

Application for Mildred Dahne Award
Department of Public Health – March, 2021

Public Health is a department deeply involved with the TCNJ and surrounding community, especially in the midst of the COVID-19 pandemic. Working across the state, our faculty, staff and students have been at the forefront of the evolving response demonstrating excellence in teacher-scholarship, academic excellence and department impact. The department consists of six full-time faculty, 4 part-time associated faculty from Communication Studies and Health and Exercise Science, and 2 full-time staff. As a new department offering our first bachelor's degree starting Fall, 2016, we developed our curriculum from the ground up with only 2 faculty in the first year. In 2018, we also added a Master's of Public Health program. Last year we were approved for accreditation review based on our application, demonstrating the strength of the faculty and the curriculum. With 32 graduate students, 147 PBH majors, and 87 minors, our department shows tremendous growth and potential. We have a record number of applicants this year, over half of which are interested in the 5-year BS/BA-MPH program. All 17 of our first cohort of graduates were placed in public health positions or graduate schools by March of 2017. Our first cohort of MPH graduates in May 2020 have gone on to both prestigious PhD programs such as Johns Hopkins and key public health positions at the NJ Department of Health, RTI International, and the Centers for Disease Control and Prevention (CDC). TCNJ's Public Health Program was recently ranked in *Best Value Schools* The 25 Best Public Health Degrees in 2021 placing at #21.

Excellence in Teaching

The faculty of the Department of Public Health have centered their mission around teaching and education both in and out of the classroom. This commitment to interdisciplinary social justice focused learning is evidenced by strong student feedback and teaching awards, the development of innovative research labs to engage student and faculty in key public health issues, interdisciplinary education both formally within the curriculum and informally through conferences and continuing education efforts, and student internship placements that put the learning squarely within a community context.

Three of our faculty have won teaching and advising awards in the past year, showing that peers, students, and alumni recognize the faculty's dedication to creating the next generation of public health professionals. Dr. Natasha Patterson was awarded the "2020 Excellence in Teaching Award", given by Public Health alumni to an impactful faculty member, and Dr. Brenda Seals was awarded the "2020 Excellence in Academic and Professional Advising Award", given by Public Health alumni to the most outstanding faculty mentor. Dr. Carolina Borges was awarded the 2020 "Faculty Warrior" for her dedication to feminism, activism, and education on Feb. 21st, 2020. This is promoted by the TCNJ WILL program as part of V-Day and the play "Vagina Monologues" at Mayo Hall. Dr. Borges was also awarded the "2020 Excellence in Student Engagement Award", given to the faculty member most committed to student success beyond the classroom. Student feedback demonstrates our commitment to excellent teaching in the formal classroom setting, with 81% of courses with student feedback in the past AY year having overall scores of 4.5 or higher.

Through the vision and efforts of public health faculty and funding from the School of Public Health and Exercise Science a unique *Public Health and Innovation Research Lab* was developed. The lab is located in Trenton Hall and is equipped with a 3D printer, 4 computers, and 2 IpadPros to support the student/faculty projects with cutting edge technology. Some examples of the student faculty led projects conducted at the lab include GalPal, a cell phone application to address sexual harassment among college students, and Freshman Vending Machine which focuses on 1st year students access to essential health products on campus. These projects not only allow

the students to grow as scholars and public health practitioners, but also provide tangible benefits to the TCNJ community.

The Department of Public Health stood up an *Environmental Microbiology Laboratory* (beginning in 2021) housed in the STEM Building. The lab allows faculty and students to explore the intersection of the environment and health through microbial source tracking, quantification, and risk analysis. Current research projects include a combination of external and internally funded grants which focus on surface water quality and the health effects to recreators, sanitation hygiene in community latrines in Nepal, how premise plumbing characteristics affect water quality in large systems, and occupational health risks presented by protozoa.

Public Health is an interdisciplinary science and the department strives to bring that to life at TCNJ. We have a number of faculty and student partnerships with the Department of Nursing within our own School, with Health Communication in the School of Arts and Communication, with the Department of Criminology within the School of Humanities and Social Science, and the MBA program within the School of Business. With Nursing our faculty and staff participate in the Community Action Poverty Simulation program, demonstrating for students the complicated socio-economic determinants of health and wellness. These collaborations have a positive impact on students and the TCNJ community as a whole. Dr. Seals in conjunction with Eileen Alexy from Nursing runs the Adult Mental Health First Aid National Training Program where over 60 students and 12 faculty have already been certified. In AY 2019/20 25 public health students completed the Peer Health Educator Certificate offered at TCNJ and so far in AY 20/21 12 students and counting have participated in the online version of the training.

The department has active 4+1 programs with Health Communication and the Department of Criminology, where their majors take graduate public health classes during their Junior and Senior years, allowing interdisciplinary conversations to flourish in the classroom and providing a mechanism for students to receive a graduate degree within one year of finishing their undergraduate program at TCNJ. Dr. Sylvia Twersky, together with Chanelle Lester-the MBA program director, developed TCNJ's first dual degree graduate program and received approval March 2021. This innovative full-time 2 year program will grant students both an MPH and an MBA with a focus in either Business Analytics and Epidemiology or Health Communication and is accepting applicants for Fall 2021.

Engagement in academics and learning outside of the classroom environment, as part of the local and global community, is a key tenet of the public health department's teaching philosophy. Dr. Marina Souza is the leader of the research group "Aging Research and Gerontology Studies". She has involved several Public Health undergraduate and graduate students with researchers from Brazil and Portugal looking at the way that people age across the world. The research group has been actively collecting and analyzing data, and publishing findings with international collaborators and student researchers.

Dr. Natasha Patterson has been instrumental in developing and leading two successful conferences with student and community participation: "Fighting the Infodemic: Fake News, Public Trust and Public Health Policy" was a joint project held on October 7, 2020 with Journalism for students to have the opportunity to examine community sensitivity and health disparities of health care access, justice, and equity. In November 2020, *Collegiate Recovery Program*, *Department of Public Health*, and *Office of Intercultural Engagement and Inclusion* partnered to bring a two part series on Racial Justice and Recovery entitled "Understanding How Systemic Racism Impacts Drug Policy and Access to Recovery Support." The event focused on how drug laws, policy, and enforcement have targeted BIPOC citizens in the USA--destabilizing families, communities, and resources. The second part "Dismantling the Effects of Systemic Racism by Creating Inclusive Spaces for Recovery," focused on actionable steps to mitigate and reverse the effects of systemic racism in order to create opportunities for

healing, wellness, and recovery. Additional opportunities for academic community learning include the virtual brown bag lecture series developed by the Department of Public Health to foster social justice and interdisciplinary dialogue even during lock-down. The inaugural lecture in March 2021 brought in 55 participants from across TCNJ and discussed the research on Implicit Bias within Healthcare.

In 2020 and Spring 2021, 66 undergraduates were doing their capstone internships. In spite of the pandemic, 100% of eligible undergraduate seniors were placed at sites; 91% of them successfully completed their internships in 2020 showing resilience and adaptability to new challenges imposed by COVID-19. In this year of COVID, over 50 student capstone placements involved assisting with COVID-19 response and even more students served as volunteers separate from the capstone requirement. For details on their work and impact in the community please see the section on department impact.

Academic Excellence

The Department contributes to the field of Public Health by disseminating research to broad audiences through publications, conference presentations, and invited panel discussions. In the past year alone our full-time faculty published 19 articles in peer-reviewed journals, including Health Education Research, International Journal of Environmental Research and Public Health (IJERPH), Gerontology and Aging, and Water Research, with 21 student co-authors. During the academic years 19/20 and 20/21 our work was presented 17 times at international conferences, 11 times at national conferences, and 5 times at local conferences, with 36 student co-authors, including 14 presentations by students. Conferences included the European Public Health Association 16th World Congress on Public Health, World Health International Congress, Annual Conference of Association for Education and Mass Communication, American Public Health Association, The Gerontological Society of America Annual Scientific Meeting, and the National Association of University Women. Our faculty published 3 books and 2 book chapters in the past year, and were invited to speak on 3 panels to share their knowledge with a wider audience. They currently have 10 more articles under review at peer-reviewed journals. Yachao Li was awarded the 2020 International Communication Association Interpersonal Communication Division Top Paper Award and the John Garrison Award for Top Applied Paper. Dr. Li's article on sexual health communication among women of color received the 2019 Communication Studies Article of the Year Award. Dr. Li also received the "Above and Beyond" Excellence Award at the 50th Anniversary of SONHES.

Faculty in the Public Health Department are recognized as national scholars. Brenda Seals is an Associate Editor for the Internal Journal of Environmental Research and Public Health (IJERPH) and a founding Editor for the Journal of Trauma. Dr. Seals is also a keynote speaker for the upcoming 75th anniversary celebration of the NJ Civil Rights law. Dr. Yachao Li is lead editor for a special journal issue titled, "Intersections of Public Health, Sexuality, and Communication" and Drs. Marina de Souza and Sylvia Twersky are editors for a special issue, "Aging Processes, Lifestyles and Longevity" for IJERPH. With Temple University, Alexis Mraz works on external contracts for environmental screening and Brenda Seals works on a federal center grant.

This year, TCNJ students started an application for a chapter of the national Eta Sigma Gamma honor society for Public Health Education. The Association reviewed and approved Drs. Seals and Patterson as meeting stringent requirements.

Department Impact

The public health department is making important contributions to the state and local COVID-19 response. Our focused, evidence based efforts are recognized state and nation-wide. Specifically, when COVID-19 deaths were

high for African American, Latinx and Native Americans in New Jersey, Drs. Brenda Seals and Natasha Patterson volunteered to work with the NJ Div of Civil Rights. They conducted research on the four counties with elevated minority deaths and identified a lack of health infrastructure like too few hospitals and clinics, a lack of early diagnosis and referral into care and stigma from health care providers. Working with the N.J. Department of Health, they extended their work to remediate these problems. TCNJ was able to involve 3 students in the larger initiative and 8 students who were recorders for the “kickoff” conference, the most students from any NJ college.

TCNJ Public Health faculty and students are at the heart of identifying subpopulations in New Jersey that may have hesitancy to receive COVID vaccination. Dr. Seals and students are the lead for the NJ Public Health Association, Division of Epidemiology efforts to conduct focus groups and a statewide survey. The information collected will be used for a state-wide campaign addressing misperceptions and misinformation and recruiting key community leaders as advocates for vaccination. Three MPH students and an undergraduate student are also leading efforts with Dr. Seals to survey Community Based Organizations dealing with overwhelming needs in Mercer and Hunterdon counties.

Our students work on the frontlines of the pandemic in both internship and volunteer capacities. Abigail Parker and Sarah Comey, both members of the Medical Reserve Corps, interned with the Hunterdon County Health Department where they assisted with the COVID-19 emergency hotline and answered questions of concerned community members and managed the PPE inventory. They were certified as contact tracers too and assisted with locating and interviewing COVID-19 patients. Abigail Lewis interned with the International Rescue Committee where she helped refugees and asylum seekers navigate the complex legal and health US systems more overburdened than ever due to the pandemic; through her work she ensured that her clients have access to medical providers, lawyers, funding, food, education, and housing. Deanna Amarosa, Jessica Fleischman, Ethan Moss, Julia Obst and Bryan Chen interned with the Princeton Health Department and assisted the Health Officer with dissemination of health messages, identifying and meeting community needs, writing epidemiological reports, planning outreach to the most vulnerable populations, organizing and managing vaccination clinics, and serving as public health resources by advising community members including for the purpose of mitigating vaccine hesitancy. Trevor Lombardi, Arvinjon Calpotura, Joseph Devizion, and Joshua Payyapilly interned at the City of Trenton Bureau of Health Promotion & Clinical Services and authored a study “Prevalence of COVID-19 in Trenton, NJ”. Radhika Purandare and Joshua Payyappilly interned with the State of New Jersey Department of Health and assisted with a project looking into the impact of COVID-19 on maternal and child health in the state, working closely with state and federal government officials and agencies, including the Centers for Disease Control and Prevention (CDC).

Public Health students and alumni play a crucial role in COVID-19 mandatory testing on campus by working at the TCNJ testing center set up in collaboration with the Bergen New Bridge Medical Center. The testing center is managed by Kyle Hioki '20 (BS in Public Health), currently a TCNJ MPH student, who serves as the Community Health Testing Supervisor. More than half of the center’s employees are from the Public Health Department: in total 10 Public Health students and 1 Public Health alumna work there ensuring that the day-to-day operations of the testing site are running efficiently. A Roscoe video promoting COVID-19 testing was directed by and starring MPH students, highlighted the work of a number of undergraduate and graduate students who work at the TCNJ Testing Center; the video was viewed more than 420 times on social media and promotes a healthier environment at TCNJ.

20% of over 50 senior capstone projects were working with state or city Departments of Health to provide COVID-19 relief to hospitals, conduct testing and provide vaccination clinics. An additional 40% of projects address community needs by decreasing food insecurity. For example, Anthony Moscato developed partnerships for the Princeton YMCA by working with Mercer County non-profit organizations to coordinate food drives and deliveries, distributing over 20,000 pounds of food to the community members in need in the summer of 2020. Santiago Yacovino interned at the Capital Area YMCA in Trenton and helped manage the Summer Meals Program, a USDA-sponsored initiative which provides free nutritious and balanced meals to children when school is not in session. Jada Covington interned with HomeFront to stop the cycle of homelessness. She delivered food to families living in motels across the state due to COVID-19 restrictions at shelters. Rachel Roby interned with the Mercer Street Friends Food Bank and participated in many of the food bank's programs including Summer Feeding and Send Hunger Packing (SHUP) for children, Commodity Supplemental Food Program (CSFP) for seniors, and the Community Food Bag Program (CFB) that were all implemented to increase access to food during the pandemic. On campus, Public Health students and alumni played a big role in reducing food insecurity by volunteering with The Shop at TCNJ.

Public Health faculty are at the forefront of addressing disparities in health outcomes. Dr. Natasha Patterson is a TCNJ representative to the state-wide Initiative on Maternal and Child Health that has the goal of decreasing the rate of maternal and infant deaths by 50% over five years. Dr. Patterson is working with a public health student, Salomine Ekambi, to advance the strategic objectives focused on raising awareness and providing education about doula support for Black pregnant women set forth by First Lady Tammy Murphy and Nurture NJ. With Sustainable Jersey, the Public Health department won a Robert Wood Johnson Foundation grant to increase health initiatives for municipalities across New Jersey. Drs. Twersky and Patterson were part of working groups that developed methods and resources to prioritize municipal actions in a way that prioritizes health equity. Dr. Twersky developed and deployed a statewide survey looking at the role of Local Boards of Health in health policy decision making, including Covid-19 policy. This work is informing the development of Gold Standards in Health for municipalities in N.J. At the same time, Dr. Seals worked on the Housing Committee, focused on healthy homes and facilities, providing resources for lead, asbestos, and/or radon abatement in homes day care facilities and schools. Dr. Borges has been serving as a Social Epidemiologist Consultant for a Local Health Department analyzing and monitoring COVID-19 data, working directly with 2 TCNJ alumni, 1 TCNJ MPH student, and 2 undergraduate students.

Conclusion

The public health faculty actively engage students in every aspect of the department: teaching, scholarship, and community service. As a department we promote and embody our values of interdisciplinary academics, community engaged participation, and working toward social justice to reduce health disparities and promote a healthy community at TCNJ, in N.J, throughout the U.S., and globally. Student engaged learning occurs in the classroom, in innovative laboratories, in both funded and unfunded research projects, and in community internship settings. This work results in peer reviewed scholarship through publications and conference presentations. Especially in this pandemic environment the public health students and faculty have risen to the challenge of serving critical roles in TCNJ, local municipalities, county level, state, and even global COVID-19 responses.