

2018

Annual Report

Public Health in New York State

Contents

- 1 Message from the Commissioner
- 2 **DSRIP:** The Faces of a Successful Program
- 3 Rapid Response to Emerging Threats
- 8 Using Data for Better Healthcare Decisions
- 11 Targeting Population Health to Improve Outcomes
- 14 Meeting Challenges with Evidence-Based Solutions
- 17 A Healthier Aging Population
- 20 Appendix A: About the Department
- 21 Appendix B: Organizational Chart
- 22 Appendix C: Regional, District, and Field Offices
- 23 Appendix D: Publications

Message from the Commissioner



In 2018 – the 100th anniversary of the 1918 influenza pandemic – New York State experienced a flu epidemic that prompted Governor Cuomo to sign an Executive Order allowing pharmacists to administer flu vaccines to children ages 2 to 18. For weeks, the Department of Health conducted a massive campaign to encourage New Yorkers to get vaccinated.

By the time I declared influenza no longer prevalent in the State in mid-May, 128,020 laboratory-confirmed cases of influenza had been reported; 23,317 people had been hospitalized, and tragically there were six pediatric deaths associated with influenza.

Our capacity to monitor epidemics like flu and better communicate critical information to the public is constantly evolving. At the end of the year, we launched the New York State Flu Tracker, a weekly-updated dashboard that keeps the public informed about the number of laboratory-confirmed influenza cases in their county by date and type for both the current season and the three previous seasons.

As this report of the Department's 2018 activities shows, we used technology and the availability of data throughout the year to better protect the public against health threats, to improve existing services, to more accurately monitor population health and healthcare system performance, and to reduce costs.

In April, the Department launched the NYS Health Connector, the public website for our All Payer Database, which, when available in 2020, will streamline healthcare system data into a central repository. From the Health Data NY portal, Health Connector provides visit volume and estimated facility costs for selected healthcare procedures, rates of complications, and other hospitallevel quality measures that can help patients determine where to seek care.

The Health Connector currently links to the Flu Tracker and includes a Suicide and Self-Harm Dashboard, augmenting existing data dashboards provided on the Department site – including those for the Prevention Agenda, for Opioids, and for the Delivery System Reform Incentive Payment (DSRIP) Program.

We've also been using technology to improve access to healthy food. Throughout the year, the Department rolled out our new eWIC electronic benefit transfer card in 59 counties across the State, with the full rollout to be completed in 2019. This card is not just simplifying shopping for families and retailers in the New York State Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); it works with a mobile app that allows users to scan product barcodes for WIC eligibility and check account balances.

In 2018, the Commonwealth Fund's Scorecard of Health System Performance ranked New York as the most improved in the nation. Our performance improved on 18 indicators. The Department's efforts to streamline health data and make it more accessible have no doubt contributed to this ranking. They also reflect Governor Cuomo's commitment to improving transparency across all levels of government and giving New Yorkers userfriendly access to State information that can help them make better decisions about their health and wellbeing.

Protecting public health entails preventing the spread of disease, responding to environmental threats, promoting health and wellness, building healthy communities, and improving the system. As each of those aspects of our mission has become more data- and technology-driven, the Department has been working to lead rather than follow, giving New Yorkers the very best options for the very best health.

Lucker, M.O.

Howard A. Zucker, MD, JD

Commissioner

New York State Department of Health

DSRIP: The **Faces** of a Successful Program

In April 2014, New York embarked on a massive project to make Medicaid more effective in New York State, improving healthcare and lives while saving taxpayers millions of dollars each year.

With the groundbreaking Delivery System Reform Incentive Payment (DSRIP) federal waiver, New York is reinvesting \$8 billion in federal savings generated by Medicaid Redesign Team (MRT) reforms, with a goal of achieving a 25% reduction in avoidable hospital use over five years.

Through DSRIP, health and social service providers across the State formed collaborative networks called Performing Provider Systems (PPS) to implement innovative projects focused on system transformation, clinical improvement, and population health improvement. There are 25 PPS across the State.

In June, DSRIP handily passed it first federal test on four key statewide performance measures: statewide metrics performance, success of statewide projects, total Medicaid spending, and Managed Care plan expenditures. DSRIP has achieved an overall reduction of 15.2% since 2014.

In this report, we wanted to spotlight some real-life success stories of the DSRIP program. Placed throughout the report, these DSRIP Stories show how culturally competent care coordination, healthy food, convenient locations for healthcare screenings, patient education, and other collaborative innovations are improving outcomes.

The Department extends its thanks to the PPS, the organizations, and the individuals who shared these stories. Client names have been changed to ensure confidentiality.



DSRIP STORIES

Just a Bit Off the Top... and a BP Check

Master barber Howard Ivey learned that he had high blood pressure in his mid-thirties. "I was one of the non-believers in the beginning," he said about regular BP monitoring. "I thought I felt fine, but I wasn't fine." Mr. Ivey became one of the first participants in Millennium Collaborative Care PPS's "Barber & Beauty Shop Initiative," an innovative partnership to help Buffalo and Niagara Falls residents better monitor their cardiovascular health in places that are convenient and make them feel comfortable. Working with the Community Health Center of Niagara, Millennium PPS has equipped five Niagara Falls locations with easy-to-use blood pressure screening cuffs for patrons to self-monitor, plus signage and an information box.

Because of his own history with controlling high BP, Mr. Ivey was determined to help others at his Niagara Falls barber shop stay healthy. He estimates that more than 60 customers have taken advantage of the blood pressure self-screening service he has been offering.

PUBLIC HEALTH IS...

Rapid Response to Emerging Threats

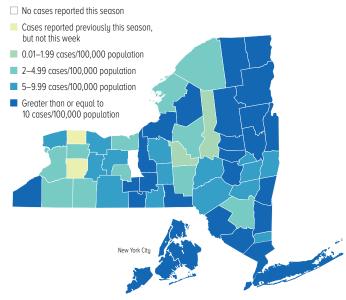
Protecting New York State's nearly 20 million residents from public threats to individual health and wellbeing lies at the heart of the Department's mission. Whether it's communicable diseases, environmental hazards, overused antibiotics, dangerous street drugs, or anything that compromises the safety of our drinking water, we mobilize quickly to contain the threat and educate the public for future safety.

Protecting the Most Vulnerable during a Brutal Influenza Season

During the 2017-2018 influenza season, more than 23,000 New Yorkers were hospitalized with laboratory-confirmed influenza and six children under age 18 died of influenzarelated causes. Influenza is dangerous and strikes many New Yorkers every year. Those most severely affected are the very young – children under age 5 – and older New Yorkers over age 65.

Because of the intensity of the 2018 outbreak, the Governor signed legislation allowing for enhanced access to flu vaccine for children in pharmacies. In addition, a massive public awareness campaign encouraged early vaccination and spread the message that it's "not too late" to get a flu shot.

Our experience in 2018 was an important factor in developing and launching the Department's online Flu Tracker, a dashboard on the New York State Health Connector that keeps the public informed about rates of influenza in their county. Updated weekly during flu season, the dashboard displays the number of laboratoryconfirmed influenza cases by date, county, and type for both the current and three previous seasons.



The Department's new **Flu Tracker** provides access to surveillance reports like this one showing flu prevalence by county for the week of December 29, 2018. The figures are calculated based on lab-confirmed influenza cases reported to the Department.



The Department worked closely with public health officials in Rockland and Orange counties to ensure that doses of MMR vaccine were available and distributed to providers.

Containing an Active Measles Outbreak

In the fall of 2018, the Department began managing what has become one of the State's largest and longest-lasting measles outbreaks in decades. The outbreak was first reported in September and initially involved Rockland and Oranges counties and New York City. The Department worked with county health officials to identify those potentially exposed, test samples at our Wadsworth Center laboratories in Albany, assist with community outreach and contact investigations, provide information on the importance of vaccination, and provide measles mumps and rubella (MMR) vaccine.

Between October 1, 2018 and December 31, 2018, there were 127 reported cases of measles in affected counties outside of New York City. The Department distributed 26,526 doses of MMR vaccine to Rockland, Orange, Westchester, and Sullivan counties. The Department and county health departments held ongoing meetings and conversations with local community leaders, school principals and administrators, healthcare providers, and parents in Rockland and Orange counties to encourage vaccinations.

The outbreak continued into 2019, and the Department continues to work closely with health officials in affected counties. Increasing vaccination rates and limiting the spread of measles remain our frontline strategy.

A Strategic Plan for Reducing the Risk of Lyme Disease

Tick-borne diseases, particularly Lyme disease, are among the nation's fastest growing infectious diseases but can be particularly difficult to diagnose. Patients with Lyme disease can present a number of possible symptoms that can wane over time and be easily confused with hundreds of other diseases.

To address this public health challenge, the Department partnered with the Department of Environmental Conservation and the Office of Parks, Recreation and Historic Preservation to launch the Lyme and Tick-Borne Disease Working Group. Controlling tick populations on public lands in counties with high rates of tick exposure, expanding data access to the public, and increasing public awareness through enhanced education and outreach are among the group's objectives. Members held a summit in July to launch the group's aggressive agenda.

In addition, the Department's Wadsworth Center Laboratory announced in June that it will partner with Regeneron Pharmaceuticals to improve the diagnosis of Lyme disease and develop new treatments. This innovative collaboration is supported by Governor Cuomo's Life Sciences initiative.

Developing New Models for Defense against Harmful Algal Blooms

In 2018, the Department worked with communities statewide to address harmful algal blooms (HABs), an emerging concern across the country and a potential threat to New York's drinking and recreational waters. We collected 409 drinking water samples at public water systems (PWS) statewide.

The Department partnered with the City of Syracuse and the Onondaga County Health Department to implement a rigorous testing and data-sharing plan for Skaneateles Lake that will serve as a model for future testing of PWS. Sampling of a HAB on Canandaigua Lake resulted in a "Do Not Drink Advisory." The Department partnered with the Village of Rushville to provide alternate water, messaging to customers, and technical assistance to the water operator. The advisory was lifted after samples confirmed that treatment effectively removed the HAB toxin microcystin.

In early 2018, 12 priority water bodies were identified for protection against HABs. In March, the Department partnered with Departments of Environmental Conservation and Agriculture and Markets to hold four regional summits that resulted in action plans to combat HABs at each priority water body.



The Lyme and Tick-Borne Disease Working Group seeks to expand public access to such data as annual tick counts and increase awareness about risks of exposure.

Educating New Yorkers on the Dangers of Antimicrobial Resistance

The Department remains committed to reducing antibiotic misuse and prevent and control antibiotic resistance to ensure the future safety of all New Yorkers. In 2018, the Antimicrobial Resistance Prevention and Control Task Force, appointed by Governor Cuomo in 2016, released NYS STop Antibiotic Resistance Roadmap (STARR), a report of its recommendations and a roadmap for partners and stakeholders in the collaborative effort to prevent and control antibiotic resistance in New York State.

Following on the recommendation to increase awareness and enhance optimal antibiotic use, the Department developed Adult and Pediatric Antibiotic Prescribing Guidelines for common outpatient conditions and distributed to nearly 15,000 healthcare providers around the State.

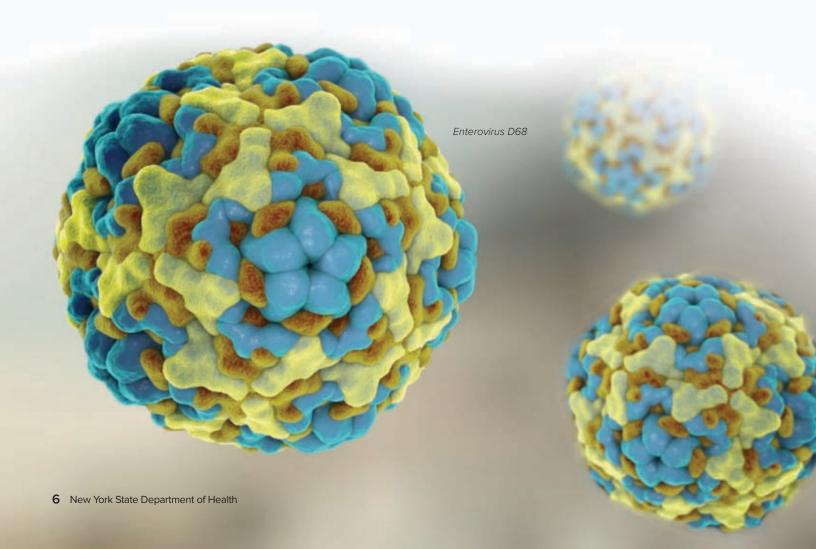
On the research front, Wadsworth Center announced in September the initiation of a collaborative relationship with Merck's ILÚM Health Solutions and OpGen to develop a state-of-the-art research program to detect, track, and manage antimicrobial-resistant infections at health-care institutions statewide. Multiple offices within the Department are participating in this public-private partnership, which has been facilitated by the Governor's Life Sciences initiative.

Promoting Awareness of Acute Flaccid Myelitis

Acute flaccid myelitis (AFM) is a rare but serious condition that weakens the muscles and reflexes in the limbs, leading to a loss of muscle tone. It has been called a "polio-like illness" and most often afflicts children. When reported cases of AFM began increasing in 2014, the CDC began national surveillance for the condition, estimating that fewer than one or two in 1 million U.S. children will develop AFM each year.

In 2018, the Department issued press releases and health advisories to healthcare providers to increase awareness of this condition. Although the cause of AFM is not yet known, viruses likely play a role. Most patients had a mild respiratory illness or fever consistent with a viral infection before they developed AFM. Some respiratory viruses – such as coxsackievirus A16 and enteroviruses A71 and D68 – have been detected in the spinal fluid of some patients with AFM. Most people infected with these viruses, however, will not develop AFM, and there are other potential infectious agents associated with AFM.

In any year, the Department reports suspected cases of AFM to the CDC for further investigation and is committed to increasing awareness of both AFM and EV-D68 infection as well as the need for testing coordination.



Alerts on K2 and Synthetic Cannabinoids

The Department joined other State agencies to target the illegal sale and use of K2 and other synthetic cannabinoids and to protect the public health and safety of New Yorkers. In April, the Department issued a statewide health advisory warning of severe and life-threatening bleeding cases that arose among users of K2 and similar drugs in five other states. Fortunately, no such cases arose in New York.



The Department is working to ensure that rural areas of the State have sufficient coverage by EMS professionals.

In July, Governor Cuomo signed legislation adding 25 such drugs to New York State's schedule of controlled substances, helping to raise awareness of the dangers they pose and providing law enforcement with the authority to fully combat their spread. The Department remains committed to working with local health and law enforcement officials to keep these dangerous substances out of the hands of New Yorkers and reduce their availability statewide.

Strengthening Emergency Medical Services in Rural Areas

Emergency Medical Services (EMS) save lives across the State every day; we rely on these teams being there when tragedy strikes. In rural areas of the State, however, there is a shortage of emergency medical technicians (EMTs) – a situation that threatens public health.

As part of Governor Cuomo's goal to strengthen EMS recruitment, the Department secured grant funding in 2018 to construct a leadership program for EMS professionals in rural areas. The Department also enhanced its EMS Facebook presence and launched the Why I Serve campaign on social media, television, and radio to highlight the rewards of working in the EMS sector. This campaign had over 200,000 direct views.



DSRIP STORIES Isabelle

When Isabelle was hospitalized for asthma at Bronx Lebanon Hospital, a Breathe Better Bronx Community Health Worker (CHW) was alerted and Isabelle's family meet with the team. In partnership with the Bronx Health Access PPS, Bronx Lebanon Hospital Center, BronxWorks, Urban Health Plan, and Boom! Pharmacy, the Breathe Better Bronx team has assisted in the treatment of over 400 patients, both adults and children like Isabelle. These consultations help reduce asthma attacks, ED visits, and hospital inpatient stays.

The consultation helped Isabelle's family identify asthma triggers such as roaches and chipping paint. Through education; advocacy efforts and negotiation with the landlord; and tangible remediation such as mattress protectors, green cleaning supplies, and a Swiffer duster, Isabelle's family reported that her asthma is now well managed.

PUBLIC HEALTH IS...

Using Data for Better **Healthcare Decisions**

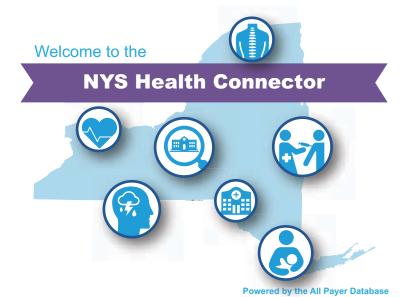
The availability of public health data not only helps members of the public make more informed healthcare choices; it also helps care providers improve their delivery systems and target services to individual and community needs. The Department continues to move toward greater transparency in regard to data and information that can help limit the spread of disease, reduce healthcare costs, and improve health outcomes overall.

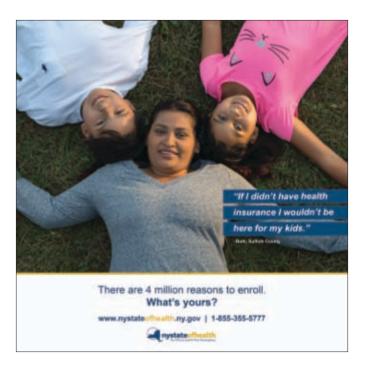
A Data-Driven Window into **Population Health and Healthcare System Performance**

The Department made significant progress in 2018 on gathering healthcare system data - including comprehensive claims, facility data, and clinical data into the All Payer Database (APD). This central repository is designed to give policymakers new ways to monitor efforts to reduce healthcare costs and improve care, quality, and population health.

In May, the APD launched the NYS Health Connector public website, with visit volume and estimated facility costs for selected healthcare procedures, rates of complications, and other hospital-level quality measures that can help New Yorkers determine where to seek care. The APD site also includes information about population health concerns.

A companion analytic portal enabling further assessment of assess quality- and cost-related trends, needs, and assets in users' regions is scheduled to be available in 2020, when the APD will be fully operational. This transformative system will provide a broader view of population health and healthcare system performance than current data resources permit.





Ensuring Quality Healthcare for All New Yorkers

The NY State of Health Marketplace made tremendous progress in 2018 to expand access to healthcare across New York State, enabling a record number of New Yorkers to enroll in high-quality health insurance programs. Since the NY State of Health was launched in 2013, the State's uninsured rate has been cut in half – decreasing from 10% to 5%. In 2018, 900,000 more New Yorkers had health insurance than five years earlier.

In 2018, NY State of Health offered a broad choice of health insurer options statewide – 12 Qualified Health Plan (QHP) insurers and 15 Essential Plan (EP) insurers. Ten insurers participated in all Individual Marketplace programs - EP, QHP, Medicaid, and the Children's Health Insurance Program (CHIP).

At the close of open enrollment on January 31, 253,102 New Yorkers had enrolled in a QHP, exceeding enrollment levels at the end of open enrollment in 2017. Of these, 24% were newly enrolled. EP enrollment for lower-income New Yorkers was 738,851. More than 4.3 million New Yorkers were enrolled through the NY State of Health in 2018, and 94% of Marketplace enrollees saw no cost increase during the year.

Boosting Efficiencies

Following the convening of six workgroups to solicit recommendations from healthcare providers, consumers. and payers as part of Governor Cuomo's 2017 Regulatory Modernization Initiative (RMI), the Department released the RMI workgroup recommendations in 2018. These recommendations – intended to streamline and improve policies, regulations, and statutes – focus on integrated primary care and behavioral health, post-acute care management models, cardiac services, telehealth, off-campus emergency departments, and long-term-care needs methodologies.

The 2018-2019 State Budget included statutory changes that expanded Medicaid reimbursement for telehealth services. These changes expanded the definition of "originating site" to include a patient's home as well as any other location where the patient may be temporarily located. The Budget also authorized new provider types who can deliver services via telehealth, including credentialed alcoholism and substance abuse counselors. early intervention service providers and coordinators,



Thanks to regulatory changes, Medicaid reimbursement is now permitted for telehealth services across the State.

and providers identified by regulation as authorized by the Office of Mental Health, the Office of Alcoholism and Substance Abuse Services, and the Office for People with Developmental Disabilities.



DSRIP STORIES Orlando

End-stage renal disease and open leg wounds due to poor circulation meant repeated hospitalizations for Orlando. He wanted to be treated at home, but he often would not let healthcare providers in. But thanks to the Transitional Care Team at Wycoff Heights Medical Center – working in partnership with the Community Care of Brooklyn PPS – things changed. The team's plan improved Orlando's health and adherence to care while allowing him to remain independent at home. They called him daily and referred him to the Brooklyn Health Home for financial assistance to help pay overdue rent and utility bills. Almost immediately, Orlando improved, visiting the wound care clinic weekly and not missing a dialysis session in the year since the intervention.

PUBLIC HEALTH IS...

Targeting **Population Health** to Improve Outcomes

Population health considers the health status and health outcomes within a group of people rather than just the health of one individual at a time. With recent efforts to reduce maternal mortality and racial disparities, to address social determinants of health, and to help one of the most economically challenged areas of the State build a stable and resilient healthcare network, the Department is looking beyond a one-size-fits-all approach to improve systems of care across the State.

Reducing Maternal Mortality and Race-Based Health Disparities

Addressing racial disparities in health outcomes is a Department priority, and one of the most devastating outcomes we face is maternal mortality. In 2018, Governor Cuomo launched the Taskforce on Maternal Mortality and Disparate Racial Outcomes to provide expert policy advice on improving maternal outcomes, addressing racial and economic disparities, and reducing the frequency of maternal mortality and morbidity.

To fully realize these goals, the Department visited seven cities across the State in 2018 to hear what mothers. mothers-to-be, and their partners/relatives had to say about their pregnancy and childbirth experiences. A total of 244 women participated in these listening sessions and helped inform the Taskforce's recommendations, which include creating a Maternal Mortality Review Board, instituting statewide implicit bias training, creating a data center to help providers access near-real-time data, increasing access to community health workers, and establishing a postpartum expert workgroup.

Focusing on hospitals, the Governor sponsored a November symposium at the New York State Health Foundation to identify strategies to reduce racial disparities in treatment. The Department expanded the New York State Quality Collaborative with hospitals statewide to review best practices to address hemorrhage and implement new clinical guidelines to reduce maternal mortality. Over 80 hospitals are voluntarily engaged in this effort.



Reducing racial disparities in treatment is critical to reducing the frequency of maternal mortality and morbidity.



The Department's Call for Social Determinants of Health Innovations attracted over 200 applicants nationwide.

The Best and Brightest Ideas for Improving Health

Addressing social determinants of health – or the conditions in which people are born, live, grow, work, and age not only improves health outcomes; it also costs less than medical interventions. The Department is committed to ensuring that, regardless of the socioeconomic obstacles New York communities face, all members of these communities receive adequate healthcare and nutritional and other services to improve their quality of life.

Although this approach to care can be challenging, much of that challenge lies in breaking away from the ineffective dictates of the past. In 2018, the Department issued a Call for Innovations for organizations to share novel approaches to improving the lives of Medicaid recipients while reducing costs. The first of its kind in New York State, this solicitation attracted over 200 applicants from across the country.

In September, the Department announced nine finalists representing community-based organizations, healthcare providers, and technology companies. The finalists presented their solutions at a summit hosted by the Department later that month.

Building a Stable Network of Healthcare in Brooklyn

As part of Governor Cuomo's Vital Brooklyn initiative, the Department awarded \$664 million for over 70 capital projects associated with the creation of the One Brooklyn Health System (OBHS). Approved by the Public Health and Health Planning Council in April, OBHS integrates Kingsbrook Jewish Medical Center, Interfaith Medical Center, and Brookdale Hospital Medical Center into a more financially sustainable healthcare system for Central and East Brooklyn communities.

The capital awards will enable OBHS to develop an ambulatory care network, integrate and better align acute care services, perform critical infrastructure improvements, and establish an integrated information technology platform for the new system.

Streamlining the WIC Shopping Experience

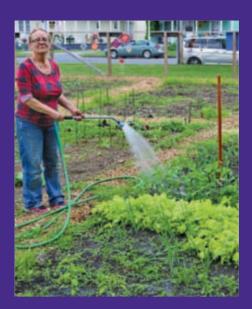
In April, New York State brought the federal Women, Infants and Children (WIC) program into the 21st century with the introduction of our eWIC electronic benefits transfer (EBT) card at a supermarket in Albany. eWIC eliminates paper checks and provides a more convenient way for families in the WIC program to gain access to nutritious foods. By the end of 2018, the card was rolled out in 59 counties and will be fully operational statewide in 2019.

The U.S. Department of Agriculture mandated that all state WIC agencies implement EBT systems by 2020 and we have done so two years early. With eWIC, vendors are reimbursed faster and families have greater shopping convenience. The State's Special Supplemental Nutrition Program for Women, Infants and Children (WIC) serves approximately 400,000 women, infants, and children each month through 92 local providers at 400 service sites.

In addition to eWIC, the Department launched WIC2Go, a new mobile app to make shopping for WIC foods easier. WIC2Go allows users to scan the barcode on a product to see if it is WIC-approved. Users can also check their WIC account balance, view their upcoming WIC appointments, and locate WIC stores and clinics.



The eWIC card was rolled out in 59 New York State counties in 2018.



DSRIP STORIES

Uniting Communities to End Food Insecurity

Providing a space where individuals, families, farms, schools, social agencies, and local businesses can come together to share knowledge, build relationships, and enjoy healthy food, Comfort Food Community of Greenwich is eliminating local food insecurity while bridging socioeconomic boundaries. Through a partnership with Adirondack Health Institute PPS, Comfort Food Community's emergency food relief service is improving health through resource connection, coaching and education, and implementing strategies to increase consumption of locally sourced produce.

Guests attend cooking demonstrations with recipes tailored to their health needs and receive support to help manage diabetes, hypertension, depression, autoimmune disorders, and other chronic conditions. Classes explaining trauma's effects on the mind and body are also offered, along with meditation, horticultural therapy, and yoga classes for coping with stress.

PUBLIC HEALTH IS...

Meeting Challenges with **Evidence-Based Solutions**

New York State continues to make significant progress on some of the most daunting public health challenges of our time – from communicable diseases to substance abuse disorders – thanks to the Department's commitment to using epidemiologic research and surveillance to develop effective interventions. New York State remains on track to end the AIDS epidemic by the end of 2020: new diagnoses of HIV are falling, and rates of enrollment in treatment for those diagnosed continue to climb.

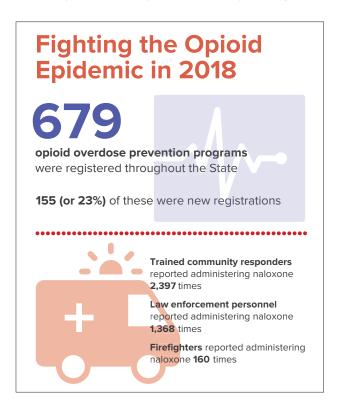
Extending Access to Life-Saving Treatments for Opioid Addiction

In 2018, the Department continued to pursue various measures to end the pain and suffering of opioid addiction and reach even more of those in need and save lives. Central to this agenda is aggressively expanding access to Medication Assisted Treatment (MAT) and specifically buprenorphine.

Like methadone and injectable naltrexone, buprenorphine is an important MAT advance that, when used in combination with counseling, helps people recover from opioid use disorder (OUD). In 2018, the Department took several avenues to increasing buprenorphine availability:

- Launched a buprenorphine public health detailing initiative to provide targeted provider coaching to increase buprenorphine prescribing.
- Funded 24 local health departments (LHDs) to increase access to buprenorphine, with the requirement that each LHD conduct two waiver trainings in its county.
- Provided buprenorphine waiver training to over 500 providers, bringing the State's total number of waivered prescribers as of August to 4,838, according to the Drug Enforcement Administration list.
- Worked with emergency departments to offer buprenorphine in 14 hospitals in western New York, with 11 agencies with 27 clinic sites providing ongoing care in Erie, Niagara, Genesee, Orleans, Wyoming, and Chautauqua counties.

Also in 2018, the Department increased the number of Drug User Health Hubs to 12 across the State, serving more than 800 individuals. Drug User Health Hubs improve the availability and accessibility of an array of appropriate health, mental health, and medication for addiction treatment services for people who use drugs, especially (but not solely) people who inject drugs.





DSRIP STORIES

Zoe

After being hospitalized and discharged three times in one year, Zoe struggled with managing her medication, missed follow-ups, and had trouble connecting to social supports. This is when Westchester Medical Center PPS's Transition of Care Wellness (TOCW) program stepped in.

TOCW addresses gaps in the transition of care experienced by patients with behavioral health diagnoses who have had multiple inpatient hospitalizations and are at high risk for readmission. TOCW connects patients with peer support services offered through Independent Living Systems and a partnership with PEOPLe Inc., which helped Zoe resolve issues to avoid being evicted from her residence. She was also connected with respite services to avoid future hospitalizations and a recovery specialist to work on goal-setting. Zoe has not been hospitalized since engaging with the TOCW team and is working to become a certified TOCW peer advocate.

Eliminating Hepatitis C

In July, Governor Cuomo announced a commitment of \$5 million to support the nation's first strategy to eliminate hepatitis C. To advise the State on the implementation process, a Hepatitis C Elimination Task Force was established and held its first meeting in November.

The plan supports the Hepatitis C Criminal Justice Initiative, which provides reentry services and peer education for incarcerated persons living with hepatitis C; hepatitis C patient navigation programs in Drug User Health Hubs; innovative hepatitis C care; and treatment models that address the needs of persons with hepatitis C who



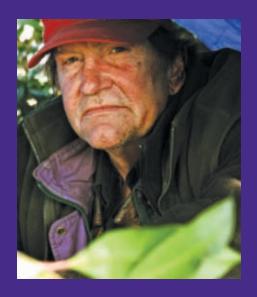
inject drugs. A public awareness campaign and measures to strengthen hepatitis C surveillance are also supported.

The Task Force's agenda will be supplemented by five workgroups charged with reviewing and updating the recommendations of the 2017 community consensus statement on eliminating hepatitis C in New York State.

Improving Time to Treatment for Persons with HIV

In 2018, the AIDS Institute issued a new policy on rapid initiation of antiretroviral treatment, stating that a new HIV diagnosis is an immediate call to action for every provider to initiate treatment immediately. While same-day initiation of treatment may not always be possible, patients should be started on treatment within three days and not longer than 30 days in an outpatient setting.

The Department's HIV Clinical Guidelines state that treatment is recommended for all patients with a confirmed HIV diagnosis regardless of their CD4 cell count or viral load. All providers serving persons with HIV should establish systems that strive for same-day initiation of HIV treatment, even while initial lab work is pending. The policy supports the "Undetectable equals Untransmittable" (U=U) message that individuals with a sustained undetectable viral load will not sexually transmit HIV.



DSRIP STORIES Jim

Jim suffered from long-term chronic mental illness and alcoholism and frequently found himself in the local emergency department. Because of these frequent visits, he was referred to Sarah, a care manager at Alliance for Better Health PPS in Troy. After several unsuccessful attempts to reach Jim by phone, Sarah's care management team visited him at home, only to find a dirt and tarp shelter in the local tent city, where he had lived for years.

Having determined that Jim's greatest need was housing, Sarah reached out to area housing resources and found Jim a place at a Catholic Charities residential program. After addressing Jim's greatest need, the team could then begin to work at improving his overall health. Jim is now connected with a primary care physician and a mental health counselor and has been keeping his medical appointments.

PUBLIC HEALTH IS...

A Healthier **Aging Population**

Nearly one in six New Yorkers today is 65 and older – a larger share of the State's population than ever before. New York is responding to these changing demographics with innovative ideas and programming. The Department is committed to ensuring that all New Yorkers are able to age in place healthily and happily in communities of their own choosing.

Prioritizing Age-Friendliness and Livability across State Agencies

In November, Governor Cuomo signed an Executive Order that directs all New York State agencies to adopt and implement the principles of age-friendly, livable communities and preventative public health into all relevant programs, policies, and funding.

With the State Office for the Aging and the Department of State, the Department worked to incorporate the Governor's vision into the New York State Prevention Agenda. That meant integrating the AARP/World Health Organization's eight domains of livability for age-friendly communities into federal and State plans, agency policies, procedures, and procurements wherever appropriate.

Also in 2018, New York State's Health Across All Policies (HAAP) initiative broke new ground in health and aging policy. HAAP seeks to improve population health and assist localities in planning and implementing elements to create age-friendly communities. With HAAP, State agencies considered the environmental, economic, and social factors that may influence the health and well-being of older New Yorkers.

Young Minds Apply Ingenuity for Aging in Place

In 2018, the Department launched the Aging Innovation Challenge, a call for college and university students to develop a product to assist older New Yorkers and their



The winning teams of young innovators in the Department's Aging Innovation Challenge.

caregivers with aging in place. HeroX – a platform similar to Kickstarter where users can post their own competition – provided the venue for the challenge, which received 34 eligible submissions vying for a portion of the \$50,000 prize pool. Five finalists were selected to present their innovation at a live demonstration event in New York City.

In November, teams from Corning Community College and Syracuse University were selected as the top innovators, and each was awarded a share of the grand prize. Given the success of this competition, the Department is considering ideas for future competitions to focus on the needs of an aging population.



A Comprehensive Resource to Assist New York's Caregivers

Because the long-term care system in New York State is layered and complex, caregivers often find gathering information about navigating the system painstaking and time-consuming. In 2018, the Department responded to this challenge by releasing the New York State Caregiver Guide, a comprehensive resource developed to provide New York's caregivers with the information they need in one convenient, centralized location. As the Guide is piloted throughout the State, feedback received will be used to inform the development of a second version that will be more widely distributed.



The New York State Caregiver Guide is an invaluable resource for those caring for the State's growing senior population.

Greater Assisted Living Opportunities for New Yorkers with Alzheimer's or Dementia

To promote aging in place, the 2018-2019 State Budget established a voucher demonstration program for adults with Alzheimer's disease or dementia who can no longer privately pay for a Special Needs Assisted Living Residence (SNALR) and would otherwise be discharged to a skilled nursing facility.

Authorized through March 31, 2020, the demonstration program keeps residents in the least restrictive setting possible, avoiding unnecessary and disruptive transitions and potentially delaying Medicaid enrollment. During this first year, 45 SNALR facilities agreed to participate.

Providing Greater Transparency on Home Care Services Agencies

At the Department's recommendation, the 2018-2019 State Budget established a registration requirement for all Licensed Home Care Services Agencies (LHCSAs). In 2018, the Department registered over 1,300 LHCSAs and created a website to make this registration information available to the public.



DSRIP STORIES Mrs. Y

Mrs. Y and her son were at the emergency department for the eighth time in a year when they met their community health worker (CHW) at NYU Langone Brooklyn PPS. Mrs. Y confided in her native Spanish that she had a challenging time managing her son's asthma and other health problems.

The CHW scheduled a joint home visit with the team's certified asthma educator; coordinated and attended a meeting with Mrs. Y, her son's school psychologist, and the school counselor; and referred the family to the New York State Children's Health Home program for care coordination services. Mrs. Y was able to obtain documents needed for her son's doctor, received access to nutritional services for him, and got a Medicaid service coordinator assigned for ongoing support. This helped her keep her son's appointments at NYU Langone Brooklyn, and his overall health improved.

Appendix A:

About the Department

Role

The New York State Department of Health is one of the State's largest agencies with the most expansive set of responsibilities – to protect, improve, and promote the health, productivity, and wellbeing of all New Yorkers. These responsibilities also include licensing, surveillance, and oversight of healthcare facilities and agencies; collecting and analyzing data relating to the health of New York State residents; and administering the State's Health Plan Marketplace (the NY State of Health), Medicaid, and Child Health Plus programs, which provide crucial low-cost and no-cost health coverage to millions of residents.

These broad responsibilities are established in the State's Public Health Law (PHL). (Medicaid responsibilities are established in Social Services Law.) The PHL also establishes the authority of the Commissioner of Health of the State of New York, who is charged with, among other things, investigating epidemics and causes of disease, enforcing the PHL, and supervising the work of local boards of health and health officers. The general powers and duties of the Department and Commissioner are set forth in PHL § 201 and 206, respectively.

New York is one of 27 states where the provision of public health services is decentralized, meaning that local health departments operate under the administrative authority of local governments. In New York State, 57 county health departments and the New York City Department of Health and Mental Hygiene provide public health services at the local level. Although each local health department addresses the needs of its own community, the State Department of Health works closely with the local health departments to provide technical assistance, financial assistance, oversight, and other services.

Governance

The New York State Public Health and Health Planning Council (PHHPC) possesses advisory authority and, along with the Commissioner, decision-making authority with respect to New York State's public health and healthcare delivery system. This includes adopting and amending the Sanitary Code and the regulations that govern healthcare

facilities, homecare agencies, and hospice programs and making recommendations concerning major construction projects, service changes, and equipment acquisitions relating to healthcare facilities and homecare agencies. The PHHPC is comprised of the Commissioner and 24 members appointed by the Governor.

The PHHPC also advises the Commissioner on issues related to the general preservation and improvement of public health. The PHHPC's powers and duties are set forth in PHL § 225. Current PHHPC members and membership on its various committees can be found at health.ny.gov/facilities/public_health_and_health_ planning_council/.

Programs and Services

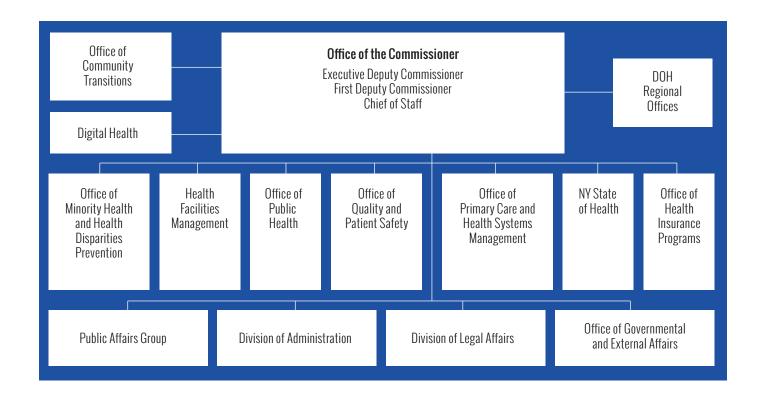
The Department has provided public health services for over 100 years and administers a wide range of public health programs, directly or through contracts, that address (1) disease prevention and control, (2) environmental health protection, (3) promotion of healthy lifestyles, and (4) emergency preparedness and response. The Department also conducts statewide healthcare surveillance in hospitals, homecare agencies, and nursing homes; conducts research and maintains diagnostic and reference laboratories at the Wadsworth Center; manages the Medicaid program; administers the New York State of Health Marketplace; and operates five healthcare institutions.

Resources

In 2018, the Department employed 3,307 people across its central office, three regional offices, three field offices, and nine district health offices statewide; an additional 1,412 worked in the five Department-operated healthcare institutions. In the 2018-19 fiscal year, the Department's appropriations totaled \$80.2 billion. Of this, approximately \$69.3 billion was the Medicaid one-year value of a twoyear appropriation, \$10.7 billion supported public health initiatives, and \$162 million was allocated to institutions operated by the Department.

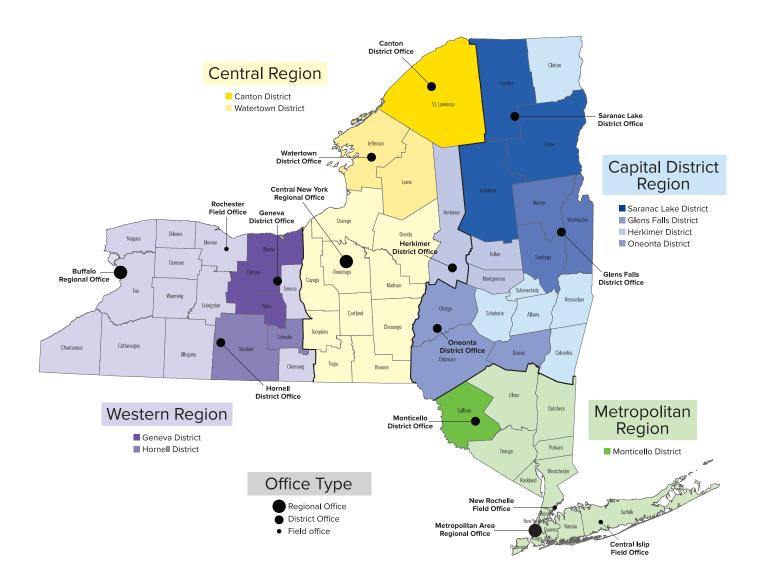
Appendix B:

Organizational Chart



Appendix C:

Regional, District, and Field Offices



Appendix D: **Publications**

Abrams J.M., Arkhipova I.R., Belfort M., Boeke J.D., Joan Curcio M., Faulkner G.J., Goodier J.L., Lehmann R., Levin H.L. 2018. "Meeting report: mobile genetic elements and genome plasticity 2018," Mobile DNA, 9.

Adams E., Quinn M., Tsay S., Poirot E., Chaturvedi S., Southwick K., Greenko J., Fernandez R., Kallen A., Vallabhaneni S., Haley V., Hutton B., Blog D., Lutterloh E., Zucker H., Bucher C., Erazo R.L., Giardina R., Glowicz J., Jackson B.R., Denis R.J., Karr J., Liddell G., Litvintseva A., Lockhart S.R., Ogundimu A., Patel R., Walters M., Welsh R., Zhu Y. Candida auris Investigation Workgroup. 2018. "Candida auris in healthcare facilities, New York, USA, 2013-2017," Emerging Infectious Diseases, 24: 1816-24.

Ahn M., Cho H., Ahn S., Jun S.C. 2018. "User's self-prediction of performance in motor imagery brain-computer interface," Frontiers in Human Neuroscience, 12: 59.

Ahn S., Cho H., Kwon M., Kim K., Kwon H., Kim B.S., Chang W.S., Chang J.W., Jun S.C. 2018. "Interbrain phase synchronization during turn-taking verbal interaction – a hyperscanning study using simultaneous EEG/MEG," Human Brain Mapping, 39: 171-88.

Anand, A., Mace K.E., Townsend R.L., Madison-Antenucci S., Grimm K.E., Espina N., Losco P., Lucchi N.W., Rivera H., Breen K., Tan K.R., Arguin P.M., White J.L., Stramer S.L. 2018. "Investigation of a case of suspected transfusiontransmitted malaria," Transfusion, 58: 2115-21.

Andrews J.G., Conway K., Westfield C., Trout C., Meaney F.J., Mathews K., Ciafaloni E., Cunniff C., Fox D.J., Matthews D., Pandya S. 2018. "Implementation of duchenne muscular dystrophy care considerations," Pediatrics, 142.

Andrews J.G., Galindo M.K., Meaney F.J., Benavides A., Mayate L., Fox D., Pettygrove S., O'Leary L., Cunniff C. 2018. "Recognition of clinical characteristics for population-based surveillance of fetal alcohol syndrome," Birth Defects Research, 110: 851-62.

Andrews J.G., Lamb M.M., Conway K., Street N., Westfield C., Ciafaloni E., Matthews D., Cunniff C., Pandya S., Fox D.J. 2018. "Diagnostic accuracy of phenotype classification in Duchenne and Becker muscular dystrophy using medical record data," Journal of Neuromuscular Diseases, 5: 481-95.

Andrews J.G., Soim A., Pandya S., Westfield C.P., Ciafaloni E., Fox D.J., Birnkrant D.J., Cunniff C.M., Sheehan D.W. 2018. "Noninvasive respiratory care received by individuals with Duchenne muscular dystrophy since 1979 – reply," Respiratory Care, 62: 1121-22.

Angalakurthi, S. K., D. J. Vance, Y. Rong, C. M. T. Nguyen, M. J. Rudolph, D. Volkin, C. R. Middaugh, D. D. Weis, and N. J. Mantis. 2018. "A collection of single-domain antibodies that crowd ricin toxin's active site," Antibodies (Basel), 7.

Appler, K., S. Brunt, J. A. Jarvis, and A. D. Davis. 2018. "Clarifying indeterminate results on the rabies direct fluorescent antibody test using real-time reverse transcriptase polymerase chain reaction," Public Health Rep, 134: 57-62.

Arora S., Kumar J.V., Moss M.E. 2018. "Does water fluoridation affect the prevalence of enamel fluorosis differently among racial and ethnic groups?" Journal of Public Health Dentistry, 78: 95-99.

Baranova, D. E., K. J. Levinson, and N. J. Mantis. 2018. "Vibrio cholerae O1 secretes an extracellular matrix in response to antibody-mediated agglutination," PLoS One, 13: e0190026.

Barn, P., E. Gombojav, C. Ochir, B. Laagan, B. Beejin, G. Naidan, B. Boldbaatar, J. Galsuren, T. Byambaa, C. Janes, P. A. Janssen, B. P. Lanphear, T. K. Takaro, S. A. Venners, G. M. Webster, W. Yuchi, C. D. Palmer, P. J. Parsons, Y. M. Roh, and R. W. Allen. 2018. "The effect of portable HEPA filter air cleaners on indoor PM2.5 concentrations and second hand tobacco smoke exposure among pregnant women in Ulaanbaatar, Mongolia: the UGAAR randomized controlled trial," Sci Total Environ, 615: 1379-89.

Bastet, L., P. Turcotte, J. T. Wade, and D. A. Lafontaine. 2018. "Maestro of regulation: riboswitches orchestrate gene expression at the levels of translation, transcription and mRNA decay," RNA Biol, 15: 679-82.

Beattie J., Parajuli S., Sanger M., Lee G., Pleninger P., Crowley G., Kwon S., Murthy V., Manko J.A., Caplan A., Dufort E., Pastula D.M., Nolan A. 2018. "Zika virus-associated Guillain-Barré syndrome in a returning U.S. traveler," Infectious Diseases in Clinical Practice, 26: e80-e84.

Beavers S.F., Pascopella L., Davidow A.L., Mangan J.M., Hirsch-Moverman Y.R., Golub J.E., Blumberg H.M., Webb R.M., Royce R.A., Buskin S.E., Leonard M.K., Weinfurter P.C., Belknap R.W., Hughes S.E., Warkentin J.V., Welbel S.F., Miller T.L., Kundipati S.R., Lauzardo M., Barry P.M., Katz D.J., Garrett D.O., Graviss E.A., Flood J.M. 2018. "Tuberculosis mortality in the United States: epidemiology and prevention opportunities," Annals of the American Thoracic Society, 15: 683-92.

Bell, E. M., E. H. Yeung, W. Ma, K. Kannan, R. Sundaram, M. M. Smarr, and G. M. Buck Louis. 2018. "Concentrations of endocrine disrupting chemicals in newborn blood spots and infant outcomes in the upstate KIDS study," Environ Int, 121: 232-39.

Benowitz I., Fitzhenry R., Dickinson M., Levy M., Lin Y., Nazarian E., Ostrowsky B., Passaretti T., Rakeman J., Saylors A., Shamoonian E., Smith T.-A., Balter S. 2018. "Rapid identification of a cooling tower-associated Legionnaires' disease outbreak supported by polymerase chain reaction testing of environmental samples, New York City, 2014-2015," Journal of Environmental Health, 80: 8-12.

Bernard Q., Smith A.A., Yang X., Koci J., Foor S.D., Cramer S.D., Zhuang X., Dwyer J.E., Lin Y.-P., Mongodin E.F., Marques A., Leong J.M., Anguita J., Pal U. 2018. "Plasticity in early immune evasion strategies of a bacterial pathogen," Proceedings of the National Academy of Sciences of the United States of America, 115: E3788-E3797.

Bhutiani, N., Q. Li, C. D. Anderson, H. C. Gallagher, M. De Jesus, R. Singh, V. R. Jala, M. Fraig, T. Gu, and N. K. Egilmez. 2018. "Enhanced gut barrier integrity sensitizes colon cancer to immune therapy," Oncoimmunology, 7: e1498438.

Blitvich, B. J., B. J. Beaty, C. D. Blair, A. C. Brault, G. Dobler, M. A. Drebot, A. D. Haddow, L. D. Kramer, A. D. LaBeaud, T. P. Monath, E. C. Mossel, K. Plante, A. M. Powers, R. B. Tesh, M. J. Turell, N. Vasilakis, and S. C. Weaver. 2018. "Bunyavirus taxonomy: limitations and misconceptions associated with the current ICTV criteria used for species demarcation," Am J Trop Med Hyg, 99: 11-16.

Bloch, D., K. Murray, E. Peterson, S. Ngai, I. Rubinstein, T. A. Halse, I. Ezeoke, L. Miller, L. Arakaki, A. Ramautar, M. Antwi, P. Del Rosso, M. Dorsinville, S. Clark, M. Halbrook, J. Kennedy, S. Braunstein, and D. Weiss. 2018. "Sex difference in meningococcal disease mortality, New York City, 2008-2016," Clin Infect Dis, 67: 760-69.

Bocour A., Greene S.K., Laraque F., Winters A. 2018. "Estimating the prevalence of chronic hepatitis C virus infection in New York City, 2015," Epidemiology and Infection, 146: 1537-42.

Boghossian, N. S., R. J. Sicko, A. Giannakou, A. Dimopoulos, M. Caggana, M. Y. Tsai, E. H. Yeung, N. Pankratz, B. R. Cole, P. A. Romitti, M. L. Browne, R. Fan, A. Liu, D. M. Kay, and J. L. Mills. 2018. "Rare copy number variants identified in prune belly syndrome," Eur J Med Genet, 61: 145-51.

Borrelli, C., Y. Hou, J. W. Pawlowski, M. Holzmann, M. E. Katz, G. T. Chandler, and S. S. Bowser. 2018. "Assessing SSU rDNA barcodes in foraminifera: a case study using Bolivina quadrata," J Eukaryot Microbiol, 65: 220-35.

Bouchara J.P. and Chaturvedi V. 2018. "The curious case of 'case report' of infections caused by human and animal fungal pathogens: an educational tool, an online archive, or a format in need of retooling," Mycopathologia 183: 879-91.

Bourke B.P., Conn J.E., De Oliveira T.M.P., Chaves L.S.M., Bergo E.S., Laporta G.Z., Sallum M.A.M. 2018. "Exploring malaria vector diversity on the Amazon frontier," Malaria Journal, 17: 342.

Branda, J. A., B. A. Body, J. Boyle, B. M. Branson, R. J. Dattwyler, E. Fikrig, N. J. Gerald, M. Gomes-Solecki, M. Kintrup, M. Ledizet, A. E. Levin, M. Lewinski, L. A. Liotta, A. Marques, P. S. Mead, E. F. Mongodin, S. Pillai, P. Rao, W. H. Robinson, K. M. Roth, M. E. Schriefer, T. Slezak, J. Snyder, A. C. Steere, J. Witkowski, S. J. Wong, and S. E. Schutzer. 2018. "Advances in serodiagnostic testing for Lyme disease are at hand," Clin Infect Dis, 66: 1133-39.

Brown A.C., Ross J., Jones D.B., Collier S.A., Ayers T.L., Hoekstra R.M., Backensen B., Roy S.L., Beach M.J., Yoder J.S. Acanthamoeba Keratitis Investigation Team. 2018. "Risk factors for acanthamoeba keratitis – a multistate case-control study, 2008-2011," Eye & contact lens, 44: S173-S178.

Brown L.G., Hoover E.R., Faw B.V., Hedeen N.K., Nicholas D., Wong M.R., Shepherd C., Gallagher D.L., Kause J.R. 2018. "Food Safety Practices Linked with Proper Refrigerator Temperatures in Retail Delis," Foodborne Pathogens and Disease, 15: 300-307.

Buck Louis, G. M., M. M. Smarr, L. Sun, Z. Chen, M. Honda, W. Wang, R. Karthikraj, J. Weck, and K. Kannan. 2018. "Endocrine disrupting chemicals in seminal plasma and couple fecundity," Environ Res, 163: 64-70.

Buck Louis, G. M., S. Zhai, M. M. Smarr, J. Grewal, C. Zhang, K. L. Grantz, S. N. Hinkle, R. Sundaram, S. Lee, M. Honda, J. Oh, and K. Kannan. 2018. "Endocrine disruptors and neonatal anthropometry, NICHD Fetal Growth Studies – Singletons," Environ Int, 119: 515-26.

Budd, J. R., C. Weykamp, R. Rej, F. MacKenzie, F. Ceriotti, N. Greenberg, J. E. Camara, H. Schimmel, H. W. Vesper, T. Keller, V. Delatour, M. Panteghini, C. Burns, W. G. Miller, and Ifcc Working Group on Commutability. 2018. "IFCC working group recommendations for assessing commutability Part 3: using the calibration effectiveness of a reference material," Clin Chem, 64: 465-74.

Butali, A., P. A. Mossey, W. L. Adeyemo, M. A. Eshete, L. J. J. Gowans, T. D. Busch, D. Jain, W. Yu, L. Huan, C. A. Laurie, C. C. Laurie, S. Nelson, M. Li, P. A. Sanchez-Lara, W. P. Magee, 3rd, K. S. Magee, A. Auslander, F. Brindopke, D. M. Kay, M. Caggana, P. A. Romitti, J. L. Mills, R. Audu, C. Onwuamah, G. O. Oseni, A. Owais, O. James, P. B. Olaitan, B. S. Aregbesola, R. O. Braimah, F. O. Oginni, A. O. Oladele, S. A. Bello, J. Rhodes, R. Shiang, P. Donkor, S. Obiri-Yeboah, F. K. N. Arthur, P. Twumasi, P. Agbenorku, G. Plange-Rhule, A. A. Oti, O. M. Ogunlewe, A. A. Oladega, A. A. Adekunle, A. O. Erinoso, O. O. Adamson, A. A. Elufowoju, O. I. Ayelomi, T. Hailu, A. Hailu, Y. Demissie, M. Derebew, S. Eliason, M. Romero-Bustillous, C. Lo, J. Park, S. Desai, M. Mohammed, F. Abate, L. O. Abdur-Rahman, D. Anand, I. Saadi, A. V. Oladugba, S. A. Lachke, B. A. Amendt, C. N. Rotimi, M. L. Marazita, R. A. Cornell, J. C. Murray, and A. A. Adeyemo. 2018. "Genomic analyses in african populations identify novel risk loci for cleft palate," Hum Mol Genet.

Carlton A.G., De Gouw J., Jimenez J.L., Ambrose J.L., Attwood A.R., Brown S., Baker K.R., Brock C., Cohen R.C., Edgerton S., Farkas C.M., Farmer D., Goldstein A.H., Gratz L., Guenther A., Hunt S., Jaeglé L., Jaffe D.A., Mak J., Mcclure C., Nenes A., Nguyen T.K., Pierce J.R., De Sa S., Selin N.E., Shah V., Shaw S., Shepson P.B., Song S., Stutz J., Surratt J.D., Turpin B.J., Warneke C., Washenfelder R.A., Wennberg P.O., Zhou X. 2018. "Synthesis of the southeast atmosphere studies: Investigating fundamental atmospheric chemistry questions," Bulletin of the American Meteorological Society, 99: 547-67.

Carmichael S.L., Ma C., Van Zutphen A.R., Moore C.A., Shaw G.M. The National Birth Defects Prevention Study. 2018. "Women's periconceptional diet and risk of biliary atresia in offspring," Birth Defects Research, 110: 994-1000.

Chaturvedi V., Bouchara J.-P., Hagen F., Alastruey-Izquierdo A., Badali H., Bocca A.L., Cano-Lira J.F., Cao C., Chaturvedi S., Chotirmall S.H., van Diepeningen A.D., Gangneux J.-P., Guinea J., de Hoog S., Ilkit M., Kano R., Liu W., Martinez-Rossi N.M., de Souza Carvalho Melhem M., Ono M.A., Ran Y., Ranque S., de Almeida Soares C.M., Sugita T., Thomas P.A., Vecchiarelli A., Wengenack N.L., Woo P.C.Y., Xu J., Zancope-Oliveira R.M. 2018. "Eighty Years of mycopathologia: a retrospective analysis of progress made in understanding human and animal fungal pathogens," Mycopathologia.

Chaturvedi V., DeFiglio H., Chaturvedi S. 2018. "Phenotype profiling of white-nose syndrome pathogen Pseudogymnoascus destructans and closely-related Pseudogymnoascus pannorum reveals metabolic differences underlying fungal lifestyles," F1000Research, 7.

Chaves L.S.M., Conn J.E., López R.V.M., Sallum M.A.M. 2018. "Abundance of impacted forest patches less than 5 km² is a key driver of the incidence of malaria in Amazonian Brazil," Scientific Reports, 8: 7077.

Chen, H., Y. Yao, Z. Zhao, Y. Wang, Q. Wang, C. Ren, B. Wang, H. Sun, A. C. Alder, and K. Kannan. 2018. "Multimedia distribution and transfer of per- and polyfluoroalkyl substances (PFASs) surrounding two fluorochemical manufacturing facilities in Fuxin, China," Environ Sci Technol, 52: 8263-71.

Cheng, K., K. E. Coller, C. C. Marohnic, Z. A. Pfeiffer, J. R. Fino, R. R. Elsing, J. Bergsma, M. A. Marcinkus, A. K. Kar, O. H. Gumbs, K. S. Otis, J. Fishpaugh, P. W. Schultz, M. R. Pope, A. R. Narvaez, S. J. Wong, S. Madison-Antenucci, T. P. Leary, and G. J. Dawson. 2018. "Performance evaluation of a prototype architect antibody assay for Babesia microti," J Clin Microbiol, 56.

Chou E., Zenteno G., Taubner B., Pilar A., Guignon E., Page W., Lin Y.-P., Cady N.C. 2018. "Grating coupled-surface plasmon resonance and fluorescent plasmonics biosensor for diagnosis of Lyme disease," Proceedings of SPIE – The International Society for Optical Engineering, 10629.

Chow N.A., Gade L., Tsay S.V., Forsberg K., Greenko J.A., Southwick K.L., Barrett P.M., Kerins J.L., Lockhart S.R., Chiller T.M., Litvintseva A.P., Adams E., Barton K., Beer K.D., Bentz M.L., Berkow E.L., Black S., Bradley K.K., Brooks R., Chaturvedi S., Clegg W., Cumming M., DeMaria A., Dotson N., Epson E., Fernandez R., Fulton T., Greeley R., Jackson B., Kallen A., Kemble S., Klevens M., Kuykendall R., Le N.H., Leung V., Lutterloh E., Mcateer J., Pacilli M., Peterson J., Quinn M., Ross K., Rozwadowski F., Shannon D.J., Skrobarcek K.A., Vallabhaneni S., Welsh R., Zhu Y. U.S. Candida Candida auris Investigation Team. 2018. "Multiple introductions and subsequent transmission of multidrug-resistant Candida auris in the USA: a molecular epidemiological survey," The Lancet Infectious Diseases, 18: 1377-84.

Chuchuy, A., M. S. Rodriguero, W. Ferrari, A. T. Ciota, L. D. Kramer, and M. V. Micieli. 2018. "Biological characterization of Aedes albopictus (Diptera: Culicidae) in Argentina: implications for arbovirus transmission," Sci Rep, 8: 5041.

Chung, M. K., G. M. Buck Louis, K. Kannan, and C. J. Patel. 2018. "Exposome-wide association study of semen quality: systematic discovery of endocrine disrupting chemical biomarkers in fertility require large sample sizes," Environ Int, 125: 505-14.

Chung, M. K., K. Kannan, G. M. Louis, and C. J. Patel. 2018. "Toward capturing the exposome: exposure biomarker variability and coexposure patterns in the shared environment," Environ Sci Technol, 52: 8801-10.

Ciota, A. T., P. A. Chin, D. J. Ehrbar, M. V. Micieli, D. M. Fonseca, and L. D. Kramer. 2018. "Differential effects of temperature and mosquito genetics determine transmissibility of arboviruses by Aedes aegypti in Argentina," Am J Trop Med Hyg, 99: 417-24.

Clark R.R., Judd J., Lasek-Nesselquist E., Montgomery S.A., Hoffmann J.G., Derbyshire K.M., Gray T.A. 2018. "Direct cell – cell contact activates SigM to express the ESX-4 secretion system in Mycobacterium smegmatis," Proceedings of the National Academy of Sciences of the United States of America, 115: E6595- E6603.

Coley S., Hoefer D., Rausch-Phung E. 2018. "A population based reminder intervention to improve human papillomavirus vaccination rates among adolescents at routine vaccination age," Vaccine, 36: 4904-4909.

Conners E.E., Lee E.H., Thompson C.N., McGibbon E., Rakeman J.L., Iwamoto M., Cooper H., Vora N.M., Limberger R.J., Fine A.D., Liu D., Slavinski S. 2018. "Zika virus infection among pregnant women and their neonates in New York City, January 2016-June 2017," Obstetrics and Gynecology, 132: 487-95.

Cooper L.A., Stringer A.M., Wade J.T. 2018. "Determining the specificity of cascade binding, interference, and primed adaptation in vivo in the Escherichia coli Type I-E CRISPR-Cas system," MBio, 9.

Crawford T., Fritz P., Wainman T. 2018. "Changes in IAQ caused by corona discharge air cleaner," ASHRAE Journal, 60: 64-67.

Crowther, L. J., P. Brunner, C. Kapeller, C. Guger, K. Kamada, M. E. Bunch, B. K. Frawley, T. M. Lynch, A. L. Ritaccio, and G. Schalk. 2018. "A quantitative method for evaluating cortical responses to electrical stimulation," J Neurosci Methods, 311: 67-75.

Curcio, M. J. 2018. "Border collies of the genome: domestication of an autonomous retrovirus-like transposon," Curr Genet, 65: 71-78.

Curry L., Schmitt C.L., Henes A., Ortega-Peluso C., Battles H. 2018. "How low-income smokers in New York access cheaper cigarettes," American Journal of Health Promotion.

Dacus H.L.M., Wagner V.L., Collins E.A., Matson J.M., Gates M., Hoover S., Tangka F.K.L., Larkins T., Subramanian S. 2018. "Evaluation of patient-focused interventions to promote colorectal cancer screening among New York State Medicaid managed care patients," Cancer, 124: 4145-53.

de Bruin, O. M., A. Chiefari, D. Wroblewski, C. Egan, and C. D. Kelly-Cirino. 2018. "A novel chemical lysis method for maximum release of DNA from difficult-to-lyse bacteria," Microb Pathog, 126: 292-97.

Debnath, I., A. M. Stringer, S. N. Smith, E. Bae, H. L. T. Mobley, J. T. Wade, and M. M. Pearson. 2018. "MrpJ directly regulates proteus mirabilis virulence factors, including fimbriae and Type VI secretion, during urinary tract infection," Infect Immun, 86.

Delaney A., Mai C., Smoots A., Cragan J., Ellington S., Langlois P., Breidenbach R., Fornoff J., Dunn J., Yazdy M., Scotto-Rosato N., Sweatlock J., Fox D., Palacios J., Forestieri N., Leedom V., Smiley M., Nance A., Lake-Burger H., Romitti P., Fall C., Prado M.V., Barton J., Bryan J.M., Arias W., Brown S.V., Kimura J., Mann S., Martin B., Orantes L., Taylor A., Nahabedian J., Akosa A., Song Z., Martin S., Ramlal R., Shapiro-Mendoza C., Isenburg J., Moore C.A., Gilboa S., Honein M.A. 2018. "Population-based surveillance of birth defects potentially related to zika virus infection – 15 states and U.S. territories, 2016," Morbidity and Mortality Weekly Report, 67: 91-96.

DeMartino, L., R. McMahon, M. Caggana, and N. P. Tavakoli. 2018. "Gender disparities in screening for congenital hypothyroidism using thyroxine as a primary screen," Eur J Endocrinol, 179: 161-67.

DeMott, C. M., R. Girardin, J. Cobbert, S. Reverdatto, D. S. Burz, K. McDonough, and A. Shekhtman. 2018. "Potent inhibitors of mycobacterium tuberculosis growth identified by using in-cell NMR-based screening," ACS Chem Biol, 13: 733-41.

Do T.N., Street N., Donnelly J., Adams M.M., Cunniff C., Fox D.J., Weinert R.O., Oleszek J., Romitti P.A., Westfield C.P., Bolen J. On behalf of the Muscular Dystrophy Surveillance, Tracking, and Research Network (MD STARnet). 2018. "Muscular dystrophy surveillance, tracking, and research network pilot: population-based surveillance of major muscular dystrophies at four U.S. sites, 2007–2011," Birth Defects Research, 110: 1404-11.

Drpic, D., A. C. Almeida, P. Aquiar, F. Renda, J. Damas, H. A. Lewin, D. M. Larkin, A. Khodjakov, and H. Maiato. 2018. "Chromosome segregation is biased by kinetochore size," Curr Biol, 28: 1344-56 e5.

Dufort E. and White J. 2018. "Pre-Zika microcephaly in Brazil: closer to the elusive baseline and new questions raised," Pediatrics, 141.

Dwicaksono A., Brissette I., Birkhead G.S., Bozlak C.T., Martin E.G. 2018. "Evaluating the contribution of the built environment on obesity mong New York State students," Health Education and Behavior, 45: 480-91.

Eastwood, G., A. A. Cunningham, L. D. Kramer, and S. J. Goodman. 2018. "The vector ecology of introduced Culex quinquefasciatus populations, and implications for future risk of West Nile virus emergence in the Galapagos archipelago," Med Vet Entomol, 33: 44-55.

Effland T., Lawson A., Balter S., Devinney K., Reddy V., Waechter H., Gravano L., Hsu D. 2018. "Discovering foodborne illness in online restaurant reviews," Journal of the American Medical Informatics Association, 25: 1586-92.

Eftekhar, A., J. J. S. Norton, C. M. McDonough, and J. R. Wolpaw. 2018. "Retraining reflexes: clinical translation of spinal reflex operant conditioning," Neurotherapeutics, 15: 669-83.

Evans I.V.R., Phillips G.S., Alpern E.R., Angus D.C., Friedrich M.E., Kissoon N., Lemeshow S., Levy M.M., Parker M.M., Terry K.M., Scott Watson R., Weiss S.L., Zimmerman J., Seymour C.W. 2018. "Association between the New York sepsis care mandate and in-hospital mortality for pediatric sepsis," JAMA, 320: 358-67.

Ezeoke I., Galac M.R., Lin Y., Liem A.T., Roth P.A., Kilianski A., Gibbons H.S., Bloch D., Kornblum J., Del Rosso P., Janies D.A., Weiss D. 2018. "Tracking a serial killer: Integrating phylogenetic relationships, epidemiology, and geography for two invasive meningococcal disease outbreaks," PLoS ONE, 13.

Fair, P. A., N. D. White, B. Wolf, S. A. Arnott, K. Kannan, R. Karthikraj, and J. E. Vena. 2018. "Persistent organic pollutants in fish from Charleston Harbor and tributaries, South Carolina, United States: a risk assessment," Environ Res, 167: 598-613. Falco R.C., Daniels T.J., Vinci V., McKenna D., Scavarda C., Wormser G.P. 2018. "Assessment of duration of tick feeding by the scutal index reduces need for antibiotic prophylaxis after ixodes scapularis tick bites," Clinical Infectious Diseases, 67: 614-16.

Feinberg A., McKelvey W., Hore P., Kanchi R., Parsons P.J., Palmer C.D., Thorpe L.E. 2018. "Declines in adult blood lead levels in New York City compared with the United States, 2004-2014," Environmental Research, 163: 194-200.

Fisher S.C., Van Zutphen A.R., Romitti P.A., Browne M.L. National Birth Defects Prevention Study. 2018. "Maternal hypertension, antihypertensive medication use, and small for gestational age births in the National Birth Defects Prevention Study, 1997–2011," Maternal and Child Health Journal, 22: 237-46.

Fisher S.C., Van Zutphen A.R., Werler M.M., Romitti P.A., Cunniff C., Browne M.L., the National Birth Defects Prevention Study. 2018. "Maternal antihypertensive medication use and selected birth defects in the National Birth Defects Prevention Study," Birth Defects Research, 110: 1433-42.

Fitzgerald D.M., Smith C., Lapierre P., and Wade J.T. 2018. "The evolutionary impact of intragenic FliA promoters in proteobacteria," Mol Microbiol, 108: 361-78.

Ford M.M., Jordan A.E., Johnson N., Rude E., Laraque F., Varma J.K., Hagan H. 2018. "Check hep C: a community-based approach to hepatitis C diagnosis and linkage to care in high-risk populations," Journal of Public Health Management and Practice, 24: 41-48.

French, C. D., R. E. Willoughby, A. Pan, S. J. Wong, J. F. Foley, L. J. Wheat, J. Fernandez, R. Encarnacion, J. M. Ondrush, N. Fatteh, A. Paez, D. David, W. Javaid, I. G. Amzuta, A. M. Neilan, G. K. Robbins, A. M. Brunner, W. T. Hu, D. O. Mishchuk, and C. M. Slupsky. 2018. "NMR metabolomics of cerebrospinal fluid differentiates inflammatory diseases of the central nervous system," PLoS Negl Trop Dis, 12: e0007045.

Frimpong E.Y., Kuang J., Wang R., Radigan M. 2018. "Medicaid cost trajectories for children with serious emotional disturbance: the HCBS waiver program versus targeted case management," Psychiatric Services, 69: 1160-66.

Fuchs, B. B., S. Chaturvedi, R. D. Rossoni, P. P. de Barros, F. Torres-Velez, E. Mylonakis, and V. Chaturvedi. 2018. "Galleria mellonella experimental model for bat fungal pathogen Pseudogymnoascus destructans and human fungal pathogen Pseudogymnoascus pannorum," Virulence, 9: 1539-47.

Gaines J., Poy J., Musser K.A., Benowitz I., Leung V., Carothers B., Kauerauf J., Mollon N., Duwell M., Henschel K., De Jesus A., Head S.K., Lee K., Arboleda N., Esposito D.H. 2018. "Nontuberculous mycobacteria infections in U.S. medical tourists associated with plastic surgery – Dominican Republic, 2017," Morbidity and Mortality Weekly Report, 67: 369-70.

Ganapathi, M., N. C. Boles, C. Charniga, S. Lotz, M. Campbell, S. Temple, and R. H. Morse. 2018. "Effect of Bmi1 overexpression on gene expression in adult and embryonic murine neural stem cells," Sci Rep, 8: 7464.

George K.S. and Pinsky B.A. 2018. "Molecular diagnosis of Zika virus infections," Reviews in Medical Microbiology, 29: 8-16.

Ghassabian, A., E. M. Bell, W. L. Ma, R. Sundaram, K. Kannan, G. M. Buck Louis, and E. Yeung. 2018. "Concentrations of perfluoroalkyl substances and bisphenol A in newborn dried blood spots and the association with child behavior," Environ Pollut, 243: 1629-36.

Ghassabian, A., R. Sundaram, N. Chahal, A. C. McLain, E. M. Bell, D. A. Lawrence, S. E. Gilman, and E. H. Yeung. 2018. "Concentrations of immune marker in newborn dried blood spots and early childhood development: results from the Upstate KIDS study," Paediatr Perinat Epidemiol, 32: 337-45.

Giannakou, A., R. J. Sicko, D. M. Kay, W. Zhang, P. A. Romitti, M. Caggana, G. M. Shaw, L. L. Jelliffe-Pawlowski, and J. L. Mills. 2018. "Copy number variants in hypoplastic right heart syndrome," Am J Med Genet A, 176: 2760-67.

Gigante C.M., Dettinger L., Powell J.W., Seiders M., Condori R.E.C., Griesser R., Okogi K., Carlos M., Pesko K., Breckenridge M., Simon E.M.M., Chu M.Y.J.V., Davis A.D., Brunt S.J., Orciari L., Yager P., Carson W.C., Hartloge C., Saliki J.T., Sanchez S., Deldari M., Hsieh K., Wadhwa A., Wilkins K., Peredo V.Y., Rabideau P., Gruhn N., Cadet R., Isloor S., Nath S.S., Joseph T., Gao J., Wallace R., Reynolds M., Olson V.A., Li Y. 2018. "Multi-site evaluation of the LN34 pan-lyssavirus real-time RT-PCR assay for postmortem rabies diagnostics," PLoS ONE, 13: e0197074.

Gingrich J., Pu Y., Ehrhardt R., Karthikraj R., Kannan K., Veiga-Lopez A. 2018. "Toxicokinetics of bisphenol A, bisphenol S, and bisphenol F in a pregnancy sheep model," *Chemosphere*, 220: 185-94.

Gingrich J., Pu Y., Roberts J., Karthikraj R., Kannan K., Ehrhardt R, Veiga-Lopez A. 2018. "Gestational bisphenol S impairs placental endocrine function and the fusogenic trophoblast signaling pathway," *Arch Toxicol*, 92: 1861-76.

Girardin, R. C., G. Bai, J. He, H. Sui, and K. A. McDonough. 2018. "AbmR (Rv1265) is a novel transcription factor of Mycobacterium tuberculosis that regulates host cell association and expression of the non-coding small RNA Mcr11," *Mol Microbiol*, 110: 811-30.

Girgis I. 2018. "Psychosocial risk factors and processes impeding adaptive capacities and contributing to psychosocial distress among later-life Egyptian immigrants," *Journal of Gerontological Social Work*, 61: 350-74.

Glidewell J., Book W., Raskind-Hood C., Hogue C., Dunn J.E., Gurvitz M., Ozonoff A., McGarry C., Van Zutphen A., Lui G., Downing K., Riehle-Colarusso T. 2018. "Population-based surveillance of congenital heart defects among adolescents and adults: surveillance methodology," *Birth Defects Research*, 110: 1395-1403.

Goel R., Westblade L.F., Kessler D.A., Sfeir M., Slavinski S., Backenson B., Gebhardt L., Kane K., Laurence J., Scherr D., Bussel J., Dumler J.S., Cushing M.M., Vasovic L.V. 2018. "Death from transfusion-transmitted anaplasmosis, New York, USA, 2017," *Emerging Infectious Diseases*, 24: 1548-50.

Gray T.A. and Derbyshire K.M. 2018. "Blending genomes: distributive conjugal transfer in mycobacteria, a sexier form of HGT," *Mol Microbiol*, 108: 601-13.

Green D.A. and St. George K. 2018. "Rapid Antigen Tests for Influenza: Rationale and Significance of the FDA Reclassification," *J Clin Microbiol*, 56.

Greene S.K., Fitzhenry R., Gutelius B. 2018. "Comments on 'Rolling epidemic of Legionnaires' disease outbreaks in small geographic areas," *Emerging Microbes and Infections*, 7.

Grillet, M. E., L. Villegas, J. F. Oletta, A. Tami, and J. E. Conn. 2018. "Malaria in Venezuela requires response," *Science*, 359: 528.

Grindler, N. M., L. Vanderlinden, R. Karthikraj, K. Kannan, S. Teal, A. J. Polotsky, T. L. Powell, I. V. Yang, and T. Jansson. 2018. "Exposure to phthalate, an endocrine disrupting chemical, alters the first trimester placental methylome and transcriptome in women," *Sci Rep*, 8: 6086.

Guimarães D., Roberts A.A., Tehrani M.W., Huang R., Smieska L., Woll A.R., Lin S., Parsons P.J. 2018. "Characterization of arsenic in dried baby shrimp (Acetes sp.) using synchrotron-based X-ray spectrometry and LC coupled to ICP-MS/MS," *Journal of Analytical Atomic Spectrometry*, 33: 1616-30.

Guo L., Danielson M., Cogan L., Hines L., Armour B. 2018. "Treatment patterns and costs among children aged 2 to 17 years with ADHD in New York State Medicaid in 2013," *Journal of Attention Disorders*.

Hadler J.L., Clogher P., Huang J., Libby T., Cronquist A., Wilson S., Ryan P., Saupe A., Nicholson C., McGuire S., Shiferaw B., Dunn J., Hurd S. 2018. "The relationship between census tract poverty and Shiga toxin-producing E. coli risk, analysis of foodnet data, 2010-2014," *Open Forum Infectious Diseases*, 5.

Han, L., N. P. Tavakoli, M. Morrissey, D. C. Spink, and Z. T. Cao. 2018. "Liquid chromatography-tandem mass spectrometry analysis of 17-hydroxyprogesterone in dried blood spots revealed matrix effect on immunoassay," *Anal Bioanal Chem*, 411: 395-402.

Hart, T., N. T. T. Nguyen, N. A. Nowak, F. Zhang, R. J. Linhardt, M. Diuk-Wasser, S. Ram, P. Kraiczy, and Y. P. Lin. 2018. "Polymorphic factor H-binding activity of CspA protects Lyme borreliae from the host complement in feeding ticks to facilitate tick-to-host transmission," *PLoS Pathog*, 14: e1007106.

Hart, T., X. Yang, U. Pal, and Y. P. Lin. 2018. "Identification of Lyme borreliae proteins promoting vertebrate host blood-specific spirochete survival in Ixodes scapularis nymphs using artificial feeding chambers," *Ticks Tick Borne Dis*, 9: 1057-63.

Hart-Malloy R., Brown S., Bogucki K., Tesoriero J. 2018. "Implementing data-to-care initiatives for HIV in New York State: assessing the value of community health centers identifying persons out of care for health department follow-up," AIDS Care – Psychological and Socio-Medical Aspects of AIDS/HIV, 30: 391-96.

Hassen, G. W., A. Roy, D. Fernandez, N. Dunn, A. Bulbena-Cabre, R. Chirurgi, L. Li, M. Dittmar, K. M. Aldous, and M. Su. 2018. "Analysis of K2 products sold as incense," Am J Emerg Med, 36: 1307-09.

Haynes, E. N., H. Sucharew, T. J. Hilbert, P. Kuhnell, A. Spencer, N. C. Newman, R. Burns, R. Wright, P. J. Parsons, and K. N. Dietrich. 2018. "Impact of air manganese on child neurodevelopment in East Liverpool, Ohio," Neurotoxicology, 64: 94-102.

Ho A., Pennell-Huth P., Newman A., Zansky S., Wiedmann M. 2018. "Foodborne illness outbreak investigation training needs: a survey among state public health staff in the Northeast and Mid-Atlantic United States," Journal of Public Health Management and Practice, 24: 34-40.

Honda M. and Kannan K. 2018. "Biomonitoring of chlorophenols in human urine from several Asian countries, Greece and the United States," Environ Pollut, 232: 487-93.

Honda M., Robinson M., Kannan K. 2018. "A rapid method for the analysis of perfluorinated alkyl substances in serum by hybrid solid-phase extraction," Environmental Chemistry, 15: 92-99.

-.2018. "Parabens in human urine from several Asian countries, Greece, and the United States," Chemosphere, 201: 13-19.

Hori, H., A. Kamijo, M. Inoue, A. Chino, Q. Wu, and K. Kannan. 2018. "Efficient decomposition of perchlorate to chloride ions in subcritical water by use of steel slag," Environ Sci Pollut Res Int, 25: 7262-70.

Howley M.M., Feldkamp M.L., Papadopoulos E.A., Fisher S.C., Arnold K.E., Browne M.L. National Birth Defects Prevention Study. 2018. "Maternal genitourinary infections and risk of birth defects in the National Birth Defects Prevention Study," Birth Defects Research, 110: 1443-54.

Huang, X., Q. Zhang, S. Zheng, J. Wang, L. Han, H. Lin, P. Ke, J. Zhuang, and Z. T. Cao. 2018. "Measurement of human serum unconjugated estriol without derivatization using liquid chromatography-tandem mass spectrometry candidate reference method and compared with two immunoassays," Anal Bioanal Chem, 410: 6257-67.

Hutchison L.M., Boscoe F.P., Feingold B.J. 2018. "Cancers disproportionately affecting the New York state transgender population, 1979-2016," American Journal of Public Health, 108: 1260-62.

lannilli E. and Gudziol V. 2018. "Gustatory pathway in humans: A review of models of taste perception and their potential lateralization," J Neurosci Res, 97: 230-40.

llacqua, R. C., L. S. M. Chaves, E. S. Bergo, J. E. Conn, M. A. M. Sallum, and G. Z. Laporta. 2018. "A method for estimating the deforestation timeline in rural settlements in a scenario of malaria transmission in frontier expansion in the Amazon region," Mem Inst Oswaldo Cruz, 113: e170522.

llic, Z., T. K. Mondal, I. Guest, D. R. Crawford, and S. Sell. 2018. "Participation of liver stem cells in cholangiocarcinogenesis after aflatoxin B1 exposure of glutathione S-transferase A3 knockout mice," Tumour Biol, 40: 1010428318777344.

lyer, A. P., J. Xue, M. Honda, M. Robinson, T. A. Kumosani, K. Abulnaja, and K. Kannan. 2018. "Urinary levels of triclosan and triclocarban in several Asian countries, Greece and the USA: association with oxidative stress," Environ Res, 160: 91-96.

Jakupi X., Lunar M.M., Mlakar J., Matković I., Tavakoli N.P., Ivanovska B.Z., Vince A., Poljak M. 2018. "HCV infection among injecting drug users in Prishtina, Kosovo," Hepatitis Monthly, 18.

Jeong, Y., J. Xue, K. J. Park, K. Kannan, and H. B. Moon. 2018. "Tissue-specific accumulation and body burden of parabens and their metabolites in small cetaceans," Environ Sci Technol, 53: 475-81.

Jiang, X., R. Sidhu, J. J. Orsini, N. Y. Farhat, F. D. Porter, E. Berry-Kravis, J. E. Schaffer, and D. S. Ory. 2018. "Diagnosis of Niemann-pick C1 by measurement of bile acid biomarkers in archived newborn dried blood spots," Mol Genet Metab, 126: 183-87.

Johnson, R. C., C. Deming, S. Conlan, C. J. Zellmer, A. V. Michelin, S. Lee-Lin, P. J. Thomas, M. Park, R. A. Weingarten, J. Less, J. P. Dekker, K. M. Frank, K. A. Musser, J. R. McQuiston, D. K. Henderson, A. F. Lau, T. N. Palmore, and J. A. Segre. 2018. "Investigation of a cluster of Sphingomonas koreensis infections," N Engl J Med, 379: 2529-39.

Johnson R.M. and McDonough K.A. 2018. "Cyclic nucleotide signaling in Mycobacterium tuberculosis: an expanding repertoire," Pathog Dis, 76.

Jones E.H., Hinckley A.F., Hook S.A., Meek J.I., Backenson B., Kugeler K.J., Feldman K.A. 2018. "Pet ownership increases human risk of encountering ticks," Zoonoses and Public Health, 65: 74-79.

June S.G. and Dziewulski D.M. 2018. "Copper and Silver Biocidal Mechanisms, Resistance Strategies, and Efficacy for Legionella Control," Journal – American Water Works Association, 110: E13-E35.

Kahn L.G., Han X., Koshy T.T., Shao Y., Chu D.B., Kannan K., Trasande L. 2018. "Adolescents exposed to the World Trade Center collapse have elevated serum dioxin and furan concentrations more than 12 years later," Environment International, 268-78.

Kahn, L. G., X. Han, T. T. Koshy, Y. Shao, D. B. Chu, K. Kannan, and L. Trasande. 2018. "Adolescents exposed to the World Trade Center collapse have elevated serum dioxin and furan concentrations more than 12 years later," Environ Int, 111: 268-78.

Kajon A.E., Lamson D.M., Bair C.R., Lu X., Landry M.L., Menegus M., Erdman D.D., George K.S. 2018. "Adenovirus type 4 respiratory infections among civilian adults, northeastern United States, 2011-2015," Emerging Infectious Diseases, 24: 201-209.

Kanwar N., Hassan F., Barclay L., Langley C., Vinjé J., Bryant P.W., George K.S., Mosher L., Matthews-Greer J.M., Rocha M.A., Beenhouwer D.O., Harrison C.J., Moffatt M., Shastri N., Selvarangan R. 2018. "Evaluation of RIDA® GENE norovirus GI/GII real time RT-PCR using stool specimens collected from children and adults with acute gastroenteritis," Journal of Clinical Virology, 104: 1-4.

Kapeller C., Ogawa H., Schalk G., Kunii N., Coon W.G., Scharinger J., Guger C., Kamada K. 2018. "Real-time detection and discrimination of visual perception using electrocorticographic signals," Journal of Neural Engineering, 15.

Karthikraj R., Bollapragada R., Kannan K. 2018. "Melamine and its derivatives in dog and cat urine: an exposure assessment study," Environ Pollut, 238: 248-54.

Karthikraj R., Borkar S., Lee S., Kannan K. 2018. "Parabens and their metabolites in pet food and urine from New York State, United States," Environ Sci Technol, 52: 3727-37.

Kathleen M. and Patrick B. 2018. Editorial introducing issue on "Molecular Effectors of Tuberculosis Pathogenesis," Pathog Dis, 76.

Kelley, D. S., C. W. Lennon, Z. Li, M. R. Miller, N. K. Banavali, H. Li, and M. Belfort. 2018. "Mycobacterial DnaB helicase intein as oxidative stress sensor," Nat Commun, 9: 4363.

Khalil N., Ebert J.R., Honda M., Lee M., Nahhas R.W., Koskela A., Hangartner T., Kannan K. 2018. "Perfluoroalkyl substances, bone density, and cardio-metabolic risk factors in obese 8-12 year old children: a pilot study," Environmental Research, 160: 314-21.

Khan A., Spector N.D., Baird J.D., Ashland M., Starmer A.J., Rosenbluth G., Garcia B.M., Litterer K.P., Rogers J.E., Dalal A.K., Lipsitz S., Yoon C.S., Zigmont K.R., Guiot A., O'Toole J.K., Patel A., Bismilla Z., Coffey M., Langrish K., Blankenburg R.L., Destino L.A., Everhart J.L., Good B.P., Kocolas I., Srivastava R., Calaman S., Cray S., Kuzma N., Lewis K., Thompson E.D., Hepps J.H., Lopreiato J.O., Yu C.E., Haskell H., Kruvand E., Micalizzi D.A., Alvarado-Little W., Dreyer B.P., Yin H.S., Subramony A., Patel S.J., Sectish T.C., West D.C., Landrigan C.P. 2018. "Patient safety after implementation of a coproduced family centered communication programme: Multicenter before and after intervention study," BMJ (Online), 363.

Khan Z.Y., Kettler J., Khwaja H.A., Naqvi I.I., Malik A., Stone E.A. 2018. "Organic aerosol characterization and source identification in Karachi, Pakistan," Aerosol and Air Quality Research, 18: 2550-64.

Kharenko O.A., Patel R.G., Brown S.D., Calosing C., White A., Lakshminarasimhan D., Suto R.K., Duffy B.C., Kitchen D.B., McLure K.G., Hansen H.C., Van Der Horst E.H., Young P.R. 2018. "Design and characterization of novel covalent bromodomain and extra-terminal domain (BET) inhibitors targeting a methionine," Journal of Medicinal Chemistry, 61: 8202-11.

Kim U.J. and Kannan K. 2018. "Method for the determination of lodide in dried blood spots from newborns by highperformance liquid chromatography tandem mass spectrometry," Anal Chem, 90: 3291-98.

—. 2018. "Occurrence and distribution of organophosphate flame retardants/plasticizers in surface waters, tap water, and rainwater: implications for human exposure," Environ Sci Technol, 52: 5625-33.

Kirby R.S. and Browne M.L. 2018. "Population-based birth defects surveillance, epidemiology, and public health practice," Birth Defects Research, 110: 1381-82.

Kirkley, A. G., C. M. Carmean, D. Ruiz, H. Ye, S. M. Regnier, A. Poudel, M. Hara, W. Kamau, D. N. Johnson, A. A. Roberts, P. J. Parsons, S. Seino, and R. M. Sargis. 2018. "Arsenic exposure induces glucose intolerance and alters global energy metabolism," Am J Physiol Regul Integr Comp Physiol, 314: R294-R303.

Knoll, E. R., Z. I. Zhu, D. Sarkar, D. Landsman, and R. H. Morse. 2018. "Role of the pre-initiation complex in mediator recruitment and dynamics," Elife, 7.

Koblin B.A., Usher D.S., Nandi V., Tieu H.-V., Bravo E., Lucy D., Miles L., Ortiz G., Kindlon M.J., Parisi D.M., Frye V. 2018. "Post-exposure prophylaxis awareness, knowledge, access and use among three populations in New York City, 2016-17," AIDS and Behavior, 22: 2718-32.

Koonce M.P. and Tikhonenko I. 2018. "Centrosome positioning in dictyostelium: moving beyond microtubule tip dynamics," Cells, 7.

Kraszewski, J. N., D. M. Kay, C. F. Stevens, C. Koval, B. Haser, V. Ortiz, A. Albertorio, L. L. Cohen, R. Jain, S. P. Andrew, S. D. Young, N. M. LaMarca, D. C. De Vivo, M. Caggana, and W. K. Chung. 2018. "Pilot study of population-based newborn screening for spinal muscular atrophy in New York State," Genet Med, 20: 608-13.

Kwon, J. M., D. Matern, J. Kurtzberg, L. Wrabetz, M. H. Gelb, D. A. Wenger, C. Ficicioglu, A. T. Waldman, B. K. Burton, P. V. Hopkins, and J. J. Orsini. 2018. "Consensus guidelines for newborn screening, diagnosis and treatment of infantile Krabbe disease," Orphanet J Rare Dis, 13: 30.

Lamb M.M., Cai B., Royer J., Pandya S., Soim A., Valdez R., DiGuiseppi C., James K., Whitehead N., Peay H., Venkatesh S.Y., Matthews D. Muscular Dystrophy Surveillance, Research, and Tracking Network (MD STARnet). 2018. "The effect of steroid treatment on weight in nonambulatory males with Duchenne muscular dystrophy," American Journal of Medical Genetics, Part A, 176: 2350-58.

Lamson B., D. M., A. E. Kajon, M. Shudt, M. Quinn, A. Newman, J. Whitehouse, J. Greenko, E. Adams, and K. St. George. 2018. "Molecular typing and whole genome next generation sequencing of human adenovirus 8 strains recovered from four 2012 outbreaks of keratoconjunctivitis in New York State," J Med Virol, 90: 1471-77.

Landing E., Antchiffe J., Geyer G., Kouchinsky A., Bowser S.A., Andreas A. 2018. "Early evolution of colonial animals (Ediacaran evolutionary radiation – Cambrian evolutionary radiation – great Ordovician biodiversification interval)," Earth-Science Reviews, 178: 105-35.

–.2018. "Corrigendum to 'Early evolution of colonial animals (Ediacaran evolutionary radiation – Cambrian evolutionary radiation – great Ordovician biodiversification interval)," Earth-Science Reviews, 179: 123.

Langan, T. J., J. J. Orsini, K. Jalal, A. L. Barczykowski, M. L. Escolar, M. D. Poe, C. K. Biski, and R. L. Carter. 2018. "Development of a newborn screening tool based on bivariate normal limits: using psychosine and galactocerebrosidase determination on dried blood spots to predict Krabbe disease," Genet Med.

Leach L., Zhu Y., Chaturvedi S. 2018. "Development and validation of a real-time PCR assay for rapid detection of Candida auris from surveillance samples," J Clin Microbiol, 56.

- Lee C.T., Greene S.K., Baumgartner J., Fine A. 2018. "Disparities in Zika virus testing and incidence among women of reproductive age - New York City, 2016," Journal of Public Health Management and Practice, 24: 533-41.
- Lee F. and Lawrence D.A. 2018. "From infections to anthropogenic inflicted pathologies: involvement of immune balance," J Toxicol Environ Health B Crit Rev, 21: 24-46.
- Lee, S. Y., S. Lee, M. Choi, K. Kannan, and H. B. Moon. 2018. "An optimized method for the analysis of cyclic and linear siloxanes and their distribution in surface and core sediments from industrialized bays in Korea," Environ Pollut, 236: 111-18.
- Lee, W. T., S. J. Wong, K. E. Kulas, A. P. Dupuis, 2nd, A. F. Payne, L. D. Kramer, A. B. Dean, K. St George, J. L. White, J. N. Sommer, M. Ledizet, and R. J. Limberger. 2018. "Development of Zika virus serological testing strategies in New York State," J Clin Microbiol, 56.
- Lennon, C. W., M. Stanger, N. K. Banavali, and M. Belfort. 2018. "Conditional protein splicing switch in hyperthermophiles through an intein-extein partnership," MBio, 9.
- Levy M.M., Gesten F.C., Phillips G.S., Terry K.M., Seymour C.W., Prescott H.C., Friedrich M., Iwashyna T.J., Osborn T., Lemeshow S. 2018. "Mortality changes associated with mandated public reporting for sepsis the results of the New York State initiative," American Journal of Respiratory and Critical Care Medicine, 198: 1406-12.
- Li A.J. and Kannan K. 2018. "Elevated concentrations of bisphenols, benzophenones, and antimicrobials in pantyhose collected from six countries," Environ Sci Technol, 52: 10812-19.
- —. 2018. "Urinary concentrations and profiles of organophosphate and pyrethroid pesticide metabolites and phenoxyacid herbicides in populations in eight countries," Environ Int, 121: 1148-54.
- Li, A. J., J. Xue, S. Lin, A. L. Al-Malki, M. A. Al-Ghamdi, T. A. Kumosani, and K. Kannan. 2018. "Urinary concentrations of environmental phenols and their association with type 2 diabetes in a population in Jeddah, Saudi Arabia," Environ Res, 166: 544-52.
- Li, G., S. Jiang, S. E. Paraskevopoulou, M. Wang, Y. Xu, Z. Wu, L. Chen, D. Zhang, and G. Schalk. 2018. "Optimal referencing for stereo-electroencephalographic (SEEG) recordings," Neuroimage, 183: 327-35.
- Li L., Zhang Q.Y., Ding X. 2018. "A CYP2B6-humanized mouse model and its potential applications," Drug Metab Pharmacokinet, 33: 2-8.
- Li W. and Agrawal R.K. 2018. "Joachim Frank's binding with the ribosome," Structure, 27: 411-19.
- Li, Y., M. R. Sharma, R. K. Koripella, Y. Yang, P. S. Kaushal, Q. Lin, J. T. Wade, T. A. Gray, K. M. Derbyshire, R. K. Agrawal, and A. K. Ojha. 2018. "Zinc depletion induces ribosome hibernation in mycobacteria," Proc Natl Acad Sci U S A, 115: 8191-96.
- Li, Z., S. Sakamuru, R. Huang, M. Brecher, C. A. Koetzner, J. Zhang, H. Chen, C. F. Qin, Q. Y. Zhang, J. Zhou, L. D. Kramer, M. Xia, and H. Li. 2018. "Erythrosin B is a potent and broad-spectrum orthosteric inhibitor of the flavivirus NS2B-NS3 protease," Antiviral Res, 150: 217-25.
- Liao C. and Kannan K. 2018. "Species-specific accumulation and temporal trends of bisphenols and benzophenones in mollusks from the Chinese Bohai Sea during 2006-2015," Sci Total Environ, 653: 168-75.
- -.2018. "Temporal trends of parabens and their metabolites in mollusks from the Chinese Bohai Sea during 2006-2015: species-specific accumulation and implications for human exposure," Environ Sci Technol, 52: 9045-55.
- Liao C., Kim U.J., Kannan K. 2018. "A review of environmental occurrence, fate, exposure, and toxicity of benzothiazoles," Environ Sci Technol, 52: 5007-26.
- Lin S., Lin Z., Ou Y., Soim A., Shrestha S., Lu Y., Sheridan S., Luben T.J., Fitzgerald E., Bell E., Shaw G.M., Reefhuis J., Langlois P.H., Romitti P., Feldkamp M.L., Malik S., Pantea C., Nayak S., Hwang S.-A., Browne M. National Birth Defects Prevention Study. 2018. "Maternal ambient heat exposure during early pregnancy in summer and spring and congenital heart defects – a large U.S. population-based, case-control study," Environment International, 118: 211-21.

Lin Y.P. and Leong J.M. 2018. "Characterization of borrelia burgdorferi binding to mammalian cells and extracellular matrix," Methods Mol Biol, 1690: 57-67.

Linden J.V. and Stramer S.L. 2018. "Transfusion-transmitted and community-acquired babesiosis in New York, 2004 to 2015: a response to why and what to do," Transfusion, 58: 1818.

Linden J.V., M. A. Prusinski, L. A. Crowder, L. Tonnetti, S. L. Stramer, D. A. Kessler, J. White, B. Shaz, and D. Olkowska. 2018. "Transfusion-transmitted and community-acquired babesiosis in New York, 2004 to 2015," Transfusion, 58: 660-68.

Lipcsei L.E., Brown L.G., Hoover E.R., Faw B.V., Hedeen N., Matis B., Nicholas D., Ripley D. 2018. "Retail deli slicer inspection practices: an EHS-net study," Journal of Food Protection, 81: 799-805.

Liu M., McCann M., Lewis-Michl E., Hwang S.-A. 2018. "Respondent driven sampling in a biomonitoring study of refugees from Burma in Buffalo, New York who eat Great Lakes fish," International Journal of Hygiene and Environmental Health, 221: 792-99.

Liu R., Alarcon W.A., Calvert G.M., Aubin K.G., Beckman J., Cummings K.R., Graham L.S., Higgins S.A., Mulay P., Patel K., Prado J.B., Schwartz A., Stover D., Waltz J. 2018. "Acute illnesses and injuries related to total release foggers – 10 states, 2007-2015," Morbidity and Mortality Weekly Report, 67: 125-30.

Liu, S., M. Kwon, M. Mannino, N. Yang, F. Renda, A. Khodjakov, and D. Pellman. 2018. "Nuclear envelope assembly defects link mitotic errors to chromothripsis," Nature, 561: 551-55.

Liu, Y., J. Perez, L. A. Hammer, H. C. Gallagher, M. De Jesus, N. K. Egilmez, and M. W. Russell. 2018. "Intravaginal administration of interleukin 12 during genital gonococcal infection in mice induces immunity to heterologous strains of Neisseria gonorrhoeae," mSphere, 3.

Lopez K.N., Nembhard W.N., Wang Y., Liu G., Kucik J.E., Copeland G., Gilboa S.M., Kirby R.S., Canfield M. 2018. "Birth defect survival for Hispanic subgroups," Birth Defects Research, 110:352-63.

Lowenfels A., Pattison M.J., Martin A.M., Ferrari C. 2018. "Improving the food environment in hospitals and senior meal programs," Preventing Chronic Disease, 15.

Lukacik G., White J., Noonan-Toly C., DiDonato C., Backenson P.B. 2018. "Lyme disease surveillance using sampling estimation: evaluation of an alternative methodology in New York State," Zoonoses and Public Health, 65: 260-65.

Ma, Z., E. Lasek-Nesselquist, J. Lu, R. Schneider, R. Shah, G. Oliva, J. Pata, K. McDonough, M. P. Pai, W. E. Rose, G. Sakoulas, and M. Malik. 2018. "Characterization of genetic changes associated with daptomycin nonsusceptibility in Staphylococcus aureus," PLoS One, 13: e0198366.

MacColl R. and Guard-Friar D. 2018. "Phycobiliproteins," Phycobiliproteins, 1-218.

Magdon-Ismail Z., Ledneva T., Sun M., Schwamm L.H., Sherman B., Qian F., Bettger J.P., Xian Y., Stein J. 2018. "Factors associated with 1-year mortality after discharge for acute stroke: what matters?" Topics in Stroke Rehabilitation, 25. 576-83

Mahale P., Engels E.A., Coghill A.E., Kahn A.R., Shiels M.S. 2018. "Cancer risk in older persons living with human immunodeficiency virus infection in the United States," Clinical Infectious Diseases, 67: 50-57.

Malashock D., Khwaja H.A., Fatmi Z., Siddique A., Lu Y., Lin S., Carpenter D. 2018. "Short-term association between black carbon exposure and cardiovascular diseases in Pakistan's largest megacity," Atmosphere, 9.

Malits, J., T. M. Attina, R. Karthikraj, K. Kannan, M. Naidu, S. Furth, B. A. Warady, S. Vento, H. Trachtman, and L. Trasande. 2018. "Renal function and exposure to Bisphenol A and phthalates in children with chronic kidney disease," Environ Res, 167: 575-82.

Malloy K., Proj A., Battles H., Juster T., Ortega-Peluso C., Wu M., Juster H. 2018. "Smoking cessation benefit utilization: comparing methodologies for measurement using NewYork State's Medicaid data," Nicotine and Tobacco Research, 20: 1467-73.

Manjari S.R. and Banavali N.K. 2018. "Structural articulation of biochemical reactions using restrained geometries and topology switching," J Chem Inf Model, 58: 453-63.

Manley K., Han W., Zelin G., Lawrence D.A. 2018. "Crosstalk between the immune, endocrine, and nervous systems in immunotoxicology," Current Opinion in Toxicology, 10: 37-45.

Mann N., Nonnemaker J., Chapman L.T., Shaikh A., Thompson J., Juster H. 2018. "Comparing the New York State smokers' quit line reach, services offered, and quit outcomes to 44 other state quit lines, 2010 to 2015," American Journal of Health Promotion, 32: 1264-72.

Marcinkiewicz, A. L., I. Lieknina, S. Kotelovica, X. Yang, P. Kraiczy, U. Pal, Y. P. Lin, and K. Tars. 2018. "Eliminating factor H-binding activity of Borrelia burgdorferi CspZ combined with virus-like particle conjugation enhances its efficacy as a Lyme disease vaccine," Front Immunol, 9: 181.

Marder E.P., Griffin P.M., Cieslak P.R., Dunn J., Hurd S., Jervis R., Lathrop S., Muse A., Ryan P., Smith K., Tobin-D'Angelo M., Vugia D.J., Holt K.G., Wolpert B.J., Tauxe R., Geissler A.L. 2018. "Preliminary incidence and trends of infections with pathogens transmitted commonly through food – foodborne diseases active surveillance network, 10 U.S. sites, 2006-2017," Morbidity and Mortality Weekly Report, 67: 324-28.

Marengo L.K., Flood T.J., Ethen M.K., Kirby R.S., Fisher S., Copeland G., Meyer R.E., Dunn J., Canfield M.A., Anderson T., Yazzie D., Mai C.T. National Birth Defects Prevention Network. 2018. "Study of selected birth defects among American Indian/Alaska Native population: a multi-state population-based retrospective study, 1999-2007," Birth Defects Research, 110: 1412-18.

Marshall, M. S., B. Jakubauskas, W. Bogue, M. Stoskute, Z. Hauck, E. Rue, M. Nichols, L. L. DiAntonio, R. B. van Breemen, J. H. Kordower, C. A. Saavedra-Matiz, and E. R. Bongarzone. 2018. "Analysis of age-related changes in psychosine metabolism in the human brain," PLoS One, 13: e0193438.

Martinez M. P. and Kannan K. 2018. "Simultaneous analysis of seven biomarkers of oxidative damage to lipids, proteins, and DNA in urine," Environ Sci Technol, 52: 6647-55.

Martinez-Moral M. P. and Kannan K. 2018. "How stable is oxidative stress level? An observational study of intra- and inter-individual variability in urinary oxidative stress biomarkers of DNA, proteins, and lipids in healthy individuals," Environ Int, 123: 382-89.

Masood S.S., Saied S., Siddique A., Mohiuddin S., Hussain M.M., Khan M.K., Khwaja H.A. 2018. "Influence of urbancoastal activities on organic acids and major ion chemistry of wet precipitation at a metropolis in Pakistan," Arabian Journal of Geosciences, 11.

McDonald R., Dufort E., Jackson B.R., Tobin E.H., Newman A., Benedict K., Blog D. 2018. "Blastomycosis cases occurring outside of regions with known endemicity – New York, 2007-2017," Morbidity and Mortality Weekly Report, 67: 1077-78.

McFarland D.J. 2018. "The mystery of unexplained variance – some comments on Brenneman et al. (2017)," J Am Acad Audiol.

McFarland D.J. and Wolpaw J.R. 2018. "Brain – computer interface use is a skill that user and system acquire together," PLoS Biology, 16: e2006719.

McGibbon, E., M. Moy, N. M. Vora, A. Dupuis, A. Fine, K. Kulas, R. Limberger, D. Liu, J. Rakeman, K. St George, and S. Slavinski. 2018. "Epidemiological characteristics and laboratory findings of Zika virus cases in New York City, January 1, 2016-June 30, 2017," Vector Borne Zoonotic Dis, 18: 382-89.

McKee M.D., Alderman E., York D.V., Blank A.E., Briggs R.D., Hoidal K.E.S., Kus C., Lechuga C., Mann M., Meissner P., Patel N., Racine A.D. 2018. "A learning collaborative approach to improve primary care STI screening," Clinical Pediatrics, 57: 895-903.

McKelvey W., Alex B., Chernov C., Hore P., Palmer C.D., Steuerwald A.J., Parsons P.J., Perlman S.E. 2018. "Tracking declines in mercury exposure in the New York City adult population, 2004-2014," Journal of Urban Health, 95: 813-25. McMinn B.R., Rhodes E.R., Huff E.M., Wanjugi P., Ware M.M., Nappier S.P., Cyterski M., Shanks O.C., Oshima K., Korajkic A. 2018. "Comparison of somatic and F+ coliphage enumeration methods with large volume surface water samples," Journal of Virological Methods, 261: 63-66.

Metzler D.F. and Russelmann H.B. 2018. "Wastewater reclamation as a water resource," Journal – American Water Works Association, 110: 58-64.

Miller L.S., Wu M., Schettine A.M., Cogan L.W. 2018. "Identifying children with special health care needs using Medicaid data in New York State Medicaid managed care," Health Services Research, 53: 4157-77.

Miller, W. G., H. Schimmel, R. Rej, N. Greenberg, F. Ceriotti, C. Burns, J. R. Budd, C. Weykamp, V. Delatour, G. Nilsson, F. MacKenzie, M. Panteghini, T. Keller, J. E. Camara, I. Zegers, H. W. Vesper, and IFCC Working Group on Commutability. 2018. "IFCC working group recommendations for assessing commutability Part 1: general experimental design," Clin Chem, 64: 447-54.

Mills, J. L., G. M. Buck Louis, K. Kannan, J. Weck, Y. Wan, J. Maisog, A. Giannakou, Q. Wu, and R. Sundaram. 2018. "Delayed conception in women with low-urinary iodine concentrations: a population-based prospective cohort study," Hum Reprod, 33: 426-33.

Mishra, N., A. Caciula, A. Price, R. Thakkar, J. Ng, L. V. Chauhan, K. Jain, X. Che, D. A. Espinosa, M. Montoya Cruz, A. Balmaseda, E. H. Sullivan, J. J. Patel, R. G. Jarman, J. L. Rakeman, C. T. Egan, Cbem Reusken, M. P. G. Koopmans, E. Harris, R. Tokarz, T. Briese, and W. I. Lipkin. 2018. "Diagnosis of Zika virus infection by peptide array and enzymelinked immunosorbent assay," MBio, 9.

Miyake Y., Tokumura M., Wang Q., Amagai T., Takegawa Y., Yamagishi Y., Ogo S., Kume K., Kobayashi T., Takasu S., Ogawa K., Kannan K. 2018. "Identification of novel phosphorus-based flame retardants in curtains purchased in Japan using orbitrap mass spectrometry," Environmental Science and Technology Letters, 5: 448-55.

Moore M.S., Bocour A., Tran O.C., Qiao B., Schymura M.J., Laraque F., Winters A. 2018. "Effect of hepatocellular carcinoma on mortality among individuals with hepatitis B or hepatitis C infection in New York City, 2001-2012," Open Forum Infectious Diseases, 5.

Moran A.J., Musicus A., Gorski Findling M.T., Brissette I.F., Lowenfels A.A., Subramanian S.V., Roberto C.A. 2018. "Increases in sugary drink marketing during Supplemental Nutrition Assistance Program benefit issuance in New York," American Journal of Preventive Medicine, 55: 55-62.

Moslehi R., Zeinomar N., Boscoe F.P. 2018. "Incidence of cutaneous malignant melanoma in Iranian provinces and American states matched on ultraviolet radiation exposure: an ecologic study," Environmental Pollution, 234: 699-706.

Muhleip J.J., Lin Y.P., Kraiczy P. 2018. "Further insights into the interaction of human and animal complement regulator factor H with viable Lyme disease spirochetes," Front Vet Sci, 5: 346.

Muttis E., Balsalobre A., Chuchuy A., Mangudo C., Ciota A.T., Kramer L.D., Micieli M.V. 2018. "Factors related to Aedes aegypti (Diptera: Culicidae) populations and temperature determine differences in life-history traits with regional implications in disease transmission," J Med Entomol, 55: 1105-12.

Nayak S.G., Shrestha S., Kinney P.L., Ross Z., Sheridan S.C., Pantea C.I., Hsu W.H., Muscatiello N., Hwang S.A. 2018. "Development of a heat vulnerability index for New York State," Public Health, 161: 127-37.

Nayebare, S. R., O. S. Aburizaiza, A. Siddique, D. O. Carpenter, M. M. Hussain, J. Zeb, A. J. Aburiziza, and H. A. Khwaja. 2018. "Ambient air quality in the holy city of Makkah: a source apportionment with elemental enrichment factors (EFs) and factor analysis (PMF)," Environ Pollut, 243: 1791-801.

Nayebare, S. R., R. Karthikraj, and K. Kannan. 2018. "Analysis of terephthalate metabolites in human urine by highperformance liquid chromatography-tandem mass spectrometry (HPLC-MS/MS)," J Chromatography-tandem mass spectrometry (HPLC-MS/MS/MS)," J Chromatography-tandem mass spectrometry (HPLC-MS/MS/MS)," J Chromatography-tandem mass Biomed Life Sci, 1092: 473-79.

Nayebare, S. R., O. S. Aburizaiza, A. Siddique, D. O. Carpenter, C. Arden Pope, 3rd, H. M. Mirza, J. Zeb, A. J. Aburiziza, and H. A. Khwaja. 2018. "Fine particles exposure and cardiopulmonary morbidity in Jeddah: A time-series analysis," Sci Total Environ, 647: 1314-22.

Neely, S., J. Martin, N. F. da Cruz, G. Piester, M. Robinson, R. Okoniewski, and B. N. Tran. 2018. "Application of dispersive solid phase extraction for trace analysis of toxic chemicals in foods," J Chromatogr B Analyt Technol Biomed Life Sci, 1092: 65-71.

Ngo, K. A., J. T. Rose, L. D. Kramer, and A. T. Ciota. 2018. "Adaptation of Rabensburg virus (RBGV) to vertebrate hosts by experimental evolution," Virology, 528: 30-36.

Nguyen, N. T. T., F. Rottgerding, G. Devraj, Y. P. Lin, A. Koenigs, and P. Kraiczy. 2018. "The complement binding and inhibitory protein CbiA of Borrelia miyamotoi degrades extracellular matrix components by interacting with Plasmin(ogen)," Front Cell Infect Microbiol, 8: 23.

Nilsson, G., J. R. Budd, N. Greenberg, V. Delatour, R. Rej, M. Panteghini, F. Ceriotti, H. Schimmel, C. Weykamp, T. Keller, J. E. Camara, C. Burns, H. W. Vesper, F. MacKenzie, W. G. Miller, and Ifcc Working Group on Commutability. 2018. "IFCC working group recommendations for assessing commutability Part 2: using the difference in bias between a reference material and clinical samples," Clin Chem, 64: 455-64.

Nishikawa K., Bari A., Khan A.J., Li X., Menia T., Semkow T.M. 2018. "Homogenization of food samples for gamma spectrometry using protease," Journal of Radioanalytical and Nuclear Chemistry, 318: 401-406.

Norman S.L., McFarland D.J., Miner A., Cramer S.C., Wolbrecht E.T., Wolpaw J.R., Reinkensmeyer D.J. 2018. "Controlling pre-movement sensorimotor rhythm can improve finger extension after stroke," Journal of Neural Engineering, 15.

Norton J.J.S. and Wolpaw J.R. 2018. "Acquisition, maintenance, and therapeutic use of a simple motor skill," Curr Opin Behav Sci, 20: 138-44.

Norton J.J.S., Mullins J., Alitz B.E., Bretl T. 2018. "The performance of 9- to 11-year-old children using an SSVEP-based BCI for target selection," J Neural Eng, 15: 056012.

Nourmohammadi A., Jafari M., Zander T.O. 2018. "A survey on unmanned aerial vehicle remote control using braincomputer interface," IEEE Transactions on Human-Machine Systems, 48: 337-348.

Noyes-Grosser D.M., Elbaum B., Wu Y., Siegenthaler K.M., Cavalari R.S., Gillis J.M., Romanczyk R.G. 2018. "Early intervention outcomes for toddlers with autism spectrum disorder and their families," Infants and Young Children, 31: 177-99.

Nwudu V., Fletcher A.M., Bauer M. 2018. "Patterns and predictors of personal protection compliance and workplace hygiene behaviors among workers with elevated blood lead levels in New York State," Journal of Occupational and Environmental Hygiene, 15: 654-63.

Oliver, J., G. Lukacik, J. Kokas, S. R. Campbell, L. D. Kramer, J. A. Sherwood, and J. J. Howard. 2018. "Twenty years of surveillance for Eastern equine encephalitis virus in mosquitoes in New York State from 1993 to 2012," Parasit Vectors, 11: 362.

Ong K.S., Kinnett K., Soelaeman R., Webb L., Bain J.S., Martin A.S., Westfield C., Bolen J., Street N. 2018. "Evaluating implementation of the updated care considerations for Duchenne muscular dystrophy," Pediatrics, 142: S118-S128.

Pandya S., James K.A., Westfield C., Thomas S., Fox D.J., Ciafaloni E., Moxley R.T. 2018. "Health profile of a cohort of adults with Duchenne muscular dystrophy," Muscle and Nerve, 58: 219-23.

Parker M.M., Bennett S.B., Sullivan T.J., Fordan S., Wesolowski L.G., Wroblewski K., Gaynor A.M. 2018. "Performance of the Alere Determine™ HIV-1/2 Ag/Ab combo rapid test with algorithm-defined acute HIV-1 infection specimens," Journal of Clinical Virology, 104: 89-91.

Patton, A. L., J. O. Jones, A. Nord, D. W. Eversole, E. E. Feazell, K. Mauldin, L. Li, L. D. Williams, S. Bai, K. Channell, G. Endres, M. Gamette, and J. H. Moran. 2018. "Multi-laboratory validation of a Delta9-tetrahydrocannabinol LC-MS/MS test kit designed for quantifying THC and marijuana metabolites in blood," Forensic Sci Criminol, 3.

Peifer A.C. and Maxwell P.H. 2018. "Preferential Tyl retromobility in mother cells and nonquiescent stationary phase cells is associated with increased concentrations of total Gag or processed Gag and is inhibited by exposure to a high concentration of calcium," Aging (Albany NY), 10: 402-24.

Pellacani C., Bucciarelli E., Renda F., Hayward D., Palena A., Chen J., Bonaccorsi S., Wakefield J.G., Gatti M., Somma M.P. 2018. "Splicing factors Sf3A2 and Prp31 have direct roles in mitotic chromosome segregation," eLife, 7.

Pettengill, M. A., T. M. Babu, P. Prasad, S. Chuang, M. G. Drage, M. Menegus, D. M. Lamson, X. Lu, D. Erdman, and N. Pecora. 2018. "Probable donor-derived human adenovirus Type 34 infection in 2 Kidney transplant recipients from the same donor," Open Forum Infect Dis, 6: ofy354.

Pezzi C., McCulloch A., Joo H., Cochran J., Smock L., Frerich E., Mamo B., Urban K., Hughes S., Payton C., Scott K., Maskery B., Lee D. 2018. "Vaccine delivery to newly arrived refugees and estimated costs in selected U.S. clinics, 2015," Vaccine, 36: 2092-2909.

Philips E.M., Jaddoe V.W.V., Asimakopoulos A.G., Kannan K., Steegers E.A.P., Santos S., Trasande L. 2018. "Bisphenol and phthalate concentrations and its determinants among pregnant women in a population-based cohort in the Netherlands, 2004-2005," Environmental Research, 161: 562-72.

Philips, E. M., L. G. Kahn, V. W. V. Jaddoe, Y. Shao, A. G. Asimakopoulos, K. Kannan, E. A. P. Steegers, and L. Trasande. 2018. "First trimester urinary bisphenol and phthalate concentrations and time to pregnancy: a population-based cohort analysis," J Clin Endocrinol Metab, 103: 3540-47.

Phillips G.S., Osborn T.M., Terry K.M., Gesten F., Levy M.M., Lemeshow S. 2018. "The New York sepsis severity score: Development of a risk-adjusted severity model for sepsis," Critical Care Medicine, 46: 674-683.

Piedmonte, N. P., S. B. Shaw, M. A. Prusinski, and M. K. Fierke. 2018. "Landscape features associated with blacklegged tick (Acari: Ixodidae) density and tick-borne pathogen prevalence at multiple spatial scales in Central New York State," J Med Entomol, 55: 1496-508.

Pires de Mello, C. P., G. L. Drusano, J. R. Adams, M. Shudt, R. Kulawy, and A. N. Brown. 2018. "Oseltamivir-zanamivir combination therapy suppresses drug-resistant H1N1 influenza A viruses in the hollow fiber infection model (HFIM) system," Eur J Pharm Sci, 111: 443-49.

Pollack, A. Z., S. L. Mumford, J. R. Krall, A. E. Carmichael, L. A. Sjaarda, N. J. Perkins, K. Kannan, and E. F. Schisterman. 2018. "Exposure to bisphenol A, chlorophenols, benzophenones, and parabens in relation to reproductive hormones in healthy women: a chemical mixture approach," Environ Int, 120: 137-44.

Popper, B., A. Demleitner, V. J. Bolivar, G. Kusek, A. Snyder-Keller, R. Schieweck, S. Temple, and M. A. Kiebler. 2018. "Staufen2 deficiency leads to impaired response to novelty in mice," Neurobiol Learn Mem, 150: 107-15.

Prescott H.C., Cope T.M., Gesten F.C., Ledneva T.A., Friedrich M.E., Iwashyna T.J., Osborn T.M., Seymour C.W., Levy M.M. 2018. "Reporting of sepsis cases for performance measurement versus for reimbursement in New York State," Critical Care Medicine, 46: 666-73.

Prussing, C., S. A. Bickersmith, M. Moreno, M. P. Saavedra, F. Alava, M. A. M. Sallum, D. Gamboa, J. M. Vinetz, and J. E. Conn. 2018. "Nyssorhynchus dunhami: bionomics and natural infection by Plasmodium falciparum and P. vivax in the Peruvian Amazon," Mem Inst Oswaldo Cruz, 113: e180380.

Prussing, C., M. Moreno, M. P. Saavedra, S. A. Bickersmith, D. Gamboa, F. Alava, C. D. Schlichting, K. J. Emerson, J. M. Vinetz, and J. E. Conn. 2018. "Decreasing proportion of *Anopheles darlingi* biting outdoors between long-lasting insecticidal net distributions in peri-Iquitos, Amazonian Peru," Malar J, 17: 86.

Qiao B., Austin A.A., Schymura M.J., Browne M.L. 2018. "Characteristics and survival of children with acute leukemia with Down syndrome or other birth defects in New York State," Cancer Epidemiology, 57: 68-73.

Ramsingh, A. I., S. J. Gray, A. Reilly, M. Koday, D. Bratt, M. T. Koday, P. M. Munson, R. Murnane, J. Smedley, Y. Hu, A. Messer, and D. H. Fuller. 2018. "Sustained AAV9-mediated expression of a non-self protein in the CNS of non-human primates after immunomodulation," PLoS One, 13: e0198154.

Ranganathan, S., J. Cheung, M. Cassidy, C. Ginter, J. D. Pata, and K. A. McDonough. 2018. "Novel structural features drive DNA binding properties of Cmr, a CRP family protein in TB complex mycobacteria," Nucleic Acids Res, 46: 403-20. Reeves, K. W., S. Schneider, J. Xue, K. Kannan, H. Mason, M. Johnson, G. Makari-Judson, and M. D. Santana. 2018. "Bisphenol-A in breast adipose tissue of breast cancer cases and controls," Environ Res, 167: 735-38.

Regnier S.M., Kirkley A.G., Ruiz D., Kamau W., Wu Q., Kannan K., Sargis R.M. 2018. "Diet-dependence of metabolic perturbations mediated by the endocrine disruptor tolylfluanid," Endocrine Connections, 7: 159-68.

Reid K.S., Sekhobo J.P., Gantner L.A., Holbrook M.K., Allsopp M., Whalen L.B., Koren-Roth A. 2018. "A mixed-method evaluation of the New York State Eat Well Play Hard community projects: building local capacity for sustainable childhood obesity prevention," Evaluation and Program Planning, 67: 79-88.

Reynolds, M. J., T. Phetruen, R. L. Fisher, K. Chen, B. T. Pentecost, G. Gomez, P. Ounjai, and H. Sui. 2018. "The developmental process of the growing motile ciliary tip region," Sci Rep, 8: 7977.

Ritaccio A.L., Brunner P., Schalk G. 2018. "Electrical stimulation mapping of the brain: basic principles and emerging alternatives," J Clin Neurophysiol, 35: 86-97.

Robyn M., Dufort E., Rosen J.B., Southwick K., Bryant P.W., Greenko J., Adams E., Kurpiel P., Alvarez K.J., Burstein G., Sen K., Vasquez D., Rausch-Phung E., Schulte C., Lutterloh E., Blog D. 2018. "Two imported cases of congenital rubella syndrome and infection-control challenges in New York state, 2013-2015," Journal of the Pediatric Infectious Diseases Society, 7: 172-74.

Rocha, B. A., A. G. Asimakopoulos, M. Honda, N. L. da Costa, R. M. Barbosa, F. Barbosa, Jr., and K. Kannan. 2018. "Advanced data mining approaches in the assessment of urinary concentrations of bisphenols, chlorophenols, parabens and benzophenones in Brazilian children and their association to DNA damage," Environ Int, 116: 269-77.

Rodriquez-Rodriquez, J. A., C. Lewis, K. L. McKinley, V. Sikirzhytski, J. Corona, J. Maciejowski, A. Khodjakov, I. M. Cheeseman, and P. V. Jallepalli. 2018. "Distinct roles of RZZ and Bub1-KNL1 in mitotic checkpoint signaling and kinetochore expansion," Curr Biol, 28: 3422-29 e5.

Rong, Y., J. Westfall, D. Ehrbar, T. LaRocca, and N. J. Mantis. 2018. "TRAIL (CD253) sensitizes human airway epithelial cells to toxin-induced cell death," mSphere, 3.

Rosero-Garcia, D., G. Rua-Uribe, M. M. Correa, J. E. Conn, and S. Uribe-Soto. 2018. "Mosquito (Diptera: Culicidae) grouping based on larval habitat characteristics in high mountain ecosystems of Antioquia, Colombia," J Vector Ecol, 43: 71-79.

Ross E.M. and Maxwell P.H. 2018. "Low doses of DNA damaging agents extend Saccharomyces cerevisiae chronological lifespan by promoting entry into quiescence," Exp Gerontol, 108: 189-200.

Rudolph, M. J., D. J. Vance, S. Kelow, S. K. Angalakurthi, S. Nguyen, S. A. Davis, Y. Rong, C. R. Middaugh, D. D. Weis, R. Dunbrack, Jr., J. Karanicolas, and N. J. Mantis. 2018. "Contribution of an unusual CDR2 element of a single domain antibody in ricin toxin binding affinity and neutralizing activity," Protein Eng Des Sel, 31: 277-87.

Rudra, P., K. Hurst-Hess, P. Lappierre, and P. Ghosh. 2018. "High levels of intrinsic tetracycline resistance in mycobacterium abscessus are conferred by a tetracycline-modifying monooxygenase," Antimicrob Agents Chemother, 62.

Russell K.E., Fowlkes A., Stockwell M.S., Vargas C.Y., Saiman L., Larson E.L., LaRussa P., Di Lonardo S., Popowich M., St. George K., Steffens A., Reed C. 2018. "Comparison of outpatient medically attended and community-level influenzalike illness – New York City, 2013-2015," Influenza and other Respiratory Viruses, 12: 336-43.

Ryan, C. W., K. Bishop, D. D. Blaney, S. J. Britton, F. Cantone, C. Egan, M. G. Elrod, C. W. Frye, A. M. Maxted, and G. Perkins. 2018. "Public health response to an imported case of canine melioidosis," Zoonoses Public Health, 65: 420-24.

Saa, P., M. Proctor, G. Foster, D. Krysztof, C. Winton, J. M. Linnen, K. Gao, J. P. Brodsky, R. J. Limberger, R. Y. Dodd, and S. L. Stramer. 2018. "Investigational testing for Zika virus among U.S. blood donors," N Engl J Med, 378: 1778-88.

Saez, I., J. Lin, A. Stolk, E. Chang, J. Parvizi, G. Schalk, R. T. Knight, and M. Hsu. 2018. "Encoding of multiple rewardrelated computations in transient and sustained high-frequency activity in human OFC," Curr Biol, 28: 2889-99 e3. Salinero, A. C., E. R. Knoll, Z. I. Zhu, D. Landsman, M. J. Curcio, and R. H. Morse. 2018. "The mediator co-activator complex regulates Ty1 retromobility by controlling the balance between Ty1i and Ty1 promoters," PLoS Genet, 14: e1007232.

Sangwan M. and Zhu L. 2018. "Role of methyl-2-nitrophenol photolysis as a potential source of OH radicals in the polluted atmosphere: implications from laboratory investigation," J Phys Chem A, 122: 1861-72.

Sathyanarayana, S., J. T. Flynn, M. J. Messito, R. Gross, K. B. Whitlock, K. Kannan, R. Karthikraj, D. Morrison, M. Huie, D. Christakis, and L. Trasande. 2018. "Melamine and cyanuric acid exposure and kidney injury in US children," Environ Res, 171: 18-23.

Shayegani M. 2018. "Epidemiological aspects of Yersinia Enterocolitica in New York state with emphasis on a recent food-borne outbreak," Yersinia Enterocolitica, 173-82.

Sikirzhytski, V., F. Renda, I. Tikhonenko, V. Magidson, B. F. McEwen, and A. Khodjakov. 2018. "Microtubules assemble near most kinetochores during early prometaphase in human cells," J Cell Biol, 217: 2647-59.

Singh, A., E. Lasek-Nesselquist, V. Chaturvedi, and S. Chaturvedi. 2018. "Trichoderma polysporum selectively inhibits white-nose syndrome fungal pathogen Pseudogymnoascus destructans amidst soil microbes," Microbiome, 6: 139.

Smarr, M. M., M. Honda, K. Kannan, Z. Chen, S. Kim, and G. M. B. Louis. 2018. "Male urinary biomarkers of antimicrobial exposure and bi-directional associations with semen quality parameters," Reprod Toxicol, 77: 103-08.

Smarr, M. M., K. Kannan, L. Sun, M. Honda, W. Wang, R. Karthikraj, Z. Chen, J. Weck, and G. M. Buck Louis. 2018. "Preconception seminal plasma concentrations of endocrine disrupting chemicals in relation to semen quality parameters among male partners planning for pregnancy," Environ Res, 167: 78-86.

Smith L.S., Wilkins N., Marshall S.W., Dellapenna A., Pressley J.C., Bauer M., South E.C., Green K. 2018. "The power of academic-practitioner collaboration to enhance science and practice integration: injury and violence prevention case studies," Journal of Public Health Management and Practice, 24: S67-S74.

Soeters H.M., Blain A., Pondo T., Doman B., Farley M.M., Harrison L.H., Lynfield R., Miller L., Petit S., Reingold A., Schaffner W., Thomas A., Zansky S.M., Wang X., Briere E.C. 2018. "Current epidemiology and trends in invasive haemophilus influenzae disease - United States, 2009-2015," Clinical Infectious Diseases, 67: 881-89.

Soim A., Sheridan S.C., Hwang S.-A., Hsu W.-H., Fisher S.C., Shaw G.M., Feldkamp M.L., Romitti P.A., Reefhuis J., Langlois P.H., Browne M.L., Lin S. National Birth Defects Prevention Study. 2018. "A population-based case-control study of the association between weather-related extreme heat events and orofacial clefts," Birth Defects Research, 110: 1468-77.

Soim A., Smith M.G., Kwon J.M., Mann J.R., Thomas S., Ciafaloni E. Muscular Dystrophy Surveillance, Tracking, and Research Network. 2018. "Is there a delay in diagnosis of Duchenne muscular dystrophy among preterm-born males?" Journal of Child Neurology, 33: 537-45.

Spratlen, M. J., F. P. Perera, S. A. Lederman, M. Robinson, K. Kannan, L. Trasande, and J. Herbstman. 2018. "Cord blood perfluoroalkyl substances in mothers exposed to the World Trade Center disaster during pregnancy," Environ Pollut, 246: 482-90.

Stafford, C., R. Atkinson-Dunn, S. N. Buss, T. Dalton, D. Gibson, S. Johnston, E. King, S. Y. Grace Lin, K. K. Mitchell, W. A. Murtaugh, H. Sease, T. R. Southern, J. L. Tans-Kersten, E. A. Travanty, L. R. Triplett, K. Wroblewski, and A. M. Starks. 2018. "The use of a shared services model for mycobacteriology testing: lessons learned," Public Health Rep., 133: 93-99.

Stauft, C. B., S. H. Shen, Y. Song, O. Gorbatsevych, E. Asare, B. Futcher, S. Mueller, A. Payne, M. Brecher, L. Kramer, and E. Wimmer. 2018. "Extensive recoding of dengue virus type 2 specifically reduces replication in primate cells without gain-of-function in Aedes aegypti mosquitoes," PLoS One, 13: e0198303.

Strunov, A., L. V. Boldyreva, E. N. Andreyeva, G. A. Pavlova, J. V. Popova, A. V. Razuvaeva, A. F. Anders, F. Renda, A. V. Pindyurin, M. Gatti, and E. Kiseleva. 2018. "Ultrastructural analysis of mitotic Drosophila S2 cells identifies distinctive microtubule and intracellular membrane behaviors," BMC Biol, 16: 68.

Sullivan M.N., Chu L.T., Zhu L. 2018. "Comment on 'Investigations on HONO formation from photolysis of adsorbed HNO 3 on quartz glass surfaces' by S. Laufs and J. Kleffmann, Phys. Chem. Chem. Phys., 2016, 18, 9616," Physical Chemistry Chemical Physics, 20: 30537-39.

Sun, Y., X. Gong, W. Lin, Y. Liu, Y. Wang, M. Wu, K. Kannan, and J. Ma. 2018. "Metabolites of organophosphate ester flame retardants in urine from Shanghai, China," Environ Res, 164: 507-15.

Swift, J. R., W. G. Coon, C. Guger, P. Brunner, M. Bunch, T. Lynch, B. Frawley, A. L. Ritaccio, and G. Schalk. 2018. "Passive functional mapping of receptive language areas using electrocorticographic signals," Clin Neurophysiol, 129: 2517-24.

Talbot T.O., Done D.H., Babcock G.D. 2018. "Calculating census tract-based life expectancy in New York state: A generalizable approach," Population Health Metrics, 16.

Talundzic, E., S. Ravishankar, J. Kelley, D. Patel, M. Plucinski, S. Schmedes, D. Ljolje, B. Clemons, S. Madison-Antenucci, P. M. Arquin, N. W. Lucchi, F. Vannberg, and V. Udhayakumar. 2018. "Next-generation sequencing and bioinformatics protocol for malaria drug resistance marker surveillance," Antimicrob Agents Chemother, 62.

Tan, Y., T. T. Lam, L. A. Heberlein-Larson, S. C. Smole, A. J. Auguste, S. Hennigan, R. A. Halpin, N. Fedorova, V. Puri, T. B. Stockwell, M. H. Shilts, T. Andreadis, P. M. Armstrong, R. B. Tesh, S. C. Weaver, T. R. Unnasch, A. T. Ciota, L. D. Kramer, and S. R. Das. 2018. "Large-scale complete-genome sequencing and phylodynamic analysis of eastern equine encephalitis virus reveals source-sink transmission dynamics in the United States," J Virol, 92.

Tan, Y., B. E. Pickett, S. Shrivastava, L. Gresh, A. Balmaseda, P. Amedeo, L. Hu, V. Puri, N. B. Fedorova, R. A. Halpin, M. P. LaPointe, M. R. Cone, L. Heberlein-Larson, L. D. Kramer, A. T. Ciota, A. Gordon, R. S. Shabman, S. R. Das, and E. Harris. 2018. "Differing epidemiological dynamics of Chikungunya virus in the Americas during the 2014-2015 epidemic," PLoS Negl Trop Dis, 12: e0006670.

Tanner, E. M., M. S. Bloom, Q. Wu, K. Kannan, R. M. Yucel, S. Shrestha, and E. F. Fitzgerald. 2018. "Occupational exposure to perfluoroalkyl substances and serum levels of perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) in an aging population from upstate New York: a retrospective cohort study," Int Arch Occup Environ Health, 91: 145-54.

Thomas N., Rutz H.J., Hook S.A., Hinckley A.F., Lukacik G., Backenson B.P., Feldman K.A., White J.L. 2018. "Assessing diagnostic coding practices among a sample of healthcare facilities in Lyme disease endemic areas: Maryland and New York – a brief report," Zoonoses and Public Health, 65: 275-78.

Thomm, A. M., A. M. Schotthoefer, A. P. Dupuis, 2nd, L. D. Kramer, H. M. Frost, T. R. Fritsche, Y. A. Harrington, K. K. Knox, and S. C. Kehl. 2018. "Development and validation of a serologic test panel for detection of Powassan virus infection in U.S. patients residing in regions where Lyme disease is endemic," mSphere, 3.

Thompson, A. K., H. Carruth, R. Haywood, N. J. Hill, W. A. Sarnacki, L. M. McCane, J. R. Wolpaw, and D. J. McFarland. 2018. "Effects of sensorimotor rhythm modulation on the human flexor carpi radialis H-reflex," Front Neurosci, 12: 505.

Thompson A.K., Cote R.H., Sniffen J.M., Brangaccio J.A. 2018. "Operant conditioning of the tibialis anterior motor evoked potential in people with and without chronic incomplete spinal cord injury," Journal of Neurophysiology, 120: 2745-60.

Thompson A.K., Favale B.M., Velez J., Falivena P. 2018. "Operant up-conditioning of the tibialis anterior motor-evoked potential in multiple sclerosis: feasibility case studies," Neural Plasticity.

Thompson C.N., Lee C.T., Immerwahr S., Resnick S., Culp G., Greene S.K. 2018. "Sampling considerations for a potential Zika virus urosurvey in New York City," Epidemiology and Infection, 146: 1628-34.

Thompson P.A., Oh H.M., Rhee G.Y. 2018. "Storage of phosphorus in nitrogen-fixing axab a ena flos-aquae (Cyanophyceae)," Journal of Applied Phycology, 30: 267-73.

Tortorelli, S., J. S. Eckerman, J. J. Orsini, C. Stevens, J. Hart, P. L. Hall, J. J. Alexander, D. Gavrilov, D. Oglesbee, K. Raymond, D. Matern, and P. Rinaldo. 2018. "Moonlighting newborn screening markers: the incidental discovery of a second-tier test for Pompe disease," Genet Med, 20: 840-46.

Tran O.C., Lucero D.E., Balter S., Fitzhenry R., Huynh M., Varma J.K., Vora N.M. 2018. "Sensitivity and positive predictive value of death certificate data among deaths caused by legionnaires' disease in New York City, 2008-2013," Public Health Reports, 133: 578-83.

Ubben T., Kluge A., Abolmaali N., Iannilli E. 2018. "Explorative analysis of IPA-SPECT data through statistical inference for an automated diagnosis of glioma tumor," Medical Physics, 45: 1108-17.

van Nuijs A.L.N., Lai F.Y., Been F., Andres-Costa M.J., Barron L., Baz-Lomba J.A., Berset J.-D., Benaglia L., Bijlsma L., Burgard D., Castiglioni S., Christophoridis C., Covaci A., de Voogt P., Emke E., Fatta-Kassinos D., Fick J., Hernandez F., Gerber C., González-Mariño I., Grabic R., Gunnar T., Kannan K., Karolak S., Kasprzyk-Hordern B., Kokot Z., Krizman-Matasic I., Li A., Li X., Löve A.S.C., Lopez de Alda M., McCall A.-K., Meyer M.R., Oberacher H., O'Brien J., Quintana J.B., Reid M., Schneider S., Simoes S.S., Thomaidis N.S., Thomas K., Yargeau V., Ort C. 2018. "Multi-year inter-laboratory exercises for the analysis of illicit drugs and metabolites in wastewater: development of a quality control system," *TrAC - Trends in Analytical Chemistry,* 103: 34-43.

Van Slyke, G., S. K. Angalakurthi, R. T. th Toth, D. J. Vance, Y. Rong, D. Ehrbar, Y. Shi, C. R. Middaugh, D. B. Volkin, D. D. Weis, and N. J. Mantis. 2018. "Fine-specificity epitope analysis identifies contact points on ricin toxin recognized by protective monoclonal antibodies," Immunohorizons, 2: 262-73.

VanEpps E.M., Troxel A.B., Villamil E., Saulsgiver K.A., Zhu J., Chin J.-Y., Matson J., Anarella J., Roohan P., Gesten F., Volpp K.G. 2018. "Financial incentives for chronic disease management: results and limitations of 2 randomized clinical trials with New York Medicaid patients," American Journal of Health Promotion, 32: 1537-43.

Wade, J. T. 2018. "High-throughput determination of in vivo DNA sequence preferences for Cas protein binding using Library-ChIP," Methods Enzymol, 616: 117-32.

Wade J.T. and Grainger D.C. 2018. "Spurious transcription and its impact on cell function," Transcription, 9: 182-89.

——. 2018. "Waking the neighbours: disruption of H-NS repression by overlapping transcription," Mol Microbiol, 108: 221-25.

Walters S.M., Rivera A.V., Reilly K.H., Anderson B.J., Bolden B., Wogayehu A., Neaigus A., Braunstein S. 2018. "Exchange sex among persons who inject drugs in the New York metropolitan area: the importance of local context, gender and sexual identity," AIDS and Behavior, 22: 2773-87.

Wan, Y., W. Xia, S. Yang, X. Pan, Z. He, and K. Kannan. 2018. "Spatial distribution of bisphenol S in surface water and human serum from Yangtze River watershed, China: implications for exposure through drinking water," Chemosphere, 199: 595-602.

Wang, W., and K. Kannan. 2018. "Inventory, loading and discharge of synthetic phenolic antioxidants and their metabolites in wastewater treatment plants," Water Res, 129: 413-18.

Wang, W., A. O. W. Leung, L. H. Chu, and M. H. Wong. 2018. "Phthalates contamination in China: Status, trends and human exposure-with an emphasis on oral intake," Environ Pollut, 238: 771-82.

Wang, Y., and K. Kannan. 2018. "Concentrations and dietary exposure to organophosphate esters in foodstuffs from Albany, New York, United States," J Agric Food Chem, 66: 13525-32.

Wang, Y., P. Kannan, R. U. Halden, and K. Kannan. 2018. "A nationwide survey of 31 organophosphate esters in sewage sludge from the United States," Sci Total Environ, 655: 446-53.

Wang, Y., W. Li, M. P. Martinez-Moral, H. Sun, and K. Kannan. 2018. "Metabolites of organophosphate esters in urine from the United States: concentrations, temporal variability, and exposure assessment," Environ Int, 122: 213-21.

Wang, Y., H. Sun, H. Zhu, Y. Yao, H. Chen, C. Ren, F. Wu, and K. Kannan. 2018. "Occurrence and distribution of organophosphate flame retardants (OPFRs) in soil and outdoor settled dust from a multi-waste recycling area in China," Sci Total Environ, 625: 1056-64.

Wasserstein, M. P., M. Caggana, S. M. Bailey, R. J. Desnick, L. Edelmann, L. Estrella, I. Holzman, N. R. Kelly, R. Kornreich, S. G. Kupchik, M. Martin, S. M. Nafday, R. Wasserman, A. Yang, C. Yu, and J. J. Orsini. 2018. "The New York pilot newborn screening program for lysosomal storage diseases: report of the first 65,000 infants," Genet Med, 21: 631-40.

Wattigney, W. A., E. Irvin-Barnwell, Z. Li, S. I. Davis, S. Manente, J. Maqsood, D. Scher, R. Messing, N. Schuldt, S. A. Hwang, K. M. Aldous, E. L. Lewis-Michl, and A. Ragin-Wilson. 2018. "Biomonitoring programs in Michigan, Minnesota and New York to assess human exposure to Great Lakes contaminants," Int J Hyg Environ Health, 222: 125-35.

Weber D.R., Thomas S., Erickson S.W., Fox D., Oleszek J., Pandya S., Venkatesh Y., Westfield C., Ciafaloni E. 2018. "Bone health and endocrine care of boys with Duchenne muscular dystrophy: data from the MD STAR net," Journal of Neuromuscular Diseases, 5: 497-507.

Wei, Y., P. Kumar, N. Wahome, N. J. Mantis, and C. R. Middaugh. 2018. "Biomedical applications of lumazine synthase," J Pharm Sci, 107: 2283-96.

Wei Y., Wang D., Chen M., Ouyang Z., Wang S., Gu J. 2018. "Extrahepatic cytochrome P450s play an insignificant role in triptolide-induced toxicity," Chinese Medicine (United Kingdom), 13.

Wells, M., E. Lasek-Nesselquist, D. Schoonmaker-Bopp, D. Baker, L. Thompson, D. Wroblewski, E. Nazarian, P. Lapierre, and K. A. Musser. 2018. "Insights into the long-term persistence of Legionella in facilities from whole-genome sequencing," Infect Genet Evol, 65: 200-09.

Wemette M., Shipp Hilts A., Mack S.R., Li Y., Eidson M., Santilli L.A., Nguyen T., Birkhead G.S. 2018. "Superstorm Sandy's impact on the provision of WIC (Special Supplemental Nutrition Program for Women, Infants, and Children) services in New York State," Public Health Nutrition, 21: 1388-98.

Wemm, S. E., Z. Cao, L. Han, and E. Wulfert. 2018. "Stress responding and stress-related changes in cue reactivity in heavy smokers, problem gamblers, and healthy controls," Addict Biol.

Westfall, J., J. L. Yates, G. Van Slyke, D. Ehrbar, T. Measey, R. Straube, O. Donini, and N. J. Mantis. 2018. "Thermal stability and epitope integrity of a lyophilized ricin toxin subunit vaccine," Vaccine, 36: 5967-76.

White J., Noonan-Toly C., Lukacik G., Thomas N., Hinckley A., Hook S., Backenson P.B. 2018. "Lyme disease surveillance in New York State: an assessment of case underreporting," Zoonoses and Public Health, 65: 238-46.

Williams, K. E., R. M. Jawale, S. S. Schneider, C. N. Otis, B. T. Pentecost, and K. F. Arcaro. 2018. "DNA methylation in breast cancers: differences based on estrogen receptor status and recurrence," J Cell Biochem, 120: 738-55.

Wittlieb-Weber C.A., Pantea C., Krikov S., Westfield C., Fox D.J., Pandya S., Bounsanga J., Johnson N.E., Butterfield R.J., Venkatesh Y.S., Ciafaloni E. 2018. "Cardiovascular health supervision for Duchenne Muscular Dystrophy; data from the MD STARnet," Progress in Pediatric Cardiology, 48: 98-104.

Wolpaw, J. R. 2018. "The negotiated equilibrium model of spinal cord function," J Physiol, 596: 3469-91.

Wolpaw, J. R., R. S. Bedlack, D. J. Reda, R. J. Ringer, P. G. Banks, T. M. Vaughan, S. M. Heckman, L. M. McCane, C. S. Carmack, S. Winden, D. J. McFarland, E. W. Sellers, H. Shi, T. Paine, D. S. Higgins, A. C. Lo, H. S. Patwa, K. J. Hill, G. D. Huang, and R. L. Ruff. 2018. "Independent home use of a brain-computer interface by people with amyotrophic lateral sclerosis," Neurology, 91: e258-e67.

Xue, J., and K. Kannan. 2018. "Mass flows and removal of eight bisphenol analogs, bisphenol A diglycidyl ether and its derivatives in two wastewater treatment plants in New York State, USA," Sci Total Environ, 648: 442-49.

Xue, J., P. Kannan, T. A. Kumosani, A. L. Al-Malki, and K. Kannan. 2018. "Resin-based dental sealants as a source of human exposure to bisphenol analogues, bisphenol A diglycidyl ether, and its derivatives," Environ Res, 162: 35-40.

Yang, Y., J. Qiu, A. Snyder-Keller, Y. Wu, S. Sun, H. Sui, A. B. Dean, L. Kramer, and F. Hernandez-Ilizaliturri. 2018. "Fatal Cache Valley virus meningoencephalitis associated with rituximab maintenance therapy," Am J Hematol, 93: 590-94.

Yang, Y., J. P. Richards, J. Gundrum, and A. K. Ojha. 2018. "GlnR activation induces peroxide resistance in mycobacterial biofilms," Front Microbiol, 9: 1428.

- Yao, Y., Y. Zhao, H. Sun, S. Chang, L. Zhu, A. C. Alder, and K. Kannan. 2018. "Per- and polyfluoroalkyl substances (PFASs) in indoor air and dust from homes and various microenvironments in China: implications for human exposure," Environ Sci Technol, 52: 3156-66.
- Yates J.L., Leadbetter E., Mantis N.J. 2018. "Alpha-galactosylceramide (agalcer) enhances vaccine-induced protection in a model of ricin intoxication," Human Vaccines and Immunotherapeutics, 14: 2053-57.
- Ye C., Zhou X., Pu D., Stutz J., Festa J., Spolaor M., Tsai C., Cantrell C., Mauldin R.L., III, Weinheimer A., Hornbrook R.S., Apel E.C., Guenther A., Kaser L., Yuan B., Karl T., Haggerty J., Hall S., Ullmann K., Smith J., Ortega J. 2018. "Tropospheric HONO distribution and chemistry in the southeastern US," Atmospheric Chemistry and Physics, 18: 9107-20.
- Yeung E.H., Sundaram R., Xie Y., Lawrence D. A. 2018. "Newborn adipokines and early childhood growth," Pediatr Obes, 13: 505-13.
- Young, A. S., J. G. Allen, U. J. Kim, S. Seller, T. F. Webster, K. Kannan, and D. M. Ceballos. 2018. "Phthalate and organophosphate plasticizers in nail polish: evaluation of labels and ingredients," Environ Sci Technol, 52: 12841-50.
- Zhang, T., X. Y. Bai, S. Y. Lu, B. Zhang, L. Xie, H. C. Zheng, Y. C. Jiang, M. Z. Zhou, Z. Q. Zhou, S. M. Song, Y. He, M. W. Gui, J. P. Ouyang, H. B. Huang, and K. Kannan. 2018. "Urinary metabolites of organophosphate flame retardants in China: Health risk from tris(2-chloroethyl) phosphate (TCEP) exposure," Environ Int, 121: 1363-71.
- Zhang, T., P. Ren, M. De Jesus, V. Chaturvedi, and S. Chaturvedi. 2018. "Green fluorescent protein expression in Pseudogymnoascus destructans to study its abiotic and biotic lifestyles," Mycopathologia, 183: 805-14.
- Zhao R., Schalk G., Ji Q. 2018. "Temporal pattern localization using mixed integer linear programming," Proceedings International Conference on Pattern Recognition, 1361-65.
- Zhu, H., R. U. Halden, and K. Kannan. 2018. "A nationwide survey of the occurrence of melamine and its derivatives in archived sewage sludge from the United States," Environ Pollut, 245: 994-99.
- Zhu H., Kannan K. 2018. "Continuing occurrence of melamine and its derivatives in infant formula and dairy products from the United States: implications for environmental sources," Environmental Science and Technology Letters, 5: 641-648.
- ———.2018. "Distribution profiles of melamine and its derivatives in indoor dust from 12 countries and the implications for human exposure," Environ Sci Technol, 52: 12801-08.
- --.2018. "Distribution and partitioning of perfluoroalkyl carboxylic acids in surface soil, plants, and earthworms at a contaminated site," Sci Total Environ, 647: 954-61.
- ---.2018. "Inter-day and inter-individual variability in urinary concentrations of melamine and cyanuric acid." *Environ* Int, 123: 375-81.
- Zhu, H., H. Sun, Y. Yao, Z. Gan, Y. Wang, and K. Kannan. 2018. "Legacy and alternative brominated flame retardants in outdoor dust and pine needles in mainland China: spatial trends, dust-plant partitioning and human exposure," Environ Pollut, 243: 758-65.
- Zhu J. and Gelberg K. 2018. "Occupational fatal injuries associated with mobile hand-fed wood chippers," American Journal of Industrial Medicine, 61: 978-85.
- Zolnik C.P., Falco R.C., Daniels T.J., Kolokotronis S.-O. 2018. "Transient influence of blood meal and natural environment on blacklegged tick bacterial communities," Ticks and Tick-borne Diseases, 9: 563-72.
- Zucker H.A. and Greene D. 2018. "Potential child health consequences of the federal policy separating immigrant children from their parents," JAMA, 320: 541-42.