



# Crime Scene

Winter 2011

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## 2011 NWAFS MEETING ANNOUNCEMENT INSIDE



### ***INSIDE***

*President's Message*

*Editor's Message*

*And More About the Newsletter*

*NWAFS Meeting Minutes*

*Asked and Answered*

*NWAFS Technical Abstracts*

*Pg 3*

*Pg 4*

*Pg 5*

*Pg 7*

*Pg 12*

*Pg 18*

*Meet the NWAFS Board*

*NWAFS 2011 Conference*

*Book Review*

*Meeting Announcements*

*NWAFS Notes*

*Caption This!*

*Pg 24*

*Pg 32*

*Pg 34*

*Pg 36*

*Pg 38*

*Pg 40*

## NWAFS OFFICERS for 2010 - 2011

### Executive Committee

President	Matt Noedel Noedel Scientific <a href="mailto:MNoedel@att.net">MNoedel@att.net</a>
Vice-President	Dan Alessio Oregon State Police <a href="mailto:Dan.Alessio@state.or.us">Dan.Alessio@state.or.us</a>
Member-at-Large	Chris Hamburg Oregon State Police <a href="mailto:Chris.Hamburg@state.or.us">Chris.Hamburg@state.or.us</a>

### Secretaries

Membership	Corinna Owsley Idaho State Police <a href="mailto:Corinna.Owsley@isp.idaho.gov">Corinna.Owsley@isp.idaho.gov</a>
Secretary-Treasurer	Heather Campbell Idaho State Police <a href="mailto:Heather.Campbell@isp.idaho.gov">Heather.Campbell@isp.idaho.gov</a>
Technical	Trevor Allen Washington State Patrol <a href="mailto:Trevor.Allen@wsp.wa.gov">Trevor.Allen@wsp.wa.gov</a>
Editorial	Jeff Jagmin Washington State Patrol <a href="mailto:Jeff.Jagmin@wsp.wa.gov">Jeff.Jagmin@wsp.wa.gov</a>

## *PRESIDENT'S MESSAGE*

I consider it an honor and great accomplishment to have gained the trust of the Northwest Association of Forensic Scientists' and receive the appointment as President of the organization. As such, I recognize that I work for you, the membership. In my effort to promote the NWAFFS as a first rate scientific organization, I will welcome all comments, suggestions or criticisms that you may have. Please call, email or yes-even text—about the things you hope to see the NWAFFS offer and strive for in the future years.

### Activity Log—President NWAFFS-1<sup>st</sup> Quarter

- Made initial contact with Board. Approved a one time gift of appreciation for NWAFFS volunteer web master-Jeff Borngasser to show the appreciation of the Board and membership for his past years of volunteer service.
- Advise the new Technical Secretary, [Trevor Allen WSP Crime Lab Spokane, WA](#); about soliciting and getting background data to help organize potential workshops for future training.
- Advise the new Member at Large, [Christopher Hamburg OSP Crime Lab Portland, OR](#); about recruiting and organizing host sites (both independent and joint meeting opportunities) for 2012, 2013 and beyond. Further using the free professional meeting planning company (HelmsBriscoe) to help hosts with contract and location hotels in their cities.
- Organize and secure a meeting site in Tacoma, WA for the 2011 NWAFFS conference. The Hotel Murano in downtown Tacoma has been secured for the conference the week of September 25, 2011.
- Initiate a conference call gathering the Board members to assure that we are coordinated and prepared to meet the ongoing challenges facing the NWAFFS

Finally, I want to ask you to consider this question:

### What do I want from membership in the NWAFFS?

Is it just to have a line item on your resume? Is it a platform for you to get your first presentation under your belt? Is it a source of career advancement via training or conferences? Depending on how you answer the question I hope it increases your awareness of what the NWAFFS can be. In the years to come, the Board of the NWAFFS is committed to providing all of the above but remember—this is YOUR association and YOU can influence where we go and what happens to us!

I challenge you to get involved and write a brief technical note for submission or suggest or provide training at the next conference. But most of all—get involved—this is your organization and you should be proud to list it among your professional affiliations.



Matthew Noedel, President NWAFFS  
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January 2011

NWAFS NEWSLETTER

# Editor's Message

In my last editor's message I wrote about getting ready for the upcoming Portland meeting. Well, it went on with great success and I want to thank the Oregon State Police Laboratory personnel who helped put on this meeting and made it well worth attending. There was some very sound workshops and the abstracts were the best that I've seen in a long time. A lot of business occurred at this meeting such as the election of new board members and the acceptance of our new members - welcome!

The new board has been, and continues to be, very busy. Topics that the board are working on include future NWAFS meeting sites, potential workshops and getting technical newsletter articles peer reviewed. You will get to know a little bit more about each board member and the newsletter in this issue.

The announcement of the NWAFS 2011 meeting was made and will be held in Tacoma, Washington. It is not too early to get excited for, and plan to attend, the 2011 meeting as Matt Noedel is already shaping this meeting up to be one that you wouldn't want to miss. If you have an idea or wish to contribute in some way please drop me, or any of the board members, a line.

As we start 2011 I would like to wish you and your families a happy and safe new year. I look forward to working with or hearing from you all this year. Send me an email to tell me what you think!

*Thank you,  
Jeff Jagmin*

## About the Newsletter...

*Crime Scene* is the official publication of the Northwest Association of Forensic Scientists. It is published 4 times a year in the months of January, April, July, and October. The Newsletter welcomes submissions from its membership such as technical tips, case studies, literature compilations, workshop or training notifications, reference citations, commentary, historical accounts, and other topics of interest to the membership. The views expressed in articles contained in this publication do not necessarily represent the views of the Northwest Association of Forensic Scientists. The Association neither guarantees, warrants, nor endorses these views or techniques but offers these articles as information to the membership.

Please submit material for publication in Microsoft Word for Windows format as an e-mail attachment or on compact disk (CD). All technical material will be subject to peer review by NWAFS members. Requests for permission of any material contained in this newsletter may be addressed to the editor. Requests, or questions, of technical submissions will be directed to the originating author. For more information regarding the Newsletter contact:

Jeff Jagmin (editor)  
Washington State Patrol Crime Laboratory  
[Jeff.Jagmin@wsp.wa.gov](mailto:Jeff.Jagmin@wsp.wa.gov)

## And More About the Newsletter..

There were several thoughts and discussions that were brought up at the Portland meeting in regards to the NWAFS newsletter. First, I will be sending the newsletters directly to you, the membership, via email. Jeff Borngasser, our webmaster, will still be updating the website and you can still get your journal there if you so desire. So, once again, if you have not updated your contact information, please do so soon.

A question that I brought up was, “should the newsletter be made public or shall we continue to only distribute to our members?” On one hand the NWAFS association has a newsletter with good content that is important to the entire forensic community. On the other hand, membership has a price and the newsletter is part of the deal. The decision was tabled at this time and will be reevaluated as our newsletter receives more technical submissions. This leads into the next two topics, author’s rights and peer review.

While at the meeting I was asked about the ownership of the contributions of the articles. As stated in the NWAFS constitution, our organization is “*to encourage the dissemination of information within the fields of forensic science and to discuss problems of common interest.*” With this in mind the newsletter is an avenue to share information with our membership within our organization. When a technical article is submitted, and accepted, for publication there is no transferring agreement rule between submitting author and newsletter. The ownership of each technical submission remains with the original author(s) - NWAFS does not take ownership. Check out more on Copyright by Jeff Teitelbaum in “**Asked & Answered**”.

Another topic that will impact the newsletter is having technical publications peer reviewed. The goal that I, and the editor’s before me, have set for the NWAFS newsletter is to consistently produce the highest quality scientific journal possible. Peer review is just another step forward in making this newsletter even better. Peer review would provide a critical, fair and non-biased evaluation of **science** based articles submitted for publication.

The proposed peer review process would be as follows:

Technical submissions for publication would be sent to me, the editor. Based upon the content I, or my designee such as the Technical Secretary, would solicit a NWAFS member either proficient or knowledgeable of the submission topic. Once a peer reviewer was found and agreeable to perform a peer review, I would send the publication minus the authors information along with a “guide to aide the peer reviewer”. Yes, this would be a blind review, or as close to as possible.

Thoughts for the reviewer to consider when reviewing a submission would be:

1. Is this submission written clearly using appropriate terms, language, and punctuation?
2. Does this submission reveal or discuss a relevant topic for the NWAFS membership?
3. Has sound scientific methodology been used in preparation of this submission?

Note – The scientific method has four steps:

1. Observation and description of a phenomenon or group of phenomena.
2. Formulation of a hypothesis to explain the phenomena.
3. Use of the hypothesis to predict the existence of other phenomena, or to predict quantitatively the results of new observations.
4. Performance of experimental tests of the predictions by several independent experimenters and properly performed experiments.

4. Are photographs appropriate – sufficient clarity and detail – too many or too few?

5. Are tables or charts clear and understandable – too cluttered – too much data/chart, etc?

6. Is the work original and properly cited?

Remember, it is NOT the responsibility of the reviewer to re-write or otherwise research the article for the author; rather it is to identify and bring any issues to the attention of the author. The “guide to aide the peer reviewer” that would be included would contain the following information:

#### GENERAL INFORMATION

Title of submission:

Date Received by Peer Reviewer:

Date Reviewed:

Date Received back to Editor:

#### PEER REVIEWERS COMMENTS

Comment on the clarity and organization of the submission:

Identify areas in the article that could be improved or clarified including photos, texts, charts or other features (if any):

#### REVIEWER RECOMMENDATION

Acceptable as received

Acceptable after revision

Not acceptable

#### ADDITIONAL COMMENTS

The reviewer would respond back to the editor, or designee, with this input. The editor would then be the intermediate for suggestions and comments. Upon successful completion of this process every peer reviewed article would then go into the newsletter annotated that the article went through the peer review process. It is my belief that this process will make our publication even stronger. After reading all of this I know that you are all even more excited and motivated to send in a technical submission. So, who is going to be the first NWAFFS pioneer to publish under peer review? Please let me know if you have any questions/comments or if you would be willing to be a reviewer.

*Thank you  
Jeff Jagmin*



# NWAFS BUSINESS MEETING MINUTES September 30, 2010

Meeting called to order at approximately 12:30 by President Glenn Davis

14 voting members required to hold quorum, 24 voting members present. List of members in attendance made by Membership Secretary, Corinna Owsley.

No meeting minutes to accept from 2009 meeting in Fort Collins, CO, because quorum was not met at the business meeting.

## Editor's Report – Jeff Jagmin

- Published 3 editions of the newsletter over the last year and the new membership roster.
- “Caption This” is back and the first winner was Chris Hamburg.
- Free meeting registration is still available for “Best Independent Newsletter Submission”. There was no recipient for the 2010 meeting.
- Discussion of NWAFS sponsoring working groups that would require the participants to publish the work in the newsletter and/or present at a meeting.
- Editor requested input on direct emailing of newsletter to membership.
  - Motion to begin direct email of newsletter made by: Kori Barnum
  - Second by: Aaron Brudenell
  - *Motion passed by unanimous vote*
- Discussion on making the newsletter available to the public. This would expand audience, but take away one of the benefits of being a member. Possibility of making some peer reviewed editions public and keeping others for members only. Jeff Borngasser mentioned the option of keeping the newsletter for members only, but posting the abstracts of peer reviewed articles on the website with author contact information.
  - Motion to table the decision until next year after evaluating if we are getting technical papers submitted: Rocklan McDowell
  - Second by: Nici Vance
  - *Motion passed by unanimous vote*

## Treasurer's Report - Glenn Davis

- Glenn Davis gave Treasurer's report for Robbie Heegel.
- Account Balances as of 9/30/10
  - Checking: \$27,293.11
  - Savings: \$48,175.45
  - Dreyfus and Investment Accounts: \$25,765.83
  - Total Assets: \$102,843.89
- Expenses for period of 10/30/09 through 9/30/10
  - Website: \$199.92
  - Accountant: \$100.00
  - PayPal Fees: \$115.70
  - 2009 Fall Meeting: \$1,026.82 (we lost money overall)
  - Total Expenses: \$1442.44



## NWAFS BUSINESS MEETING MINUTES

- Income for period of 10/30/09 through 9/30/10
  - Dividend Income (Dreyfus): \$35.99
  - Interest Income (Savings): \$39.46
  - Membership Dues: \$7,050.00
  - Total Income: \$7,125.45
- Total Income and Expenses: \$5,683.01
- Motion to accept Treasurer's Report made by: Rhonda Banks
- Second by: Rocklan McDowell
- *Motion passed by unanimous vote*



### Membership Report – Corinna Owsley

- Applicants for Provisional Regular Member:
 

Chrystal Bell Kelsey Brand Christina Buettner Joseph R. Callo Jr. Christine Cannon Ryan Chambers Marion Clark Calvin Davis Tanis Jimenez Jennifer Malone Angela Mayfield Brian Medlock Kerry Russell Steven Stone Odessa Wozniak	OSP Forensic Services, Portland, OR OSP Forensic Services, Clackamas, OR Wyoming State Crime Lab, Cheyenne, WY Las Vegas Metro PD, Las Vegas, NV Nampa PD, Nampa, ID OSP Forensic Services, Clackamas, OR WSP Crime Lab, Tacoma, WA OSP Forensic Services, Clackamas, ISP Forensic Services, Meridian, ID Wyoming State Crime Lab, Cheyenne, WY OSP Forensic Services, Bend, OR OSP Forensic Services, Bend, OR ISP Forensic Services, Meridian, ID WSP Crime Lab, Seattle, WA OSP Forensic Services, Springfield, OR
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- Applicants for Provisional Associate Member:
 

Nicole Frane Aaron Harker Kerri Neal Michael Odom Britany Sorenson	Student BSU, Intern ISP Meridian, ID Chubbuck PD, Chubbuck, ID Global Drug Testing Labs, ID DEA Western Lab, San Francisco, CA Global Drug Testing Labs, ID
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- Elevation of Provisional Regular to Regular (voting) Member:
 

Trevor Allen Megan Ashton Erica Graham Stacy Guess Larsen, Nika Lewis, Lamora Susan Russell Stenzel, Jason	WSP Crime Lab, Cheney, WA Montana Department of Justice WSP Crime Lab, Vancouver, WA ISP Forensic Services, Meridian, ID OSP Forensic Services, Ontario, OR ISP Forensic Services, Pocatello, ID Canyon CSO Crime Lab, Caldwell, ID WSP Crime Lab, Cheney, WA
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## NWAFS BUSINESS MEETING MINUTES

- Life Member Nominations  
No nominations for 2009/2010.

- Current NWAFS Membership:
 

Regular Members	195
Provisional Regular Members	42
Associate Members	25
Provisional Associate Members	1
Life Members	11
Total	274



- Members terminated 2009 (non-payment of dues)

Richard Carter	
Claire Chun	Honolulu PD Crime Lab
Chesterene Cwiklik	Cwiklik & Associates
Sara Day	CA Dept. of Justice
Kristine Deters	
Linda Errichetto	Las Vegas Metro PD Lab
Joe Faulkner	Sacramento Co. DA's Crime Lab
E. Lee Griggs	Protection Technology, Inc.
Barbara Hopkins	Utah State Crime Lab
Jennifer Iem	Cwiklik & Associates
Howard Kalyn	RCMP Forensic Lab
Lynn Kurtz	Montana Forensic Science Division
Lansing Lee	Oakland PD Crime Lab
Shawn Ludow	Utah State Crime Lab
Denise Lyons	Ventura Co. SO Crime Lab
Rebecca Maloney	Grand Junction PD
Bob McClymont	Alberta Fish and Wildlife
Eric McCollum	BATF
Linda McGarvey	Cwiklik & Associates
Bruce Palmer	CA Dept. of Justice
Scott Serena	Santa Rosa Police Department
Julianna Taylor	Utah State Crime Lab
James Weigand	CA Criminalistics Institute
Christine Wright	Utah State Crime Lab

- Resigned Members 2009
  - Jan Beck (4/1/09)
  - Elizabeth Carpenter (4/23/09)
  - Steve Clemens (4/1/09)
  - James H. Gaskill (9/8/09)
  - Rick Groff (4/21/09)
  - Dave Laycock (fall 2008)
  - William Moriwaki (8/3/09)
  - Jim Pex (5/4/09)
  - Jennifer Watkins (4/25/09)

## NWAFS BUSINESS MEETING MINUTES

- Members terminated 2010 (non-payment of dues)
 

Tom Abercrombie Minoru Aoki Dylan Argyle Chris Beheim Lisa Brewer Katharine Bruner-Benson Dianne Burns Shirley Chew Teddie Critchlow Chesterene Cwiklik Jonathan Dyer Edward Formoso Patrick Friel Tom Homan Steven Johnson Jeremy Johnston Sharon Landin Julie Long Linda Otterstatter Joseph Pasternak Rex Edwin Riis Elizabeth Selya Katharina Wiest	Oakland PD Crime Lab Las Vegas Metro PD Lab Utah State Crime Lab Alaska DPS Crime Lab Santa Clara Co. Crime Lab Arizona DPS Crime Lab CA Dept. of Justice, Santa Barbara DEA Western Lab Utah State Crime Lab Cwiklik & Associates OSP Crime Lab, Portland WA. State Toxicology Lab WA. State Toxicology Lab OSP Crime Lab, Portland LAPD Crime Lab Idaho State Police Forensics ID Dept. of Fish and Game Montana Forensic Science Division Federal Bureau of Investigation Montana Forensic Science Division South Dakota State Crime Lab CA Dept. of Justice
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- Resigned Members 2010
  - Kevin Byrne (10/12/09)
  - John Wehrenberg (5/24/10)
  - Kurtis Smith (for the end of 2010)
  - Vincent Vitale (deceased)
- Motion to vote all new members and membership elevation as a group by: Kori Barnum
- Second by: Jeff Jagmin
- *Motion passed by unanimous vote*
- Motion to accept by: Rhonda Banks
- Second by: Rocklan McDowell
- *Motion passed by unanimous vote*

### Vice President Report - Position Vacant

- No report

### Member-at-Large Report - Andrew Pacejka

- Not present and no report.

### Technical Resources Secretary - Bahne Kliezt

- Not present and no report.

## NWAFS BUSINESS MEETING MINUTES

### New Board Position Openings

- Glenn Davis, President, opened the floor for election nominations.
- Glenn Davis nominated to continue another term as President by Rocklan McDowell
  - Glenn Davis declined the nomination.
- Matthew Noedel nominated for President by Jeff Jagmin.
  - Second by: Glenn Davis, *motion passed by unanimous vote*
- Discussion on the risks/benefits of leaving the VP position open if no one is willing to serve.
- Dan Alessio nominated himself for Vice President.
  - Second by: Corinna Owsley, *motion passed by unanimous vote*
- Chris Hamburg nominated for Member-at-Large by Jeff Jagmin.
  - Second by: Rocklan McDowell, *motion passed by unanimous vote*
- Heather Campbell nominated for Secretary/Treasurer by Corinna Owsley.
  - Second by: Rhonda Banks, *motion passed by unanimous vote*
- Trevor Allen nominated for Technical Resource Secretary by Corinna Owsley.
  - Second by: Jeff Jagmin, *motion passed by unanimous vote*

### General Business

- Ad hoc committee formed to update the constitution and by-laws. Members: Corinna Owsley, Rhonda Banks, Jeff Borngasser, Rocklan McDowell and Devon Sommer. Copies of the proposed changes will be provided to the membership at least 30 days before the next business meeting.
- Dan Alessio encouraged new members to become involved with the organization and serve on the board.
- Discussion on meeting planning and removing some of the burden from the host to encourage individuals to host a meeting.
  - Rocklan McDowell discussed possibility of association picking the location and planning a meeting and local members could provide assistance if they are able.
  - Rhonda Banks discussed the fact that we need to be sharing information from host to host.
  - Dan Alessio recommends that we keep using the meeting planning company that he employed for the Portland meeting.
- Matthew Noedel volunteered to host the 2011 meeting in the Puget Sound area.
  - Second by: Rocklan McDowell, *motion passed by unanimous vote*
- Motion by Rocklan McDowell to close the 2010 business meeting.
- Second by: Jeff Borngasser
- Meeting is *closed by unanimous vote* at approximately 2:15.



*Special thanks goes out to Jon Dyer for the Superman logo work and Kathy Kittell for compositing of the images and artwork for the Portland meeting*

## Asked & Answered

### *Search tips from a forensic library*

Jeff Teitelbaum, MLIS  
Library & Information Services  
Forensic Laboratory Services Bureau  
Washington State Patrol / Seattle Washington  
[Jeff.Teitelbaum@wsp.wa.gov](mailto:Jeff.Teitelbaum@wsp.wa.gov)

# Copyright



If the dreaded word “Copyright” hasn’t already prompted you to turn to another article, I’m hoping that this column will show that the topic has a very interesting history, a *few* somewhat clear rules, and, well, the morass of confusing and contradictory statutes that rightfully confound anyone who deals with copyright issues. But there *will* be several guidelines and recommendations discussed here that should help anyone who must make decisions regarding copyright, including authors who publish in journals, scientists who want to post published articles on their lab intranet site, or speakers who use images from the internet in their PowerPoint presentations, etc.

So let’s start off with a few relatively clear-cut bits of information:

#1: I don’t see the traditional copyright symbol “©” - so the material must be free to use.

Wrong! This symbol is no longer required as an indicator of copyright, so just because you don’t see it on an article or chart or book, **don’t assume that the work is not copyrighted.**

#2: It’s on the Web so I can use it without permission.

Wrong again. People grab things off the Web all the time, but, essentially, everything that is on the Web is copyrighted in the same way that a CD album is copyrighted and the same way that a book is copyrighted. It all depends on how you use the material. More on this later.

#3: I can legally use material that someone else has created as long as I give them proper credit.

Giving credit is a nice gesture of good faith, but it has nothing whatsoever to do with your legal right to use somebody else’s work.

All right, we're on fairly solid ground so far. But let's step back for a moment and briefly familiarize ourselves with the origins of copyright law and exactly what makes a work copyrightable.

### **1710 - England and the first copyright law**

The concept of copyright, and the first copyright law, originated in England in 1710 with the **Statute of Anne**. At that time, printing companies were virtually free to take the work of any author, copy it, publish it, and pocket the profits. Authors did not receive royalties from their work, and, in fact, were even barred from self-publishing.

So the copyright law sought not only to protect the authors from their work being copied and sold without permission, but also to encourage authors to produce new work.

### **1787 - The original Constitution of the United States contained a copyright clause.**

This seems fascinating to me...the fact that copyright was, even at that time, considered to be an issue important enough to include in this seminal document.

### **1998 - The Sonny Bono Act**

Some of the most contentious changes to copyright law over the years have been the continuous alterations to the duration of the terms. That is, copyright protection keeps getting longer.

From the original 14 years that an author was protected in 1787, the terms are, currently, **the lifetime of the author plus another 70 years**. Generally, it's been the large corporations who have lobbied the hardest to extend the terms of copyright because they have the most to gain by protecting their copyrighted products. Former Senator Sonny Bono had lobbied for, and won, an extension for corporate copyright protection of 120 years following the creation of the work.

### **Copyright changes in the last 25 years**

You do not need to register your work with the copyright office anymore:

Copyright protection now vests automatically and immediately upon the creation of a new work.

This newsletter, for instance, was copyrighted the moment it was finished on the editor's computer.

Previously, an author had to register their work with the copyright office for it to be legally recognized, but that's not the case now. You *can* register your work, however. If you feel that your work has particular merit or potential importance, it might be a good idea to register it with the Copyright Office. It costs about \$30, and it might well be worth it to have your work officially documented.

And, again, you no longer need to place a © on the work for the copyright to vest.

### **What is copyright?**

So, what does copyright really mean? In a simplistic way, it's really just the 'right to copy.' But here's the formal definition, according to the U.S. Copyright Law:

**Copyright is a form of protection provided by law to the authors of original works of authorship.**

And what can be copyrighted?

**Original works of authorship that are fixed in a tangible medium of expression.**

As you might imagine, the sentence above, which comes directly from the U.S. Copyright Law, has been endlessly debated by lawyers in copyright cases. What constitutes an "original" work of authorship? Since most work builds on the work of others, how do you define originality?

And "fixed in a tangible medium of expression"...does that apply to a song that has never been recorded or notated in written form? It does. Even a doodle on a paper *could* be ruled to be an original work of authorship and thus would merit copyright protection.

Copyright protection applies to both published and unpublished works.

### **Why are copyright issues important to you?**

#### **1. Protect your own work**

If you're an author, you probably would like compensation or official acknowledgment if others decided to use your work in any way. And you probably would prefer that others didn't simply take your work and present it as their own.

#### **2. Build on the work of others**

Conversely, you will almost certainly be basing some of your findings on work published by others, and you want to be able to use this information without infringing on their copyrighted material.



### 3. Use copyrighted material in a lawful way

If you're an instructor in a school, if you're a scientist working in a lab, if you're an administrator whose organization uses copyrighted material as part of daily business, you really want to address the issues of copyright and take steps to keep yourself compliant with the law. The legal process and potential penalties can be extremely expensive.

#### What Copyright does not protect:

**Facts or data** - Facts cannot be copyrighted, but writings *about* facts or an original method of compiling the facts is copyrightable.

**Works of the federal government** - Any work produced by the federal government cannot be copyrighted and is available for anyone to use. Works by state and local government can be copyrighted.

**Works in the public domain** - Anything written prior to 1923 is generally accepted to be public domain material, which means that it is available for anyone to use without any type of restriction.

#### Fair Use

Fair use is where things really get interesting. Congress established extensive rights to protect the copyright owner, who can legally reproduce, distribute, and modify her/his work. They also established, however, a number of exceptions to these rights...certain circumstances whereby an author's work can be legally copied, distributed, or used in some manner. Of these 16 exceptions, or provisions, fair use is by far the best known. And the most confusing. And the most debated!

Definition of fair use: **A limited right to legally use copyrighted works.**

The Fair Use statute, which consists of four short statements (usually called factors), is remarkably brief and simple in comparison to most other federal statutes. Congress deliberately created a very flexible statute, and there are no legally definitive answers to most fair use questions. We can make assumptions based on the rulings of prior cases, but, basically, fair use depends upon the circumstances of each case. Basically, it's a source of constant confusion, but fair use is essential for educators and researchers and for the continuing creation of new works.

#### Fair use is based on balancing the four factors

What you need to remember is that you do not need to satisfy all four of the fair use factors. You need to evaluate all of them, but the pivotal issue is whether, overall, the factors lean in favor for or against fair use. Here is a brief description of the factors:

**1. The purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes**

Congress and the courts have clearly established their preference for nonprofit, educational and research purposes over those of a commercial nature.

But every case and every situation is different. A famous university copyright case several years ago concerned a professor's use of "course packs," which are a Xeroxed compilation of articles and chapters selected around a particular topic. The university thought that it had a strong claim for fair use based on educational purposes, but another of the 4 Factors (see Factor 4 below) weighed more heavily against them.

**2. The nature of the copyrighted work**

This factor has often revolved around whether the work in question was a published or an unpublished work, with fair use rulings almost always favoring published works. This is because the primary purpose of copyright law, as well as fair use, is to encourage and allow for the growth of knowledge.

**3. The amount and substantiality of the portion used in relation to the copyrighted work as a whole**

So, how much of the whole work are you using and is this a fair amount? Again, no hard and fast way to define what will be considered reasonable. Many will argue that a journal article constitutes only a part of the whole with the whole being the journal issue itself. One court, however, ruled that a journal article itself was an entire work, although the ruling, it should be noted, went against a commercial company.

**4. The effect of the use upon the potential market for or value of the copyrighted work**

Finally, the impact on the marketplace. Some courts have called this the most important factor. Are you taking money away from the copyright owner? And this is where the universities lost the course packs argument, because using chapters from published books was ruled to be a substitution for purchasing them. Now, all universities must pay copyright royalties to use material collected in course packs.

**Conclusions and recommendations**

While this column has presented only a few specific cases to illustrate the ambiguities and perplexities of copyright issues, suffice it to say that there is no shortage of them. Copyright attorneys can have widely disparate opinions on most copyright issues, especially when they concern questions of fair use, and these issues can generally be settled only in court.

In closing, I'd like to leave you with a few guidelines and recommendations:

1. In general, always assume that something is copyrighted until you can prove otherwise.
2. When giving a presentation with PowerPoint -- if possible, request permission to use any material you are using that has been taken directly from the Web, especially if you plan to offer hard copies of your presentation.
3. Be very judicious in posting journal articles on internet/intranet sites. As helpful as it would be to post articles that could be used for training, journal club reading, etc., I do not post any published articles. If you do need to post some material, try to request permission to do so.
4. If you publish an article with a journal that has restrictive copyright terms, definitely try to negotiate with the publisher. Your request might be denied, but it's your material and you should try to get the most favorable terms for yourself, especially if you know that you'll want to use the material in another forum (a classroom, for instance).

*Jeff Teitelbaum*

*December 10, 2010*

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NWAFS newsletter editor response

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When technical articles are submitted and accepted for publication, there is no transferring agreement rule between submitting author and newsletter. Therefore, this means that the ownership of each technical submission remains with the original author(s) - NWAFS does not take ownership. Requests or questions, of technical submissions, will be directed to the originating author. It will then be up to the author on how he/she will respond. Please send any comments or questions to the editor.

*Thank you  
Jeff Jagmin*

## 2010 NWAFS PORTLAND MEETING TECHNICAL ABSTRACTS

### **NIST Office of Law Enforcement Programs (OLES) Forensic Science Program and Overview of Current Research and Projects**

*Robert M. Thompson, National Institute of Standards and Technology; Office of Law Enforcement Standards*

The Office of Law Enforcement Standards (OLES) is a unique standards, science, and technology organization within the National Institute of Standards and Technology (NIST) that collaborates within the public safety community. The presentation will introduce the work in which OLES is currently engaged:

- Counterterrorism and Response Technologies
- Detection, Enforcement and Inspection
- Public Safety Communication Research
- Protective Systems Research
- Forensic Sciences

Following this, a more detailed review of the Forensic Science Programs will be presented.

### **Obtaining Prints from Deceased Bodies Immersed in Water**

*Kathy Egli & Elizabeth Geltz, Oregon State Police*

This method was originally used by the FBI to identify plane crash victims found in water. Recently, it has been successfully employed to identify victim remains following Hurricane Katrina. Friction ridges on the hands and feet flatten as a result of prolonged exposure to water; consequently, conventional methods are not always effective in obtaining sufficient friction ridge detail to identify a victim. The application of heat and moisture (by boiling the fingers/hands) helps to restore the three-dimensional nature of the friction ridge skin, thus making conventional methods more effective. After utilizing many methods over the last thirty-four years, Kathy Egli has had the most success with this methodology and has been able to make several key identifications.

### **OSP Cold Case Strategy**

*Susan Hormann, Oregon State Police*

In September 2008, the Portland Police Bureau was awarded a NIJ grant to evaluate evidence from cold homicide cases and submit relevant items to the Oregon State Police (OSP) Forensic Laboratory for DNA

analysis. The analysis of cold cases can be a bit overwhelming and when OSP Forensic laboratory entered into an interagency agreement with Portland Police Bureau (PPB) there were many layers to the management and analysis of the cases. To simplify the process, OSP has implemented an approach that incorporates the information from the police agency, triage guidelines, submission requirements, and analysis strategy.

Coordination with PPB prior to the beginning this project was crucial in establishing the ground rules, goals, and expectations for each of the partners.

Once the project was in progress, the OSP Forensic Laboratory developed additional strategies to deal with internal laboratory challenges presented by the cold case evidence.

This presentation will outline the cold case approach of the OSP Forensic Laboratory and discuss how to meet the challenges that these cases can present. Having a coordinated cold case management plan will assist forensic laboratories who are called upon to perform analysis in cold case investigations.

### **The Retention and Transfer of Spermatozoa on Clothing by Machine Washing: A Review of the Relevant Literature and How it Applies to the "Laundry Defense"**

*Amy Wilson, Oregon State Police*

The presentation will include a review of the relevant literature on the topic of laundering semen stains on clothing. Topics will include the retention of spermatozoa on laundered semen stains and the potential transfer of spermatozoa by machine washing. The various papers on this topic will be summarized and compared with one another in order to give the attendee an understanding of the published research. The popular "laundry defense" will be discussed and tools will be given to the attendee to be able to analyze a case scenario and determine if the "laundry defense" is a plausible explanation for the presence of spermatozoa on the evidence. This presentation will be geared toward forensic scientists conducting casework in Biology/DNA, but may also be of interest to attorneys and anyone with an interest in the topic.

## 2010 NWAFS PORTLAND MEETING TECHNICAL ABSTRACTS

### **Acrosomeless Sperm Found in Casework**

*Devin Mast, Oregon State Police*

Globozoospermia is a rare medical condition in which an acrosome is not formed with the production of sperm cells. The resulting sperm cells are missing a key morphological feature used for sperm identification in case work. This presentation is about the apparent discovery of Globozoospermia in a rape case and the way the Oregon State Police Forensics Division reported its findings.

Before we perform the full study, we must undertake several pilot studies to assess the feasibility of methodologies and test assumptions of probability models. Utilizing 30 ten-print cards, we will assess the assumption of independence of minutia characteristics within and among fingerprints from an individual through auto-correlation analyses. Obtaining information on independence of the variables within a fingerprint will affect the way the overall statistical model is created and the probabilities that are created by the model.

### **Application of Spatial Statistics to Latent Print Identifications: Towards Improved Forensic Science Methodologies**

*Emma K. Dutton, Steve Taylor, Pat Aldrich and Bryan E. Dutton*

The goals of this project are to evaluate fingerprint characteristics using established techniques in spatial statistics, determine certainty levels for fingerprint uniqueness, and quantitatively validate the existing latent print ACE-V comparison methodology. The objectives are: 1.) to evaluate fingerprint characteristics or topological attributes (e.g., minutia number, type, and position typically employed by forensic latent print analysts) using spatial statistics to derive probabilistic models for predicting fingerprint uniqueness, and 2.) to utilize the derived fingerprint probabilistic models to establish certainty levels for latent print identifications.

This project was supported by Award No. 2009-DN-BX-K228 awarded by the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice. The opinions, findings, and conclusions or recommendations expressed in this publication/program/exhibition are those of the author(s) and do not necessarily reflect those of the Department of Justice.

### **An Unusual Method of Suicide**

*Dan Alessio, Oregon State Police*

How do you document evidence from an apparent suicide scene where the decedent was reportedly alone but no "firearm" was found? This presentation documents an unusual case, chronicling the thought process the examiner used, the documentation issues and the challenges faced while working to form a conclusion.

The overall goal of our study will be to expand on previous studies to develop the baseline statistics for various fingerprint characteristics (e.g., minutia number, type, and position, pattern type, ridge flow) by extracting fingerprint topographical data using a suite of Geographic Information System (GIS) and morphometric (e.g., NTSYSpc) software. Fingerprint characteristics obtained from ten-print standards on file with the Oregon State Police (OSP) will be evaluated for each digit and in multiple combinations using spatial statistical analysis software to develop a probabilistic model for fingerprint uniqueness. The data generated will then be used to develop statistical models that estimate the accuracy of ten-print to latent comparisons and certainty levels for latent identifications.

### **Validation and Implementation of GeneMapper Idx for Use as an Expert Assistance for Casework DNA**

*Jennifer Dahlberg, Washington State Patrol*

This presentation will cover the Washington State Patrol Crime Lab validation plan to switch from GeneMapper ID v3.2 to Gene Mapper IDx v1.1. This will include which experiments were done and what the results were, focusing on the problem results and what was done to resolve these problems. The use of this software as an expert assistant for casework DNA will be discussed, as well as how it has helped or impeded our workflow.

## 2010 NWAFS PORTLAND MEETING TECHNICAL ABSTRACTS

### Evaluating Stochastic Thresholds for Four Amplification Kits

*Julie Ferragut, Bode Technology*

In July 2009 the FBI published a new version of the Quality Assurance Audit Standards for Forensic DNA Testing Laboratories. A new requirement for validation studies is to establish a stochastic threshold when applicable. The stochastic threshold would define a level at which the analyst can be confident that allelic dropout has not occurred and also to assist in the interpretation of mixtures.

Bode used this opportunity to evaluate the amplification systems it currently had in place to determine a stochastic threshold that would aid in interpretation. While many papers have discussed the need for stochastic thresholds and provide examples of stochastic effects, very few studies discuss how to empirically determine a stochastic threshold.

To determine an appropriate stochastic threshold Bode evaluated a highly heterozygote individual at different low level concentrations in four amplification kits: Profiler Plus, COfiler, Identifiler, and PowerPlex 16. The goal was to determine at what RFU level one could be confident that drop out of a sister allele has not occurred. Bode then also evaluated nine two-person mixtures to determine if the contribution of more than one individual would affect the stochastic threshold. This presentation will discuss: our validation plan, method for evaluating an appropriate stochastic threshold, the results of our study, and tips for conducting similar studies in your laboratory.

### Evaluation of the Random Nature of Acquired Marks on Footwear Outsoles

*Christopher Hamburg\* and Rhonda Banks, Oregon State Police*

The individualization of a footwear impression is based on the postulate that "accidental" marks on outsoles acquired through wear are random. This project tests that assumption by evaluating the marks acquired on multiple pairs of shoes during normal wear while attempting to control certain variables

that include outsole design, wearer, travel paths, and length of wear. This project is a long-term evaluation of an entire outsole of modern material and design typically seen in casework.

Travel paths were essentially reproduced for each pair of shoes by careful documentation of the participants' daily activities along with the use of a pedometer to attempt to duplicate the number of steps taken.

Test impressions were taken from each pair of shoes prior to the start of the project and at each predetermined interval. Four pairs of shoes were worn, 2 for each participant. All right shoes and all left shoes were compared to each other.

No acquired marks were found to repeat.

### The HotLips Pizza Caper: A case of fingerprint pattern similarity

*Melissa Lyman, Oregon State Police*

This presentation will discuss an interesting case in which the suspect of a burglary was identified based on thorough forensic analysis and luck.

### Identity Automation

*Cami Green, Promega*

As case submission rates continue to rise across the country, forensic labs have begun to evaluate automation technology as a way to improve the sample throughput. However, the individual needs of each lab are varied and process specific. Promega has developed automation methods for extraction, quantitation set-up, normalization, and amplification set-up that are both flexible and user friendly. The ability to customize the Promega automation solution allows labs to set access levels for administrators and users, handle samples differently based on quantitation results, set pipetting limits for sample consumption, and offer multiple reporting formats. The presentation will demonstrate the ease of use in adopting Promega's automation scripts into a laboratory's workflow.



## 2010 NWAFS PORTLAND MEETING TECHNICAL ABSTRACTS

### **RFID Technology - Enhanced Evidence Tracking**

*Robert Krivickas, Bode Technology*

RFID technology can improve the efficiency of collecting, processing, storing, and managing forensic evidence and data. The presentation will provide an overview of the current process map for tracking and identifying evidence at Bode Technology using RFID technology. This process includes the automation of evidence tracking and monitoring throughout a facility, enabling real-time asset identification, and automation of Chain of Custody Transfer. The improved process will be compared against previous methods of sample tracking, identifying improvements in process flow, time saved, and enhanced process security.

Improving the efficiency and accuracy of evidence and data collection by utilizing hand-held RFID readers and RFID labels/tags at crime scenes and other points of collection will also be discussed. The potential impact of incorporating a RFID system at a crime lab to automate accessioning and evidence management will also be included in the discussion.

Meeting attendees will benefit by learning about how an existing technology can be implemented within their facilities that can improve overall efficiencies, improve security, and lower operating costs.

### **The Road to Better Report Writing - OSP Customer Survey Summary and Initial Findings**

*Ryan Chambers, Oregon State Police*

Analytical reports being sent to various agencies need to strike a careful balance. On one hand, they need to be as simple and understandable as possible for readers who often do not have a science background. On the other hand, we are obligated (by ISO and professionalism) to include pertinent analytical information in our reports, which may necessitate technical terminology and concepts. How do we make sure we are finding that balance? The Oregon State Police Forensic Services Division formed a committee, deemed the CLEAR Committee (Clear = Clear, Legible, Effective, & Accurate Reports), in order to review reports from each forensic discipline in an attempt to identify problem areas and offer suggestions for im-

provement. In addition, the committee decided to go a step further and survey both the prosecution and defense communities of Oregon's legal system. Initial returns from the survey proved that problematic language and phrasing do exist in our reports and there is room for improvement.

### **"Shot through the head, but who's to blame? Hobos give love a bad name (bad name)"**

*Veronica Vance, Oregon State Police*

In January of 2009 forensic scientists responded to a law enforcement request for assistance in the excavation/ recovery of a skeletonized body in North Portland. A partially-skeletonized body was found located in a large thicket of blackberry bushes by the landowner attempting to clear the brush.

The decomposing body was fully clothed, but No I.D. was found in the field. Initial observations revealed no apparent trauma to skull; several skeletal elements gave the indication that this was possibly a middle aged individual, and dental restorations were present. But it was when x-rays were taken at the autopsy that "real" evidence of a homicide was discovered. This presentation shows how anthropology, crime scene analysis, and good old-fashioned investigative techniques solved the mystery of the "Blackberry Man".

### **Applications of UHPLC-MS in Forensic Science**

*Kayvon Jalali\*, Kathryn Preston, Guifeng Jiang, and Terry Zhang, Thermo Fisher Scientific*

UHPLC is a new technology that boosts the resolving power of HPLC and allows for separation of a large number compounds in complex mixtures. This additional resolution results in better detection with lower noise and sharper and bigger signal in any mode of detection such as UV, FL, MS, etc. Mass spectrometry is a universal detection tool for identification of organic compounds. In this presentation we show examples of where the resolving power of UHPLC coupled with mass spectral detection allows forensic analysts to identify and accurately measure the levels of illicit drugs, their salt forms and other compounds such as drug precursors in various matrices.

## 2010 NWAFS PORTLAND MEETING TECHNICAL ABSTRACTS

### **Automated Sperm Searching, Fantasy or Reality?**

*Devon Sommer, Oregon State Police*

As anyone has ever sat in front of a microscope for any prolonged length of time looking at evidence can tell you, the exercise can become tedious very quickly. This is particularly true in the world of DNA and serology, where screening slides collected from sexual assault kits can be particularly tiring, especially when they are large and/or heavily smeared. One solution has been the introduction of the automated sperm searching microscope to the marketplace. The system is a computer attached to a microscope with software that is capable of performing a search for the analyst. Problem solved, right? Well, yes and no. While the physical ability to screen has been automated (after user-established parameters), the actual confirmation is still left to the analyst. So, there is still scope time involved with the screening process. This can be a minor inconvenience, but overall the system has the potential to cut significant time off the screening process. This presentation will address the strengths and weaknesses of the automated system currently in use in two Oregon State Police Laboratories. It will describe the process involved for bringing our system online and our experience with the system to date.

### **"Can't I Just Take the Fifth?" - Testifying Without Terror**

*Heidi Eldridge, Eugene Police Department*

For many latent print examiners, the thought of presenting an identification in court has always been a daunting one. Since the release of the NAS report in February of 2009, that level of concern has increased significantly for many as the number of challenges increases, the nature of the questions changes, and the comforting catch phrases that were so frequently employed cease to be appropriate.

In June of 2010, Ms. Eldridge successfully navigated a Daubert/Brown/O'Key admissibility hearing in Lane County, Oregon in a Motion to Exclude fingerprint

evidence based on NAS report arguments. In this presentation, Ms. Eldridge explains how she addresses questions of validity, error rate, subjectivity, and certainty in a courtroom environment without relying on phrases such as "exclusion of all others," "100% certainty," or "zero error rate." She will explain when it is okay to agree with a criticism of the discipline and when to stick to your guns; what information you need to be armed with to adequately defend the science during this transitional period; and how to be honest and transparent and explain the limitations of your conclusions, without weakening your expertise and credibility in the eyes of the judge and jury.

By considering a new way to think about your testimony in court, it is hoped that you, too, will be able to Testify Without Terror.

### **Case Report: An Accidental Death Involving Inhalation of 1,1-Difluoroethane**

*Sara Short, Oregon State Police*

A 35-year-old female with a history of depression was found deceased on the bedroom floor of her home one hour after exiting a hot tub. Femoral blood, urine, and vitreous humor were submitted for routine toxicological analysis. An initial toxicological examination confirmed 0.08 g/dL ethanol and therapeutic concentrations of the antidepressants sertraline and venlafaxine in the femoral blood. During the alcohol/volatiles analysis by headspace GC-FID, an unidentified peak was also observed. When compared to previous cases, the unidentified peak was suspected to be 1,1-difluoroethane (DFE), the propellant component in many canned air products, such as computer keyboard cleaner, which was later confirmed by a reference laboratory. The decedent's history of inhalant abuse was not known to investigators until our discovery of DFE. Without the identification and quantitation of DFE, the cause of death would have been undetermined. This case illustrates the necessity for further analysis when unexpected analytes appear during toxicological casework.

## 2010 NWAFS PORTLAND MEETING TECHNICAL ABSTRACTS

### **Survey of Sexual Assault Evidence Kits**

*Jennifer Riedel, Oregon State Police*

Statistics regarding the results of Sexual Assault Forensic Evidence (SAFE) kit analyses would be helpful in educating law enforcement and medical personnel on sexual assault response efforts. This study evaluated the incidence of semen positive results from 469 rape victims' SAFE kit samples. The kits were submitted to two Oregon State Police laboratories between 2003 and 2005. Information from officer's reports and victims' statements was also collected. Overall, 46% of the 469 victims had at least one sample that was positive for semen. As the time elapse between assault and sample collection increased, the probability of a positive result decreased. That probability leveled out to approximately 26-27% after 36 hours, with a spike of 40% in the 48-60 hour range. Additional conclusions evaluated positive results based on body locations reportedly penetrated, condom usage, reported voluntary intercourse, and other factors. Instances when both vaginal and cervical samples were collected and yielded different results were also evaluated. This study determined that while the victim's statement remains a good trigger for which samples should be collected, they should not be solely relied upon. Vaginal and cervical samples should both be collected when possible.

### **Exploring the Limit of Gunpowder Particle Quantity for Distance Determination**

*Matthew Noedel, Noedel Scientific LLC*

Gunpowder particles can be deposited on surfaces that are relatively close to the muzzle of a firearm at the time of discharge. Typically, the overall size, density and distribution of the entire pattern is compared to test patterns generated at known distances to offer an approximation of the muzzle to target distance. Some forensic practitioners attempt to quantify the total number of particles deposited or observed and correlate that count with a certain distance. This study was conducted to attempt to define the limits of counting or quantifying the number of gunpowder particles to estimate muzzle to target distance.

### **Sensitivity and Specificity of Leucocrystal Violet: A Comparative Study of Three Reagent Formulations**

*Rhonda Banks, Oregon State Police*

Leucocrystal violet (LCV) is often used as a chemical enhancement for bloodstains and impressions in blood. Several different formulations for this reagent have been published. This presentation will discuss and compare the sensitivity and specificity of three reagent formulations of LCV.



## **NWAFS PRESIDENT MATTHEW NOEDEL NOEDEL SCIENTIFIC**

I attended college at the University of Montana in Missoula and left with a BS degree in Microbiology/Chemistry minor. Shortly after graduation, I moved to Seattle to start my career and the night before I was to start a new job selling Time-Life books over the phone I decided to go to Graduate School. Having heard from a friend about forensic science, I went to California State University at Sacramento and entered the Forensic Science Graduate Program. After a few semesters in that program, I lucked into a job with a new fledgling Forensic Toxicology company starting up in Sacramento. This new career quickly snuffed the college work and I went forward full time at the tox lab.

I learned many lessons at the tox lab and was given the opportunity to work both production drug testing and high profile specialty tox. One of the most interesting cases I was involved with was the drug and alcohol testing of Captain Hazelwood and the crew of the Exxon Valdez after the oil spill off of the Alaska coast. Shortly after the Exxon case, I had an opportunity to return to the Northwest and took a job as a chemist and trace examiner with the Washington State Patrol Crime Lab in Tacoma, WA.

Once in place with the WSP crime lab, I joined their Crime Scene Response Team and began to work in the field assisting agencies with complicated crime scenes. After five years of chemistry/trace, I decided to transfer into the Firearm and Tool Mark section of the lab. This transfer opened a whole new world of forensics to me as I was not a life long firearm enthusiast and had to learn everything firearms from scratch. I found the firearm assignment to be the most rewarding and challenging area I had worked in and I continue to work in that area today.



After 15 years with the State Patrol, I decided to try independent consulting and started my current company Noedel Scientific. As a consultant I work a wide variety of crime scene and shooting reconstruction cases from all across the United States, Canada and recently Jamaica! I am a Past President of the NWAFS, the former Editor of the NWAFS newsletter and the AFTE Journal, the current Treasurer of the Association for Crime Scene Reconstruction and a member of IABPA and AAFS. When not immersed in forensic problems I like rock climbing and mountaineering, “researching” dive pubs and taverns and seeking out pinball machines. I’ve been known to obsess about baseball and hope to one day visit the Hall of Fame in Cooperstown, New York.



**NWAFS VICE PRESIDENT  
DAN ALESSIO  
OREGON STATE POLICE**



College attended: Harding University, Searcy, Arkansas

How started in forensics: Tore my ACL resulting in getting laid off from job. After ACL replacement surgery started volunteering at OSP Portland Crime Lab in the Firearms section. Learned to run the IBIS system and was hired as IBIS Tech. Six months later became Forensic Scientist Firearms Examiner.

Current Specialties: Firearms, Crime Scenes

Most Memorable NWAFS Moment: Too many to list + some I can't talk about. Probably the first meeting I attended in October, 2000 in Seattle. Meeting many people who have become dear friends! Still regret not staying for the banquet (didn't know about it at the time).

Pets: Scottish Terrier named Olive, three chickens named Lacey, Daisy and Little Jerry - great eggs!

Favorite TV Shows: Currently, Colbert Report, Two and a Half Men, Glee (I'll admit it) among others

Recreation: Running, Weight Lifting, Downhill Skiing, Softball, Camping, Fishing, Hunting.



## NWAFS MEMBER AT LARGE CHRISTOPHER HAMBURG OREGON STATE POLICE

I graduated from Willamette University (Salem, OR) in 1996 with a degree in Chemistry. For some reason I thought that was the perfect educational background to become an umpire in professional baseball. So, in January of 1998 I left cold and rainy Portland, Oregon for sunny Kissimmee, Florida to attend the Jim Evans' Academy of Professional Umpiring. During my first stint of extended spring training I was bitten by the forensic bug. Since we only worked about 3 hours a day, I needed something to pass the time. One of the other guys on my crew also knew how to read and he had a collection of crime novels with a touch of forensics mixed in. During one off-season I visited the Arizona DPS crime lab in Tucson and asked what I needed to do to get a job in forensics. They suggested buying Saferstein's book and start filling out applications.

Well, it worked. I was hired by WSP to work in the Microanalysis section of the Tacoma Crime lab in January, 2003. I was also a member of the WSP Crime Scene Response Team. I now work in the Trace section of the OSP Portland Metro lab where I currently perform casework in impressions and glass.

One of my most vivid memories is the first NWAFS meeting I went to in Portland in 2003. I presented my first professional paper, met a lot of great people, and best of all, got to go to the Nike employee store. A pretty good start to a long relationship with this organization.

I must have poor taste in television, because some of my favorite shows like Pushing Daisies and Dead Like Me have only lasted a couple of seasons each.

My wife has one pet cat, I have none.





**NWAFS MEMBERSHIP SECRETARY  
CORINNA OWSLEY  
IDAHO STATE POLICE**



I received my Bachelor of Science degree in chemistry/biology minor from Albertson College of Idaho in 1998...and no, I did not have to choose if I wanted my diploma in paper or plastic. My first employment as a chemist was testing soil and water samples at an environmental lab. After a year and a half of sniffing diesel fumes (and yes that was part of the testing...explains a lot about me, huh?), I was hired by Idaho State Police Forensic Services. I have spent the last 10 years in the drug chemistry section and have also had the joy of working in breath alcohol and now in the ever exciting field of Quality Assurance.



I joined NWAFS in 2003 and have been Membership Secretary since Fall 2008. My most memorable NWAFS moment can be described in one word, TOGA. In my spare time I enjoy camping, hiking and for the last few years, running. I am not fast but it is an effective way to clear my head of the stress from work and family.



**NWAFS SECRETARY-TREASURER  
HEATHER CAMPBELL  
IDAHO STATE POLICE**

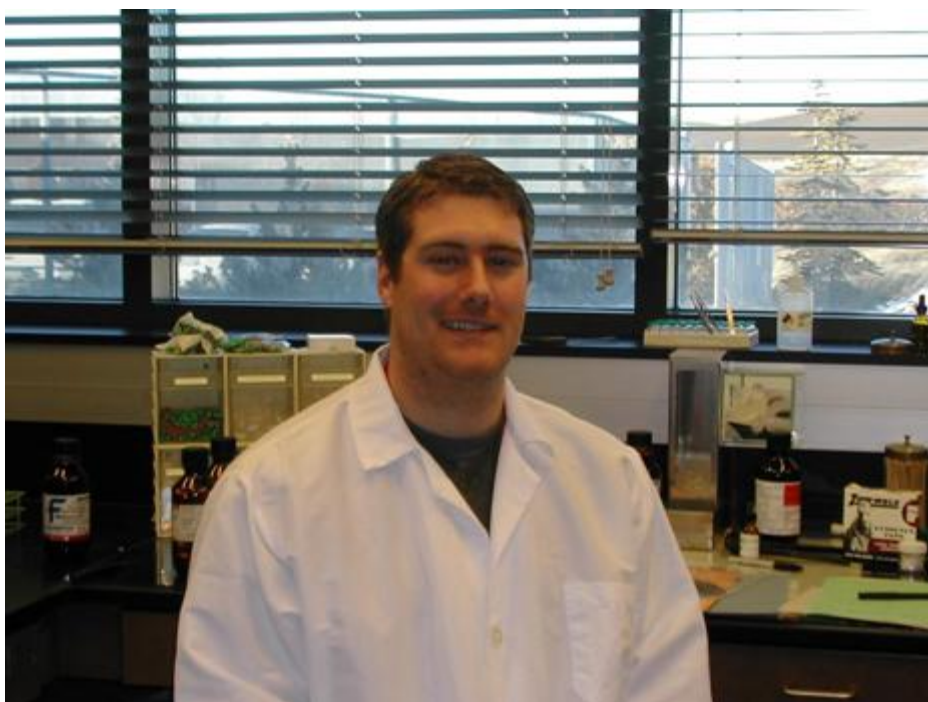
I received my BS degree in Chemistry from Boise State University in 1998. GO BRONCOS! I began my career as a forensic scientist with OSP in the Ontario Lab in Feb of 2000. I became a member of the NWAFS with stellar recommendations from Lt. Steve Taormina, Christine Ogilvie and Jennifer Riedel (thanks guys)! I worked for OSP until their budget issues drove me off. I started with ISP in the Meridian lab Dec of 2002 working as a drug analyst. I have attended several NWAFS meetings and always have a great time reuniting with old co-workers and friends. I am married with children (Claire-8, Hallie-5, Garrett- 5 months) and enjoy spending time with my family, playing sports and my new role as sec/treas!



**NWAFS TECHNICAL SECRETARY  
TREVOR ALLEN  
WASHINGTON STATE PATROL**



I attended college at Eastern Washington University and graduated with a BS in Chemistry in 2006. After spending a few years at an environmental lab I joined the WSP – Spokane lab in 2007. Currently I am a Chemist and a member of the Crime Scene Response Team. In my free time I like to play and coach soccer, go hiking, ski the back country, brew beer with my dad and hang out with my wife Jenn and take our Westie “Cotton” on walks in the hills around our house.



## NWAFS EDITORIAL SECRETARY

### JEFF JAGMIN

### WASHINGTON STATE PATROL

In 1988, I completed my service with the US Marine Corps, and I was going through the process of starting a career as a corrections officer. I completed an application, physical, written and oral examinations and was then given a gift, the book *Unnatural Death: Confessions of a Medical Examiner* by Michael M. Baden, M.D. This was my first introduction to the field of forensics which generated a great deal of interest for me. Rather than continue with this, I pulled out of the process and decided to pursue the education route because in my mind, "forensics seemed much cooler". In the very limited information on forensics at that time (remember getting "internet information" using Unix?), I decided to pursue a chemistry degree to help me in my quest.

I attended Olympic College (junior college) and left with an Associates Degree in Arts and Sciences. I was working fulltime at a credit union where I was a computer operator working the graveyard shift when I transferred to the University of Washington. I was

commuting across Puget Sound via a ferry and was lucky enough to have a job that gave me time to do my homework. I left the UW in 1995 not only with a Bachelor of Science in Chemistry but with a true love of chemistry. After many, many applications to get a job in chemistry (biotech companies, environmental testing labs, oil refineries and the WSP Crime Laboratory) I finally ended up with a job performing pesticide residue analysis on agricultural crops such as tomatoes and grapes which was scientifically very stimulating, but the pay was horrid.

Almost one year later, my applications finally generated a call, and I got offered a position with the bio-

tech company Immunex which I happily accepted. One week later the human resources office of the WSP called me and offered me a job. Even though the pay was much less, I made my decision, and my forensic career started with the WSP Tacoma Crime Laboratory in 1996 where I was assigned to the chemistry section performing examinations in controlled substances and suspected clandestine laboratory samples. I joined the WSP Statewide Incident Response Team in 1997 where I responded to suspected clandestine laboratory scenes with duties including scene evaluation, safety and collection. In 2002 I was assigned to the microanalysis section where I was responsible for the examination of evidence in suspected explosives, fibers, impressions, hair screening, general criminalistics and microscopy.



In January 2008, I transferred to the WSP Seattle Laboratory when I promoted to Supervising Forensic Scientist of the Microanalysis and Questioned Document sections. I am a member of the American Academy of Forensic Sciences, International

Association of Identification, Northwest Association of Forensic Sciences and American Chemical Society. I am also a member of the Technical Working Group for Fire and Explosives (TWGFEX) where I am a co-chair on the explosives database committee.

My interests outside of forensics are enjoying my wife Amy and our daughter Samantha Paige. I look forward to passing on my limited skills in pinball and fishing to both Amy and Samantha! When I look back at the path that I took, I never dwell but, I am always amazed how an event (reading a book) 22 years ago can have a dramatic impact on one's life!





**The Forensic Sciences Foundation**  
**Announces a Contest**  
**For**  
**Possible Applications of New Science or Technology**  
**To Forensic Science**

**WE WANT YOUR IDEAS!!!**  
**YOU COULD WIN MEETING EXPENSES (UP TO \$1,200)**  
**AND RECOGNITION!!**

In its efforts to encourage applications of new science and technology in forensic science the Forensic Sciences Foundation (FSF) is sponsoring a contest. This contest is open to anyone concerned with enhancing the forensic sciences. To enter, a 500 - 1000 word abstract must be submitted proposing a potential application of a new or emerging area of science or technology to forensic science. We are interested in new ideas; the submitter need not have conducted actual research on the idea. The abstracts will be judged by a subcommittee of the Theoretical Forensic Sciences Committee of the Forensic Sciences Foundation, supplemented, as required, by one or two others with appropriate technical expertise. Selection of the winner will be based on the following criteria:

- a) The novelty/originality of the abstract
- b) Potential positive impact on an area of forensic science
- c) The possibility of cross disciplinary impact
- d) The overall impact if successfully applied to forensic science

It is planned that the selected abstract would provide the basis for a half-day workshop at the AAFS 2012 Annual Scientific Meeting. The selected abstract will be subject to the AAFS peer-review process and must be accepted for presentation by the AAFS Program Committee. If accepted for the program, the author of the winning abstract will receive up to \$1,200 toward his/her attendance at that meeting. The structure of the workshop will include an introduction of the topic by the contest winner, a presentation by the winner or another appropriate expert on the basic science or technology involved, and a period for questions and discussion. **Abstracts must be received electronically at the AAFS office by January 15, 2011.** Please send your abstracts to [meetings@aaafs.org](mailto:meetings@aaafs.org); put FSF Technology Contest in the subject line.

SEPTEMBER 25-30, 2011

Hotel Murano, Tacoma WA



NORTHWEST ASSOCIATION OF  
FORENSIC SCIENTISTS  
ZOMBIE



Noedel  
Scientific

Hosted By:  
Noedel Scientific



## NWAFS Conference: September 25-30, 2011 Tacoma, WA

The 2011 NWAFS Conference has been set for the week of September 25, 2011, at the Hotel Murano in Tacoma, WA. We are preparing a full slate of workshops, vendors and scientific presentations so be sure to plan on attending! Workshops to include:

- The forensic aspects of synthetic THC products
- Special topics in Bloodstain Patterns
- Shooting Reconstruction Topics
- Trace Evidence and Clothing Exams
- And much more to come!



**\$109/nite!**

Start getting that presentation and abstract ready; this will be your chance to advance the field of forensic science and your career!

**One of the features in the works is a ZOMBIE  
themed banquet so prepare to scare!**

**MARK THE DATES!**

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# BOOK REVIEW

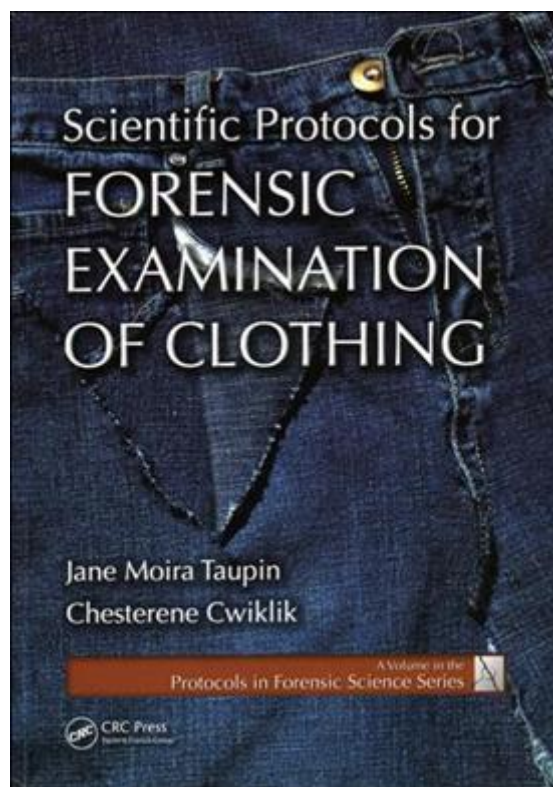
## Scientific Protocols for Forensic Examination of Clothing

Jane Moira Taupin and Chesterine Cwiklik,  
CRC Press, Protocols in Forensic Science Series, 232 pages

Reviewed by  
Margaret Barber, Forensic Scientist  
Microanalysis Unit  
Washington State Patrol - Seattle

This book is the first to present a concise guide for case approach and comprehensive examination of clothing evidence in forensic casework. Clothing examination has, in the past, been viewed as incidental to obtaining the “real” evidence. Clothing was, in the author’s words, “a source of samples,” rather than evidence with a story of its own to tell. Here, clothing examination is presented in new detail and demonstrated to have as much importance as crime scene processing. It is not a process of just picking everything off a garment and cataloguing what was found. The clothing examination may be a critical factor to the outcome of a case. Thought should precede each step of the procedure to determine what is, or is not relevant, and what each examination result means to the case as a whole.

In *Scientific Protocols for Forensic Examination of Clothing*, the authors provide the tools to make such evaluations by taking the reader through the entire process of clothing examination – from the basis for doing the examination, through each step of information gathering and physical examination, to the final interpretation and presentation in court. Along the way, there are discussions on quality control, health and safety of the examiner, preservation of the evidence, peer review, interactions with the legal system, and some final thoughts on training to maintain expertise.



The book covers a wide range of evidence that may be found on clothing and is written for examiners in any specialty area of the crime laboratory. Separate chapters are given to the procedures for examining generalized stains and deposits, pattern evidence (such as bloodstains, fingerprints, or impressions), various biological evidence, and trace evidence or debris. The book ties each of these individual aspects of analysis together through case examples. Each of the various evidence types becomes valuable depending on the surrounding case circumstances. The discussion of relevance, target searches, and context searches in chapter 8 is a perspective I have not read elsewhere. It is one of the strong points of this text. The authors share through the numerous interesting case examples a wealth of knowledge gained only by experience, and this alone makes this a valuable book to have on the shelf.

There are color photos, photomicrographs, and diagrams dispersed throughout the text. Many do add value to the text, but for some photos, the pertinent characteristic is not readily apparent. An arrow or other annotation to direct the reader's attention would have been helpful. Some of the photos depicting fabric damage or the morphology of specific particles could, perhaps, have been taken at greater magnification to better demonstrate the microscopic details. The photos of patterns, stains, and deposits were very useful. The photo of a sample page of case notes (page 51) and the various diagrams were each very good additions to the text.

For those who just can't find the perfect word to use in their case notes or report, several glossaries are also included which may be helpful in clarifying and standardizing the language used to describe the evidence. The specific terminology includes fabric and sewing terms, stains and deposits, bloodstain patterns, damage, and

"process-based descriptive terminology for traces and debris." The glossary of terms to describe the appearance of stains and deposits (page 71), in particular, has not been offered previously in the forensic literature.

There are four appendices of differing value to the overall text. Appendices 1, 3 and 4 are very useful checklists and summaries that bring focus to an examination. I would keep these on hand as a quick reference during casework to ensure that all aspects of the evidence have been observed and properly documented. However, the second appendix, "The Stereomicroscope," seems to be a bit below the level of the rest of the book. It includes a few thoughts to let the reader know that a good stereomicroscope is necessary and there are choices available, but it is not, and was probably not intended to be, a reference on microscopy.

*Scientific Protocols for Forensic Examination of Clothing* is not a beginning level text, or an "intro to forensics." It is a college level text that I would recommend for readers with at least some experience with forensic investigative processes. The examiner with a little experience will have no problem following the path of logic from observations to conclusions. However, the novice forensic scientist or the lay-reader may wonder at times, "This may be true, but why is this so?" since some of the more basic aspects of forensic investigation are assumed to be understood.

Overall, I think the authors accomplished their goal of bringing together a comprehensive, integrated, interdisciplinary approach to clothing examination. I would highly recommend this book as a text to build upon an existing foundation of basic forensic training. I am setting aside a place on my library shelf for my own copy.

# MEETING ANNOUNCE-

**2011 ACSR Annual Training Conference**

**February 8 - 10, 2011**

**Jacksonville, FL**

<http://www.acsr.org/>



**AAFS 63rd Annual Meeting**

**February 21 - 26, 2011**

**Chicago, IL**

<http://aafs.org/>

**Association of Firearm and Tool Mark Examiners**

**AFTE May 29—June 3, 2011**

**Chicago, IL**

[www.afte.org](http://www.afte.org)



**Inter/Micro: 62nd Annual Applied Microscopy Conference**

**July 11 - 15, 2011**

**Chicago, IL**

[www.mcrl.org](http://www.mcrl.org)

**96th Annual IAI International Educational Conference**

**August 7 - 13, 2011**

**Milwaukee, WI**

<http://www.theiai.org/conference/2011/index.php>



## 2011 Trace Evidence Symposium: Science, Significance and Impact

August 8 - 11, 2011

Kansas City, MO

<http://www.ojp.usdoj.gov/nij/events/trace-evidence-symposium/>

## International Association of Bloodstain Pattern Analysts

October 3-7, 2011

Milwaukee, WI

[www.iabpa.org](http://www.iabpa.org)



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## Training Opportunity: Processing and Reconstructing Shooting Crime Scenes



Date: April 4-8, 2011  
Location: Spokane Police Dept. Range--Spokane, WA  
Hours: 8:00-17:00 M-F  
Cost: \$800 per student (class limited to 12)

***This course is highly recommended for anyone who needs to process, document and understand crime scenes that involve the discharge of a firearm.***

For Details Contact:

Matthew Noedel  
253.227.5880  
[mnoedel@att.net](mailto:mnoedel@att.net)



# NWAFS NOTES



Pictures from “Team Biohazard”, runners from the OSP Lab, who ran the Hood to Coast this last summer. This is the team at the finish line.

Back Row: Dan Medin (Kori Barnum’s husband), Kori Barnum, Nici Vance, Jesse Bennett, Calvin Davis, Dan Alessio)  
 Middle Row: Chris Ibarra-Rivera, Heather Feaman, Emily Lawler, Kathy Kittell, Loretta Alessio\_Fincher (Dan’s sister)  
 Kneeling: Devon Sommer, Ryan Chambers

***The Mother of All Relays***





The Hood to Coast Relay is the largest relay in the world and is considered "The Mother of All Relays". The 197 mile course consists of 36 legs, of which each team member must run at least three of these legs in rotation. The legs vary from 3.52 miles to 7.79 miles, and the terrain for each leg can vary from level terrain to steep uphill and/or downhill. Teams must complete the course within a 31 hour time limit which is an average team pace of 9 minutes 30 seconds per mile!



FS Kathy Kittell handing off to FS Devon Sommer (both NWAFS members).

So, do you have anything interesting going on in your laboratory or have information in which you wish to share with our membership? If so, please submit to:

[Jeff.Jagmin@wsp.wa.gov](mailto:Jeff.Jagmin@wsp.wa.gov)

# CAPTION THIS!



The best caption submitted for this photo will win a  
\$20 gift card of your choice!

[Jeff.Jagmin@wsp.wa.gov](mailto:Jeff.Jagmin@wsp.wa.gov)

# CAPTION THIS WINNER!

Congratulations to our last  
newsletter's winner:

**Josh Spatola**  
California Department of Justice - Sacramento

*In this episode of "Mishaps in Dentistry"  
we give you the story of  
Natalie Brown aptly titled  
"The Tale of the Tail Mistaken for the Trunk"*



Runner up goes to:

**Dan Peterson**  
Oregon State Police - Clackamas

**"Is finding my diamond ring really worth all this?"**

# FREE REGISTRATION!

**Got an interesting technical note, informative article  
or research project?**

**Make a submission to the NWAFS newsletter, and you could win  
FREE REGISTRATION to an upcoming NWAFS meeting!**

**The officers vote for the “Best Independent Newsletter Submission”  
once per year and award a FREE REGISTRATION to the winner.**



**Help keep the NWAFS newsletter interesting and informative by  
sending your submissions to:**

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