

# Synaptic Connections



 The Official Newsletter for CPA Division VIII- Neuropsychology

## Inside this issue:

Letter From Chair	1
Intro To The Editor	2
Grad Students Applying for Internships	3
Neuroplasticity and Cognitive Rehab	4
Culturally Competent Assessment	5

## Letter From Your Chair

Dear Members of the Neuropsychology Division,

This is our first newsletter under the stewardship of Editor Dr. Roxanna Rahban (Division VIII Secretary) and Associate Editor Dr. Eric Freitag (Division VIII Member at Large).

Your Division has done so much in 2014 and 2015 and we would like to share our highlights with you all.

Our first big project was to award eight scholarships to deserving community college students. These students competed to win the chance to attend the May 2015 CPA convention for a day. This project was spearheaded by Board members Dr. Robert Tomaszewski, Monica Ellis, and myself.

Mentorees were present for the 6-hour Erin Bigler Institute sponsored by our Division. Board Member Dr. Thomas Hardey was responsible for bringing Dr. Bigler to California. Dr. Bigler is an international expert on brain imaging and his presentation was absolutely awesome.

The eight winning students were given the chance to interact with our Division Board and then they received awards that evening, honoring them for their motivation, interest and commitment to the field of neuropsychology. Their picture here shows them receiving the awards. We hope to foster interest in our field, early on in the educational process.

*(Continued on page 2)*

### Editor-in-Chief

Roxanna Rahban, Ph.D.

### Associate Editor

Eric Freitag, Psy.D., ABN

### Contributing Authors

Lin Nelson, Ph.D., ABN  
Roxanna Rahban, Ph.D.  
Monica Ellis, MA  
David Raffle, Ph.D.  
Mary Goodarzi, MA



Dr. Nelson with CPAGS Mentorees at the 2015 Conference

(Letter From Chair—Continued from page 1)

These deserving young men and women have faced many challenges to further their education. We will be interested in following their paths to see whether they are among our future neuroscientists!

Our second big project, tackled by Board members Dr. Oren Boxer and Monica Ellis, was to improve communication among our Division members. We have been working hard to create a better way to convey information to our members. We improved our website (linked from the CPA website) and have created individualized member email lists to better communicate with you. So, in addition to the listserv mechanism, you all will be hearing from us through customized e-mailings.

This newsletter was another huge project and work in progress, headed by Dr. Roxanna Rahban. This first issue contains an Index of Division News, which we hope you will take the time to peruse.

Plus, check out the pictures of Dr. Thomas Hardey receiving an award for Distinguished Service to the Field of Neuropsychology. Our student Board member, Monica Ellis, received the Student Award for Distinguished Service.

Finally, in keeping with what WE can do for YOU, our membership, we need feedback.

Some of you want legislative updates. Others want personal assistance. Some have asked for ways to improve their businesses. Some want to reach out and meet with other members to case conference.

Our Division Board has members from all over the State of California ready to help. We meet the last Friday of every month.

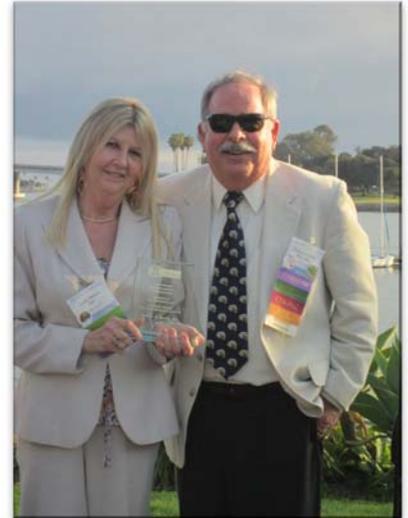
In short, we are here to serve YOU. Please email me

at [LNelson@mednet.ucla.edu](mailto:LNelson@mednet.ucla.edu) and let me know how I can best serve you, our members. Any way we can help you, please ask.

Sincerely,

Linda D. Nelson, Ph.D., ABN,  
*Chair,*

*Neuropsychology Division VIII, CPA*



**Dr. Hardy (right) receiving award for distinguished service. Pictured with Dr. Nelson.**

## **Introducing Our New Editor, Dr. Roxanna Rahban**

**D**r. Roxanna Rahban is our Neuropsychology Division VIII Newsletter Editor. Roxanna received her Ph.D. in clinical psychology from UC Santa Barbara. She is an early career member of our Division and is enthusiastic, energetic and filled with ideas to keep our members informed and connected. She received post-doctoral training in neuropsychology, and now has a private practice in Los Angeles.

One of the things that's so great about our newest Board member is she wants to reach out to you, our members, in so many ways. This newsletter will be a major source of news and communication from our Division. You'll see Roxanna's special touch in the

news and feature articles. Interviews by student members of seasoned neuropsychologists. Informative articles by our future Chair. And kudos to Dr. Eric Freitag, our Division Board member, who assisted greatly in the layout and production of the newsletter. One idea Roxanna has brewing is to have members of the division meet locally, socialize, mingle and talk about complicated and interesting cases. She knows the challenges of working on forensic, med-legal, workers' comp, or brain injury/rehab cases and that working in private practice can be tough. It's not just about learning, though, it's about making new friends

(Continued on page 3)

(New Editor -Continued from page 2)

and starting collegial relationships. The more seasoned members know how tough it was starting out. Do we work with kids? Adults? How do you start a business? Billing insurance? Use psychometrists? Find referrals? Roxanna hopes to connect us better and, most importantly, make it happen! Look for more on this front in the months to come.

## Graduate Students Applying for Internships

By Monica U. Ellis, M.A.

For many graduate students in psychology, the prospect of applying for internship can lead to a smorgasbord of emotions: excitement, anxiety, eager anticipation, as well as worry about the internship crisis statistics and the possibility of not matching to an internship site. Many of us have also heard stories from classmates who have recently completed their internship applications and interviews and the struggles experienced during the internship process. The recent internship match results announced February 20th resulted in only 66% of students from APA-accredited programs matching with an APA accredited internship site during Phase I. The fact is that many highly qualified students did not match because there are just not enough training slots open to place every student who applies. I hope to address some of the common obstacles encountered by fellow graduate students and offer some resources that might help reduce some angst and offer direction for internship applicants.



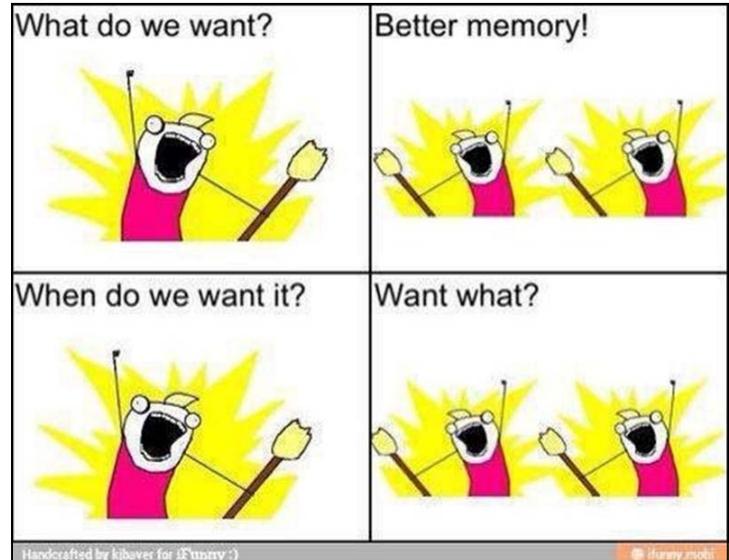
After exploring various internship sites within the field of neuropsychology, several sites from The Association of Psychology Postdoctoral and Internship Centers ( [www.appic.org](http://www.appic.org) ) have been compiled into a list. In addition to the sites that offer neuropsychological testing as part of their training program, an additional list of APA Division 40 (Neuropsychology heavy) internship sites have also been made available for review. While I have in-



Welcome, Roxanna...and a big THANK YOU for all your hard work.

Synaptic Connections Editor  
Roxanna Rahban, Ph.D.

## Today In Neuropsychology Humor!



cluded several links and documents for further resources and guidance, I have gathered some informative suggestions and tips from students who have completed the internship process.

First and foremost, an applicant should always be themselves, be open to talk about who they are, and their hard work performed. Now is the time to shine! When applying to sites, one should apply to sites that are a good match with regards to his or her interests, training objectives, and career goals for the future. Come interview time, directors can usually sense if an applicant chooses the site solely based on their reputation or because it's less than 5 miles away from home. In terms of clinical experiences prior to internship, directors do not expect nor desire to train someone from "ground-zero." One should already have some relevant clinical experience with regards the services provided or populations served. Their job is to "round out" one's training. The trajectory of experiences should fit with what they offer, and their

(Continued on page 4)

program should complement the areas in which an applicant desires continued professional growth. During the interview phase, it is important to ask questions and speak with the current interns about their experiences with the site. Feel free to inquire about the program's values for comprehensive vs. focused training, work-life balance, and any related concerns. Finally, don't forget to relax and enjoy the process. Although this last point is easier said than done, it must be done. Be intentional about taking time to unwind when necessary and navigate this journey with some ease and calmness within. Have trust in yourself and the process that things will work out for the good eventually in the end.

Book from APAGS on everything internship related: <http://www.apa.org/pubs/books/4313034.aspx>

Blog with tips on understanding the match process, writing great internship essays, and how to get and keep a support network as you navigate the application process: <http://www.gradpsychblog.org/tag/internship/> "Nailing the Interview" video: [https://drive.google.com/open?id=0BwHHGLhi\\_4i-UGk2WnFoVjR0ajQ&authuser=0](https://drive.google.com/open?id=0BwHHGLhi_4i-UGk2WnFoVjR0ajQ&authuser=0)

Feel free to contact Monica Ellis for further questions at [monicaellis@fuller.edu](mailto:monicaellis@fuller.edu).

Also, let us know if you have any additional resources to share with the Division VIII student body!



## "You're Serious!" – Neuroplasticity and Cognitive Rehabilitation

By David L. Raffle, PhD.  
Division VIII Member

Neuroplasticity is the brain's natural ability to reorganize neural pathways – to regrow, repair, and "rewire" its neural circuits – in response to new situations or environmental changes. This occurs throughout the process of lifelong learning and when the brain is forced to compensate and adjust its activity in response to injury or disease (Schwartz & Begley, 2002).

A child's brain is incredibly plastic and resilient. Even if the entire left hemisphere, which contains most all language functioning, is removed before the age of four or five, the child can still learn to talk, read, and write. However, the common belief that an adult brain loses its plasticity when childhood ends, and thus cognitive rehabilitation is a waste of time, has been proven false in a large number of studies. For example, in one study by Maguire et al. (2006), London taxi drivers, who have a remarkable ability to acquire and use knowledge of a large complex city, had greater gray matter volume than the average person in the mid-posterior region of the hippocampus—the area of the brain where mental maps of the environment are stored.

The adult brain is not "hard-wired" or resistant to change. Evidence exists for neurogenesis, the formation of new nerve cells to replace damaged ones, and for neural pathway regeneration. Specifically, healthy neurons in adjacent areas grow new nerve endings to reconnect with neurons whose links had

been severed, and to establish new connections to send and receive information from neurons in more distant, undamaged circuits. The goal for treatment following a brain injury is to form new neural pathways so that the original function of the damaged neurons can be reconstituted. While some of this occurs in response to the injury itself, most occurs in response to training, or cognitive rehabilitation.

The brain is nothing if not efficient, and very little energy is wasted in performing the very complicated tasks of keeping us alive and the near infinite number of individual functions necessary for us to navigate the world around us. As a consequence, the brain can be a bit lazy. When we ask it to engage in something that requires excess energy, such as to form new connections and rewire itself around a damaged area, the brain will make a limited effort and go back to the homeostasis it prefers. During cognitive rehabilitation, we tell the brain to get up and start working. The brain then, as a result, might say "You're serious!?"

By giving the brain structured sensory input and structured activity, it will provide additional input to circuits, resulting in reconnections of partially disconnected neural circuitry (Sohlberg & Mateer, 2001). The very same neural mechanisms that we use during normal learning are activated, resulting ultimately in some recovery of the lost functions. "Injuries sustained after acquisition of a skill may be associated with substantial recovery of abilities, as cortical networks for skills have already been established" (Sohlberg & Mateer, 2001, p. 62).

(Continued on page 5)

*David L. Raffle, PhD, is the Director of Raffle Brain Institute in West Los Angeles. He is a clinical and forensic neuropsychologist with three decades of experience working with individuals of all ages with cognitive and memory impairments. He performs clinical and forensic neuropsychological assessments for children with learning disabilities, adolescents and adults with traumatic brain injury, and elderly patients with possible dementia.  
www.RaffleBrainInstitute.com.*

## **Culturally Competent Neuropsychological Assessment: Reflections of an Interview with Dr. David Lechuga**

**By Mary Goodarzi M.A., Roxanna Rahban Ph.D.**

**W**ith our ever-growing immigrant and multicultural populations, there has been an increase in the need for neuropsychological assessments that are culturally sensitive. We live in a society with such a diverse ethnic population and the Universalist perspective has not been the ideal. We have come to realize that culture and language do affect cognition and psychometric data. If psychologists do not take time to understand the impact of culture, there will likely be a misunderstanding of an individual's true brain functioning, accurate case conceptualization, and consequently, appropriate treatment planning and support services.

First and foremost, psychologists should take a step back and assess whether they truly understand the culture of the individual being assessed. It is important to have an accurate understanding of a client's value system, how they view illness, the role of healthcare providers, and how they deal with treatment modalities that may or may not mesh with their worldviews. Additionally, psychologists should continuously consider preconceived notions or potential biases of the individuals' cultural backgrounds when they are seeking assistance. One must always ask, "Do I have any preconceived biases?" and work on being aware of how these views affect his or her clinical work. Not only is having a cultural bias powerful, but also is having the expectation that a client will not perform well on assessments. Such in depth cultural awareness and competence requires ongoing professional development, including consultation, supervision, and mentorship in the field.

In California, we have an ongoing need for informed psychologists who should ideally be bi-lingual, tri-lingual and have primary linguistic competence in

various languages, such as Spanish, Mandarin, Farsi, Arabic, and Russian. Even with the growth of many bilingual psychologists, it continues to be difficult to construct and administer valid assessments for many other languages. Some of the commonly used assessments do not exist for other cultural groups. It has been suggested that neuropsychologists who intend to assess non-English speaking patients should speak the same language as the individual being assessed. One should strive to have the most appropriate tools (i.e., cultural and linguistic competence) to assess a particular client. If that is not possible, then one should work with a colleague who speaks the language. Furthermore it is not advised to use an interpreter into this equation because they would not likely provide the most reliable and accurate assessment data. Dr. David Lechuga, for example, shared with us that he examines some individuals with colleagues, such as Dr. Gallardo. He shared that "In order to be culturally competent and practice ethically, it requires two of us because the complexity of an individual's culture is that significant."

With regards to the selection of tests, psychologists should be cautious about which tests they use with ethnic populations. A primary factor for consideration is the examinees' education level. Dr. Lechuga also shared that in California, "we have so many diverse Latino clients, such as Mexicans from different regions of the country, and we need to use tests that have been standardized on each unique ethnic group." However, our current tests have not all been stratified for specific educational levels within the heterogeneous Latino population. As a result, reliable reference data is an ongoing challenge for neuropsychological assessments. Moreover, when using personality tests

(Continued on page 6)

such as the MMPI-2 or the PAI that were translated into another language (e.g., Spanish), translated test items are complex and may be difficult to interpret, even with the appropriate educational background. As a result it is still difficult for a monolingual Spanish speaking client to fully understand the true intended meaning of a test question. Although it might appear to be the gold standard for monolingual clients, a Spanish version of a personality test may or may not entirely equate to an English version and such translations likely need to be written in a manner that is linguistically appropriate for the population tested.

As psychologists, we are ethically responsible for developing appropriate and necessary levels of cultural competency in order to conduct our clinical work in the most professional manner. We are always developing our internal processes/cultural awareness and we understand that, like many things, our professional growth is also a work in progress. Likewise, it is important to remember that the assessments we use are subject to statistical noise and limitations – they cannot always tell us the complete truth about every human being. These tools simply provide one source of

data that may, at times, be biased. As a result, it is our overarching goal to conceptualize each human being in a holistic manner and to always remember that assessment tools provide a piece of the puzzle among an array of other variables and considerations when evaluating every unique patient.

Thank you, Dr. Lechuga, for sharing your knowledge and words of wisdom with us regarding culturally competent neuropsychological testing.