

### A Message From Your Editors:

Volume 1, Issue 1, October 2011

Hello and welcome to SPAU@Stern's first issue!

We are so excited to have the opportunity to create the first official Stern College Speech Pathology and Audiology newsletter publication. The purpose of SPAU@Stern is to give all students- Speech Pathology majors and non- Speech majors alike- a chance to learn new information about the field. The articles included in this newsletter cover a wide range of topics, such as summer internships, speech or hearing- related books or films, student interviews, and SPAU in the media.



Davina Simhaee Founder, Editor & Layout  
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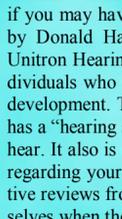
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As Speech Pathology and Audiology are continuously growing disciplines, our primary goal is to provide you with the latest information and encourage you to think "outside the box" within the field. We will keep you updated with Speech Pathology and Audiology events that are happening at Stern, as well as, lectures outside of the college. Be sure to check out our upcoming events section to find out the dates of the graduate school fair and lectures. We hope that you enjoy our first issue and learn as much as we have!

With warm regards,  
Davina Simhaee & Chani Markel

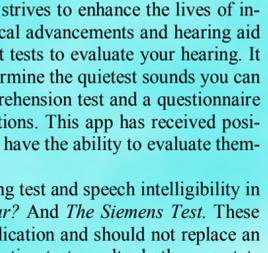
### iHear! The Newest iPad "Apps" for Audiology

By: Leigh Cohen



With the recent death of Steve Jobs, the public has increased its awareness and appreciation of our generation's frequent use of technology and how this advanced era of "apps" has changed our lives for the future. Jobs left behind a legacy of creativity, drive, and passion for making a difference in this world. If you own an iPad, iPhone, iPod, or if you've seen one of the many Apple advertisements, you know that for almost anything you need to get done, "there's an app for it." This popular slogan has been utilized from anything from cooking, to weighing items, to shopping, to checking weather, to translating, and much more. You name it, they have an app for it. So it is not surprising in this technological age, Audiologists have also used this advancement to their advantage. There are a number of new apps that have been developed to assist both audiologists and the general public. These applications are used in aiding people to assess their own hearing or even help audiologists do further testing on patients. The feedback from these apps has not only been positive but has motivated innovators to develop the next "big app" that will change the course of Audiology for the future.

One of the better-known Audiology Apps, created by *Eyemaginations Inc.* is called the *Luma Audiology App*. This application is an amazing tool which aids audiologists by making topics such as hearing losses, balance issues, treatments, and causes easy to explain to patients. The app provides videos, simulations, and images that can give patients a quick and engaging education in Audiology. For example, the app presents a simulation of the inner workings of the ear, portraying where a hearing loss may stem from. Other videos explain the vestibular system, binaural hearing losses, tinnitus, hearing aids, and more.



*uHear* is another app for Audiology which allows you to test your own hearing. This type of app is quite popular; many other companies have replicated the essential idea with slight distinctive twists on their respective apps. This screening test enables you to determine whether your hearing is within normal range or if you may have a potential hearing loss. It was created by Donald Hayes, Ph.D., Director of Audiology for Untron Hearing. Untron Hearing is a company which strives to enhance the lives of individuals who suffer from hearing losses by technological advancements and hearing aid development. The app provides you with three different tests to evaluate your hearing. It has a "hearing sensitivity" test which allows you to determine the quietest sounds you can hear. It also is equipped with a "speech in noise" comprehension test and a questionnaire regarding your performance in common listening situations. This app has received positive reviews from customers who are enjoying that they have the ability to evaluate themselves when they are concerned about their hearing.

Other similar apps also provide hearing screening test and speech intelligibility in noise tests. Such apps are titled, *Senses – What U Hear?* And *The Siemens Test*. These apps provide the disclaimer that it is not a medical application and should not replace an audiological examination. In the case of receiving negative test results, both apps state that the patient should refer to a local audiologist. However, this revolutionary application has been carefully developed to test and ensure the most precise results possible; the *Siemens Test* in particular has an accuracy rate of 96 percent. Additionally, the app makes clear to the patients that the test is independent from language. Because the test does not depend on the patients' proficiency in a specific language, people from all over the world are able to use it.

One of the more amusing and educational Audiology apps for future Audiologists is *The Hearing Loss Simulator*. This app gives you the option to choose a specific hearing loss configuration and allows you to listen to sounds as though you had that hearing loss. With this app, you can also record and play back your own voice at different hearing levels. This app is beneficial for students because it enables you them to see where common sounds are located in terms of loudness and frequency.

It is evident that the role of technology has truly become a vital part of our everyday lives. In Audiology, like many other fields, the use of technology has helped both patients and students. The use of apps is spreading awareness and accessibility to the general public. With these apps, people can learn which sounds are harmful and can even see for themselves whether they potentially have a hearing loss. Apps are enhancing our society day by day, and we have yet to see what awaits us in the future years to come.

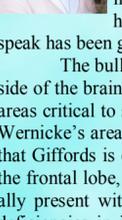
#### Sources

n. pag. Web. 10 Oct 2011. <<http://itunes.apple.com/us/genre/ios/id36?mt=8>>.

n. pag. Web. 10 Oct 2011. <<http://tinnitux.com/blog/tag/ipad-apps-hearing-loss/>>.

### The Growing Use of the iPad by Children with Autism

By: Avigayil Goldson



With the use of smart phones, tablets, and other increasingly sophisticated gadgets becoming widespread in our society, teachers, parents, and doctors are looking for ways to use new technologies to help people with autism in their daily lives. There are over 30 apps geared towards students and children with special needs, helping them communicate their feelings, stay organized, and simulate activities previously inaccessible to them.

Among the main challenges faced by children highly impacted with autism is the inability to make themselves understood to families, teachers, and friends. One type of app allows children to press an icon that speaks for them, so that they can communicate joy by tapping a happy face, frustration by tapping an angry face, or sadness by tapping a frowning face. The failure of children with autism to communicate their feelings clearly leads to frustration for the people around them and tantrums by the children themselves, increasing stress in the home. With these kinds of apps, the children and their families can enjoy a more secure and peaceful home.

Children with autism also face difficulties with organization in schoolwork and other kinds of projects, a problem alleviated through the use of the iPad, which gives them the ability to work on one task at a time, helping them focus and minimizing distractions. Apps for simulating musical performance provide them with the opportunity to do activities once impossible for them to do.

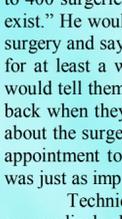
In relation to children with autism and other special needs, the late Steve Jobs called the iPad a "miracle device" because it compensated for so many of the symptoms of autism. The iPad also carries with it less of a stigma for kids to use in schools because it has a "cool" factor that enhances the status and self-esteem of any child who has one. Children with autism also benefit from its light weight, relatively low cost, and ease of use.

Inevitably, not all teachers are so enthusiastic. For higher functioning children with autism, there is an app which takes dictation. This is good for the children, but only if they have a quiet area to work in, which is not always available to children in a larger school.

Overall, the iPad is a great piece of technology with many uses. With reasonable awareness of its limitations, it can help many children with disabilities communicate and interact with the world in ways the rest of us take for granted.

### Gabrielle Giffords Recovery

By: Melissa Kessel



On January 8<sup>th</sup>, 2011, United States House Representative, Gabrielle Giffords, was shot in the head, at point-blank range, outside of a super market in Tucson, Arizona. Immediately following the shooting, Giffords was taken to Tucson's University Medical Center where she underwent brain surgery. While Giffords was listed in critical condition, UMC's trauma director, Dr. Peter Rhee is optimistic about her recovery.

Brain injuries similar to Giffords' create a variety of behavioral and cognitive problems. Among the extensive lists of impairments are issues involving walking, dressing, memory and attention, even a greater likelihood for depression and suicide attempts. In particular, Giffords' ability to speak has been greatly impacted.

The bullet tore through Giffords' left side of her brain. The left side of the brain houses both Broca's and Wernicke's area, two distinct areas critical to speech. Broca's area controls speech production, while Wernicke's area controls language comprehension. It has been reported that the Giffords is experiencing an aphasia associated with the damage of the frontal lobe, or Broca's aphasia. Patients with Broca's aphasia usually present with non-fluent, labored, and halting speech, often with deficiencies in intonation and stress-patterns. Writing can be exceedingly difficult as well.

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Based on news reports as of July, local experts in speech pathology reported that Giffords was making great strides in her language recovery. Speech rehabilitation is often characterized by endless repetitions of words and phrases. Progress is often measured in slow steps. Jillian Goldner, a speech-language pathologist at the local VA Hospital in Arizona reported "words that were very over-learned tend to be preserved." Therapists frequently begin with anything that has been drilled into the brain prior to the injury because typically they are the easiest to retrieve. Local experts were not surprised when new reports said Giffords was able to sing 1970's hit "American Pie" early on in her recovery.

While sometimes speech improvement can be spontaneous, the biggest improvements are often seen in the first year or two. Dr. Steve Flanagan, chair of the Rusk Institute of Rehabilitation at NYU Langone Medical center said "she has received some of the best rehab anyone can conceive...a brain injury that's as severe as hers is not measured in days or weeks or sometimes even months, but many years." Although Giffords reportedly has made great strides, her journey to recovery is not nearly over. Giffords is reported as having an extremely positive attitude throughout her therapy, which speech therapists in turn hope will continue to aide her in rehabilitating her verbal expression.

#### Sources

James, Susan Donaldson. "Gabby Giffords' Rosy Recovery Needs Reality Check, Say Experts" 14 June 2011. 11 October 2011. <<http://abcnews.go.com/Health/gabby-giffords-recovery-rosy-experts-reality-check/story?id=13829783&page=2>>

n. pag. Web. 13 Oct 2011. <[http://azstarnet.com/news/science/health-med-fit/article\\_31e427c-a783-5c0b-8c53-d3c83b5ca3fd.html](http://azstarnet.com/news/science/health-med-fit/article_31e427c-a783-5c0b-8c53-d3c83b5ca3fd.html)>.

### What's Taking So Long?

By: Elana Bindiger



This past summer I had the privilege to intern for the head pediatric ENT's in North Shore LIJ Hospital. Despite the fact that I am a Speech Pathology and Audiology major and have no intention of practicing in that field, this was an amazing opportunity that I could not pass up. I had studied human anatomy in class and found it very interesting and felt confident that I would be able to understand what the doctor was doing. It turns out, I was right. I was able to follow almost every appointment and when I did not understand something, the doctor explained it to me. Everything I learned in class from my teachers and textbooks came to life as the doctor examined and treated his patients. Despite the extensive application of medical theory I witnessed, the most impactful lesson I learned did not have anything to do with specific medical concepts. That was because during the time I spent following, observing and interacting with the doctor, I realized something I could not learn from a classroom lecture or find in my notes; doctors are not only doctors but therapists as well.

"I HAVE VIVID MEMORIES FROM MY CHILDHOOD OF GOING TO THE DOCTOR WITH MY MOTHER."

I have vivid memories from my childhood of going to the doctor with my mother. When we arrived at the office, we would look around and see a filled waiting room. We would go to the desk to sign in and the receptionist would always say, "I am so sorry, the doctor is running a little behind schedule." I remember thinking, "What is taking the doctor so long? Didn't we have an appointment?" After being on the other side of the receptionist's desk, I realized "what takes so long." From the moment a patient walks into an office, it is not only the doctor's job to heal the patient, but also to listen to, care for, and encourage the patient. Many of the cases I experienced were of children who needed tonsillectomies. An average ENT does approximately 400 tonsillectomies a year. While to the doctor it is just a routine surgery, to the parents, it is very serious. It is the doctor's job to help them understand that the procedure is routine and safe, and that when everything goes as planned, the child will be in better shape in the long term.

I also noticed that the doctor never promised anything. He would say "I do close to 400 surgeries a year and have had no complications but that doesn't mean they don't exist." He would then give them a paper that explained the possible complications to the surgery and say "fever, nausea and bad breathe is all normal after surgery. No hard foods for at least a week. Your child will miss a week to a week and a half of school." He would tell them to take a moment to think about it and he would leave the room and come back when they had made a decision. He would sit and answer any questions they had about the surgery and answer them in a way that they would understand. Sometimes the appointment took 20 – 30 minutes. He never rushed. A patient's emotional well-being was just as important as their physical health.

Technical and fundamental education is critically important for employment in any medical-related field. Effective treatment is dependent upon applying the lessons and theories learned in the classroom to the patient in the doctor's office. Watching this process of concept turning into practice unfold live was an amazing experience to be apart of. However, the most valuable part of my summer internship was finally answering the age-old question of "What takes so long at the doctor's office" and, in turn, learning a critically important lesson. Good doctors are also good therapists because when dealing with patients, top-notch medical care alone is not enough. Patience, compassion and understanding are necessary when practicing any form of medicine. This summer I witnessed the therapy side of the medical field and I can reassure everyone on the other side of the receptionist's desk that although it may take a long time to see the doctor, it is well worth the wait.

### Film Review: "How Difficult Can This Be?"

By: Yael Selter



Have you ever dreaded sitting down to watch a documentary film with the assumption that it was going to be dull, outdated or tedious? With these preconceived notions, I was required to watch "How Difficult Can This Be?" a powerful and enlightening film by Rick Lavoie, which takes the viewer inside the mind of every struggling child with a learning disability. My cynicism was soon transformed to awe as Mr. Lavoie's film unfolded.

As explained by ASHA, the American Speech-Language-Hearing Association, a learning disability refers to a disorder or delay in the development of speech, language, writing, or arithmetic. Mr. Lavoie mentions that the most people tend to define a child with learning disabilities as "Lazy and Dumb." The problem with the ASHA definition is that it focuses solely on what the child lacks, instead of defining alternative learning methods which a child with a learning disability might need in order to succeed.

Lavoie conducts an eye-opening workshop to professionals, parents and children, having them experience firsthand what it feels like to be a person with a learning disability. In this brilliant workshop, the participants struggled to complete various tasks which challenge their levels of self-confidence, cognitive processing, reading comprehension and visual and audio perception. This ultimately leads to a deeper understanding and a true empathy for individuals with learning disabilities.

Actually, the word "individual" suddenly takes on a whole new meaning as the participants understand how harmful it can be to generalize educational methods to children of various skill-sets. Lavoie poignantly states, "It's not that everyone gets the same thing, it's that everyone gets what he or she needs." In order to create an equitable and just environment, individuals have to be treated as such. He emphasizes the sad reality that many teachers are quick to lose patience and intimidate students through embarrassment and threats of punishment. This type of approach inevitably leads children to fear their teachers, hate school, and ultimately "shut down."

Teachers must be aware of each child's needs and look for ways to help the child feel confident in the classroom. Children with learning disabilities usually do not participate in class. Anxiety is responsible for turning these children into either introverts or class-clowns. Neither is necessary. Lavoie advises teachers to set up a system together with the children so that they are prepared in advance for the classroom activity. This allows the students' anxiety levels to reduce and for them to comfortably participate in class. It is incumbent upon educators to ensure that their students excel. If not addressed at an early age, children with learning disabilities can be emotionally scarred for life. It is only through understanding, patience, and the establishment of a strong support system, can these all-too-common circumstances be avoided.

"How Difficult Can This Be?" is a must-see for viewers both in and out of the education field. Consider it a gift to yourself, as well as to anyone you happen to meet, with any kind of learning challenge.

### Upcoming events:

- November 1 2011– 9:00– 10:00pm  
Stern College, Yeshiva University

Graduate School Night! Come hear current Speech Pathology and Audiology students speak about their experiences applying and attending graduate school. Questions about the event? Contact Yael Selter at [yaelserter@gmail.com](mailto:yaelserter@gmail.com)

- November 15, 2011 – 7:00-8:30pm  
Stern College, Yeshiva University and the Jewish Stuttering Association, New York, NY

"Going with the Flow: A Guide to Transcending Stuttering"

Film screening and Q&A for people who stutter, professionals and the general public, with Phil Schneider, Uri Schneider, Inga Barsky and Devora Salzman



If you would like to write for "SPAU@Stern" or have any questions, please do not hesitate to contact

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Students of all majors are welcome to write for "SPAU@Stern."

