

## **Abstracts for Awarded Grants FY17 By Department**

### **Academic Affairs:**

**PALMGREN, Jennifer: Woodrow Wilson Teaching Fellowship – Woodrow Wilson National Fellowship Foundation – 7/1/2014–6/30/2016 – PS#N1730 – Awarded: \$250,817.88:**

This grant establishes a model for the design and implementation of the Woodrow Wilson Foundation New Jersey Teacher Fellowship Program at TCNJ. Under this Program, the Foundation will work with TCNJ to recruit some of the best and brightest individuals as Woodrow Wilson Teaching Fellows, and will place these Fellows in new graduate level teacher preparation programs. These Fellows will agree to teach in high need urban and/or rural schools in New Jersey for at least three years, while TCNJ shall provide the Fellows with intensive mentoring.

### **School of Arts and Communications:**

**CROLL, Emily: Mercer County History Grant – 9/1/2015 – 8/31/2016 – S1636 – Awarded \$1,950.00 (Final Report due 1/8/2017)**

To support the stewardship of the Sarnoff Collection at TCNJ. The Sarnoff Collection plays an important role in educating and connecting local citizens in Mercer County to their rich, historical legacy.

**PAZELLA-GRANLUND, Margaret: MCCHC 2017 – Mercer County Cultural Heritage Commission – 1/1/2017 – 12/31/2017 – S1880 – Awarded \$4,400.00**

The MCCHC grant will help support 8 events in the Art Gallery at TCNJ. Funding is essential for supporting costs related to the printing of exhibition catalogues, announcements, posters, and exhibition installation expenses.

### **School of Business:**

**ALLEN, Lorraine: SBDC Costshare 2016 – TCNJ – 1/1/2016 – 12/1/2016 – C1641 – Awarded \$35,032.15:**

This is a renewal of Small Business Development Centers for 2016. The main objective is to contribute to the growth and economic development of the small business community through small business retention and expansion for Mercer County.

**ALLEN, Lorraine: SBDC Federal 2016 – Rutgers SBA – 1/1/2016 – 12/31/2016 – F1641 – Awarded \$165,000.00:**

This is a renewal of Small Business Development Centers for 2016. The main objective is to contribute to the growth and economic development of the small business community through small business retention and expansion for Mercer County.

**ALLEN, Lorraine: SBDC County 2016 – Mercer County Economic Development – 2/1/2016 – 1/31/2018 – C1652 – Awarded \$34,000.00**

This is a renewal of Small Business Development Centers for 2016. The main objective is to contribute to the growth and economic development of the small business community through small business retention and expansion for Mercer County.

**ALLEN, Lorraine: SBDC Federal 2017 – US SBA – 1/1/2017 – 12/30/2017- F1741 – Awarded: \$165,000.50**

The purpose is to provide long term clients with research, walking tour of actual companies, launch a Spanish translated module to attract new Latino startup companies, and provide an advisory board for business owners to provide feedback and recommendations. Along with holding finance conference and partnering with other companies to provide support

**ALLEN, Lorraine: SBDC State 2017 – State of New Jersey – 7/1/2016 – 6/30/2017 – S1741 – Awarded:\$32,400**

This is a renewal of Small Business Development Centers for 2017. The main objective is to contribute to the growth and economic development of the small business community through small business retention and expansion for Mercer County.

**ALLEN, Lorraine: SBDC County 2017 – Mercer County Economic Development – 1/1/2017 – 12/31/2017 – C1752 – Awarded \$34,000.00**

This is a renewal of Small Business Development Centers for 2017. The main objective is to contribute to the growth and economic development of the small business community through small business retention and expansion for Mercer County. Costshare for F1741 from County.

**ALLEN, Lorraine: SBDC Costshare 2017 – TCNJ – 1/1/2017 – 12/31/2017 – C1741 – Awarded \$34,448:**

This is a renewal of Small Business Development Centers for 2017. The main objective is to contribute to the growth and economic development of the small business community through small business retention and expansion for Mercer County.

### **Economics**

**BAKER, Richard: Race, Family Background, and Educational Attainment in the Early Twentieth-Century South – Spencer Foundation – 3/1/2016 – 2/28/2018 – Awarded \$49,891.00**

The results of the project will shed light on the determinants of racial differences in school and earnings. In addition, this grant will assess the relative importance of disparities in educational opportunity and family background as contributors to the racial gap in educational attainment.

## **Community Centers:**

### **Bonner Center:**

**CAMP, Heather: TVRS Continuation – NJ-OAG – 7/1/2016 – 6/30/2019 – S1755 – Awarded \$1,277,623.00**

Extension of the TVRS project. Funding helps pay students to collect data, conduct interviews, and Mental Health First Aid training.

**DONOHUE, Patrick: MCDHS-TCNJ Capacity Building-1/1/2015-12/31/2016-PS: S1527 -Awarded: \$90,000**

With this funding, it will help assist in maximizing benefits and improving the community and county by enhancing the capacity to respond to the needs of its clients and program participants of the local non-profit network. This funding will help to create and sustain at least one program at TCNJ Trenton Works that helps community partners utilize the arts as a vehicle to enhance the resiliency factors.

**DONOHUE, Patrick: FNJ TPPB – Fund for New Jersey – 7/1/2014-9/30/2015 – N1575 – Awarded \$40,000:**

The purpose of this grant is to further develop the capacity of the Trenton Prevention Policy Board, a unique local collaborative community network of professionals in the capital city that aims to reduce youth violence and crime through collective action. It will move the Board closer to a grassroots model that involves a substantially higher number of Trenton residents and at-risk youth in an important deliberate and action-oriented process that changes policies, practices, and programs. This grant will provide the community with a more robust and steady stream of academic resources, including students and professors that will advance its agenda.

**DONOHUE, Patrick: Bonner Innovation Fund (Continuation) – The Corella and Bertram F. Bonner Foundation – 8/1/2014-8/31/2016 – N7055 – Awarded \$37,510:**

Through this grant, The Bonner Center at The College of New Jersey will have the ability to address the one issue, from which most of the other problems have stemmed, that the City of Trenton is facing: the lack of economic opportunities or jobs. This grant offers an opportunity for Bonners, other students, and their partners (faculty and community) to directly and indirectly address this lack of opportunity in a place-based initiative; one that focuses on downtown Trenton. Specifically, they will help establish and maintain a city hub for community engaged learning and innovation; one that will draw visitors downtown and channel their creativity to help rejuvenate the heart of the city.

**DONOHUE, Patrick: NJ AmeriCorp Formula Year 2 of 3 (2015) – NJ CNCS – 9/1/2014-8/31/2015 – S1550 – Awarded \$240,673:**

This grant will address the persistent statewide poverty issues in pre-determined New Jersey counties. Some municipalities in these counties are plagued by extreme levels of poverty, and the need for anti-poverty programs in these areas are well-documented. Through the funding of this grant, the program will focus on various anti-poverty services and in particular, those services related to economic opportunity, education, and healthy futures.

**DONOHUE, Patrick: NJ AmeriCorp Bonner Match FY2015 – Bonner Foundation – 9/1/2014-8/31/2015 – N1555 – Awarded \$37,490:**

This grant is part of an effort to mobilize students, professors, and other volunteers to address the unmet needs of local communities. In particular, this grant will be used to fund Program Operating Costs as defined by the New Jersey AmeriCorps Bonner Leader Program project budget and any other budget amendments sent to the Bonner Foundation.

**FOELL, Christen (formerly DONOHUE, Patrick): National Bonner AmeriCorps Program Year 2, 2014-2015 – CNCS – 10/6/2013-10/5/2016 – F1431 – Awarded \$227,825:**

Given the breadth of community needs within the targeted geographic areas, Bonner AmeriCorps members will serve with a wide range of organizations addressing the needs related to education, poverty, economic opportunity, environmental issues, services for persons living with disabilities, and other human needs. However, Bonner AmeriCorps members will be primarily involved in service related to the educational, economic, and health related needs of disadvantaged persons.

**DONOHUE, Patrick: FY15 Community Partner Capacity – Agency – 7/1/2014-8/31/2015 – P1551 – Awarded \$33,377:**

Funding for this grant will help continue the Community Partner Capacity Building Initiative. Bonner wants to partner with non-profit organizations to cultivate the common ground that exists between the teaching/civic mission of the College and the needs/interests of the community organization.

**CORDIER, Kristi: NJ Bonner AmeriCorp FY 16 – NJ Department of State (CNCS) 9/1/2015 – 8/31/2016 – S1650 – Awarded \$348,465.00**

TCNJ proposes a multi-size collaboration involving institutions of higher education and nonprofit organizations to have 62 AmeriCorps members who will provide services related to education, economic opportunity, and health futures by offering academic support to disadvantaged youth, job training, and other skill development services to un- and underemployed persons and help low-income individuals increase food security in Mercer and Middlesex Counties.

**CORDIER, Kristi: NJ Bonner AmeriCorp FY 17 – NJ Department of State (CNCS) 9/1/2016 – 8/31/2017 – S1750 – Awarded \$341,485.00**

Renewal - TCNJ proposes a multi-size collaboration involving institutions of higher education and nonprofit organizations to have 62 AmeriCorps members who will provide services related to education, economic opportunity, and health futures by offering academic support to disadvantaged youth, job training, and other skill development services to un- and underemployed persons and help low-income individuals increase food security in Mercer and Middlesex Counties.

**NORDQUIST, Michael: BTE Ewing – Johnson & Johnson – 8/15/2016 – 6/30/2017 – PS: Awarded: \$10,000.00**

TCNJ's Center for Community Learning and Research (CELR Center) is pleased to submit this Letter of Intent, respectfully requesting \$10,000.00 to enter into a partnership with Janssen Pharmaceuticals, Ewing Public School District, and Ewing High School for the purpose of designing and launching a Johnson & Johnson Bridge to Employment (BTE) program in Ewing, NJ.

**NORDQUIST, Michael: Trenton Youth Policy Planning Board – NJ OAG – 7/1/2016 – 6/30/2017 – PS: 1731 Awarded: \$40,000.00**

The purpose of YPPB Initiative in NJ is to reduce youth violence and delinquency while simultaneously strengthening and building relationships between local law enforcement and communities. Various federal and state policies and practices empower the convening of the YPPB Initiative in NJ. State and National experts agree that the most effective delinquency and crime prevention strategies seek to reduce the influence of environmental and community characteristics scientifically shown to be highly correlated to crime. At the same time we must increase the impact of protective factors that build resiliency and mitigate against the impact of risk factors. Delinquency prevention should be a multi-pronged endeavor. It should incorporate a wide array of sometimes seemingly unrelated public policy efforts that collectively contribute to the "bottom line" of less crime and increased public safety. Public policy efforts to improve schools, reduce substance abuse, child abuse, and neglect and teen pregnancy, strengthen families and communities, address mental health problems, improve job readiness and provide greater job opportunities make significant contributions to a comprehensive primary delinquency prevention strategy.

**NORDQUIST, Michael: Mercer County Capacity Building Initiative – Mercer County Department of Human Services– 1/1/2017 – 12/31/2018 – Awarded: \$45,000.00 –PS#: N1797**

Fee for Service between Mercer County and TCNJ. The purpose is assist in maximizing benefits and improving the community and county by enhancing the capacity to respond to the need of its clients and program participation of the local non-profit network. By entering the contract both parties agree to build the capacity of identified local non-profits to better the needs of their collective populations.

**NORDQUIST, Michael: Wells Fargo BCS Education Brigade – Wells Fargo Foundation – 3/29/2017 – 3/31/2018 – Awarded: \$25,000.00 – PS#P1723**

To support the TCNJ Wells Fargo-Bonner Education Brigade that works with Trenton youth in three locations. The team focuses on literacy, positive youth development, and environmental education. They deliver the following programs: 1. Facilitate after-school activities 2. read aloud and respond 3. Literacy project community engaged learning days 4. Learning lab at Habitat for Humanity 5. Environmental Education.

**NJSSI:**

**DREWES, Donna: RWJ Health Impact Assessment – Robert Wood Johnson – 7/1/2015-12/31/2015 – PS: N1538- Awarded \$350,000:**

The purpose of this effort is to use the experience of Superstorm Sandy as a case study to (1) identify health-related impacts of storm surge disasters; (2) canvas the needs and opportunities for employing health information to support the recovery of victim populations and victimized communities, especially during the initial recovery phase; (3) select appropriate indicators of these impacts; (4) determine whether such indicators can be accommodated within existing Health Impact Assessment practices as well as the modifications that might be necessary to include them; and (5) outline the components of a more holistic Health Impact Assessment process.

**DREWES, Donna: Civic Engagement – Community Foundation of NJ – NJ/Community Foundation of NJ – 7/1/2013 – 12/31/2014 – PS: N1480 – Awarded \$190,000.00**

**Missing a proposal**

**DREWES, Donna: Sustainable Jersey for Schools Cert. Program – Sustainable Jersey Corporation – 7/1/2014-6/30/2016 – N1581 – Awarded \$100,000:**

This grant will support the development and creation of a new Sustainable Jersey for School Districts certification program, which will be modeled after the Sustainable Jersey municipal government certification program. This program is committed to advancing sustainable development practices in schools throughout New Jersey.

**DREWES, Donna: SJ Municipal/Schools Cert. Program – Dodge Foundation – 7/1/2014-6/30/2016 – N1527 – Awarded \$222,000:**

The funding from this grant is intended to support the work of TCNJ's Sustainability Institute related to Sustainable Jersey's municipal government certification program. This includes: identifying key sustainability issues that can be addressed at the local level, documenting solutions and best practices related to those issues, and maintaining a robust program of financial, technical, and peer support, and policy coordination to help move communities toward sustainability.

**DREWES, Donna: SJ Municipal/Schools Cert. Program – Dodge Foundation – 7/1/2015-6/30/2017 – N1627 – Awarded \$430,000:**

The funding from this grant is intended to support the work of TCNJ's Sustainability Institute related to Sustainable Jersey's municipal government certification program. This includes: identifying key sustainability issues that can be addressed at the local level, documenting solutions and best practices related to those issues, and maintaining a robust program of financial, technical, and peer support, and policy coordination to help move communities toward sustainability.

**DREWES, Donna: Sustainable Jersey for Schools – SJ Sub/ New Jersey Boards Association – 7/1/2013 – 12/31/2016 – PS: N1484 - Awarded \$225,000.00**

The parties are interested in working together in support of promoting a certification program for public schools and their governance bodies in NJ that want to implement sustainable practices that will result in saving money and promote steps that will improve the overall health and their quality of life over the long term.

**SOLOMON, Randall: NY Cleaner Greener Communities – NYSERDA PACE U Subaward– 7/1/2016 – 3/31/2018 – PS: S1738 – Awarded \$83,500.00**

This grant funding will allow the NY Cleaner Greener Communities to succeed at their goal to lower greenhouse gas emissions in the Northeast. This goal will be completed through Phase 2 of CGC. These projects will stimulate environmentally sustainable economic growth consistent with the Phase 1 Regional Sustainability Plans and Regional Economic Develop Council Strategic Plans.

**SOLOMON, Randall: National Fish and Wildlife-NFWF 2014-3/1/2015-3/1/2017-PS: F1540 –Awarded \$409,210.00**

Funding of this project will help with the goal of this project which is to convene a team of the major public and private players in NJ to systemically identify successful strategies, develop them into clear, ready-to- use local actions, assess large numbers of communities for the applicability of these strategies, and work with a number of pilot communities to create quick wins and success models that will drive further adoption throughout the State.

**SOLOMON, Randall: Surdna 2014 Renewal – Surdna Foundation – 12/17/2013 – 12/16/2016 – PS: N1425 – Awarded: \$825,000.00**

The purpose of the grant is to support the next phase of Sustainable Jersey's growth, including a gold level certification, efforts to catalyze a national movement of similar state/local certification programs, and next generation infrastructure activities.

**SOLOMON, Randall: Sustaining Coastal Marshes for Ecosystem Services along the Jersey Shore – Subaward through Rutgers - 9/1/2014 – 8/31/2017 – PS: F1557 – Awarded: \$4992.00**

Overall, funding for the Sustainability Institute will support the Co-I McDermott and SI's Resiliency Manager's to lead the social science component of this research, interact with the rest of the research team and be responsible for directing Research Components 4, including logistical preparation for the workshops, staff support during the workshops, and analysis and synthesis of the results. In year 1, funds are for pre-workshop assessment planning.

**SOLOMON, Randall: Prudential Resiliency – Prudential Foundation – 3/1/2016 – 3/1/2017 – PS: N1651 – Awarded: \$200,000.00**

This is a comprehensive program to promote a "Sustainable NJ" through municipality and school support. Programs encourage a healthy and efficient NJ supporting 565 municipalities and 2,492 NJ schools through a sustainability certification process.

**SOLOMON, Randall: FY17 SJ Compliance Filing – NJ BPU – 7/1/2016–6/30/2017 – Requested: \$499,999.48**

Under this task, Sustainable New Jersey will conduct at least 3 meetings a year, change the energy elements of the Sustainable Jersey municipal and school program, finalize and publish indicators for the energy elements of the Gold level of certification, complete an enhanced EDF/NJNG embedded consultant program, update Clean Energy Database, and produce and publish at least one additional group element.

**SOLOMON, Randall: SJ Surdna Gold – Surdna Foundation – 4/15/2017-4/30/2019 – Awarded: \$280,000.00 – PS#: N1725**

The purpose of this grant is to support Sustainable Jersey to build sustainable and equitable communities by deploying data tracking systems that measure impacts to guide the development of emergent best practices.

**TCNJ Clinic:**

**CHONG, Angela (previous PI - Nancy Scott): Recovery and Environmental Strategies for AOD College Campuses YR 2 – Dept. of Human Services Division of Mental Health and Addiction Services – 7/1/2016-6/30/2017 – PS: S1735 – Awarded \$245,000.00:**

The objectives of this project is to develop and specify existing TCNJ housing designated as substance free for students in recovery, but also open to other students abstaining from alcohol or drugs. This project will also provide clinical support by developing a comprehensive referral and case management process for students in need of counseling, in addition for environmental management and late night programming at TCNJ.



**CHONG, Angela: Grants to Reduce Domestic Violence, Sexual Assault, and Stalking on Campus – Department of Justice – 10/1/2015 – 9/30-2018 – PS: F1664 – Awarded \$299,039.00**

To implement an on campus program to educate students, train campus law enforcement, and train members of campus disciplinary boards about sexual assault, domestic violence, dating violence, and stalking.

**CHONG, Angela: Recovery Support and Environment Strategies YR 3 – NJ DHS – 7/1/2017 – 6/30/2018 – PS#:S1835 – Awarded \$245,000.00**

Renewal

**School of Education:**

**CSCD:**

**PETROFF, Jerry: New Jersey Consortium on Deaf Blindness – USDOE – 10/1/2013-9/30/2018 – F1449 – Awarded \$1,340,430.00:**

This grant was awarded for the purpose of serving youth and adults who are deaf-blind and works with them to pursue independent living and employment goals. The goal of this project is to assure the provision of high quality education programs within natural environments/supported inclusive settings and appropriate services for infants, toddlers, children, and youth who are deaf blind. This goal will be accomplished through a menu of discrete initiatives within a responsive statewide approach for families, educators and community service providers under the following objectives: 1) To facilitate the development and ongoing implementation of a Statewide Community of Practice on the Education of Students with Deaf blindness that includes family members; deaf blind adult consumers; early intervention, special and general education personnel; and State and Local Educational Agencies; 2) To develop and implement a well-coordinated and responsive centralized system for professional development (including on-site coaching support) specific to the needs of students who are deaf blind; and 3) To develop a statewide initiative for the early and ongoing identification of infants, students and youth with deaf blindness.

**PETROFF, Jerry: NJDBEDP-ICC 2016-2017 – CBVI – 6/1/2016 – 6/30/2017 – F1759 – Awarded: \$110,033.47**

The purpose of this grant is to ensure that NJ residents who are deaf-blind and meet the program's eligibility requirements will receive specialized customer premises equipment needed to effectively access telecommunication services, Internet access services and advanced communication services.

**PETROFF, Jerry: SSP-NJ 2016 – 2017 – CBVI – 6/1/2016 – 6/30/2017 – F1765 – Awarded: \$203, 310.68**

The goal of SSP-NJ is to promote greater community integration for adults who are deaf-blind that meet the project criteria through the development and implementation of a statewide network of support service providers.

**PETROFF, Jerry: Work Skills Preparation 2015 – 2016 – CBVI – 10/1/2015 – 9/30/2016 – F1681 – Awarded: 579,314.84**

To provide vocational rehabilitation services to a wide range of individuals including youth of transition age (14-21) and adults who are blind, vision impaired, or deaf-blind.

**PETROFF, Jerry: Enhancing and Extending the Current Career and Community Studies Program – US Department of Education – 10/1/2010 – 9/30/2016 – PS: F1145 – Awarded: \$1,281,117.00**

TCNJ Career and Community is seeking to expand and enhance its existing Post-Secondary Program for Students with Intellectual Disabilities to result in establishing it as a high quality inclusive comprehensive transition postsecondary model program.

**PETROFF, Jerry: TPSID 2 – Bergen County Community College – 10/1/2015 – 9/30/2020 – PS: F1617 – Awarded: \$132,038.77**

The primary purpose of TPSID (Transition Program for Students with Intellectual Disabilities into Higher Education) is to support and develop demonstration programs for students with disabilities into higher education. This will enable institutions of higher education to create or enhance inclusive comprehensive transition programs for students with disabilities.

**PETROFF, Jerry: Work Skills Preparation 2017 – 2019 – CBVI – 10/1/2016 – 9/30/2019 – F1781 – Awarded: \$1,697,019.80**

The goal of WSP is to provide a two-week summer program for Extended School Year Service and Transition/Vocational Assessment for Youth who are blind, vision-impaired, and deaf blind with complex educational needs. There shall be 2, two week sessions that will include up to 12 students per session for a total of 24 students per summer.

**PETROFF, Jerry: Summer College Prep Program 2017 – CBVI – 10/1/2016 – 9/30/2017 – F1711 - Awarded: \$378,041.97**

Design and implement a 4 week summer residential program for high school students (16 and older) eligible for vocational rehabilitation services at NJCBVI who would benefit from enrollment at a college or university upon graduation from high school to prepare for employment.

**Department of Education Admiration and Secondary Education:**

**GORDON, Karen (Previously SEATON, Gregory) - NJDOE-CDC- Y2-Y5 NJDOE CDC HIV, Sexual Health Evaluation-7/31/2014-7/31/2016-PS:F1555-Awarded \$40,000:**

With this funding, nine tasks will be completed: maintenance of online databases, Support and monitor of uploading of policy data from districts. Analysis of policy document data, conduction of two focus groups of 5-7 participants. Contact/interview school district personnel. Make 2-3Site visits to view delivery or adoption of sexual health curriculum.

**GORDON, Karen: Building Teacher Leadership Competitive Grant – NJ DOE – 9/1/2015 – 7/31/2016 – PS: F1673 – Awarded: \$181,864.00**

The purpose of this grant is to leverage the power of school district university partnerships and improve support for entry level teachers in the state of NJ.

**GORDON, Karen: Building Teacher Leadership Yr 2 – NJ DOE – 8/1/2016 – 7/31/2017 – PS: F1773 – Awarded: \$200,000.00**

This grant is a continuation of the Building Teacher Leadership program where the goal is to establish a comprehensive approach to beginning teacher support, such as: setting policies and procedures on how teacher will be supported at district and school levels, provide a cohort of prepared teacher leaders to assist the beginning teachers, a program of support for teacher leaders, etc.

**Department of Elementary and Early Childhood Education:**

**FIEBER, Larry: Center for Future Educators at TCNJ – NJEA – 2014 – 2016 – PS: N1420 – Awarded: \$645,000.00**

The purpose is to strengthen and coordinate the respective efforts to assure that the design, planning, development, and implementation of the Center for Future Educators at TCNJ is completed. This will establish a firm and collaborative working relationship between TCNJ and TCNJ's School of Education.

**FIEBER, Larry: Center for Future Educators – NJEA – 1/1/2017 – 12/31/2019 – PS: Awarded: \$215,000.00**

The purpose of this renewal is to strengthen and coordinate our respective efforts to assure that the design, planning, development, and implementation of the Center for Future Educators at TCNJ shall proceed on schedule and in fulfillment of the established goals and objectives.

**PEEL, Anne : Pilot Program for Early Literacy Instructional Support – Trenton Public Schools- 3/1/2017 – 6/30/2017- PS:- Awarded: \$34,774.79**

The goal of the project is to conduct a needs assessment in K-2 classroom in two elementary schools in Trenton from March to June, 2017 that focuses on how to enhance support for student currently or at-risk of falling below grade level expectations in reading.

**Department of Special Education, Language, and Literacy:**

**BLUMBERG, Rick: US Department of Education- Enhancing and Extending the CCS Program/Transition Programs for Students with Intellectual Disabilities into Higher Ed (Year 5 of 5)-10/1/2014-9/30/2015-PS: F1145-Awarded \$1,146,617.00:**

Funding for this project will help relieve one semester of work for Project co-directors. Funding will help hire a project manager, housing specialist, Project Specialist, and funding coordinator and student workers. These funds will be used for honorarium and expenses of a Professional to be determined to provide a keynote address and one breakout session at the annual "Yes I am Going to College Conference". These funds may also be used to provide honoraria to student-presenters. Funds may also be used for Language Interpreters to be hired on an as-needed basis to translate meetings, trainings, classes, etc. to Sign Language, Spanish, and other languages.

**BLUMBERG, Richard: Extending and Enhancing the Current Career and Community Studies Program (Year 5 of 5) – Department of Education – 10/1/2014-9/30/2015 – F1145 – Awarded \$255,439:**

The College of New Jersey, Career and Community Studies Program, will use this funding to extend and enhance the currently operating Career and Community Studies Program (CCS) at TCNJ so to result in establishing it as a high quality inclusive comprehensive transition and postsecondary model program for students with intellectual disabilities.

**WU, Yiquang: Creating a Team of Highly Qualified Professionals (CTHQP) for English Language Learners – US Department of Education – 9/1/2011 – 8/31/2016 – F1248 – Awarded: \$1,999.799.00**

TCNJ's project entitled CTHQP for English Language Learners proposes to work in consortium with the 21 district Professional Development School Network by providing in-service and pre-service programs to its sizable population of K-12 teachers, administrators, and counselors. The central goal of this proposed project is to create a highly qualified community of professionals who can provide appropriate instruction and services to ELLs.

**HALL, Matthew: Write for Change: NSF Grant – NSF – 9/1/2016 – 8/31/2018 – Awarded: \$25,610.00**

Hall will collaborate with Co-PI Stornaiuolo to participate in the research activities of the research. Hall will collaborate with Co-PI Hull and be a member of the technology design team headed by UC Berkeley. Hall will serve as the lead facilitator of the curriculum development efforts for the project. He will work with curriculum consultants for the W4C project, as well as core teacher who are currently participating in the W4C project. Finally, Hall will coordinate the efforts to collect data on the effectiveness of the curriculum.

**DELL, Amy : Providing Assistive Technology Training to Expand Pre-Employment Transition Services to Youth with Disabilities – Disability Rights NJ – 4/1/2017- 9/30/2017 Awarded: \$12,099.13, PS#F1704**

The goal of the project is to transition personnel, teachers, high school and college students with disabilities, and parents on how to prepare youth for transition to college and/or employment through the use of iPad technology and instruction in self-advocacy. To do so we need to expand the inventory of iPads, app, and accessories for the iPad, provide demonstration on how to use them, and do follow-up training workshops.

**SHALLISH, Lauren: The Dis/Ability and Social Justice Project – NJ Council on the Humanities- 7/1/201-6/30/2018 –Requested: \$18,095.18**

Through the curriculum development and a leadership institute involving local self-advocates, performance artists, film screenings, and cross-disciplinary scholarship presentations, this project will facilitate the modeling of inclusive practices that situate disability as an integral part of our increasingly diverse society.

**Counselor Education:**

**GIBSON, Sandy: Contract to Serve as the Mercer County IDRC – Mercer County Government – 5/1/2014 – 4/30/2016 – PS: E1512 – Awarded: \$280,000.00**

TCNJ is a central location to Mercer County residents and easily accessible from surrounding communities, making it an ideal location for the Mercer County Intoxicated Driver Resource Center (IDRC). The clinic will provide IDRC services to eligible recipients in Mercer County, enhancing the safety and welfare of the Mercer County community. The IDRC will include a didactic first offender psycho-education program, evaluation, and case management, as well as treatment referral and monitoring.

**GIBSON, Sandy: IDP Curriculum Development – State of NJ: IDP – 10/5/2015 – 1/31/2017 – PS: E1253 – Awarded: \$27,500.00**

TCNJ will work to develop a curriculum with NJ's Intoxicated Driving Program through 3 stages. TCNJ will conduct research and workshops to establish program goals, provide consultation for design of the curriculum, and deliver the training and technical assistance to implement the revised curriculum.

**GIBSON, Sandy: Community Reinforcement and Family Training (CRAFT) – J. Seward Johnson, SR, 1993 Charitable Trust – 3/3/2014 – 12/31/2017 – PS: N1421 – Awarded: \$10,000.00**

To bring the originator of CRAFT, Dr. Bob Meyers, to TCNJ for a two-day training for TCNJ Clinic Staff, faculty, students, current practicing SACs, and school counselors in all Mercer County School Districts, and targeted practicing community counselors. Also to follow through with post-training supervision for one faculty member which will enable him to become a certified trainer in CRAFT.

**SETO, Atsuko: School of Education research Mini-grant- Mental Health Facilitator Program-6/24/2015-6/24/2018-PS: N/A (Mini grant)-Awarded \$9,000:**

This funding with help Continuing Education Training and field-initiated project to increase first-contact level Mental Health Service capacity on campus and surrounding communities. This funding will help increase first-contact level mental health service capacity by training paraprofessionals, laypeople, and non-mental health professionals in Mental Health Facilitator (MHF) program.

### **School of Engineering:**

**SCHREINER, Steven: TCNJ-MUSE Program for Summer 2016 – NASA Subaward from Rutgers – 5/1/2016 – 8/1/2016 – PS: F1721 – Awarded: \$25,000.00**

This grant provides funding for professors in the school of engineering to hold research projects with students over the summer. Research focuses on STEM.

**Schreiner, Steven: TCNJ-MUSE program for Summer 2017 – NJ Space Grant Consortium – 12/1/2016 – 12/31/2017 – Awarded \$25,000.00**

The proposal requests funding from the NJ Space Grant Consortium to support the activities of TCNJ – Mentored Undergraduate Summer Experience (MUSE) program, which is a research cluster (NJS GC definition) program, where a group of TCNJ students are invited to spend a summer at the TCNJ Campus, performing research in the laboratories of and under the supervision of TCNJ engineering faculty members.

### **Electrical and Computer Engineering**

**PEARLSTEIN, Larry: AFRL – Artificial Intelligence Based Algorithmic Engine – AFRL-Griffiss Institute – 9/1/2016 – 11/22/2016 – PS: F1786 - Awarded \$7,500.00**

Our proposed project consists of four tasks. The first task is the installation of software in our high-performance workstation. The second task is to continue work on benchmarking the algorithmic performance and throughput. In our third task, we will integrate evaluated tools in a Graphical User and lastly develop a Deep Convolutional Network framework and conduct a pilot study.

### **Mechanical Engineering**

**SEPAHPOUR, Bijan: Professional Formation of Engineers – NSF – 10/01/15 – 9/30/2017 – PS#: F1672 Awarded \$146,986.00:**

The purpose of this research study is to create assessment tools to measure how well engineering students and engineering alumni personally identify with the profession of engineering. By studying the effects of education interventions related to professional identity, we ultimately aim to increase the number of engineers by improving undergraduate retention, undergraduate success, persistence as an engineer, and post-graduation success as an engineer.

**SEPAHPOUR, Bijan: TCNJ MUSE Program – NASA via Rutgers Subaward – 12/1/2015 – 7/1/2016 – PS: F1621 – Awarded: \$15,000.00**

For the support of the activities of TCNJ Mentored Undergraduate Summer Experience (MUSE) program. The faculty invite eligible students to participate in their research activities throughout the summer period.

**Department of Technological Studies:**

**GOEKE, Alison: FY15 CTSO-TSA YR 2 - NJ DOE – 9/1/2014-8/31/2015 – S1528 – Awarded \$146,500:**

The Technology Student Association (TSA) is the only student organization devoted exclusively to the needs to technology education students. TSA is a catalyst for engaging students in a quality STEM education, while refining the skills they need for high-wage, high-demand careers. Participation in TSA provides an ideal platform for integrating real world, project based learning and activities, with the required science, technology, engineering, and mathematics skills needed to succeed in the 21st Century. Since TCNJ became the lead agency for TSA in 2000, it has become the fastest growing Career and Technical Student Organization (CTSO) in the state. More than 2,000 middle and high school students competed in the 2013 State Conference at TCNJ this spring, the highest in NJ TSA history. TCNJ's central location helps to draw students and educators from all areas of the state for TSA events. The low number of future professionals to fill STEM-related careers is a state and national concern, but TSA is the solution. Each year, TSA engages thousands of NJ students in STEM matter through exciting, hands-on, technology and engineering activities and competitions. By continuing to improve and expand upon the opportunities of TSA providers for NJ youth, the number of students choosing STEM-related college degrees and career paths may increase, helping to mold our state's next generation of technologists, scientists, inventors, designers, mathematicians, and engineers.

**GOEKE, Alison: CTSO – TSA Year 4 – NJDOE – 9/1/2016 – 8/31/2017- PS: S1728 – Awarded: \$146,500.00**

The Technology Student Association (TSA) is the only student organization devoted exclusively to the needs to technology education students. TSA is a catalyst for engaging students in a quality STEM education, while refining the skills they need for high-wage, high-demand careers. Participation in TSA provides an ideal platform for integrating real world, project based learning and activities, with the required science, technology, engineering, and mathematics skills needed to succeed in the 21st Century. Since TCNJ became the lead agency for TSA in 2000, it has become the fastest growing Career and Technical Student Organization (CTSO) in the state. More than 2,000 middle and high school students competed in the 2013 State Conference at TCNJ this spring, the highest in NJ TSA history. TCNJ's central location helps to draw students and educators from all areas of the state for TSA events. The low number of future professionals to fill STEM-related careers is a state and national concern, but TSA is the solution. Each year, TSA engages thousands of NJ students in STEM matter through exciting, hands-on, technology and engineering activities and competitions. By continuing to improve and expand upon the opportunities of TSA providers for NJ youth, the number of students choosing STEM-related college degrees and career paths may increase, helping to mold our state's next generation of technologists, scientists, inventors, designers, mathematicians, and engineers.

**O'Brien, Steve: Center for Excellence in STEM Education – Matawan – Aberdeen School District Board of Education – 3/16/2015 – 6/30/2016 – PS: N1232 – Awarded: \$10,000.00**

The purpose of this plan is to provide professional development training and support for K-5 teachers on developing lessons and a unit of study that integrates design-based pedagogy to support the implementation of the Next Generation Science Standards, and their relationship to the Common Core for ELA and Math Literacy.

### **Civil Engineering**

**BECHTEL, Andrew: NJDOT Project 2015-5 – NJDOT – 9/1/2015 – 12/31/2016 – PS: F1668 Awarded \$333,487.33**

The purpose of a specification is to ensure that resulting products, based on the specification, are safe, useful, affordable, and accomplish the design intent. Dr. Bechtel is performing research into the effects hand-layup methods have on the characteristic values of FRP material properties used for external strengthening of concrete.

**BECHTEL, Andrew: Verification of Pour-Stop Beam Tables – Steel Deck Institute – 6/1/2017 – 10/1/2017 – Awarded: \$9,939.72**

Pour-stops are provided by steel deck manufacturers to serve as an end form and screed-line during deck placement and finishing. Due to increasing costs, of labor and crane picks, a trend has developed where the pour stop is used by itself to span between beams. The goal of this research is to experimentally validate the assumptions made when creating the pour-stop design tables and subsequently the tables themselves.

**HORST, Michael: National Dam Safety 3 – NJ DEP – 7/7/2015 – 7/30/2016 – PS: F1785 – Awarded: \$14,000.00**

The federal government has used the National Dam Safety Program to protect Americans from dam failure. The NDSP is in partnership of the states, federal agencies and other stakeholders that encourages individual and community responsibility for dam safety by initiating dam safety training, dam safety research, increased inspections, emergency action planning, etc.

**HORST, Michael: Dam Safety 4 – NJDEP – 10/1/2016 – 7/31/2017 – Requested: \$20,330.00**

Continuation of project

**HORST, Michael: NJDEP CAP State Support Services 2 – FEMA through NJDEP – 12/1/2015 – 11/30/2017 – Awarded: \$30,000.00**

To recruit, identify, evaluate, and recommend appropriately qualified student interns for placement at the Bureau.



## **School of Humanities and Social Science:**

### **Criminology:**

**STOUT, Bruce: US Bureau of Justice-VOA/DV Second Chance Mentoring Project-10/1/2014-9/30/2016-PS: F1542 Awarded-\$3,600**

Funding for this project will be used to create a Category 1A project to provide mentoring to adult offenders who are incarcerated in and returning to our target area which is Camden County, NJ. The model is to offer both pre- and post-release mentoring services to 120 offenders over the two year grant period by serving 60 offenders each year.

### **English:**

**BLAKE, David: NEH-Enduring Questions- NEH Enduring Questions Course on Ancient and Modern Meanings of Fame-7/1/2015-12/31/2017- PS: F1662 -Awarded \$21,973.00:**

Funding for this project will help implement a new course to explore history and literature of fame as it occurred before the advent of mechanical and digital reproduction.

**PEARSON, Kim (Co-PI: Teresa Nakra): Trenton Makes Music – Cultural Memory, Identity, and Economic Development – NJ Council on the Humanities with TCNJ Costshare – 1/20/2016 – 1/18-2017 – PS: F1678 – Awarded: \$20,000.00**

We seek to create a podcast series and digital archive about the history of music in Trenton , NJ, to be hosted on a web-based and mobile –friendly digital platform. All six audio podcasts will be available for download. Three of the podcasted will be videotaped. These free public events will excavate community members' memories of Trenton's powerful but largely undocumented role in the history of popular music, stimulating scholarship and attention to cultural revival efforts.

### **History:**

**HAZELLE, Celia: Pathways Project: NJ STEP – Gates Foundation>Rutgers – 7/1/2014-12/31/2014 – N1542 – Awarded \$21,000:**

The College of New Jersey was awarded this grant to work in conjunction with the NJ-Step staff at Rutgers University School of Criminal Justice to offer college courses in NJ State correctional facilities as a member of the STEP Consortium. TCNJ will specifically recruit faculty to teach courses offered by the college, both college level degree tracked courses and combined courses with TCNJ civilian students.

**CHAZELLE, Celia: NJ STEP – Vera Foundation – 1/1/2015 – 6/30/2015 – N1542 – Awarded \$35,000.00**

Staff and faculty from Tcnj will work with the NJ-STEP staff at Rutgers University School of Criminal Justice to offer college courses leading to an AA and BA degree inside NJ State correctional facilities as a member of the STEP Consortium. A designated Site Coordinator will staff course offerings being held at Garden State Youth Correctional Facility; Albert C. Wagner Youth Correctional Facility, and East Jersey State Prison.

**Library System:**

**TOSAKA, Yuji: Continuing Education Program for Cataloguing and Metadata Librarians – IMLS, Drexel – 6/1/2014-5/31/2017– N1415 – Awarded \$498,773.00:**

Funding for this project will support the purpose of technical direction of grant performance. Funding will provide necessary personnel, facilities, equipment, materials and data to perform the work in accordance with its proposal.

**School of Nursing, Health, and Exercise Science:**

**ALTMILLER, GERALYN: Healthcare Quality Conference – AHRQ – 7/1/2016 – 6/30/2017 – F1779 – Awarded \$32,803.00**

The overarching goal of the conference is to provide nurse educators with the knowledge needed to develop and implement teaching strategies and support integration of the IOM/QSEN Competencies into education programs for nurses and nursing students.

**HOOVEN, KATIE: Population Health 2.0 – Robert Wood Johnson Foundation – 7/1/2016 – 6/30/2017 – PS: N1748 – Awarded: \$197,321.00**

Add information about population health to the TCNJ Nursing Curriculum for students. Funding helps with activities for TCNJ Nursing students.

**LINDBERG, CLAIRE: Sub for Lifespan- Antimicrobial Use in Dialysis Units (Dialysis Research Project)- 9/30/2014-12/29/2015- PS:F1516 -Awarded \$49,970.00:**

Funding for this grant will allow weekly support and assistance with educational and behavioral interventions. Conduct educational sessions at the intervention sites. Assist and support behavioral intervention strategies.

**PERRON, TRACY: SNACK 2.0 – Novo Nordisk Inc. – 9/1/2016 – 6/30/2017 – PS: N1729 – Awarded: \$85,000.00**

The program will focus on empowering parents/caregivers, providing healthy foods in school, improving access to health affordable foods, and increasing physical activity. The purpose of the grant is to empower parents and caregivers to make healthy food choices, and to increase the fitness and health of children ages 5-10 years old in the City of Trenton.

**PERRON, TRACY: SNACK 2.0 Year 3- Novo Nordisk, Inc.- 8/1/2017-7/31/2018 –Requested \$64, 999.93**

Year 3 of the SNACK 2.0 program will focus on empowering parents and caregivers to make healthy food choices, and to increase fitness and health of children ages 5-10 years old in the City of Trenton . This will be done by providing physical activity during recess, and health education in the areas of fitness, healthy eating, and healthy lifestyles.

**PERRON, Tracy: Enduring Changes – Johnson&Johnson – 12/2015 – 8/31/2017 – PS: N1653- Awarded: \$1,200.00**

This is an external minigrant.

The purpose of this grant is to support participating school health fellow teams in the initiation and implementation of the Enduring Change Plans. The goal is to develop an educational program that incorporates healthy lifestyle choices, healthy eating, and physical activity for children grades K-5.

**Ratamess, Nicholas: Comparison of the Stimulant and Hemodynamic effects of Bitter Orange Extract (p-SYNEPHRINE) [ADVANTRA Z/KINETIQ] with Caffeine – 2/1/2017-1/1/2019 – PS: - Awarded \$26,000.00**

The purpose of this study is to compare the cardiovascular effects of caffeine with p-synephrine since no studies have directly compared the effects of p-synephrine with caffeine on heart rate and blood pressure at comparable doses, and therefore determined the relative stimulatory activities.

## **School of Science:**

### **Biology:**

**DICKINSON, Gary: ONR-Duke Subaward- Assessing the Effect of Environment on Barnacle Settlement, Adhesion, and Biomineralization-4/15/2014-9/14/2017-PS: F1432-Awarded \$284,612.69**

Funding for this project will help reach the goal of the proposed work is to assess the impact of variations in salinity, pH and temperature on adhesion and biomineralization in the barnacle *Amphibalanus Amphitrite*. The PI, Dr. Gary H. Dickinson, will coordinate and supervise all aspects of this project. He will directly supervise 2-3 undergraduate students and a part-time technician funded by this project.

**DICKINSON, Gary: Assessment of Snow Crab Cuticles – NOAA – 9/1/2016 – 9/30/2017 – PS: F1774 – Awarded \$19,995.50**

In collaboration with NOAA, the PI will work with students to analyze the cuticles of Alaskan crabs to elucidate the effects of ocean acidification.

**ELLIOT, Kathryn: ASM Undergraduate Research Fellowship (Applicant Dylan McClung) – American Society for Microbiology – 5/1/2014 – 6/15/2015 – PS: N/A - Awarded: \$5,000.00**

Research project on lab that focuses on genetic variation and rearrangements within bacteria. Specifically, they will investigate the activity and role of the gene YqgF. Marked as inactive by Wendy in database but has no closeout dues.

**MORRISON, Janet: Deer x Invasives ^2: Interactive effects in the herb layer of suburban forests – NSF – 3/15/2013 – 2/28/2018 – PS: F1333 – Awarded: \$300,002.00**

This proposed study will be a multi-year field experiment in 6 forests. The proposed study puts into one interconnected system the experimental effects from two co-occurring dominant invasive species. This study will significantly advance invasion and plant community ecology.

**NAYAK, Sudhir: FIRSTS (Foundation for Increasing and Retaining STEM Students) Program: A bridge program to study the sociological development of science identities – NSF – 01/1/2016 – 12/31/2018 – PS#: F1675 - Awarded \$538,900.00**

FIRSTS is an extended bridge program for incoming students from at-risk groups, which will increase student success using a developmental support system that extends into the academic year. The summer bridge program will consist of math and science skills development, remediation, and assessment, while the first semester will focus on refining writing skills. Importantly, this grant incorporates a sociological study to elucidate the reasons why some students persist in STEM majors while others elect to leave.

**PEEL, Nina: NIH- How does loss of tubulin glutamylation cause ciliopathies? A genetic approach in *C. elegans* (Also titled: Deciphering how tubulin glutamylation regulates microtubule function)- 4/1/2015-3/31/2018- PS: F1556 Awarded \$214,444.00:**

Funding for this project will help the research decipher how tubulin glutamylatin regulates microtubule function.

**KRESS, Tracy: Reciprocal coupling between RNA splicing and transcription through chromatin dynamics – NIH – 9/23/2016 – 8/31/2019 – PS: F1784 – Awarded: \$394,529.00**

The proposed research seeks to elucidate the mechanisms that permit reciprocal coupling between RNA splicing and transcription to regulate gene expression. Mutations impacting RNA splicing, as well as transcription, are implicated in a number of human diseases, including various neurological diseases and cancers. The proposed research is therefore *relevant to public health* because a mechanistic understanding of the coordination of transcription and RNA splicing provides a basis for targeting mammalian homologs for therapeutic interventions of human disease. The project is *relevant to the NIH's mission and the mission of NIGMS* because it seeks fundamental knowledge about critical cellular processes that will provide a foundation for the development of strategies for the prevention or treatment of human disease.

**Chemistry:**

**CHAN, Benny: PERSIST: Phase 2 – NSF – 1/1/2013 – 8/31/2018 – PS:F1497 – Awarded \$154,031.00 (Total: \$635,567.00)**

Funding for this grant will help support the funding for programs with graduates in science programs. The goal is to keep and add more students in the PERSIST program.

**Physics:**

**KIRK, Taryl: MRI: Development of a Localized Field Emission Scanning Electron Microscope and Secondary Electron Spin Polarization Analysis System – 9/1/2015 – 08/31/2018 – PS: - Awarded \$994,365.00**

Funding for this project serves to increase access to shared instrumentation for scientific and engineering research and research training for institutions of higher education by improving the quality and expanding the scope of research and research training in science and engineering.

**BENOIT, Margaret: Earthscope Seismic Experiment – NSF – 3/1/2013 – 4/30/2017 – PS: F1325 – Awarded \$151,977.00**

We propose a three year, multidisciplinary effort to characterize lithospheric structure, mantle flow, and topographic evolution of the southeastern US continental margin from the Atlantic coast to the continental interior. This project aims to shed light on two fundamental scientific questions related to the tectonic history and ongoing evolution of the region 1) What is the pattern of mantle flow beneath the eastern US continental margin and how has it affected surface topography? And 2) How does the geological architecture and topography at the surface relate to the deeper structure of the crust and lithosphere?

**MAGEE, Nathan: Noyce: Preparing Highly Qualified Physics Teachers – NSF – 9/1/2016 – 8/31/2021 – PS: F1769 – Awarded: \$1,200,000.00**

The project aims to respond directly to the dire need for more and better physics teacher preparation, while also providing a model for program development that is uniquely designed for the primarily undergraduate institution environment.

**MAGEE, Nathan: RUI: Cirrus Ice Crystal Surface Structure and Kinetics at the Nanoscale – NSF – 7/1/2015 – 6/30/2018 – PS: F1661 – Awarded: \$197,700.00**

The aims will advance theoretical understanding of ice/vapor phase change kinetics, improve parameterization of light scattering by cirrus, and promote improved modeling of cirrus clouds in the Earth's climate system.

**MCGEE, David: Optical and electro-optic modulation of biomimetically-functionalized carbon nanomaterials – US Dept. of Energy to University of Wisconsin subaward – 12/1/2013 – 5/31/2017 – PS: F1471 – Awarded: \$90,000.00**

To improve understanding of chromophore-nanotube interaction, the investigator will perform experiments in photoinduced birefringence to probe chromophore alignment under the influence of coherent polarized illumination.

**WIITA, Paul: Characterizing the Optical Emission from 3C273 and Other Quasars – NASA via Space Science Institute – 1/1/2017- 12/31/2017– Awarded: \$5,000.00**

We propose to measure the long and short cadence light curves of the archetypal quasar 3C273 and to measure the long cadence light curves of a large statistically complete sample of 185 quasars drawn from the Sloan Digital Sky Survey and of 65 bright quasars drawn from other surveys in Fields 8 and 10.

## **Computer Science:**

**DOYLE, Laura: Building Computer Science Education Capacity – Martinson Foundation – 7/1/2016 – 6/30/2019 – PS: N1724 – Awarded: \$360,000.00**

The Center for Excellence in STEM Education at TCNJ with the support of the Martinson Foundation plan to use the large network of school district contacts recently built with a successful integrative-STEM professional development effort to engage a large number of NJ school districts, schools, teachers, and administration, resulting in the dramatic increase in CS courses and programs being offered in NJ schools.

**PAPAMICHAIL, Dimitrios: Algorithms for Synthetic Gene Library Design – NSF – 1/28/2014 – 9/30/2017 – PS: F1495 – Awarded: \$199,999.00**

Research will concentrate on algorithms and techniques that will enable cost efficient design of optimized gene libraries for high-throughput experimentation. During the course of the grant, researchers will use algorithms corresponding software tools to design an extensive library of synthetic GFP variants, to assay, and determine correlation to in vivo activity.

**PULIMOOD, Monisha: Supplement for TUES: Collaborating Across Boundaries to Engage Undergraduates in Computational Thinking (FY12-15) – NSF – 2012-7/31/2017 – F1321 – Awarded \$186,770.00:**

This grant supports the development of a model for students and faculty to collaborate across diverse disciplines and with a community organization to develop technology-based solutions to address complex “real-world” problems. The Bureau of Labor Statistics estimates that 1.4 million computing jobs will be added by 2018. Yet universities will produce fewer than half the candidates needed to fill these jobs. There continues to be a lack of motivation and interest among American youth to pursue careers in science, technology, engineering, and mathematics (STEM) fields. Our hypothesis is that to increase motivation toward, and interest in, computing careers, undergraduate students must be immersed in multidisciplinary collaborative experiences where they are creators of technology-based solutions, and where they internalize the relevance of and interconnectedness between classroom learning and the community they live in.

## **Mathematics:**

**HAGEDORN, Thomas: Scholarships for Success in Computational Science – NSF – 7/1/2014-6/30/2018 – F1527 – Awarded \$628,097:**

This project at The College of New Jersey (TCNJ) improves mentoring and student support structures within the Departments of Computer Science, and Mathematics and Statistics. Dissemination of these results both within TCNJ and in the respective disciplines is leading to improved advising and mentoring practices by other departments and institutions. The project provides significant advising, mentoring, and tutoring services that supplement those already provided by the college. The project funds approximately 27 scholarships per year for computer science and mathematics students at TCNJ.

**OCHS, Michael: Modeling Transcriptional Reprogramming by Markov Chain Monte Carlo Sampling (Year 3 of 3) – NIH – 9/1/2014-8/31/2015 – F1462 – Awarded N/A:**

The goal of this project is to integrate previous studies and data resources into a prior model on the effect of signaling on transcriptional reprogramming. The three aims are as follows: 1. Develop a model of signaling coupled to transcriptional reprogramming, 2. Develop a model of the effect of methylation on inference of transcriptional reprogramming, and 3. Develop a methodology to identify biomarkers for transcriptional reprogramming based on the MCMC models.

## **Facilities and Management:**

### **Student Life:**

**HADGE, Joe: NJ Peer Institute 2017 – New Jersey Highway Traffic Safety – 10/1/2016 – 9/30/2017 – Awarded: \$81,051.00 PS#: F1750**

The objective is to plan and execute the New Jersey Peer Institute, a substance-free and healthy-message promoting conference. Advisors and student leaders from collegiate institutions participate and earn national Bacchus Gamma Peer Education certification.