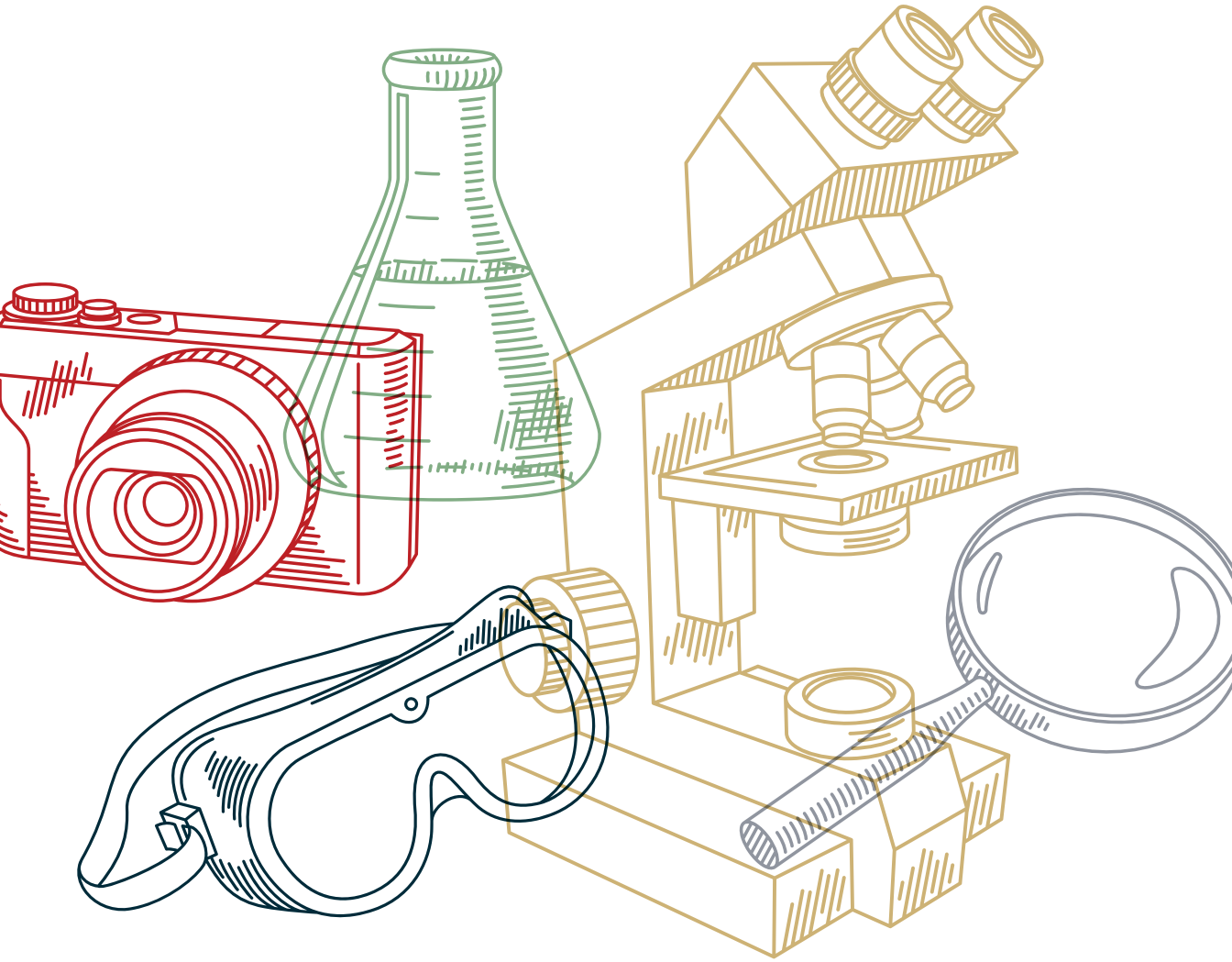
GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF FORENSIC SCIENCES

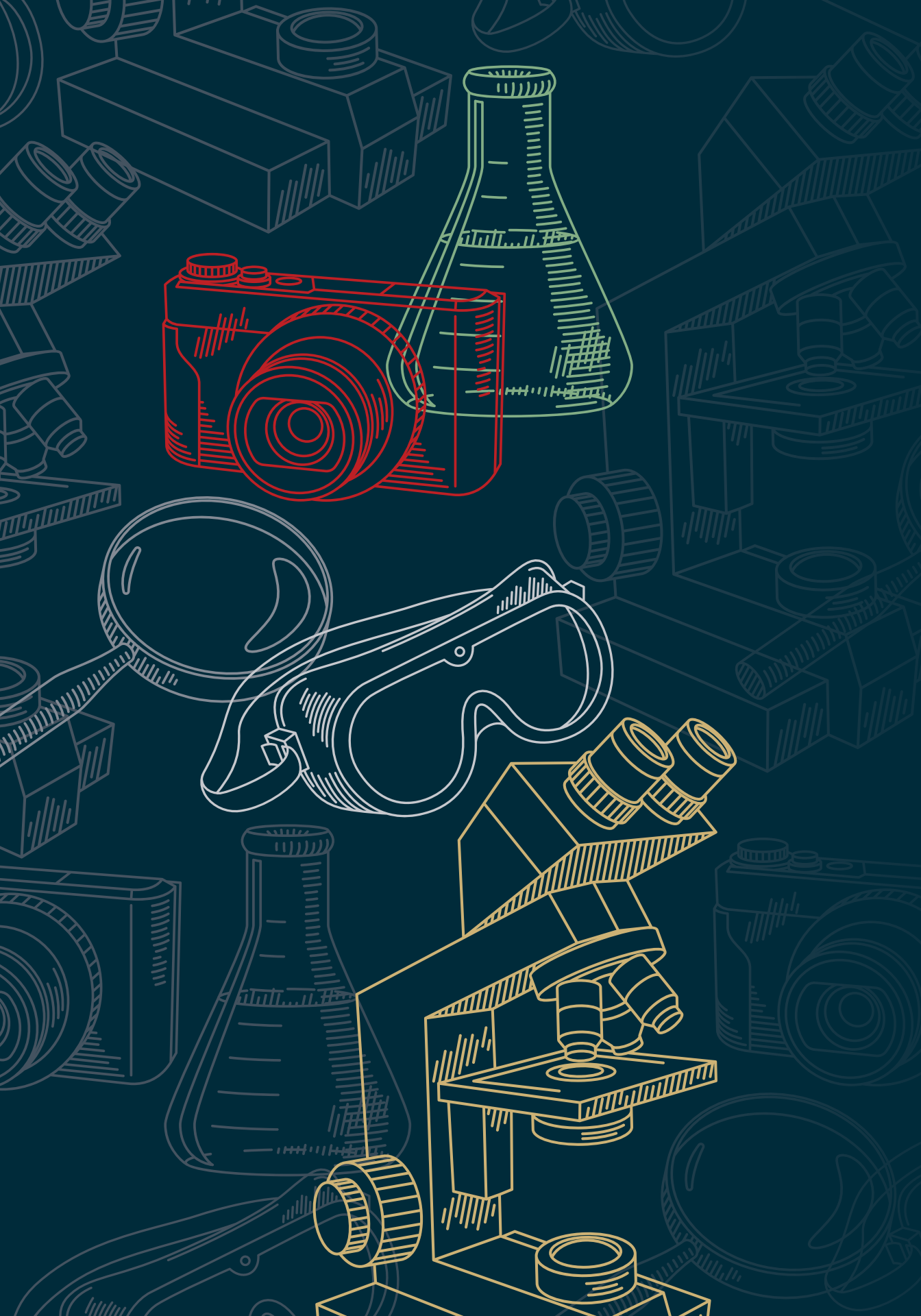


2022 ANNUAL REPORT

Reliable Science, Safer Streets.

DISTRICT OF COLUMBIA DFS DEPARTMENT OF FORENSIC SCIENCES

WE ARE WASHINGTON DC GOVERNMENT OF THE DISTRICT OF COLUMBIA
MURIEL BOWSER, MAYOR



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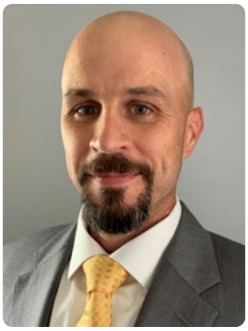


Interim Director's Statement

DEAR RESIDENT,

The Department of Forensic Sciences (DFS) made tremendous progress over Fiscal Year (FY) 2022 utilizing the resources provided by Mayor Bowser in her efforts to provide safer streets for D.C. District residents and visitors. The mission of the DFS is to provide high-quality, timely, accurate and reliable forensic science that use best practices and the best available technology, focusing on unbiased science and transparency, to enhance public safety and health.

This past year, the progress that has occurred was only possible because of the Mayor's commitment to providing the resources that the department needs, complemented by the support of the Council. Aided by our state-of-the-art facility, DFS staff continues to work tirelessly to meet the needs of District residents and restore trust with our stakeholders. Our laboratories and offices are filled with capable and dedicated scientists and staff members who strive daily to deliver high-quality, reliable crime scene, forensic science, public health services and support to critical stakeholders.

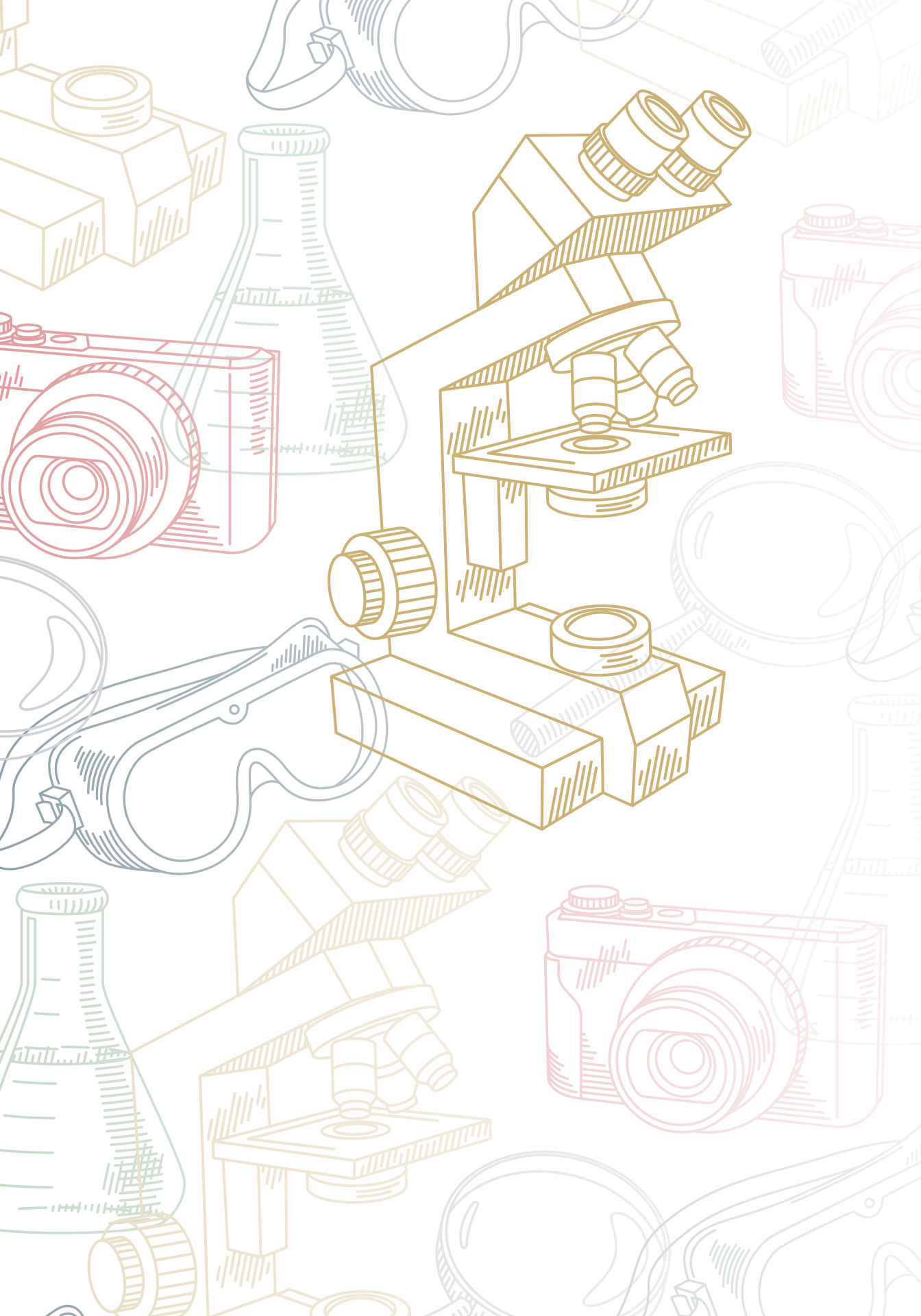
The DFS Crime Scene Services division is always on, working tirelessly throughout FY22 and responding to crime scenes to collect and analyze evidence to assist in the potential closure of criminal cases to support District residents. The Forensic Science Laboratory is moving steadily toward a successful application for reaccreditation, which would further support our criminal justice partners and the D.C. Public Health Laboratory is ready to trace any particle that comes into the District to ensure residents and visitors remain safe.

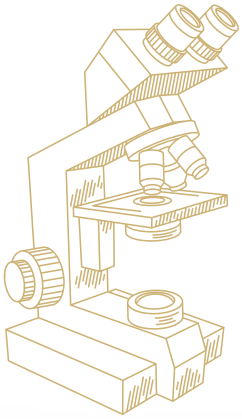
I would like to acknowledge Mayor Bowser, City Administrator Donahue, Deputy Mayor Appiah, and their staff members for their continuous and generous support of the DFS as we strive to achieve the Mayor's vision of a safer, stronger Washington, D.C. I would also like to recognize all of our public safety partners who support the DFS.

I am thankful for the DFS team members who work within the DFS offices and laboratories – whose stronger science has led to safer streets for all our friends and neighbors in the District of Columbia. We are proud to share our FY22 annual report with you and to demonstrate how reliable science leads to safer streets.

Sincerely,

Anthony Crispino, Interim Director





Public Health Laboratory (PHL)

THE PHL is responsible for identifying and characterizing infectious pathogens (bacteria, fungi and viruses), dangerous substances (heavy metals and toxic or volatile materials) and other hazards to public health and safety. Throughout 2022, the community relied on the PHL's services when the Mpox outbreak hit the District, when a fox was found biting people around the U.S. Capitol building, and for its continued testing response to the SARS-CoV-2 (COVID-19) pandemic. In FY22, PHL performed 79,937 tests, performed 119 proficiency tests and conducted multiple verification and validation efforts to bring on new tests, including wastewater surveillance and Drugs of Abuse screening and confirmation assays.

IMMUNOLOGY/ VIROLOGY UNIT

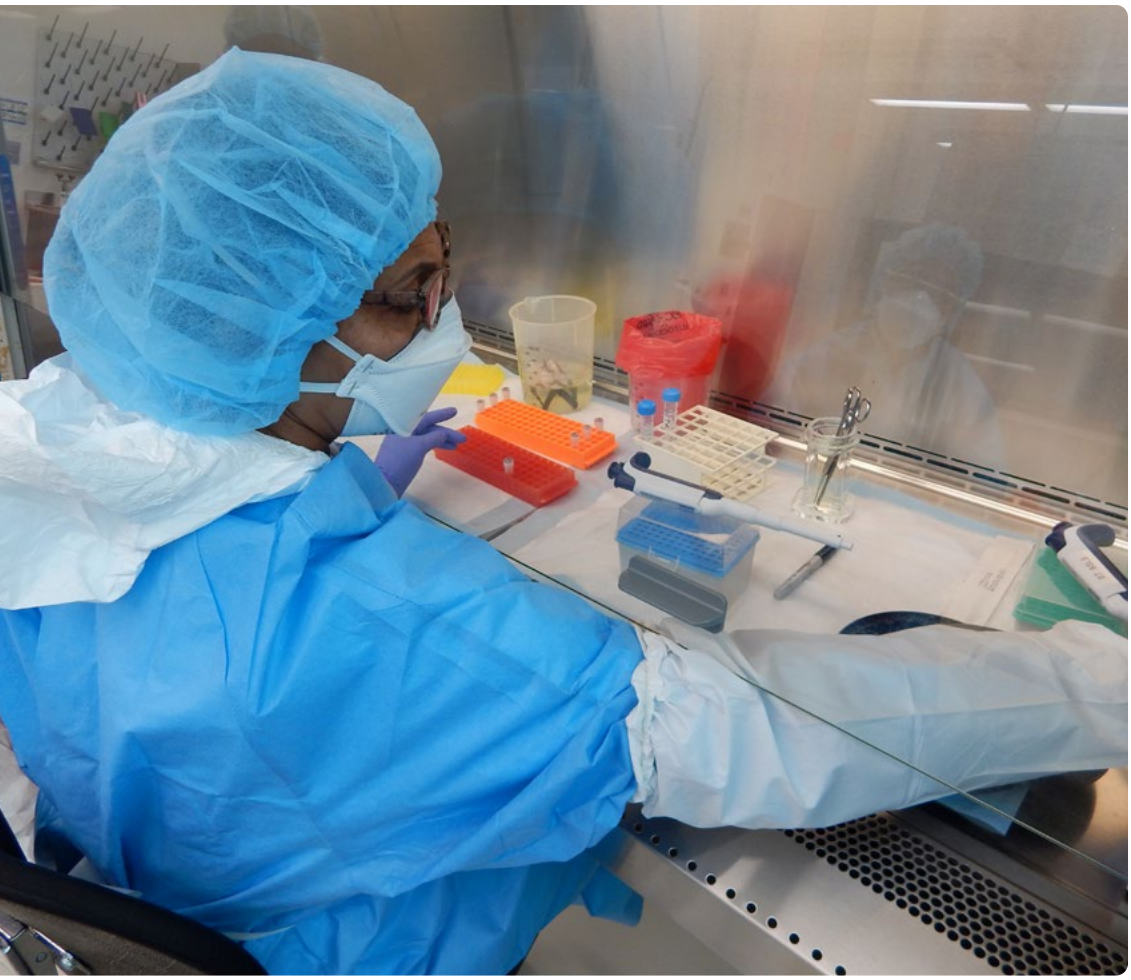
PHL's Immunology/Virology Unit (IVU) was at the lab's forefront for COVID-19 testing. Using the Panther Fusion System, a real-time RT-PCR in vitro diagnostic test, IVU maintained an average turnaround time of 1.7 days from date of collection. In FY22, IVU tested more than 74,000 specimens. In FY22, IVU also received 139 animal brain specimens for rabies testing, 12 of which tested positive, which yielded an overall rabies positivity in the District of 8.6%. Raccoons and bats were the animals that most commonly tested positive. IVU also provided approximately 625 Urine Drugs of Abuse screening tests for the Youth Services Center, the District's juvenile detention center.

ACCESSIONING UNIT

In FY22, the Accessioning Unit (ASU) received 953 Mpox samples for testing and processing over the course of three months. ASU shipped 351 of those samples to the CDC for additional testing.

MICROBIOLOGY UNIT

The Microbiology Unit (MBU) cultures, identifies, and characterizes both clinical and environmental bacteria and yeast that have the potential to impact public health. The MBU is also a member of the CDC PulseNet program, which specializes in the detection, isolation and characterization of foodborne pathogens, such as Salmonella, Shigella, Campylobacter, STEC (shiga toxin–producing E. coli), and Listeria. In FY22, the MBU received and characterized 214 isolates, 146 of which were sequenced and found to be associated with six national and local outbreak clusters of Salmonella serogroups and Shigella species. The MBU also provides phenotypic and genotypic microbiology techniques to identify antibiotic-resistant organisms known as Carbapenems-resistant Enterobacterales (CRE). In FY22, the MBU received and characterized 103 CRE isolates.



MOLECULAR DIAGNOSTIC UNIT

To support the Office of the Chief Medical Examiner, the Molecular Diagnostic Unit verified the use of the CDC test for post-mortem specimens. The PHL provided results to aid in death investigations in FY22. The PHL also performed whole-genome sequencing of SARS-CoV-2, which provided definitive epidemiological linkages to assist with outbreak investigations and detect new mutations of the virus, including the Delta and Omicron variants. The PHL also provided sequencing data to GISAID, a global database that tracks genotypes to identify emerging sequence variants of public health significance.

In May 2022, the Centers for Disease Control and Prevention (CDC) alerted

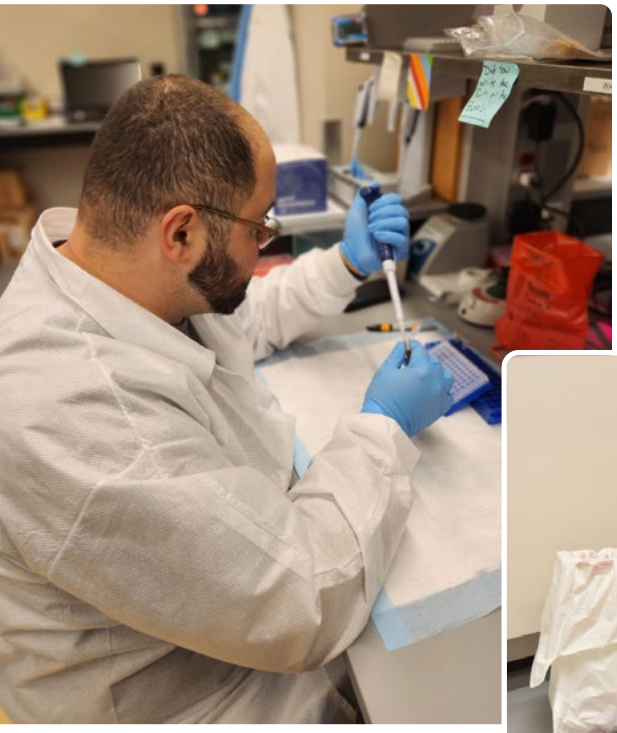
the country and public health communities about Mpox's arrival in the United States. Seven days after the alert, the PHL received its first two samples.

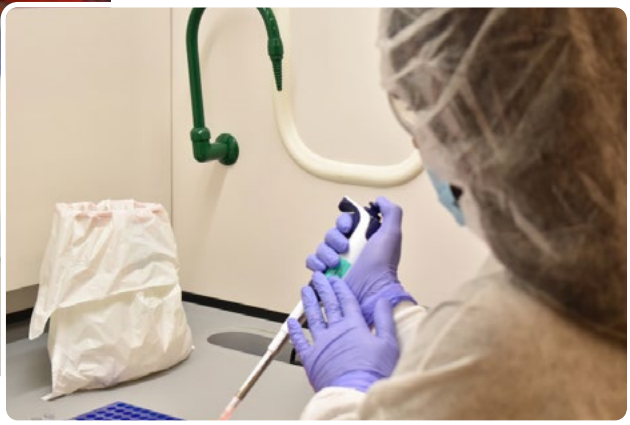
During FY22, the PHL tested over 900 samples from nearly 500 individuals. It took a massive team effort across all units to complete the testing – effectively cross-training additional accessioning and testing staff, increasing operating hours, performing safety risk assessments and communicating with external partners such as the CDC, Association of Public Health Laboratories and DC Health. Washington, D.C., was number one per capita for Mpox cases yet was able to complete testing within 24 hours for each sample received. The efforts of the DFS PHL during this public health emergency were critical to health officials' efforts to prioritize the District's receipt of needed vaccine doses, which were in limited supply, for District residents.

CLINICAL TOXICOLOGY UNIT

The Clinical Toxicology Unit (CTU) works within the Laboratory Response Network for Chemical Threats – a national network of CDC, state and local PHLs that responds to chemical terrorism and other public health emergencies. The CTU has maintained its clinical testing capabilities to assess exposure to a wide range of chemical threats, including but not limited to chemical terrorism (i.e., involving ricin, nerve agents, cyanide, etc.) and accidental exposures involving industrial chemicals (i.e., volatile organic compounds, toxic metals, etc.).

In addition, the CTU maintains a relatively new and emerging Drug Monitoring Program (DMP). In its current state, the DMP has maintained its clinical testing capabilities to support behavioral health programs, such as methadone treatment for opioid use disorders. In FY23, the CTU will expand its clinical testing capabilities to include buprenorphine treatment for opioid use disorders.



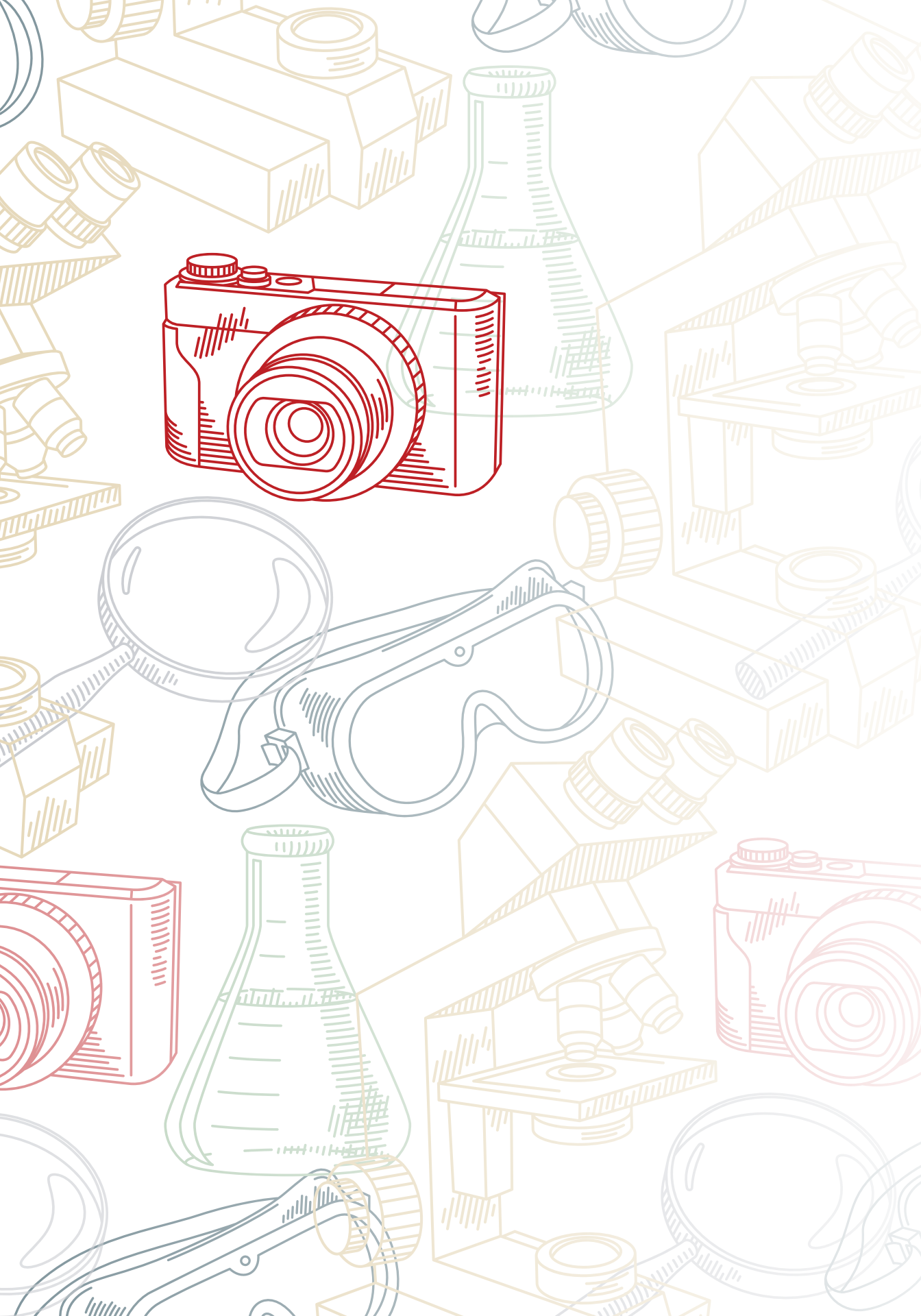


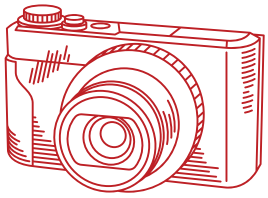
BIOTERRORISM UNIT

The Bioterrorism Unit (BTU) is a critical part of the Homeland Security and Emergency Management Agency's capacity to respond to incidents of bioterrorism agents in the District. This laboratory also functions as a core and internal reference laboratory that supports the MBU, the Virology Unit and other laboratories that perform molecular techniques to confirm the presence of suspected pathogens. In FY22, BTU analyzed a total of 29 samples for potential biological threat agents.

PHL ACCOMPLISHMENTS

Both the Centers for Medicare & Medicaid Services and the CDC's Division of Select Agents and Toxins performed scheduled inspections of the District's PHL. The PHL passed both inspections and thus maintained accreditation with both agencies. The PHL also implemented a cross-training program to ensure preparedness for future emerging public health threats. Eighteen medical technologists working at the DFS PHL have received cross-training in disciplines outside their primary area of responsibility, including training in clinical diagnostic testing, environmental testing and non-testing areas like informatics and data management.





Crime Scene Sciences (CSS)

THE CSS is a 24/7 operation and was responsible for responding to thousands of crime scenes to collect and preserve more than 55,898 items of evidence in FY22 – at or as close as possible to the time of the original crime report. CSS is comprised of a diverse team that includes law enforcement professionals, forensic laboratory technicians, civilian crime scene technicians and property technicians. This diversity of backgrounds is the team's strength.

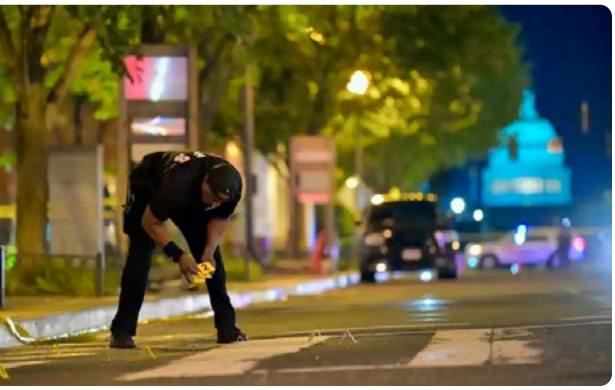
CSS provides high-quality, around-the-clock support through its two units: the Crime Scene Sciences Unit (CSSU) and the Central Evidence Unit (CEU). When crimes occur, there are often hundreds if not thousands of pieces of evidence (e.g., blood, fingerprints, weapons, cartridge casings, and clothing) that must be processed. CSSU is responsible for responding to crime scenes and extracting every possible piece of physical evidence on a crime scene according to a strict code of standards. The forensic scientist photographs, collects, processes, documents, and preserves all evidence for future analysis. Once evidence has been collected, packaged, and identified, the evidence is transported to the forensic laboratory. CEU personnel thoroughly document and store the evidence in its proper area to keep it from degrading or changing over time. To yield greater clarity on what occurred during a crime, the evidence must be viewed within the context in which the crime took place. Its integrity must not be compromised.

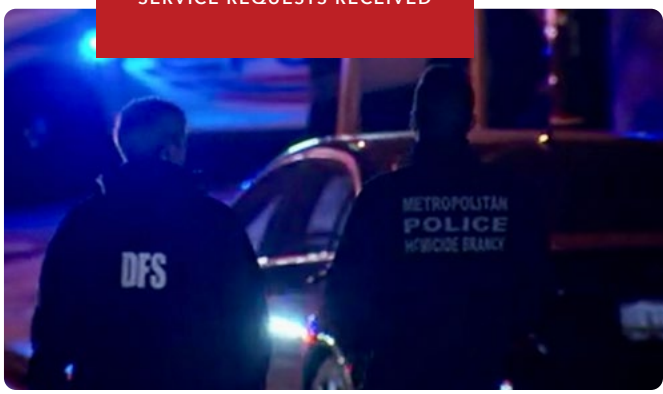
CSSU WORKLOAD MEASURES

CSSU independently processed 4,851 crime scenes and received 3,259 service requests in FY22.

4,851
CRIME SCENES PROCESSED

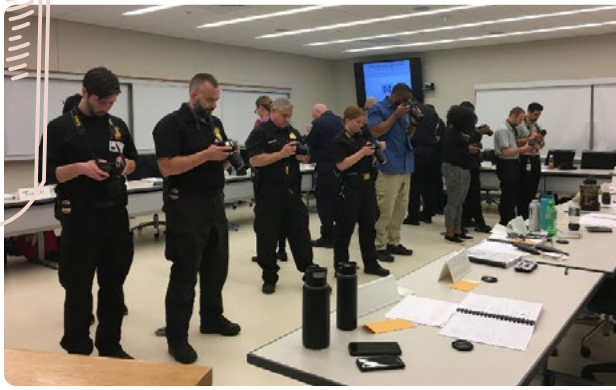
3,259
SERVICE REQUESTS RECEIVED

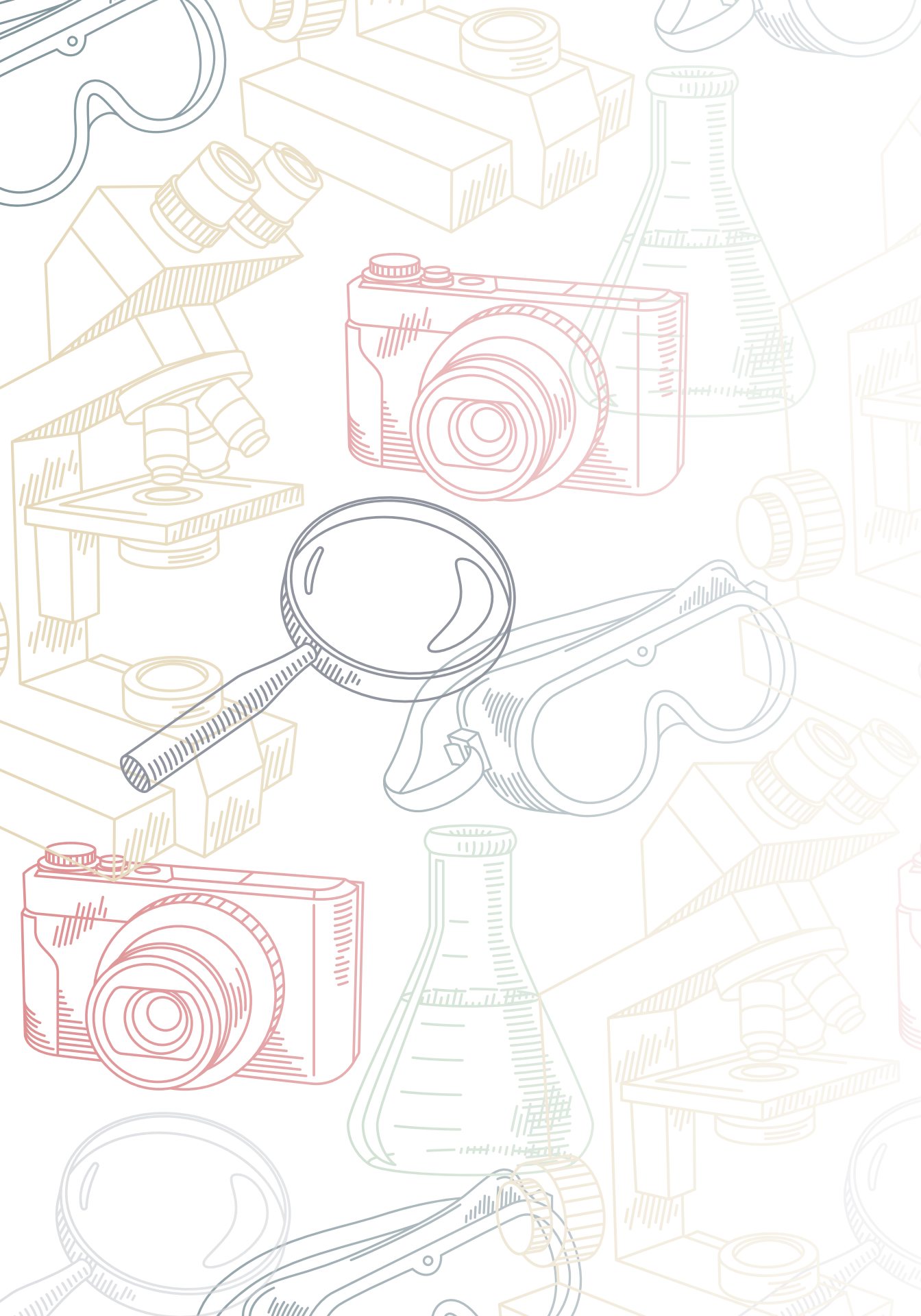


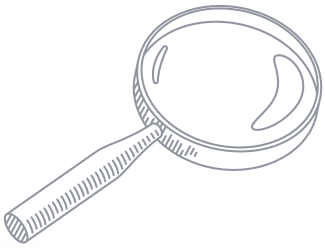


CSSU ACCOMPLISHMENT

CSSU completed a three-year project which involved the purging of records that passed the retention schedule for thousands of files. This project was completed with the help of 40 DFS interns who were hired during FY21 and FY22.







Forensic Science Laboratory (FSL)

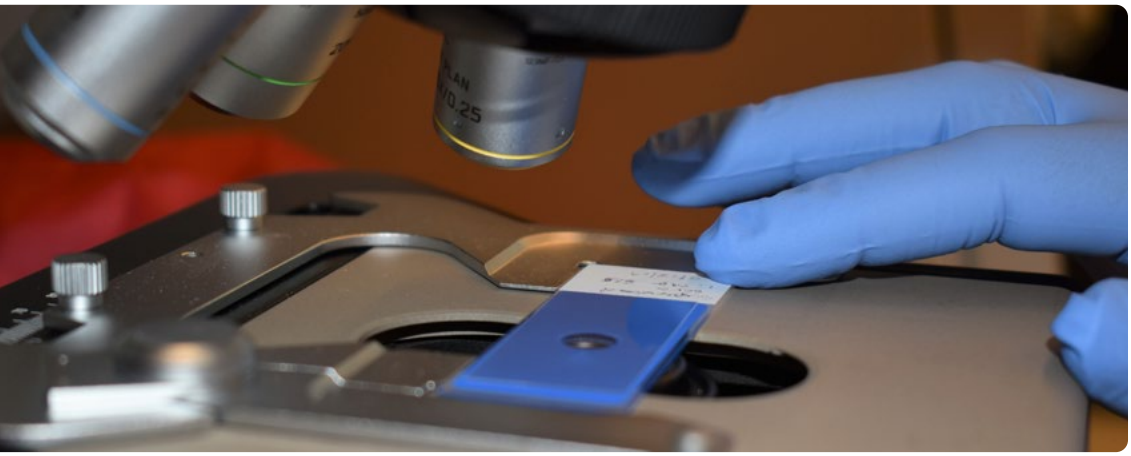
THE FSL comprises three units: the Forensic Biology Unit (FBU), the Latent Fingerprint Unit (LFU) and the Forensic Chemistry Unit (FCU). The FSL currently partners with accredited laboratories to provide Automated Fingerprint Identification System (AFIS) and Combined DNA Index System (CODIS) forensic intelligence and outsources evidence submitted for forensic testing in support of investigations and criminal prosecutions.

FORENSIC BIOLOGY UNIT

The DFS received and tested 279 sexual assault kits from the Metropolitan Police Department (MPD) in FY22, with an average turnaround time of 79 days. Of these, 225 kits were completed within the 90-day window, as stipulated according to section 202(b) of the Sexual Assault Victims' Rights Amendment Act (SAVRAA), which codified best practices based on the needs identified by sexual assault survivors to strengthen their rights and enhance system responses.

FBU WORKLOAD MEASURES

FBU uses the Federal Bureau of Investigation (FBI) CODIS software system to search DNA profiles to form possible links between violent crimes, known offenders and arrestees. Due to the suspension of forensic casework in April 2021, FBU partnered with two participating CODIS state government laboratories to ensure the continuity of CODIS services in the District. The FBU in partnership with the two state laboratories obtained 102 CODIS hits in FY22.



FBU ACCOMPLISHMENTS

SAVRAA Education: FBU presented to a cohort of sexual assault nurse examiners (SANEs) at the District's SANE Adult/Adolescent Seminar. Analysts explained the importance of the SAVRAA and the steps the DFS has tak-

en to ensure survivors of sexual assault receive timely information.

University and High School Outreach: FBU scientists participated in educational sessions and interviews with George Mason University, Georgetown University and Coolidge High School. They discussed topics like probative items for DNA testing, general laboratory processing and CODIS. At American University, FBU helped film students create a documentary about cold cases.

International Outreach: FBU sponsored a tour to South Africa and participated in a SART panel discussion with Moldova regarding a multidisciplinary SANE approach. FBU also attended several meetings and conferences throughout FY22, including the CODIS State Administrators Meeting, the National CODIS Conference, the 29th Congress of the International Society for Forensic Genetics, the American Academy of Forensic Sciences 2022 Annual Scientific Conference, the 2022 National Institute of Justice Forensic Science Research & Development Symposium, the 8th Annual Workshop on STRmix Implementation and Casework Approach, the Global Forensic and Justice Center's 11th Annual Forensic Science Symposium and the Technical Leader Summit.

FORENSIC INTELLIGENCE UNIT

The Forensic Intelligence Unit (FIU) ensures that evidence testing requests submitted to the FSL are evaluated, triaged and prioritized to develop strategic forensic testing plans, and ensure forensic services are provided to customers in a timely manner. FIU also utilizes statistical data, to track the impact of the forensic testing on the investigations and criminal justice process. FIU performs statistical analyses of these impacts to ensure that FSL's resources are being appropriately deployed to support District residents.

	FBU	FEU	FCU	LFU	EP
MPD	1525	129	3*	898	262
USAO	310	2	1	24	18
OAG	17	3	3	3	0

REQUESTS FOR TESTING FROM THREE PRIMARY CUSTOMERS, FY22, BY UNIT;
*FIU was not tracking statistics for the FCU for the entirety of this time period.

FIU WORKLOAD MEASURES

The FIU received and processed a total of 3,259 requests from key stakeholder agencies in FY22. This unit provides an invaluable service to the following agencies: the MPD, the United States Attorney's Office (USAO), the Office of the Attorney General (OAG) for the District of Columbia, the Office of the Inspector General for the District of Columbia and other entities, including the United States Park Police, the Naval Criminal Investigative Service, the Federal Protective Service, and the Metro Transit Police Department.

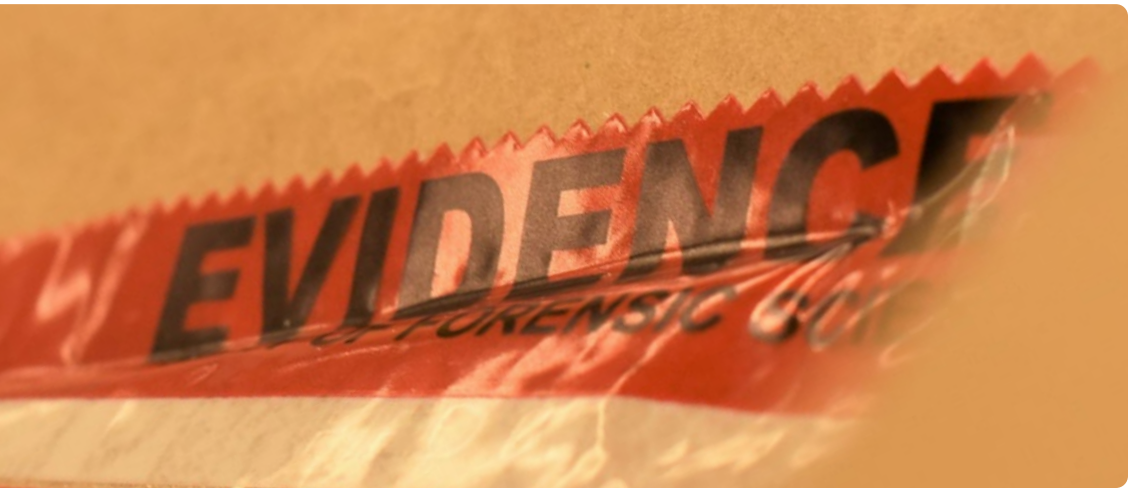
On the previous page, FIU's FY22 requests for testing are broken out by unit, illustrating the relative volume of requests passed on to each unit.

FIU ACCOMPLISHMENTS

The FIU successfully collaborated with the MPD and ATF personnel to ensure FSL prioritized the analysis of evidence acquired from firearms in the 7th District (Ward 8).

The FIU worked with internal and external customers to enhance the request for testing approval process. These enhancements ensure the continuity of operations based on probative evidence and outsourcing capacity.

The FIU successfully integrated reporting capabilities within the Laboratory Information Management System (LIMS) to track statistics and key measures.



LATENT FINGERPRINT UNIT

LFU analysts examine unknown or latent fingerprints and palm prints collected from items of evidence to determine their value. Suitable latent prints are then compared to known fingerprints to determine their source. Latent prints may be entered into the AFIS, a biometric database that uses digital imaging technology to obtain, store and analyze fingerprint data. Latent prints are searched against stored, known prints, possible source candidates are generated and LFU analysts evaluate the results. AFIS results have helped produce intelligence leads for several DFS customers.

LFU WORKLOAD MEASURE

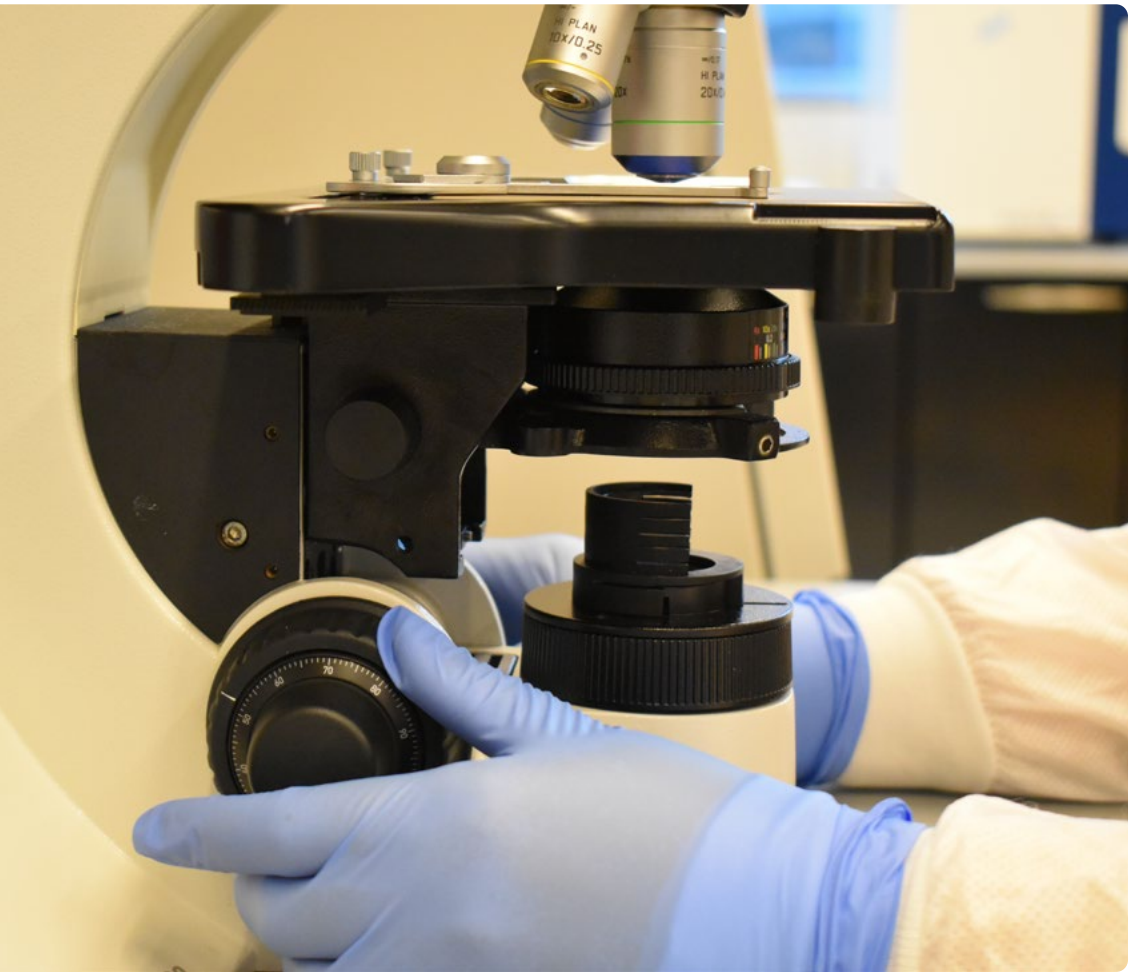
The collection and entry of latent fingerprints into AFIS are integral functions of the LFU. The unit members registered a total of 1,302 entries into AFIS and generated 601 hits in FY22. Below, AFIS entries and hits are broken down by quarter.

	Q1	Q2	Q3	Q4	TOTALS
Entries	274	344	306	378	1,302
Hits	140	195	98	168	601

AFIS ENTRIES AND HITS, FY22, BY QUARTER

LFU ACCOMPLISHMENTS

Community Outreach: The LFU participated in Georgetown University's Summer Forensic Science Academy. This program gives high school students a firsthand look at the world of forensic science, as presented by professionals in the field, to include professionals from the DFS. Students engage in several hands-on exercises, lectures and panel discussions that cover a multitude of forensic topics – from daily forensic laboratory operations to ethical practices and policies of forensic practitioners. The LFU participated in a panel discussion with the students to address questions from the group, such as "A Day in the Life" of experiences with working challenging, complex cases. The students were grateful for the opportunity to speak with the DFS and to gain insight into career opportunities in the field of forensic science.



FORENSIC CHEMISTRY UNIT

In FY22, the FCU pivoted to focus on drug surveillance to identify emerging drug trends, specifically by processing syringes supplied anonymously from four District harm reduction service providers. In FY22, FCU received 1,846 syringes for processing. The information gathered through this work serves not only the residents of the District but those of the nation as a part of the CDC-funded Overdose Data to Action (OD2A) grant-funded program.

Q1	Q2	Q3	Q4	TOTALS
380	425	618	423	1,846

SYRINGES RECEIVED FOR PROCESSING, FY22, BY QUARTER

FCU WORKLOAD MEASURES

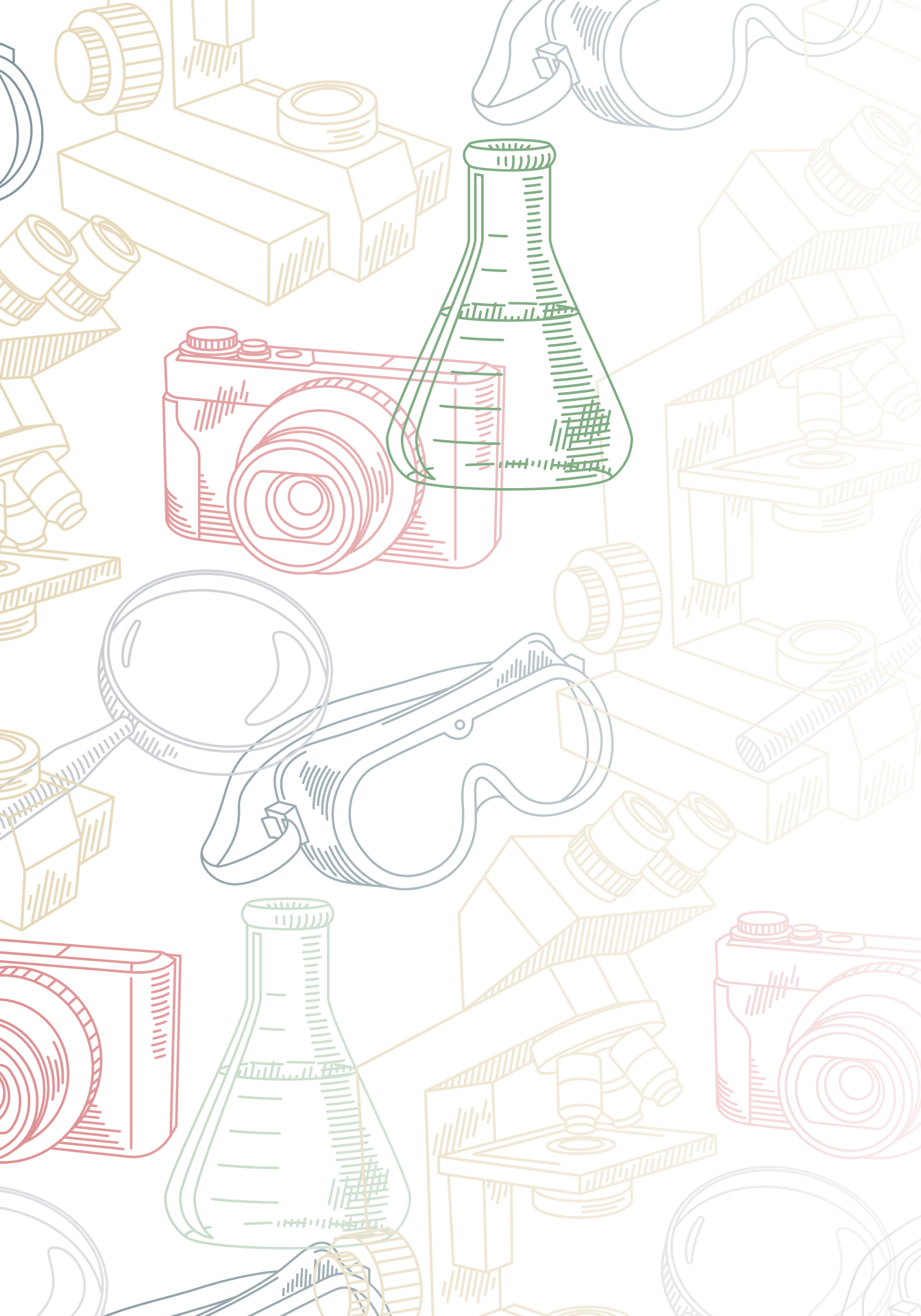
In FY22, the FCU analyzed residue in 1,846 syringes obtained from syringe exchange programs in Washington, D.C. The analysis revealed the presence of numerous controlled dangerous substances (CDSs), with the top five being fentanyl (found in 50.2% of syringes), methamphetamine (23.1%), cocaine (23.9%), heroin (23.3%), and fluorofentanyl (7.8%). Opioids, including synthetic opioids like fentanyl and non-synthetic opioids like heroin, were the most commonly detected among all syringes.

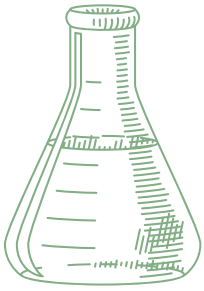
Notably, the FCU's data on opioids confirms that heroin has remained prevalent in the illicit drug market in Washington, D.C., unlike in other areas. The FCU's data on amphetamine-type stimulants indicates a significant and persistent increase in methamphetamine and N-ethylpentylone during the latter part of the fiscal year. Furthermore, the FCU's analysis found that xylazine and caffeine were the most frequently detected adulterants and cutting agents among the 1,846 syringes.

FCU ACCOMPLISHMENTS

The FCU is a recipient of the CDC OD2A grant award. Because of this grant opportunity, FCU has been able to collect, collate and report vital data to law enforcement and public health authorities regarding emerging dangerous substances and drug trends in the nation's capital. Using the collected data, the FCU has also aided the prevention of opioid overdoses through analysis and surveillance studies of CDSs. The FCU has solidified and improved partnerships with the syringe-exchange community and has opened doors for continued education and information exchange with needle-exchange providers on analytical data, opioid misuse practices and negative user impacts. The FCU continues to issue monthly drug intelligence bulletins to DFS customers and stakeholders to efficiently disseminate timely, actionable information that is based on validated science.

The OD2A work has also led to the publication of its analytical studies. FCU chemists were responsible for the publication of two journal articles in FY22, both published in Forensic Science International, highlighting the unit's Opioid Surveillance work. The first, "Fentanyl Analog Trends in Washington D.C. Observed in Needle-Exchange Syringes," reported on real-time drug trend monitoring through the analysis of used syringes provided by harm-reduction programs. The second, "Genuine and Counterfeit Prescription Pill Surveillance in Washington, D.C.," highlighted the rise of counterfeit pills discovered in the District that mimic pharmaceuticals, but actually contain fentanyl and other illicit substances.





Administrative Support

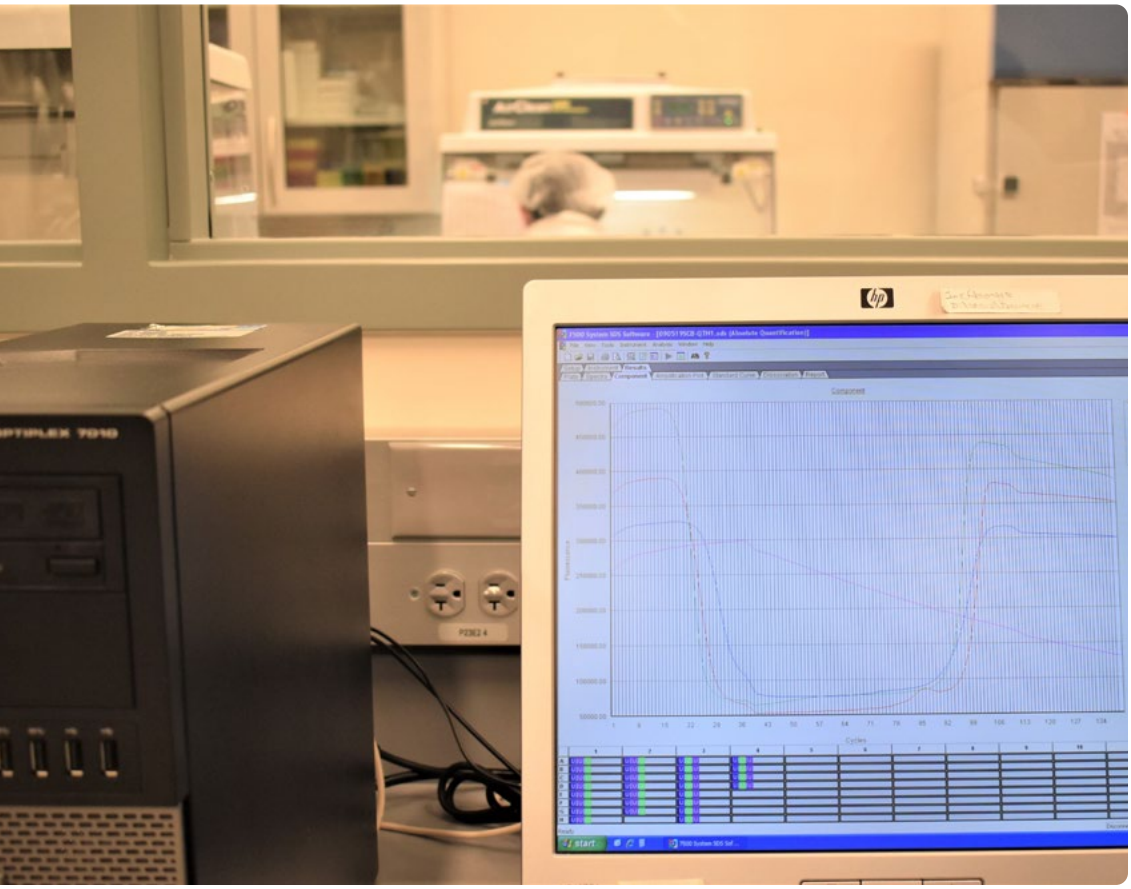
THE ADMINISTRATIVE SUPPORT UNITS consist of the Forensic Technology Unit (FTU), Human Resources, Training, Quality Assurance units, and the Office of Health and Safety. The Administrative Support Units provide high-level oversight and support to each division within the DFS, ensuring that employee needs and concerns are met.

FORENSIC TECHNOLOGY UNIT

The Forensic Technology Unit (FTU) is the primary IT solutions and service provider for the DFS. The unit's mission is to provide the FSL, PHL and CSS Divisions with quality solutions and services, with a focus on consistent and efficient support. The unit:

- collects pertinent information relevant to the issues at hand,
- performs first-contact resolution whenever possible,
- explores solutions via root-cause analysis,
- publishes proactive outbound communications, and
- provides strategic acquisition support and consultation.

The FTU manages on-site and cloud technologies that are vital and highly specialized systems designed to support the work of the DFS.



TRAINING UNIT

The Training Unit ensures the agency maintains the highest standards with respect to technology and emerging methodologies, regularly training scientists on the latest advancements in forensic science.

The unit also works to enhance staff members' technical skills, knowledge and professional development.

The Training Unit revised unit-specific training manuals; developed agency-wide Diversity, Equity and Inclusion workshops; hosted in-person training and restarted in-person tours in FY22.

EMPLOYEE TRAINING MEASURES

DFS scientists completed a total of 4,817.6 hours of training in FY22. Below is a breakdown of employee training hours over the past five years.

FY18	FY19	FY20	FY21	FY22
3,400	3,719	3,780	5,045	4,817.6

TRAINING HOURS COMPLETED, BY FISCAL YEAR

TYPES OF TRAINING

CSS, FSL AND PHL

- BEGA Ethics Week
- Cybersecurity
- DHCR Conflict Resolution
- DFS Employees Sharing Knowledge (DESK)

- Technical Writing
- GW Management Training
- LIMS v3.8
- Manager's Summit
- Qualtrax
- Workplace Conflict Resolution
- Harassment Training
- Training and Travel
- Diversity, Equity and Inclusion Workshops
- Meeting EEO and Workplace Disputes
- Annual Association of Forensic Quality Assurance Managers Training Conference

CSS Division

- Cellebrite Certified Operator
- Chain of Custody

FSL Division

- Major City Chiefs Forensic Investigations Conference
- ANAB Root Cause Analysis
- ANAB Forensic Technical Assessor Training for ISO/IEC 17025 or ISO/IEC 17020
- Vicarious Trauma
- VIII International Conference on Novel Psychoactive Substances
- International Society of Forensic Genetics
- Forensic Investigations Conference
- STACS DNA & Forensics User Conference
- BSS Next Generation Identification Conference
- AACC Annual Scientific Meeting and Clinical Lab Expo
- American Academy of Forensic Sciences Scientific Conference
- Establishing and Implementing Latent Print Suitability Criteria Webinar

- Molecular Diagnostic Courses – Clinical Genomics: A Review of Technology and Clinical Applications
- STRmixTM Virtual Refresher
- CODIS State Administrators Meeting
- National CODIS Conference
- 2022 American Academy of Forensic Sciences Conference
- 2022 NIJ Forensic Science Research & Development Symposium
- 8th Annual Workshop on STRmix Implementation and Casework Approach
- Global Forensic and Justice Center 11th Annual Forensic Science Symposium
- Technical Leader Summit

PHL Division

- Association of Public Health Laboratories Annual Conference
- GW Emerging Leaders Workshop
- Horizon LIMS Tech Forum
- ASM Microbe Annual Conference
- Preparedness Summit
- ASM Clinical Virology Symposium
- AACC Annual Scientific Meeting and Clinical Lab Expo
- Clinical Virology Symposium
- Pan American Society of Clinical Virology Molecular Workshop
- HOLOGIC Open Access Training
- The Future Action Symposium Uplifting All Our Talent to Inspire the Future STEM Workforce
- SCIEX Advanced LC-MS/MS Training
- National Safety Council Safety Congress and Expo

TRAINING UNIT ACCOMPLISHMENTS

DFS Tours: The DFS Training Unit relaunched in-person tours and hosted multiple educational tours, several of which had 50 or more participants.

DFS Internships: The DFS Training Unit continued its internship program in person, and several interns were hired to full-time positions within the CSS Division. The DFS was recognized during National Disabilities Awareness Month as an Aspiring Professionals Internship Program Host.

QUALITY ASSURANCE UNIT

The Quality Assurance Unit provides oversight of all quality assurance measures that maintain the DFS's validity and ability to conduct self-sustaining science. This unit is responsible for the coordination of audits, policy and procedure oversight, certifications and accreditations. These processes are designed to safeguard the public's confidence in DFS test results by imparting robust quality systems that improve responsibility, impartiality, traceability, reproducibility, transparency and the overall utilization of scientific approaches to problems.

QUALITY ASSURANCE UNIT ACCOMPLISHMENTS

Quality Tracking System: The Quality Assurance Unit improved the Quality Corrective Action Report and Quality Preventive Action Report master tracking spreadsheet to streamline and verify the accuracy of reports.

Audits and Assessments: The Quality Assurance Unit successfully completed nine internal audits in FY22.

QUALITY ASSURANCE UNIT KEY PERFORMANCE INDICATORS

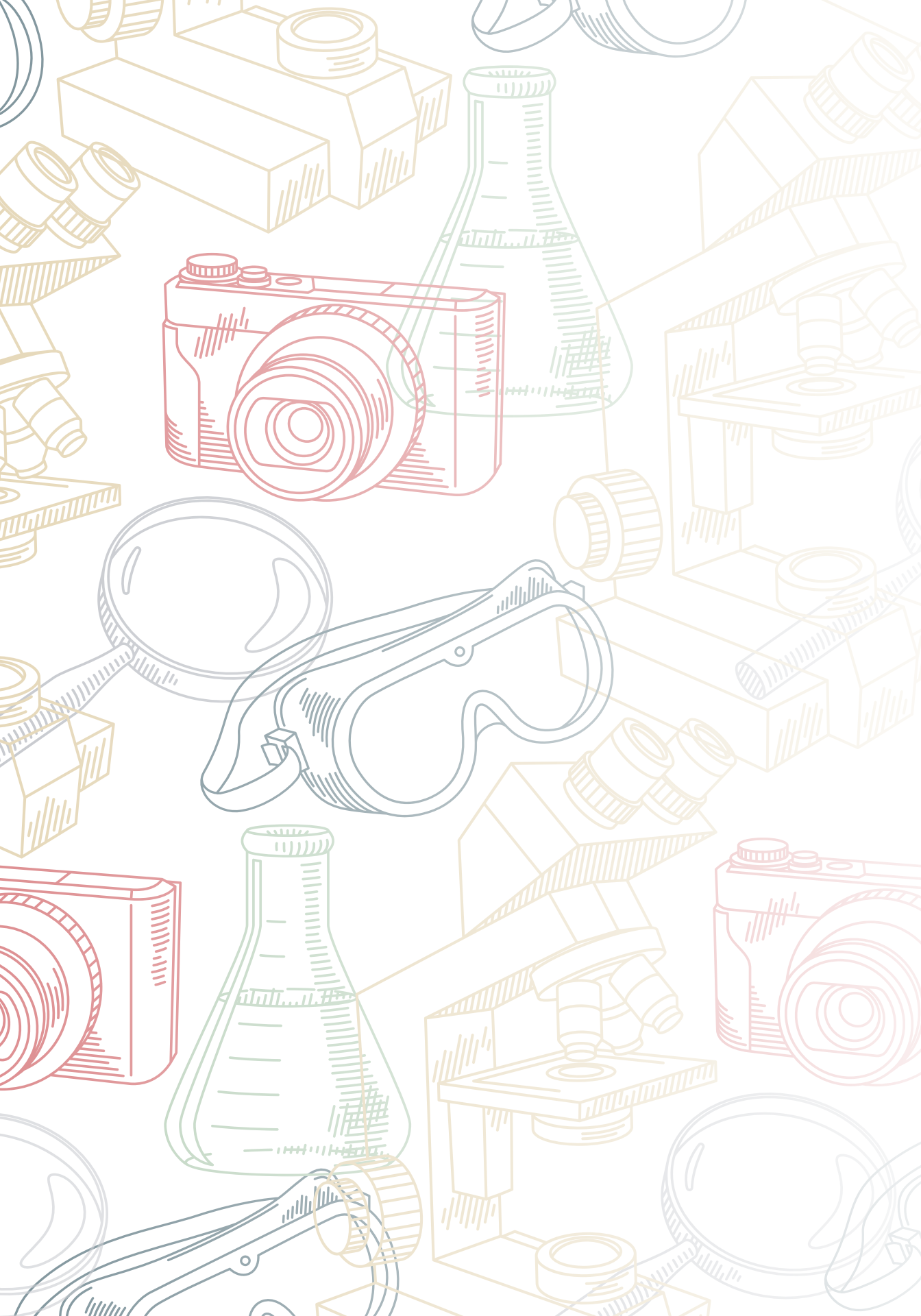
The Quality Assurance Unit monitors competency and provides proficiency tests for scientists who perform functions in any of the DFS's 14 scientific units. The number of scientists decreased from 140 to 136 in FY22.

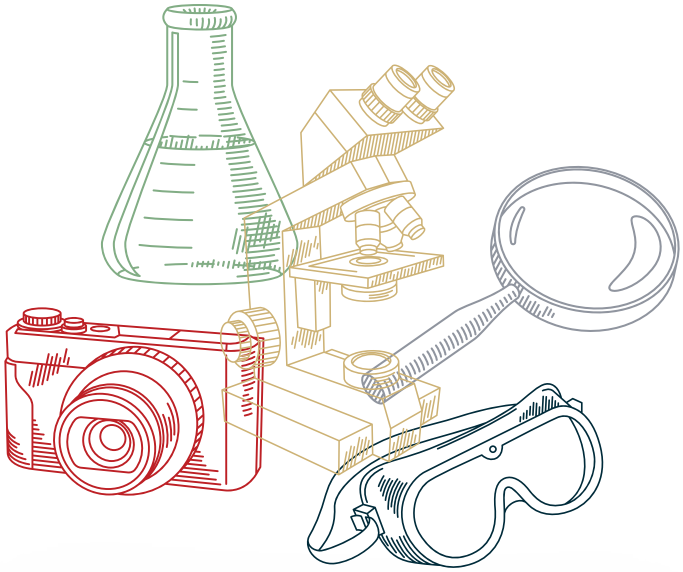
The following audits were successfully conducted in FY22:

- CDC's Division of Select Agents and Toxins – PHL's BTU
- D.C. Health and Regulation and Licensing Administration
- Clinical Laboratory Improvement Amendments
- D.C. Office of Risk Management
- FBI Quality Assurance Standards for Forensic DNA Testing Laboratories Audit provides strategic acquisition support and consultation

THE OFFICE OF HEALTH AND SAFETY

The Office of Health and Safety continued to update policies to meet the CDC's workplace recommendation requirements on face coverings, group gatherings and social distancing for employees and visitors. Safety officers also developed a cloud-based inventory program to track supplies.





Outreach

THE AGENCY interacts with District residents and educates them about our work for the purpose of building trust in our services within neighborhoods and supporting the development of a robust science, technology, engineering and mathematics (STEM) career pipeline for District residents and those who choose to work in the city. The DFS continued to support the District's public safety agenda and strengthened stakeholder partnerships in FY22.

Through media reports, increased social media engagement and community outreach, residents learned about the life-saving work the DFS performed during the pandemic.

PEOPLE AND CULTURE

The scientists, laboratory technicians, senior leaders, administrative staff and interns who do the important work of this agency are our people. It is our job as an agency to ensure they receive the training, education and support they need to continue to deliver on our commitment to solid science and safer streets. Equally important is the culture that we cultivate for our employees. We want to build camaraderie and a support system that fosters an environment that propels our work.

In FY22, the DFS participated in several People and Culture initiatives, including a food drive for a local food pantry and a book drive for the children of citizens who have returned from incarceration.

To promote health and wellness within the agency, the DFS hosted a walking club, chair stretching sessions for stress relief and an employee wellness workshop.

DIVERSITY, EQUITY AND INCLUSION

The DFS's Diversity, Equity and Inclusion (DEI) program is designed to create an inclusive cultural climate to ensure that the agency's diverse workforce has access to the tools and support they need to succeed. As a part of this effort, DFS employees strive to exemplify the agency's core values of accountability, trust and integrity.

The DFS hosted several DEI watch sessions, where attendees were encouraged to watch various DEI video resources and participate in open discussions after the viewing.

THE DFS EDUCATES AND MENTORS

Restrictions on in-person events affected how we could highlight the vital work of our agency and promote careers in forensic science and other STEM fields in FY22. We have fully reopened our doors for public tours to engage students and community groups.

SPECIAL PROJECTS AND INITIATIVES

Each year, the DFS supports cross-cutting special projects and initiatives that involve stakeholders from across the District.

National Forensic Science Week (NFSW): This event was held September 18-24, 2022. The DFS shared messages of appreciation with staff and organized activities to celebrate all our forensic disciplines. NFSW hosted a District Superior Court judge to discuss True Crime: Science in the Courtrooms.

Medical Laboratory Professionals Week: This event, commonly referred to nationwide as Lab Week, provides the laboratory profession with a unique opportunity to increase public understanding of and appreciation for clinical laboratory personnel. During the week of April 24-30, 2022, the DFS received video messages from our partners expressing their appreciation for the life-saving work of the PHL laboratorians.


DFS

INTERN SPOTLIGHT

Internships are an integral component of the DFS's outreach efforts. The agency attracted interns through a myriad of feeder programs and relationships with multiple colleges and universities, such as American, Bowie State, George Mason, George Washington and Howard in FY22.

The DFS also supports internship initiatives prioritized by the Mayor's office, such as the District Leadership Program (DLP), which promotes employment opportunities that help participants build pathways to the middle class. We were pleased to host two DLP interns who diligently worked with the DFS, learning and helping the organization achieve its goals.

The internship program provides students with practical experience and the type of exposure they need if they are strongly considering careers in forensic science and public health. Our internship projects run the gamut from

mentorship and shadowing opportunities to conducting research and data collection. Our pool of interns is as diverse, interesting and dynamic as the scientists, technicians and administrative staff at the DFS.

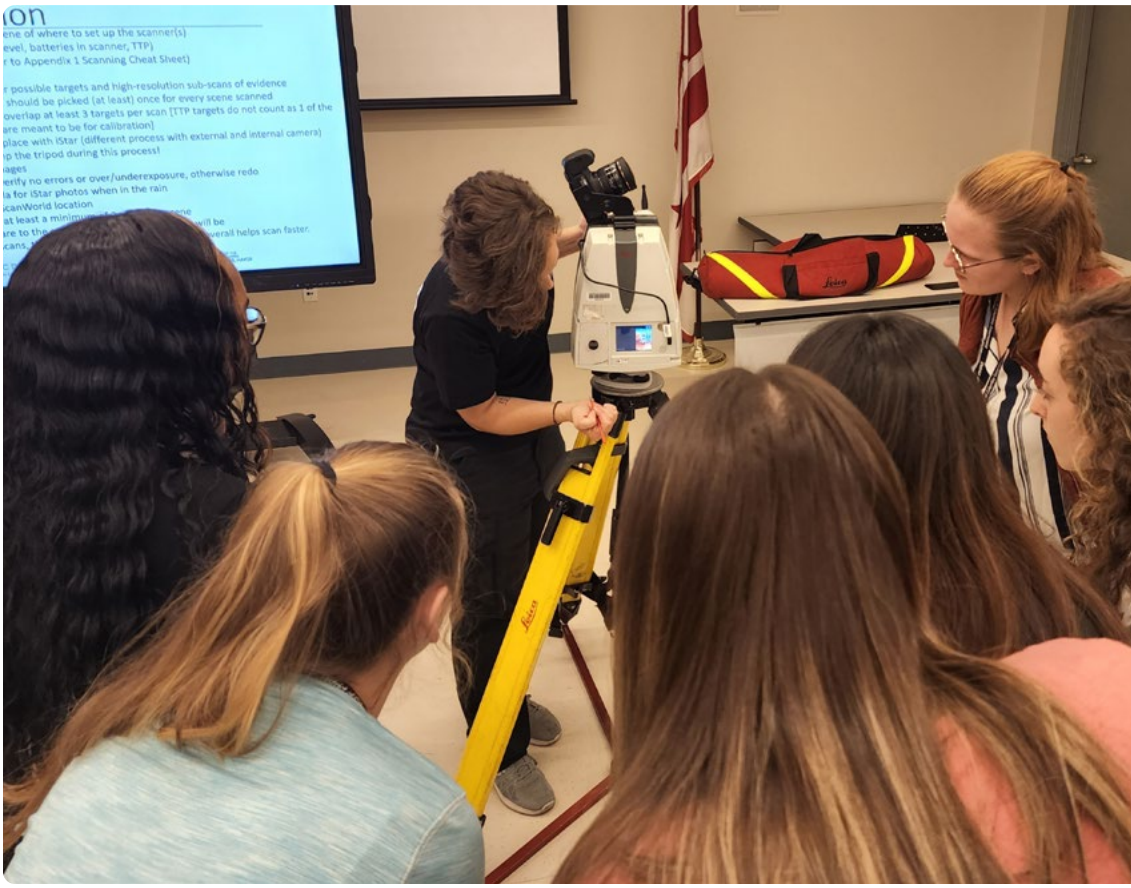
The agency hosted approximately 70 interns in our CSS, PHL and FSL programs in FY22.

CSS – Interns supported the program records management project by digitizing legacy MPD crime scene reports and filing them electronically.

PHL – Interns supported the program by creating laboratory kits and assisting with COVID-19 response preparation.

Association of Public Health Laboratories Fellows – A new addition to support PHL units; 10 fellows in FY22.

FSL – Interns supported the program by decontaminating equipment and supplies, maintaining records management of prints and conducting safety checks.



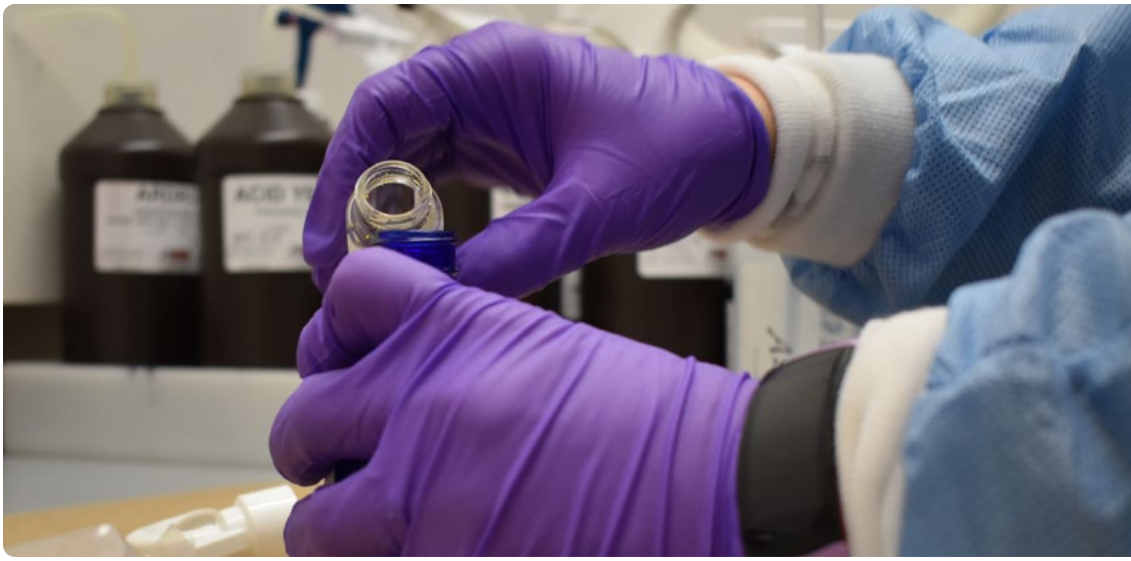
Future Projects

The following is a sample of our planned initiatives for FY23.

Public Health Laboratory

Molecular Diagnostic Unit

PHL will expand surveillance testing using whole-genome sequencing to include both bacterial and viral pipelines to address the needs of District stakeholders. This expansion will include a respiratory viral pipeline containing Whole Genome Sequencing (WGS) of SARS-CoV-2 as well as other respiratory viral pathogens. These data will provide the information needed to make epidemiological links for contact tracing, outbreaks and disease monitoring in the District.

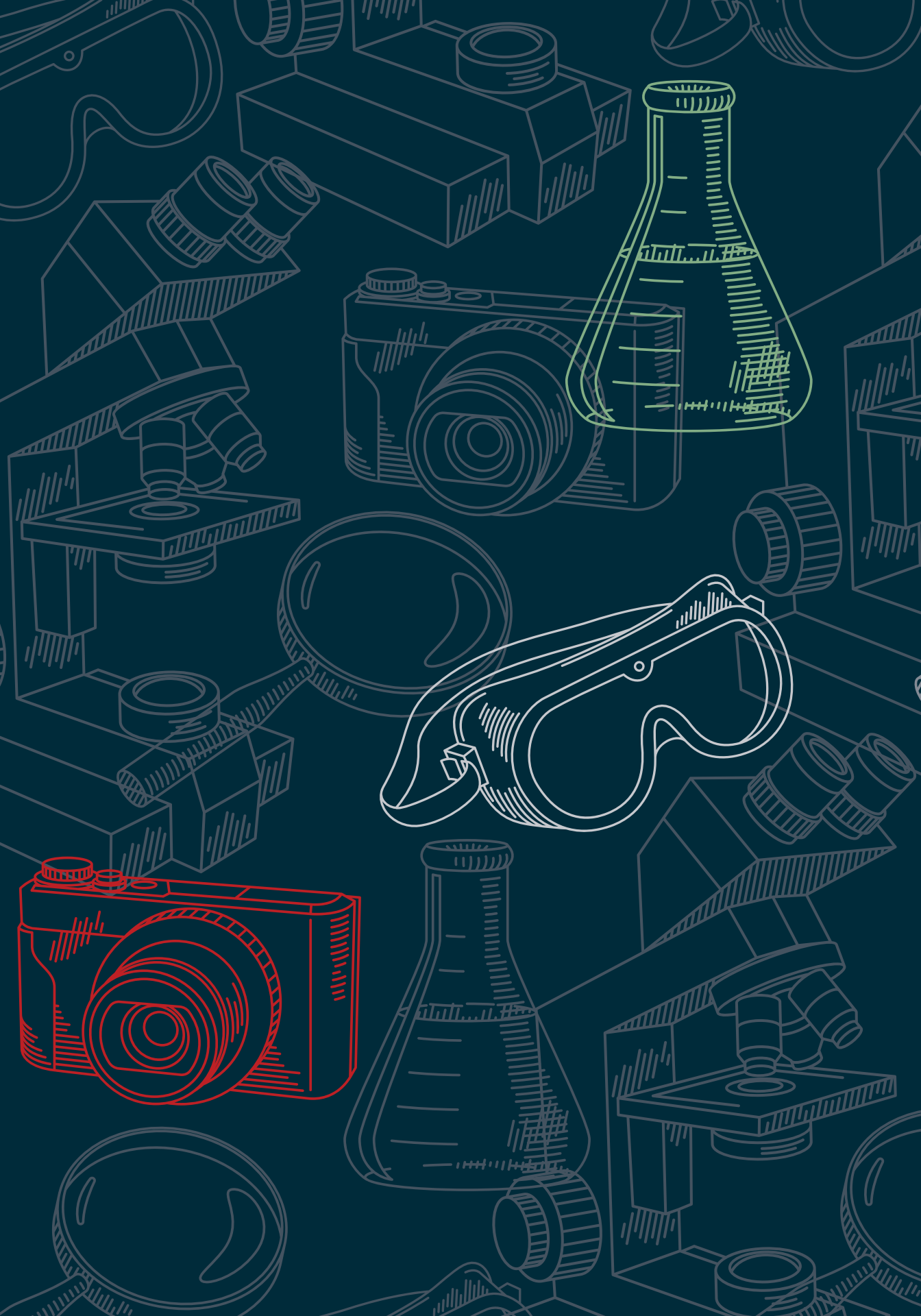


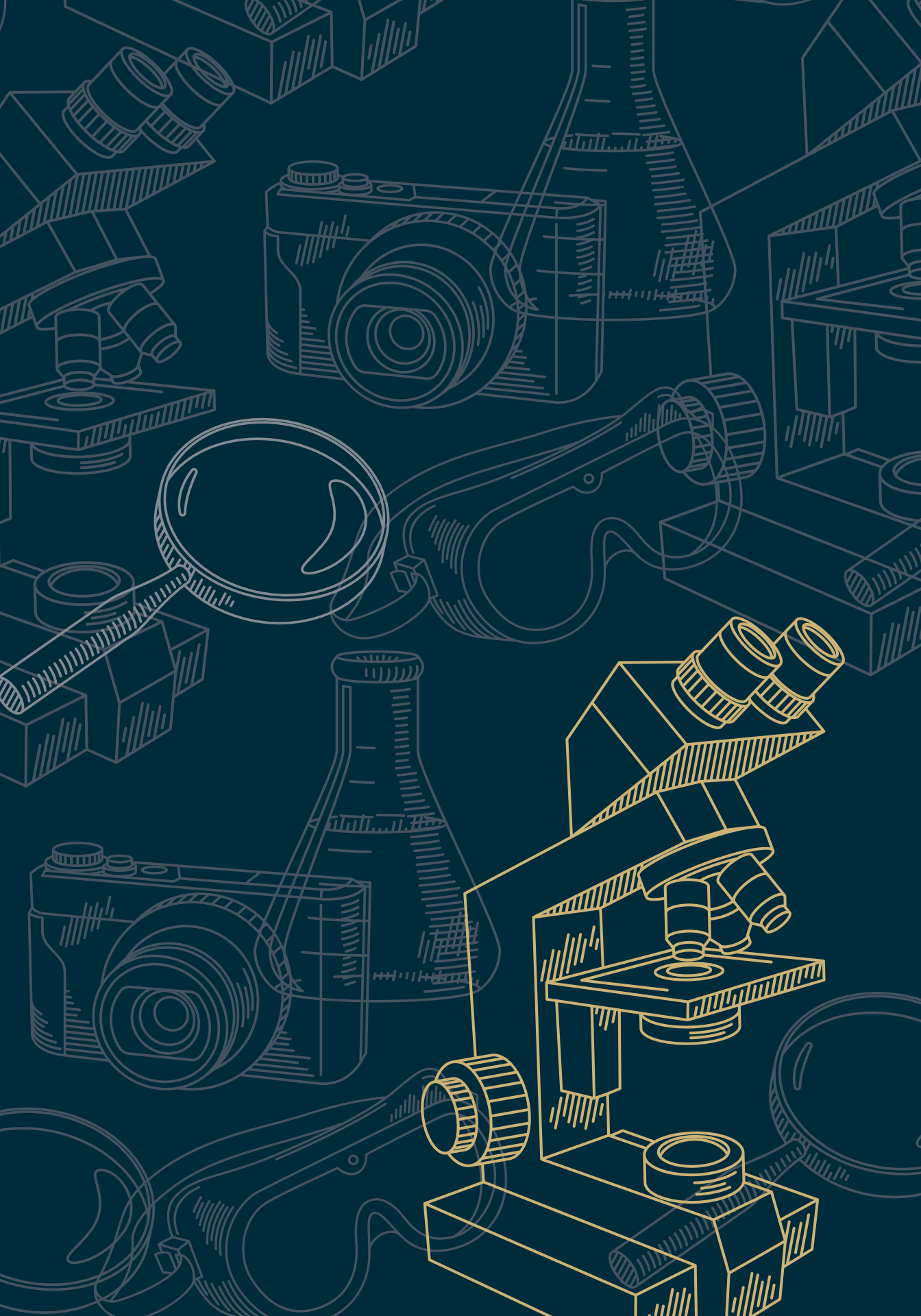
Clinical Toxicology Unit and Immunology Virology Unit

PHL will implement testing for Drugs of Abuse to support the Department of Behavioral Health's (DBH's) need for better diagnostics. This testing will create the opportunity to offer more accurate and detailed information to DBH clinics so that their client base can receive better assessments and clinical monitoring. Additionally, drug surveillance trends can be provided to both DBH and the Department of Health, which would allow them to conduct better intervention programs.

Bioterrorism Unit and Clinical Toxicology Unit

PHL will support the FBI and the District's Department of Health by providing biological and chemical terrorism testing services in order to comply with the requirements associated with the CDC's Public Health Emergency Preparedness (PHEP) grant, which was awarded to the District. In FY21, the District received local funds to support analytical personnel in the Bioterrorism Program along with reagents and supplies for both the Biological Terrorism and Chemical Terrorism Programs that were not covered under PHEP funds. The PHL will be able to fulfill mandatory PHEP requirements in order to conduct laboratory testing of human specimens and of environmental and chemical samples for potential biological and chemical terrorism agents. The program also includes training for sentinel laboratories in the District.





2022 ANNUAL REPORT

Reliable Science, Safer Streets.

GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF FORENSIC SCIENCES

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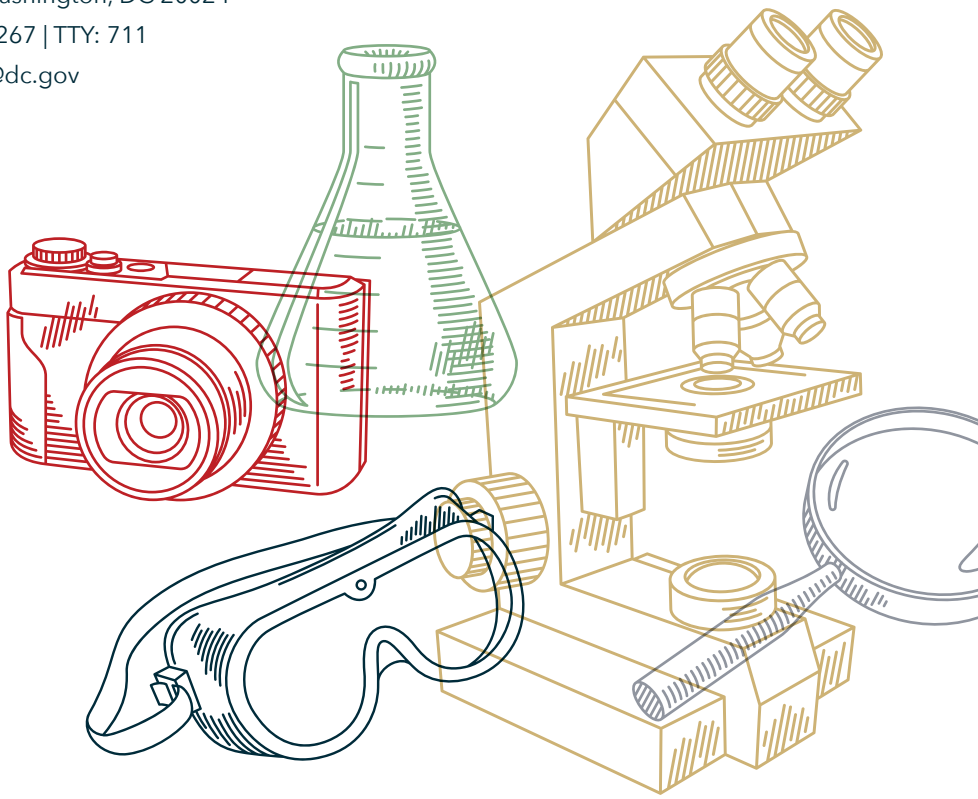

DISTRICT OF COLUMBIA DFS DEPARTMENT OF FORENSIC SCIENCES

WE ARE WASHINGTON GOVERNMENT OF THE DISTRICT OF COLUMBIA
DC MURIEL BOWSER, MAYOR