 | **Direct:** (636) 547-2655  
**Cell:** (636) 233-9779 | **Fax:** (877) 828-0976  
**Address:** 62 North Central Dr O'Fallon, MO 63366  
**Website:** [www.deltaoutsourcegroup.com](http://www.deltaoutsourcegroup.com)



DELTA OUTSOURCE GROUP

# LATE

Aloha Rosalyn Baker,

My name is Shea Uehana and I am a graduate student at the University of Hawaii at Hilo. I am testifying in support of SB 2516 as the need for funding for research and education in Hawaii for rat lungworm disease is essential. The rat lungworm is a microscopic, parasitic worm that grows up to an inch in length in your brain and central nervous system, and the damage this parasite can cause is why this disease is so devastating. In Hawaii, rat lungworm disease is costing people their lives, livelihoods, savings, health, and well-being.

In the past 15-years cases of rat lungworm disease have been increasing in number and severity in the Hawaii, particularly on Hawaii Island and Maui. According to the CDC and the Hawaii State Department of Health, severe cases are supposed to be rare. However, each year we are having more and more serious cases, some resulting in permanent disability, coma, and even death and suicide. Many victims have reported being misdiagnosed or turned away from hospitals for treatment because doctors don't know about rat lungworm disease. Education of the medical community is imperative.

Research and education for rat lungworm disease is crucial to Hawaii's efforts to become food secure, and if we are to support local farmers, school garden projects, and the Farm to School Program. As infection is most often from eating contaminated food, it is essential that everyone involved with food, including farmers, gardeners, food handlers, grocers, and consumers, be educated about the disease and understand the proper measures that must be taken to minimize the risk of contamination. Infection can also occur from ingesting contaminated water. A great number of people on Hawaii Island rely on rainwater catchment for their household water supply, particularly in the Puna, Kau, South Kona, and Hamakua Districts. It is critical for Hawaii Island residents and farmers using catchment for agriculture water to be aware of the importance of maintaining their rainwater catchment systems and filters, as infected slugs and snails can crawl into catchment tanks can contaminate water with the parasites.

In conclusion, I am supporting SB 2516 because rat lungworm disease is preventable, and the severity of the disease can be mitigated if diagnosed and treated early. Ignoring this important problem has and will continue to hurt our farmers, our residents and visitors, and Hawaii's reputation as a tropical vacation paradise. It is essential that adequate funding be allocated for research and education on rat lungworm disease, and a program is developed for the control of the vectors that carry this horrible disease.

Sincerely,  
Shea Uehana  
(808)896-4698



## Rock Riggs

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**From:** baker5 - Kyra  
**Sent:** Friday, February 05, 2016 9:51 AM  
**To:** WLA Testimony  
**Subject:** FW: SB2516 Support testimony from Rat Lungworm Survivor

**From:** Jeremai [mailto:jeremai@gmail.com]  
**Sent:** Thursday, February 04, 2016 1:28 PM  
**To:** Sen. Roz Baker  
**Subject:** SB2516 Support testimony from Rat Lungworm Survivor

**LATE**

### Regarding

SB2516

### Date/Time of hearing:

Feb. 5, 2016 @ 2:45 pm

Rosayln H. Baker

Chairman of the Senate Commerce Consumer Protection and Health Committee

[senbaker@Capitol.hawaii.gov](mailto:senbaker@Capitol.hawaii.gov)

Aloha,

My name is **Jeremy Cann** and I am testifying **in support** of SB 2516 as the need for funding for research and education in Hawaii for rat lungworm disease is essential.

My wife and I are survivors, this disease has taken our ability to work and live a natural life. We are still in severe nerve pain as in our brains there are holes and tunnels formed by the rat lungworm infection.

We almost died and we were turned away from HMC the first time we sought help there. There is not enough awareness in the Hawaii medical community, schools, food services or DOH, when this disease have been known but not respected like Dengue fever.

Rat lungworm disease is preventable!

Please help make this so in Hawaii and all our islands.

The rat lungworm is a microscopic, parasitic worm that grows up to an inch in length in your brain and central nervous system, and the damage this parasite can cause is why this disease is so devastating. In Hawaii, rat lungworm disease is costing people their lives, livelihoods, savings, health, and well-being.

In the past 15-years cases of rat lungworm disease have been increasing in number and severity in the Hawaii, particularly on Hawaii Island and Maui. According to the CDC and the Hawaii State Department of Health, severe cases are supposed to be rare. However, each year we are having more and more serious cases, some resulting in permanent disability, coma, and even death and suicide. Many victims have reported being misdiagnosed or turned away from hospitals for treatment because doctors don't know about rat lungworm disease. Education of the medical community is imperative.

Research and education for rat lungworm disease is crucial to Hawaii's efforts to become food secure, and if we are to support local farmers, school garden projects, and the Farm to School Program. As infection is most often from eating contaminated food, it is essential that everyone involved with food, including farmers, gardeners, food handlers, grocers, and consumers, be educated about the disease and understand the proper measures that must be taken to minimize the risk of contamination. Infection can also occur from ingesting contaminated water. A great number of people on Hawaii Island rely on rainwater catchment for their household water supply, particularly in the Puna, Kau, South Kona, and Hamakua Districts. It is critical for Hawaii Island residents and farmers using catchment for agriculture water to be aware of the importance of maintaining their rainwater catchment systems and filters, as infected slugs and snails can crawl into catchment tanks can contaminate water with the parasites.

In conclusion, I am supporting SB 2516 because rat lungworm disease is preventable, and the severity of the disease can be mitigated if diagnosed and treated early. Ignoring this important problem has and will continue to hurt our farmers, our residents and visitors, and Hawaii's reputation as a tropical vacation paradise. It is essential that adequate funding be allocated for research and education on rat lungworm disease, and a program is developed for the control of the vectors that carry this horrible disease.

Sincerely,

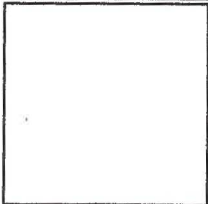
Jeremy Cann

170 Akea St, Hilo Hi 96720

808-386-6219

Be Love, Share Love, Sustain Love

[LinkedIn Jeremai Cann](#)



## Rock Riggs

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**From:** baker5 - Kyra  
**Sent:** Friday, February 05, 2016 9:50 AM  
**To:** WLA Testimony  
**Subject:** FW: support rat lung worm research

**LATE**

**From:** Amara Karuna [mailto:amara@mindspring.com]  
**Sent:** Thursday, February 04, 2016 1:37 PM  
**To:** Sen. Jill Tokuda; Sen. Roz Baker; Sen. Mike Gabbard  
**Subject:** support rat lung worm research

Aloha,

My name is Amara Karuna and I am with La'akea permaculture Community on the big Island. I am testifying in support of SB 2516 as the need for funding for research and education in Hawaii for rat lungworm disease is essential. We have had many friends who have had this terrible disease and we need more research! thanks

Amara Karuna

## Rock Riggs

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**From:** baker5 - Kyra  
**Sent:** Friday, February 05, 2016 9:50 AM  
**To:** WLA Testimony  
**Subject:** FW: SB 2516

LATE

**From:** Dona Willoughby [mailto:injoyying@gmail.com]  
**Sent:** Thursday, February 04, 2016 1:48 PM  
**To:** Sen. Roz Baker  
**Subject:** SB 2516

Dear Ms. Rosalyn Baker,

Aloha,  
My name is Dona Willoughby and I am with La'akea Intentional Community. I am testifying in support of SB 2516. I am a retired Commander from the US Navy. My field was medical.

7 years ago before much was known about Rat Lung Disease, I got the disease. At the time I ate kale out of the garden without washing it. While I am not chronically debilitated from the disease my symptoms lasted several years and were debilitating at the time.

I believe funding research and education in Hawaii for rat lungworm disease is essential. The rat lungworm is a microscopic, parasitic worm that grows up to an inch in length in your brain and central nervous system, and the damage this parasite can cause is why this disease is so devastating. In Hawaii, rat lungworm disease is costing people their lives, livelihoods, savings, health, and well-being.

In the past 15-years cases of rat lungworm disease have been increasing in number and severity in the Hawaii, particularly on Hawaii Island and Maui. According to the CDC and the Hawaii State Department of Health, severe cases are supposed to be rare. However, each year we are having more and more serious cases, some resulting in permanent disability, coma, and even death and suicide. Many victims have reported being misdiagnosed or turned away from hospitals for treatment because doctors don't know about rat lungworm disease. Education of the medical community is imperative.

Research and education for rat lungworm disease is crucial to Hawaii's efforts to become food secure, and if we are to support local farmers, school garden projects, and the Farm to School Program. As infection is most often from eating contaminated food, it is essential that everyone involved with food, including farmers, gardeners, food handlers, grocers, and consumers, be educated about the disease and understand the proper measures that must be taken to minimize the risk of contamination. Infection can also occur from ingesting contaminated water. A great number of people on Hawaii Island rely on rainwater catchment for their household water supply, particularly in the Puna, Kau, South Kona, and Hamakua Districts. It is critical for Hawaii Island residents and farmers using catchment for agriculture water to be aware of the importance of maintaining their rainwater catchment systems and filters, as infected slugs and snails can crawl into catchment tanks can contaminate water with the parasites.

In conclusion, I am supporting SB 2516 because rat lungworm disease is preventable, and the severity of the disease can be mitigated if diagnosed and treated early. Ignoring this important problem has and will continue to hurt our farmers, our residents and visitors, and Hawaii's reputation as a tropical vacation paradise. It is essential that adequate funding be allocated for research and education on rat lungworm disease, and a program is developed for the control of the vectors that carry this horrible disease.

Sincerely

Dona M. Willoughby  
PO BOX 1071  
Pahoa, HI, 96778

214-4601

## Rock Riggs

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**From:** baker5 - Kyra  
**Sent:** Friday, February 05, 2016 9:50 AM  
**To:** WLA Testimony  
**Subject:** FW: Regarding SB2516

**From:** Victoria Gershik [mailto:vgershik@gmail.com]  
**Sent:** Thursday, February 04, 2016 1:48 PM  
**To:** Sen. Roz Baker  
**Subject:** Regarding SB2516

LATE

Regarding  
SB2516

Date/Time of hearing:  
Feb. 5, 2016 @ 2:45 pm

Aloha,

My name is Victoria Gershik and I am with Evening Rain Farm. I am testifying in support of SB 2516 as the need for funding for research and education in Hawaii for rat lungworm disease is essential. The rat lungworm is a microscopic, parasitic worm that grows up to an inch in length in your brain and central nervous system, and the damage this parasite can cause is why this disease is so devastating. In Hawaii, rat lungworm disease is costing people their lives, livelihoods, savings, health, and well-being.

In the past 15-years cases of rat lungworm disease have been increasing in number and severity in the Hawaii, particularly on Hawaii Island and Maui. According to the CDC and the Hawaii State Department of Health, severe cases are supposed to be rare. However, each year we are having more and more serious cases, some resulting in permanent disability, coma, and even death and suicide. Many victims have reported being misdiagnosed or turned away from hospitals for treatment because doctors don't know about rat lungworm disease. Education of the medical community is imperative.

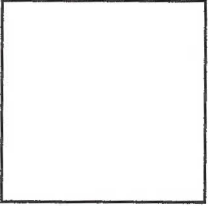
Research and education for rat lungworm disease is crucial to Hawaii's efforts to become food secure, and if we are to support local farmers, school garden projects, and the Farm to School Program. As infection is most often from eating contaminated food, it is essential that everyone involved with food, including farmers, gardeners, food handlers, grocers, and consumers, be educated about the disease and understand the proper measures that must be taken to minimize the risk of contamination. Infection can also occur from ingesting contaminated water. A great number of people on Hawaii Island rely on rainwater catchment for their household water supply, particularly in the Puna, Kau, South Kona, and Hamakua Districts. It is critical for Hawaii Island residents and farmers using catchment for agriculture water to be aware of the importance of maintaining their rainwater catchment systems and filters, as infected slugs and snails can crawl into catchment tanks can contaminate water with the parasites.

In conclusion, I am supporting SB 2516 because rat lungworm disease is preventable, and the severity of the disease can be mitigated if diagnosed and treated early. Ignoring this important problem has and will continue to

hurt our farmers, our residents and visitors, and Hawaii's reputation as a tropical vacation paradise. It is essential that adequate funding be allocated for research and education on rat lungworm disease, and a program is developed for the control of the vectors that carry this horrible disease.

Sincerely,  
Victoria Gershik  
Evening Rain Farm, Kapoho, HI  
917-273-6329

Hā Gershik, Still Waters



**We, You are, I am, This is, beautiful beyond belief**

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## Rock Riggs

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**From:** baker5 - Kyra  
**Sent:** Friday, February 05, 2016 9:50 AM  
**To:** WLA Testimony  
**Subject:** FW: Regarding SB 2516

**LATE**

**From:** James Awai Akau [mailto:akauster@gmail.com]  
**Sent:** Thursday, February 04, 2016 1:52 PM  
**To:** Sen. Roz Baker  
**Subject:** Regarding SB 2516

Aloha mai la Rosalyn,

I write this correspondence to support SB 2516. Rat lung worm is of great public health concern, and should receive funding for both research and education. Rat lungworm, a microscopic, parasitic worm can grow up to an inch while housed in the brain and central nervous system, and as a result inflict devastating consequences. For the past 15-years, increasing rat lungworm incidents have become more severe, particularly on Hawaii and Maui Island. Serious cases have resulted in permanent disability, coma, death, and suicide.

To achieve food sovereignty, the State of Hawaii requires rigorous research of rat lung worm. Infection primarily occurs with the consumption of contaminated food, thus farmers, gardeners, food handlers, grocers, as well as consumers, should be educated to minimize the risk of contamination. Infection can also occur from ingesting contaminated water. A great number of people on Hawaii Island rely on rainwater catchment for their household water supply, particularly in the Puna, Kau, South Kona, and Hamakua Districts. It is of dire importance for Hawaii Island residents and farmers using catchment systems to understand fail proof checks of their systems and filters to prevent infected slugs and snails from invading and contaminating water with the parasites.

In conclusion, I am supporting SB 2516 because rat lungworm disease is preventable, and the severity of the disease can be mitigated if diagnosed and treated early. Ignoring this important problem has and will continue to hurt our farmers, our residents and visitors, and Hawaii's reputation as a tropical vacation paradise. It is essential that adequate funding be allocated for research and education on rat lungworm disease, and a program is developed for the control of the vectors that carry this horrible disease.

Mau no,

James Akau

(808) 430-3058

--  
mahalo piha



## Rock Riggs

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**From:** baker5 - Kyra  
**Sent:** Friday, February 05, 2016 9:49 AM  
**To:** WLA Testimony  
**Subject:** FW: Support SB2516

**From:** [gabe@huedoku.com](mailto:gabe@huedoku.com) [<mailto:gabe@huedoku.com>]  
**Sent:** Thursday, February 04, 2016 3:42 PM  
**To:** Sen. Roz Baker  
**Subject:** Support SB2516

Regarding  
SB2516

Date/Time of hearing:  
Feb. 5, 2016 @ 2:45 pm

Aloha Sen. Rosayln H. Baker,

My name is Gabriel Mott. I am testifying in support of SB 2516 as the need for funding for research and education in Hawaii for rat lungworm disease is essential. The rat lungworm is a microscopic, parasitic worm that grows up to an inch in length in your brain and central nervous system, and the damage this parasite can cause is why this disease is so devastating. In Hawaii, rat lungworm disease is costing people their lives, livelihoods, savings, health, and well-being.

In the past 15-years cases of rat lungworm disease have been increasing in number and severity in the Hawaii, particularly on Hawaii Island and Maui. According to the CDC and the Hawaii State Department of Health, severe cases are supposed to be rare. However, each year we are having more and more serious cases, some resulting in permanent disability, coma, and even death and suicide. Many victims have reported being misdiagnosed or turned away from hospitals for treatment because doctors don't know about rat lungworm disease. Education of the medical community is imperative.

Research and education for rat lungworm disease is crucial to Hawaii's efforts to become food secure, and if we are to support local farmers, school garden projects, and the Farm to School Program. As infection is most often from eating contaminated food, it is essential that everyone involved with food, including farmers, gardeners, food handlers, grocers, and consumers, be educated about the disease and understand the proper measures that must be taken to minimize the risk of contamination. Infection can also occur from ingesting contaminated water. A great number of people on Hawaii Island rely on rainwater catchment for their household water supply, particularly in the Puna, Kau, South Kona, and Hamakua Districts. It is critical for Hawaii Island residents and farmers using catchment for agriculture water to be aware of the importance of maintaining their rainwater catchment systems and filters, as infected slugs and snails can crawl into catchment tanks can contaminate water with the parasites.

In conclusion, I am supporting SB 2516 because rat lungworm disease is preventable, and the severity of the disease can be mitigated if diagnosed and treated early. Ignoring this important problem has and will continue to hurt our farmers, our residents and visitors, and Hawaii's reputation as a tropical vacation paradise. It is essential that adequate funding be allocated for research and education on rat lungworm disease, and a program is developed for the control of the vectors that carry this horrible disease.

Sincerely,  
Gabriel Mott  
CEO/founder Huedoku Labs  
Honolulu, HI  
808-250-4825

Regarding  
SB2516

Date/Time of hearing:  
Feb. 5, 2016 @ 2:45 pm

Rosalyn H. Baker  
Chair of the Senate Commerce Consumer Protection and Health Committee

Aloha,

My name is Doctor Jon Martell and I am a practicing hospital physician as well as the Medical Director for Acute Care at Hilo Medical Center. Over the past six years, I have seen the devastation of rat lungworm disease personally as I have cared for hospitalized patients stricken by the severe form of the disease. Over this time I have seen the numbers and severity of cases increase significantly. In addition, I have seen the disease evolve from a problem of a small group of individuals with 'alternative life-styles' to become a disease that effects our citizens universally. The tragedy in worsened by the fact that none of these catastrophic illnesses had to happen. Rat lungworm is a completely preventable disease. Preventable, that is, if we are willing to make the effort that is needed to control the parasite and educate our citizens. I am pleased to provide this testimony in support of SB 2516 as funding for research, education and vector control in Hawaii for rat lungworm disease is desperately needed and too long delayed.

Rat lungworm infection is most often acquired by eating food that is contaminated by snails and slugs. Because these snails and slugs are everywhere in our environment, it is essential that we learn how to control the population the population of infected rats and snails that perpetuate this disease. It is equally important that everyone involved with food, including farmers, gardeners, food handlers, grocers, and consumers, be educated about the disease and understand the proper measures that must be taken to minimize the risk of contamination. In some cases, infection might also occur from ingesting contaminated water, usually from catchment systems. More research needs to be done to determine proper protective measures for catchment systems but it is critical for Hawaii Island residents and farmers using catchment for agriculture water to be aware of the importance of maintaining their rainwater catchment systems and filters.

In conclusion, I am supporting SB 2516 because rat lungworm disease is preventable if we accept the challenge and make the effort. Inadequately addressing this important problem has and will continue to hurt our farmers, our residents and visitors, and Hawaii's reputation as a tropical vacation paradise. It is essential that adequate funding be allocated for research and education on rat lungworm disease, and a program is developed for the control of the vectors that carry this horrible disease.

Sincerely,

Jon V. Martell, MD  
Hilo Medical Center  
jmartell@hpsc.org

Chief Quality Officer and Medical Director for Acute Care

## Rock Riggs

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**From:** baker5 - Kyra  
**Sent:** Friday, February 05, 2016 9:48 AM  
**To:** WLA Testimony  
**Subject:** FW: Support SB 2516

From Senator Baker's office – thanks!

Kyra

**From:** Veruschka Normandeau [mailto:veruschka.normandeau@gmail.com]  
**Sent:** Thursday, February 04, 2016 11:14 PM  
**To:** Sen. Roz Baker  
**Subject:** Support SB 2516

Aloha,  
My name is Veruschka Normandeau. I am testifying in support of SB 2516 as the need for funding for research and education in Hawaii for rat lungworm disease is essential. The rat lungworm is a microscopic, parasitic worm that grows up to an inch in length in your brain and central nervous system, and the damage this parasite can cause is why this disease is so devastating. In Hawaii, rat lungworm disease is costing people their lives, livelihoods, savings, health, and well-being.

In the past 15-years cases of rat lungworm disease have been increasing in number and severity in the Hawaii, particularly on Hawaii Island and Maui. According to the CDC and the Hawaii State Department of Health, severe cases are supposed to be rare. However, each year we are having more and more serious cases, some resulting in permanent disability, coma, and even death and suicide. Many victims have reported being misdiagnosed or turned away from hospitals for treatment because doctors don't know about rat lungworm disease. Education of the medical community is imperative.

Research and education for rat lungworm disease is crucial to Hawaii's efforts to become food secure, and if we are to support local farmers, school garden projects, and the Farm to School Program. As infection is most often from eating contaminated food, it is essential that everyone involved with food, including farmers, gardeners, food handlers, grocers, and consumers, be educated about the disease and understand the proper measures that must be taken to minimize the risk of contamination. Infection can also occur from ingesting contaminated water. A great number of people on Hawaii Island rely on rainwater catchment for their household water supply, particularly in the Puna, Kau, South Kona, and Hamakua Districts. It is critical for Hawaii Island residents and farmers using catchment for agriculture water to be aware of the importance of maintaining their rainwater catchment systems and filters, as infected slugs and snails can crawl into catchment tanks can contaminate water with the parasites.

In conclusion, I am supporting SB 2516 because rat lungworm disease is preventable, and the severity of the disease can be mitigated if diagnosed and treated early. Ignoring this important problem has and will continue to hurt our farmers, our residents and visitors, and Hawaii's reputation as a tropical vacation paradise. It is essential that adequate funding be allocated for research and education on rat lungworm disease, and a program is developed for the control of the vectors that carry this horrible disease.

Sincerely,  
Veruschka Normandeau  
12-4855 AHia Rd, Pahoa, HI 96778

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F.U.N.

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Fabulous Ubiquitous Nirvana

Regarding  
SB2516  
Date/Time of hearing:  
Feb. 5, 2016 @ 2:45 pm

Aloha Sen. Rosayln H. Baker,

My name is Gabriel Mott. I am testifying in support of SB 2516 as the need for funding for research and education in Hawaii for rat lungworm disease is essential. The rat lungworm is a microscopic, parasitic worm that grows up to an inch in length in your brain and central nervous system, and the damage this parasite can cause is why this disease is so devastating. In Hawaii, rat lungworm disease is costing people their lives, livelihoods, savings, health, and well-being.

In the past 15-years cases of rat lungworm disease have been increasing in number and severity in the Hawaii, particularly on Hawaii Island and Maui. According to the CDC and the Hawaii State Department of Health, severe cases are supposed to be rare. However, each year we are having more and more serious cases, some resulting in permanent disability, coma, and even death and suicide. Many victims have reported being misdiagnosed or turned away from hospitals for treatment because doctors don't know about rat lungworm disease. Education of the medical community is imperative.

Research and education for rat lungworm disease is crucial to Hawaii's efforts to become food secure, and if we are to support local farmers, school garden projects, and the Farm to School Program. As infection is most often from eating contaminated food, it is essential that everyone involved with food, including farmers, gardeners, food handlers, grocers, and consumers, be educated about the disease and understand the proper measures that must be taken to minimize the risk of contamination. Infection can also occur from ingesting contaminated water. A great number of people on Hawaii Island rely on rainwater catchment for their household water supply, particularly in the Puna, Kau, South Kona, and Hamakua Districts. It is critical for Hawaii Island residents and farmers using catchment for agriculture water to be aware of the importance of maintaining their rainwater catchment systems and filters, as infected slugs and snails can crawl into catchment tanks can contaminate water with the parasites.

In conclusion, I am supporting SB 2516 because rat lungworm disease is preventable, and the severity of the disease can be mitigated if diagnosed and treated early. Ignoring this important problem has and will continue to hurt our farmers, our residents and visitors, and Hawaii's reputation as a tropical vacation paradise. It is essential that adequate funding be allocated for research and education on rat lungworm disease, and a program is developed for the control of the vectors that carry this horrible disease.

Sincerely,  
Gabriel Mott  
CEO/founder Huedoku Labs  
Honolulu, HI  
808-250-4825

## Rock Riggs

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Thursday, February 04, 2016 7:42 PM  
**To:** WLA Testimony  
**Cc:** islandsign@gmail.com  
**Subject:** Submitted testimony for SB2516 on Feb 5, 2016 14:45PM

**LATE**

### **SB2516**

Submitted on: 2/4/2016

Testimony for WLA/CPH on Feb 5, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Doug Allan	Individual	Support	No

Comments: Aloha, My name is Doug Allan and I am with Island Sign LLC. I am testifying in support of SB 2516 as the need for funding for research and education in Hawaii for rat lungworm disease is essential. The rat lungworm is a microscopic, parasitic worm that grows up to an inch in length in your brain and central nervous system, and the damage this parasite can cause is why this disease is so devastating. In Hawaii, rat lungworm disease is costing people their lives, livelihoods, savings, health, and well-being. In the past 15-years cases of rat lungworm disease have been increasing in number and severity in the Hawaii, particularly on Hawaii Island and Maui. According to the CDC and the Hawaii State Department of Health, severe cases are supposed to be rare. However, each year we are having more and more serious cases, some resulting in permanent disability, coma, and even death and suicide. Many victims have reported being misdiagnosed or turned away from hospitals for treatment because doctors don't know about rat lungworm disease. Education of the medical community is imperative. Research and education for rat lungworm disease is crucial to Hawaii's efforts to become food secure, and if we are to support local farmers, school garden projects, and the Farm to School Program. As infection is most often from eating contaminated food, it is essential that everyone involved with food, including farmers, gardeners, food handlers, grocers, and consumers, be educated about the disease and understand the proper measures that must be taken to minimize the risk of contamination. Infection can also occur from ingesting contaminated water. A great number of people on Hawaii Island rely on rainwater catchment for their household water supply, particularly in the Puna, Kau, South Kona, and Hamakua Districts. It is critical for Hawaii Island residents and farmers using catchment for agriculture water to be aware of the importance of maintaining their rainwater catchment systems and filters, as infected slugs and snails can crawl into catchment tanks can contaminate water with the parasites. In conclusion, I am supporting SB 2516 because rat lungworm disease is preventable, and the severity of the disease can be mitigated if diagnosed and treated early. Ignoring this important problem has and will continue to hurt our farmers, our residents and visitors, and Hawaii's reputation as a tropical vacation paradise. It is essential that adequate funding be allocated for research and education on rat lungworm disease, and a program is developed for the control of the vectors that carry this horrible disease. Sincerely, Doug Allan Island Sign 355 Hukilike St #117, Kahului HI 96732

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

LATE

Feb. 5, 2015

2:45 PM

Testimony in support of funding of SB 2516 for funding for rat lungworm research and education.

Aloha distinguished Senators Rosalyn Baker, Michael Gabbard, Vice-Chairs, and Committee Members,

My name is **Kathleen Howe**. I am a graduate student at the University of Hawaii at Hilo, working with Dr. Susan Jarvi at the Daniel K. Inouye College of Pharmacy, and I am here to testify in support of SB 2516 for funding for rat lungworm research and education. I am here on behalf of myself and the many others who have experienced this tragic disease that are not able to be here today.

Seven years ago today my son was in a coma at Hilo Medical Center, completely paralyzed, with a tracheal tube in his throat, on a ventilator, with a stomach peg and on a feeding tube, not expected to survive or ever recover, because of a parasitic infection he contracted on Hawaii Island. We will never know for sure how he contracted angiostrongyliasis, or rat lungworm disease. Because I was working out of the country when he became sick, my sister, who lives at ground zero for this disease, took him into the ER and told the doctors she thought he had rat lungworm disease. They told her he had the flu. She took him back a few days later and told them he had rat lungworm disease and they needed to put him on steroids. They said, "Auntie we don't want to listen to you." Finally, when he could not urinate because the nerves to his bladder were damaged, he was admitted.

If my son had gotten early treatment he may never have gone into a coma, and he may have recovered. Instead, due to lack of awareness by the medical community, he is now disabled. His case has cost the state, his insurance company, and his family a very large sum of money that I am confident is well in excess of one million dollars. Cluster cases of this disease started in the Puna District in 2001-2005 and continued to occur on a yearly basis in that area. And yet, when my son got sick, doctors didn't know how to identify or treat it. At the same time my son was in the hospital there were two other cases of rat lungworm disease, a woman and her fiance. The woman went into a coma about two weeks before my son, and she is still seriously disabled. She was also turned away from the ER multiple times. While my son was in the hospital I heard of other cases, there was a nurse from the Hilo Medical Center who was on leave because her young son had the disease and he was at Kapiolani Childrens going through physical therapy. Another I learned about from one of the doctors, who came into my son's room and told me he had another case that was almost identical to my son's. Every year since my son's illness I am contacted by people who have the disease, or I hear of cases. There was a young child that died, another that is now mentally disabled, another who is blind, all cases of rat lungworm disease. This past year we had two deaths related to rat lungworm disease, one in Kona, and one in Puna. A young woman from Maui who is such an inspiration to her community for the work she has done, is still in a wheelchair more than a year later, and still in so much pain from the nerve damage. A man from the mainland who recently brought his



because we grow gardens and eat from them, or it is our lifestyle, or, most recently and most injurious of all, that the disease was due to unsanitary conditions like you would find in a developing country. None of these are true, and the last only served to finger point the Puna District, one of the poorest districts in the state with a large number of residents who have no health insurance or on state health insurance. This is a food-borne and water-borne disease and no funding has been allocated by state or federal agencies for the control of this disease. There has been no money allocated to conduct research on the parasite, vectors, and the disease itself. There has been no help for those whose lives have been so tragically interrupted or destroyed by this disease. Case numbers look low because there is no simple diagnostic, although we are working on it. But I challenge you to look at the number of hospitalizations, and the duration of hospitalization, that are a result of this disease in Hawaii, and I can guarantee you, this disease is costing the state a lot of money and will continue to do so until something is done.

In closing, I am submitting my testimony in support of full funding of SB 2516. Monies are found for the coconut rhinoceros beetle, for the coffee borer beetle, for miconia, for fire ants. The number of invasive species problems we have are staggering and they are all important. But rat lungworm disease has caused death and disability in Hawaii, and that is why this issue must be moved to the top of the list of important issues and receive full funding. I ask you to consider my testimony and pass this bill. Mahalo nui loa for the work you do.

M. Kathleen Howe

Tropical Conservation Biology and Environmental Science Masters Program

University of Hawaii at Hilo

maryk8@hawaii.edu

**gabbard2 - Donna**

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Friday, February 05, 2016 12:36 PM  
**To:** WLA Testimony  
**Cc:** islandeyesvideo@yahoo.com  
**Subject:** Submitted testimony for SB2516 on Feb 5, 2016 14:45PM

**LATE**

**SB2516**

Submitted on: 2/5/2016

Testimony for WLA/CPH on Feb 5, 2016 14:45PM in Conference Room 224

Submitted By	Organization	Testifier Position	Present at Hearing
Mary Marvin Porter	Individual	Support	No

Comments: Aloha, My name is Mary Marvin Porter and I am with the Sierra Club. I am testifying in support of SB 2516. We are in dire need for funding for research and education for rat lungworm disease. From this disease we are having serious cases, some resulting in permanent disability, coma, and even death and suicide. I personally have known several that had the disease. 1 A man that committed suicide several years ago from it because he was in so much pain, 2) A handsome healthy young man who was a worker employed in building my house 9 years ago and a year later he had the rat lung disease, resulting in months of hospitalization, and he still has not fully recovered. 3) And a man that just built a beautiful home on the island and then died from it last Fall. In the past 15-years cases of rat lungworm disease have been increasing in number and severity in Hawaii, particularly on Hawaii Island and Maui. Many victims have reported being misdiagnosed or turned away from hospitals for treatment because doctors don't know about rat lungworm disease. Education of the medical community is imperative. Research and education for rat lungworm disease is crucial As infection is most often from eating contaminated food, it is essential that everyone involved with food, be educated about the disease. Please support SB 2516 because rat lungworm disease is preventable, and the severity of the disease can be mitigated if diagnosed and treated early. It is essential that a program is developed for the control of the vectors that carry this horrible disease. Mahalo, Mary Marvin Porter Island Eyes Video 15-1622 10 Avenue, HPP Kea'au, Hawai'i 96749

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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**gabbard2 - Donna**

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Friday, February 05, 2016 1:34 PM  
**To:** WLA Testimony  
**Cc:** amara@mindspring.com  
**Subject:** \*Submitted testimony for SB2516 on Feb 5, 2016 14:45PM\*

LATE

**SB2516**

Submitted on: 2/5/2016

Testimony for WLA/CPH on Feb 5, 2016 14:45PM in Conference Room 224

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Amara Karuna	Laakea community LLC	Support	No

**Comments:**

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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**gabbard2 - Donna**

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**From:** mailinglist@capitol.hawaii.gov  
**Sent:** Friday, February 05, 2016 1:04 PM  
**To:** WLA Testimony  
**Cc:** lesliewingate7@gmail.com  
**Subject:** \*Submitted testimony for SB2516 on Feb 5, 2016 14:45PM\*

**LATE**

**SB2516**

Submitted on: 2/5/2016

Testimony for WLA/CPH on Feb 5, 2016 14:45PM in Conference Room 224

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Leslie Wingate	Individual	Support	No

**Comments:**

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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