

#### THE

# CRIMESCENE

**NEWSLETTER OF THE LAKE COUNTY CRIME LABORATORY** 

### William Koubek: New to the Scene

#### BY ROBERT SBERNA

When Bill Koubek began his bachelor's degree at Tiffin University in 2007, he had a dream of becoming a forensic scientist.

Koubek's dream was achieved in June 2014 when he joined the Lake County Crime Laboratory. But his entry into the field took a more circuitous route than he'd planned.

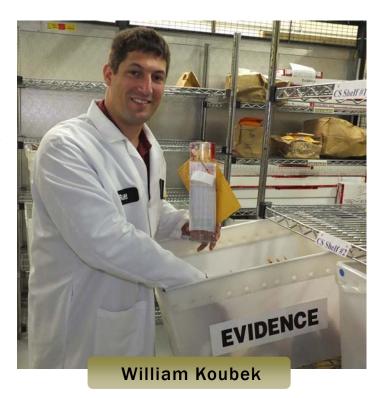
Koubek graduated from Tiffin in 2011 with a degree in criminal justice. He quickly learned that in order to pursue a career in forensic science he would need additional certification.

Koubek enrolled in Cleveland State University's Forensic Chemistry certificate program. One of the courses was taught by Douglas Rohde, the Crime Laboratory's Supervisor of Chemistry and Toxicology. Koubek took advantage of the opportunity to seek out Rohde's counsel.

"Doug advised me that even though I had the necessary science courses, I (CONTINUED ON PAGE 3)



"Next time the prosecutor shows you pictures of the crime scene, try not to blurt out, 'Been there, done that.'"



# Ledeger: Middle School Under Fire

#### BY ROBERT SBERNA

On the morning of November 7, 1994, as Keith Ledeger was preparing to check out of the Plaza Motel in Wickliffe, he phoned the front desk to ask for masking tape. "I need to wrap something up," he told Dave Michos, the motel owner.

Ledeger, a former Wickliffe resident, was back in town after 10 years of drifting around Florida, where he'd been arrested several times for disorderly conduct and public intoxication.

At 11:15, Ledeger vacated his room, leaving behind a Styrofoam cooler and a partially finished bottle of wine. He spent the next two hours or so drinking at the Sand Bar lounge on Euclid Avenue.

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# Frequently Asked Questions

This Column
Answers
Questions
Commonly
Asked of our
Scientists



ANSWERED BY DOUGLAS ROHDE, M.S. EXPERT IN FORENSIC TOXICOLOGY

**Q:** What is the preferred sample for toxicology cases, blood or urine?

**A:** It depends on the circumstances.

The sample choice for toxicology analysis depends a great deal on the question being asked. Was an individual impaired at the time of an accident? Was a death due to a drug overdose or a poison? Is a person complying with the terms of their probation? Was the individual reporting a sexual assault drugged at some point prior to the incident? The toxicological answers to these questions are based on the time intervals involved in each scenario listed above.

Blood and urine are the most commonly analyzed samples in toxicology. Blood is the preferred sample for investigations dealing with an individual's functioning and behavior, such as impaired driving or death. Blood drug concentrations provide the best correlation to the effect of the drug on an individual. The window of detection for most drugs is generally limited to hours.

After a blood drug concentration is obtained, the interpretation of its effects - the impairment or toxicity of the drug on a particular individual - must be performed with caution. An individual's tolerance to a drug, multiple drug interactions and biological variations are taken into account.

Drugs in urine samples can be detected for days and sometimes even weeks. Because of this longer detection window, urine is a better choice than blood for answering questions of drug use or exposure, such as probation violations or drug facilitated sexual assaults. Urine drug concentrations provide poor correlations to drug effects on an individual; therefore, they cannot be used

for impairment opinions.

For example, marihuana can be detected in blood for 2 - 6 hours while the marihuana metabolite (the breakdown product of marihuana) can be detected in urine for 2 - 6 days in a casual user and as long as a month or more in a chronic user. Yet the effects of marihuana last, on average, just 2 - 3 hours, so a positive urine sample will only indicate usage and not impairment.

Of course, with toxicology, it's not always that easy. To establish the use of heroin in an individual, urine is a desired sample in addition to blood in order to detect the short-lived heroin metabolite, 6-MAM. Blood and urine samples should both be collected in impaired driving cases where heroin is suspected.

To summarize, blood is the preferred sample for driving impairment cases while urine is the preferred sample for probation and drug facilitated sexual assault cases. There may be instances where blood is not able to be collected, in that case urine can be collected and submitted for analysis and vice versa. It is better to collect any type of sample than none at all.

The LCCL provides blood and urine collection kits to all law enforcement agencies and local hospitals in Lake County. They are available for pick-up at the laboratory.

Law enforcement personnel are encouraged to call Doug Rohde at 440-350-2793, whenever they have a question regarding toxicology testing or interpretation.



#### William Koubek: New to the Scene

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#### **HIGHLIGHTS**

- Bachelor of Arts in both General Science and Criminal Justice - Tiffin University
- Certificate in Forensic Chemistry - Cleveland State
- Affiliate American Board of Criminalistics (ABC)
- Member Ohio Identification Officers Association (OIOA)
- Member International Association for Identification (IAI)

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actually needed a degree in a scientific discipline," said Koubek.

To fulfill the requirements for CSU's Forensic Chemistry program, candidates need to complete a laboratory internship. "I approached Doug about the possibility of interning at the Lake County Crime Laboratory," Koubek said. "I was persistent and thankfully he needed someone at the time."

During his internship, a part-time position became available at the Crime Laboratory, providing Koubek with a promising pathway to his career goal.

He began his part-time position on October 22, 2013. Just three days earlier, he was married to his high school sweetheart. "It was a great week for me," he said.

Koubek's internship and part-time employment enabled him to gain practical lab experience and forensic knowledge. His time at the Crime Laboratory also provided Rohde and the other forensic scientists with the opportunity to assess his capabilities. Koubek impressed them with his hard work and he was offered a full-time position. However, the offer was contingent on Koubek completing a science degree.

With his dream job in sight, Koubek, accompanied by Rohde, returned to Tiffin University to speak with a dean about the most expedient way to receive a science degree. They were told that Koubek would need several more courses to earn a bachelor's degree in general science from Tiffin.

In the spring of 2014, while working part-time at the Crime Laboratory, Koubek attended Lorain County Community College and also took online courses from Tiffin and Owens Community College in order to earn the credits necessary to satisfy the degree requirements. It was a grueling schedule, but the hours of commuting and studying were well worth it, said Koubek. "I knew in the end that I would finally have the career that I had visualized since I began this journey."

Koubek never doubted that he'd reach his goal. He credits his parents for instilling in him a solid work ethic that has served him well throughout his life. "I was raised to not give up and to keep trying," he said.

A standout baseball player in high school, he received a scholarship to Tiffin, where he played for two years until an injury ended his collegiate sports career. "In sports and work, and everything else I do, I've always tried to do my very best," he said.

Koubek's interest in forensic science was sparked in high school. He was a fan of CSI-type television shows, but also realized that he had an aptitude for science. "Science was a passion of mine," he said. "It was a calling. I knew that I could (CONTINUED ON PAGE 4)



## William Koubek: New to the Scene

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become a forensic scientist and be an asset to a laboratory."

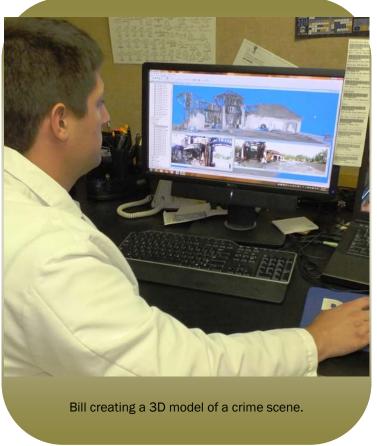
At the Crime Laboratory, Koubek is responsible for preparing and processing solid dose drugs for chemical analysis. Those substances include heroin, cocaine, prescription drugs, amphetamines, marihuana, and various other drugs that police have seized from suspects or discovered while conducting searches. He also performs testing on drug paraphernalia such as syringes and spoons.

During his internship, Koubek was asked by Rohde to prepare a presentation on the various cutting agents seen in heroin evidence submitted to the Crime Laboratory. Koubek had the opportunity to present his findings at the Midwestern Association of Forensic Scientists annual meeting in 2014.

As part of his job, Koubek said he has seen an increasing volume of heroin. The drug's growing popularity and varying potency have led to a spike in overdose deaths in Lake County. "People don't really know the purity of the heroin they are using," he said. "Nor do they know what it's being cut with. Taking heroin is a game of Russian roulette."

Koubek cautioned that he's seeing more incidences of heroin being cut with fentanyl, a powerful synthetic opiate. Users who aren't aware that their heroin contains fentanyl are at an increased risk of a deadly overdose.

Koubek is expanding his duties at the laboratory. When the Crime Scene Team uses the Focus3D Laser Scanner at a crime scene to take photos and measurements, Koubek uses the data collected by the scanner and the SceneVision-3D Software to create an accurate 3D model of the scene for use in investigations and court. He is also currently training in toxicology and crime scene analysis.



"There are a lot of opportunities at the Crime Laboratory," he said. "I want to make this a career. I can definitely see myself doing this for the rest of my working life."

Outside of the laboratory, Koubek enjoys playing sports, including volleyball, softball, golf and bowling. He also enjoys camping, traveling, and spending time with family and friends. Noting that he and his wife have recently moved to Painesville, Koubek said they are looking forward to exploring Lake County.

# Ledeger: Middle School Under Fire

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Shortly before 2 p.m., Michos noticed Ledeger walking past the Plaza Motel. He was carrying an object "about four feet long wrapped in white plastic that had been taped," Michos later told police. He ran outside to tell Ledeger that he'd forgotten to take his cooler, but Ledeger waved him away.

Ledeger, 37, then jogged behind the Wickliffe Library. There, he ripped away the white plastic bags that concealed a New England Firearms "Pardner" 12-gauge single shot shotgun. Ledeger had purchased the firearm and a box of 25 shells on Nov. 3 at a Kmart in Cleveland. (CONTINUED ON NEXT PAGE)

At 2:10, Wickliffe Police received a 9-1-1 call from Dave Majka, a construction worker at the nearby Lincoln Road sewer project. He reported that a man with a shotgun had entered Wickliffe Middle School. Majka heard gun shots just seconds after his call ended.

Wickliffe police officer Thomas Schmidt was among the first responders. From the parking lot, he saw James Anderson, the school's assistant principal, crawling through a window and running away from the building. Schmidt drew his gun and entered through the main doors.

Wickliffe Police Officers Leonard Nosse Jr., Joseph Matteo and James Hula were also at the scene immediately. Nosse entered the school through the east end, while Matteo and Hula positioned themselves on the west side of the school where children were being evacuated.

When Ledeger had first entered the school, he approached the administrative offices and asked to see either the principal or the assistant principal. Anderson happened to walk past at that moment and Ledeger leveled his gun at him. Anderson bolted into Richard Stalker's office just as Ledeger fired. He slammed the door and shoved a garbage can against it while Stalker scrambled under his desk. Ledeger fired through the door several times. Anderson was struck in the buttocks and fingers, but he and Stalker were able to escape through a window.

Ledeger then walked down a hallway in the direction of Peter Christopher, the school's custodian, who had been standing outside the computer lab waiting for two teachers. A graduate of a technology institute in Cleveland, Christopher enjoyed tinkering with electronics of all kinds. He had offered to help the teachers with a computer issue.

As Ledeger moved towards Christopher, he aimed his shotgun at Tanya, a sixth-grader, who was standing in the hallway.

"He looked at me and pointed the gun right at me," she later told police. "Mr. Christopher was screaming at me to get away, to get out."

The 11-year-old ran into a classroom, where teachers had instructed the children to lie down on the floor. "I thought he would come after me because I could identify him," she said. "I was scared and crying."

Christopher pushed a teacher into the computer lab, and then stepped into Ledeger's path.

"Get the hell out of here!" he yelled. "Put the gun down!"

Ledeger fired twice, hitting Christopher in the chest.

The gunman then walked swiftly to the south end of the building, pushing terrified children aside with the butt of his gun. The children and faculty members



12-gauge shotgun used by Ledeger.

would later tell police that Ledeger seemed to be looking for specific adult males.

Lowell Grimm, the school's shop teacher and basketball coach for 29 years, was standing by the boy's locker room when he first saw Ledeger. Grimm pushed a girl into the locker room and then turned to run. Ledeger fired three shots at Grimm, striking him in the torso and arm.

Grimm staggered through an exit door and then collapsed in front of a large group of students who had been evacuated outside.

Nosse, meanwhile, was moving quickly through the main hallway in search of the gunman. Scanning each room as he passed, he saw Christopher lying motionless on the floor of the computer room. At that moment, Ledeger came into sight.

"Drop the shotgun! Drop the shotgun!" Nosse yelled. When he didn't comply, he fired once with his Beretta 9mm pistol, striking a window behind Ledeger.

When Ledeger scurried away, Nosse radioed for help for the grievously wounded Christopher.

Thomas Schmidt, a 24-year police veteran, had just stepped inside the main entrance when he saw the barrel of Ledeger's shotgun appear around a corner. Suddenly, the muzzle flashed and Schmidt went down. He was wounded in the stomach and right arm. A right-handed shooter, Schmidt was unable to hold his pistol.

Ledeger ducked into an alcove to reload. Nosse, hearing the gunshot, ran towards Schmidt, who was lying on a large doormat decorated with the Wickliffe Blue Devil mascot.

"Officer down!" Nosse radioed. He kneeled next to Schmidt, protecting him (CONTINUED ON PAGE 6)

# Ledeger: Middle School Under Fire

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After being found guilty of Aggravated Murder, Attempted Murder and several other counts, Ledeger was sentenced to serve a prison term of 57 years to life.

until other officers arrived. Just then, he heard footsteps rapidly approaching and Ledeger appeared. His shotgun was pointed at Schmidt. Nosse laid down suppressive fire to prevent Ledeger from firing again at Schmidt. The shots flew past Ledeger, chipping masonry walls and splintering wood doors. One of the bullets struck the school trophy case, spraying glass throughout the hallway.

Ledeger vanished around a corner, but quickly reemerged. Nosse again ordered him to drop his gun. He then fired multiple times, striking Ledeger in the right hand, right foot and stomach. When Ledeger fell to the floor, Nosse kicked the shotgun from his hands.

"He's down," Nosse radioed. "Suspect in custody down."

Ledeger's rampage had lasted three minutes and 34 seconds.

"When I first arrived at the school, I had a plan of getting in the building and cutting him off before he saw me," recalled Nosse, now a sergeant with Wickliffe Police. "I had heard that he was on the west side of the building, so I came in from the opposite end. It was a matter of staying focused and executing my plan. I wasn't even thinking. I was just running through my protocols."

Ledeger, Schmidt and Grimm were all rushed to area hospitals in serious condition. Anderson was treated and released for his pellet wounds.

Peter Christopher, 41, died at the scene. Nearly 800 people attended his funeral at Our Lady of Mount Carmel Church in Wickliffe, where he sang in the choir.

Tanya's grandfather credited Christopher for saving his granddaughter's life. "When the guy was shooting, Mr. Christopher got her out of the way and he got shot," he said. Ledeger, a high school dropout who had attended Wickliffe Middle School, never fully explained the reasons for his actions. While Ledeger was being loaded into an ambulance, a police officer asked him why he came to the school. "Revenge, sir," he answered.

Police speculated that Ledeger may have been seeking vengeance for harsh discipline he received there as a student. School records showed that Grimm was Ledeger's ninth-grade shop teacher.

At his court arraignment, Ledeger, a diagnosed paranoid schizophrenic, pleaded not guilty by reason of insanity. However, during court hearings to determine Ledeger's competency to stand trial, Lake County Prosecutor Charles E. Coulson successfully argued that Ledeger was sane when he embarked on his shooting spree.

"There was a cunningness there; there was purpose," Coulson said at the time. "He wasn't delusional. This was a planned act."



Hallway at Wickliffe Middle School where Ledeger was apprehended.

After Ledeger was ruled competent, he agreed to a plea bargain that spared him the death penalty. He received a life sentence with no chance of parole for 57 years. In 2011, Ledeger died in prison of natural causes. (CONTINUED ON NEXT PAGE)

None of the school's 530 students were injured by Ledeger, but memories of his shooting spree would haunt many of the children for years afterward.

David Green, a criminalist with the Lake County Crime Laboratory, also has vivid recollections of that afternoon two decades ago. Green was part of the Crime Laboratory team that helped Wickliffe Police process the shooting scene.

"It was just crazy; there was so much going on," said Green, recalling his impressions when he first arrived. At that time, school shootings were rare, he noted. The Columbine High School shooting, in which 13 students



Bullet-ridden trophy case at Wickliffe Middle School.

lost their lives, didn't happen until 1999.

As Green, then 27, surveyed the broken glass and bloody hallways, he said he was struck by the violence that had just occurred.

Green was joined at the middle school by criminalist Mitch Wisniewski (now retired) and Linda Erdei, who served as a serologist, crime scene analyst and lead DNA analyst until she was named director of the Crime Laboratory in 2000.

With Ledeger in custody, the Crime Laboratory team focused its efforts on collecting firearms evidence and blood at the various shooting spots.

"The suspect was just walking through the school and blasting away," Green said. "We knew where the one gentleman was killed and we knew where the others were shot, so we moved as a team from location to location. Our primary goal was to collect victims' bodily fluids, photograph the scene, and collect spent ammunition rounds such as extracted casings and shotgun wadding. That's how the Wickliffe Police Department wanted us to help."

Speaking with witnesses and first responders is the typical starting point for crime scene processing, said Green, who joined the Crime Laboratory in 1989. He

added, however, that it's not unusual to get conflicting stories from eyewitnesses after a chaotic event.

"Witnesses can become confused, especially in a situation like the Wickliffe school shooting, where teachers are concerned for themselves and their students," he said. "But we have to start somewhere, so we base our initial assessment on the witnesses' statements. Then we let the evidence tell us what happened, because the science always leads to the truth."

Coulson, reflecting about the case, stated, "We can't overlook the human tragedy in this incident, but going forward there were important lessons gained by law enforcement about how to respond to school shootings. The way the Wickliffe Police Department responded to this emergency is now the model that is being embraced across the country. Law enforcement is now being trained that the best approach to an active shooter is to immediately confront the attacker rather than waiting to assemble and respond. A quick response is essential to minimizing loss of life and injury."

The 1994 shooting spurred discussions about how to improve school security in Wickliffe and other area districts. Back then, front doors at Wickliffe schools were all unlocked and anyone could walk in. Wickliffe now has locked doors with camera surveillance, and visitors need to be buzzed in by the main office.

Additionally, earlier this year, the school district implemented a Multi-Agency Radio Communication System (MARCS) that connects all Lake County schools directly with police dispatch. With MARCS, each school is equipped with a central radio system that can be activated during an emergency by pressing a single button. Once activated, an "open mic" is created, which gives school staff members a period of two minutes to announce and describe the ongoing emergency to central dispatch. The alert is relayed to all Lake County law enforcement agencies notifying them of the nature of the emergency and facilitating their quick response.

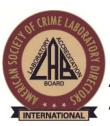
The Wickliffe Middle School shooting was the city's second multiple-victim incident that year. Six months earlier, troubled loner Richard Pinto killed two people and wounded a third at the Rokspot, a converted factory on Lakeland Boulevard where local musicians practiced.

Nosse said that Wickliffe Police processed the Rokspot crime scene themselves. "However, after the Rokspot shooting, we learned that it would be helpful to have an outside agency such as the Lake County Crime Laboratory come in and collect evidence," he said. "Having the Crime Laboratory at the middle school shooting freed us up to handle the things we needed to do."



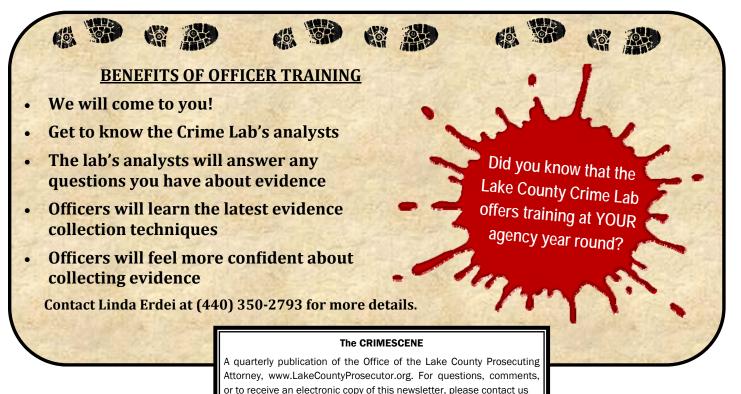
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