National Association of Mathematicians

Newsletter

Volume XLVII Number 2 Summer 2016

Contents

Football Scores in the Math Zone

John Urschel

John Urschel is a Canadian-born American football guard for the Baltimore Ravens of the National Football League (NFL). Even though he played college football at Penn State, he has bachelor's and master's degrees in mathematics from the university. He has published peer-reviewed articles in mathematics, and is currently pursuing a PhD in mathematics from MIT.

Photo courtesy of Penn State Athletics

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publishes the NAM Newsletter four times per year.

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NAM's History and Goals: The National Association of Mathematicians, Inc., known as NAM, was founded in 1969. NAM, a nonprofit professional organization, has always had as its main objectives, the promotion of excellence in the mathematical sciences and the promotion and mathematical development of under-represented minority mathematicians and mathematics students. It also aims to address the issue of the serious shortage of minorities in the workforce of mathematical scientists.

From the Editor

Talitha Washington

As a mother to a young man, I often worry about the societal forces that could cause my son, Maxwell, to sway his engineering ambitions. Next year, he will enter a high school where he will focus on mathematics and engineering as well as pursuing his love of football on the gridiron. As he completes his middle school milestones, I ponder back to the days where I stood taller than he, and he literally looked up to me when we talked. The photo shown on the right was taken when he began his humble football path back in 2010. He now towers over me at a grand six feet four inches tall with broad, strong shoulders. I am hopeful for his future, especially at a time when there are others clearing a path so that he can tackle all that life has to offer.

In this issue of the Newsletter, Jackie Giles encourages us all both to remember and honor our football greats who reached great mathematical heights (page 3). Former NFL player and famous math graduate student John Urschel shows by example that the pursuit of mathematics is doable and fun (cover and page 4). The nation's only all-male black educational institution, Morehouse College, shines brightly as the recipient of a prestigious award which honors them as a program that makes a difference (page 5). Morehouse professor Ulrica Wilson is recognized as excellent teacher for her research and mentorship with undergraduates (page 5). Mariel Vazquez will be feted for her pioneering work on DNA topology at the upcoming Blackwell-Tapia Conference this fall (page 5). Thanks to Hollywood, we will see the "Hidden Figures" of black female scientists and mathematicians who were crucial to NASA's success in the Space Race (page 7). The 2016 Joint Mathematics Meetings in Seattle provided an opportunity for the NAM community to share research, gain connections, and mentor the next generation of mathematicians (page 8). Robert Hampshire will deliver the Blackwell Lecture at the summer MAA MathFest where we will learn key mathematical insights of strategic parking (page 9). We are most thankful for those programs which prosper in developing underrepresented mathematicians, such as MSRI-UP which is celebrating its 10th year (page 10).

I remember the wise words of my uncle Reggie who said that we each must walk our own path. As a mother and mathematician, I am thankful for those who create a better path in mathematics for my child as he will soon dab on 'em in the end zone. With deep joy and appreciation, I am proud to look up to my son and I feel hopeful about his future.

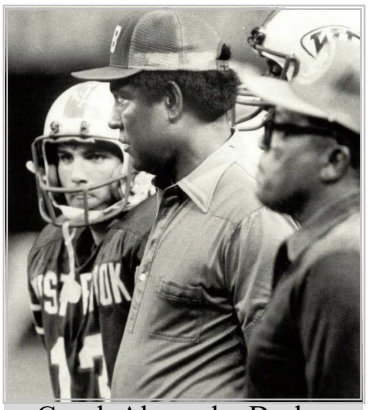
Enjoy!

Don't forget to pay your NAM dues by using the form on page 15 or online at: www.nam-math.org

Mathematical Thinking Enhances Professional Football Performance: Our Groans, Glory & Great Achievements

Jacqueline Brannon Giles

Giving birth to greatness in a university often is accompanied by groans of challenge, struggle and what may appear to be insurmountable tasks. The birth of Texas Southern University (TSU) started with a groan from a man who was denied entrance in another major Texas institution. The groans of segregation gave rise to the birth of a powerful historical university that served the needs of the disenfranchised in 1947. Those groans were a blessing in disguise for they were the sound of birth pains, giving rise to an institution that has produced leaders who are prepared to lead in a culturally diverse United States of America as well as internationally. Many of those leaders have been outstanding on the gridiron in college and professional football.



Coach Alexander Durley

R. C. Thomas remembers the groans of a TSU player who loved to practice on the playing field under the leadership of Head Coach Alexander Durley who was also a mathematics professor. R. C. was a young man who served as the water boy for the TSU team. He is the brother of W. K. Hicks, an outstanding former NFL player with the New York Jets. R. C. remembers Hicks' friend and colleague Warren Wells, who was so passionate about football practice that R.C. sometimes heard him groan when he did his drills and other schemes in practice. Wells is among nearly 65 other Texas Southern University football stars that made memorable contributions to the American Football League and the National Football League.

Coach Alexander Durley would send his football players to the Mathematics Lab, in Samuel Nabrit Hall for mathematics tutoring to help them maintain good averages in their mathematics classes. I met one of the players who became a great "deep threat." In 1962, he claimed that he did mathematics on the football field while I do it on the blackboard. It took a lot of years for me to see the wisdom in his comment.

The preparation and expended intellectual, physical and spiritual energy imparted by the mathematics professor, Alexander Durley, who was also the head coach in the Sixties yielded a cadre of physical warriors. These high achievers made phenomenal gains in professional football. Many, however, have not been heralded in the national media, but now their university has dropped the gauntlet to wage war against oversights and selective exposure. Now is the time for the former TSU stars to shine in glory as we reflect on their great achievements at Homecoming in 2015.

Jacqueline Brannon Giles

The legacies of achievement in sports are founded on the passions and pathos of the academic leaders, both past and present. Isaac Newton said, "If I have seen farther than others, it is because I have stood on the shoulders of giants." So, the giants in athletic achievement of the past at Texas Southern have established a robust foundation for the future. Some of the great achievers in professional football who I have researched are:

Douglas, John (1967 - 1969)
Frazier, Charlie (1962 - 1970)
Hicks, W.K. (1964 - 1972)
Hill, Winston (1963 - 1977)
Holmes, Ernie (1972 - 1978)
Jones, Homer (1964 - 1970)
Rice, Andy (1966 - 1973)
Wells, Warren (1964 - 1970)
White, John (1960 - 1961)

One of the powerful professional football players who attended Texas Southern University and who brought honor and glory to us all was Ernie Holmes. He was a part of the strong defense for the Pittsburgh Steelers. The other strong men of the "Steel Curtain" were "Mean" Joe Greene, L. C. Greenwood, and Dwight White.

Ernie Holmes inspired me because he is the father of a young mathematician, Dr. Roderick Holmes who made history by becoming the second African American male to complete a Ph.D. in mathematics at the University of Houston. The fact that the senior Holmes fathered the historical mathematician is evidence, in my opinion, that the men on the playing field are often men of high intellect, and those genes are passed down to the next generation of

Ernie Holmes

http://www.steelers.com/news/article-1/Steelers-Chairman-Dan-Rooney-on-the-Death-of-Ernie-Holmes/F603357A-F872-4C26-BDB7-7A27E1EE51EF

football, mathematics and other disciplines.

Another reason I developed a passion for researching and writing about the men who attended Texas Southern and who played professional football is because in 1974 I hired a relative of one of the Steel Curtain group. Bob White, a former probation officer, would brag about the feats of the Steel Curtain during breaks at an Urban League Emergency School Aid Act (ESAA) project located at Blodgett and Dowling at the former Urban League location. Bob White was the uncle of Dwight White of the Steel Curtain.

John White, another TSU alumnus, also inspired a passion in me for research and writing about football. He headed Project P.U.L.L. after his career ended, and he hired other former NFL players from Texas Southern as a part of his community service effort to touch and direct the lives of those who had unusual challenges when they transitioned from the glory of professional football back to mundane lifestyles in Third Ward. John White's project was located on McGowan and Hwy 288. The purpose of the project was youth development, and leadership development. Deloyd Parker, the Executive Director and Founder of S.H.A.P. E. Community Center reminded me that Project P.U.L.L. was funded by professional athletes and community persons.

Winston Hill inspired me, too. Hill protected the blind -side of Joe Namath. Over the years I have questioned the selection process of the committee responsible for voting players into the Professional Football Hall of Fame in Canton, Ohio. Two visits to the Hall of Fame shifted my interest to examine the selection process. One research question that I have posed to hundreds of students requires us to look at the interaction analysis on the football playing field. The argument I present is that a quarterback cannot be successful if the wide receiver or others do not make successful receptions. The quarterback cannot be successful if he is sacked. Therefore, the players who successfully protect the quarterback are as valuable as the quarterback. The logic directs our thinking to conjecture that if the quarterback is in the Hall of Fame, then the key players who protected him should be enshrined.

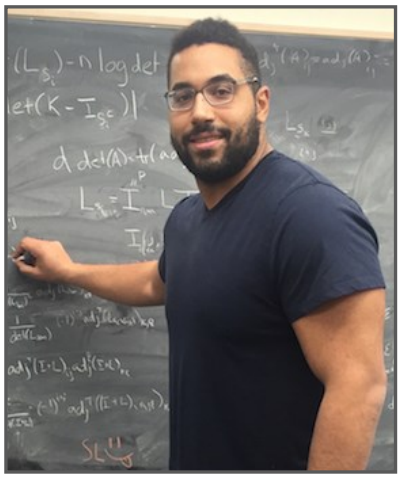
The other arguments that have been presented in more than 1400 articles on Bleacher Report and Raider Nation Times include a characterization of intensity, integrity, and consistency in performance on the playing field. Several TSU alumni demonstrated those characteristics on the playing field. Many of the more than 65 TSU alumni who became AFL or NFL players have not been recognized for their illustrious achievements. Some argue that players from Historically Black Colleges and Universities, in the past, did not have the support system to protect and promote their achievements in professional football. Also, there are those who agree with the premises of life after football challenges depicted in the documentary entitled, "Broke," distributed by ESPN.

Texas Southern University is leading the movement to recognize its own graduates and former students by featuring their achievements in both their professions and in their communities. The celebratory events of this year's Homecoming will resound through this nation, signaling a new era of recognition and honor for those who have inspired millions by their outstanding performance on the gridiron.

We salute our professional football stars. We are grateful for the joy and inspiration they are giving us and have given us through the years.

Jacqueline Brannon Giles is an Adjunct Professor at Texas Southern University and a Resident Professor at Central College, Houston Community College. She is also the Region C Representative of the National Association of Mathematicians Board of Directors. She can be reached at: jbgiles@yahoo.com

From the Editor: Texas Southern University (TSU) is a historically black university (HBCU) that was founded in 1927 in Houston, Texas. Since it's founding, the institution has held several names including the Houston Colored Junior College (1927-1934), the Houston College for Negroes (1932-1947), Texas State University for Negroes (1947-1951) and Texas Southern University (1951-Present). TSU is a doctoral/research university 11 schools and colleges that serves about 9,700 undergraduate and graduate students. More than 60 TSU alumni have played professional football. Their clearly conveyed motto is "Excellence in Achievement".



NFL player John Urschel Tweets that He Got Four As @ MIT Math PhD

John Urschel @JohnCUrschel · May 24

My first semester in school in nearly three years. Four PhD classes at MIT. Four A's. The streak continues!!!

244 1.1K •••

Morehouse Receives the AMS Mathematics Programs that Make a Difference Award

Left to right: Tre Wells, Zerotti Woods, Aquia Richburg, Jordan Clark, Jerrell Mure, Octavious Talbot, and Malachi Morgan. All are 2014 Morehouse graduates except Richburg, who finished in 2015. Credit: Morehouse College Department of Mathematics

The Department of Mathematics at Morehouse College has been chosen to receive the 2016 AMS Mathematics Programs that Make a Difference Award. (Photo of Morehouse students at the Joint Mathematics Meetings courtesy of the Morehouse College Department of Mathematics.)

The annual award was created by the AMS Committee on the Profession to recognize outstanding programs that successfully address the issue of underrepresented groups in mathematics. Morehouse is honored "for its significant efforts to encourage students from underrepresented groups to continue in the study of mathematics."

David Savitt of Johns Hopkins University, who served as chair of the award selection committee, said: "The Department of Mathematics at Morehouse College goes the extra mile to encourage and challenge its students. The faculty show great care and devotion in their teaching and mentoring, and they also open students' horizons by, for example, offering research opportunities and getting students to participate in conferences. The impact Morehouse has on increasing diversity in the mathematical sciences community will exert a positive effect for years to come. The AMS is very happy to present this deserving department with the Programs that Make a Difference Award."

Morehouse College is a private, all-male, historically black college in Atlanta, Georgia, with enrollment of approximately 2200 students. In recent years its Department of Mathematics has graduated an average of 14 mathematics majors per year. This places Morehouse as the nation's top producer of black male mathematics degree recipients (and one of the top producers of all black mathematics graduates). Roughly half of recent mathematics majors have gone on to graduate programs in STEM disciplines, a majority of those in the mathematical sciences. Notably, three alumni earned mathematics PhDs in 2015 (and a total of six in the past seven years); for comparison, a total of fifteen black male U.S. citizens earned a PhD in mathematics nationwide in 2013-14.

The Morehouse mathematics department strives to provide a challenging yet nurturing environment for all of its students. Much of the department's energy is focused on excelling in the ordinary business of all mathematics departments: delivering high-quality instruction in rigorous courses. Encouragement and support are given both to students who are struggling and to students who are excelling. The department hosts various social events that build community among the students and foster a sense of camaraderie centered on shared interest in mathematics.

Through interactions with faculty and colloquium speakers, Morehouse mathematics students gain new perspectives on the opportunities a degree in mathematics opens up. They also start to see beyond their coursework and to get a taste of what research in mathematics is like. Mathematics majors are encouraged to participate in Research Experiences for Undergraduates programs, and some also do research projects with Morehouse faculty. Students make presentations in departmental poster sessions and at local and national mathematics conferences, including in the Harriett J. Walton Symposium on Undergraduate Mathematics Research, which the department has held annually for the past 14 years.

The official announcement of this award, including the selection committee's citation, is available from the AMS Public Awareness Office and appears in the May 2016 issue of the *Notices of the AMS*.

For media inquiries, contact Mike Breen at paoffice@ams.org.

Professor Ulrica Wilson Named Morehouse College's 2016-2017 Vulcan Teaching Excellence Award Winner

Morehouse College Office of Strategic Communications

Morehouse College mathematics professor Ulrica Wilson has been named the institution's 2016-2017 Vulcan Teaching Excellence Award winner.

Established by the Vulcan Materials Company and co-sponsored by the Georgia Independent Colleges Association, the Vulcan Teaching Excellence Award goes to an outstanding professor who demonstrates strong academic skills in the classroom and provides leadership and support in other areas of campus life.

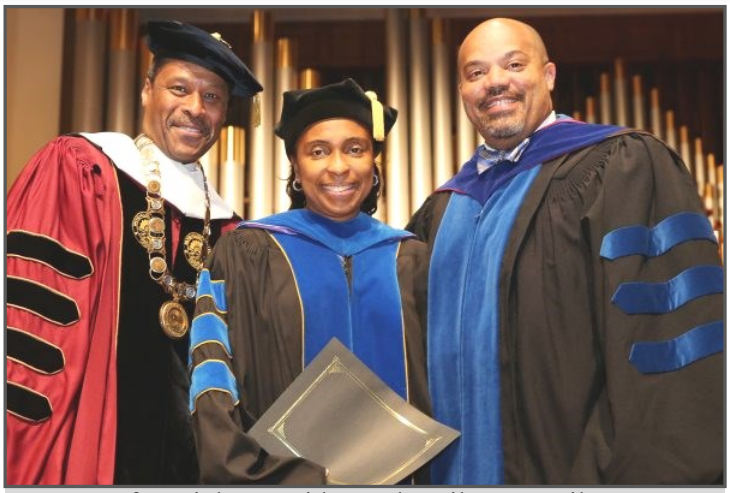
An assistant professor whose research interests are in non-commutative ring theory and combinational matrix theory, Wilson has been at Morehouse since 2007. She has received a number of awards, grants and fellowships during her teaching career, including fellowships from the Woodrow Wilson Foundation, the Ford Foundation and the Irvine Foundation. Wilson is also the associate

director for Diversity and Outreach at the Institute for Computational and Experimental Research in Mathematics at Brown University.

Wilson has led work on grants designed to help Morehouse students to get into graduate programs. She also has mentored students as they complete their own research. She also has served on curriculum committees and has tirelessly worked to make sure students get the academic support they need.

Wilson also organizes an annual workshop that works with faculty participants from around the country on best practices for supervising undergraduate research projects. She also co-directs a program that prepares women for doctoral study and mentors them towards success in graduate school and professionally.

"Having more than a stellar record of dedicated teaching at Morehouse College, our Vulcan Award winner this year clearly demonstrates commitment to her department, to her division and to the College, but most importantly to the full and complete development of our men, undergraduates and alumni alike," said Garikai Campbell, provost and senior vice president for Academic Affairs.



Left to right: President John Silvanus Wilson, Ulrica Wilson, and Garikai Campbell

For media inquiries, contact Add Seymour Jr. of the Morehouse College Office of Strategic Communications at Add.Seymour@morehouse.edu

Vazquez to Receive 2016 Blackwell-Tapia Prize

Catherine Crawley

The National Blackwell-Tapia Committee is pleased to announce that the 2016 Blackwell-Tapia Prize will be awarded to Mariel Vazquez, a professor in the departments of mathematics and of microbiology and molecular genetics at the University of California, Davis.

The prize is awarded every other year in honor of the legacy of David H. Blackwell and Richard A. Tapia, two distinguished mathematical scientists who have been inspirations to more than a generation of African American, Latino/Latina, and Native American students and professionals in the mathematical sciences. The prize recognizes a mathematician who has contributed significantly to research in his or her field of expertise, and who has served as a role model for mathematical scientists and students from under-represented minority groups or has contributed in other significant ways to addressing the problem of the under-representation of minorities in math.

Vazquez is a pioneer in an emerging field called DNA topology, which applies pure math to untangle the biological mysteries of DNA. Application areas of her research include cancer treatment, drug design, understanding genome rearrangements after radiation damage or in cancer, and gaining insight into how genomes package in viruses and within cells and into how viral DNA (e.g., retroviruses, such as HIV) integrates into the host genome. Vazquez was an academic visitor in the biochemistry department at the University of Oxford, England, in 2006 and 2007 and was a visiting scholar at the University of California, Berkeley in 2008. Vazquez was an academic visitor at the Cancer Research Center in Salamanca, Spain, and an academic visitor at the molecular biology department in the Center for Research and Development in Barcelona, Spain. Vazquez's research has been supported by grants from the National Institutes of Health and by the National Science Foundation (NSF). In 2012, she was one of only 96 scientists to receive a Presidential Early Career Award for Scientists and Engineers from U.S. President Barack Obama. She was also the recipient of a NSF CAREER award in 2011 for her efforts conducting innovative research and finding creative ways to integrate research and education.

Mariel Vazquez

Vazquez has worked passionately to increase diversity in the mathematical sciences at all levels. As a professor at UC Davis since 2014, Vazquez mentors graduate students, has developed an interdisciplinary course in "Analyzing DNA Structure with Mathematical and Computational Methods," and has served as co-PI on a grant from the National Security Agency to increase the mathematics and statistics components of the 2015-2016 annual conferences of the Society for Advancement of Chicanos/Hispanics and Native Americans in Science. She has also volunteered for other public outreach, including lecturing for the UC Davis Math Circle for middle and high school students. Before joining UC Davis, Vazquez was on the faculty at San Francisco State University where she mentored undergraduates and graduate students and co-founded the elementary school level component of the San Francisco Math Circles.

The prize will be presented at the Ninth Blackwell-Tapia Conference and Awards Ceremony on Oct. 28-29, 2016, at the University of Knoxville, Tennessee. The conference is co-hosted by the National Institute for Mathematical and Biological Synthesis (NIMBioS) and the Statistical and Applied Mathematical Sciences Institute (SAMSI). The conference includes scientific talks, poster presentations, panel discussions and ample opportunities for discussion and interaction. Participants will come from all career stages and will represent institutions of all sizes across the country, including Puerto Rico.

The idea for a conference honoring Blackwell and Tapia came from Carlos Castillo-Chavez, who was a member of the Mathematical Sciences Research Institute's (MSRI) Human Resources Advisory Committee and a professor of mathematics at Cornell University at the time. Chavez, now a professor at Arizona State University, secured funding from Cornell for the first Blackwell-Tapia Conference in 2000. The award was established two years later under the leadership of Castillo-Chavez and MSRI Director David Eisenbud. Since 2002, the NSF Mathematical Sciences Institutes have served as conference sponsors and hosts. For the 2016 conference, NIMBioS received a grant from the Alfred P. Sloan Foundation to help support the event. Subsequent conferences were held at MSRI (2002), the Institute for Pure & Applied Mathematics (2004 and 2014), the Institute for Mathematics and its Applications (2006), SAMSI (2008), the Mathematical Biosciences Institute (2010), and the Institute for Computational and Experimental Research in Mathematics (2012).

The Blackwell-Tapia Prize was offered for the first time in 2002. Recipients exemplify the high standards of research and service to under-represented minority communities recognized by this award. Past prize recipients include Arlie Petters, Benjamin Powell Professor of Mathematics, Physics, and Business Administration at Duke University (2002); Rodrigo Bañuelos, Professor of Mathematics at Purdue University (2004); William Massey, Edwin S. Wiley Professor of Operations Research and Financial Engineering at Princeton University (2006); Juan Meza, Dean of the School of Natural Sciences at the University of California at Merced (2008); Trachette Jackson, Professor of Mathematics and head of the Jackson Cancer Modeling Group at the University of Michigan (2010); Ricardo Cortez, Pendergraft William Larkin Duren Professor of Mathematics at Tulane University (2012) and Jacqueline Hughes-Oliver, Professor of Statistics, North Carolina State University (2014).

Left to right: David Blackwell (1919-2010) and Richard Tapia

The National Blackwell-Tapia Committee selected the prize recipient. Committee co-chairs are the 2012 and 2014 prize recipients Cortez and Hughes-Oliver. The other committee members are Castillo-Chavez and Eisenbud, as well as Lloyd Douglas, University of North Carolina; Deanna Haunsperger, Carleton College; Suzanne Lenhart, NIMBioS and the University of Tennessee, Knoxville; Bob Megginson, University of Michigan; Kelly Sturner, NIMBioS; and Sherry Woodley, Arizona State University.

As recipient of the 2016 prize, Vazquez now joins the selection committee for the next Blackwell-Tapia prize.

To register for the conference, see:

http://www.nimbios.org/education/blackwell_tapia

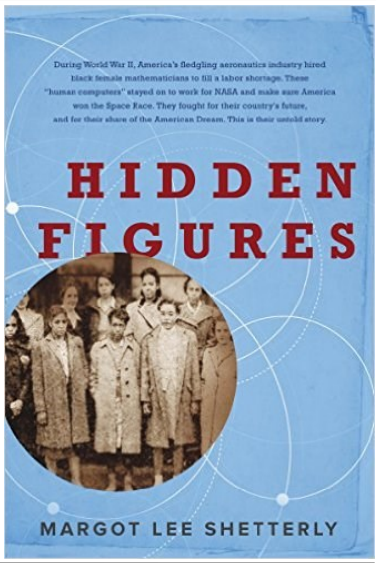
For more information, contact NIMBioS Communications Manager Catherine Crawley at ccrawley@nimbios.org.

Movie "Hidden Figures" Tells the Stories of NASA Mathematicians from the 1960s

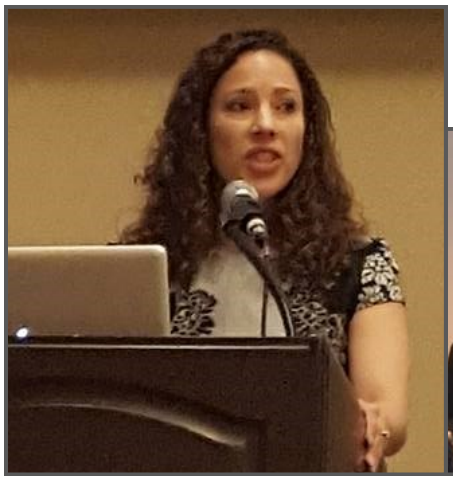
"Hidden Figures" will tell the inspiring story of mathematicians Katherine Johnson (Taraji P. Henson) and Dorothy Vaughn (Octavia Spencer) as well as engineer Mary Jackson (Janelle Monáe). The movie is based on Margot Lee Shetterly's book, "Hidden Figures: The Story of the African-American Women Who Helped Win the Space Race," to be published September 6, 2016 by HarperCollins.

The three titular characters worked at NASA during the height of the Space Race. For example, their calculations helped launch astronaut John Glenn into orbit in 1962. From 1953 to 1983, Katherine Johnson worked for NASA as a "computer" for celestial navigation. She was instrumental in calculating the trajectory for both Project Mercury and the Apollo 11 flight to the Moon in 1969. On November 24, 2015, President Obama awarded Johnson the Presidential Medal of Freedom as a ceremony at the White House.

The film will be released on January 13, 2017.



NAM at the 2016 Joint Mathematics Meetings in Seattle



NAM Cox-Talbert Address (left) was given by Tanya Moore (Building Diversity in Science/City of Berkeley) who shared "Why mathematicians and statisticians are needed to create lasting social impact."

NAM Panel Discussion (above, right) on how to "Work hard, play hard: balancing career, hobbies, and family", featured Ron Buckmire (Occidental College), Emille Davie Lawrence (University of San Francisco), Robin Wilson (California State Polytechnic University), and Mariel Vazquez (University of California at Davis).

NAM Granville-Brown-Haynes Session of Presentations by Recent Doctoral Recipients in the Mathematical Sciences (above, left to right) included research talks by Caleb Ashley (Morehouse College), Syvillia Averett (Central State University), Reginald McGee (Mathematical Biosciences Institute), Kevin Mugo (Purdue University), and Nakeya Williams (United States Military Academy at West Point). Nakeya Williams received the special award from the Mathematical Biosciences Institute (MBI) for her presentation.

NAM Banquet provided the students of Medgar Evers College an opportunity to talk with keynote speaker Tanya Moore (above, left).

NAM Claytor-Woodard Lecture on the "Analysis on non-smooth domains" was given by Tatiana Toro (center, University of Washington). Edray Goins (left, NAM President) and Talitha Washington (right, NAM Vice-President) awarded her a plaque.

MAA Minority Chairs Meeting, led by Lloyd Douglas (MAA Interim Director of Programs), where Ulrica Wilson (left, Morehouse College) shared that EDGE 2016 will be at Purdue University.

Robert Hampshire to Give NAM's Blackwell Lecture at Summer MAA MathFest 2016

Robert Hampshire (University of Michigan) will give the NAM David Harold Blackwell Lecture at the MAA MathFest on Friday, August 5, from 1:00 p.m. to 1:50 p.m. in the Regency Ballroom in the Hyatt Regency hotel in Columbus, Ohio. Hampshire's lecture is entitled "Urban Analytics: The Case for Smart Parking". This lecture will present Hampshire's results on the problem of harmful air pollution and costly gas using techniques from queueing theory, stochastic processes, the Rao-Blackwell theorem, optimization, and machine learning. For more information, see:

http://mathfest.maa.org

NAM @ JMM 2017 in Atlanta

Thursday, January 5, 8-11:50 a.m. and 1-3:50 p.m.
AMS–NAM Joint Special session on *The Mathematics of the Atlanta University Center* organized by Talitha Washington (Howard University), Monica Jackson (American University) and Colm Mulcahy (Spelman College)

Friday, January 6, 1:00 p.m.-4:00 p.m.
NAM Granville-Brown-Haynes Session of Presentations by Recent Doctoral Recipients in the Mathematical Sciences organized by Talitha Washington (Howard University)

Friday, January 6, 2016, 6:00 p.m.-8:40 p.m.
NAM Banquet with the *NAM Cox-Talbot Address* given by Garikai Campbell (Provost, Morehouse College)

Saturday January 7, 2016, 9:00 a.m.-9:50 a.m.
NAM Panel Discussion, Moderated by Duane Cooper, Morehouse College

Saturday, January 7, 2016, 10:00 a.m.-10:50 a.m.
NAM Business Meeting

Saturday, January 7, 2016, 1:00 p.m.-1:50 p.m.
NAM Claytor-Woodard Lecture given by Wilfrid Gangbo (Georgia Institute of Technology)

To register, see: http://jointmathematicsmeetings.org/jmm

NAM Calendar

Conferences & Workshops

CAARMS 21 (Conference for African American Researchers in Mathematical Sciences) will be held **June 15-18**, 2016 in Princeton, New Jersey. See: http://www.caarms.net

The **Diversity Workshop and Mentoring Program** at the Joint Statistical Meetings in Chicago, Illinois will be held on **July 31-August 3, 2016**. See: http://community.amstat.org/cmis/events/dmp

MAA MathFest 2016,will be held **August 5-8** in Columbus, Ohio. The **NAM David Blackwell Lecture** will be given on August 5 at 1:00 pm by Robert Hampshire (University of Michigan) who will present "Urban Analytics: The Case for Smart Parking". See announcement above.

The **Richard Tapia Celebration of Diversity in Computing** conference will be held **September 14-17, 2016** in Austin, Texas. See: http://tapiaconference.org

StatFest, a one day statistics conference for undergraduates from underrepresented groups, will be held on **September 24, 2016** at Howard University in Washington, DC. See: http://community.amstat.org/cmis/events/statfest

The Society for the Advancement of Hispanics/Chicanos and Native Americans in Science will host the **2016 SACNAS National Conference** on **October 13-15** at the Long Beach Convention Center, Long Beach, California. See: http://sacnas.org/events/national-conf

The **Black Doctoral Network Conference** will be held on **October 27-29, 2016** in Atlanta, Georgia. See: www.blackphdnetwork.com

The **2016 Blackwell-Tapia Conference** will be held on **October 28-29** at the University of Tennessee Conference Center in Knoxville, Tennessee and is organized by the National Institute for Mathematical and Biological Synthesis (NIMBioS). The award recipient is Mariel Vazquez who is featured on page 6 in this Newsletter. See: http://www.nimbios.org/education/blackwell_tapia

The **2016 Field of Dreams Conference** will be held **November 4-6** in in St. Louis, Missouri. See: http://www.mathalliance.org

Joint Mathematics Meetings 2017 will be held in Atlanta, Georgia on **January 4-7** (Wednesday-Saturday). See above and: http://jointmathematicsmeetings.org

The Association for Women in Mathematics (AWM) **Research Symposium** will be on **April-8-9, 2017** at the University of California Los Angeles and includes keynote speaker Mariel Vazquez who is featured in this Newsletter on page 6. See: https://sites.google.com/site/awmmath/home/awm-research-symposium-2017

The **National Mathematics Festival** is a free and public celebration that will be held on **April 22, 2017** in Washington, DC. See: www.nationalmathfestival.org

Job Openings

Job openings may be found on the *NAM Newsletter* webpage at:

http://nam-newsletter.org

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MSRI-UP Celebrates 10th Year

The Mathematical Sciences Research Institute (MSRI) celebrates its 10th year in hosting the MSRI Undergraduate Program (MSRI-UP). This is a summer program for undergraduate students, especially those from underrepresented groups, who have completed two years of university level courses and would like to conduct research in the mathematical sciences. MSRI-UP provides students with meaningful research experiences, the necessary skills and requisite knowledge to participate in successful collaborations. The program also provides a community of academic peers and mentors who encourage and support students through a successful graduate program.

The organizers include Federico Ardila (San Francisco State University), Duane Cooper (Morehouse College), Maria Mercedes Franco (Queensborough Community College (CUNY)), Herbert Medina (Loyola Marymount University), and Suzanne Weekes (Worcester Polytechnic Institute). For more information, see: www.msri.org/up

Francis Su (Harvey Mudd College) led the research in 2015

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