

From post-doc to careers in science: helpful insights for the transition to independence

Welcome Message from the Editors of *El Faro*, Bryan Cruz, Rubi Gonzales, & Rodolfo Flores

Welcome to the 2019 Spring edition of *El Faro: La Voz de la Red*. The overall goal of this online newsletter is to promote new information on current topics and research amongst the members of the National Hispanic Science Network (NHSN) and the Early Career Leadership Committee (ECLC).

We first would like to introduce our new ECLC chair, Dr. Luis A. Natividad. Dr. Natividad is a new faculty member in the School of Pharmacy at The University Texas at Austin. He is longtime member of NHSN. He is an up-and-coming pioneer in the field of neuroproteomics. His work applies neuroproteomics to elucidate novel mechanisms underlying the effects of alcohol use on cognitive functions.

In the present issue of *El Faro*, we seek to provide our readers with useful advice on transitioning to careers in science. In particular, we have asked our contributors to provide advice on finding a career in the areas of social work. The focus of this issue is on how to scout for positions, the importance of networking, preparing for the research/chalk talk, negotiating a salary, and crafting a successful curriculum vita.

In this newsletter issue, we have identified an individual whom we believe is well positioned to speak on this topic in the area of social work. We highlight some important topics discussed by the interviewee highlighted in our *Featured Article*. We shared some important insight into academic careers in science obtained from a NIDA Diversity Supplement workshop attended by Bryan and Rodolfo. We highlight new members of NHSN, Israel Garcia and Natalia A. Quijano Carde.

We would also like to take the time to thank Melissa Prestwood for her extraordinary service.

Join us in acknowledging some of the recent accomplishments of the ECLC members in our *Member Accomplishments Section*.

We hope you find reading this edition worthwhile. We would like to thank everyone who helped to plan and contribute to this edition of *El Faro*. If you are interested in being part of a future edition of *El Faro*, please feel free to contact us.

Sincerely,

Bryan, Rubi & Rodolfo



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A Homage to Alberto G. Mata

By: Avelardo Valdez, University of Southern California



Dr. Alberto G. Mata Jr. passed Saturday, December 29, 2018. He received his Ph.D. in sociology from the University of Notre Dame in 1978 and held various prestigious post-doc positions upon graduation. He was a professor of

Sociology and Social Work and taught at a number of institutions including the University of Texas and the University of Wisconsin-Milwaukee. He retired as professor emeritus from the University of Oklahoma in the summer of 2013. He also had a distinguished public service record in various federal branches of government including NIH and SAMHSA. He was project officer in the Community Branch in NIDA. He served on a Presidential Commission on HIV/AIDS and the Ford Foundation Community AIDS program as a board member.

Throughout his academic and government career, he was a fierce advocate for Latinos and other minorities. As a Health Science Administrator at NIDA, he supervised the AIDS demonstration projects throughout the United States and Puerto Rico. He encouraged minority scholars and others to submit NIH NIDA applications to address this serious health issue. I for one benefited tremendously from his encouragement when he urged me to submit a NIDA grant in the early 1990s while at the University of Texas at San Antonio. However, he did this with Latino scholars throughout the United States who would otherwise not have considered pursuing careers in public health would it not have been for his encouragement. Moreover, upon submission he would campaign relentlessly for your application throughout the NIH review process.

In regards to the National Hispanic Science Network (NHSN), he along with Drs. Mario De La Rosa, and Lula Beatty two other Health Science Administrator at NIDA were its primary intellectual architects. They organized the initial cadre of Latino

public health researchers that approached Alan Leshner, the director of and Richard Millstein the Deputy Director of NIDA at the time, for funds to establish the precursor of the NHSN. But, even before the initial contract was given to the University of Miami that would establish the NHSN, Drs. Mata, De La Rosa, and Beatty conceived of the idea of a Latino research training institute. The first iteration of this training mechanism was in San Diego in 1993. It was at this meeting that many individuals who became the organizers of the NHSN met for the first time including persons such as William Vega, Richard Cervantes, Merrill Singer and many others.

Upon leaving NIDA in the early nineties, he secured a faculty position at the University of Oklahoma and resumed his research on gangs, drugs and HIV. He also taught continuing education classes for the Department of Defense traveling to military bases all over the world including Italy, Spain, South Korea, Japan and Germany to teach service members and families.

During this time, he worked with my research team at UTSA, University of Houston and more recently at USC. He was one of the founding members of the NHSN steering committee. He played a particular important role in developing the initial NHSN training program that became part of the contract with the University of Miami. He also co-directed the Interdisciplinary Research Training Institute (IRTI) for several years. Many fellows who participated in those early IRTI cohorts remember him fondly from our meetings at the University of Houston.

One of Al's most endearing characteristics is that he had a tremendous capacity to see the best in everyone he encountered. Al seldom had an unkind thing to say about those he interacted with or knew. He was a relentless advocate for Latinos especially graduate students and junior faculty. It did not matter if you were at the bottom of the class or right at the top, Al would always have your back and provide you unlimited attention and support.

Lastly, as I reflect back on the years I knew him, I can honestly state that Al Mata was brilliant and a highly innovative thinker. He was ahead of the curve on many public health related research issues. He was one of the first to recognize the HIV/AIDS as a public health problem among Latinos in the US. In



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addition, I remember him pushing the idea of emergency rooms as important sites to collect data and conduct substance use research. This particular idea did not catch on until 20 years later.

Lastly, he was the funniest guy I ever met. He had a fun loving humor never mean spirited but very personal. He had a favorite joke about me. He would tell everyone, I had a dog named Chuco that would escape from our back yard at night and roam the streets. He would recount how you could take bets on who would come home first that night - me or the dog? This was sure to prompt a big laugh especially from him.

Anyone who ever met Al Mata knows that the world is a better place because of him.

Featured Article



Dr. Eden Robles is a Research Assistant Professor at The University of Texas at El Paso, and Director of Mental Health and Emotional Well-being Backbone Organization, a Paso del Norte Health Foundation Initiative. My research interests are in the areas of minority substance use and mental health disparities research, and the cultural and

socioeconomic influences on substance use and mental health related behaviors. More specifically, I focus on program development and evaluation, specifically, of treatment and practice adapted for bilingual-bicultural environments.

1) *Certain areas of in careers in science undergo different job application processes, what advice would you give to someone who is trying to determine if they should go through the tenure track or work in a more applied setting? How did you decide this was the best decision for you? What would you say is the most surprising thing (or something that someone else may*

not know) about your job/position? Also, feel free to discuss on how you found it about your position (e.g. networking or online).

As a community engaged scholar, I find that the most rewarding work for me is in an applied setting. Ever since my undergraduate studies I remember thoroughly enjoying the courses that placed us in direct interaction with the community. Many times I would strategically pick the courses that I knew would challenge me to develop or be a part of something that would make a greater impact. For me, my favorite thing is seeing multiple stakeholders come together to find a solution to their problem and then test that solution out. One of the best things to know is that I contributed to a better and healthier world. It was during these experiences that I developed the skills I would need to become a social worker, but because of great mentors that I had, I developed a healthy scientific curiosity. One PhD later, I find myself working in an applied setting where I get to engage with the community as a change agent and as a scholar. Officially, I am a community engaged scholar. I can honestly say that I find my work exciting and rewarding, and there isn't a day that I don't feel like what I've done is making a difference. Nevertheless, working in an applied setting is fraught with challenges, and there is no security in this work other than the knowledge that people will always need solutions and solution makers. However, truth be told, challenges come with choosing a tenure track position or work in an applied setting. At some point in the determination process, you just have to decide what ultimately gives you a sense of fulfillment and what you're ultimately willing to sacrifice. My vision for myself is to direct a binational center where I lead and empower leaders to create lasting social change in behavioral health. The position I hold now enables me to fulfill my vision. As a result, I give up the prestige that comes with a tenure track position, and my position is built on soft money. Yet, what I get in return is a greater earning potential than I do in a tenure track position, the ability to work with influential people, and a great sense of accomplishment by being at the center of community change. All of these factors considered, I happily chose to work in the applied setting over a tenure track position. Ultimately,



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choosing between two distinct paths is up to the person deciding and what they are willing to accept. The good news is that neither choice is permanent. Transitioning is not easy, but there are many people that have gone from applied to tenure track and the other way around. That is not to say that the choice should be taken lightly, by no means! Take the choice seriously, but make it based on what matters most to you fully cognizant of the things you will forfeit or not fully enjoy as a result of your decision.

2) *Preparing for a career in science essentially begins from the moment you begin graduate school. What skills/training do you think graduate students should be sure to develop and/or strengthen that you think would help them as they enter the job market? Also, what was your experience on the job market? Please comment on your experience when going on job interviews and negotiating salaries. What pieces of advice would you give to others who would soon be entering the job market? Finally, what do you think the next generation of scientists should know or approach in coming into this field as a professional (once out of graduate school)?*

The best skills/training that a graduate student should be sure to develop and/or strengthen is understanding how to apply their research to address critical needs. This advice applies to both basic and social science graduate students. Oftentimes, students can get consumed by the “me” of research – awards, publications, etc. All of these things are wonderful and should be achieved. My point is not to say that students should not strive for these things, they definitely should. The drive to achieve should also be driven by the desire to improve life for others. Health outcomes, medical techniques and tools, and community, among many other areas of research, have the great potential to make an impact on our lives. Graduate students need to remember that the research they are conducting ultimately should have a greater purpose and impact. For me, this has been the key to fulfillment. It is also this deeper understanding of the purpose and impact of my work that put me on the map for my current position. I am the director of a backbone organization for collective impact in behavioral health, and this was a position

that I was specifically targeted for because of my super ability to engage in community engaged scholarship. When I reflect on it now, a lot of what I accomplished leading up to that offer was helping me prepare for the position. Graduate students that are just starting their career should remember that each decision shapes the future options they are presented with later. Sometimes it can be tempting to take different graduate research assistant positions that are completely unrelated. Economic need can definitely drive this decision, but if possible, it is better to have a clear interest and make strategic choices based on that interest. A kind and intelligent man once told me, take a look at the resume of the person you most want to have a similar career to and then make strategic decisions just like they did. Of course, you have to set your own path. On that note, my final piece of advice is to believe in yourself enough to set your own path. The harsh reality of this field is that not everyone is going to support you or think your ideas or what you believe in is worthwhile. It's heartbreaking, but it doesn't define you. At the same time, you have to know when to listen to sage advice. The best thing a graduate student can do is to surround themselves with mentors that can help them navigate for themselves. Knowing how to weigh advice and independent thought can make the world of the difference in future success years after leaving graduate school.



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Spreading NIDA-NIAAA Words of Advice

Rodolfo and Bryan were invited to participate in the NIDA-NIAAA Diversity Supplement Workshop where they learned about the vast areas of career opportunities and they would like to share those with you. They provide information on the various career avenues available for graduate students, post docs, and new faculty on the following. This meeting takes place in Bethesda Maryland every year. It includes several individuals from various academic backgrounds (i.e. from undergraduate students to faculty members). It is a great opportunity for networking. Various speakers give talks on various subject regarding academic jobs to how to obtain funding. They provide a lodging and travel. If you are interested in applying, feel free to click the link.

- Tips on preparing for independent funding
- Knowing who to contact
- Loan repayment program

Opportunities for Beginning Investigators

NIH actively seeks to support beginning investigators. When you apply for your first NIH grant, check the box on the form that signals to reviewers that you're a new investigator (meaning you haven't been principal investigator on an NIH research grant before). The reviewers are often more forgiving of applications from novices.

Other, non-R01 research awards available specifically to beginning investigators include

- ◆ Mentored Research Scientist Development Award (K01)
- ◆ Independent Scientist Award (K02)
- ◆ Mentored Clinical Scientist Development Award (K08)
- ◆ Small Grant (R03)
- ◆ Academic Research Enhancement Award (R15)
- ◆ Exploratory/Developmental Grant (R21)
- ◆ Career Transition Award (K22)

Many of these programs are announced periodically in the NIH Guide to Grants and Contracts (<http://grants.nih.gov/grants/guide/index.html>). Each has its own criteria for eligibility and submission of applications. Information on these and other NIH extramural funding opportunities can be found at <http://grants.nih.gov/oeer.htm>.

In addition to NIH, other federal agencies and private sector organizations solicit and fund research grants, and each has its own application and review system (see "Resources," page 173). You can send the same application to multiple funding sources in the public and private sectors, but you must disclose your multiple applications to each potential funder to avoid "double dipping" when awards are made.

The first speaker provided tips on independent funding regarding R01 applications for new faculty. They provided an overview of the NIH funding process and the two-level review system used by NIH for R01 applications. They described details in preparing strong R01 applications, and what steps to take if your application does not get funded. Below are some tips for preparing a strong grant application and funding

opportunities provided by A Practical Guide to Scientific Management: Making the right Moves.

- Look for advice at your own institution
 - Pick three senior colleagues who have been successful grantees and talk about the goals of your applications.
- Look for a home for your grant application
 - Find a fitting program officer and NIH institute
- Try to get review by more than one NIH Institute
 - Although your application can only be funded by one institute, getting your application reviewed by more than one agency can improve your chances of getting funded.

The conference also spoke about the NIH loan repayment programs. This program is offered to qualified researchers and can pay up to \$ 35,000. The incentive is for the applicant to contribute to the NIH mission in return for payment of the loan. If you are interested in applying, please click the link (<https://www.lrp.nih.gov/>).

<https://www.drugabuse.gov/offices/office-nida-director-od/office-diversity-health-disparities-odhd/odhd-research-training-programs/nida-diversity-supplement-program>



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New Member Spotlight:

Israel Garcia-Carachure, B.A.



Israel Garcia-Carachure is a Graduate Student at The University of Texas at El Paso working under the mentorship of Dr. Sergio D. Iñiguez. His graduate examines how exposure to stress or psychotropic medications (ketamine) regulate responses to drugs of abuse from a neurodevelopment and sex-specific standpoint in animal models.

1) Why did you decide to join the NHSN?

I decided to join NHSN because I gravitated to their mission of improving health among Hispanics. I believe being able to disseminate data at NHSN will be an enriching experience because I will engage in stimulating discussions, as well as get feedback from peers and leaders in my field. Coming from a minority serving institution, and identifying as a minority, I look forward to utilizing the resources of learning about diverse academic concentrations, networking with potential collaborators or employers at NHSN.

2) When and why did you become interested in Hispanic health research?

As an undergraduate student at CSUSB, I became interested in the biological aspects that drive behavior, and thus, I volunteered to work in the neuroscience laboratory of Dr. Sergio Iñiguez. Specifically, I decided to work with Dr. Iñiguez because his preclinical approach investigating mood-related disorders, from a developmental perspective, aligned with my own research interests (drug abuse and

depression).

3) Briefly describe your current line of research.

My current line of research focuses on examining whether ketamine administration during adolescence increases sensitivity to natural (sucrose) and drug (cocaine) reward in adulthood, using C57BL/6 female mice.

4) What is your ultimate dream in terms of your career? Have you already accomplished this?

My ultimate goal in terms of my career is to obtain a tenure-track position at a research-intensive university. In particular, I would like to continue conducting pre-clinical work in the realm of psychiatric disorders such as depression. Given that I am a minority in science, my long-term goal is to mentor underrepresented students and be at the forefront of the STEM pipeline.

5) What is the most important lesson you learned as a graduate student?

The most important lesson I have learned as a graduate student is resiliency. The ability to overcome hurdles that life and graduate school brings to the table is imperative. As a researcher and graduate student, I have learned to be patient and flexible, and trust the process that failure is inevitable and apart of growth. Altogether, being resilient and keeping a positive outlook has been valuable.

6) What is the most important quality you look for in a mentor?

I believe that a good mentor has multiple important qualities, but if I have to pinpoint one quality it would be transparency. Transparency involves openness, communication, and accountability which are all critical for maintaining a good relationship.

7) What advice would you give on how to handle stress?

Handling stress can be difficult, but I have learned to implement self-care in my life. Maintaining a good balance of mental and physical fitness has facilitated my journey as a researcher and graduate student.



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8) What is your cultural background and how did it influence your choice of career and/or research area?

Growing up in a low-income environment in Southern California, as a Mexican-American male, has taught me the importance of achieving a higher level of education in order to battle the inequalities that plague my community. From an early age, I acquired an understanding of the significant role that the environment plays in shaping an individual's overall health and development of the self are the main reasons I decided to study psychology as an undergraduate student at California State University San Bernardino (CSUSB).

9) What do you do for fun?

I enjoy outdoorsy activities such as fishing and hiking. I also like to challenge myself with different exercising activities; therefore, I have recently taken up running and I plan to participate in my first marathon sometime this year.

New Member Spotlight:

Natalia A. Quijano Cardé



Natalia Quijano Cardé is a Graduate Student at the University of Pennsylvania working under the guidance of Dr. Mariella De Biasi. Her graduate work examines understudied receptor systems play a role in modulating responses to ethanol.



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1) Why did you decide to join the NHSN?

I was originally introduced to the NHSN by a colleague, Dr. Erika Perez, who had been part of the organization and shared its mission with me. In addition to that, I became an IRTI trainee in 2017, which provided me the opportunity to meet other NHSN members. Being part of the NHSN has been extremely beneficial for me as a PhD candidate in pharmacology, as it provides the forum for conversations on drug abuse liability and health disparities among marginalized populations. In addition, it offers a friendly environment to build my scientific network.

2) When and why did you become interested in Hispanic health research?

As a Puerto Rican, moving to the US Mainland and experiencing the tremendous cultural diversity of this country ignited my passion to understand how/why Hispanics (and other minority populations) are disproportionately affected by neuropsychiatric disorders and how they seek/receive treatment. Becoming part of the IRTI program and learning more about the social underpinnings of addiction greatly increased my desire to contribute to Hispanic health research.

3) Briefly describe your current line of research.

I am currently pursuing a PhD in pharmacology at the University of Pennsylvania working under the mentorship of Dr. Mariella De Biasi. In our lab, I investigate how certain understudied receptor systems play a role in modulating responses to ethanol. Overall, I am interested in understanding the neurobiology underlying the association between certain genetic variations and alcohol-related endophenotypes, to ultimately shed light on the development of novel therapeutics.

4) What is your ultimate dream in terms of your career? Have you already accomplished this?

I would like to continue conducting research on drug addiction in an environment in which I can also help underrepresented students to pursue advanced careers in science.



5) What is the most important lesson you learned as a graduate student?

I have learned various important lessons as a graduate student, but the one that has impacted me the most is that having a diverse and supporting network is extremely beneficial and crucial for success.

6) What is the most important quality you look for in a mentor?

An outstanding mentor is fully invested in your success, helps you achieve *your* goals (not his/her), and provides an adequate amount of guidance so that your research moves in the right direction without depriving you from a sense of independence and ownership.

7) What advice would you give on how to handle stress?

We are all different, but I would advise to find a healthy hobby, like gardening, drawing, cooking, hiking... you name it!

8) What is your cultural background and how did it influence your choice of career and/or research area?

I was born and raised in Puerto Rico. Unfortunately, alcohol use is often glorified in the Island, which contributes to the high prevalence of alcohol use disorders in PR. Growing up, I saw people in my neighborhood suffering from addiction and the lack of understanding regarding its biology and treatment. This motivated me to do research on drug addiction.

9) What do you do for fun?

I *procrastibake*! I like trying out new recipes and sharing them with my friends.

Members Accomplishments

We would like to congratulate ECLC members on their recent accomplishments! Congratulations! Please congratulate your fellow members!

- ❖ Congratulations to **Dr. Luis Natividad!** We are proud of him for his new faculty position
- ❖ We congratulate **Rubi Gonzales & Rodolfo Flores** on their fellowship award from the Interdisciplinary Research Training Institute on Hispanic Drug Abuse (IRTI) at the University of Southern California. This training program is funded by the National Institute on Drug Abuse (NIDA), National Institutes of Health (NIH) (R25DA026401).
- ❖ **Rubi Gonzales** also received The Dodson Research Grant from the Graduate School at the University of Texas, which will fund her M.A thesis research project. Congratulations!
- ❖ We also congratulate **Bryan Cruz** for his two awards, the Outstanding Master's Thesis Award and Best Paper Award from the Department of Psychology at the University of Texas of El Paso at El Paso.
- ❖ Congratulations to ECLC members **Bryan Cruz** and **Rodolfo Flores** for their paper published in *Neuropsychopharmacology*, title: *Insulin modulates the strong reinforcing effects of nicotine and changes in insulin biomarkers in a rodent model of diabetes.*
- ❖ Congratulations to **Daniela Franco** for her graduate acceptance into the University of Maryland in Baltimore.



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