Back when I was a student in the New Mexico Beekeepers Association’s Certified Beekeeper Apprentice Program, I attended a session on apitherapy, conducted by Kathleen Miller. Apitherapy involves using bee venom and products made by honeybees for medicinal purposes. I found the subject to be absolutely captivating. I’d been a beekeeper for several years by then, and between pollination, beeswax and honey, I felt like I was putting my hives to good use, but the idea of also using my hives as a resource for healing opened up a new and interesting world for me.

The American Apitherapy Society holds its Charles Mraz Apitherapy Course and Conference every fall, alternating between the east and west coasts. I had been hoping to make it to the conference for a couple of years, and fortunately this year I received a generous stipend from NMBKA for my work over the past year as Level 1 Coordinator for the Certified Beekeeper Apprentice Program. I knew I wanted to put it to good use in sharing my knowledge as a beekeeper in the New Mexico beekeeping community, so I headed to sunny Southern California — along with my daughter, whom I had promised to take to Harry Potter World in Los Angeles as her high school graduation gift!

Sitting in the conference room of the Redondo Beach Hotel, looking out the open window at palm trees along the Pacific Ocean with a beach breeze blowing in, I found myself surrounded by people from varied backgrounds.

Continued on page 4
From the Editor
Contact: aasoffice@apitherapy.org
Hello AAS Members,

During the weekend of October 21-23, 2016 the AAS held the Charles Mraz Apitherapy Course and Conference in the beautiful beach community of Redondo Beach, CA located just 15 minutes south of Los Angeles International Airport where more than 60 participants gathered from all over the world to learn and share the fascinating medicine of the bee hive. Redondo Beach proved to be an amazing venue offering perfect weather, scenery, and other activities within walking distance of the conference such as bicycling, kayaking, sailing, or just enjoying the miles of white sandy beaches, the boardwalk, restaurants, shops, and the unrivaled sunsets on the Pacific ocean. The hardest part may have been just staying in the classroom!

The Redondo Beach Hotel where the event was held surpassed any other venue in previous years mostly due to the personalized one on one service we received from our hosts. The event manager Chris Matsumoto and his competent and beautiful assistant Kia Dobie were available to us for the entire weekend assisting us with everything from setting up the AV, re-arranging the rooms to flow with our needs, and assisting our participants with anything that they needed for the duration of our event. A fabulous lunch was served on both Friday and Saturday and participants enjoyed their lunch on the outdoor deck facing the harbor and the beautiful pacific ocean. Chris, Kia, and the entire hotel staff were amazingly friendly, helpful and integral in the overall success of our conference. Many of the participants, equaling to almost half, were from CA and the remainder of the participants represented 14 different states and Mexico. A large number of the participants were already current members of AAS with the remainder of the participants becoming new members inclusive of their participation. Regardless of where people came from, this group had an extraordinary cohesion that was very unique and by the end of the weekend I am pretty sure that we all left with that same magical feeling of a very successful event.

Continued on page 12
Happy Winter Solstice & Happy Holidays to Each and every one of You,

I want to say thank you to all of the people who participated in this year's CMACC 2016 in Redondo Beach California. What an amazing, perceptive, inspired, and inspiring group of people! All the work we do in preparation each year for this event is so worthwhile to be able to share our knowledge and experience with each other in such a positive collective interchange. Openly listening to each others ideas is how we truly grow as individuals and apitherapists so that we may share this knowledge in an educated, safe and grounded manner with those in need. There certainly was a special palpable light and spirit shining within this particular group that kept us going all week-end long, and still!

Looking forward to the future as we continue to evolve and set educational standards in the field of apitherapy, the AAS is looking for new board with specific talents to fill certain tasks and dedicate a specific amount of time on a weekly basis to fulfill these roles. Some of you have already expressed an interest in volunteering your talents and services. Please send the AAS office a letter of intent and a resume which will be reviewed and decided upon by the AAS board. Please state the amount of consistent hours per week that you are able to commit to the AAS. Currently we are looking for:

- AAS office manager to work with Executive Director.
- Website design and management.
- Social media and public relations, advertising, and fundraising.

Priscilla Coe, a long time AAS member, CMACC participant, JAAS contributor, and AAS Public Relations Advisor, passed away on October 2, 2016. Priscilla was originally from Mt. Pleasant, New York and in more recent years lived in Sonoma, California. Priscilla was intelligent, kind hearted and completely passionate about apitherapy and holistic beekeeping. She was instrumental in the development of the Melissa Garden, a 40 acre Honeybee Sanctuary in Healdsburg, California. http://www.pacifichorticulture.org/articles/the-melissa-garden-a-sanctuary-and-season-of-honeybees/.

Priscilla wrote an article “Honeybee Sanctuaries” for the JAAS, Vol. 18, No. 3, July-September 2011 available to members on the AAS website. At Taste August 2008, Priscilla was the curator of the Honey Pavilion. http://civileats.com/2008/08/04/ode-to-the-honeybee-the-honey-pavilion-at-taste/. Priscilla wrote a wonderful extensive article titled “Medicine from the Hive: an Introduction to Apitherapy” which was published in LILIPOH Magazine in the summer of 2008, V.13, No.52. We plan on re printing it in an upcoming newsletter or JAAS.

Priscilla worked in the fields of culinary public relations, apitherapy and biodynamics. Her employment and extensive volunteer work reflected her deep interest and commitment to food policy, sustainable agriculture, gardening, aromatherapy and therapeutic herbalism. She loved to spend summers teaching children the joys of cooking and gardening at the Heart’s Bend Camp in New Fane, Vermont in addition to teaching the children of friends and family. She was also a cooking instructor and school director at Arcade Cooking School in Seattle.

A Hange Korb beehive of straw covered with manure, in the Melissa Garden

Continued on page 15
Report from the 2016 Charles Mraz
Apitherapy Course and Conference

Continued from page 1

There were DOMs (Doctors of Oriental Medicine), massage therapists, people suffering from different illnesses who wanted to learn more about treatment, people who buy bees for apitherapy purposes, and plenty of plain old beekeepers. The organizers were happily surprised at the increased number of beekeepers in attendance this year. New Mexico had one of the strongest showings with five attendees from our state at the conference.

Session topics covered over the three days included all aspects of bee medicine, such as the basics of using honey, royal jelly, propolis, pollen, and bee venom for better health. One of my favorite sessions, taught by New Mexico beekeeper Amelia Moody, demonstrated how to make medicinal propolis salve. Glen Perry, whose research resulted in a highly bioavailable form of propolis and earned him a medal at Apimondia 2007 in Melbourne, Australia, for innovation in the use of hive products, taught a full-hour session on the medicinal uses and benefits of propolis. Glen also taught a session on propolis and cancer. I even took home a recipe for medicinal bee bread for human consumption (I have a batch brewing up in my kitchen as I write this).

Other sessions covered practical topics such as apitherapy intake and technique, and informed consent and legal issues. Because there is no certification for apitherapists, anyone who performs bee venom therapy (also known as “stinging”) can ultimately be held liable, whether they are a medical professional or not. The main difference is that a medical professional is within their scope of practice to diagnose a condition, whereas a “lay stinger” like me is not qualified to make any type of diagnosis—though I would consider “stinging” a client who came to me with a diagnosis.

The conference ended with hands-on stinging demonstrations during the Treat and Be Treated session. Attendees volunteered to be stung, or to try their hand at stinging others. Conference organizer Frederique Keller, L.Ac, and current President of the American Apitherapy Society, demonstrated how to perform a preliminary sting to test a new client for reactions, how to use the technique of “tapping” where the apitherapist takes the venom-filled stinger and lightly taps it into the body in a series of micro-stings to spread out the reaction, and how to complete a full-on sting where the client is stung and the stinger is left in for many minutes until it stops pulsing and all of the bee venom is released into the client’s tissue. A California licensed L.Ac., DOM demonstrated how to use a bee stinger in conjunction with an acupuncture needle to get maximum effect. One participant brought her dog in for the veterinary apitherapy hands-on session. The dog was coughing consistently until the apitherapist, who was also a licensed Acupuncturist stung him on his Chinese medicine correlated heart and lung points. With all the people around him he barely noticed the sting, but stopped coughing within several minutes.

One final thought: As impressed as I am by apitherapy, I have always struggled to reconcile my love for bees with the idea of taking the life of a bee for the purpose of apitherapy. One of the apitherapists at the conference, who had been reproached by someone for taking the lives of bees, asked that person if she ate honey. When she said she did, the apitherapist pointed out that many more bees are killed or injured in the act of honey harvesting than in the act of apitherapy. The apitherapist also made the point that most of the bees she collects are foragers close to the end of their hard-working lives. “When I go out to my hives, I ask the bees for volunteers. I also notice that when they sting me it is usually somewhere where I need bee medicine. Bees know these things.”

Carolyn Hammack is a beekeeper living in Albuquerque, and is a Co-chair of ABQ Beeks and the Level 1 Coordinator of the NMBKA Certified Beekeeping Program. Contact her at littletreesbees@gmail.com This article was originally published in the December 2016 NMBKA Newsletter, New Mexico Beekeepers Association and reprinted with permission from both parties.
President of AAS Frederique Keller, L.Ac. and Vice President of AAS Chris Kleronomos, L.Ac. DAOM welcome the group to CMACC 2016 in Redondo Beach, CA.

AAS Board members Kathy Genova, RN and Michael Szakacs setting up the auction tables and the 50/50 raffle.

Observation hive provided by Bill’s Bees from Angeles National Forest, CA.

Sunset view from the Redondo Beach Hotel.
Frederique Keller, L.Ac. demonstrates BVT on Leo, a local participant’s pet dog, during the practical session on Sunday afternoon.

Amelia Moody, LMT demonstrates how to make medicinal propolis salve.

Dr. Patrick Fratellone, MD demonstrates BVT on CMACC participant Jason Colvin who is suffering from Lyme disease.

Students gathered around during the practical demonstrations during Sunday afternoon’s hands on treat and be treated session.
Participant Tina McDonald admiring the local honey tasting display

The camaraderie of this dynamic group was apparent at the Saturday night sunset reception where everyone had a great time. Friendships were formed both inside and outside of the classroom.
Honey for the Treatment of Infections

By Dr. Peter Molan

Associate Professor of Biochemistry, Honey Research Unit, Department of Biological Sciences, University of Waikato, Hamilton, New Zealand

An Ancient Medicine Rediscovered
Honey is one of the oldest medicines. Its use is recorded in Sumerian clay tablets estimated to be 4,000 years old, and in Egyptian papyri dated from 1900 to 1250 B.C. It is also mentioned in the Veda, the sacred scriptures of Hinduism, thought to be about 5,000 years old, and in the Holy Qu’ran and the Talmud. Hippocrates (460-357 B.C.) used many of the Egyptian prescriptions. He found that honey “cleans sores and ulcers of the lips, heals carbuncles and running sores.” Celsius (circa 25 A.D.) used honey for many different purposes: As a laxative, as a cure for diarrhea and upset stomach, for coughs and throat maladies, to agglutinate wounds, and for eye diseases.

Honey has continued to be used in medicine ever since, but little was known about how it worked. It was not until the late 19th century that bacteria were found to be the cause of infections. Although there are several reports in medical journals in the 1930’s of honey being effective in clearing wounds of bacterial infection, it was not recognized in these reports that it had been established in laboratory work in 1919 that honey has antibacterial activity. It was not until the mid 1940’s that more intensive laboratory studies were carried out, but by this time antibiotics were becoming available for the treatment of infections, and honey was displaced from use in medicine.

Despite the advent of antibiotics, honey had continued to be used in folk medicine, and it is from this pool of knowledge that the re-introduction of honey into modern medicine has come. There have been numerous reports in medical journals of this folk remedy being used as a last resort on infected wounds, burns, and ulcers that were not responding to antibiotic treatment. The remedy was in all cases found to be remarkably effective. This effectiveness is being recognized in an increasing number of reports. In 1989, an editorial in the Journal of the Royal Society of Medicine expressed the opinion that, “The time has now come for conventional medicine to lift the blinds off this ‘traditional remedy’ and to give it its due recognition.

“The time has now come for conventional medicine to lift the blinds off this ‘traditional remedy’ (honey) and to give it its due recognition.

Recent Research

Many researchers have reported that honey varies in the potency of its activity. Despite this, none of the reports in the medical journals mentions any selection of the honey used. At the University of Waikato we have investigated how much variation there is in the antibacterial activity of honey likely to be used medically. Commercial apiarists supplied 345 samples of honey from 26 different floral sources for the study. The samples of honey were tested against staphylococcus aureus, the most common wound-infecting species of bacteria. The activity of each sample was compared with that of a reference antiseptic, phenol (carbolic). It was found that the activity varied from a level that was the equivalent of 58% phenol to a level that was below the limit of detection (2% phenol). One third of the samples tested were of this low level of activity.

The results of this research (recently published internationally in the Journal of Pharmacy and Pharmacology) show the importance of selecting the honey used for medical purposes. Although all honey will stop the growth of bacteria because of its high sugar content, when the sugars are diluted by body fluids this antibacterial action is lost. The additional antibacterial components (primarily hydrogen peroxide generated by the glucose oxidase enzyme in the honey) then become important.

Continued on page 9
Considering that carbolic disinfectant is usually used with a phenol concentration of 4-5%, it is evident that selected honeys can remain antibacterial when extensively diluted by body fluids. Another finding in this research was that hydrogen peroxide was not the only antibacterial substance involved in some types of honey. When testing samples of the honeys with the enzyme catalase added to remove the hydrogen peroxide, it was found that only two of the 26 floral types of honey contained significant levels of this additional antibacterial activity. In one of these, vipers bugloss honey, the level of activity was quite low. In the other, manuka honey, the additional antibacterial activity was in some samples quite high, although it is important to note that half of the 60 samples tested had very low levels or none of this additional antibacterial activity.

This additional antibacterial activity was considered to be important enough to warrant further investigation. As a project for her recently completed M.Sc. thesis, Dawn Willix compared the antibacterial activity of an average-level manuka honey with that of an average-level honey with activity due to hydrogen peroxide, testing them on seven different species of bacteria chosen as the ones most commonly involved in wound infection. The percentage (by volume) of each type of honey needed to completely prevent the growth of each species of bacteria was found to be:

<table>
<thead>
<tr>
<th></th>
<th>Manuka Honey</th>
<th>Other Honey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escherichia coli</td>
<td>3.7</td>
<td>7.1</td>
</tr>
<tr>
<td>Proteus mirabilis</td>
<td>7.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Pseudomonas aeruginosa</td>
<td>10.8</td>
<td>6.8</td>
</tr>
<tr>
<td>Salmonella typhimurium</td>
<td>6.0</td>
<td>4.1</td>
</tr>
<tr>
<td>Serratia marcescens</td>
<td>6.3</td>
<td>4.7</td>
</tr>
<tr>
<td>Staphylococcus aureus</td>
<td>1.8</td>
<td>4.9</td>
</tr>
<tr>
<td>Streptococcus pyogenes</td>
<td>3.6</td>
<td>2.6</td>
</tr>
</tbody>
</table>

Although some species are more sensitive to the action of one type of honey than they are to the other, on average there is little difference. The most notable point is that these “average” honeys can be diluted nearly ten-fold yet still completely halt the growth of all the major wound-infecting species of bacteria. Also notable is the finding that an “average” manuka honey will still halt staphylococcus aureus when diluted with 54 times its volume of fluid: This is not only the most common wound-infecting species, but is notorious for developing resistance to antibiotics.

The work has recently been carried further by microbiologists at Waikato Hospital looking at the effect of these two honeys on their collection of strains of MRSA-strains of staphylococcus aureus that cause ward closures in hospitals because they are resistant to most or all of the commonly used antibiotics. All of the strains have been found to have their growth halted completely by the honeys diluted to 5-10%. Similar sensitivity has been found in some other recent work, carried out at the University of Waikato, in which we tested the bacterial species that cause mastitis in dairy cattle. If honey is as effective in the udder as it is in the laboratory in stopping the growth of these bacteria, then it would be a very useful alternative to antibiotics as it would not need the milk to be held back because of unacceptable residues from the treatment. Injection of honey up the teat of a cow should cause no problems when it is considered that it can safely be put in the eye for the treatment of eye infections.

**Stomach Ulcers**

In the traditional medicine of some parts of the world honey has also been used to treat dyspepsia and stomach ulcers. There are numerous reports of this treatment being used successfully in clinics in Russia in modern times, and a recent report of a clinical trial in Egypt which established that this traditional remedy is in fact effective. However, there has been no explanation of how honey works in this treatment, which has prevented the treatment from being considered seriously by many in the medical profession. In the last few years it has been recognized that dyspepsia and stomach ulcers are frequently caused by infection of the stomach by a species of bacteria, helicobacter pylori. The possibility that the healing effect of honey on the stomach may be through its acting on this bacteria was suggested by Niaz Al Somai at the University of Waikato.

Continued on page 10
In collaboration with microbiologists at the Waikato Hospital, he tested strains of helicobacter pylori isolated from biopsy samples of stomach ulcers, using the same two honeys that had been tested on the wound-infecting species of bacteria. It was found that the honey with hydrogen peroxide activity did not prevent the growth of cultures of helicobacter pylori when added at concentrations up to 50%, but the manuka honey completely halted growth of the bacterium at a concentration of 5%.

A clinical trial was organized to find out if manuka honey has the same effect on the bacterium in the stomach as it does when they are on agar plates. There is much interest in this possibility because conventional therapy for stomach ulcers is far from satisfactory. Drugs which prevent secretion of acid in the stomach allow an ulcer to heal but it frequently re-appears. Only if helicobacter pylori is eliminated is a lasting cure achieved, but it is a very difficult infection to clear. A combination of antibiotics and bismuth is required, and unpleasant side-effects often result. There is also the consideration that a very large amount of money is spent on the pharmaceuticals currently used to treat stomach ulcers. If honey is shown by clinical trial to be a reasonable alternative it would be a much cheaper option. The trial was abandoned without completion because the gastroenterologists were not entering sufficient patients, so no conclusive results were obtained regarding the ability of the treatment with manuka honey to clear the bacterial infection. However, there was a clear indication that the patients taking the honey with antibacterial activity had significant relief from the discomfort and pain associated with their illness, whereas the patients taking honey without antibacterial activity did not. (Neither group of patients knew whether they were taking active or inactive manuka honey, nor did their gastroenterologists know. The dosage used was 20g of honey four times a day, 1 hour before meals or at bedtime.)

**Update on Current Research**

This presentation is to provide an update on the current research into the antibacterial activity of honey being carried out at Waikato University under the direction of Dr. Peter Molan. A priority at the present time is to provide scientific evidence of the effectiveness and safety of using honey as an alternative to conventional forms of treatment for skin and gastrointestinal infections in the medical field and mastitis, wounds, and scours in the veterinary fields. We have numerous reports, both scientific papers and personal communications, of honey being used successfully to treat ulcers, bedsores, wounds, burns and dermatitis which were not responding to usual methods of treatment, but it has proven difficult to convince those in the medical and veterinary professions that honey is a safe effective remedy to use.

**Sterilization of Honey**

One of the main objections to using honey has been that it may introduce a new infection from bacteria or spores present in the honey. Although it is generally thought that honey is a sterile product, bacteria and spores are able to survive in the honey but it is unlikely that they will actually grow in it unless the water content is too high. One report has shown that disease causing bacteria introduced into honey samples were capable of surviving 1.5 months to 2.4 years at 10 degrees Celsius. Heat treatment or filtration through microporous membranes which are capable of preventing the passage of bacteria and spores are the usual ways medical products are sterilized.

Sterilization of honey by heat treatment is not suitable because any hydrogen peroxide activity would be lost, and although it is more heat stable, there is also a reduction in the non-peroxide activity of manuka honey at the temperatures required to ensure complete sterilization of honey. Filtration is also not suitable because of the high viscosity of honey, and particles present in the honey which block up the pores in the membranes. Gamma-irradiation, which is used to sterilize items such as surgical gloves and dressings which cannot be heat sterilized, was suggested as a possible alternative for sterilizing honey for use in hospitals. It may also be worth considering as an alternative to heat treatment of honey which is required when exporting to the external market.

*Continued on page 11*
To determine whether this would have any effect on the antibacterial activity of the honey, samples were tested for activity before and after gamma-irradiation. The results showed that there was no significant reduction in the antibacterial activity of honeys containing hydrogen peroxide activity and manuka honeys with non-peroxide activity.

**Clinical Trial on Wound Healing**

In conjunction with staff at Waikato Hospital a clinical trial is in its preliminary stages using honey as a wound dressing. The aim is to compare the effectiveness of honeys with the two different types of activity (hydrogen peroxide, and the non-peroxide activity of manuka honey) and also compare these with a standard treatment. So far only manuka honey has been used, and good results are being obtained.

**Honey for the Treatment of gastroenteritis**

Currently, with funding by the Honey Industry Trust, a study is being carried out to determine whether organisms which cause gastroenteritis (diarrhea and vomiting), are sensitive to the peroxide and non-peroxide antibacterial activity of honeys. Again, many reports have indicated that honey is an effective remedy for stomach upsets.

One report in the British Medical Journal suggested that it shortened the duration of bacterial diarrhea and was as effective as glucose at promoting the reabsorption of sodium and water from the intestines. As the major problem with gastroenteritis is that the patient becomes dehydrated, dosing with honey would help to replace lost electrolytes and provide an energy source as well. A pasture blend honey with a high hydrogen peroxide activity and a manuka honey with a medium non-peroxide activity are being compared with an artificial honey (a mixture of sugars at an acid pH similar to that found in honey). The artificial honey is used as a control to determine whether the antibacterial activity is due solely to the high sugar and low pH of honey or to some other factors present only in the honeys. The results show that the organisms tested so far are inhibited by concentrations of 5-8% pasture blend (high peroxide) and 7-11% manuka honey but it requires 20-30% artificial honey to have the same effect, clearly showing that factors other than sugar and pH are providing the antibacterial activity. Although the bacteria tested so far have been isolated from human infections, the indications are that honey could be equally effective and valuable as a remedy for scours in young animals such as calves. It could also be used as an organic alternative to the antibiotic food supplement currently used for other animals including piglets and poultry. This avoids the problem of antibiotic residues. Bacteria isolated from animal sources will be tested in the next stage of the study.

**Effect of Honey on Fungi**

Another project recently funded by the Honey Industry Trust was to determine whether honey had any activity against a range of dermatophytes, i.e. fungi causing skin infections such as ringworm and athletes foot. All the fungi species tested were inhibited by low concentrations of the hydrogen peroxide activity but considerably higher concentrations of manuka honey type non-peroxide activity were necessary for inhibition.

Note: This article has been reprinted from the Spring 1997 issue of Bee Informed.
In addition to the participants themselves, we had 8 faculty members representing the AAS with 2 invited guest speakers coming together to teach and share their knowledge of Apitherapy with this very enthusiastic group of students. Representing the AAS were Frederique Keller, L.Ac., Dr. Chris Kleronomos, L.Ac., DAOM, Dr. Andrew Kochan, MD, Dr. Patrick Fratellone, MD, Glen Perry, Hossein Yeganehrad, Michael Szakacs, Kathy Genova, RN, and Marilyn Graham. Those who presented did an amazing job delivering their wealth of experience and sharing their apitherapy knowledge with others. A very special thank you goes out to them for donating their time and effort at their own expense to share with others what they are so very passionate about, their commitment is invaluable to the AAS as an organization. Guest speakers included Ellie Lobel who delivered a dynamic presentation on lyme disease and Amelia Moody, LMT who presented the propolis salve workshop sharing her hands on knowledge of medicinal plants and herbs that are a common staple in her day to day life. We thank them both for graciously sharing their unique apitherapy experiences with us.

We once again offered a post conference practical workshop, an option that most of the participants chose to partake in. The workshop brought the classroom knowledge into the hands of the participants where they were able to have a hands on experience primarily with bee venom therapy and different BVT technics including test stings, micro stings, full stings, stinging specific locations for different conditions such as Lyme, and apipuncture (a sting along side an acupuncture needle in a specific point). A highlight of the workshop was Frederique Keller, L.Ac. demonstrating veterinary BVT on Leo, a dog that one of the local participants brought so she could learn how to help him with certain conditions of aging. It was interesting to see that the dog seemed so much more energetic after the treatment and he wagged his tail the entire time! The practical workshop was an excellent way to end the conference where everyone mingled and chatted while practicing that which they had spent the last few days learning. It was clear that everyone left the workshop taking with them the confidence that they would need to appropriately and safely practice BVT solidifying what they had spent all weekend learning.

On a lighter note, we had an ongoing silent auction, a 50/50 raffle, and new this year, a Chinese auction where we had everything from books, to soaps, to acupuncture charts and dolls, many bee related products and items, and best of all, hand made cards by Dr. Patrick Fratellone, MD that captured everyone’s attention. The sunset happy hour reception on Saturday night was a huge success, again with most of the participants attending. The setting was beautiful and everyone had a great time mingling and relaxing after a long day in the classroom. By Sunday morning we truly were one big family of like minded individuals exchanging phone numbers and looking forward to our next event.

I also want to express our appreciation to Bill Lewis of Bill’s Bees from Angeles National Forest, CA who provided us with the beautiful and ever so fascinating observation hive that many enjoyed throughout the conference. Bill also supplied the small honey jars filled with his amazing honey that was given to all participants.

This conference was dedicated to Dr. Theo Cherbuliez, MD, a most iconic figure in apitherapy both here in the US and internationally, who passed away on July 2, 2016. A beautiful slide show of Theo was presented on Sunday morning and a paper copy of the September issue of the Journal of the American Apitherapy Society where Theo was commemorated was offered to all participants. We felt it was critical that the participants know who Theo was and how much he globally contributed to apitherapy and the bees. He is sorely missed.

Bee Happy,
Marilyn Graham
**RECIPIES**

**Fire Cider Master Health Tonic**
*By Frederique Keller, L.Ac.*

**Ingredients:**
- 16 oz organic unfiltered apple cider vinegar
- 1/4 cup chopped garlic
- 1/4 cup chopped onion
- 1/4 cup fresh horseradish
- 1/4 cup fresh hot peppers
- 2 organic lemons, sliced
- 2-4 whole ginger slices
- 2-4 pieces of turmeric root/ osha root
- 1/8-1/4 teaspoon fresh pollen
- 1 oz propolis extract
- Raw organic honey to taste
- A few sprigs of rosemary/thyme

**Preparation:**
- Combine all the above ingredients (except for the vinegar) in a quart size glass mason jar & lid & pack 3/4 full.
- Pour in the apple cider vinegar filling it to the top.
- Close tightly and shake.
- Keep the jar in the refrigerator or a cool, dry place for 1 month or longer. Shake well daily. When cider is ready, strain the concoction through cheesecloth or muslin tea towel making sure to squeeze out every last drop. Add raw honey to taste. No need for refrigeration.
- Rest of the mixture can added to rice, used in stir fries, etc.
- Delicious in salad dressings, added to soups, stews, rice dishes, etc.
- Extremely effective hangover cure!

**Dosage:** 1TBSP- 1 shot glass daily for general immune system boost. More if you start feeling ill.
As a current, past, or future supporter of AAS, you are well aware of this phrase: Honeybees - Our allies in healing!

Widely recognized in many cultures around the world, the hive products and the treatments that they are used for significantly reduce suffering and improve one's health and well-being. They are often far less costly than conventional medicine, and they usually have fewer side effects. The American Apitherapy Society plays a vital role in increasing the public's access to this information, and you, as members and participants, support us through your memberships, renewals, and simply by participating. Your support enables us to continue our work and maximize our ability to engage others in the practice of Apitherapy.

In our annual appeal, we are asking for you to help us:

- Continue sending our Newsletter monthly to members, past members and over 3,000 participants who subscribe to it over the web.
- Provide scholarships to students to attend our future Course and Conference.
- Bring outside speakers to our Course and Conference.
- Organize and sponsor Apitherapy workshops throughout the year in different parts of the country.
- Make necessary updates to our website and create more venues for distributing information via our website.

As a nonprofit organization, the AAS relies on the generosity of its supporters. Your tax-deductible contribution may be given through our website under DONATE on the right side of the home page, via this link, or by check sent to the address below. Either way, you'll enable us to spread the word about honeybees—and their integral role in our food and our medicine. Donations of any amount are greatly appreciated and make a huge difference.

With warm greetings for this holiday season,

Frederique Keller, L.Ac., President
The American Apitherapy Society, Inc.
New Members

Arizona
Dave Peterson

California
Jad Dawson, L.Ac.
AlyssaBeth Archambault
Josette Diaz
Ruben Castillo Fuentes
Dr. Craig Keoshian, DC
Margo Shafer

Connecticut
James Murphy

Florida
Carol Knapstein
Lorraine Smith

Louisiana
Esteban Quispe

Massachusetts
Cynthia Cornwell
Renae Barton

Michigan
Mai Lor

Minnesota
Josh McCulloch

New Mexico
Adrian Greigo

New York
John Kolasa
Madeline Breckinridge, LCSW

Oregon
Valerie Brook

Pennsylvania
Michael Schmaeling

Puerto Rico
David Hanig

Rhode Island
Lorraine Lucas
Theodore Sanford

Utah
Susan Nelson

Algeria
Yacine Tibermacine

Canada
Natasha Blazevic
Jelena Zivkovic
Sukhwinder Lally

Finland
Hanna Ruusupihna

Iran
Hade Rafiee

South Korea
MJ Kim, QC

Spain
Rocco Petrizzo

Donors
Juliette Jones, FL

From the President
Continued from page 3

Priscilla’s relentless curiosity about nature, apitherapy and the bees led her to Apimedica in Athens, Greece where we shared many special moments together. Following that, Priscilla helped organize a fantastic Apitherapy workshopconference with the Sonoma, CA Beekeepers that was a huge success and she was a wonderful host and support.

Priscilla, your quiet perseverance, your passion for the bees, and your support of the AAS all these years will be missed. I know you are flying free in the eternal Melissa Garden.

Peace, bees and great health always,

Frederique Keller, L.Ac
President of the American Apitherapy Society

Priscilla Coe
Seasons Greetings!

Let there be bees on earth...
And let it begin with you...