



BioCommunications Association, Inc.

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BIOCOMM 2006  
Pat McGiffert

*Paruroctonus*  
Chip Hedgcock

**Annual Meeting Site**  
**Tucson Marriott University Park**

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**Welcome**

**Program  
Abstracts  
Workshops  
Meeting at a Glance**



**Welcome** to the 77th annual meeting of the BioCommunications Association in Tucson, Arizona. As Scientific Program Chair, I have tried to make the meeting interesting to all by diversifying the topics and combining presenters from outside and within the BCA. Hopefully this will encourage others to get involved and join the BCA. Meeting highlights are: the great desert city of Tucson, Center for Creative Photography, Adobe CS3 creative suite, Podcasting, Telemedicine, Forensics, Nature Photography and great workshops. Please thank the presenters, sponsors and everyone working behind the scenes for making this meeting possible; most are here because they love what they do. Also let members of the committee know your likes and dislikes, what you would like at future meetings, ideas for speakers, and any other suggestions. Remember this is your association so be involved. Enjoy your stay in Tucson. I hope you learn, interact with colleagues, make new friends, and most of all Have Fun.



Thank you,  
**Thomas Bednarek, RBP**  
Scientific Program Chair

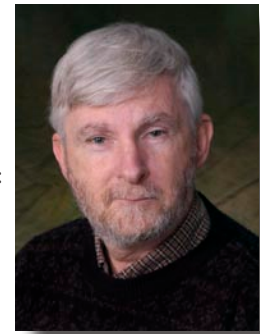


**Jeb Zirato**  
Biolimages Chair

**Chip Hedgcock**  
Workshop Chair



As you get settled in I want to welcome you to one of the most under-rated cities in the US. According to the web, Tucson has been continuously settled for over 12,000 years. It celebrates a diversity of cultures, architecture, and peoples. Yet, it is one of the “Mega-Trend” cities of the 21st Century: the Optics Valley, premier health services center for the Southwest, the astronomy center of the world, home of a premier research institution - University of Arizona, and a tourism destination. Tucson has it all!



This 77th annual meeting of the BioCommunications Association will be a watershed meeting for our organization. After years of diminishing possibilities we suddenly find ourselves looking at a whole new map! Through a single generous contribution, the financial constraints that stifled creative approaches are gone. Our biggest challenge will be what kind of organization will we choose to be?

Richard Frederickson and his team have worked hard to put together a meeting that will help you redefine yourself as well. While you are here you will learn new skills that will make you more valuable in the workplace. You will have a chance to interact with other professionals who understand your needs and problems. You will also have a chance to interact with software designers and sales people from some very influential companies. Put it altogether and you will have a hot time in the old presidio!

Welcome to Tucson!

A handwritten signature in black ink that reads "James M. Fosse".

James M. Fosse, RBP, FBCA  
BCA President

**Richard Frederickson, FBCA**  
Director of Conferences



**Keynote Speaker**  
**Jack Dykinga**  
*Feeling the Light on the Land*

Pulitzer Prize (1971 Feature Photography) winning photographer Jack Dykinga blends large format landscape art photography with documentary photojournalism. He is a regular contributor to Arizona Highways and National Geographic Magazines. His eight wilderness advocacy, large format books include: Frog Mountain Blues, The Secret Forest, The Sierra Pinacate, The Sonoran Desert, Stone Canyons of the Colorado Plateau, and Desert: The Mojave and Death Valley. He authored and photographed Large Format Nature Photography, a “how to” guide to color landscape photography. Jack Dykinga’s ARIZONA, is a compellation of Jack’s best Arizona images along with his personal wilderness experiences.



Currently, he serves on the board of The Sonoran National Park Project in an effort to create a new Bi-National Park on the Arizona/Sonora, Mexico border. He has also focused on Texas/Mexican border highlighting the biological richness and diversity of the protected areas along the Rio Grande River corridor which appeared in the February 2007, National Geographic Magazine.

In April, 2007, Jack and four other photographers, became the first ever Rapid Assessment Visual Expedition (R.A.V.E.) for the International League of Conservation Photographers, to document the El Triunfo Cloud forest in Chiapas, Mexico, drawing attention to the threatened habitat there.



**Anne Shiras Pioneer Members Lecture**  
**Richard McNeely**  
*Arizona Telemedicine:  
How Biocommunicators Make it Work*



Rick McNeely is the Director of Biomedical Communications at the University of Arizona and the founding Co-Director of the Arizona Telemedicine Program. Biomedical Communications has a staff of about 40 serving the Tucson and Phoenix campuses, and the award-winning Arizona Telemedicine Program now reaches more than 160 sites.

The Arizona Telemedicine Program, with its home on both the Tucson and Phoenix campuses of the University of Arizona College of Medicine, is recognized as one of the world’s most successful telemedicine efforts. From day-one of the program in 1996 Rick McNeely championed the involvement of biocommunicators in all aspects of the program.

Rick will share how his thirty-plus years in the biocommunications field influenced the role biocommunicators are playing in telemedicine. He will also preview exciting future telemedicine applications being developed in Arizona, such as virtual centers of excellence for specific diseases and rapid throughput clinics that rely heavily on advanced imaging and telecommunications techniques.



# Sunday, July 22

1:00-5:00 PM **Board of Governors Meeting**  
(Ventana)

3:00-5:00 Registration (Atrium)

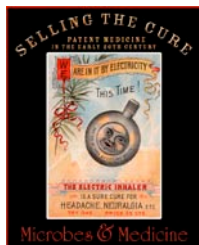
6:00 **Opening Reception**  
(Pima)

7:00 **Welcome and Introductions** (Madera/Canyon)  
Patent Medicine of the Early 20th Century Exhibit - Norm Barker  
Nile Root, RBP FBPA – Images

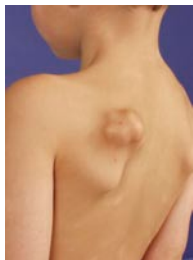
7:30 **Biolmages Awards Ceremony**  
Support for Biolmages Salon provided by Nikon.



*Microbes & Medicine*  
Patent Medicine of the  
Early 20th Century:  
Selling the Cure



Biolmages 2006  
Best of Show  
5 Year Old Osteochon-  
droma Left Scapula  
James Koepfler  
Children's Hospital  
Boston, MA



Biolmages 2006  
Award of Excellence  
*Too Young to Die: The Harsh Reality -  
Please Spay or Neuter*  
Phil Snow  
The University of Tennessee,  
College of Veterinary Medicine  
Knoxville, TN

## BioCommunications Association Board of Governors

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Vice President Charlene Baron  
Secretary/Treasurer Tom Hurtgen, FBPA  
Past President John Hendrix, RBP, FBPA

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## Journal of BioCommunications BCA Editor

Mark Marzolf

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Connie Johannsen, RBP

### JBC Managing Editor

Joe Ogradnick, FBPA

BIOCOMM 2006  
Knoxville, TN  
Group Photo  
by Sue Loomis





# Tuesday, July 24

- 7:00 AM Continental Breakfast (Pima)
- 8:30 **The Ultimate Visual Communications Toolkit – Adobe Creative Suite 3**  
(Madera/Canyon) Lynn Grillo
- 10:00 Break (Pima)
- 10:15 **Taking Digital Imaging to the Next Level – Adobe Photoshop CS3 Extended**  
(Madera/Canyon) Ashley Manning Still
- 11:30 **Lunch – sponsored by Adobe** (Pima)
- 12:40 Walk to Center for Creative Photography (Meet in Pima)
- 1:00 PM **Behind the Scenes Tour – Center for Creative Photography**  
**Introduction to the Center**  
**Special viewing of select photographers' prints**  
**Small group tours**
- 4:00 Program ends - Open evening in Tucson

## **The Center for Creative Photography** [www.creativephotography.org](http://www.creativephotography.org)

Located on the University of Arizona campus, The Center for Creative Photography holds more archives and individual works by 20th century North American photographers than any other museum in the nation. These holdings include a research collection featuring the archives of over 50 photographers – Ansel Adams, Lola Alvarez Bravo, Richard Avedon, Louise Dahl-Wolfe, W. Eugene Smith, Harry Callahan, and Edward Weston among them.

The archives include photographs, negatives, albums, work prints, manuscripts, audio-visual material, contact sheets, correspondence and memorabilia. The Center for Creative Photography's art collection totals more than 80,000 works by 2,000 photographers.

## **The Ultimate Visual Communications Toolkit – Adobe Creative Suite 3** **Lynn Grillo, Solutions Engineer, Adobe Systems**



For almost three decades, Adobe has revolutionized how the world engages with ideas and information. Adobe Creative Suite 3 Design Premium is one of its brand-new, tightly integrated, design and development software suites that unite the best of Adobe and former Macromedia® product innovation. A highly efficient working environment, Design Premium software includes all-new versions of indispensable tools for page layout, image editing, illustration, and PDF workflows. And now—with newly integrated

components for creating compelling websites, rich interactive experiences, and engaging mobile content—you'll see how you can create content for multiple media. Products included in the Adobe Creative Suite 3 Design Premium are Adobe InDesign CS3, Photoshop CS3 Extended, Illustrator CS3, Flash CS3 Professional, Dreamweaver CS3, Acrobat 8 Professional, Bridge CS3, Version Cue CS3, and Device Central CS3. As a Solutions Engineer with Adobe Systems, Lynn's work centers around Adobe's products for creative professionals. Based in the New York metro area, she is an Adobe Certified Expert in numerous Adobe applications including Photoshop, Illustrator, InDesign, Acrobat, GoLive and InCopy. Lynn proudly holds Adobe Print Specialist, Adobe Web Specialist and Adobe Creative Suite Master certifications. To date, she has co-authored several books on Adobe GoLive, was technical editor of Adobe InDesign CS2 Killer Tips and The Adobe InCopy book and contributes regularly to Web sites and magazines for creative professionals. Support for this presentation has been provided by Adobe.



## **Taking Digital Imaging to the Next Level – Adobe Photoshop CS3 Extended** **Ashley Manning Still, Senior Product Manager for Adobe Photoshop**

From diagnostic workflow to communication of findings to patient education, digital images play a fundamental role in the work of medical and science professionals. Adobe Photoshop CS3 Extended software builds on top of Adobe Photoshop--the digital imaging standard--with new, powerful tools for documenting and analyzing information and visualizing potential outcomes. Some of the features you will see demonstrated are: nondestructive editing, measurement and analysis, DICOM support, advanced compositing and the ability to quickly create an animation with a series of images and export it to a wide variety of formats including QuickTime, MPEG-4 and FLV. Ashley Still is currently Sr. Product Manager for Adobe Photoshop and is focused on new markets and advanced technologies for Photoshop. Prior to joining Adobe, Ashley worked with an Entrepreneur in Residence at Sutter Hill Ventures developing and evaluating business plans and at eCircles.com, one of the first online sites offering photo-sharing and editing. She holds a BA from Yale University and an MBA from Stanford Graduate School of Business.



# Monday, July 23

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7:00 AM	<b>Full Buffet Breakfast</b> (Pima)	
8:30	<b>Welcome</b> (Madera/Canyon)	
8:45	<b>Keynote Address – <i>Feeling the Light on the Land</i></b>	Jack Dykina
10:00	<b>The Group Photograph</b>	Susanne Loomis
10:30	<b>Business Meeting</b> (Pima)	
11:30	<b>Luncheon and Towne Hall Meeting</b> (Pima)	
1:00 PM	<b>If a Picture's Worth a Thousand Words, A Podcast is Worth...</b> (Madera/Canyon)	Stuart Glogoff
2:00	<b>Seaweeds: Wonders of the Ocean Realm</b>	Norm Barker
2:30	Break (Pima)	
3:00	<b>Variation in Human Color Vision Perception: It's All in Our Genes</b> (Madera/Canyon)	Brian C. Verrelli, PhD
	<b>Documenting the Diversity of Life Through Photography</b>	Paul Hamilton
4:30	Program ends	
5:00	<b>Workshop - Jewels of the Night</b> (Registered participants meet in Atrium lobby, dinner included in fee)	Chip Hedgcock



Biolimages 2006  
Award of Excellence  
*The Death of a Child*  
Julia Serat  
Medical Media  
Shriners Hospitals for Children,  
Northern California  
Sacramento, CA

## **If a Picture's Worth A Thousand Words, A Podcast Is Worth...** **Stuart Glogoff – University of Arizona Learning Technologies Center**

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Biomedical communications professionals integrate the communications arts and technology to support instruction, research, patient care and an institution's public service mission. When a new technology emerges, our first step is often assessing how and when to use it. This is the case with podcasting, a new technology within the area of personal broadcasting. This presentation looks at the different ways that podcasts are delivered, what is involved in creating and maintaining podcasts, how biocommunications professionals might use podcasting to extend services to their constituents, and how a complementary technology called digital storytelling can have a dramatic impact on patient care.

## **Seaweeds: Wonders of the Ocean Realm** **Norm Barker, RBP, FBPA, Associate Professor of Pathology, Johns Hopkins University**

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Seaweeds or algae have served as some of the first specimens to be captured with the newly invented photographic processes of the early 1840s. The first photographic book by Anna Atkins was published using the cyanotype process and seaweeds as subject matter. William Henry Fox Talbot, the scientist/inventor of the positive negative process proclaimed about his new invention "every man could be his own publisher and printer." Before photography, scientists were keenly aware of the bias of the artist eye in reproducing and properly documenting their science for publication. The role of these early processes will be discussed along with the changes in technology that helped with the advancement of science and the publishing industry.

Norm Barker is an Associate Professor of Pathology and Art as Applied to Medicine at the Johns Hopkins University, School of Medicine. He specializes in photomicroscopy and macro photography. He is an R.B.P and fellow of the Biocommunications Association. His work is in the permanent collections of more than forty museums including The Smithsonian, The George Eastman House, The American Museum of Natural History and The Science Museum in London. He recently co-authored a book and exhibit entitled Seaweeds: Wonders of the Ocean Realm that is touring museums around the country.

[www.ancientmicroworlds.com](http://www.ancientmicroworlds.com)

**Variation in Human Color Vision Perception: Its All in Our Genes**  
**Dr. Brian C. Verrelli**  
**School of Life Sciences and The Biodesign Institute, Arizona State University**

Color vision perception enables many organisms including humans to distinguish among the different types of light that are reflected by objects that we encounter everyday. From organisms as simple as shrimp to as complex as humans, we live in a world that represents a spectrum of color that is seen and unseen, which begs the question, why is there so much variation in color perception among us? Even within human populations, we recognize that there exists variation in perception with respect to color-blind individuals as well as differences between men and women. The ability to perceive different colors is made possible by a number of photoreceptor “cones” that exist in the retinae of the eye and embody studies from many disciplines including behaviorists, physiologists, physicists, and geneticists. Using a genetics and anthropological perspective, I present an examination of how differences among individuals in their eye photoreceptor cones enable them to have unique perception abilities. These genetic observations have enabled us to understand why we see the colors we do and explicitly explain why women specifically may have a clearer view of the world of color than men that is steeped well within human history.

**Documenting the Diversity of Life Through Photography**  
**Paul Hamilton, Executive Director, Reptile Research**

Photography is quickly becoming the primary means of documenting biodiversity and communicating such findings to the world. The challenges faced by a Biologist wishing to document the diversity of life are both technical and creative. Specialized photographic equipment and techniques are necessary, but by no means sufficient, for the task. The organism must be collected, handled, and posed appropriately; no small task for poisonous, venomous, aggressive or skittish critters. The technical goal is to have a “photo voucher” or a permanent record of a species in a certain place and time, and can even be used to describe a new species. Technical aspects then aside, creativity is key. A creative photo can convey something of biological relevance, like mating behavior or habitat use. But it can also serve as a means to communicate with the rest of the world--professional or not--the interest, beauty, and value of biodiversity.

Paul Hamilton specializes in conservation, behavioral and evolutionary ecology, and herpetology. Trained for 17 years in herpetology of the American Southwest, he has been studying the reptiles and amphibians of Ecuador for the last 7 years. His work includes the science of Ecology and Evolution, and how to use photographs for everything from recording biodiversity and testing hypotheses to conveying the artistic value of images of nature.

[www.reptileresearch.org](http://www.reptileresearch.org)  
[www.biodiversityphotography.org](http://www.biodiversityphotography.org)

**Workshop – Jewels of the Night: Studio Techniques for the Photographer**  
**Charles “Chip” Hedgcock, University of Arizona**

Biocommunicators are often called upon to photograph a wide variety of small static objects in the hospital or laboratory where they work. This four hour workshop will help them use the skills and techniques that they already have to photograph small (and often highly mobile!) animals in the studio. There are few places participants of this workshop could go to receive this kind of exposure. They will have access to a wide variety of small living animal subjects. Knowledgeable experts will be on hand to help them with not just the nuts and bolts of studio photography, but techniques for applying the photographic skills that they already have to photographing living subjects. Experience first-hand the Sonoran desert's famous bio-diversity, which will provide a plethora of subjects for small animal studio photography in a variety of forms, expressing a variety of behaviors. Participants will learn methods for capturing, containing and safely photographing these fragile and highly mobile creatures. They will learn to get the images they need with little risk to the well-being of the subject as well as the photographer.

This workshop will be held at the field station for Sonoran Arthropod Studies Institute, SASI, “A membership supported organization fostering an awareness, knowledge and appreciation of all nature through the study and interpretation of the vital roles arthropods play in the Sonoran Desert ecosystem.” The Institute is housed in a former homestead located in Tucson Mountain Park, a 20,000 acre Sonoran Desert natural preserve located a few miles west of Tucson. The station has a small classroom, electricity, running water, restroom facilities and is ideally suited for this workshop. Volunteers from the institute will assist in the capture, handling and identification of animals photographed during the evening as well as providing pertinent natural history information. [www.sasionline.org](http://www.sasionline.org)

Equally at home photographing in the studio or in the field, Charles “Chip” Hedgcock has been a professional photographer for more than 20 years. He is a member of the American Society of Media Photographers (ASMP), the Stock Artist Alliance (SAA) and a Registered Biological Photographer through the BioCommunications Association (BCA). Charles has a background in Medical, Commercial and Biological/Scientific photography. This talent and experience, coupled with his keen interest in natural history have led him on photography and research projects in the American southwest and Sonora, Mexico.  
[www.charleshedgcock.com](http://www.charleshedgcock.com)

Support for this workshop provided by the Foundation of the American Society of Media Photographers.

Centipede © Chip Hedgcock



# Wednesday, July 25

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7:00 AM	Continental Breakfast for Workshop Participants	
8:30	<i>Workshops – Session I</i>	
	<b>Hands-on Photoshop CS3 Extended</b> (Main Gate Center)	Ashley Manning Still
	<b>Hands-on CS3 Print/PDF Workflow</b> (Main Gate Center)	Lynn Grillo
	<b>Total Body Photography</b> (Boardroom)	Sam Chesnutt
10:00	Break	
10:15	<i>Workshops – Session II</i>	
	<b>CS3 Web &amp; Flash Interactive Workflow</b> (Main Gate Center)	Lynn Grillo
	<b>Introduction to Color Management</b> (Madera/Canyon)	Daniel Dejan
11:45	Lunch - Provided for those registered in BOTH morning & afternoon workshops	
1:00 PM	<i>Workshops – Session III</i>	
	<b>Hands-on Photoshop CS3 Extended</b> (Main Gate Center)	Ashley Manning Still
	<b>Hands-on CS3 Print/PDF Workflow</b> (Main Gate Center)	Lynn Grillo
	<b>Digital Color: RGB to CMYK Conversions</b> (Madera/Canyon)	Daniel Dejan
2:30	Break	
2:45	<i>Workshop – Session IV</i>	
	<b>CS3 Web &amp; Flash Interactive Workflow</b> (Main Gate Center)	Lynn Grillo
	<b>Producing VR Tours with VR Worx</b> (Ventana)	Adam Cooper
4:15	Workshops end	
7:00	<b>Portfolio Review</b> (Pima)	
8:00	<b>Open Portfolio Show</b> (West Foyer)	
9:00	<b>Ice Cream Social</b> (West Foyer)	

## Workshop Abstracts

### Hands-On Adobe CS3 Design Premium (Part 1) – Print & PDF Workflow

**Lynn Grillo, Solutions Engineer, Adobe Systems**

Now that you've seen it, get your hands on it! Engage with Adobe Creative Suite 3 Design Premium and learn how you can create content and share it across different media. You'll get to play with a little of everything. In Part One, Lynn will guide you through a hands-on workflow from print design to PDF creation using Adobe InDesign CS3, Photoshop CS3 Extended, Illustrator CS3, Acrobat 8 Professional, Bridge CS3, Version Cue CS3, and Device Central CS3. Support for Lynn Grillo's workshops has been provided by Adobe.



### Hands-On Adobe CS3 Design Premium (Part 2) – Web & Flash Interactive Workflow

**Lynn Grillo, Solutions Engineer, Adobe Systems**

In Part Two, Lynn walks the class through a hands-on workflow for creating web pages and interactive Flash elements using, Photoshop CS3 Extended, Illustrator CS3, Flash CS3 Professional, Dreamweaver, 8 Professional, Bridge CS3, Version Cue CS3, and Device Central CS3. Support for Lynn Grillo's workshops has been provided by Adobe.



As a Solutions Engineer with Adobe Systems, Lynn's work centers around Adobe's products for creative professionals. Based in the New York metro area, she is an Adobe Certified Expert in numerous Adobe applications including Photoshop, Illustrator, InDesign, Acrobat, GoLive and InCopy.



Lynn proudly holds Adobe Print Specialist, Adobe Web Specialist and Adobe Creative Suite Master certifications. To date, she has co-authored several books on Adobe GoLive, was technical editor of Adobe InDesign CS2 Killer Tips and The Adobe InCopy book and contributes regularly to Web sites and magazines for creative professionals.

### Total Body Photography Workshop

**Sam Chesnutt, DigitalDerm, Inc.**

Sam Chesnutt of DigitalDerm will discuss Total Body Photography and how it is used by the Dermatologist in the early detection of melanoma, a deadly form of skin cancer. He will discuss Total Body Photography as it applies to the dermatologist, the patient and you the photographer. Mr. Chesnutt will address insurance reimbursement and what to expect. He will also discuss the employment opportunities in the field. This workshop will help prepare participants for Total Body Photography Certification.





## Hands-On Adobe Photoshop CS3 Extended Ashley Manning Still, Senior Product, Adobe Systems

Now that you've seen it, get your hands on it! Engage with Adobe Photoshop CS3 Extended and learn how you can make your images more effective in communicating results. You'll spend time with the top features of Photoshop CS3 Extended made especially for medical and science professionals. This is a half day work shop offered during the two morning sessions and repeats in the afternoon. Support for Ashley Manning Still's workshops has been provided by Adobe.

Ashley Still is currently Sr. Product Manager for Adobe Photoshop and is focused on new markets and advanced technologies for Photoshop. Prior to joining Adobe, Ashley worked with an Entrepreneur in Residence at Sutter Hill Ventures developing and evaluating business plans and at eCircles.com, one of the first online sites offering photo-sharing and editing. She holds a BA from Yale University and an MBA from Stanford Graduate School of Business.



## Introduction to Color Management Daniel Dejan, National Print and Creative Specialist for Sappi Fine Paper



An introductory workshop demonstrating how to understand your color from monitor to press and beyond. The seminar is broken into three parts. Using a comparative demonstration, the first section demonstrates how to go beyond four-color process with touch-plates, ink substitution, and stochastic screening. The second section addresses Color Management. Expert tips are recommended for getting better color and managing the digital workflow. Lastly, we go beyond 4-color and show a variety of printing techniques to expand and augment the standard print gamut. A copy of The Standard: Managing Color is provided.

Daniel Dejan is the National Print and Creative Specialist for Sappi Fine Paper with over 30 years experience as an award-winning graphic designer and creative director. This dynamic and entertaining speaker regularly presents to the printing and creative communities and has written extensively for trade publications and the Designer's Guide to Print Production.



## Digital Color: RGB to CMYK Conversions Daniel Dejan, National Print and Creative Specialist for Sappi Fine Paper

A beginning to intermediate discussion of color theory concentrating on the RGB to CMYK conversion with additional conversations regarding achieving critical color match.

In addition, an introduction to expanded gamut printing, the LPI/DPI relationship and high resolution half-tone dot reproduction, Stochastic/Staccato (CTP) screening will be provided. Sappi's "How To Read A Press Sheet" booklet and handouts will be distributed.

## Producing VR Tours with VR Worx Adam Cooper, RBP, FBCA, North Shore-LIJ Health System

Bring a higher level of interactivity and maximum motion to your web design and multimedia productions. This workshop will be a hands-on project to produce a Virtual Reality Tour using the program VR Worx. The group will act as 360-degree subjects and will be photographed using the specialized tripod. The program will be demonstrated. The image will be adjusted using Photoshop. The dramatic still image will be shown as an add-on to the VR product. Each attendee will receive a CD with the finished VR as well as the Photoshop still image.

Adam Cooper RBP, FBCA, is the Chief Medical Photographer and Manager of Graphic Systems at North Shore-LIJ health System where he has been for 20 years. He has a BS in Biomed Photo from RIT and is an RBP. Part of his philosophy is to try to implement new products and services as much as possible in the department.

## Post Conference Workshop Friday, July 27

### Creativity and Composition Workshop - Field & Classroom, Day-Long Workshop Bill Fortney – Nikon Professional Support



What could be better than an early morning sunrise shoot in the crisp desert air? We can shoot the sunrise and then be in the Arizona-Sonora Desert Museum by 7:30 a.m. In early morning we will enjoy the cooler temps and better light. This is a great place to photograph the desert environment; it's plants, birds and animals!

Back in the cool classroom we'll learn some more about Digital Nature Photography, talk about exposure, white balance, light, composition and more! A full day of shooting, learning and enjoying each others company! – Bill Fortney

Arizona-Sonora Desert Museum – [www.desertmuseum.org](http://www.desertmuseum.org)

This workshop will be held at the Arizona-Sonora Desert Museum. A world-renowned zoo, natural history museum and botanical garden, all in one place! Exhibits re-create the natural landscape of the Sonoran Desert Region so realistically you find yourself eye-to-eye with mountain lions, prairie dogs, Gila monsters, and more. Within the Museum grounds, you will see more than 300 animal species and 1,200 kinds of plants. There are almost 2 miles of paths traversing 21 acres of beautiful desert.



# Thursday, July 26

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7:00 AM	Continental Breakfast (Pima)	
8:15	<b>Forensic Technical Program</b> (Madera/Canyon)	Moderator Gale Spring
8:15	<b>Old Wood's Lamps Die Hard</b>	Robert Cheeseman
8:50	<b>Forensic Photography in a CSI World</b>	Gale Spring
9:45	<b>Vendor Introductions</b>	
10:00	Vendor Exhibits Open & Break (Pima)	
10:15	<b>Justice Through Science and Art: Incorporating Visual Aids into the Courtroom</b>	Michael Havranek and Asha Renee Kays
11:00	<b>Twisted Pixels: Ethical Guidelines for the Appropriate Use and Manipulation of Scientific Digital Images</b>	Doug Cromey
11:45	Birds of a Feather Luncheon (Pima)	
1:00	<b>Show Us Your Stuff</b> (Madera/Canyon)	Adam Cooper, moderator
1:40	<b>Info Share</b>	Bob Turner, moderator
2:15	Concurrent Sessions <b>Secrets of the Successful Self-Employed and Small-Business Owners</b> (Madera/Canyon)	Michael Havranek and Asha Renee Kays
	<b>We Create Our Tools Then Our Tools Shape Us. What Changes with the Adaption of New Media?</b> (Room #223)	John Hendrix
	<b>From the Bottom Looking Up – A Different Perspective on the Future of Photography</b> (Pima)	Gale Spring
3:15	Break & Vendor Exhibits Close	
3:30	<b>Anne Shiras Pioneer Members Lecture – Richard McNeely Arizona Telemedicine: How Biocommunicators Make It Work</b>	
6:30	<b>Honors Reception</b> (West Foyer)	
7:30	<b>Honors Dinner</b> (Madera/Canyon)	

## Old Wood's Lamps Die Hard

### Rob Cheeseman, RC Forensic Inc., Forensic Technologist

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Spectrophotometric lighting for forensic applications including the near ultra violet (UV) to near infrared (IR) photographic techniques. Digital infrared (IR) photography has particular opportunities in domestic violence (DV), gun shot residue (GSR) and blood spatter detection on dark surfaces. Traditional visible light Forensic Lighting Source (FLS) techniques are still as valid as they were in 1908 (R.M. Wood's Patent date). The advent of the Wood's Lamb precedes most of today's investigators by several generations and has certainly earned a place in forensic history. The introduction of the LED (light emitting diode) has been first reasonable option to the trusty Wood's Lamb. More recently the newer high performance LED's yielded the necessary illumination required of a serious forensic tool. The use of the LED blue light (475 Nm) with orange goggles for the discovery of protein stains (i.e.; semen stains) in sexual assault investigators has been a technique used for many years by the well informed employed investigators. Similarly the same technique can be used with a shorter wave length (395 Nm / purple color) with yellow goggles for the enhancement of contusions (bruising). The employment of these techniques presents many new and unique opportunities in various forensic disciplines.

Rob is an instructor, forensic consultant and occasional expert witness. Mr. Cheeseman has instructed local, federal and international law enforcement agencies personnel on various forensic techniques and has been pursuant with new technologies and techniques, which have improved forensic applications. [www.rcforensic.com](http://www.rcforensic.com)

## Forensic Photography in a CSI World

### Gale Spring, FBPA, Moderator, Associate Professor and Program Leader of Scientific Photography at RMIT University in Melbourne, Australia

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Recently, the interest in forensic science has grown with the proliferation of television programs such as CSI and NCIS among others. What impact has this had on the expectations of courts and juries in presenting and interpreting evidence? What expertise does a forensic photographer need today? How does this impact on medical, scientific and law enforcement photographers? What is the 'real life' difference of the role of a forensic photographer compared to myth? Gale will share his experience of presenting testimony in criminal and civil courts as well as medical tribunals and sporting disputes. The presentation will also cover critical points to remember when documenting evidence or preparing expert testimony. It also elaborates on the difficulties and disputes that arise with the use of digital imaging.

After 11 year in pathology and forensic photography at the University of Texas Health Science Center at Dallas, Gale Spring has been the Associate Professor and Program Leader of Scientific Photography at RMIT University in Melbourne, Australia for over 19 years.

## Justice through Science and Art: Incorporating Visual Aids into the Courtroom

Michael Havranek, M.A.M.S., CMI and Asha Renee Kays, MS, CMI

Photos, videos, models, illustrations, animations, and interactive presentations are all being used more abundantly in contemporary courtrooms. This presentation will discuss the design and creation of these visuals and how to make them relevant and admissible in court. Special emphasis will be given to the process of creating demonstrative aids as well as costs and limitations. Discussion will also focus on how the different artistic disciplines can work together in mutually beneficial roles when recording, creating, and displaying legal visuals. Knowing how to work alongside the legal system, and knowing how to make the best use of illustrators, videographers, and photographers in order to create useful and effective visual aids, can open the door to successful opportunities in legal graphics. Michael and Asha are both certified medical illustrators with over 11 years of combined experience in medical-legal visuals. Having both been employed by the nation's top medical-legal exhibit provider for over 6 years, they have branched out to run successful independent businesses in medical-legal graphics. They work closely alongside legal professionals and have given presentations regarding biomedical visualization to attorneys, science editors, and research departments for large companies such as Philip Morris USA.



[www.amicusvisualsolutions.com] Support for this presentation has been provided by the Vesalius Trust.



## Twisted Pixels: Ethical Guidelines for the Appropriate Use and Manipulation of Scientific Digital Images

Doug Cromey, Univ. of Arizona, Cell Biology & Anatomy/ Cellular Imaging Facility Core

The scientific community has grown increasingly concerned about the veracity of digital images. While there have been isolated cases of outright image manipulation fraud, there are a greater number of instances of authors over-manipulating an image in an attempt to present convincing data. Often the author's enthusiasm for the science is combined with an ignorance of the basic principles of what a digital image represents and how it should be appropriately handled. Due in part to the well publicized fraud cases, a number of professional societies and journals have come out with detailed lists of what can and cannot be done with digital image data. Unfortunately, lists of rules do nothing to overcome the lack of understanding in the labs. This presentation will cover twelve guidelines and discuss the scientific reasons that justify their importance. Mr. Cromey will draw from his extensive experience in microscopic imaging in the presentation. Doug has been involved with biological microscopy since 1979. He first published a list of digital imaging guidelines online in February 2001 and has revised and updated the guidelines ever since.

## Show Us Your Stuff – Adam Cooper, RBP, FBCA – Moderator

InfoShare – Bob Turner, RBP, FBPA - Moderator

The program which will include a number of images by various presenters who will show their work, and explain the processes used to produce the image. They will then take a few minutes of questions. The presentations will go deeper into the process than simply viewing the images from the salon.

InfoShare is a collection of short presentations of general interest on new equipment, materials, or processes. Each topic is covered in 5 to 10 minutes.

## Secrets of Successful Self-Employed and Small-Business Owners: Survival Skills, Marketing, And Entrepreneurial Tactics in an Age of Technological Advances That Are Changing How We Do Business As Creative Technicians – M. Havranek & A.Kays

Some advances in technology have made it more difficult for the creative technician to maintain steady employment. As more creative technicians look to other opportunities, many start independent businesses and struggle to market and thrive. There are five basic principles that may help a creative small business owner to acquire new clients: 1) Identify which skills make you stand out from competitors, 2) Realize the difference between being a technician and a business owner, 3) Acquire the behaviors that attract clients, 4) Explore cost effective marketing tools, and 5) Be passionate about your business. A discussion of these five key principles will lead to many ideas about how to create a business that is attractive to new clients, how to make technology work for the technician, how to overcome certain challenges of a small business, and innovative ideas regarding marketing and advertising.

## We Create Our Tools Then Our Tools Shape Us. What Changes With The Adaptation Of New Media? – John Hendrix, RBP, FBCA

The decisions we make on the adaptation of technology may not yield the outcomes we expect. Whether personal as in selecting a cell phone or decisions about our careers and departments, technology has an impact that we might overlook. There is a culture change. We think of technology as a tool but we need to better understand what changes. Ideas put forth by Marshall McLuhan on the impact of media and technologies on culture offer us a different way of looking at change and help us assess where we are going.

## From the Bottom Looking Up - A Different Perspective on the Future of Photography Gale Spring, FBPA

Metaphorically speaking, the world has certainly gotten smaller, but are we taking advantage of its shrinking size? This presentation looks at aspects of the photographic industry and education from an Asia-Pacific perspective. What is the current status and potential future of scientific, medical and forensic photography? Is technology driving our profession or is the profession in control of our future? Because of its physical isolation and passion for technology, Australia has been a test market for the introduction of many technologies. It can embrace new technologies and ideas quickly. This presentation will offer a different perspective on photography and will highlight what is happening in Australia to 'keep the enthusiasm and professions alive'.

# Meeting at a Glance

Monday, July 23	Tuesday, July 24	Wednesday, July 25	Thursday, July 26
7:00 Full Buffet Breakfast	7:00 Continental Breakfast	7:00 Workshop Continental Breakfast	7:00 Continental Breakfast
8:15 Registration opens	8:15 Registration opens	8:30 <b>Workshop Session I</b>	8:00 Registration opens
8:30 Welcome <b>Keynote Address</b> <b>Jack Dykinga</b>	8:30 Technical Program	10:00 Break	<b>8:15</b> Forensic Technical Program
10:00 Group Photo	10:00 Break	10:15 <b>Workshop Session II</b>	10:00 Vendors Exhibits Open & Break
10:30 Business Meeting	10:15 Technical Program	11:45 Workshop Lunch	10:15 Technical Program
11:30 Luncheon and Town Hall Meeting	11:30 Luncheon sponsored by Adobe	1:00 <b>Workshop Session III</b>	11:45 Birds of a Feather Luncheon
1:00 Technical Program	12:40 Walk to Center	2:30 Break	1:00 Show Us Your Stuff & Info Share
2:30 Break	1:00 <b>Program Continues at the Center for Creative Photography</b>	2:45 <b>Workshop Session IV</b>	2:15 Concurrent Sessions
3:45 Technical Program	4:00 End of Tuesday Program Enjoy Tucson!	4:15 Workshops End	3:15 Break & Vendor Exhibits Close
4:30 End of Monday Technical Program		7:00 Portfolio Review	3:30 <b>Pioneer Members Lecture</b> <b>Richard McNeely</b>
5:00 <b>Workshop</b> – Jewels of the Night		8:00 Open Portfolio Show	6:30 Honors Reception and Banquet
		9:00 Ice Cream Social	
			<b>Friday, July 27</b> 4:30 AM - 4:00 PM PreDawn Photo & Composition Workshop

## Equipment and Support for this Meeting Provided by:

