

PSYCHOBABBLE

UPCOMING EVENTS AND IMPORTANT DATES

Wednesday, January 30th

Summer Programs Academic Presentation

Friday, February 1st

Bowling & Game Room Social

Saturday, February 2nd

CAC Volunteer Event

Wednesday, February 6th

Valentine's Day Bake Sale

Thursday, February 14th

2nd General Meeting, Chair Elections, &
Valentine's Social

1/30- Summer Programs Academic Presentation, Heyne 135, 5:45-6:45 pm This event will introduce an overview of many summer programs available for students to become involved in research, the requirements/benefits of these, and how to get started in applying for them. Earn 25 points for attending.

2/1- Bowling & Game Room Social, Student Center Game Room, 6:00-8:30 pm

Enjoy a night of FREE bowling and games and socialize with your fellow members. Earn 25 points for attending.

2/2- CAC Volunteer Event, Children's Assessment Center, 10:00 am-12:00 pmHelp decorate the children's playroom for Valentine's Day. Earn 50 points for attending.

2/6- Valentine's Day Bake Sale PGH Breezeway, 9:00 am-4:00 pm Earn 20 points for donating an item and 15 points per hour for volunteering.

2/14- 2nd General Meeting, Chair Elections, & Valentine's Social, Heyne 135, 5:45-6:45 pm Vote for your Spring 2019 chairs

Vote for your Spring 2019 chairs and followed by our Valentine's social. Earn 30 points for attending.

What's inside

Page 2

Member Spotlight

Meet one of our most dedicated members.

Page 3

Severe Learning Disabilities in Juvenile Delinquents

Learn about a UH reseach project.

Page 4

Transcranial Magnetic Stimulation Therapy

An up and coming non invasive treatment for severe depression

Page 6

How to Seek a Letter of Recommendation for Research Programs

Tips from our Officer of Academic Affairs

Page 8

Points and Dues

How to save on club dues



Member Spotlight: Christie Tsao

Katherine Kabel, HISTORIAN

his semester our first member spotlight is junior Christie Tsao. She is an outstanding member and Psi Chi's top point earner in Spring and Fall of 2018. Christie is a psychology and human development and family studies double major graduating in Spring 2020. Born in Hong Kong, Christie moved to Houston just three years ago to attend UH. In Hong Kong, she thought there would be fewer opportunities to make use of her psychology degree and the academic system is very rigid, so she thought the diverse community of UH in the US would be the best choice for her. Since coming to UH, she has been involved in multiple psychology labs, her favorites being the Center for Couples Therapy, Self, Motivation, and Relationship Theories (SMaRT) Lab, and the Sleep and Anxiety Center of Houston. Her initial interest in psychology stemmed from her curiosity in examining interpersonal communication which led her to relationship counseling. After graduation, she hopes to earn a master's degree in clinical psychology to become a relationship counselor. Another potential career she has recently become interested in is research in sleep psychology on a Ph.D. track.

Through her studies in psychology, Christie feels that she has learned many valuable lessons about herself such as self-acceptance. In Chinese culture, her family viewed emotional issues as a problem-solving scenario, but she has learned to better express her emotions and recognize them. UH has allowed her to push herself out of her comfort zone by making a diverse group of friends and getting involved on campus. In addition to Psi Chi, she



she is also the vice president of CLASS Ambassadors. In her free time, she loves to sing and play piano, which she has played since the age of 4. Thank you, Christie, for your dedication to Psi Chi, we are lucky to have you as a member!

Christie Tsao Member Spotlight

Become a Chair

Becoming a chair is one of the best ways to get involved in Psi Chi and Psychology Club. It's a one semester commitment and all members are welcome to run. Below are descriptions of each chair's responsibilities.

PRESIDENT'S CHAIR

Assists with social events, general meetings, and overall needs of the organization.

VICE PRESIDENT'S CHAIR

Assists with inductions, point tracking, and professional networking.

TREASURER'S CHAIR

Assists with fundraising efforts, bake sales, and maintaining Psi Chi store.

SECRETARY'S CHAIR

Assists with applications, volunteer events, and tutoring program.

ACADEMIC AFFAIRS' CHAIR

Assists with academic events and SWPA planning.

HISTORIAN'S CHAIR

Assists with Psychobabble, taking pictures at events, and creating promotional material.

Elections will be held Thursday, 2/14

The deadline to apply is Tuesday 2/12

To add your name to the ballot, visit uhpsych.org/elections

Severe Learning Disabilities in Juvenile Delinquents

Lesley Hart, Ph.D.

P20-JJLD is the nickname of a research project funded by the Eunice Kennedy Shriver National Institute of Child Health and Development (NICHD). P20 is a type of grant that funds exploratory studies, usually large, often multi-center projects. Officially, P20-JJLD is called Severe Learning Disabilities in Juvenile Delinquents: Presentation, Course, and Remediation (Grant #P20HD091005). True to its name and title, it is a large project with contributors from the University of Houston, Baylor College of Medicine, Harris County Juvenile Probation Department, Connecticut Court Services Division, and MindTrust (a software programming company). The Principle Investigator of this grant is Elena Grigorenko, PhD, a professor at UH and BCM; other UH professors involved are Lesley Hart, Sascha Hein, and Oxana Naumova. The goal is to explore the effects of a reading intervention on the reading of youth in detention: their reading improvement, their genetic (methylation) response, and their electrophysiology (brain responses). Longer term, it is expected that youth who participated in the reading intervention will be less likely to recidivate, i.e. to return to juvenile detention or adult prison.

P20-JJLD has four project "arms". The first is a "big data" arm, that is looking at the data from thousands of youth who have come in and out of the court system in the past 12 years. The goal is to identify markers that are related to learning and long-term improved outcomes in incarcerated youth. Sascha Hein, PhD, a professor in the UH PHLS department, leads this arm.

The second arm of this P20 is the intervention arm. This project has developed a novel intervention specially tailored to the needs of these youth called SERIOUS (Strategies for Enhancing the Reading In Older Underperforming Students). SERIOUS it builds reading skills that are lacking, including early phonics, fluency, and vocabulary; it utilizes strategies that are appropriate for older individuals in order to maximize motivation and account for the (somewhat spotty, but present) background knowledge related to reading; and it teaches "learning to learn" skills, such as how to monitor your own comprehension, what to pay attention to, the benefits of persistence, and how to understand word meanings. The one-on-one

intervention is provided in 24 90-minute sessions over a period of about 6 weeks. After this person-to-person component, youth are given a smart phone. This personto-computer component of the intervention is a "gamified" learning device pre-programmed with word games and rewards for playing. A total of 192 youth will participate. Lesley Hart, PhD, a professor in the UH department of psychology, is responsible for this arm.

Arms 3 and 4 of P20-JJLD involve the genetics and electrophysiology components. Students are tested three times – before the intervention, at the midpoint, and after the intervention; they are given reading and other academic tests, they complete tasks while brain waves are being recorded, and their saliva is collected for methylation analysis. (Methylation is the process that records experiences onto DNA.) Oxana Naumova, PhD and Sergey Kornilov, PhD, current and former UH psychology faculty respectively, designed these arms together and Dr. Naumova is responsible for these arms.

Also vital to the success of this study are the cooperation of the HCJPD, who have enthusiastically supported the project; the work of dedicated psychology graduate students who assess the youth; and the participation of motivated psychology undergraduate students, who complete the intervention with the students as part of their forensic psychology course participation.

SERIOUS is expected to improve the reading of these youth in detention, which is subsequently expected to improve life functioning in other domains. For example, academic improvements are expected to reduce repeat offending, and increase longer-term success in academics and job placements. Gains in reading are expected to be related to brain changes and to methylation pattern changes. That is, improving the reading skills of these youth will change their behavior, their brain's response to letters and words, and their very DNA, which will improve their everyday lives and long-term outcomes.

For more information about P20-JJLD, please contact Elena Grigorenko (elena.grigorenko@ times.uh.edu) or Lesley Hart (lahart@ central.uh.edu).

Transcranial Magnetic Stimulation

Katherine Kabel, HISTORIAN

irst developed in 1985 by Dr. Anthony Barker, transcranial magnetic stimulation (TMS) is a relatively new non-invasive treatment for major depressive disorder (MDD). The FDA approved TMS for MDD treatment in 2008, and it is gaining popularity among physicians across the country since many insurance companies will now cover the treatment. TMS is a neuromodulatory treatment reserved for severe cases of depression in which medications have failed. According to Dr. Simon Kung, a psychiatrist at the Mayo Clinic, the ideal candidate for TMS is someone with severe depression who has tried 2-4 psychotropic medications without any results or who hasn't been able to take medications due to intolerable side effects or other adverse reactions. Thus, TMS is a potential alternative to additional medication trials in `treatment-resistant MDD patients.

TMS works by transmitting electromagnetic currents to stimulate regions of the brain that are affected by depression. As shown in the diagram below, electricity flows through a wire coil connected to a capacitor to create a magnetic field that pulses the brain with energy. The changing magnetic current passes through the scalp until it reaches the neurons which are the next conductive materials. This electrical signal travels along neural pathways throughout the brain, thus stimulating activity in targeted regions

In a lecture at Massachusetts General Hospital, Dr. Tracy Barbour explained that the electrical current aims to change neural excitability and activity to restore normal functioning. TMS for MDD primarily targets the left prefrontal cortex, a specific region of the brain which is typically hypoactive in severe depression. Though the current only immediately affects activity in the cortex, the waves propagate deeper into the brain and then affect other regions such as the limbic system.

The course of treatment typically lasts about 4-6 weeks requiring daily treatment sessions Monday

to Friday for a total of approximately 20-30 sessions. The sessions last about 20-30 minutes and are done in outpatient facilities. Patients are able to integrate the treatment into their normal lives because it does not require hospitalization or anesthesia, unlike electroconvulsive therapy (ECT) which has long been the gold standard for medication-resistant depression. The sessions are done with the patient completely awake and alert. Patients describe the main side effect as discomfort at the site of the magnet (a tapping sensation people say is "like a woodpecker". However, most patients report only minor discomfort and become less sensitive to the sensation over time.

Future research will involve decreasing the treatment time and cost as well as how it may be utilized to treat other psychiatric disorders. Currently, TMS is only approved to treat unipolar depression, but researchers like Dr. Barbour hope to use it to treat

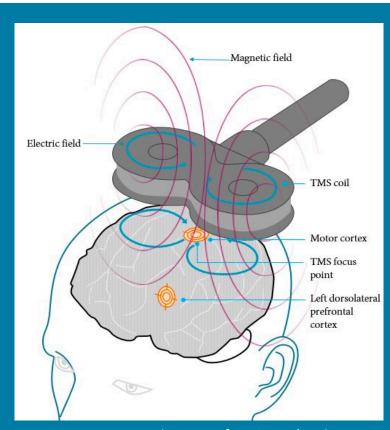


Diagram of TMS Mechanism

bipolar depression and schizophrenia in the future by targeting different areas of the brain. With schizophrenia in particular, TMS could potentially be an effective treatment for negative medication-resistant symptoms of psychotic illnesses by increasing brain activity.

Though there are potentially great benefits to TMS, it isn't yet as widely used as antidepressant medication primarily due to issues with time and cost. Until very recently, even with FDA approval, insurance companies rarely covered TMS treatment, leaving patients to pay up to \$10,000 out of pocket for a course of therapy. Additionally, it is a considerable time commitment to go into a clinic five days a week. Dr. Andrew Leuchter pointed out in a lecture that too much time is wasted in the treatment sessions identifying the optimal parameters for each patient such as magnet location, stimulation intensity, and frequency. Decreasing the time spent on setting parameters would yield a faster treatment time and reduced cost. In addition, researchers are studying the efficacy of faster magnetic pulse rates, which would further reduce treatment time and make TMS more accessible to the public.



KATHERINE KABEL Historian

Want your article featured in Psychobabble?

In this year's edition of Psychobabble, we want our members involved! If you're involved in research, presenting a poster, have an interesting study or topic to share, or anything psychology related topic, we'd love to feature your article in Psychobabble. For each article members may earn between 15-30 points depending on the length and content of the article which will ultimately subtract from your dues. To submit your article, email it to

uh.psichi@gmail.com.

Additionally, we will include a member spotlight in each edition of Psychobabble. We wish to recognize members who are going above and beyond in their studies, in community service, and other notable achievements. If you wish to nominate someone for a spotlight, again please contact an officer or email us.



How to Seek a Letter of Recommendation for Research Programs

Andrea Ochoa, Officer of Academic Affairs

For those with an interest in applying to graduate school in Psychology, taking part in research can be crucial in the effort to become competitive. Our Psi Chi chapter and Psychology club has the goal to help our members succeed in this aim, and it is important to point out that there is more than one way to be involved with research. While last semester we had an event focused on the process of joining a lab as an undergraduate assistant, our first academic meeting of Spring 2019 will have the goal of discussing ways that students can develop their own independent projects. As it will be mentioned, a common requirement to get accepted for summer research is getting at least one letter of recommendation (sometimes two) from a professional who can speak of you well and convince a board of admissions that you have the skills they are looking for in an applicant. Finding and communicating with potential letter writers can be unnerving, so here are a few tips that may help you navigate the process more smoothly.

1. Before all, pick your potential writers mindfully.

Browse the programs that you find genuinely interesting and that you believe require a background that at least overlaps with yours. Review the guidelines that each program cites, as not all look for the same amount of letters of recommendation, the same content in each of them, or even for the same type of person to write them. One program might ask you for one letter from a professor that

teaches at your university, so you might want to reach out to someone in whose class you have been outstanding, or the director of the lab where you volunteer if they also happen to be a faculty member. A different program might require a reference from someone who has seen you perform greatly in a research or clinical environment, and it may not matter if they are also professors; perhaps the manager of a lab where you work in the medical center. Programs might even request any given combination of these two, or something entirely different. Find this information, organize it (perhaps using a program like Microsoft Excel), and use it to narrow down the people who you might want to ask for help.

2. Look for someone who knows you the best.

Some career counselors will tell you that, when it comes to these kinds of applications, a letter of recommendation consisting of two vague, impersonal paragraphs looks even worse than no letter at all. You are not looking for someone to simply describe your resume or express general support of your goals; it matters that the letter has enough details to demonstrate that the person writing it sees you as a unique student, with strengths and personal features that differentiate you. A professor from a class where you tend to ask good questions might speak of your intellectual curiosity; a lab director might refer to your commitment to performing high-quality work and your ability to work with others. Whomever you consider, try to

try to ensure that they will write a document of decent length and substance.

3. Choose the way you ask and make it deliberate.

Do not let the subject of your letter be something that you blurt out nervously in the middle of a fake conversation about what your class was about today. Consider whether you want to ask your potential recommender in person or through email, depending on how busy you know they are. Most often, it is best to ask in person, in a moment when you know they are available to listen and have a good idea of what you want to say: what your goal is in pursuing this program, and why you think they would be a great reference for you. Be respectful of their time when you approach them. Ask them if they are in a situation where they can find the moment in their schedule to write a consistent letter for you, as some professionals are overwhelmed with duties already. Bring all the information they might need, from the details about the program to the kind of topics you would like them to mention if (and only if) they decide to do you this favor.

4. If they say "yes", stay in touch.

Within two days of finding a recommender, email them simply to tell them 'thank you' and repeat what it is specifically that you need from them, always being clear and concise. Take advantage of this email to send them your unofficial transcript, your resume or CV, and any other information you have that might help them better understand how amazing you are. If you are applying to more than one program, send them an Excel file with all the names, places, and deadlines associated with each. Ask them if there is anything else they need to make the writing process easier for them.

5. Follow up and continue building a professional relationship.

Most often, getting a person to write you a letter of this kind is not the end, but rather the be-

ginning of an interactive process. Show that you value what they are doing for you by keeping up, letting them know about the outcome of your application, and even visiting them now and then. Act as if they might become a permanent reference in your list, someone who will always know how you communicate and work with others in an academic environment. Who knows? A long-term version of this experience might lead to mentorship, or simply to gaining the support of one more wonderful professional as you pursue your career goals.



Andrea Ochoa, Academic Affairs













Contact Us

uh.psichi@gmail.com Heyne Room 105

www.uhpsych.org

Social Media

@UHpsichi



Dues and Points

Event	Points
Volunteer Event	50 Points
Social Event	25 Points
Volunteer Tutor	25 Points/Hr
Academic Event	25 Points
Fundraising Event	15 Points/Hr
Donating Items for Bake Sale	20 Points
Attending Member Meetings	20 Points
Running Psi Chi Store (office Hours)	10 Points/Hr (150 Limit)
Wearing Club T-shirt to Member Meetings	10 Points
Bringing a Friend to Member Meetings	10 Points
Psychobabble Article	10 Points

Points Earned	Dues Owed
0-79	\$55
80-119	\$45
120-199	\$40
200+	\$30



Issue 3 Vol 17 Jan 2019