



ASTEE

Board of Directors

Sandy Koch

President

Emily Weber

President Elect

Chad Schennum

Treasurer

Michelle Drake

Secretary

Micheal Villarreal

Director

Michael Trimpe

Director

Chris Hamburg

Director

Katherine Igowsky

Executive Secretary

November 2020

ASTEE Newsletter

Table of Contents

Message from the President	1	Committee Updates	7
Update - Research Grant Awardee	2	Important Dates	10
Handbook of Trace Evidence Analysis	4	Locard Award Winner	11
ASTEE Crossword	5	May We Introduce You To...	14

Message from the President

Hello ASTEE Members,

My hopes at the beginning of the year were to build on the momentum from our 10 year anniversary celebration and to plan for where we want to take this organization over the next decade... But as with so much of life in 2020, things took a detour in March leading us to a year many of us will not soon forget. While there was much that has been difficult, there were aspects that were also inspiring in how people and laboratories adapted and persevered.



The education committee worked with members and forensic partners to present several webinars and several of our sponsors also offered webinars that were informative and helped provide online training when we could not meet in person. The links to several of those training webinars are on our new website and the discussion boards have been an effective way to engage in ongoing discussions among our members who remain physically distanced. While online training and conferences have served us well this year, there is nothing that can replace the added value of personal interaction and in-person training. With that in mind, the education committee developed a new application to encourage labs to host future training events for our members for when we can get back to meeting in person. I hope to see the members-only section and discussion boards used more in the coming years to keep us connected between conferences when we back are in our separate labs and facing an unusual analytical question.

Message from the President continued...

Though many conferences were cancelled this year, the combined meeting planned with NEAFS for this fall transitioned to an online format. We are working on a combined meeting for next year and will hope to see many of you there next year. The ability to adapt and make the best of the situation has helped keep our field relevant and has allowed members to share their research in different ways. As we were essentially in a holding pattern with so much of our professional training and meetings being cancelled we refocused to build up our financial reserves after the expense of new website. Through this process the ASTEE board has ensured that we are well positioned to sponsor future training events, offer travel awards to attend meetings in the coming years, and that we will be able to facilitate professional network building at conference receptions when it is safe to meet again in large groups. Until then we continue to attract new members and are building the content available on the website so I am hopeful that once we get past this pandemic, we will emerge stronger together.

It has been an honor to serve as President of ASTEE and I look forward to seeing how this organization develops in the coming years.

Stay Healthy and Best Wishes,

Sandy Koch

2020 ASTEE President

Update from Research Grant Awardee

In 2016 I received the research grant award from ASTEE to support an interlaboratory study on microscopical hair comparisons. The funds went toward supplies needed to prepare the test samples and shipping to participating examiner laboratories. Many ASTEE members responded to my request for participation in this study and their participation and willingness to give their time and share their expertise was invaluable. The results of this study have now been published in an early view format online and it is expected to be in the January issue of the Journal of Forensic Sciences. I want to thank all the hair examiners who participated for their willingness to share their time and expertise. I hope the results will be useful to the field.



Paper

Microscopical discrimination of human head hairs sharing a mitochondrial haplogroup

Sandra L. Koch PhD✉, Corey Liebowitz BS, Mark D. Shriver PhD, Nina G. Jablonski PhD

First published: 21 September 2020 | <https://doi.org/10.1111/1556-4029.14560>

Funding information:

Funding provided by the National Science Foundation, Award 1453571, as well as the American Society of Trace Evidence Examiners.

UV-VIS ABSORBANCE

UV-VIS REFLECTANCE

UV-VIS FLUORESCENCE

RAMAN

UV-VIS POLARIZATION

GLASS REFRACTIVE INDEX

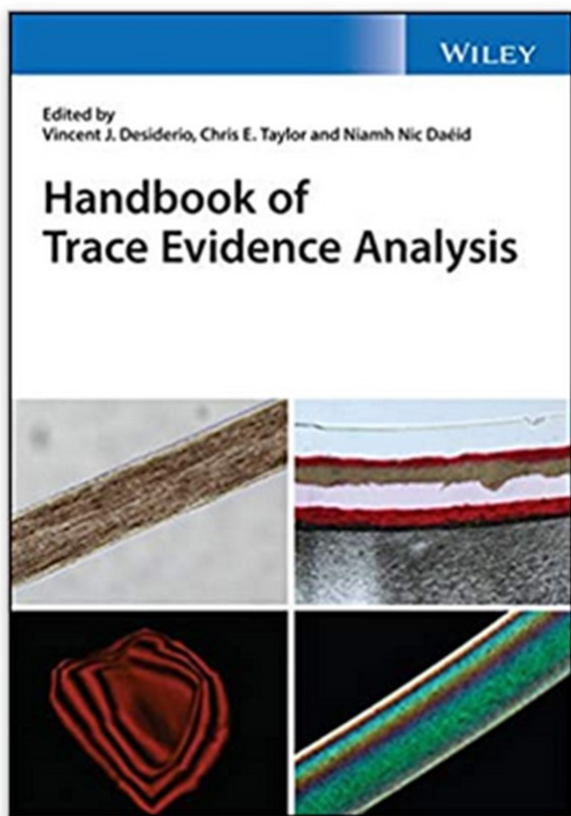
WWW.MICROSPECTRA.COM



ATTENTION ASTEE MEMBERS

There is a new Trace Evidence book, Handbook of Trace Evidence Analysis, that will be published soon and advanced copies are now being sold. ASTEE's very own past presidents Chris Taylor and Vinny Desiderio are two of the editors.

The book also features chapters by many distinguished ASTEE members and respected Trace Evidence experts.



Chapter 1: Trace Evidence Recognition, Collection, and Preservation: *Ted Schwartz, Daniel Rothernberg, and *Brandi Clark

Chapter 2: Polarized Light Microscopy for the Trace Evidence Examiner: *Andy Bowen (ASTEE- Past President)

Chapter 3: Paints & Polymers: *Robyn Weimer (ASTEE- Past President); *Diana Wright (ASTEE-Edmond Locard Award for Excellence Recipient) and Tamara Hodgins

Chapter 4: Forensic Hair Microscopy: *Jay Beckert

Chapter 5: Fibers: *Sandy Koch (Current ASTEE President) and Kornelia Nehse

Chapter 6: Interpretation of Glass Evidence: *Tatiana Trejos, James Curran, and Tacha Hicks

Chapter 7: Interpreting Trace Evidence: *Patrick Buzzini and James Curran

* ASTEE Member

ISBN-13: 978-1118962114

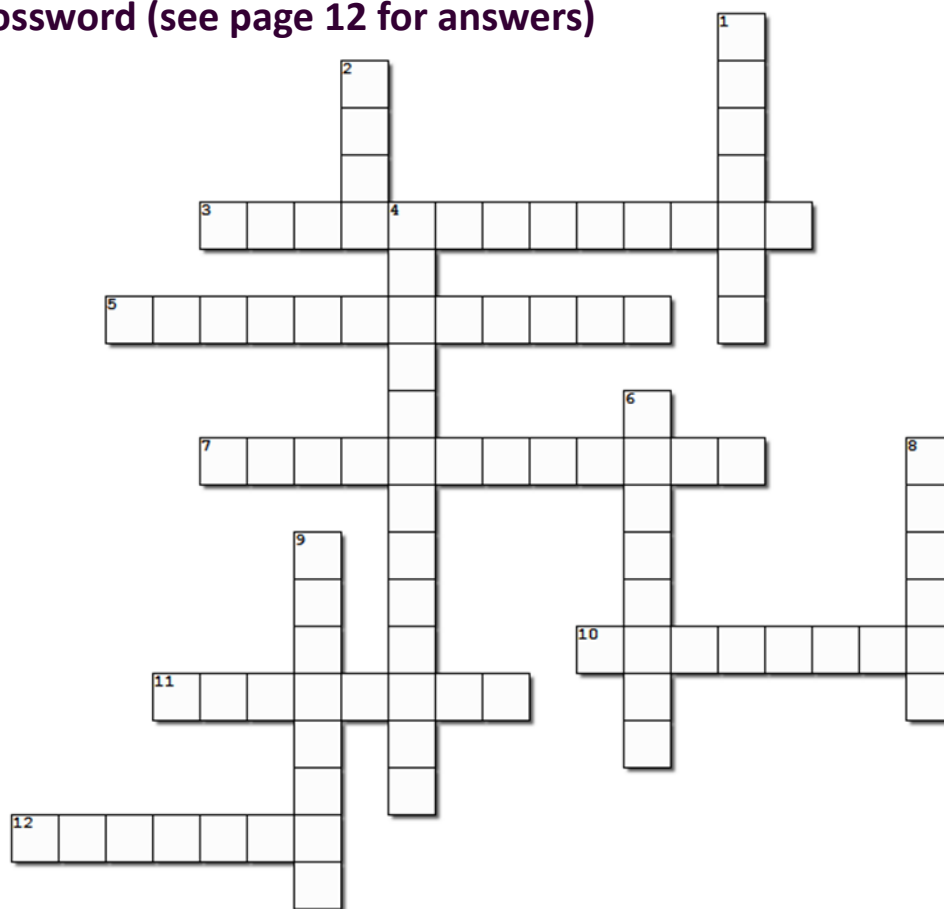
ISBN-10: 1118962117

Reserve your copy today!!! More information on this book and ordering information can be found at the following website (please note that other purchase sources are available).

https://www.amazon.com/Handbook-Evidence-Analysis-Vincent-Desiderio/dp/1118962117/ref=sr_1_1?dchild=1&keywords=9781118962114&linkCode=qs&qid=1596198810&s=books&sr=1-1

Some of the royalties of the sale of the book will go to ASTEE- Thank you Chris Taylor!

ASTEE Crossword (see page 12 for answers)



Across	Down
3. Is one of the bylaws of Thanksgiving that there must be pumpkin pie? To learn the bylaws of ASTEE, the chair of the Bylaws Committee can help! (2 words)	1. Is that Uncle that drives you crazy over for Thanksgiving? In the spirit of social distancing, remind him that he needs to give you at least this amount of CDC recommended space. (2 words)
5. If there is one thing we can all agree on recently, it's that one can never have too much hand sanitizer. What chemical is the most commonly used active ingredient? (2 words)	2. What is Thanksgiving without some friendly family competition? You'll need this item, familiar to fiber analysts, to be able to play tug-o-war.
7. Your future in 2021 is looking so bright, you're going to need shades. Specifically shades that incorporate the same feature as a commonly used compound microscope.	4. The day after Thanksgiving, you notice someone has run over your mailbox. Thankfully it snowed the night before and you have a beautiful tire impression. What technique will you use to make a cast? (2 words)
10. The turkey caught on fire! Was it sabotage? You collect some debris in an airtight container and use the GC/MS to see if you can detect any mixtures of this family of chemicals.	6. The breaking of this turkey bone as a traditional Thanksgiving ritual is a great opportunity to introduce your family to the concept of physical match!
11. Don't cheers your family too hard, or else you may have shards of this type of glass all over your Thanksgiving meal. (2 words)	8. This feature of a characteristic GSR particle also describes what your mug of hot chocolate will taste like if you don't let it cool a bit first.
12. Oh no. There's a hair in your food! This root stage informs you that it fell out naturally...if only you knew who it came from.	9. Christmas is coming! You'll need some tape with high tensile strength to package your brother's gift, a brand new 16lb bowling ball – which pressure sensitive tape could you use?



Super Light Element Analysis



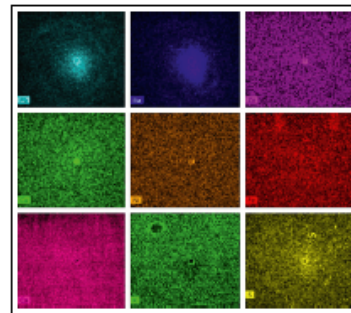
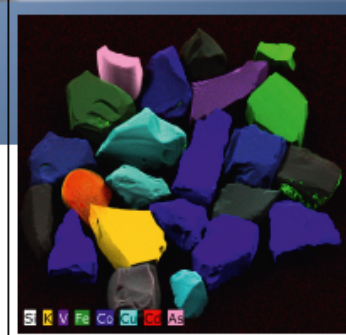
M4 TORNADO^{PLUS} For Forensics Analysis - Glass to Gun Shot Residue

- High spatial resolution analysis from carbon to americium
- Superior light element detection
- Innovative aperture management system (AMS) for high depth of field
- Quick change sample stage for easy sample loading
- High throughput for vastly increased acquisition times
- Meets ASTM E2926 - 17: Standard Test Method for Forensic Comparison of Glass Using Micro-X-ray Fluorescence (μ -XRF) Spectrometry



www.bruker.com/m4tornado-plus

<https://mbna.bruker.com/acton/media/15240/forensic-glass-micro-xrf>



Innovation with Integrity

Micro-XRF

ASTEE at a Glance – Committee Updates

Audit Committee

The Audit Committee has completed ASTEE's 2018 Financial Audit and found the documentation for payments and receipts in order with no discrepancies between the register and the bank statements. A summary is provided below.

The detailed audit report will be posted to the ASTEE website in the members only section. In 2018 we transitioned to electronic preservation of ASTEE financial records and that has helped facilitate quicker audits. The 2017 records are being scanned into electronic format and that audit is still in progress. The 2019 audit has started and should be completed shortly.

	2015	2016	2017	2018
IN	\$16,626.64	\$14,003.44	***	\$12,207.13
OUT	\$11,103.14	\$7,433.75	***	\$10,415.27

Explanation of expenses: In recent years, ASTEE has sponsored three networking events held in conjunction with AAFS, our partner meetings, and Inter/Micro. In addition, awards for member training, research, professional development, scholarship, and meeting travel have been offered. These costs are partially offset by membership dues and our sponsors: CRAIC, EDAX, Foster & Freeman, McCrone Research Institute, and Hooke College of Applied Sciences.

Research Committee

One of the roles of the Research Committee is to help pair graduate or undergraduate students interested in conducting research projects with forensic science practitioners. The forensic scientist can guide the student in choosing a project that will be relevant to the field, and provide assistance as needed in the research design, execution, and interpretation of results. If you are interested in assisting a student or a forensic scientist trainee with a research project, know a student who is looking to perform practical research, or have a specific research need you'd like fulfilled, please don't hesitate to reach out to asteeresearch@gmail.com. More information about the Research Committee is available on the ASTEE website at <https://www.asteetrace.org/rcommittee>.

Communications Committee

If you haven't already, please [register](#) for an account on the ASTEE Forum. Once you do, navigate to the User Settings page (upper right corner) and subscribe to the Email Digest on a daily or weekly basis, so you will be kept in the loop about new posts and announcements from ASTEE.

Is there a Trace Evidence job opening at your agency? Did you sign up for a webinar that you think the TE community should know about? Do you have a trace-related question to pose to your peers? We encourage you to post in the ASTEE Forum! Any ASTEE member can create a post for the entire group to see. Email asteetrace@gmail.com if you have any questions about creating your first post.

ASTEE at a Glance – Committee Updates continued...

Education Committee

Thank you to those who attended the low explosives webinar on July 16th! We had over 135 attendees for this informative presentation. Reminder that if you missed it, the webinar has been archived on the FTCoe website (you need an account to view the content; <https://forensiccoe.org/webinar/intact-low-explosives-analysis/>).

Be sure to visit the ASTEE member forum! We have been posting various journal articles, conference materials, and online resources for your enjoyment. Please post anything you would like to share with the membership! If you have any questions, please contact the committee at the e-mail listed below.

If you or your laboratory are interested in hosting a workshop, if you have ideas for potential webinars, or you can recommend someone who may be able to offer a workshop or webinar, please send an e-mail to astee.edu.committee@gmail.com.

Elections Committee

The 2020 ASTEE election was a great success! Congratulations to Daniel, Kelsey, and Jenny!

Next year we will be looking to fill the President Elect, Secretary, and a Director position. It is a great way to get involved in the forensic community. If you are a full member in good standing, I encourage you to think about running in 2021. If you are an associate member please consider upgrading to a full member. Please contact the membership chair with any questions about your membership status.

The elections committee is also looking for new members. If you are interested in participating in the elections committee please contact Katie Igowsky at Katherine.Igowsky@state.mn.us.

Election Results:

President Elect:

- Daniel Mabel 100%
- Abstain 0%

Treasurer:

- Kelsey Winters 100%
- Abstain 0%

Director:

- Dr. Jenny Lounsbury 68%
- Stephanie Freiwald 27%
- (write in) I don't feel I can vote since I am one of the individuals 1%
- (write in) Dana Greely 1%
- Abstain 0%



PROFESSIONAL DEVELOPMENT COURSES

Hooke College offers a number of regularly-scheduled courses designed for busy industry professionals. Spend a week acquiring broader knowledge of analytical instrumentation, and learn new techniques to take back to your lab. Learn the practical knowledge that our industry experts have gained through decades of practice.

CUSTOM COURSES

Our instructors, who are practicing scientists and subject matter experts, understand that your unique problems require unique solutions. Begin with the content of our existing course offerings, then work together with us to design a curriculum that addresses your specific needs.

INDUSTRIAL MICROSCOPY SPECIALIZATION

This program consists of attending four professional development courses with hands-on instruction, each followed by a practicum characterizing unknown samples. Upon successful completion of the program, together with a capstone project, students earn an Industrial Microscopy Specialization.

LEARN ON INDUSTRY'S MOST MODERN EQUIPMENT

- JEOL scanning electron microscopes
- Thermo and Bruker FTIR systems
- Olympus BX line of microscopes
- Renishaw Raman microscope

Questions?

Contact education@hookecollege.com | 630-887-7100



“I appreciate that the instructors are practicing scientists. I really enjoyed the times the instructors or other students told stories about their personal experiences because it helped put things in perspective for the real world.”

— M. Shannon, Miami-Dade Police Department

ASTEE at a Glance – Committee Updates continued...

Publications Committee

Newsletter

The Publications Committee is always looking for new content to share with ASTEE Members! Please send any ideas for ASTEE Newsletter content, including *News You Can Use* topics, to Kiersten Coffin (Kiersten.coffin@dps.texas.gov).

JASTEE

Jeremy Morris is stepping down at the end of 2020 as the Editor of JASTEE. We are excited to announce that Heidi Prough of the Michigan State Police has agreed to be the new Editor of JASTEE. Heidi previously served as the Formatting Editor for the Journal. Thank you Heidi for helping advance ASTEE and trace evidence in this important role! And thank you Jeremy for your time as JASTEE Editor!

Awards Committee

Due to the COVID-19 pandemic, ASTEE and the Hooke College of Applied Sciences have decided to cancel the 2021 Hooke College of Applied Sciences Training Award. We hope to resume this award again in 2022.

The Student Research Project Award is due on December 1. This is a \$250 research award for undergraduate or graduate students that are performing research specifically in the field of Trace Evidence. The applicant must be pursuing a Bachelor's of Science or higher degree in the natural sciences or forensic sciences.

The Scholarship Award is due February 17. Graduate students in the field of Forensic Science who plan on pursuing work in the Trace Evidence field are encouraged to apply for the ASTEE Scholarship Award. The Scholarship provides \$500 and a 2 year membership in ASTEE.

Award information and applications are on the ASTEE website.

Important Dates

December 1, 2020	Student Research Project Award applications due
December 7-9, 2020	Virtual meetings for Chemistry: Seized Drugs & Toxicology SAC & subcommittees and Chemistry: Trace Evidence SAC & subcommittees
February 17, 2021	Scholarship Award Applications due

Locard Award Winner

What a surprise and humbling honor to be selected for The Edmond Locard Award for Excellence in Trace Evidence. The laboratory employed some truly sneaky tactics to keep it hidden until our organization's quarterly awards ceremony. I want to thank Diana Wright, the American Society of Trace Evidence Examiners (ASTEE) Awards Committee, and the Board of Directors for the nomination and selection.

I have been in forensic science and associated with Trace Evidence for over 28 years; wow, has time flown. Although I feel I just contributed and supported Trace Evidence where and when I could, this recognition by my peers is certainly an honor for me, especially because the recognition has come from ASTEE. I have had a fantastic and memorable time in Trace Evidence, and there is more work to be done. When I look back on my professional career some of my most rewarding times have been when I was part of group working and planning to make forensic science better. Being active in forensics and Trace Evidence has provided many opportunities to meet other professional colleagues and create lasting friendships. I often find myself trying to find the courage to participate or lead professional committees and groups. Working with and meeting great people along the way has made the job easy and rewarding. Have the courage to volunteer and participate because trace evidence examiners are a great bunch of folks who will welcome you with open arms!

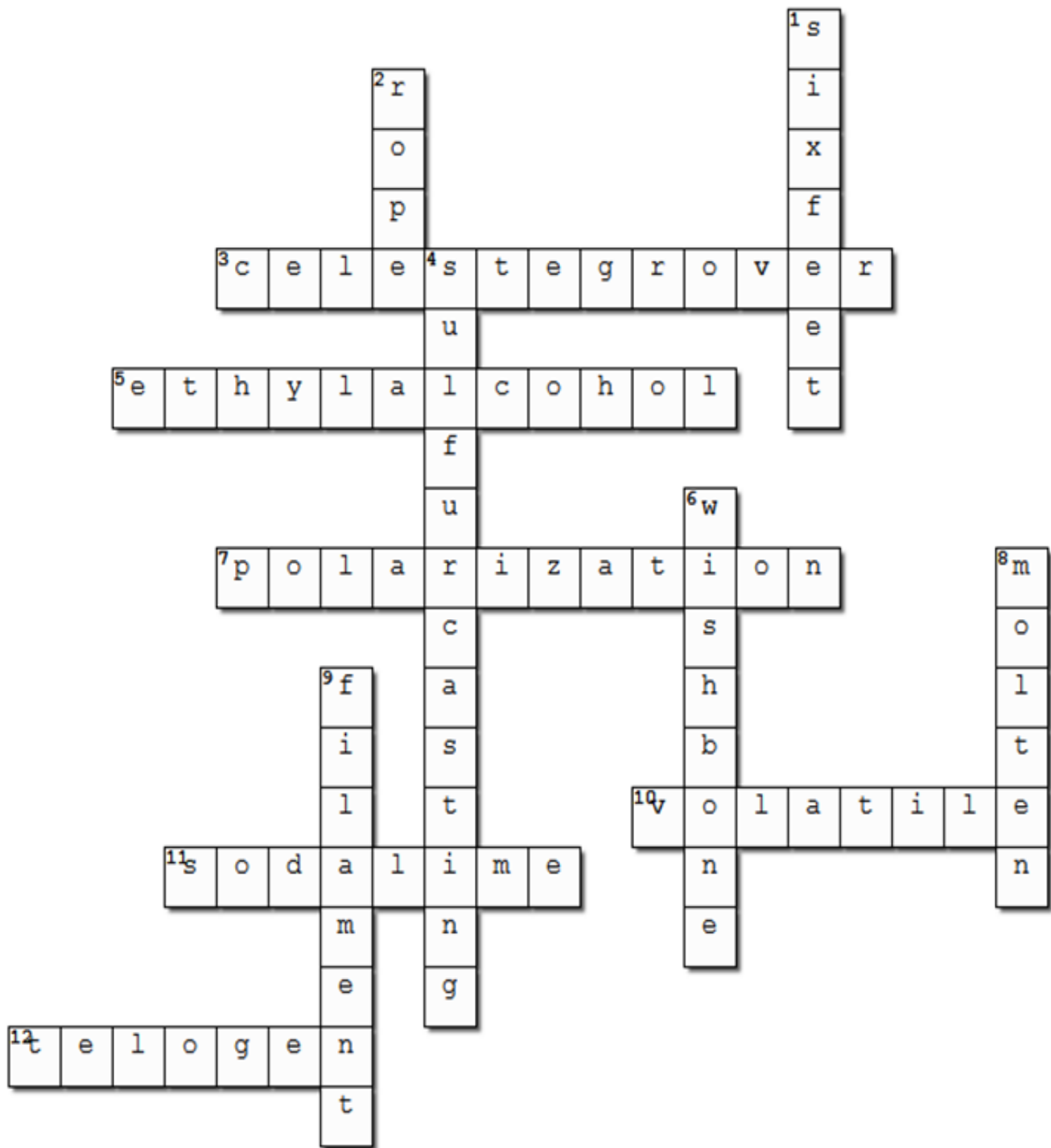
Thank you to my wife for understanding my passion to be continuously involved. Thanks to all of you that I have encountered in my career - too many to list here - as you all transferred a trace of wisdom, knowledge, betterment, and friendship to me and influenced my career.

Thank You and Kind Regards,

Chris E. Taylor



ASTEEN Crossword Answers





HELP MCCRONE RESEARCH INSTITUTE TODAY

Like many other organizations and institutions at this moment in history, McCrone Research Institute has been greatly impacted by this unprecedented pandemic. Due to COVID-19, **all Institute operations and programs have been temporarily suspended.**

For the first time in our organization's history, **we are asking for help.** We have launched a COVID-19 Relief and Preservation Fund. We have already experienced early success towards our initial goal and are nearing \$50,000 raised to date, thanks to generous supporters. However, with no end in sight of the pandemic, our needs are still great.

Please consider making a gift today to preserve the legacy of Walter and Lucy McCrone and ensure our future delivery of world-class microscopy education.

You can make a direct gift by visiting our [GoFundMe Charity](#) page, or clicking the donate link on our website, mccroneinstitute.org. Thank you for your support!



McCrone Research Institute's first-ever virtual course! Students joined via Zoom from 6 states, 3 countries and 2 continents!

May We Introduce You To...

May we introduce you to... Kiersten (LaPorte) Coffin

Occupation: Forensic Scientist in the Trace Evidence Section with the Texas DPS Crime Laboratory

What Trace Evidence sub-discipline(s) are the focus of your work? Hair, Impressions, Paint/Polymer, Physical Match, Fibers

What is your favorite quote? *'Do not go where the path may lead, go instead where there is no path and leave a trail.'* —Ralph Waldo Emerson

What do you like to do in your down time? I like to enjoy the outdoors with my family whether it is camping, going on a bike ride, hunting, running, walking the dogs, etc. When I am not outdoors I am usually inside working on some sort of craft project or house renovation.

Tell us something that would surprise others about you: I love dressing up for Halloween! It is a challenge to think of a new theme for the entire family every year (my husband, step-son, and two dogs) and to DIY the costumes. You can never be too old to dress up for Halloween!



May we introduce you to... Anne Koettel

Occupation: Trace Evidence Examiner at the Tarrant County Medical Examiner

What Trace Evidence sub-discipline(s) are the focus of your work? GSR, Impressions, Hair

What is the top activity on your bucket list? I would love to travel to Australia. I have a couple old friends who now live there, but always hated the thought of “wasting” a couple vacation days getting to the opposite side of the world.

What do you like to do in your down time? With an active four year old and a puppy, what is downtime? Ha! I enjoy cooking, baking, watching sports (particularly the Cubs, Hawkeyes, and Dallas Cowboys) and reading when I find some time.

Tell us something that would surprise others about you: I grew up in the same house all the way through high school, but moved to 4 different states within the first 10 years after college.





WWW.ASTEETTRACE.ORG