



# International Society for Neuroethology

Newsletter/June 2017

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## THIS ISSUE INCLUDES

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Meet Our New Allen Press Rep



## The Prez Says

*Catharine Rankin*  
President of the ISN



Hi Everyone!

I hope 2017 has been productive for you so far! It has for me. It also has been a good year to date for the ISN—we are just about to have the Neuroethology Gordon Conference in Switzerland—which the program indicates will be a great success. A few weeks ago the ISN Executive Committee met in San Diego and worked with **Justin Marshall** (Local Organizing Committee) and **Harold Zakon** (Program Committee) on plans for the 2018 congress in Australia—put it on your calendar now and start planning to present your work to your fellow neuroethologists. It looks like a

wonderful congress with great opportunities for trips before and after (dive trip anyone?) to exciting and biologically significant locations. I think I will plan for at least a 2 week trip to take advantage of being “Down Under.” The program is already coming together and looks really exciting. You will receive e-mails from the ISN with more information and can always visit the congress website for updates (<http://icn2018.com/>). Join us in Brisbane!

It has certainly been an “interesting” time politically in the world in recent months...we have had several members (particularly from the US) ask us if ISN is going to take a stand about politically-driven changes in science policy and funding in the US. I wanted to take this opportunity to remind our members that the ISN is incorporated as a 501C3 organization in the US. This designation exempts us from paying taxes in the US and allows our members to make tax deductible donations to our organization. As a 501C3, we are prohibited from making any type of political statement or backing any political party or candidate as an organization. Thus, we cannot come out as an organization in any way that could be interpreted as political, no matter how strongly we feel. That being said, we *can* all take a stand for science, for fact-based policy, and evidence-based decision making. As neuroethologists, we should continually remind people about the importance of behavioral analyses. If you haven't read this article from Neuron (**Neuroscience needs behavior: Correcting a reductionist bias**, [http://www.cell.com/neuron/abstract/S0896-6273\(16\)31040-6](http://www.cell.com/neuron/abstract/S0896-6273(16)31040-6)) link to it immediately. Pass it on, present it in journal clubs, and talk about it with your students and colleagues. Think about the possibility of writing or collaborating on similar reviews on the value of carrying out careful behavioral analyses before jumping in to dissect cellular and molecular mechanisms. Our community is ideally placed to be strong advocates for the importance of high quality behavioral studies in fostering understanding of how nervous systems produce and regulate behavior.

In addition to advocating for behavior in the scientific community, we can all also be a voice for science in our larger communities. Participate in outreach programs, bring your science off-campus, and remind people that science is awesome, and at the same time relatable! Show people that anyone can learn to think scientifically and can use the scientific approach to understand the world around them better. That is a stand we CAN take as an organization and a way we CAN make a difference!!

Thanks for everything you are already doing—maybe if you have found a particularly effective way to reach out you will take the time to post your ideas on the ISN

Facebook page. And don't forget to use our Facebook page to communicate with the ISN membership, to post job announcements, highlight conferences people might be interested in, and, of course, to point out exciting new research that our members might have missed, including your own. 'til next time—may all your experiments replicate, your papers be accepted, and your grants get funded!!

### **Catharine Rankin** **President, ISN**

(Here's the citation for the Perspective mentioned in this column: Krakauer JW, AA Ghazanfar, A Gomez-Marín, MA MacIver, and D Poeppel. 2017. Neuroscience needs behavior: Correcting a reductionist bias. *Neuron* 93: 480-490.)

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## **REMEMBERING FRANZ HUBER**

**ISN Secretary Susan Fahrbach** remembers reading a paper by **Franz Huber** that introduced her to fundamental concept in neuroethology.

**Prof. Dr. Franz Huber** passed away on April 27, 2017, as the age of 91. Huber received many honors in his lifetime, but he will be particularly remembered by neuroethologists as a co-founder of the ISN. In recognition of his many contributions to our understanding of acoustic communication and his leadership in the field of neuroethology, he was designated an ISN Fellow in 2014.

Huber was director of the Neuroethology Department at the former Max Planck Institute of Behavioural Physiology in Seewiesen from 1972 to 1993. His lifelong interest was the neural basis of behavior, and his research focused on crickets, katydids, and cicadas. The ISN website describes him as the founding father of cricket neurobiology, and also notes his warmth, enthusiasm for research, and extraordinary skill in as a communicator of science to a broad range of audiences.

Although many current members of the ISN have personal remembrances of Franz Huber, I was never fortunate enough to meet him or hear him speak. But Huber played an important role in my development as a scientist through his writing. When I heard the news of his passing, almost I immediately remembered a day long ago sitting in the elegant and quiet library of The Rockefeller University in New York City. I was on the verge of completing my doctoral dissertation in behavioral neuroendocrinology and would soon join the laboratory of Jim Truman at the University of Washington in Seattle as a postdoc. I felt excited and honored by the opportunity to switch from research on rodents to the tobacco

hornworm (which at the time reigned supreme in Seattle), but was also anxious about joining a research community about which I knew so little of customs and origins. Even the terminology was unfamiliar. I struggled with one term in particular that seemed to be everywhere in the 1980s: **identified neuron**.

After spending an afternoon reading papers on hormones and metamorphosis, I needed a break and picked up a copy of Scientific American from the "leisure reading" table. Unwittingly, I had in my hand an issue containing an article by Franz Huber and John Thorson titled simply: Cricket Auditory Communication. I was captivated from the opening paragraph, which describes the 1913 "telephone" experiment of Johann Regan, a high school teacher in Vienna. In this experiment, a female cricket was induced to approach a telephone earpiece in response to a male chirping on the other end. And then the third paragraph of the article tackled exactly the issue I was struggling with, stating: **Many of the largest neurons can now be identified readily in all members of a species, much as a particular tooth is readily identified in person after person**. I finally "got" the concept of identified neuron. I read on in delight, filled with wonder.

When I heard the news of Huber's passing from other ISN members, I reflected on that analogy and the hour spent reading that article. I wanted to hold an actual copy of that issue of Scientific American in my hands again, but my university library has moved 1985 to off-site storage. So I turned to Google Scholar. A simple search for "Franz Huber Scientific American" yielded the article I sought: [http://www.utoronto.ca/~amason/courses/coursepage/week2/sciam253\\_6.pdf](http://www.utoronto.ca/~amason/courses/coursepage/week2/sciam253_6.pdf).

My thirty-two year old memory of this article did not deceive me. The article was as delightful and refreshing and beautifully written as I remembered. I can't think of any better way to honor Huber's contributions to our field than sharing this paper with you. I hope that you, in turn, will share it with your colleagues and, especially, your students.



## 2016 YEAR-END FINANCIAL REPORT

ISN Treasurer **Karen Mesce** provided the following financial report for 2016 at the May 2017 meeting of the ISN Executive Committee. All figures are given in U.S. dollars.

<b>ISN Total Assets 12/31/2015:</b>	\$521,566.62
<b>ISN Total Assets 12/31/2016:</b>	\$546,573.29
<b>Mid-Year Total (May 2017):</b>	\$561,000.00

**Cash Revenue** \$53,636.01  
(membership dues, donations, return of seed money for ICN 2016, interest on cash deposits)

**Investment Revenue** \$21,901.28  
(Schwab Portfolio)

**Expenditures** (\$50,530.25)  
(Allen Press management fees, Konishi Research Awards, Capranica Prizes, Developing Neuroethology Awards, Young Investigator Awards, Heiligenberg Student Travel Awards, ISN Support of Andes School of Neuroethology, bank wire costs and credit card transaction fees)

### Highlights

- The financial status of the ISN is excellent.
- All seed money provided for ICN 2016 has been reimbursed.
- Almost all expenditures directly support the membership, with a strong focus on young members.
- Investment revenues track recent gains in U.S. financial markets (many thanks to our proactive Treasurer for steering us through uncharted waters).
- The ISN is in a position to continue its established activities, including providing seed money for ICN 2018.

### Questions?

- Direct specific questions about ISN finances to the ISN Treasurer, **Karen Mesce**.
- Interested in serving in the future as ISN Treasurer? This is an appointed position restricted to U.S. citizens because of tax filing requirements. If you might consider serving the ISN with your financial acumen, why not discuss exactly what the position entails with Karen? The Treasurer is a member of the ISN Executive Committee and provides significant guidance in the planning of ISN activities.

## EXECUTIVE COMMITTEE REPORT



San Diego, May 2017. From left to right: President Catharine Rankin, President-Elect Eric Warrant, Brisbane Congress LOC Chair Justin Marshall, Past-President Peter Narins, Montevideo Congress Representative José Peña, Secretary Susan Fahrback, Brisbane Congress PC Co-Chair Harold Zakon, Treasurer Karen Mesce.

Here's an overview of the many topics covered at the annual meeting of the ISN Executive Committee on May 6, 2017. To assist in the important task of planning for the

2018 Brisbane Congress, the Executive Committee was joined by **Justin Marshall**, **Harold Zakon**, and **José Peña**. Our new Allen Press Representative, **Terry Leatherman**, joined us via Skype.

- Financial Report (**Karen Mesce**)
- Report from Allen Press (**Terry Leatherman**)
- 2018 Congress
  - Local Organizing Committee Report (**Justin Marshall**)
  - Program Committee Report (**Harold Zakon**)
- Presidential Symposium Plans (**Catharine Rankin**)
- Advance Planning for ICN 2020 in Lisbon (**Catharine Rankin**)
- Secretary's Report (**Susan Fahrback**)
- General Business (**Catharine Rankin**)

## Highlights

At the time of the Executive Committee meeting, the membership of the ISN was 389. This represents a decline in both student and regular membership. Membership has a tendency to increase during congress years and decrease during the intervening year, so it is unclear if this number is a cause for concern. For comparison, membership in 2016 (a congress year) was 500 while membership in 2015 (a non-congress year) was 438. It was agreed that we should continue to track membership numbers closely and develop new mechanisms to encourage members to renew as soon as their membership expires. It was noted that one category in which we have seen steady growth is in the number of life members—over the past ten years, the number of life members has increased from 11 to 38.

Analysis of our members' locations supports our view that the ISN is a truly international society: 22 countries are represented by current members. The largest bloc is from the U.S. (42%), followed by Germany (14%), Canada (7%), United Kingdom (6%), Argentina (5%), Australia (4%), Japan (4%), France (3%), Israel (3%), and Sweden (3%), and 12 other countries. This means that, in non-Congress years, primary contact among members is either at the Neuroethology GRC or via the web site. This led to a lively discussion of how the ISN website can be modernized to communicate better with members and allies. Stay tuned—it seems likely that we will be working with Allen Press in the near future to make our website more useful and engaging.

**Justin Marshall** provided a comprehensive overview of the venue for the Brisbane Congress. Members can be assured that no detail has been overlooked in the planning.

More details will be pushed out to members in the coming months, but two items of note are the many opportunities that Brisbane presents for side trips (both near and far) of biological interest and that the concluding banquet will be an Australian-style barbecue. Also of note is the new starting date of July 15 (instead of July 16).

**Harold Zakon** and **Karin Nordström** are Program Committee Co-Chairs for the Brisbane Congress. Harold updated us on the plans for speakers and symposia. Again, you'll be hearing much more as invited speakers commit and the program is finalized in the months to come. **Catharine Rankin** wrapped up the congress-focused portion of the meeting with a discussion of her plans for the Presidential Symposium. Based on a recent visit to Portugal, Cathy also provided a sneak peak of what 2020 holds for the ISN: we'll be at the Estoril Conference Center in Cascais, a beautiful beach suburb of Lisbon.

All of those involved in planning for Brisbane are committed to ensuring that the program reflects the geographic, gender, age, and ethnic diversity of our membership. **Justin Marshall** noted that airfare to Australia might pose a financial barrier to students interested in participating, and urged the ISN to consider broadening its support of student travel for 2018, in addition to seeking as much external funding as possible.

The daylong meeting wrapped up with a discussion of the behind the scenes work of running a society—renewing our contract with our management society, appointment of members to award committees, the pros and cons of affiliating with other scientific societies etc. The Executive Committee will be taking some topics to the ISN council in the coming months, so be on the look-out for new ideas.

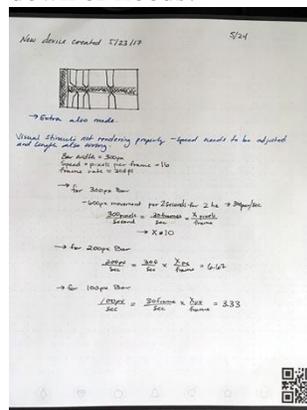


## EARLY CAREER PERSPECTIVE: LAB NOTEBOOKS

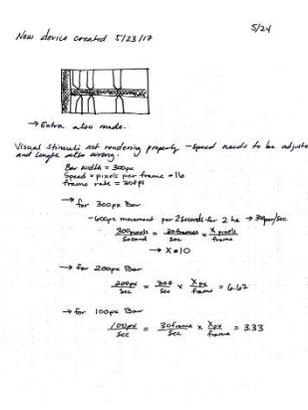
Early Career Representative **Cynthia Harley** (Metropolitan State University-Twin Cities) has been thinking hard about what makes a good lab notebook. Here she provides a review of a product that takes a very modern approach to old problems. Disclaimer: please note that a description of any product in this newsletter represents the author's personal opinion, not an endorsement by the ISN.

Lab notebooks have always been problematic for me. I am what many would call *particular* about the feel of a lab notebook. As a result, I have tried numerous notebooks on the market and have found many to be lacking in feel, ruling method, page numbers... the list goes on. Over the years, I have been attempting to convert to digital notebooks, but to no avail. I like having pen and paper while working. It just feels...right. However, this creates a major problem. Remember, lab notebooks are property of the lab. But what if you are engaged in a collaborative project with a former lab and need to keep the notebook? What if you have started your own lab and need that page where you wrote down a protocol from your postdoc or doctoral years? What if you have need for that information and the notebook is in another city/state/country? This problem only becomes greater as you generate more notebooks. Multiple notebooks are inevitably split between multiple projects, and I never had the right one with me when I needed it. I know that some type a digital notebook and keep in in the cloud, but then what do you do if you need to make a sketch? Amazingly, I have found all of these problems to be solved by a product called the Rocketbook Wave.

automatically (via your upload location) or to print into a pdf. Many such programs will even perform handwriting recognition and will transcribe your notes. Several can even make the notes searchable. This has solved many of my issues—the notebook can be shared easily, different sections and pages are easily separated into different projects (just check a different symbol at the bottom), and I can enjoy the ease of writing and drawing on paper with the added benefits of a digital copy. In addition, because the data are stored in the cloud, your information can be accessed from anywhere and is safe even if the lab burns down or floods!



A native Wave page

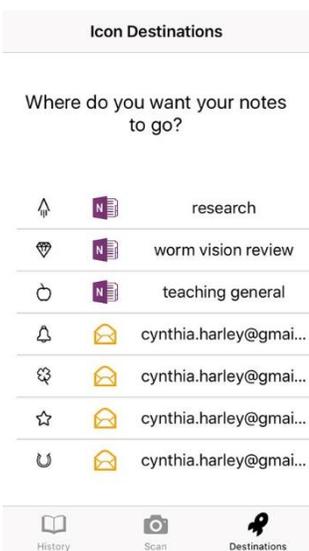


A beautiful pdf

The second reason the Wave is so special is the form factor of the notebook—this in and of itself is a thing of beauty, in my opinion. It comes in two sizes (regular, 8.5 x 9.5 inches or executive, 6 x 8.9 inches). Rather than being ruled the Wave has dots, which allows for more flexibility in creation of tables, graphics etc. It is well bound and takes a pretty good beating. It also has page numbers.

Third, and I know this one is going to be controversial—it is re-usable. Once the notebook is scanned and uploaded to a location or format of your choice, you can erase it by placing it in the microwave with a cup of water. Oh you did not want to erase it? Just stick it in the freezer and everything will come back. Is this beneficial? We are entering the digital age and, frankly, we need to limit the loss of trees and lab space. I realize that, for lab notebooks the thought of erasing might make some shudder. After all, part of proper lab notebook protocol is that it should not be erasable and pages should not be able to come out; however, we are in a digital age and digital files can be edited. I envision this as a digital format that is free from limitations of digital formats. Don't buy it? OK fine, the thing is also great for keeping your notes for teaching and making them easy to scan and upload for student use.

If you are like me, you want to know how the notebook erases—the pens are the magic there. You can use anything in the Pilot FriXion line of erasable pens. I like this



What makes the Wave special? First, it is that the Wave, in combination with the Rocketbook App, will upload your notebook pages to any one of a number of locations using your smartphone. This is not a tablet: it is just special paper. The image is then enhanced and sent to the indicated location (e.g. e-mail, Dropbox, Evernote, Google Drive). The location of the upload is defined by checking a symbol located at the bottom of the paper. I have my Wave automatically scan pages into

my digital notebooks within Microsoft One Note. This makes it easy to share your notes with your collaborators

because it allows me to keep things neat and tidy—so if I make a silly spelling mistake, I just fix it and all is well. The Wave notebook only erases 5 times, but at \$27 it is still definitely worth it. Want one that erases an infinite number of times? Try the Rocketbook Everlast (\$37), which erases when wiped with a wet cloth but still reportedly maintains the feel of paper without the smudging of whiteboard. Admittedly, I am quite clumsy and have spilled on my notebooks a lot, so I am worried about investing in an Everlast, but will be testing one soon to see if this is an issue. Like the uploading ideas but want a notebook that does not erase? Rocketbook's One (\$17) is the notebook for you.

In conclusion, I know that many of us have struggled with the switch from a paper lab notebook to digital. Both have upsides and downsides. Digital can exist in the cloud and be shared with collaborators, but freehand drawing is not possible, and I have found it hard to keep my digital notebook updated while I am busy at the bench. I have tried tablets with limited success. I love paper notebooks but have a hard time retaining access to my information and hate the format of most notebooks for one reason or another. The Rocketbook is a hybrid and it is amazing.

Interested? Check out a new take on the classic lab notebook at <https://getrocketbook.com/>



## HEILIGENBERG TRAVEL AWARD WINNERS

Congratulations to the 2017 Heiligenberg Travel Award winners and their supportive mentors and letter writers! All four students will be attending the 2017 Gordon Research Conference in Les Diablerets, Switzerland.

**Charlotte Doussot** (Universität Bielefeld) will present her research on the use of local and global cues by homing bumblebees. Her mentor is **Martin Egelhaaf**, and her second recommender was **Olivier Bertrand**.

**Maayan Kaiser** (Ben-Gurion University of the Negev) will present her research on the impact of wasp venom on cockroach brains. Her mentor is **Frederic Libersat**, and her second recommender was **Hans-Joachim Pflüger**.

**Daniel Knebel** (Tel Aviv University) will present his research on leg control in the desert locust viewed as an interaction of CPGs, sensory inputs, and activity in higher motor centers. His mentor is **Amir Ayali**, and his second recommender was **Hans-Joachim Pflüger**.

**Florencia Scarano** (University of Buenos Aires) will present on the binocular properties of the lobular neurons of crabs. Her research is co-mentored by **Daniel Tomsic** and **Julieta Sztarker**, and her second letter writer was **Ana Silva**.



## NEW ASSOCIATION MANAGER TO PROVIDE SOCIETY SERVICES TO ISN

The ISN Newsletter asked Allen Press to help us introduce our new representative, **Terry Leatherman**, to the ISN membership. Why? Almost every communication you have with the ISN is routed through Allen Press; the better Terry knows us and the better we know him, the more productive this important relationship can be.

Starting this spring, a new association management executive has begun providing services and counsel to the leadership and members of ISN. In February, **Terry Leatherman** joined Allen Press, a Lawrence, Kansas based printing and publishing company, as an Association Manager. ISN partners with Allen Press, which provides



a variety of administrative services to benefit our Society. While new to the Allen Press team, Leatherman has excelled during a 30+ year career as an association management executive. He has served in roles as President and CEO responsible for revenue generation and membership and a government affairs strategist and lobbyist.

*I have always loved working with not-for-profit organizations. When two or more people share a common interest, they realize they can accomplish more if they work together in association. When they unite behind a common mission, their united effort can bring important improvements to our society. Leatherman continued, In the case of the International Society for Neuroethology, hundreds of scientists and academics have united to better understand the neural mechanisms behind natural behaviors, and in pursuit of this knowledge important discoveries are happening to benefit people everywhere. Leatherman looks forward to working with ISN's leadership to make our Society even more relevant and engaging. He added, The ISN's membership comprises impressive and driven individuals who have important scientific work to perform. It is my hope I can work with*

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*the Society's volunteer leaders to help increase the connection and involvement of current members with ISN and to make membership more attractive to prospective members.*

For many years, Allen Press has worked with scholarly societies, such as ISN, to provide support functions. Services Allen Press provides to ISN includes overseeing the annual membership retention campaign, member communications and accounting services.

*The ISN is happy to welcome Terry to the team that will help us all prepare for Brisbane. And in case you are wondering exactly where Brisbane is...*

