The Orbiter

Volume 23: Issue | Spring 2016



MCNAIR SCHOLARS PROGRAM. UNIVERSITY OF NEW HAMPSHIRE

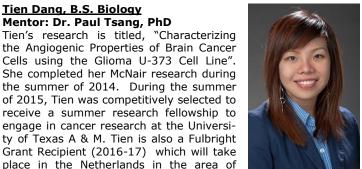


CONGRATULATIONS GRADUATING MCNAIR SENIORS!!



Steven Arias, B.S. Physics Mentor: Dr. Karsten Pohl, PhD

Steven's research is titled, "Syntheses of Novel Two Dimensional Materials: Graphene and Beyond". He completed his McNair summer research during the summer of 2015. Steven will begin his Ph.D. in Physics at the University of New Hampshire this Fall of 2016. He received full-funding including tuition remission and a Teaching Assistantship.



Aquedo DeLosSantos, B.S. **Chemical Engineering** Mentor: Dr. Dale Barkey, PhD

Aquedo's research is titled, "The Chemical Resistance of Anodic Coating for Medical & Food Processing Applications". He completed his McNair summer research during the summer of 2014. During the summer of 2015, Aguedo was competitively selected as a Chemical Engineering Intern at Apple in CA. Before pursuing graduate study, Aguedo plans to acquire industry experience in his field upon graduating from UNH.



Melissa Dongo, B.A. Psychology Mentor: Dr. Michelle Leitchman, PhD

Cells using the Glioma U-373 Cell Line".

of 2015, Tien was competitively selected to

engage in cancer research at the Universi-

cancer research. Tien plans to pursue a

Tien Dang, B.S. Biology

M.D./Ph.D. in the future.

Mentor: Dr. Paul Tsang, PhD

Melissa's research is titled, "Evaluating Episodic Memory in Children Using a Science-Learning Event". She completed her McNair summer research during the summer of 2014. Melissa will begin her Ph.D. in School Psychology with full-funding (tuition scholarship and Graduate Assistantship) at the University of Florida this coming Fall 2016.



Brianna Hartford, B.S. Occupational Therapy

Mentor: Dr. Shelly Mulligan, PhD

Brianna's research is titled, "A Criterion-Validity Study of the Sensory Processing 3 - Dimensions Measure". She completed her McNair summer research during the summer of 2014. During the Spring of 2015, Brianna received a scholarship to study abroad in Denmark to which she engaged in child developmental studies. Brianna is currently working on her M.A. in Occupational Therapy at UNH and plans to pursue a Ph.D. in Child Development in the future.



"Computational studies of RNA structure and dynamics". She completed her McNair summer research during the summer of 2015. Rhiannon will begin her M.S./Ph.D. in Chemical Engineering with full-funding at the University of New Hampshire this Fall of 2016.



Michael Mignanelli, B.A. Classics Mentor: Dr. Harriet Fertik, PhD

Michael's research is titled, "Understanding Athenian Sentiments towards Public Speaking: A Study of Aristophanes' Ecclesiazusae". He completed his McNair summer research during the summer of 2015. Michael will be serving as a teaching intern for the St. Paul's School Advanced Studies Program in Concord, NH this summer. Michael will pursue his Ph.D. in Classics with full funding (Tuition scholarship and Teaching Assistantship) at the University of Texas at Austin this coming Fall 2016.



Keshav Nepal, B.S. Biomed Sciences Mentor: Dr. David Townson, PhD

Keshav's research is titled, "The Influence of OmniGen AF on neutrophil activation, ovulation rate and fertility in the female rat". He completed his McNair summer research during the summer of 2014. Upon graduating from UNH this May, Keshav plans to pursue a M.D./ Ph.D. in Immunology during the Fall of 2017.





Volume 21, Issue 2 Page 2

CONGRATULATIONS GRADUATING MCNAIR SENIORS!!



Briah Parchment, B.S. Biomed Sciences Mentor: Dr. Paul Tsang, PhD

Briah's research is titled, "Determining the effects of therapy dog interaction on a human patient's blood pressure and salivary stress hormone concentration". Briah completed her McNair summer research during the summer of 2014. Upon graduating from UNH this May, Briah plans to pursue a Ph.D. in Zoology to apply her interest in the behavioral aspects of certain animals to future research.



Puskar Siwakoti, B.S. **Medical Microbiology** Mentor: Dr. Cheryl Whistler, PhD

Puskar's research is titled, "Investigation of virulence of emergent vibrio parahaemolyticus". He completed his McNair summer research during the summer of 2014. Upon graduating from UNH this May, Puskar plans to obtain industry experience before pursuing a M.D./Ph.D. in Biomedical Sciences. He plans to begin graduate study during the Fall of 2017.



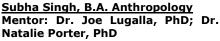
Denyelle Surrell, B.S. **Wildlife Conservation**

Denyelle's research is titled, "A comparative analysis of the nest structure of Saltmarsh, Nelson's, and Saltmarsh-Nelson's hybrid sparrows". She completed her McNair summer research during the summer of 2015. graduating from UNH this May, Denyelle plans to pursue a Ph.D. in Ecology in the future.

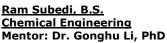


Stephanie Yee, Psychology

"Considering Racial Bias and Police Legitimacy in Mock Trials with Race Manipulations". She completed her McNair summer research during the summer of 2015. Stephanie will begin her Ph.D. in Counseling Psychology at the University of Maryland at College Park with full-funding (tuition remission and research fellowship).



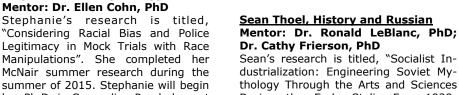
Subha's research is titled, "HIV Knowledge among Muslim University Women". She completed her McNair summer research during the summer of 2014. During the summer of 2015. Subha was competitively selected to receive a Summer Undergraduate Research Fellowship (SURF) at UNH to pursue research at Dr. Kevin Cullingan's Genome Lab. Subha is currently in the process of applying to M.S. programs in Biochemistry/Biotechnology.



Mentor: Dr. Gonghu Li, PhD Ram's research is titled, "The effect of Morphology on Titanium Dioxide Photocatalysis". He completed his McNair summer research during the summer of 2014. During the summer of 2015, Ram was competitively selected to serve as a Product development Chemical Engineering Intern at Conductive Compounds in Hudson, NH. Before pursuing a graduate program in his field, Ram plans to acquire industry experience following graduation.



Impact of Immigration on Output-Mix: Results from Hurricane Mitch". He completed his McNair summer research during the summer of 2015. As of the Fall of 2016, Val will begin his M.A. in Economics with full-funding (tuition remission and Graduate Assistantship) at UNH. His long-term objective is to pursue a Ph.D. in either Economics or Mathematics in furtherance of a career in research.



dustrialization: Engineering Soviet Mythology Through the Arts and Sciences During the Early Stalin Era, 1928-1941". He completed his McNair summer research during the summer of 2014. Sean was competitively selected for an IROP in Russia during the summer of 2015. He will pursue his Ph.D. in History with full-funding (tuition remission and Research fellowship) at the University of Wisconsin at Madison this Fall 2016.









Page 3 Volume 21: Issue 2

UNH MCNAIR SCHOLARS ACADEMIC EXCELLENCE ACROSS THE US & ABROAD



Congratulations to our McNair scholars who presented their research at the University of Maryland at College Park!

The University of Maryland at College Park hosted a National McNair Research Conference between March 10-13, 2016. McNair Scholars, Rhiannon Jacobs, Chemical Engineering Senior ('16), Stephanie Yee, Psychology Senior ('16), Suraj Sangroula, Biochemistry Junior ('17), and Steven Arias, Physics Senior ('16), successfully presented their research and networked with graduate schools within the D.C. area.

Left to right: Steven Arias ('16), Stephanie Yee ('16), Rhiannon Jacobs ('16), and Suraj Sangroula ('17).

LORENA CRUZ — SPAIN (SPRING 2016)



Lorena Cruz is a UNH sophomore and Spanish major. She is currently working on her McNair Research Proposal while studying abroad in Granada, Spain; a city located in the southernmost province of Andalucía. The city was the capital of the Moor Empire in Spain. The Islamic influences in architecture, culture, and language are preserved throughout the city. The purpose of Lorena's McNair research is to investigate how the Moor invasion and occupation of Spain has had lasting effects on the Spanish language as well as certain aspects of its culture and why those aspects remain in Spanish culture. Lorena's study abroad experience has been made possible through a study aboard scholarship she received from her UNH advisor, the Granada program director, and Chair of the Department of Languages, Literatures, and Cultures, Lina Lee. Lorena is currently enrolled at the University of Granada and is studying at the Center of Modern Languages. She has been placed in the upper track, known as Hispanic Studies. This upper track includes 5 courses which are reading, writing, and speaking intensive. Her courses include: Islamic Culture in Spain, Translation English-Spanish I, Latin American Literature, Spanish Literature, and a Speaking and Writing course.

Lorena describes her experience thus far:

Spain's culture is based in its complex and extensive history; therefore, knowing the history of this country is vital for understanding its society. I have been here for over a month and I have visited historical landmarks such as castles, cathedrals, bridges, museums and such all over Granada, Madrid, Toledo and Segovia. I have also visited cities that lay right on the Mediterranean Sea such as Nerja, Almería, and Cabo de Gata. It is humbling being surrounded by a historic society such as this. I have walked through the corridors of the Alhambra, a palace/fortress that was built for the Moorish ruler, Mohammed ben Al-Ahmar. I have come face-to-face with Pablo Picasso's massively large and influential painting, Guernica. I have stood beneath the Roman Aqueducts in Segovia. So far, this experience has taught me the importance of revolutionary and innovative thinking in architecture, art, literature, and so on. This allows me to relate my experience to my McNair research as I am reminded of the importance of an idea. One idea is enough to alter the world we know and the construction of that idea may just last beyond ruin. It may just go on to influence the world for 2,000 years.

Page 4 Volume 23: Issue 1

UNH MCNAIR SCHOLARS: ACADEMIC EXCELLENCE ACROSS THE US & ABROAD

DEBORA MAGALHAES — SPAIN (SPRING 2016)





Debora Magalhaes is a UNH Junior and Occupational Therapy major. Deb completed her McNair research fellowship during the summer of 2015 to which she investigated, " Test-Retest and Inter-rater Reliability of the Sensory Processing 3- Dimensions Scale". The SP-3D is a new assessment tool that measures sensory processing disorders among children. Upon earning a B.S/M.S. in Occupational Therapy at UNH, Deb plans to pursue a Ph.D. in Neuroscience. Deb is currently studying abroad in Barcelona, Spain through *Academic Programs International (API)* at the Universitat Autonoma

de Barcelona. Deb decided to study abroad to become more culturally aware, improve and develop her foreign language skills and for the opportunity of personal growth. During her semester abroad, Deb will be fulfilling her historical discovery course, *Spanish Civilization and Culture*. This course focuses on the different cultures within Spain and the history of their language, nationality and political implications.

Deb describes her experience thus far:

I chose to study abroad in Spain because it is a great opportunity to practice my Spanish. While I do have experience with the Spanish language, studying in Barcelona has deepened my understanding of the language as I have had the opportunity to be immersed in the culture. My goal is to learn sufficient Spanish and to become a trilingual speaker as I am already fluent in English and Portuguese. As an occupational therapist, I want to assist families that don't speak English in medical settings because foreign language speakers are always needed in the medical field. Occupational therapists work with patients to help them do the activities that are meaningful to them. Therefore, as an occupational therapist, it is important to be sensitive to other cultures because it will ultimately lead to a better understanding of what's important to the patient. During my experience abroad I have been fortunate enough to expand my traveling beyond Barcelona. So far, I have been to three different countries: Ireland, Italy and France and I have Budapest, Netherlands and Prague scheduled within the next two months. I have also been to other cities in Spain including Valencia and Seville. My experience abroad so far has been amazing. I have had the opportunity to learn about several different cultures, visit many historical locations, improve my Spanish and travel Europe. My Journey abroad as been a true growing experience and I am very excited for what the next two months have to offer!

ASHLEY GONZALEZ — FRANCE (SPRING 2016)



Ashley Gonzalez is a UNH Junior and Sociology/ International Affairs major. Ashley completed her McNair research fellowship during the summer of 2015 to which she investigated, "Determining how Women of Color Perceive Interactions with the Police". Upon earning a B.A. at UNH next Spring of 2017, Ashley plans to pursue graduate studies in Sociology with a concentration in Criminology.

Ashley describes her experience thus far:

My experience abroad is more than I could have imagined. I am currently living in Cezanne's land of Aix-en-Provence, France. On a regular basis, I can see the mountain that influenced many of his paintings. Aix is also called the city of water, and it is known for it's fountains. I am currently counting them for a class and the number I have so far is 11. Most of my time here is spent walking, finding new discoveries along the way. I am learning that the best way to improve my French is to not be afraid to make mistakes. Studying Abroad is something I would encourage everyone to do.

Page 5 Volume 23: Issue 1

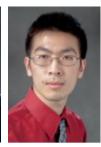
MCNAIR SCHOLARS ALUMNI CORNER

CONGRATS TO MCNAIR ALUM (2015) ON COMPLETING THEIR FIRST YEAR OF GRADUATE SCHOOL!















Left to right: Amber Craft, M.S. Kinesiology (Ball State); Adrienne Hill, M.S. Civil Engineering (Virginia Tech); Olivia Jobin, M.S. Environmental Engineering (Colorado State); Allen Ma, Ph.D. Mechanical Engineering (Tufts University); Herbie Smith, Ph.D. Physics (University of Texas at Austin); Shersingh Tumber-Davila, Ph.D. Earth System Science (Stanford University); Janice Disla, Ph.D. Developmental Psychology (UC Merced).

MCNAIR ALUM (2001) DR. DAVID LUCANDER EARNS GRIOT AWARD!



Dr. David Lucander received his PhD in African American Studies from UMASS Amherst in 2010. He is a 2001 UNH McNair Scholar and has been a faculty member at Rochester Community College since 2009. He teaches Pluralism and Diversity in America, American History, and Civil Rights Movements, 1945-1975. Dr. Lucander was recently recognized with the Griot Award by the African American Historical Society of Rockland County for "for dedication, expertise, and generosity in sharing the story of the African diaspora." Dr. Lucander also recently received the "Missouri History Book Award" by the State Historical Society of Missouri for his most recent authored book, "Winning the War for Democracy: The March on Washington Movement, 1941–1946". The Missouri History Book Award is given annually to the author of the best book written on the history of Missouri and Missourians.

MCNAIR ALUM HONORARY SENIOR CELEBRATION SPEAKER 2016

Dr. Lana Cook, PhD

Senior Communications Assistant, Office of Digital Learning, Massachusetts Institute of Technology McNair Scholar Alum (2005) & Honorary Keynote Speaker, McNair Senior Celebration 2016



Dr. Lana Cook is a proud TRIO alumnae. In addition to being a member of the 2005 UNH McNair cohort, Lana participated in the Upward Bound program at the University of Maine Orono, as well as the Student Support Services program through UNH CFAR. After graduating from UNH in 2007, Lana entered a combined Master's / PhD program at Northeastern University and received her doctorate in English in 2014 with a dissertation on contemporary American literature and film. At Northeastern, Lana was the 2014 recipient of Northeastern's Humanities Center Fellowship, a program that brings interdisciplinary scholars together to engage the university community on topics in the humanities. While at Northeastern, Lana taught writing and literature, and tutored international students on English language writing and speaking. She has presented at a number of local and national conferences and published her work in interdisciplinary journals and other publications. After graduation, Lana worked in program administration over the summer at the Graduate Consortium in Women's Studies at M.I.T, providing an entry into higher education administration. She now works in communications and development at MIT's Office of Digital Learning, collaborating with fellow administrators, faculty, students, and technologists to foster open education for learners worldwide.

Page 6 Volume 23: Issue 1

SUMMER NEWS

CONGRATULATIONS TO UNH MCNAIR SUMMER 2015 SCHOLARS ON PRESENTING THEIR RESEARCH AT THE UNIVERSITY OF CALIFORNIA AT BERKELEY!



Left to right: Tammy Gewehr (Director), Chris Leipold ('16), Thanh Dinh ('17), Deb Magalhaes ('17), Mikey Sales ('17), Stephanie Yee ('16), Michael Mignanelli ('16), Suraj Sangroula ('17), Ashley Gonzalez ('17), Steven Arias ('16), Denyelle Surrell ('16), Val Tomescu ('16), and Rhiannon Jacobs ('16).

SUMMER 2016 RESEARCH FELLOWSHIPS & INTERNSHIPS





Congratulations to our McNair Juniors who have secured internships and research fellowships/assistantships for summer 2016!

Mikey Sales (left), Research Assistant, Developmental Psychology, UNH, Dr. Michelle Leichtman

Thanh Dinh (right), Research Experience for Undergraduates (REU) Fellowship, Texas A & M University

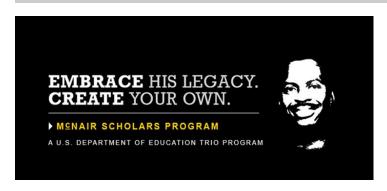
SUMMER 2016 TEACHING FELLOWSHIP



Michael Mignanelli, McNair Scholar and Classics Senior ('16), has been selected to serve as a summer intern for the St. Paul's School Advanced Studies Program in Concord, NH. This internship gives rising college juniors, seniors and recent graduates an opportunity to gain valuable teaching skills by working with experienced teachers in their chosen subject. Michael Mignanelli will be a Teaching Intern for the Ancient Greece course, a course that focuses on the literature, culture, and history of the ancient Greeks. Interns are very involved in teaching classes, leading discussions with the students, class planning, and evening homework help during study hours. They work closely with their teacher daily. In addition, interns lead the sports and extracurricular programs, help supervise the dormitories they live in, and assist in the library. Applicants often demonstrate a genuine interest in being a part of a community of learners, willingness to work hard, and a solid academic record. This program offers substantial compensation to its interns and provides them with housing and living expenses. As an intern, Michael will gain necessary pedagogical skills prior to starting graduate school.

Page 7 Volume 23: Issue 1

UNH MCNAIR CELEBRATES 25 YEARS!



The University of New Hampshire has been home to the McNair Scholars Program since 1991. This summer, the program will host a New England McNair Research Symposium to commemorate the program's 25th year anniversary. Carl McNair, brother of the late Ronald McNair, will serve as the symposium's honorary guest speaker. The research symposium will include faculty, staff, and students from all over the New England area including UNH, UCONN, Wesleyan University, Suffolk University, and UMASS-Boston. Save the Date! The Symposium will occur on July 28th and 29th, 2016, including a brunch and poster presentation on Friday, July 29th.

SPECIAL THANKS TO THE MCNAIR ADVISORY COMMITTEE

The McNair Scholars Program wishes to acknowledge the McNair Advisory committee for their service and continued support of our program and scholars:



Faculty:

- Dr. Cesar Rebellon, Sociology
- Dr. Per Berglund, Physics
- Dr. John Collins, Biomedical Sciences
- Dr. Michelle Leitchtman, Psychology
- Dr. Ricardo Medina, Engineering
- Dr. Chris Reardon, Political Science
- Dr. Gonghu Li, Chemistry

Sean McGhee, Director, OMSA Anna Metzger, Coordinator, CONNECT Program

Students:

Ram Subedi, Senior, Chemical Engineering Brianna Hartford, Senior, Occupational Therapy

MCNAIR CURRENT STATS

Since the UNH McNair Scholars Program began in 1991, it has served 325 students. Of those 138 alumni have gone on to receive a master's degree and 31 have earned a PhD degree. 17 alumni have gone on to earn other professional doctorates and 19 alumni are currently pursuing a PhD.

There are currently 34 UNH McNair scholars enrolled in the program and 29 Pre-McNair students are currently on their way to become McNair scholars next year!

> UNH McNair Alums: We want to hear from YOU! Please let us know where you are in the world and the last degree you completed. Contact us at mcnair.program@unh.edu or (603) 862-0088



MCNAIR SCHOLARS PROGRAM STAFF

TAMMY J. GEWEHR

Director

E-mail: tammy.gewehr@unh.edu

HELEN LONEK Program Assistant

ERIN VARSALONE Assistant Director

E-mail: erin.varsalone@unh.edu

McNair Scholars Program, University of New Hampshire 11 Garrison Avenue, Stoke Hall, G50 Durham NH 03824-3511 Phone: (603) 862-0088 Fax: (603) 862-1927 E-Mail: mcnair.program@unh.edu