

Academy of Surgical Research



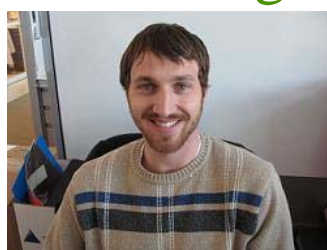
Surgical Savvy

Scrubbing In With...

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Scrubbing In With.....



Kevin Barnard, BS, new member of ASR

I graduated from the University of Connecticut in 2005, where I had originally studied to become a veterinarian, but switched my focus to research and finished with a degree in Pathobiology.

A few months after graduating I began working with the Pre-clinical Orthopedics animal models group at Genzyme.

I've really enjoyed my last four years working in this small group; I've had the opportunity to work with many talented people and have learned so much in the field of surgical research.

I am a brand new member of ASR, and recently attended my first ASR conference in New Orleans. I am looking forward to meeting and working with others to broaden my knowledge in the field of surgical research.

J. Eric McCloud, BS, Publications Committee

I look forward to getting to know you all. I got my start at an Agricultural High School (Walter Biddle Saul) located in Philadelphia. While attending Saul, I developed a fond appreciation for farm animals, laboratory animals, and learning about their anatomy and physiology. I grew up telling everyone I wanted to be a veterinarian, like a lot of us. I eventually earned my BS in animal bioscience from Penn State University in 1993 and entered the workforce as an animal technician at the notable Wistar Institute in Philadelphia. I also earned graduate course credits in biomedical sciences at Drexel University in 1997 and worked in a research laboratory focused on non-invasive and minimally invasive cardiovascular imaging at Hospital of University of Pennsylvania.



In 2001, I went on to work for Charles River Laboratories (CRL) based in Worcester, MA. Working at CRL as a research assistant afforded me many opportunities to become involved and take on leadership roles in conducting various preclinical GLP and non-GLP research studies. I recently took on a new role as a laboratory coordinator at "start up" CRO based in Wake Forest University's Piedmont Triad Research Park (PTRP).

Now, I'm working more closely with one of my mentors and supervisor Dr. Vincent Mendenhall, a renowned experimental veterinary surgeon, who is director of the CRO. I'm learning and performing more surgically focused procedures and I find surgery in preclinical testing to be very rewarding, particularly as it relates to patient safety. I hope to achieve my ASR certification in the near future.

What's Next? How to Change an Endotracheal Tube While Maintaining the Airway

Nance M. Moran, BLA, AS, SRS, RLATg, Genzyme Corporation, Massachusetts

Your patient is intubated. Even though you've performed your equipment check you realize that the endotracheal tube you have in place is damaged in some way (i.e. the cuff won't stay inflated). How do you change the endotracheal tube without losing your patent airway and without struggling with risking further trauma by blind intubation or by laryngoscope?

Commercially available materials such as the SHERIDAN T.T.X.TM Exchanger are available just for this purpose. It is made of flexible tubing with depth markers directly on it for insertion accuracy into the trachea. The tube must be of small diameter than the internal diameter of your endotracheal tube. The tubing allows for airflow during your tube exchange. The commercially available materials can be costly. You can however make your own at a more reasonable price!

A sterile open ended polypropylene urinary catheter can be marked for depth. Be sure that the urinary catheter is at least 2 inches longer than the depth measured for insertion. Urinary catheters come in many diameters and can be autoclaved. It is not suggested to use a urinary catheter that has been used in any other procedures. The tube should be measured and marked (from the thoracic inlet to the incisors). If there is a female insertion port opening that bells out at one it will need to be cut off to facilitate sliding of the endotracheal tubes around it if it is wider than the endotracheal tube. Next lubricate the catheter very lightly using either K-Y jelly or xylocaine jelly. Use caution, be sure not block the opening at the end of the catheter with the lubrication. Next insert the catheter into the endotracheal tube gently extending down to your marker on the catheter. Keep hold of the urinary catheter while in place, do not let it slide down. Place your new previously checked tube (also lubricated) over the catheter using it as a stylette to guide the new endotracheal tube into place. Remove the catheter once your endotracheal tube is in place.

Materials: open ended polypropylene urinary catheter, lubricant, marker, new endotracheal tube

Polypropylene urinary catheter



Tech Tips

By Kevin Barnard

Question?

How do you perform blind intubation in rabbits?

Blind intubation can be the preferred method of intubation for rabbits in many cases. The laryngoscope can be very intrusive, and has the potential to cause significant damage to the oral cavity. However, this is not to say that blind intubation doesn't have the potential for injury. Multiple attempts at blind intubation can cause severe damage to the epiglottis, including swelling and bleeding. Since direct visualization of the epiglottis is not available with this procedure, alternative techniques must be used to properly perform blind intubation, and prevent injury to the animal.

The endotracheal tube used in this procedure is a 3.0-4.0 mm internal diameter tube. Prior to use, the cuff should be inflated to ensure the tube is holding the inflation, and then deflated prior to any intubation attempts. A xylocaine jelly can be used on the tube to lubricate and topically numb the airway, for easier access.

Once the rabbit is fully anesthetized, place the rabbit in sternal recumbancy, and gently hyper-extend (elongate) the neck. Gently place the tongue off to the side of the mouth, and using a laryngoscope, look into the rabbit's mouth, making sure it's clear of debris. Be sure to remove any food or fecal debris found in the mouth to prevent the tube from pushing debris into the lungs. With the neck hyper-extended, to straighten the airway, place the endotracheal tube in the mouth of the rabbit, and advance slowly. On the inside of the tube there should be condensation with each breath the rabbit takes, as the condensation gets stronger in the tube, the tube is nearing the entrance of the larynx. When the tube encounters some resistance, it has come in contact with the epiglottis. Pull back slightly on the tube and allow condensation once again, gently advancing the tube as condensation forms. Another method is to listen to the end of the tube, breaths should be audible and become louder as tube nears epiglottis.

Breathing sounds should be audible and clear coming from the end of the endotracheal tube, if placed correctly. Visually confirm placement with condensation in the tube, or the bottom end of laryngoscope will condensate. It's also possible to visualize breaths by holding a few hairs up to the end of the tube and looking for movement. If no breathing sounds are heard, and no visual confirmation of breaths from the end of the tube are confirmed, the tube has been inadvertently placed in the esophagus. In this case the tube must be removed, and intubation attempted again (a smaller tube may be needed). Once placement in the airway is confirmed, the tube must be secured with a length of catheter string. Tie the string around the tube, and then wrap around the neck and tie. Once secured, hook up the end of the tube to the anesthesia machine with the oxygen on, and inflate the cuff. I have provided a link to a video of blind intubation being performed, which illustrates the techniques I described using the "listening" technique.

Video link:

http://wildlife1.wildlifeinformation.org/000VIDEOS/V9_RabbitET_Blind/IS_Blind_Intubation.htm

WHAT DO YOU WANT TO TALK ABOUT?

We'd love to hear from you! Send us a profile, tech tip or article!

Submission deadlines: June 1st, and November 1st (July and December Issues)

Times New Roman 12 font

Enclose pictures as an attachment in .jpg format

Submit electronically to:

Nance Moran

49 New York Avenue

Framingham, MA 01701

Nance.moran@genzyme.com

508 271-3574

2010 ASR Conference Hits the Beach!!!

The 2010 Academy of Surgical Research Annual Conference is going back to one of the most popular destinations of the events history – Clearwater Beach, FL. The conference is scheduled for Sept. 30-Oct. 2. The program will be held at the luxurious Sandpearl Resort – right on the beach.

Topics being considered by the Program Committee include:

- Cardiovascular / Catheterization Forum
- Orthopedic Forum
- Minimally Invasive Surgery
- Medical Device Implantation
- Organ Transplant Surgery
- Wound Healing
- Ischemia Reperfusion
- Much More!!

The Program Committee Chairman this year is John “Cody” Resendez. If you have ideas about the program go the Academy’s website www.surgicalresearch.org and you will find a connection to the Program Committee – they certainly will appreciate your input.

Congratulations New Certification Holders

During this past September’s Annual Conference in New Orleans, 28 certification candidates passed their exams to become Surgical Research Specialists (SRS), Surgical Research Technicians (SRT), and Surgical Research Anesthetists (SRA). Here is a listing of the new certification holders – congratulations. Also, if you are interested in applying for a certification in 2010 go to the website and click on Certification.

SRS

Daniel S. Allen, SRT, SRS
Mark Beckel, SRS
Dr. Pamela Broussard, DVM, SRS
Jon Ehrmann, SRA, SRS
Dr. Michail Katsimpoulas, SRS
Stacy L. Porvasnik, SRS
Amy Jo Williams, SRA, RVT, MA,
SRS

OHSU
American Preclinical Services
IHIMF
Bristol-Myers Squibb Company
Biomedical Research Foundation
University of Florida

Ethicon Endo-Surgery, Inc.

SRT

Elizabeth Carter, CVT, SRT
Allyson Hansell, SRT
Kerry D. Hoffman, SRT
Joanne C. Kuziw, SRT
Amanda L. McSweeney, RLAT, SRT
Christina Mitchell, SRT
Traci L. Russell, SRT
Monica Torres, SRT

American Preclinical
Services
GlaxoSmithKline
Glaxo Smith Kline
Glaxo Smith Kline
CBSET, Inc.
Charles River
Pfizer Incorporated
University of South Florida

SRA

William Allen, SRA
Joseph Altemus, SRA
Bozena G. Antil, BS, CVT, RLAT, SRA
Anne Burkholder, SRA
Tihomir Cakic, SRA
Paulyn Cha, SRA
Jillian M. Horvath, SRA
Maureen Lamkin, SRA
Justin L. Prater, SRA
Kendra Southwick, BS, LATG, LVT, SRA

SNBLUSA
Thomas Jefferson University
Charles River Laboratories
Pfizer, Inc.
University of Texas at Austin
Roche Pharmaceuticals
MPI Research
Bristol-Meyers Squibb
MPI Research
MPI Research

Award Winners

The following awards were presented by 2009 President Kim Bayer during the 2009 Conference.

Jacob Markowitz Award

Dr. Paul Flecknell

Adreas von Recum Award (for outstanding contributions to the Academy)

Dr. Luis Toledo-Pereyra



C.W. Hall Award (for top rated article in past year in JIS)

R.O. Giovanardi, MD, PhD, E.L. Rhoden, MD, PhD, C.T. Cerski, MD, PhD, M. Salvador, PhD, A.N. Kahil, MD, PhD

Ischemic Preconditioning Protects the Pig Liver by Preserving the Mitochondrial Structure and Downregulating Caspase-3 Activity

Michael DeLeo Award (for highest rated poster presentation)

Allison S. Parlapiano

5/6 Nephrectomy: Comparison of Two Surgical Techniques in Male Sprague-Dawley Rat

Allison S. Parlapiano, Merck & Co, Department of Central Pharmacology, Rahway, NJ



Barry Sauer Award (for highest score on certification exam)

SRS

Pam Broussard (no picture available)

Jon Ehrmann



SRT

Elizabeth Carter (*presented by Certification Committee Chair Lisa Johnson*)



SRA

Joseph Altemus

