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Newsletter of the American Society of  
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Summer 2016

## American Society of Parasitologists Newsletter, v. 38, no. 3, Late Summer 2016

Scott Lyell Gardner

*University of Nebraska - Lincoln*, [slg@unl.edu](mailto:slg@unl.edu)

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ASP Newsletter

Vol. 38, No. 3

Late Summer, 2016

# The American Society of Parasitologists



## Newsletter

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### From the Editor

As you have seen in the past, we have included interesting and, sometimes, controversial non peer-reviewed white papers in the *ASP Newsletter*. Send in your contributions.

There are only a very few items that I have rejected over the years.

Sincerely,

SLG - editor



*William C. Campbell, long-term ASP member, guest at the Rocky Mountain Conference of Parasitologists, September 2015, and recipient of the 2015 Nobel Prize in Physiology or Medicine!*

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## **President Jerry Esch - A Letter to the ASP Membership**

To: Members of the Society  
From: Jerry Esch  
President, American Society of Parasitologists, 2016-2017  
Subject: What does the coming year hold for our Society?

Whereas I have no crystal ball, there are several things about which I am certain will happen during my term as President. First, six issues of our Journal will be published. How do I know this? Because our Editor, Mike Sukhdeo, along with an exceptional Editorial Board, will get the job done. Second, four Newsletters from Scott Gardner will arrive for each of us. Third, Lee Couch already has her feet on the ground. Responsibilities associated with the Secretary-Treasurer's office are being met head-on and the job is being done exceptionally well. Fourth, knowing Herman Eure and Kelli Sapp as well as I do and as long as I have, I am completely confident that our meeting in San Antonio will go on as scheduled and that it will be one to be remembered!



**Jerry and friend in Colorado, considering nature, together.**



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Finally, what about my duties as President? First, all committee replacements have been made. Second, I have invited three speakers for the Presidential Symposium in San Antonio, and all have agreed to participate. They include Kym Jacobson of the Hatfield Marine Center in Newport, Oregon, Derek Zelmer, University of South Carolina-Aiken, and Celia Holland of Trinity College in Dublin, Ireland. Third, at the strong suggestion of former President, John Janovy, Jr., I have begun writing a Presidential Address for the San Antonio meeting. After several starts and stops, I am preparing a lecture that deals with 'discovery' in parasitology. You might ask, "Discovery of what?" If you really want to know, you will need to attend the San Antonio meeting and hear the talk.

There is another aspect of presidential responsibility that actually involves something, or some things, that are outside the realm of regular duties of each incoming President. In my case, an idea developed while reading the Minutes of a recent annual meeting. I took the idea first to Mark Siddall and he concurred in the direction I was thinking. As I had been perusing the Minutes, it occurred to me that an annual budget was not part of the report. In fact, when I read an annual report of the Secretary-Treasurer, projected expenditures and revenues were not provided. I also began thinking about how our assets were presented and I thought it was rather lackadaisical.

So, I contacted Lee Couch, our new Secretary-Treasurer and Bob Grieve, newly appointed Chair of the Business Advisory Committee, and explained to them my concern. They both agreed that a discussion dealing with this situation was essential. Accordingly, I invited them to travel to a cabin owned by my family in the mountains of Colorado in June 2016, prior to the Edmonton meeting. Mark was invited but could not attend. I also invited Ron Hathaway, a member of the Priorities and Planning Committee; he lives close by and I figured that since he was a carry-over member of the Committee he should be involved as a way of taking information back to his Committee if needed. During the coming year, it is my hope to participate in discussions by Bob and Lee as they move toward development of a budget process.

Since a budget development process will carry with it changes in our by-laws, I have asked Susan Perkins, President-Elect and Chair of Priorities and Planning Committee, to assume responsibility for making appropriate changes. I will assist Susan and the Committee as needed, but I do not expect the changes to be as extensive as they were during 2016.



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Finally, as Chair of the Priorities and Planning Committee during Mark Siddall's term as President, one of our duties was to resolve the 'Open Access' question for our Society. After consideration of the situation, a vote was scheduled; However, I held back at the last minute since I was unsure about how to estimate revenues, expenditures, etc. regarding 'Open Access' in preparing a budget for 2016-2017. At our Council meeting in Edmonton, Julian Hillyer proposed a motion to at least partially resolve the issue. A unanimous vote by Council approved his suggestion, and will be included in Lee's report to the ASP.

I also want to congratulate Herman Eure and Kelli Sapp for putting on such a good meeting in Edmonton. They are really getting 'good' about their business. One other person, and his committee, I want to thank. Having participated in managing the scut-work of planning and producing a meeting, a lot work behind the scenes is involved. A good local committee and chair are absolutely essential. The Edmonton committee and Al Shostak, their chair, did a really great job and I am proud to thank them for their work.

I look forward to serving our Society over the next 11 months, and will be in touch again by ASP Newsletter!

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## **Annual Meeting – 2017 – Plan for San Antonio, Texas**

Plan now - June 26-30, 2017 at the Hilton-Palacio del Rio Hotel in San Antonio







## Obituary - Franklin Sogandares-Bernal

**Franklin Sogandares-Bernal**, professor, charmer, hunter, story teller and lecturer, was born May 12, 1931 in Ancon, Panama Canal Zone to Anastasio and Blanca Bernal Sogandares. While growing up in Panama he enjoyed fishing and hunting with his Uncle, and would help punch cows on his grandfather's ranch. In 1951 after graduating high school in the Canal Zone, he moved to New Orleans where he received a BS in Biological Sciences from Tulane University. He continued his graduate education at the University of Nebraska-Lincoln at where he simultaneously earned a master's degree in 1957 and a PhD in Zoology and Anatomy in 1958 working with Harold W. Manter as his major professor. While in Nebraska, he married Judith Alis Stanley. He said "*it was the worst year of my life*" and they later divorced.

He spent 1957-1958 working for the state of Florida as a marine parasitologist. He returned to New Orleans in 1958 where he became an instructor at Tulane. He was promoted to full professor of Biological Sciences (parasitology) and Bioscience at Tulane and resided there until 1971. He had the distinct honor of achieving full



Franklin Sogandares-Bernal – somewhere near Panama.



professor after only 4 years. He eventually became the director of graduate studies in the department of Biological Sciences and served as coordinator for science planning for the construction of the Stern Building, an important addition to the Science Center at Tulane.

He married Lucy Ann McAlister in 1960 and they had three children. They divorced in 1982.

In 1971, he moved his family to Missoula, Montana where he

served as a professor and the Chairman of the Zoology department at the University of Montana. He eventually transferred to the department of microbiology. In Montana he enjoyed hunting bear and other big game. He and his family enjoyed their time in the mountains and spent a considerable amount of time enjoying the outdoors.

In 1974, he and his family moved to Dallas, Texas to continue his work as a Biological Sciences professor and served as Chairman of the Biology Department at Southern Methodist University where he remained until his retirement in 1996. He continued to maintain professional contact as Emeritus Professor at SMU. During these years he served on advisory panels of the National Research Council where he traveled to Egypt and Kenya to report on post-doctoral programs at U.S. installations in the region. He was the Director of Infectious Disease Research for the Baylor Research Foundation in Dallas and was also a medical staff affiliate in the department of pathology at Baylor University Medical Center.

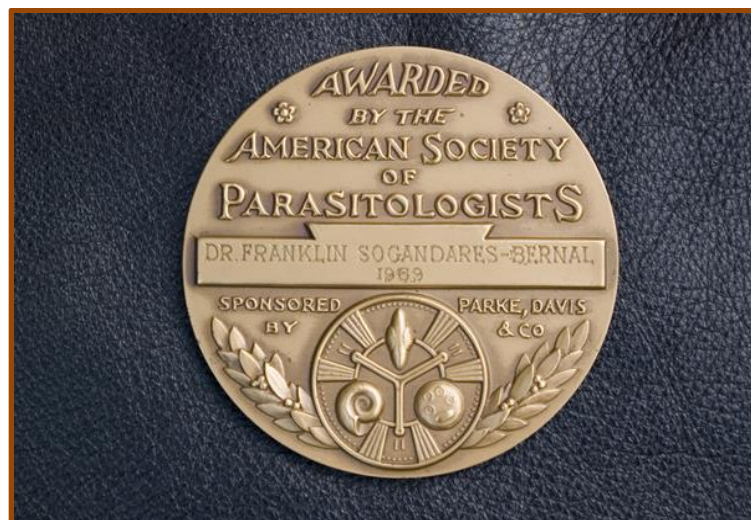
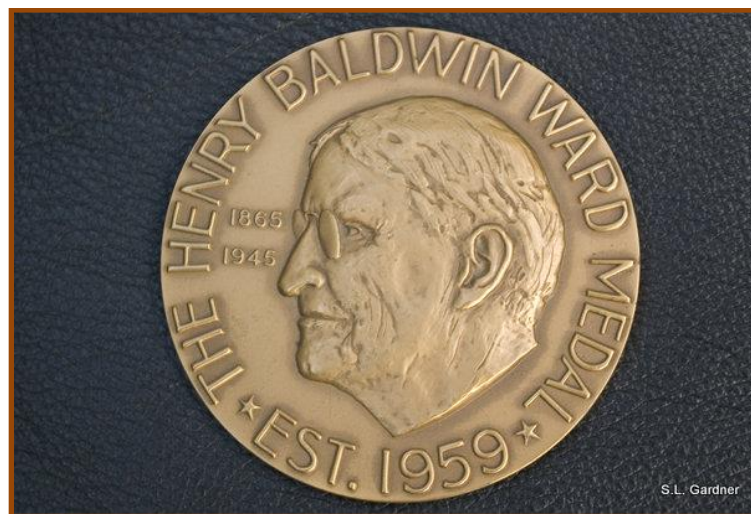
Because he attained a position of leadership in parasitological research, he was awarded the Henry Baldwin Ward medal of the American Society of Parasitologists in 1969. Throughout his esteemed career, he published about 100 articles on his research findings that have appeared in peer reviewed national and international journals.



Frank, after a successful hunt for bear in Montana.



When he retired in 1996, his close friend Dr. George Race encouraged him to move to Lampasas County, Texas where he bought a small ranch near Adamsville, Texas and tended to his many interests including hunting, angering the neighbors, and training his dogs to do things he would later regret. He furthered his interest in hunting by building amazingly accurate custom hunting rifles based on Mauser actions. He enjoyed reading and discussing history. His generous, kind hearted spirit will be missed by all who knew him.



**Photo-images of the Henry Baldwin Ward medal won by Franklin Sogandares-Bernal - 1969.**





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## **Report from the Field – Field Parasitology 2016 from the University of Nebraska-Lincoln**

For the 5<sup>th</sup> straight year, Scott Gardner taught the Field Parasitology course at the University of Nebraska-Lincoln's Cedar Point Biological Station (CPBS) in southwestern Nebraska – Click to visit the HWML facebook page for info and videos (<https://www.facebook.com/Manterlab/>)

-The station was established in 1975 by UNL professors Nickol, Janovy, and Lynch. Since that time thousands of students have been trained in methods and techniques of field biology that included the disciplines of Herpetology, Mammalogy, Invertebrate Zoology, Entomology, Animal Behavior, Ornithology, Ecology, and of course Field Parasitology. The UNL course "Field Parasitology" was initially conceived, planned, and implemented by John Janovy Jr. and was taught by him from about 1975 – 2010. In 2011, the course was taught by Terry Haverkost, and subsequently by Scott.

**Field Trip.** Scott teaches the course and includes the students as they are part of a major field-expedition with the main focus being a survey of the parasites of vertebrates of the region. While the main collecting emphasis is on the smaller mammals, road-kills or hunter killed carnivores, lagomorphs, and turkeys are also examined in detail. To achieve the maximum data taken from each specimen of a mammal, herp, bird, or fish that is collected, all specimens are processed and eventually deposited in the University of Nebraska State Museum or other collections around the central part of the country. For vertebrates, each specimen that is captured has a georeferenced location recorded both in the field parasitology laboratory log book –using archival ink on 100% cotton rag acid free paper, with the data for these specimens also flowing into online "cloud" document spreadsheets that will eventually be converted to the online database Arctos. See: <http://arctos.database.museum/>

**Mammals.** One interesting fact was that we collected individuals of two species of pocket gophers (Rodentia: Geomyidae) this past summer, including *Geomys lutescens* and *Geomys bursarius* and probably some hybrids, too. The vulgar name of these animals is "Pocket Gopher" but many people call them other things when they invade a garden or a golf course green. Individuals of *G. bursarius*, collected in the loess soils just north-east of Ogallala on the bluffs overlooking the North Platte river were loaded with the anoplocephalid cestodes *Andrya macrocephala* and *Anoplocephaloides variabilis* while the individuals of *G. lutescens* only 20 km away in the sandhills were loaded with *Hymenolepis*



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*weldensis* but no *Andrya* nor *Anoplocephaloides*. We have excellent molecular and morphological data now on these species so we will be getting a good set of sequences (6 genes) and morphology for each specimen so we can correlate morphology and molecules.

**How do we Collect All These Data?** When a vertebrate animal is brought into the lab, the locality of its capture is recorded and it is euthanized, and assigned or labeled (with a museum quality skin tag) with a permanent field-collection number that stays with the individual animal and its parasites from then on. The main thing that we concentrate on in the museum world is keeping the data for the parasite and its host linked from the time it is collected until the time that the parasite might be described as new and a "symbiotype" of the host is assigned (see: [Frey, et al., 1992. Designation and curatorial management of type host specimens \(symbiotypes\) for new parasite species. Journal of Parasitology 78: 930-932.](#)) or it is deemed a voucher specimen and linked in that way.

## **Museum Specimens - Where does the host specimen go?**

When the specimen of the vertebrate is placed into a museum collection and assigned a museum catalog number, the **field number** also stays associated with the specimen in the museum catalog. If we discover Cestodes, we record where they were found and we label the cestodes (if there are more than one) A1 for the 90 percent of the specimen that goes into hot formalin after it relaxes and A2 for the part that goes in to 95% ethanol and is stored permanently in the -20 freezer, and A3 for the part that goes into liquid nitrogen. The part in hot formalin is then stored and transported in 10% buffered formalin. It is extremely important that no formalin ever comes into contact with the specimens that are to be saved for molecular / sequencing analysis. In addition, we count the number of segments that go into each of the alcohol vials and cryotubes so that in case it is a new species, or a species lacking morphological information, we know how many segments there were to start with. As noted, each host specimen gets a sequential number and any cestodes found are labeled and stored individually (for those that we need to keep separate) A, B, C etc.. Nematodes discovered in a mammal cecum, for example, are preserved and are stored in one of several different ways depending on how rare the nematode is, and whether there is sufficient material to get good molecular and morphological data from a single individual. If there are sufficient numbers of individuals, we like to put some specimens directly into 98% ethanol (both males and females) and store the vial in the -20 C or -85 C freezer. For morphology



only, we like to put nematodes that we find in both the small intestine and the cecum/ large intestine into pure glacial acetic acid for a few seconds prior to either clearing directly in glycerine or storage in 70% ethanol and subsequent clearing in glycerine. Nematodes from the stomach (*Physaloptera*, *Protospirura*, etc.) kind of ignore the GAA and really do not respond to this treatment at all.

Students learned all these methods, and each student also learned the methods of collecting mammals using Sherman live traps, museum special snap traps, pitfalls, and by hand or with insect nets at night with powerful headlamps. Unfortunately, this year, we did not have an opportunity to set mist nets for bats. Each student also prepared mammal study skins as part of his/her learning methods. The first few were pretty rough looking, but some students were able to really put remarkable beauty into their final museum-mammal study skin product. In just three weeks students went from zero to making museum quality slides of *Hymenolepis*, *Cittotaenia*, *Anoplocephaloides*, etc. and the host animals, too.

Invertebrate host animals were not ignored as this year more than 1,000 individual snails of the genera *Physa*, *Stagnicola*, and *Helisoma* were collected smashed and examined for sporocysts, rediae, and cercaria of trematodes. Many infections were noted by the snail crew and the data will be presented at the RMCP meeting in a couple weeks at CPBS here in Nebraska.

[Turkeys](#), fish, frogs, toads, kangaroo rats (*Dipodomys ordii*), *Peromyscus leucopus*, *Onychomys*, *Sylvilagus* and *Lepus californicus* were a focus of field parasitology research projects. Road-kill turkey vultures, barn owls, and *Tympanuchus cupido* were all examined for parasites and various projects were completed on these animals in a 3 week period.

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## Willis A. Reid, Jr. Student Research Grants

Keep in mind that there are student research grants available to student members of the ASP - apply next year!! (-ed)

### Call for Applications

In 2004, the American Society of Parasitologists began a new program to provide small grants to students studying parasitology. At this time, the ASP is able to fund one graduate student (\$1000) and one undergraduate student (\$500) doing research in the field of parasitology.

- Submissions must be received by January 20, 2017.
- Awardees will be notified by April 1, 2017 and awards dispersed on that date.

### Eligibility

The competition is open to undergraduate and graduate level ASP student members affiliated with institutions or major professors who have limited or no grant money to support student research. **Both** the student and his/her major professor must be members of the ASP at the time of application. ([Applications for membership may be found at http://amsocparasit.org/](http://amsocparasit.org/)).

### Documentation

The application packet must include:

1. A brief proposal written by the student (**maximum** of **3** pages, double-spaced, 11 pt typeface minimum in either MS Word, WordPerfect, or PDF format only) outlining the student's proposed research must be submitted, along with a separate, detailed 1-page budget of how the money will be spent. Money can only be used for supplies, equipment, and travel expenses for research (**not** to attend and present results at meetings).
2. A brief CV (1-2 pages).
3. A letter of support from the student's major professor stating why the student needs funding and explaining why the student is a good candidate to receive the grant.

NOTE: At the end of one year (April 1, 2018), awardees must submit a brief report (1-2 pages) summarizing their research activities over the year, outlining what was accomplished and the expenses incurred related to the initial proposal.

Please submit proposals to:

Dr. Ghislaine Mayer  
[ghislaine.mayer@manhattan.edu](mailto:ghislaine.mayer@manhattan.edu)





### **Note to Members -**

The ASP Newsletter welcomes news of parasitological interest. Please send your text electronically to the editor as an e-mail and attach as an MS Word document. Drawings, photographs, charts, or tables can be sent as B/W TIF files at 300 dpi.

Thanks: [slg@unl.edu](mailto:slg@unl.edu)

### **Editor**

Scott Lyell Gardner, Ph.D.  
Editor, ASP Newsletter  
Curator of Parasitology  
The Harold W. Manter Lab. of Parasitology  
W-529 Nebraska Hall  
University of Nebraska State Museum  
University of Nebraska-Lincoln  
Lincoln, Nebraska 68588-0514  
Tel: 402-472-3334 Fax: 402-472-8949  
E-mail: [slg@unl.edu](mailto:slg@unl.edu)

### **ASP AFFILIATE SOCIETIES**

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- Helminthological Society of Washington
- New England Association of Parasitologists
- Northern California society of Parasitologists
- Parasitology Section, Canadian Society of Zoologists
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