TABLE OF CONTENTS

1. Departmental Activity Report and Listing

2. Departmental Bibliography
### Instructional Program

The Clinical Sciences faculty continued to provide key instructional offerings. In addition to acting as course coordinators for the courses in the list below, faculty also provide instruction in a number of other DVM and graduate courses.

<table>
<thead>
<tr>
<th>DIDACTIC COURSES:</th>
<th>SEMESTER</th>
<th>COORDINATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Careers in Veterinary Medicine (VMC-910)</td>
<td>FALL</td>
<td>FISH</td>
</tr>
<tr>
<td>Advanced Topics in Equine Medicine and Surgery (VMC-911)</td>
<td>SPRING</td>
<td>DAVIS</td>
</tr>
<tr>
<td>Special Topics in Zoological Medicine (VMC-921)</td>
<td>FALL</td>
<td>LEWBART</td>
</tr>
<tr>
<td>Introduction to Companion Animal Behavior (VMC-927)</td>
<td>SPRING</td>
<td>SHERMAN</td>
</tr>
<tr>
<td>Chelonian Medicine and Surgery (VMC-928)</td>
<td>SPRING</td>
<td>LEWBART</td>
</tr>
<tr>
<td>Introd to Physical Exam Skills-Lab Animal and Zoological Species (VMC-931)</td>
<td>SPRING</td>
<td>LEWBART</td>
</tr>
<tr>
<td>Principles of Surgery (VMC-932)</td>
<td>FALL</td>
<td>MATHEWS</td>
</tr>
<tr>
<td>Theriogenology (VMC-933)</td>
<td>FALL</td>
<td>BAILEY</td>
</tr>
<tr>
<td>Introduction to Physical Examination (VMC-937)</td>
<td>SPRING</td>
<td>MARKS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SELECTIVES:</th>
<th>SEMESTER</th>
<th>COORDINATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Ferret Medicine (VMC-991)</td>
<td>FALL (odd years)</td>
<td>STOSKOPF/HARMS</td>
</tr>
<tr>
<td>Companion Avian Medicine (VMC-991)</td>
<td>SPRING</td>
<td>DEGERNES</td>
</tr>
<tr>
<td>Invertebrate Medicine (VMC991)</td>
<td>SPRING</td>
<td>LEWBART</td>
</tr>
<tr>
<td>Equine Medicine (VMC991)</td>
<td>FALL</td>
<td>BREUAUS</td>
</tr>
<tr>
<td>Advance Carnivore Medicine (VMC991)</td>
<td>SPRING</td>
<td>STOSKOPF</td>
</tr>
<tr>
<td>Animal Behavior and Welfare (VMC-991)</td>
<td>FALL</td>
<td>SHERMAN</td>
</tr>
<tr>
<td>Applied Surgical Anatomy (VMC991)</td>
<td>SPRING</td>
<td>MATHEWS</td>
</tr>
<tr>
<td>Intro to Medical Photography/Digital Imaging (VMC991)</td>
<td>FALL</td>
<td>BRISTOL/SAVAGE</td>
</tr>
<tr>
<td>Large Animal Endoscopy (VMC991)</td>
<td>ALL YEAR</td>
<td>GERARD</td>
</tr>
<tr>
<td>Extramural Experiences in Laboratory Animal Medicine (VMC-991)</td>
<td>SPRING</td>
<td>WILLIAMS</td>
</tr>
<tr>
<td>Art and Practice of Effective Veterinarian-Client Communications (VMC-991)</td>
<td>FALL</td>
<td>GERARD/WILLIAMS</td>
</tr>
<tr>
<td>Physical Therapy and Rehabilitation (VMC991)</td>
<td>SPRING</td>
<td>MARCELLIN</td>
</tr>
<tr>
<td>Advanced Fish Medicine (VMC991)</td>
<td>FALL</td>
<td>LEWBART</td>
</tr>
<tr>
<td>Advanced Herptile Medicine VMC991</td>
<td>FALL</td>
<td>STOSKOPF</td>
</tr>
<tr>
<td>Advanced Companion Avian Medicine (VMC991)</td>
<td>SPRING</td>
<td>DEGERNES</td>
</tr>
<tr>
<td>Raptor Medicine and Rehabilitation (VMC991)</td>
<td>FALL</td>
<td>DEGERNES</td>
</tr>
<tr>
<td>Primate Medicine (VMC991)</td>
<td>SPRING</td>
<td>STOSKOPF</td>
</tr>
<tr>
<td><strong>Advanced Equine Theriogenology (VMC991)</strong></td>
<td>SPRING</td>
<td>WHITACRE</td>
</tr>
<tr>
<td>Introduction to Equine Orthopedics &amp; Lameness (VMC991)</td>
<td>SPRING</td>
<td>REDDING</td>
</tr>
<tr>
<td>Advanced Horse Handling (VMC991)</td>
<td>SPRING</td>
<td>GERARD/JONES</td>
</tr>
<tr>
<td>Environmental Medicine and Policy (VMC991)</td>
<td>SPRING</td>
<td>KENNEDY-STOSKOPF</td>
</tr>
<tr>
<td>Professional Meeting (VMC991)</td>
<td>FALL/SPRING</td>
<td>FLAMMER</td>
</tr>
<tr>
<td>Equine Dentistry (VMC991)</td>
<td>SPRING</td>
<td>GERARD</td>
</tr>
<tr>
<td>Small Animal Practice Experience (VMC992)</td>
<td>FALL/SPRING</td>
<td>WILLIAMS</td>
</tr>
<tr>
<td>Health/Safety in the Third World (VMC992)</td>
<td>SPRING</td>
<td>LOOMIS</td>
</tr>
<tr>
<td>Active Learning in Companion Animal VTH (VMC992)</td>
<td>FALL/SPRING</td>
<td>HARDIE</td>
</tr>
<tr>
<td>Extramural Experience in Zoo Medicine (VMC991)</td>
<td>FALL/SPRING</td>
<td>LEWBART</td>
</tr>
<tr>
<td>Small Animal Theriogenology (VMC-991)</td>
<td>FALL</td>
<td>BAILEY</td>
</tr>
<tr>
<td>Equine Colic (VMC-991)</td>
<td>FALL</td>
<td>BLIKSLAGER</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ELECTIVES:</th>
<th>SEMESTER</th>
<th>COORDINATOR</th>
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</thead>
<tbody>
<tr>
<td>Topics in Wild Avian Medicine (VMC-926)</td>
<td>SPRING</td>
<td>DEGERNES</td>
</tr>
<tr>
<td>Chelonian Medicine and Surgery (VMC-928)</td>
<td>SPRING</td>
<td>LEWBART</td>
</tr>
<tr>
<td>Special Topics in Zoological Medicine (VMC-921)</td>
<td>FALL/SPRING</td>
<td>DEGERNES</td>
</tr>
<tr>
<td>Advanced Topics in Equine Medicine &amp; Surgery (VMC 911)</td>
<td>SPRING</td>
<td>DAVIS</td>
</tr>
<tr>
<td>Ethics in Fisheries &amp; Wildlife Sciences (FW-730)</td>
<td>FALL</td>
<td>STOSKOPF</td>
</tr>
</tbody>
</table>
### CLINICAL ROTATIONS:

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Offered Year Round</th>
<th>Coordinator</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Health – Philosophy to Practice (VMP-986)</td>
<td>SPRING</td>
<td>KENNEDY-STOSKOPF (Co-L)</td>
</tr>
</tbody>
</table>

| General Limited Small Animal Practice (VMC-939)         | YEAR ROUND         | FERRIS      |
| Theriogenology (VMC 940)                               | YEAR ROUND         | WHITACRE    |
| Advanced Topics in Theriogenology (VMC 941)            | YEAR ROUND         | HARRELL     |
| Sea Turtle Medicine & Rehabilitation (VMC 950)         | YEAR ROUND         | FISH        |
| Medicine/Companion Animal For Food Animal/Equine (VMC 954) | YEAR ROUND         | STOSKOPF    |
| Extramural Experiences/Laboratory Animal (VMC 955)     | YEAR ROUND         | TATE        |
| Small Animal Emergency (VMC 960)                        | YEAR ROUND         | HANEL       |
| Extramural Experiences in Zoological Medicine (VMC 963) | YEAR ROUND         | LEWBART     |
| Equine Emergency (VMC-966)                             | YEAR ROUND         | PRANGE      |
| Small Animal Dentistry (VMC 967)                        | YEAR ROUND         | EROSHIN     |
| Equine Lameness and Orthopedics (VMC-968)              | YEAR ROUND         | TATE        |
| Medicine/Small Animal (VMC 971)                         | YEAR ROUND         | HARRELL     |
| Clinical Small Animal Veterinary Cardiology (VMC 972)   | YEAR ROUND         | DEFRANCESCO |
| Small Animal Surgery (VMC 973)                          | YEAR ROUND         | ROE         |
| General and Orthopedic Surgery (VMC 973)               | YEAR ROUND         | ROE         |
| General Surgery (VMC-973G)                              | YEAR ROUND         | ROE         |
| Orthopedic Surgery (VMC-973O)                           | YEAR ROUND         | TATE        |
| Equine General Surgery (VMC-975)                        | SPRING             | HANSEN      |
| Veterinary Critical Care (VMC-976)                      | FALL/SPRING        | BREUHAUS    |
| Preventative Health Care (VMC 977)                      | SPRING             | PRANGE      |
| Equine Lameness (VMC 978)                               | SPRING             | JONES       |
| Equine Medicine (VMC 979)                               | YEAR ROUND         | WILLIAMS    |
| Veterinary Clinical Oncology (VMC 980)                  | YEAR ROUND         | FISH        |
| Laboratory Animal Medicine (VMC 981)                    | FALL/SPRING        | VARIOUS FACULTY |
| Clinical Veterinary Ophthalmology (VMC 982)             | YEAR ROUND         | CLODE       |
| Dermatology (VMC 983)                                   | YEAR ROUND         | MURPHY      |
| Introduction to Clinical Neurology & Neurosurgery (VMC 984) | YEAR ROUND         | MUNANA      |
| Advanced Companion Animal Internal Medicine (VMC 986)   | YEAR ROUND         | HARRELL     |
| Aquatic Medicine (VMC 987)                              | FALL               | LEWBART     |
| Special Species Medicine (VMC 988)                      | SPRING/FALL        | LEWBART     |
| Zoological Medicine (VMC 989)                           | YEAR ROUND         | STOSKOPF    |
| Musculoskeletal Ultrasound in the Horse (VMC 990)       | SPRING             | REDDING     |
| Special Topics in DoCS (VMC-991/992)                    | FALL/SPRING        | VARIOUS FACULTY |
| Equine Special Topics (VMC 993)                         | YEAR ROUND         | JONES       |
| Small Animal 4th Year Extramural Experiences (VMC 994)  | YEAR ROUND         | WILLIAMS    |
| Clinical Conference (VMC-995)                           | FALL               | LEWBART     |
| Clinical Conference (VMC-995)                           | SPRING             | GUY         |
| Advanced Avian Clinical Medicine (VMC 996)              | SPRING             | DEGERNES    |
| Raptor Medicine and Rehabilitation – Clinician Approval (VMC 997) | SPRING/FALL        | DEGERNES    |
| Wildlife Rehabilitation Medicine (VMC 998)              | YEAR ROUND         | STOSKOPF    |
| Zoological Husbandry & Nutrition (VMC-964)              | YEAR ROUND         | STOSKOPF    |

### GRADUATE COURSES:

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Semester</th>
<th>Coordinator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Ethics and Conduct of Sciences (CBS-662)</td>
<td>SPRING</td>
<td>FISH</td>
</tr>
<tr>
<td>Advances in Gastrointestinal Pathophysiology (CBS-764)</td>
<td>FALL</td>
<td>BLIKSLAGER</td>
</tr>
<tr>
<td>One Health-Philosophy to Practice (CBS 810)</td>
<td>SPRING</td>
<td>KENNEDY-STOSKOPF</td>
</tr>
<tr>
<td>Advanced Topics in Zoo Medicine I (CBS-817)</td>
<td>FALL</td>
<td>KENNEDY-STOSKOPF</td>
</tr>
<tr>
<td>Zoo Medicine II (CBS-818)</td>
<td>SPRING</td>
<td>KENNEDY-STOSKOPF</td>
</tr>
<tr>
<td>Seminar in Comparative Biomedical Sciences (CBS-800)</td>
<td>FALL</td>
<td>JONES</td>
</tr>
<tr>
<td>Special Topics in Comparative Medicine &amp; Translational Research</td>
<td>FALL</td>
<td>OLBY/LASCELLES</td>
</tr>
<tr>
<td>Epidemiology of Wildlife Diseases (FW-720)</td>
<td>FALL</td>
<td>KENNEDY-STOSKOPF</td>
</tr>
<tr>
<td>Ethics in Fisheries and Wildlife Sciences (FW-730)</td>
<td>FALL</td>
<td>STOSKOPF</td>
</tr>
<tr>
<td>Special Topics in Theriogenology I (CBS-810)</td>
<td>FALL</td>
<td>BAILEY</td>
</tr>
</tbody>
</table>
Special Topics in Theriogenology II (CBS-810) | FALL | BAILEY
---|---|---
**MSPVM COURSES:** | **SEMESTER** | **COORDINATOR**
Advanced Specialty Training in SA Surgery & SA Internal Medicine (SVM-579) | YEAR ROUND | ROE/HAWKINS
Special Topics in SA Surgery & SA Internal Medicine (SVM-595) | YEAR ROUND | ROE/HAWKINS
Special Topics in SA Surgery & SA Internal Medicine (SVM-610) | YEAR ROUND | ROE/HAWKINS
Advanced Reading in SA Surgery & SA Internal Medicine (SVM-635) | YEAR ROUND | ROE/HAWKINS
Supervised Teaching in SA Surgery & SA Internal Medicine (SVM-685) | YEAR ROUND | ROE/HAWKINS
Other Training (Rounds) in SA Surgery & SA Internal Medicine (SVM-686) | YEAR ROUND | ROE/HAWKINS
Supervised Research in SA Surgery & SA Internal Medicine (SVM-693) | YEAR ROUND | ROE/HAWKINS

Research

**Volume of Activity**
- Extramural Grants as Primary Investigator and/or Co-Investigator – $2,079,787
- CVM/NCSU Grant Funding - $96,802
- DoCS Firestone Canine Research – $2,500
- DoCS Veterinary Practice Plan Research – Not Applicable

**Extension and Public Service**

Managed a clinical practice that provided effective and efficient service (Information provided for 2011-2012 fiscal year through March 2012)

99% of hospital revenue collected at discharge  
$2,229,523 Total VPP Revenue Generated by Department  
$7,296,601 Total Hospital Revenue Generated by Department

**FACULTY – Honors, Awards and Recognitions**

- **Atkins** – Invitation to participate in Pre-Congress Meeting on ACE-I and Aldosterone Breakthrough, British Small Animal Veterinary Association, 2013
- **Atkins** – Invitation to present “Hot Topics in Cardiology” regarding MS Delta and Heartworm Resistance, 2013
- **Atkins** – Asked to be a steering committee participant for multinational effort to provide a consensus statement on CardioRenal Syndrome in dogs and cats, 2013
- **Bizikova** – Invitation to speak at the WCV 2012 and at the ECVIM (2013) on topics canine pemphigus foliaceus and feline autoimmune skin diseases
- **Blikslager** – Nominated for Mentor of the Year Award, Southern Regional Education Board, Atlanta, December 2012
• Breitschwerdt – Radio In Vivo, Your link to the Triangle Science Community WCOM 103.5FM Carrboro, NC, March 6, 2013

• Breitschwerdt – The People’s Pharmacy. Hosts, Joe and Terry Graedon, Public Radio. WUNC Interview, March 6, 2013

• Breitschwerdt – NCSU Alumni Association Outstanding Research Award, 2012


• Clode – Invitation to speak at USP Workshop on Ophthalmic Preparations, Rockville, Maryland, October 2013

• Gilger and Beth Salmon – Received NCSU Invention Disclosure on Thermosensitive polymers for ocular drug delivery, December 2012

• Gookin – Received Cobblestone Aubrey-Tugger Coat of Excellence Award, 2012

• Hanel – Invited to take part in a panel discussion on thromboelastography at IVECCS 2013, give a specialist level lecture on the topic, and be part of Partnership for Rotational Viscoelasttic Test Standardization (PROVETS); Domain Chair (Definitions and Data Reporting), American College of Veterinary Emergency and Critical Care, 2011-present

• Hess – Invited to give research report on first discovery of class I peptide-binding motif in the dog at the 2012 ACVIM Forum

• Jones – Developed a novel therapy to inhibit neutrophil function to treat pulmonary inflammation

• Keene – Comparative Cardiology: Spontaneous Animal Models of Human Disease. Pediatric Grand Rounds, Duke University, September 13, 2012

• Keene – Invited State of the Art Lecturer, The Animal Medical Center

• Lewbart – Received the William Medway Award for Excellence in Teaching from the International Association for Aquatic Animal Medicine, May 2012

• Lewbart – Selected to hood the graduating DVM student at the annual Oath and Hooding Ceremony for NCSU-CVM, May 2012

• Marcellin-Little – invited to present my research to NCSU’s Board of Trustees, to the ACVS, to the AVMA, to the BSAVA / BVOA (in the UK), to the NCSU Pre-Vet club, and at a seminar dedicated to regenerative medicine

• Marcellin-Little – Featured on the cover of the NCSU’s research magazine, Winter 2012 issue

• Marks – Received Bayer Animal Health Recognititon Award
• **Muñana** – Keynote speaker at 25th Annual European College of Veterinary Neurology Symposium, Ghent, Belgium, September 2012

• **Muñana** – Recipient of annual donations form Epi-K9 Foundation and the Krauss Charitable Foundation in support of research on canine epilepsy

• **Olby** – Invited Speaker at the Hare Laboratory of Canine Cognition, Duke University, Durham NC, January 2013

• **Olby** – Wobbly Dogs and SNP Chips; Uncovering Causes of Cerebellar Degeneration Invited Speaker for the Niemeyer Lecture Series at Missouri College of Veterinary Medicine, Columbus MO, November 2012

• **Olby** – Why so Wobbly? The Cause of Canine Cerebellar Abiotrophy. Invited speaker at the Merial-NIH- National Veterinary Scholars Symposium Comparative Medicine: The Key To Translation Fort Collins, CO, August 2012

• **Olby** – Canine Spinal Cord Injury. Invited speaker at Irvine University Primate Consortium, April 2012

• **Olby** – Canine spinal cord injury Invited speaker at the One Health Course (NCBMA) run by the One Health Intellectual Exchange Series: Philosophy to Practice, April 2012

• **Olivry** – Recipient of the 2013 WSAVA Hill’s Excellence in Veterinary Healthcare Award

• **Prange** – Received Senior Student Award – Student Chapter of the American Association of Equine Practitioners for “Outstanding dedication to the teaching and mentorship of senior students”

• **Prange** – Received Thank a Teacher, Office of Faculty Development

• **Prange** – Invitation to chair the “Neck & Back”: Intersection of Neurological and Musculoskeletal Lameness” session at the ACVS Symposium 2013, San Antonio, TX

• **Prange** – Invitation to write a Clinical Commentary on a Case Report in the Equine Veterinary Education, 2012

• **Sherman** – Invitation to present research in an international venue: **Sherman BL**, Gruen ME, Case B, Lazarowski L, Foster M, Dorman D. Identifying Emotional Reactivity in Detection Dogs. DSTL Canine Science and Technology Forum, London UK, April 26-27, 2012

### Publications and other professional activities

<table>
<thead>
<tr>
<th>Dept.</th>
<th>Original works in peer-reviewed journals</th>
<th>Case Reports in peer-reviewed journals</th>
<th>Review articles in peer-reviewed journals</th>
<th>Books</th>
<th>Book Chapters</th>
<th>Abstracts from scientific &amp; professional veterinary conferences</th>
<th>Electronic Media</th>
<th>Invited Research presentations, professional audience</th>
<th>Continuing Education presentations</th>
<th>Bulletins Booklets, etc.</th>
<th>Copyrights</th>
<th>Patents</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOCS</td>
<td>128</td>
<td>17</td>
<td>13</td>
<td>2</td>
<td>30</td>
<td>130</td>
<td>15</td>
<td>312</td>
<td>17</td>
<td>4</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Students

Student Activities

Graduate Students :

- 47 # Graduate students receiving CVM graduate student stipends (based on all
  CVM graduate students)
- 4 # Graduate students supported from extramural funds
- 51 # Graduate students in progress
- 9 # Graduate students completing degrees
- >95 % of previous graduate students employed in related fields

House Officers :

Faculty supervised the training of 44 residents and 13 interns in 11 specialty areas.

- 100% Residents accepted this year were in top 10% of applicant pool
- 385 # of applications for DoCS residency programs
- 336 # of applications for DoCS Small Animal internship program
- >95% previous residents passing certification exams w/in 4 years
- 13 previous residents employed in specialty area or graduate program
- 70 # of applications for DoCS equine intern

Honors and other measures of quality (students, graduate students, house
officers with whom faculty have advised, mentored and or served on committees)

Blikslager:

- Raphael Labens – Recruited to University of Edinburgh, 2012
- Tracey Hill – Recruited as Lecturer at University of Edinburgh, 2012
- Megalii Nigot – Received Graduate Student of the Month Award, March 2012
- Liara Gonzalez – Selected to present her CVM and Research Experience to the Board
  of Trustees, 2012
- Liara Gonzalez – Awarded an NIH CCMTR T32 Fellowship, 2012-14
- Prashant Nighot – On the cover of AJP-Cell (http://ajpcell.physiology.org/content/302/1)

Breitschwerdt:

- Beth Pultorak – Received Graduate Student of the Month Award, February 2013
- Natalie Cherry – Employed by Galaxy Diagnostics in RTP following graduation

DeFrancesco:

- Elizabeth Gettinger was SC VECC Student of The Year and matched with her #1 rank
  (CSU internship)

Degernes:

- Toni Poston, Class of 2012 – Received Clinical Proficiency in Avian Medicine Award

Fish:

- Jack Dutton, Class of 2013 – Received ASLAP Veterinary Student Award, 2012
Gookin:
• Derek Foster – Recruited as tenure-track Assistant Professor of Ruminant Medicine at NCSU-CVM
• Katie Tolbert – Recruited as tenure-track Assistant Professor of Small Animal Medicine at University of Tennessee
• Elizabeth Lennon – Received 1st Place Oral Research Abstract Award at 2012 Phi Zeta Research Forum

Harrell:
• Lauren Beck – Obtained clinical pathology residency at CSU
• Laura Harjes – Obtained internship at OSU

Hauck:
• Dr. Stacey Snyder – Appointed as Research Associate at Duke University
• Dr. Viviana LeDonna – Appointed to a clinical pathology residency at LSU

Hawkins:
• Sam Jenning – Recruited into faculty position at Tufts University
• Justin DeVanna – Abstract accepted for ACVIM, 2013

Hess:
• Peter Ross – Defended his IMM PhD in September 2012 and received Fellowship in the North Carolina Biotechnology Center Industrial Fellowship Program
• Greg Gojanovich – Won the Innovation Challenge at the 2013 NCSU-CVM Annual Research Forum

Jones:
• Emily Medlin – Awarded a Molecular Biotechnology GAANN Fellowship at NCSU
• Emily Medlikn – Received Hitchings Young Investigator Award
• Katie Sheats – Awarded K01 from NIH
• Katie Sheats – Received Monica Menard Award at NCSU-CVM
• Katie Sheats – Awarded 1st Place at Graduate Student Symposium, Life Sciences Division
• Katie Sheats – Received Graduate Student of the Year Award, Dept of Clinical Sciences
• Eui Jae Sung – Defended his thesis and was hired as Postdoctoral Research Assistant at NIEHS

Lascelles:
• Tracy Hill – Successfully defended her PhD and was recruited to Edinburgh University

Marcellin-Little:
• Dr. Nathan Brown – Completed his PhD and moved onto a Postdoc position with a grant funded by the AKC

Marks:
• Marisa Ames – Became cardiology fellow, 2013
• Trisha Oura – Recruited into faculty position at Tufts University
• Andrew Woolcock – Became internal medicine resident at the University of Georgia
• Katy Bermann – Recruited into faculty position at Edinburgh University
• Christina Marino – Became resident at the University of Pennsylvania
Mathews:
- Elena Moldal – Successfully defended PhD at Norwegian School of Veterinary Science

Olby:
- Dr. Ganokon Urkasemsin – Awarded PhD in May 2013

Olivry:
- Dr. Petra Bizikova – Recruited as tenure-track Assistant Professor of Dermatology at NCSU-CVM, 2012

Sherman:
- Regina Lawson – Received Elanco Behavior Award

Stoskopf:
- Kate Freeman – Won Morris Animal Foundation Post-graduate Competition
- Michael Berecz – Became diplomate in the American College of Preventative Medicine
- Jennifer Hurley-Sanders – Received NIH Poster Presentation Award
- Heather Henson-Ramsey – Recruited into Department Head Position at Lewis and Clark College
- Chris Whittier – Recruited into faculty position Tufts University
- Felicia Nutter – Recruited into faculty position at Tufts University

Suter:
- Eric Seiser – Successfully defended PhD thesis

Vaden:
- Allison Wistrand Mazepa – Received diplomate status in ACVIM
- Rae Hutchins – Received diplomate status in ACVIM

2013 CVM Research Forum Awards (DoCS mentorship in italics):
- **Mary Katherine Sheats** received recognition award for oral presentation on “Myristolated alanine-rich C-kinase substrate (Marcks) is an important regulator of beta-2 integrin dependent functions in equine neutrophils” (Sam Jones/Advisor)
- **Andrea Tomas** received recognition award for oral presentation on “Relationship between mechanical thresholds and limb use in dogs with coxofemoral joint OA-associated pain, and the modulating effects of pain alleviation from total hip replacement” (Duncan Lascelles/Advisor)
- **Greg Gojanovich** received excellence award for innovation on “Incognito islets; combining TALEN and stem cell technologies to create abundant, islet transplants that lack MHCI molecules, thereby preventing rejection” (Paul Hess/Advisor)
- **Sylvia Hood** received recognition award for innovation on “Application of poly (O, L-lactide-co-glycolide) (PLGA) nanoparticles for improving dendritic cell-based vaccination against FIV”

CVM Awards Banquet 2013 (DoCS Awards in Bold):

**Phi Zeta Awards**
Presenter: Dr. Ronald Banes
Recipient: Christine Luke – 3rd year student with the highest GPA at the conclusion of the fall semester.
Recipients: Seniors: Ariel Hickey, Anne Meyer, Marina Mavromatis, Timothy Gaffrey, Elizabeth Wood, Laura Ellsaesser, Kimberly Young, Jessica Durrant, Emily Wayne, Gloria Macdonald, Sydney Cartiff
Juniors: Christine Luke, Emily Coffey, Kate Archibald, Kathleen McGinnis, Katharine Macdonald, Laura Garlow, Sara Virgil, Katelyn Cordle, Jessica Miller, Anna Wepprich

**Elanco Student Award for Excellence in Veterinary Behavior**
Presenter: Dr. Barbara Sherman
Recipient: Dr. Gloria Macdonald

**ACVIM Clinical Excellence Awards**
Presenters: small animal – Dr. Karyn Harrell
Recipient: Jessica Durrant & Laura Harjes

**Large Animal Award**
Presenter: Dr. Sam Jones
Recipient: Hillary Lobar & Sabrina Trager

**ACVS Small Animal Surgery Award**
Presenter: Dr. Lascelles
Recipient: Brett Gulledge

**ACVS Large Animal Surgery Award**
Presenter: Dr. Callie Fogle
Recipient: Jessica Huwa

**Donald R. Howard Surgery Award**
Presenter: Dr. Rich Redding
Recipient: Kathryn Williams

**Ethicon Surgical Excellence Awards**
Presenter: Dr. Hardie
Recipient: Jessica Gibson & Isaac Cortes

**Clinical Proficiency in Wildlife, Aquatic, Avian & Zoological Medicine**
Presenters: Dr. Michael Stoskopf & Dr. Suzanne Kennedy Stoskopf

**Teva Animal Health Dermatology Award**
Presenter: Dr. Marcy Murphy
Recipient: Jessica Durrant
Dr. Monica Menard Award for Excellence in Veterinary Pathobiological Research
Presenter: Dr. Phil Sannes
Recipient: Dr. Katie Sheats

ASLAP Student Award
Presenter: Dr. Rick Fish
Recipient: Sara Andux

BIVI Cardiology Award
Presenter: Dr. Sandy Tou
Recipient: Sydney Cartiff

Ophthalmology Senior Student Award
Presenter: Dr. Brian Gilger
Recipient: Sydney Cartiff

Oncology Senior Student Award
Presenter: Dr. Laurel Williams
Recipient:

The Veterinary Neurology Award
Presenter: Dr. Natasha Olby
Recipient: Amanda Lehnberg

Association of Feline Practitioners Senior Student Award
Presenter: Dr. Marks
Recipient: Katie Sizer

Banfield Client Communication Award
Presenters: Dr. Gerard
Recipient: Jennifer Beasley

DOCS Bedside Manner Award
Presenter: Dr. Rita Hanel
Recipient: Stephanie Istvan & Amy Davenport

DOCS Outstanding Small Animal Intern Award
Presenter: Dr. Karyn Harrell
Recipient: Dr. Casey Kohen & Dr. Jessica Mobley

Award for Proficiency in Emergency & Critical Care
Presenter: Dr. Steve Marks
Recipient: Liz Gettinger

Novartis Small Animal Clinical Proficiency Award
Presenter: Dr. Kathy Lunn
Recipient: Kahlina Frey

Joel Kirk Budd, Jr. Award
Presenter: Dr. Hardie
Recipient: Sydney Cartiff
Companion Animal Faculty Clinical Proficiency Awards
Presenter: small animal – Dr. Lizette Hardie
Recipients: Jessie Wofford, Laura Ellsaesser, Marina Mavromatis, Heather Trenholme, and Crystal Lock.

Presenter: large animal – Dr. Timo Prange
Recipient: Kaitlin Walsh, Jason Heitzman

Theriogenology Clinical Proficiency Award
Presenter: Dr. Bailey
Recipient: Jessica Huwa

W. C. Brownie Investigative Diagnostic Medicine Awards
Presenter: Equine – Dr. Jen Davis
Recipient: Ashley Banes

Merck Animal Health Award for Pain Management
Presenter: Dr. Duncan Lascelles
Recipient: Lizzie Wood

Class of 2013 Bayer Faculty Award
Presenter: David Kleisch
Recipient: Dr. Terri DeFrancesco

Class of 2014 Bayer Faculty Award
Presenter: Kathleen McGinnis
Recipient: Dr. Lizette Hardie

Leroy Coggins Graduate Fellowship Endowment
Presenter: Dr. Anthony Blikslager
Recipient: Dr. Liara Gonzalez

Zoetis Animal Health Award for Research Excellence
Presenter: Dr. Paul Lunn
Recipient: Dr. Natasha Olby

Huffman Leadership Award
Presenter: Dr. Paul Lunn
Recipient: Dr. Michael Stoskopf

Zoetis Distinguished Teaching Award
Presenter: Dr. Paul Lunn
Recipient: Dr. Steve Marks
Departmental Listing as of April 30, 2013

**Professor**
Atkins, C.E., DVM, Professor, Internal Medicine, Cardiology
Blikslager, A.T., DVM, PhD, Professor, Equine Surgery
Breitschwerdt, E.B., DVM, Professor, Small Animal Internal Medicine
Bristol, D.G., DVM, Professor, Large Animal Surgery
Davidson, M.G., DVM, Professor, Ophthalmology & Associate Dean/Director VHC
DeFrancesco, T.C., DVM, BS, Professor, Cardiology/Critical Care
Flammer, K., DVM, Professor, Non-domestic Avian Medicine & Assoc Dean, Academic Affairs
Gilger, B.C., DVM, MS, Professor, Ophthalmology
Hardie, E.M., DVM, PhD, Professor & Department Head, Small Animal Surgery
Hauck, M.L., DVM, PhD, Professor, Oncology
Hawkins, E.C., DVM, Professor, Small Animal Internal Medicine
Jones, S., DVM, PhD, Professor, Equine Medicine
Keene, B.W., DVM, MS, Professor, Cardiology
Lascelles, B.D., BVSc, PhD, BS, Associate Professor, Small Animal Surgery
Lewbart, G.A., VMD, MS, Professor, Aquatics, Wildlife & Zoo Medicine
Lunn, D.P., BVSc, MS, PhDMRCVS, Professor of Equine Medicine and Dean of CVM
Marcellin, D.J., DEDV, Professor, Small Animal Surgery
Mathews, K.G., DVM, MS, DACVS, Professor, Small Animal Surgery
Munana, K.R., DVM, MS, Professor, Neurology
Olby, N.J., VetMB, PhD, Professor, Neurology
Olivery, T.J., DVM, PhD, Professor, Immunodermatology
Roe, S.C., PhD, BVSc, MVSt, MS, Professor, Small Animal Surgery
Stoskopf, M.K., DVM, PhD, Professor, Aquatics, Wildlife & Zoo Medicine
Tate, L.P., VMD, Professor, Equine Surgery
Vadens, S.L., DVM, PhD, BSA, Professor, Small Animal Internal Medicine
Williams, L.E., DVM, Professor, Oncology

**Associate Professor**
Birkenheuer, A.J., PhD, DVM, BS, Associate Professor, Small Animal Internal Medicine
Breuhaus, B.A., DVM, PhD, Associate Professor, Equine Medicine
Degernes, L.A., DVM, MPH, BS, BA, Associate Professor, Avian Medicine and Epidemiology
Fish, R.E., DVM, PhD, MS, BS, Assoc. Prof. & Director of University Animal Resources
Gookin, J., DVM, PhD, Associate Professor, Small Animal Internal Medicine
Hansen, B.D., DVM, Associate Professor, Critical Care/Emergency Medicine
Harms, C.A., DVM, Associate Professor, Aquatics, Wildlife & Zoo Medicine
Lunn, K., BVMS, MS, PhD, Associate Professor, Small Animal Internal Medicine
Suter, S.E., VMD, MS, BS, Associate Professor, Oncology
Whitacre, M., DVM, Equine Theriogenology

**Assistant Professor**
Bailey, S., DVM, Assistant Professor, Theriogenology
Clode, A., DVM, Assistant Professor, Ophthalmology
Davis, J., DVM, Assistant Professor, Equine Medicine
Hanel, R., DVM, Assistant Professor, Emergency Medicine
Hess, P.R., DVM, Assistant Professor, Oncology
Jermyn, K., DVM, Assistant Professor, Small Animal Surgery
Mariani, C.L., DVM, Assistant Professor, Neurology
**Clinical Assistant, Clinical Associate, Clinical Professor**
Early, P., DVM, Clinical Assistant Professor, Neurology
Ferris, K.K., DVM, BS, Clinical Assistant Professor, General Practice
Fogle, C., DVM, Clinical Assistant Professor, Equine Surgery
Grunkemeyer, V., DVM, Clinical Assistant Professor, Avian
Harrell, K.A., DVM, Clinical Assistant Professor, Small Animal Internal Medicine
Marks, S.L., BVSc, MS, Clinical Professor, Small Animal Internal Medicine
Murphy, K. M., DVM, Clinical Assistant Professor, Dermatology
Musulin, S., DVM, Clinical Assistant Professor, Emergency/Critical Care
Prange, T., DVM, Clinical Assistant Professor, Equine Surgery
Redding, W.R., DVM, MS, Clinical Associate Professor, Equine Surgery
Risselada, M., DVM, Clinical Assistant Professor, Small Animal Surgery
Sherman B.S., PhD, DVM, MS, Clinical Professor, Animal Behavior
Stevens, B., DVM, Clinical Assistant Professor, General Practice
Tou, S., DVM, Clinical Assistant Professor, Cardiology
Wood, M., Clinical Assistant Professor, Small Animal Internal Medicine

**Research Assistant, Associate, Professor**
Maggi, R.G., Research Associate Professor, Small Animal Internal Medicine
Kennedy-Stoskopf, S., Research Professor, Aquatics, Wildlife & Zoo Medicine

**Visiting Assistant Professor, Clinical Veterinarian, Visiting Clinical Instructor, Research Associate Postdoc, and EPA Professional**
Breen, T., Research Assistant, Oncology (Olby)
Case, B., Research Assistant, Small Animal Surgery (Lascelles)
Harden, L., Research Assistant, Clinical Studies Core (Lascelles)
Hamilton, A., Research Assistant, Clinical Studies Core (Olby)
Hegarty, B., Research Associate, Small Animal Internal Medicine (Breitschwerdt)
Knazovicky, D., Research Assistant, Small Animal Surgery (Lascelles)
Lim, Ji-Hey, Research Associate Postdoc, Neurology (Olby)
Linnehan, R.M., Visiting Asst. Professor, Aquatics, Wildlife & Zoo Medicine
Mascarelli, P., Research Associate, SA Medicine (Breitschwerdt)
Pridgen, T., Research Associate, Equine Surgery (Blikslager)
Rosen, L., Clinical Veterinarian, Avian (Degernes)
Shroff, V., Research Assistant, Oncology (Suter)
Stauffer, S., Research Assistant, Small Animal Internal Medicine (Gookin)

**Adjunct Professor, Associate Professor, Assistant Professor**
Abrams, Frank, Assoc Status, Professor Emeritus Bio & Ag Engineering, Ortho Surgery
Adams, Allison, Adjunct Assistant Professor, Cardiology
Akililu, Nigatu, Adjunct Professor, Equine (working with Dean Lunn on project)
Atlee, Barbara, Adjunct Assistant Professor, Dermatology
Baden, Daniel, Adjunct Professor, Aquatics, Wildlife & Zoo Medicine
Baker, Shannon, Adjunct Assistant Professor, Aquatics, Wildlife & Zoo Medicine
Bergyl, Richard, Adjunct Lecturer, Aquatics, Wildlife and Zoo Medicine
Bowman, Karl, Associate Professor Emeritus, Equine Surgery
Brown, Virginia, Adjunct Associate Professor, Special Species Medicine
Burkett, Richard, Adjunct Assistant Professor, Avian Medicine
Chanoit, Guillaume, Adjunct Assistant Professor, Small Animal Surgery
Chappell, Kim, Adjunct Assistant Professor, Clinical Studies/Dermatology
Coffer, Natalie, Adjunct Assistant Professor, Aquatics, Wildlife & Zoo Medicine
Deresienski, Diane, Adjunct Asst Professor, Aquatics, Wildlife & Zoo Medicine
Devoe, Ryan, Adjunct Assistant Professor, Aquatics, Wildlife & Zoo Medicine
DeYoung, David, Adjunct Professor, Small Animal Surgery
Dombrowski, Daniel, Adjunct Lecturer, Aquatics, Wildlife & Zoo Medicine
Dye, Janice, Adjunct Associate Professor, Internal Medicine
Eckerman-Ross, Christine, Adjunct Assistant Professor, Nondomestic Avian Medicine
Edling, Thomas, Adjunct Assistant Professor, Aquatics, Wildlife & Zoo Medicine
Eward, Cindy, Adjunct Assistant Professor, Small Animal Surgery
Eward, William, Adjunct Assistant Professor, Small Animal Surgery
Falk, Ronald, Adjunct Professor, Small Animal Internal Medicine
Flannigan, Gerrard, Adjunct Assistant Professor, Behavior Medicine
Ford, Richard, Professor Emeritus, Small Animal Internal Medicine
Frazier, Matthew, Adjunct Assistant Professor, Equine Medicine
Gee, Melanie, Adjunct Assistant Professor, Aquatics, Wildlife & Zoo Medicine
Grafinger, Michael, Adjunct Assistant Professor, Aquatics, Wildlife & Zoo Medicine
Hammer, Douglas, Adjunct Associate Professor, Occupa. Health/Zoonotic Disease
Harling, David, Adjunct Assistant Professor, Ophthalmology
Haulena, Martin, Adjunct Assistant Professor, Aquatics, Wildlife & Zoo Medicine
Hennessy, Catharine, Adjunct Assistant Professor, Equine Medicine and Surgery
Hinshaw, Jeff, Adjunct Status, Associate Professor, Zoology and Aquatic Medicine
Hoglund, Don, Adjunct Associate Professor, Equine Medicine
Holmes, Elaine, Adjunct Assistant Professor, Small Animal Surgery
Howard, James, Adjunct Professor, Neurology
Johnson, Daniel, Adjunct Assistant Professor, Aquatics, Wildlife & Zoo Medicine
Kornegay, Joe, Adjunct Professor, Neurology
Leonatti, Stacey, Adjunct Assistant Professor, Aquatics, Wildlife & Zoo Medicine
Levine, David, Adjunct Professor, Small Animal Surgery
Loeffler, Ingrid, Adjunct Assistant Professor, Avian Medicine
Loomis, Michael, Adjunct Associate Professor, Zoological Medicine
Mansmann, Richard, Professor Emeritus, Equine Surgery
Matthews, Charles, Adjunct Professor, Equine Surgery
McCashin, Frederick, Adjunct Clinical Professor, Equine Medicine and Surgery
McMullen, Richard, Adjunct Assistant Professor, Ophthalmology
Monteiro-Riviere, Nancy, Professor Emeriti, Dermatology and Toxicology
Mozzachio, Kristie, Adjunct Assistant Professor, Aquatics, Wildlife & Zoo Medicine
Mulcahy, Daniel, Adjunct Associate Professor, Aquatics, Wildlife & Zoo Medicine
Norton, John, Adjunct Associate Professor, Laboratory Animal Medicine
Norton, Terry, Adjunct Assistant Professor, Zoological Medicine
Powers, Lauren, Adjunct Assistant Professor, Avian Medicine
Preston, Gloria, Adjunct Associate Professor, Small Animal Internal Medicine
Ruslander, David, Adjunct Assistant Professor, Oncology
Sabin, Leilani, Adjunct Assistant Professor, Cardiology
Schopler, Robert, Adjunct Assistant Professor, Avian Medicine
Scott, David, Adjunct Assistant Professor, Avian Medicine
Sharp, Nicholas, Adjunct Associate Professor, Neurology
Shuler, Jack, Adjunct Assistant Professor, Equine Health Program
Sifers, Thomas, Adjunct Assistant Professor, Internal Medicine, Intensive Care Unit
Sigmon, Betsy, Adjunct Assistant Professor, Internal Medicine
Simpson, Wendy, Adjunct Assistant Professor, Equine Surgery
Sontakke, Sushama, Adjunct Assistant Professor, Internal Medicine/Microbiology
Spodnick, Gary, Adjunct Assistant Professor, Surgery
Stroud, Cheryl, Adjunct Assistant Professor, Aquatics, Wildlife & Zoo Medicine
Taylor, Brian, Adjunct Assistant Professor, Equine Surgery
Taylor, Karen, Adjunct Assistant Professor, Aquatics, Wildlife & Zoo Medicine
Trumpatori, Brian, Adjunct Assistant Professor, Small Animal Surgery
Tuttle, Allison, Adjunct Assistant Professor, Aquatics, Wildlife & Zoo Medicine
Vasbinder, Mary-Ann, Adjunct Assistant Professor, Laboratory Animal Medicine
Wheeler, Simon, Adjunct Professor, Small Animal Surgery
Williams, Cathy, Adjunct Assistant Professor, Aquatics, Wildlife & Zoo Medicine
Zalutsky, Michael, Adjunct Associate Professor, Oncology

Support Staff
Beth Barlow, Research Specialist
Janet Barnett, Executive Assistant
Joy Beaston, Department Accountant
Julie Bradley, Research Technician
Heather Broadhurst, Research Technician
Gail Druley, Research Technician
Stan Dunston, Research Specialist
Patricia Faw, Research Specialist
Tonya Harris, Research Specialist
Jennifer Holmes, Research Specialist
Allison Klein, Research Specialist
Tonya Lee, Processing Assistant V
Lisa Mamo, Research Specialist
Henry Marr, Research Specialist
Fonda Martin, Research Specialist
Caroline Meek, Research Specialist
Julie Nettifee-Osborne, Research Specialist
Judy Paps, Research Technician
Kent Passingham, Research Specialist
Beth Salmon, Research Specialist
Jenna Schirmer, Research Specialist
Brittany Sherbert, Research Technician
Jennifer Solinger, Research Technician
Andrea Thomson, Research Specialist
Sarah Wall, Research Specialist
Kimberly Williams, Laboratory Supervisor
Jackie York, Administrative Support Associate – VBDD Laboratory

Residents – House Officers
Frane Banovic, Dermatology
Lisa Bazzle, Emergency/Critical Care
Ashley Brandes, Oncology
Emily Christiansen, Zoological Medicine
Katherine Crook, NCSU/VCA Neurology
Amy Davenport, Small Animal Medicine
Justin DeVanna, Small Animal Medicine (Army)
Michael DiCicco, Small Animal Medicine
Amy Edwards, Equine Medicine
Jenessa Gjeltema, Zoological Medicine
Julie Hempstead, Ophthalmology
Timothy Hodge, Cardiology
Blaire Holland, Equine Medicine
Rae Hutchins, Small Animal Medicine
Stephanie Istvan, Small Animal Emergency & Critical Care  
Gerding Joey, Ophthalmology  
Chad Johannes, Oncology  
Meredith Kapler, Small Animal Surgery  
Hani Korani, Small Animal Surgery (Tuskegee)  
Renee Krebs, Small Animal Surgery (Army)  
Dustin Lewis, Radiation Oncology  
Melissa Lewis, Neurology  
Kristin Manning, Clinical Investigator  
Mischa McDonald-Lynch, Small Animal Surgery  
Katherine McKelvey, Theriogenology  
Larry Minter, Zoological Medicine  
Amanda Mobley, Emergency/Critical Care  
Margaret Musser, Oncology  
Jay Newman, Equine Surgery  
Rafael Obrador de Aguilar, Small Animal Emergency & Critical Care  
Jillian Orlando, Clinical Animal Behavior  
Jean-Sebastien Paleme, Small Animal Medicine  
Jessica Partlow, Large Animal Surgery  
Nelson Pinto, Ophthalmology  
Jessica Pritchard, Small Animal Medicine  
Malte Schwartz, Neurology  
Joanne Tuohy, Small Animal Surgery  
Rennie Waldron, Neurology  
Jessica Ward, Cardiology  
Jennifer Willcox, Oncology  
Jenessa Winston, Clinical Investigator  

Interns  
Rose Baker, Equine Medicine and Surgery  
Julie Balko, Small Animal  
Ingrid Balsa, Small Animal  
Theresa Beachler, Theriogenology  
Lindsey Bullen, Small Animal (Focus on Nutrition)  
Megan Duffy, Oncology  
Michele Edelmann, Small Animal  
Catherine Harrington-Murphy, Small Animal  
Casey Kohen, Small Animal  
Kathleen Lindsey, Emergency/Critical Care  
Bianca Lourenco, Small Animal  
Christina Marino, Small Animal  
Jessica Mobley, Small Animal  
Jennifer Ottmann, Small Animal  
Rebecca Riley, Equine Medicine and Surgery  
Jacie Schneider, Small Animal  
Maria Serrano, Exotic Animal Medicine  
Heng Tham, Dermatology  

Graduate Students  
Mary Boss, CBS (Hauck)  
Teresa Buchelt, CBS (Jones)  
Lauren Charles-Smith, Fish and Wildlife Science (Kennedy-Stoskopf)
Justin DeVanna, Specialized Vet Medicine (Hawkins)
Mila Freire-Gonzalez, CBS (Lascelles)
Liara Gonzalez, Physiology (Blikslager)
Gregory Gojanovich, Immunology (Hess)
Younggeon Jin, CBS (Blikslager)
Monica Kim, CBS (Jones)
Amanda Kortum, CBS (Jones)
Raphael Labens, CBS (Blikslager)
Dana LeVine, CBS (Jones)
Emily Medlin, CBS (Jones)
Jennifer Niemuth, Fish and Wildlife Science (Stoskopf)
Meghali Nighot, CBS (Blikslager)
Rattapan Pattanarangsan, Fish and Wildlife Science (Stoskopf)
Elizabeth Pultorak, CBS (Breitschwerdt)
Hannah Reynolds, CBS (Jones)
Peter Ross, Immunology (Hess)
Caryline Salzmann, CBS (Olby)
Efrain Serrano, CBS (Jones)
Mary Sheats, CBS (Jones)
Eui Jae Sung, CBS (Jones)
Jaime, Tarigo, CBS (Birkenheuer)
Mary Katie Tolbert, CBS (Bissett)
Ganokon Urkasemsin, CBS (Olby)
Adam Ward, CBS (Jones)
Jamie Wearn, CBS (Davis)
DEPARTMENTAL BIBLIOGRAPHY FOR 2012-2013

1. **Original works in peer-reviewed journals.**


   Bare CA, Schramme AR, **Bailey CS***, Heitzman JM, Whisnant S, Sper RD, Archibald D, **Whitacre M**. The effect of oxytocin or carbetocin administration during mid-diestrus on the interovulatory interval and estrus behavior of mares. Clin Theriogenology 2013;5(1):27-35. (*corresponding author; student first author)


Bizikova P, Dean GA, Hashimoto T, Olivry T*. Cloning and establishment of desmocollin-1 as a major autoantigen in canine pemphigus foliaceus. Vet Immunol Immunopathol 2012;149:197-207. (*corresponding author, graduate student trainee first author)


Clode AB*, Harms C, Fatzinger MH, Young F, Colitz C, Wert D. Identification and management of ocular lipid deposition in association with hyperlipidaemia in captive moray eels, Gymnothorax funebris Ranzani, Gymnothorax moringa (Cuvier) and Muraena retifera Goode and Bean. J Fish Dis 2012;35(9):683-693. (*first author and corresponding author)


Lennon EM, **Hanel RM**, Walker JM, Vaden SL. Hypercoagulability in Dogs with Protein-Losing Nephropathy as assessed by Thromboelastography. J Vet Intern Med 2013;27(3):462-468. (*assisted with project design, data collection, obtained grant money, editing of manuscript)


**Harms CA**, Harms RV. Venous blood gas and lactate values of mourning doves (*Zenaida macroura*), boat-tailed grackles (*Quiscalus major*) and house sparrows (*Passer domesticus*) following capture by mist net, banding, and venipuncture. J Zoo Wildl Med 2012;43:77-84.

**Harms CA**, Cranston EA, Papich MB, Rodriguez MX, Higgins MB, Flanagan JP. Pharmacokinetics of clindamycin in loggerhead sea turtles (*Caretta caretta*) after a single intravenous, intramuscular or oral dose. J Herp Med Surg 2011;21:113-119. (despite indicated year, this issue did not come out until mid-2012; second author was a Merck veterinary student summer scholar)


Reeder JP, **Hawkins EC***, Cora MC, Marks SL, Grindem CB. Effect of a combined aspiration and core biopsy technique on quality of core bone marrow specimens. J An Anim Hosp Assoc 2013;49:16-22. (*corresponding author with house officer trainee)


Maggi RG, Mascarelli PM, Balakrishnan N, Rohde CM, Kelly CM, Ramaiah L, Leach MW, Breitschwerdt EB. ‘Candidatus Mycoplasma haemomacaque’ and Bartonella quintana bacteremia in cynomolgus monkeys. JCM 2013;51:1408-1411.


Miller MM, Thompson EM, Suter SE, Fogle JE. CD8+ clonality is associated with prolonged acute plasma viremia and altered mRNA cytokine profiles during the course of feline immunodeficiency virus infection. Vet Immunol Immunopathol 2013;52(3-4):200-208.


2. Case reports in peer-reviewed journals.


LeBlanc N, **DeFrancesco TC**, Adama AK, **Atkins CE, Tou SP**, Fudge JC, **Keene BW**. Cutting balloon catheterization for interventional treatment of cor triatriatum dexter: 2 cases. J Vet Cardiol 2012;14:525-530.


3. **Review articles in peer-reviewed journals.**

**Blikslager AT**. Misoprostol: is it safety or a lack of understanding that prevents its more frequent usage? Equine Vet J 2013;45:8.


Clode AB*. Corneal Cytology and Culture Collection. Clinician’s Brief 2012,10:75-77. (*first author and corresponding author)


Tou SP, Keene BW. Clinical Notes: Treating and monitoring chronic congestive heart failure in dogs. Clinician’s Brief, May 2012.


5. **Chapters in Books.**


Maggi RG, Breitschwerdt EB. Bartonellosis en perros y gatos. In Enfermedades vectoriales del perro y el gato. 2012; Chapter 5. Spanish


6. Titles of abstracts from scientific and professional veterinary conferences (i.e. abstracts submitted for presentation as papers or posters at scientific/clinical conferences where the proceedings are citable).


Nighot PK, Young K, Blikslager AT. Chloride channel ClC-2 mediated tight junction barrier function modulates DSS-induced murine colitis. Gastroenterology 2012.


Hill T, Blikslager AT. Indomethacin decreases recovery of gastric barrier function after acid injury in a novel ex vivo canine model. 7th Annual NC State University Research Graduate Student Symposium 2012.


Jawanda JS, Miller MB, Balakrishnan N, Breitschwerdt EB. *Bartonella henselae* infection manifesting as hypergammaglobulinemia, splenomegaly with polyclonal plasmacytosis, stroke, and suspected prosthetic aortic arch infection. 7th International Conference on *Bartonella* as Animal and Human Pathogens, Raleigh, NC, April 25-28, 2012.


Hempstead JH, Clode AC, Salmon BH, Gilger BC. Ocular tissue concentration of voriconazole and fluconazole in an ex vivo canine globe perfusion model. American College of Veterinary Ophthalmologists, Portland, OR, October 2012.


Abarca EM, Salmon JH, Gilger BC. Effect of choroidal perfusion on ocular tissue distribution after intravitreal or suprachoroidal injection of fluorescein sodium or lipophilic carbocyanine DiI in an ex vivo porcine eye model. NCSU-UNC Collaborative Studies in Ocular Drug Delivery Workshop, McKimmon Center, North Carolina State University, Raleigh, NC, November 13, 2012.


Abarca EM, Salmon JH, Gilger BC. Effect of choroidal perfusion on ocular tissue distribution after intravitreal or suprachoroidal injection of fluorescein sodium or lipophilic carbocyanine DiI in an ex vivo porcine eye model. American College of Veterinary Ophthalmologists, Portland, OR, October 2012.


Tolbert K, Gookin JL*. Exogenous sialic acid and cysteine protease inhibition block adherence of Tritrichomonas foetus to the intestinal epithelium. 30th Annual Forum of the American College of Veterinary Internal Medicine, New Orleans, LA, June 2012. (oral) (*corresponding author).


Oura TJ, Hanel RM*, Davies J, Robertson ID, Thrall DE, Seiler GS, MacIntyre N. Diagnostic imaging enhances management of acute respiratory distress syndrome. American College of Veterinary Radiology, 2012 Scientific Conference, Las Vegas, NV, October 2012. (*assisted with project design, data collection, obtained grant money, editing of manuscript)


Medlin E, Yoder J, **Jones SL**. The role of MARCKS protein in in vivo neutrophil migration in zebrafish. NC State Molecular Biotechnology Training Program Symposium, 2013.

Sheats MK, Adler KB, **Jones SL**. Myristoylated Alanine Rich C Kinase Substrate (MARCKS) is an important regulator of Beta2-Integrin dependent functions in equine neutrophils. NC State Graduate Student Symposium, 2013. (Awarded first place, Life Sciences Division)
Sheats MK, Adler KB, Jones SL. Myristoylated Alanine Rich C Kinase Substrate (MARCKS) is an important regulator of Beta2-Integrin dependent functions in equine neutrophils. CVM Research Forum, 2013. (oral presentation)

Keene BW, Fox PR, Hamlin RL, Beddies GF, Keefe TJ, Settje T, Treml LS, for the HECTOR investigators: Efficacy of BAY 41-9202 (bisoprolol oral solution) for the treatment of chronic valvular heart disease (cvhd) in dogs. Accepted (late breaking abstract) for the 30th annual Veterinary Medical Forum of the American College of Veterinary Internal Medicine, May 2012


Briley JD, Williams MD, Freire M, Benito J, Hash J, Ghashghaei T, Lascelles BDX. Feasibility and Repeatability of Cold and Mechanical Quantitative Sensory Testing in Dogs as a measure of neuropthic pain states. Merck Merial Summer Student Symposium, August 2-5, 2012. (poster presentation)

Tuohy J, Kwan T, Horn T, Harrysson OLA, Lascelles BDX, Marcellin-Little DJ. Management of long bone tumors with custom freeform total joint prostheses. 1st Scientific Meeting of the Veterinary Society of Surgical Oncology, May 24-25, 2012. (oral communication) (Accepted)

Hill T, Young K, Lascelles BDX, Blikslager AT. Misoprostol Protects Gastric Barrier Function after Acid Injury in a Novel Ex Vivo Canine Model. Digestive Diseases Week, May 19-22, 2012. (poster presentation)


Serrano ME, Cowen P, Lewbart, GA, Stoskopf MK. Use of a web-survey questionnaire to study the United States’ preparedness to respond to unusual mortality events involving nongame freshwater fishes. Proceedings of the International Association for Aquatic Animal Medicine, 2012; 42.


Lappin MR, Maggi RG, Hawley JR, Breitschwerdt EB. Failure to amplify *Bartonella koehlerae* DNA from blood of cats and their fleas in the United States. American College of Veterinary Internal Medicine Annual Meeting, New Orleans, LA, May 31, 2012; Abstract #30

Davenport A, Mascarelli PE, Maggi RG, Breitschwerdt EB. Phylogenetic diversity of bacteria isolated from sick dogs using the bapgm enrichment culture platform. American College of Veterinary Internal Medicine Annual Meeting, New Orleans, LA, May 31, 2012; Abstract #15


Casper K, Maggi RG (Mentor). Bartonella detection after storage. 21st Undergraduate Symposium. Raleigh, NC, 2012. (First Prize Award)


Harrysson O, Horn T, Marcellin-Little D. Medical applications of direct metal additive manufacturing. Material Science & Technology (MS&T’12), Pittsburgh, PA, October 2012.

Levine D, Adair HS III, Marcellin-Little DJ. Assessment of the accuracy and reliability of goniometry of the carpus, tarsus, and fetlock joints in horses. The International Symposium in Veterinary Rehabilitation and Physical Therapy in Veterinary Medicine, Vienna, Austria, August 2012.

Braxton A, Mariani CL. The evaluation of matrix metalloproteinase-2 and -9 in urine samples from canine cancer patients. CVM Annual Research Forum, North Carolina State University, 2013.

Braxton A, Mariani CL. The evaluation of matrix metalloproteinase-2 and -9 in urine samples from canine cancer patients. 21st Annual North Carolina State University Undergraduate Research Symposium, North Carolina State University, 2012.

Mariani CL. Matrix metalloproteinase-2 and -9 in canine central nervous system tumors. 30th Annual Forum of the American College of Veterinary Internal Medicine, 2012.


Domaracki C, Olby NJ* Quantification of Hindlimb Coordination in Dogs Recovering from Acute Intervertebral Disc Herniations. CVM Research Forum, NCSU March 2013.


Redding WR. The use of MRI in the evaluation of the fetlock. BEVA, Manchester, 2013.


Redding WR. Experience with US/MRI Fusion in the Operating Theater. BEVA, Manchester, 2013.

Redding WR. The use of MRI in the evaluation of the fetlock, 40 cases. ACVS 2012 (2013).

Redding WR. The use of advanced imaging in the lameness exam of the horse Veterinary Congress, Valdivia, Chile, 2012.

Redding WR. Current treatments of horses with foot lameness. Veterinary Congress, Valdivia, Chile, 2012.

Redding WR. Full day Lab on the Use of Ultrasound in the Lameness Workup of the Horse. Veterinary Congress, Valdivia, Chile, 2012.

Redding WR. MRI exam of sporthorses with fetlock region pain. ACVS 2012.

Seibert R, Roe SC, Marcellin-Little D, DePuy V, Lascelles BDX. Comparison of bodyweight distribution, peak vertical force and vertical impulse as measures of hip joint pain and efficacy of total hip replacement. ACVS Symposium, November 2012. (Accepted – not presented due to Hurricane Sandy and ACVS being cancelled)


Tate LP. Dorsal displacement of the soft palate and entrapment of the epiglottis diagnosis & options for treatment. ECVS 2013 Abstract.


Tate LP. Laparoscopic assisted ovariectomy in the mare. 11th Annual Scientific Meeting of the Soft Tissue Veterinary Society, June 4, 2012.

7. Works prepared for presentation and distribution through electronic media, including CD-ROMS, audio and video disks and tapes, computer-generated presentations, broadcast videos, etc.


Breitschwerdt EB. Interview, Clinician Scientist, AKC Canine Health Foundation Video, August 2012.


Gookin JL. Posted teaching videos regarding diagnosis of Tritrichomonas foetus on YouTube, 2012.

Roe SC. Soft padded leg bandage. CVM Video Library, 2013.

Roe SC. Extracapsular suture stabilization for CCL. CVM Video Library, 2012.


Stevens BJ. Euthanasia and decision making. NCVMA Pod Cast, Spring 2012.


Stoskopf MK (Editor). Primate Medicine 2012. Course CD. NCSU EMC.

Stoskopf MK (Editor). Veterinary Illustration 2012. Course CD. NCSU EMC.

8. Titles of invited presentations/papers/proceedings (including CE) where the primary audience was professionals (veterinarians, scientists, etc.)

Atkins CE. C635 recruitment and what’s new in diuretics? CEVA C635 Recruitment Dinner Meeting, Boulder, CO, April 16, 2013. (2 hours)

Atkins CE. Aldosterone breakthrough and bimodal suppression of Renin-Angiotensin-Aldosterone in canine cardiac disease. British Small Animal Veterinary Association, Veterinary Cardiology Society, Birmingham, UK, April 3, 2013. (1 hour)

Atkins CE. C635 recruitment and what’s new in diuretics? CEVA C635 Recruitment Dinner Meeting, Newark, NJ, March 20, 2013. (2 hours)

Atkins CE. Advances, controversies and dilemmas in canine heartworm disease. Heartworm Interest Groups, Toronto, Ontario, Canada, March 18-19, 2013. (3 presentations at 1.5 hours)

Atkins CE. Heartworm preventive – more than meets the eye. American Animal Hospital Association, Merial Parasitology Symposium, March 16, 2013. (1 hour)

Atkins CE. Topics in small animal cardiovascular medicine. International Veterinary Seminars, Futaleufu River, Chile, SA, February 26 – March 4, 2013. (20 hours)

Atkins CE. C635 recruitment and what’s new in diuretics? CEVA C635 Recruitment Dinner Meeting, Jacksonville, FL, January 29, 2013. (2 hours)

Atkins CE. C635 recruitment and clinical electrocardiography. CEVA C635 Recruitment Meeting, Care First Animal Hospital, January 29, 2013. (2 hours)

Atkins CE. C635 recruitment and what’s new in diuretics? CEVA C635 Recruitment Dinner Meeting, Kansas City, MO, January 23, 2013. (2 hours)

Atkins CE. Merial heartworm symposium: Heartworm preventive – More than meets the eye. North American Veterinary Conference, Orlando, FL, January 19-21, 2013. (1.5 hours)


Atkins CE. Heartworm disease and cardiovascular medicine. Memphis-Shelby County Veterinary Medical Association, December 1, 2012. (4 hours)

Atkins CE. Lectures and laboratories on canine cardiovascular disease. Waltham Veterinary Conference, Chennai, India, November 9-11, 2012. (24 hours)

Atkins CE. Lectures and laboratories on canine cardiovascular disease. Waltham Veterinary Conference, New Delhi, India, November 9-11, 2012. (24 hours)

Atkins CE. Lectures and laboratories on canine cardiovascular disease. Waltham Veterinary Conference, Mumbai, India, November 9-11, 2012. (24 hours)

Atkins CE. C635 recruitment and what’s new in diuretics? CEVA C635 Recruitment Meeting, Preston Animal Hospital, Raleigh, NC, January 25, 2013. (2 hours)


Atkins CE. Heartworms in practice – Are views changing? Elanco Advisory Board Meeting, Dallas, TX, October 19, 2012. (1 hour)

Atkins CE, Ames M. Aldosterone breakthrough and bimodal suppression of Renin-Angiotensin-Aldosterone in canine cardiac disease. European College of Veterinary Internal Medicine, Maastricht, NL, September 5, 2012. (1 hour)

Atkins CE, Keene B. C635 investigation announcement and managing acute heart failure. NCSU Continuing Education Seminar, Raleigh, NC, July 18, 2012. (1 hour)

Atkins CE. Research seminar: Aldosterone breakthrough with ACE-I in experimental RAAS activation. ACVIM Forum, June 1, 2012. (0.5 hour)

Atkins CE. Current advances, controversies and dilemmas in canine heartworm disease. Heartworm Interest Group, Pittsburgh, PA, May 10, 2012. (2 hours)

Atkins CE. Current advances, controversies and dilemmas in canine heartworm disease. Heartworm Interest Group, Youngstown, OH, May 9, 2012. (2 hours)
Atkins CE. When to use and NOT to use inotropes (Pimobendan, Dobutamine and Digoxin). Latin American Veterinary Conference, Lima, Peru, April 26, 2012.


Atkins CE. When the specialist is out: Case-based approach to cardiac disease, Emphasizing Physical Examination. Latin American Veterinary Conference, Lima, Peru, April 26, 2012.

Atkins CE. Cardiovascular physical examination – What’s practical and important? Latin American Veterinary Conference, Lima, Peru, April 26, 2012. (2 hours)

Atkins CE. Topics in veterinary cardiology. Latin American Veterinary Conference, Lima, Peru, April 26, 2012. (6 hours)

Atkins CE. Current advances, controversies and dilemmas in canine heartworm disease. Little Rock Veterinary Medical Association, Little Rock, AR, April 18, 2012. (2 hours)

Atkins CE. Current advances, controversies and dilemmas in canine heartworm disease. NW Arkansas Veterinary Medical Association, Fayetteville, AR, April 17, 2012. (2 hours)

Atkins CE. What is heart failure? NCSU Foundation Benefactors’ Meeting, Raleigh, NC, March 17, 2012. (0.5 hours)

Birkenheuer AJ. Babesiosis and cytauxzoonosis. Las Vegas, NV, February 18, 2013. (2 hours)


Birkenheuer AJ. Babesiosis. One Medicine Symposium, Raleigh, NC, December 5, 2012. (1 hour)


Bizikova P. An update on canine pemphigus foliaceus. Proceedings, 7th World Congress of Veterinary Dermatology, Vancouver, Canada, 2012; 257-263.

**Blikslager AT.** Triaging equine colic patients. Midwest Veterinary Conference, Columbus, Ohio, February 2013.

**Blikslager AT.** Treating pain in horses with colic. Midwest Veterinary Conference, Columbus, Ohio, February 2013.

**Blikslager AT.** Cost and prognosis of colic. Midwest Veterinary Conference, Columbus, Ohio, February 2013.

**Blikslager AT.** Diagnosis and treatment of impaction. Colic Midwest Veterinary Conference, Columbus, Ohio, February 2013.

**Blikslager AT.** Small colon impaction. Midwest Veterinary Conference, Columbus, Ohio, February 2013.

**Blikslager AT.** Fluid treatment of horses with colic. Midwest Veterinary Conference, Columbus, Ohio, February 2013.


**Blikslager AT.** Infectious disease, inflammation, and their effect on gut barrier function. 9th International Conference on Equine Infectious Diseases, Lexington, Kentucky, October 2012.

**Blikslager AT.** Formulating prognoses and cost estimates in colic. 2nd Annual Potomac Regional Veterinary Conference, Washington, DC, September 2012.

**Blikslager AT.** Differential diagnosis of impaction colic. 2nd Annual Potomac Regional Veterinary Conference, Washington, DC, September 2012.


**Blikslager AT, Merritt AM.** Equine interactive case discussions. 45th European Veterinary Conference, Amsterdam, Netherlands, April 2012.

Merritt AM, **Blikslager AT.** Equine primary gastric impaction. 45th European Veterinary Conference, Amsterdam, Netherlands, April 2012.

**Blikslager AT.** Colic news hour. 45th European Veterinary Conference, Amsterdam, Netherlands, April 2012.

Breitschwerdt EB. Medicine Grand Rounds, A One Health Approach to Vector Borne Infectious Diseases. Duke University Medical Center, Durham, NC, April 5, 2013.

Breitschwerdt EB. Infectious diseases. ContinuEd Veterinary Symposium, Park City, Utah, February 11-13, 2013. (6 hours)

Breitschwerdt EB. Infectious Diseases. Michigan Veterinary Conference, Lansing, Michigan, January 25, 2013. (6 hours)

Breitschwerdt EB. Bartonellosis: A one health approach to an emerging infectious disease. Comparative Biomedical Sciences Visitation Day, College of Veterinary Medicine, North Carolina State University, Raleigh, NC, November 9, 2012.

Breitschwerdt EB. Human Bartonellosis: A One Health Approach to an Emerging Infectious Disease, North Carolina State University Encore Program, Raleigh, NC, October 15, 2012.


Breitschwerdt EB. Bartonellosis: Of cats, dogs, mice and men. Division of Infectious Diseases, College of Veterinary Medicine, University of Florida, Gainesville, Florida, October 9, 2012.


Breitschwerdt EB. Overview of vector borne infectious diseases. Richmond Academy of Veterinary Medicine, Richmond VA, May 3, 2012.

Breitschwerdt EB. Vector borne infectious diseases and conservation medicine. St. Georges University, Grenada April 10-19, 2012. (Graduate Course lectures)


Clode AB. How to approach canine glaucoma. Buffalo Academy of Veterinary Medicine Lecture Series, Buffalo, NY, March 7, 2013. (2 lecture hours)

Clode AB. How to approach canine corneal disease. Buffalo Academy of Veterinary Medicine Lecture Series, Buffalo, NY, March 7, 2013. (1 lecture hour)

Clode AB. How to approach feline corneal disease. Buffalo Academy of Veterinary Medicine Lecture Series, Buffalo, NY, March 7, 2013. (1 lecture hour)

Clode AB. Ophthalmology techniques for the ambulatory practitioner. North Carolina Veterinary Medical Association Merck Equine Symposium, Southern Pines, NC, February 23, 2013. (1 lecture hour, 4 lab hours)


Clode AB. Ocular pharmacology (Antibiotics, antifungals, nonsteroidal anti-inflammatories, corticosteroids, ocular hypotensives, mydriatics, miotics). American College of Veterinary Ophthalmology Basic Science Course, Raleigh, NC, June 18, 2012. (7 hours)

Davis JL. Pharmacokinetics and pharmacodynamics of drugs in horses. Presented at the University of Saskatchewan, Saskatoon, Canada, April 2013.

Davis JL. Diagnosing and treating diseases that cause laminitis before they strike. Presented at the Equine Podiatry Symposium, Raleigh, NC, March 2013.

Davis JL. What’s new in equine muscle diseases. Presented at the Equine Health Symposium, Raleigh, NC, February 2013.

Davis JL. Is it lame or neurologic: roundtable discussion. Presented at the Equine Health Symposium, Raleigh, NC, February 2013.


**Davis JL.** Corticosteroids: uses and adverse effects. Presented at the Central Veterinary Conference, Kansas City, MO, August 2012. Published in the Proceedings of the Central Veterinary Conference, 2012.


**DeFrancesco TC.** Can we delay progression of heart disease. NCSU Cardiology Symposium. NCSU College of Veterinary Medicine. Raleigh, NC, March 16, 2013. (1 hour)

**DeFrancesco TC.** Cardiac auscultation 101. NC Veterinary Forum. NCSU College of Veterinary Medicine. Raleigh, NC, November 22, 2012. (1 hour)

DeFrancesco TC. Basic and advanced electrocardiographic interpretation limited enrollment session. International Veterinary Emergency and Critical Care Conference, San Antonio TX September 10, 2012. (3 hours)

DeFrancesco TC. Abdominal fluid assessment by sonography for trauma (AFAST) and thoracic fluid assessment by sonography for trauma (TFAST) wet lab. International Veterinary Emergency and Critical Care Conference, San Antonio TX, September 8, 2012. (3 hours)

DeFrancesco TC. Update: diagnosis and management of canine congestive heart failure, Update: diagnosis and management of feline congestive heart failure. What is the evidence? Can biomarkers tell you the difference between cardiac and respiratory disease. International Veterinary Emergency and Critical Care Conference, San Antonio TX, September 8-12, 2012. (3 hours)

Degernes L. Avian and Reptile Hematology. Wildlife Rehabilitators of North Carolina Symposium, Raleigh, NC, January 2013. (lecture and 2-hour lab)

Degernes L. Avian anesthesia, emergency support and diagnostic surgical techniques. Annual Conference of the Association of Avian Veterinarians, Louisville, KY, August 2012. (lecture and 2, 4-hour labs)

Degernes L. Raptor Rehabilitation and the Natural History Considerations for Rehabilitation for Release to the Wild. Invited guest speaker for Beijing Normal University, College of Life Sciences, Beijing, China, May 2012.

Degernes L. Raptor Medicine in the United States. Invited guest speaker for Zhejiang University, College of Animal Sciences, Department of Veterinary Medicine, Hangzhou, China, May 2012.


Gookin JL. The neonatal piglet model of necrotizing enterocolitis. NCSU-University of Surrey Models of Animal Disease Workshop, Raleigh, NC, January 10, 2013.

Gookin JL. The neonatal piglet model of necrotizing enterocolitis. University of North Carolina Chapel Hill Department of Pediatric Medicine, Chapel Hill, NC, December 2012.

Gookin JL. Essentials of the oral abstract presentation. CVM Graduate Student Association Lunch and Learn, NCSU-CVM, Spring 2012.


Grunkemeyer VL. Clinical management of ileus in the rabbit. North Carolina College of Veterinary Medicine Veterinary Froum, Raleigh, NC, 2013. (electronic proceedings)


Hanel R. Management of diabetic ketoacidosis. Given at Preston Animal Hospital to group of veterinarians from 3 hospitals that gather for invited CE lectures, March 2013.


Hansen BD. Using the strong ion gap to interpret acid-base status. Proceedings, Central Veterinary Conference West, San Diego, CA, 2012. (1 hour lecture)


Hansen BD. Cardiovascular system support: protocols for shock. Proceedings, Central Veterinary Conference West, San Diego, CA, 2012. (1 hour lecture)

Hansen BD. Respiratory system support. Proceedings, Central Veterinary Conference West, San Diego, CA, 2012. (1 hour lecture)


Hansen BD. Respiratory distress. Animal Medical Center Partners in Practice lecture series, Animal Medical Center, NY, 2012. (1 hour lecture)


Hansen BD. Pain management lab. Compact Disc Multimedia Proceedings, IVECCS, San Antonio, TX, September 2012. (4 hours laboratory)
Hansen BD. SID/SIG: Recognizing the unmeasured anion. Compact Disc Multimedia Proceedings, IVECCS, San Antonio, TX, September 2012. (2 hour lecture)


Harms CA. Marine mammal sedation, euthanasia and peri-euthanasia issues in North Carolina, 4 hr lecture and 4 hr laboratory instruction in Wildlife Field Anesthesia and Stranded Marine Mammals course, National Park Service, Biological Resources Management Division, Cape Hatteras National Seashore, Buxton, NC, February 13, 2013.


Harrell K. Update from ACVIM 2012. For Dr. Betsy Sigmon’s Group, July 2012.


Harrell K. 1131 Updates for Clinical Pathology, February 2012.


Keene BW. Cardiology Update. NY City Veterinary Association, NY, NY, 2012. (3 hours)


Keene BW. Diagnosis and treatment of asymptomatic heart disease. Ohio State University Royal Canin Cardiology Forum, Columbus, OH, 2012. (1 hour)


Lascelles BDX. Phenotyping the canine OA patient. Where are we? Invited research seminar, Veterinary Orthopedic Society Conference, Park City, Utah, March 12, 2013.


Robertson SA, Lascelles BDX. Recognizing chronic pain how do we know they hurt? The World Small Animal Veterinary Association Global Pain Council Pre-Congress Meeting, Auckland, New Zealand, March 5, 2013.

Lascelles BDX. Management of osteoarthritis in young dogs. Western Veterinary Conference, Las Vegas, February 20, 2013

Lascelles BDX. Risk-benefit decision making in the long-term use of NSAIDs for canine osteoarthritis. Western Veterinary Conference, Las Vegas, February 17, 2013.


Lascelles BDX. Pain management in cats versus dogs: what are the differences? Oral presentation at 27. VÖK-Jahrestagung, Universität Salzburg, Austria, September 23, 2012.


Lascelles BDX. Feline Pain Control. Oral presentation to Novartis Animal Health Sales Representatives, NCSU CVM, May 1, 2012. (no proceedings)


Lewbart GA. AVMA Position on Euthanasia; Terrestrial Invertebrates, 2013.


Lewbart GA. Encouraging aquatic courses in veterinary school curricula. World Aquatic Veterinary Medical Association Aquatic Veterinary Education Programme, Network Of Veterinary Information & Communication Technology in Education. Bucharest, Romania (via Internet), October 4, 2012.

Lewbart GA. Terrestrial invertebrate medicine laboratory. Vetsuisse-Faculty, The University of Zürich, Zürich, Switzerland, September 26, 2012. (3 hours)


Marcellin-Little DJ. Complex distal femoral fractures – Advanced AO course, Columbus, OH, April 2012.

Marcellin-Little DJ. Hinged linear external fixation – Advanced AO course, Columbus, OH, April 2012.

Marcellin-Little DJ. Antebrachial deformities in adult dogs – Advanced AO course, Columbus, OH, April 2012.


Mariani CL. Is it neuro or ortho? Sorting our lameness, paresis and dogs that won’t get up. Proceedings, Ontario Veterinary Medical Association Annual Conference, Toronto, Ontario, Canada, 2013.


Mariani CL. Seize the Day – Treatment plans for the routine and difficult to control epileptic. Proceedings, Ontario Veterinary Medical Association Annual Conference, Toronto, Ontario, Canada, 2013.


Marks SL. Problem based case presentations. Illinois State Veterinary Medical Association, Chicago, IL, November 2012.


Marks SL. Case presentations. Danish Small Animal Veterinary Association, Aarhus, Denmark, November 2012.


Marks SL. Veterinary Endoscopy Lab. Oquendo Center, Las Vegas, NV, October 2012. (~20 hrs of hands on endoscopy instruction for general practitioners.

Marks SL. Veterinary Endoscopy Lab. Oquendo Center, Las Vegas, NV, May 2012. (~20 hrs of hands on endoscopy instruction for general practitioners.

Marks SL. Practical emergency and critical care techniques. Association des medecins veterinaries du Quebec, Laval, Quebec, March 2012.

Marks SL. Diagnosis and management of respiratory trauma. Association des medecins veterinaries du Quebec, Laval, Quebec, March 2012.

Marks SL. Tough Night in the ER: case presentations. Association des medecins veterinaries du Quebec, Laval, Quebec, March 2012.

Marks SL. Basics of fluid therapy. K9 Down, Raleigh, NC, February 2012.

Marks SL. Advanced CPCR. K9 Down, Raleigh, NC, February 2012.

Marks SL. Advanced procedures wet lab. K9 Down, Raleigh, NC, February 2012.

Mathews KG. Morning lectures and afternoon laboratories covering the acute abdomen; surgical disasters; decision making in gastrointestinal, urological and respiratory surgery; surgery of the airways and thorax, ureter, gastrointestinal tract and hepatobiliary system. Copenhagen University, Master Course in Soft Tissue Surgery, November 19-23, 2012.


Olby NJ. Intervertebral disc herniations: The old, the new, the future. NCVC Raleigh, NC. November 2012.


Olby NJ. Once seen, never forgotten – How to recognize unusual neurological syndromes. XVIth Jornadas Internacionais Medicina Veterinaria, Vila Real, Portugal, October 2012.

Olby NJ. Spinal Radiographs; a useful Diagnostic Tool. XVIth Jornadas Internacionais Medicina Veterinaria, Vila Real, Portugal, October 2012.

Olby NJ. A logical approach to changed mental status. XVIth Jornadas Internacionais Medicina Veterinaria, Vila Real, Portugal, October 2012.

Olby NJ. Intervertebral disc herniations: The old, the new, the future. XVIth Jornadas Internacionais Medicina Veterinaria, Vila Real, Portugal, October 2012.


Prange T. Cryotherapy – Prevention of Laminitis, 2013 Equine Health Symposium Raleigh, NC.


Roe SC. Transarticular External Fixators, Complex fractures of the humeral condyle, Complex acetabular fractures, Complex shaft fracture case – with case discussion, Plate-rod fixation of complex shaft fractures, Antebrachial growth deformity – immature dogs, Antebrachial Deformity – Adult dogs, TTO & MMP, Correction of excessive tibial slope, Biomechanical considerations in the fixation of comminuted fractures, SOP Locking plates, Infection of bone and Implants. Surgical Fixation of Fractures, Course Notes, Sydney, Australia, August 2012.

Roe SC. Implant Design and Performance, Principles and Application of Cerclage Wire, Biomechanical considerations in the fixation of comminuted fractures, SOP Locking plates, Infection of Bone and Implants. Surgical Fixation of Fractures, Course Notes, Columbus OH, April 2012.

Roe SC. Hip dysplasia in the young puppy. The Labrador Quarterly, Fall 2012; 24-26.

Sherman BL. How to select the best military working dogs based on their behavior. Lecture to the Student Chapter of AVSAB (Behavior Club), NCSU-CVM, March 25, 2013.


Suter S. Canine bone marrow transplantation. Virginia Veterinary Medical Association, February 6, 2013.

Suter S. RTK Inhibitors/Palladia. Virginia Veterinary Medical Association, February 6, 2013.

Tate LP. Endoscopic diagnosis of diseases of the paranasal sinuses and surgical approaches for the horse. NCVC, Equine Spring Meeting, February 2013.


Vaden SL. Strategies to reduce the frequency of recurrent UTIs. The Veterinary Endocrinology & Internal Medicine Seminar. Nassau, The Bahamas Island, November –December 2012.


9. **Titles of continuing education presentations/papers/proceedings where the primary audience was not professionals (livestock producers, dog breeders, horse owners, etc.)**

**Baily CS.** Vaginal flora and antibiotic sensitivity patterns in spayed and intact dogs in NC. Raleigh Kennel Club, Raleigh, NC, December 2012.

**Baily CS.** Vaginal flora and antibiotic sensitivity patterns in spayed and intact dogs in NC. First Annual Canine Breeder Symposium, Raleigh, NC, October 2012.

**Baily CS.** Vaginal flora and antibiotic sensitivity patterns in spayed and intact dogs in NC. GSD Club of Greater Raleigh, Raleigh, NC, October 2012.

**Baily CS.** Canine dystocia management and puppy care. Raleigh Shetland Sheepdog Club, Raleigh, NC, September 2012.

**Blikslager AT.** An owner's guide to the interaction of nutrition and colic in the horse. Equine Health Symposium, Raleigh, NC, February 2013.

**Blikslager AT.** Equine colic. Pepperwood Horse Health Fair, Pepperwood Farm, Fuquay-Varina, NC, March 2012.

**Blikslager AT.** Causes of equine colic. American Pre-Veterinary Medical Association, NC State University, Raleigh NC, March 2012.

**Davis JL.** Diagnosing and treating diseases that cause laminitis before they strike. Presented at the Equine Podiatry Symposium, Raleigh, NC, 2013. (Vets and owners in the audience)

**Gookin JL.** *Tritrichomonas foetus* – what you simply need to know. The International Bengal Cat Society Membership and Education Conference, St. Augustine, FL, February 24, 2012.

**Hanel R.** Course coordinator, lecturer and laboratory instructor. Physical Examination. K9 First Aid. IV fluid therapy and therapeutic interventions for shock, heatstroke, smoke inhalation and burn wound management in the “K9 Down; Are You Prepared? Immediate Care of the Injured Dog for Emergency Personnel” course. NC State University, College of Veterinary Medicine, Raleigh, NC, February 16-17, 2013.

**Lewbart GA.** Comparative fish anatomy Lab. Veterinary Careers Student-Parent Education Workshop, NCSU-CVM, June 22, 2012. (1.5 hour session)


**Roe SC.** Sore hips and tying wire. NC Society of Farm Managers and Rural Appraisers, July 2012.

**Sherman BL.** Celebration of Life: Dr. R.K. Anderson. Invited Speaker at Memorial Service, University of Minnesota College of Veterinary Medicine, December 5, 2012.


10. **Bulletins, booklets, and similar educational material developed for distribution.**


Olby NJ. Wobbly and Cramping Scotties. The Quest for Answers. Presented to the Scottish Terrier Club of America at their Annual National Meeting in Montgomery PA, October 2012.

11. **Copyrighted software and other copyrighted scholarly material (if not included in 1-10).**

Olby NJ. Stem cell therapy brings hope to paralyzed dogs By Amy Ettinger for Morris Animal Foundation Newsletter – Animal News. Interviewed for this article and edited the piece, 2012.

Olby NJ. Stem-Cell Therapy May Benefit Dogs with Intervertebral Disc Disease by Barbara Fawver for Purina Magazine. Interviewed for this article and edited the piece, 2012.

12. **Patents.**

Giler BC, Salmon JH. Thermosensitive polymers for ocular drug delivery, December 2012 (NCSU invention disclosure).

Quimby J, Lunn K. Mirtazapine as an appetite stimulant for cats. Filed June 1, 2012.


13. **Awards/Other Contributions.**

Atkins CE. Invitation to participate in Pre-Congress Meeting on ACE-I and Aldosterone Breakthrough, British Small Animal Veterinary Association, 2013.

Atkins CE. Invitation to present “Hot Topics in Cardiology” regarding MS Delta and Heartworm Resistance, 2013.

Atkins CE. Asked to be a steering committee participant for multinational effort to provide a consensus statement on CardioRenal Syndrome in dogs and cats, 2013.
Bizikova P. Invitation to speak at the WCV 2012 and at the ECVIM (2013) on topics canine pemphigus foliaceus and feline autoimmune skin diseases.

Breitschwerdt EB. Radio In Vivo, Your link to the Triangle Science Community WCOM 103.5FM Carrboro, NC, March 6, 2013.


Breitschwerdt EB. NCSU Alumni Association Outstanding Research Award, 2012.


Clode AB. Invitation to speak at USP Workshop on Ophthalmic Preparations, Rockville, Maryland, October 2013.

Hanel RM. Invited to take part in a panel discussion on thromboelastography at IVECCS 2013, give a specialist level lecture on the topic, and be part of Partnership for Rotational Viscoelastic Test Standardization (PROVETS); Domain Chair (Definitions and Data Reporting), American College of Veterinary Emergency and Critical Care, 2011-present

Hess PR. Invited to give research report on first discovery of class I peptide-binding motif in the dog at the 2012 ACVIM Forum.


Marcellin-Little DJ. I have been invited to present my research to NCSU’s Board of Trustees, to the ACVS, to the AVMA, to the BSAVA / BVOA (in the UK), to the NCSU Pre-Vet club, and at a seminar dedicated to regenerative medicine.

Marcellin-Little DJ, Ola Harrysson. Featured on the cover of the NCSU’s research magazine, Winter 2012 issue.

Muñana KR. Keynote speaker at 25th Annual European College of Veterinary Neurology Symposium, Ghent, Belgium, September 2012.

Muñana KR. Recipient of annual donations form Epi-K9 Foundation and the Krauss Charitable Foundation in support of research on canine epilepsy.

Olby NJ. Veterinary Neurology. Invited Speaker at the Hare Laboratory of Canine Cognition, Duke University, Durham NC, January 2013.

Olby NJ. Wobbly Dogs and SNP Chips; Uncovering Causes of Cerebellar Degeneration Invited Speaker for the Niemeyer Lecture Series at Missouri College of Veterinary Medicine, Columbus MO, November 2012.

Olby NJ. Why so Wobbly? The Cause of Canine Cerebellar Abiotrophy. Invited speaker at the Merial-NIH- National Veterinary Scholars Symposium Comparative Medicine: The Key To Translation Fort Collins, CO, August 2012.

Olby NJ. Canine spinal cord injury Invited speaker at the One Health Course (NCBMA) run by the One Health Intellectual Exchange Series: Philosophy to Practice, April 2012.

Olivry TO. Recipient of the 2013 WSAVA Hill’s Excellence in Veterinary Healthcare Award.

Prange T. Invitation to chair the “Neck & Back”: Intersection of Neurological and Musculoskeletal Lameness” session at the ACVS Symposium 2013, San Antonio, TX.


14. Grants Applied for as Principal or Co-Investigator.


Bailey S (PI), Vaden S (Co-I), Diaw M, Jacob M, Saker K. Effect of intravaginal administration of probiotics on vaginal microbiota and clinical outcomes of dogs with recurrent urinary tract infections. (The Theriogenology Foundation) $11,614. (submitted, not funded)

Breitschwerdt EB (PI), Qurrollo BA, Hegarty BA, Maggi RG (Co-PIs). Anaplasma platys and Ehrlichia canis Neglected Zoonotic Tick Borne Pathogens. September 2012 (National Research Fund for Tick Borne Diseases) $58,388. (not funded)

Breitschwerdt EB, Bizikova P (Co-PIs). Bartonella spp. and canine idiopathic nodular panniculitis. March 2013 (AKC Health Foundation) $11,232. (pending)

Breitschwerdt EB, Linder KE, (Co-PIs). Bartonella spp. in skin cancers in dogs. March 2013 (AKC Health Foundation) $11,140. (pending)


Breitschwerdt EB, Maggi RG. Identification of new medical uses for BAPGM enrichment culture. February 2013 (North Carolina Biotechnology Grant Program) $80,000. (submitted)

Degernes LA (PI), Van Wettere AJ (Co-I) and Ley D (Co-I). Mycoplasma polyarthritis in black vultures (Coragyps atratus). 2012-2013 (Association of Avian Veterinarians Research Grant) $10,000. (Pre-proposal, pending)

Degernes LA (PI), Van Wettere AJ (Co-I), Ley D (Co-I). Mycoplasma-associated arthritis in black vultures (Coragyps atratus). 2012-2013 (Raleigh Durham Caged Bird Society Avian Research) $7,800. (not funded)
Scott D (Co-PI), Degernes LA (Co-PI). Use of electronic medical records system to track emerging disease in wild avian populations. 2012-2013 (USDA APHIS Region 2, Avian Health & Disease Surveillance and Monitoring Support) $44,500. (not funded)

Fish RE (PI), Dorman DC (CoI), Sherman BL (CoI), Lascelles BDX (CoI), Grunkemeyer V (CoI). Role of gastrointestinal stasis in the postoperative recovery of rabbits. 2013 (American Association for Laboratory Animal Science) $7,500. (submitted)

Fish RE (PI), Dorman DC (CoI), Sherman BL (CoI), Lascelles BDX (CoI), Grunkemeyer V (CoI). Role of gastrointestinal stasis in the postoperative recovery of rabbits. 2013 (American College of Laboratory Animal Medicine Foundation) $29,685. (submitted)

Fish RE (PI), Dorman DC (CoI), Sherman BL (CoI), Lascelles BDX (CoI), Grunkemeyer V (CoI). Role of gastrointestinal stasis in the postoperative recovery of rabbits. 2013 (NCSU CVM Internal Grant) $19,775. (submitted)

Gilger BC. Ocular toxicity and pharmacology of RX-10045. March 2013 – Dec 2013 (Celtic Therapeutics, Inc. NY, NY) $42,000. (Testing Service Agreement)

Gilger BC. Effects on ocular surface immunology in dogs with KCS that are treated with cyclosporine. March 2013 – December 2013 (Allergan, Inc, Irvine, CA) $30,000. (Testing Service Agreement)

Gookin JL (PI), Foster DM (co-I), Sherry B (co-I), Magness ST (co-I). Targeting crypt cell proliferation to promote recovery from C parvum infection. July 5, 2013 (NIH-NIDDK R01DK099471-01) $1,500,000 (Scored. In Revision for re-submission)

Hansen B, Hanel R (Co-PI), Nordone S. Continuous monitoring of ScvO2 in critically ill dogs. 2012 (American College of Veterinary Internal Medicine) $11,400.

Hawkins EC (10% effort), Markham BE (PI, Phrixus Pharmaceuticals), Kornegay JN (PI, Texas A&M University subcontract). Effects of P-188 on respiratory function and diaphragm degeneration in DMD. NIH (NINDS), SBIR (Phase 2). September 1, 2013-August 31, 2015 $642,815 Total; $383,255 Direct. NCSU subaward $73,804. (submitted)


Hess PR. Comparison of peptides derived from feline enteric coronavirus (FECV) and feline infectious peritonitis virus (FIPV) bound by a putative classical MHC class I molecule, FLA-K. 2013 (Winn Foundation) $17,920 (submitted, pending).

Hess PR. Comparison of FLA class I-restricted peptides from FIP & FEC viral strains. 2013 (ACVIM Foundation/Pfizer) $19,756 (submitted, pending).
**Hess PR.** Comparison of the FLA class I-restricted peptides derived from FIP and feline enteric coronaviruses. 2013 (Morris Animal Foundation) $37,914 (submitted, pending).

**Lunn KF.** Investigating the Genetic Basis of Typical Hypoadrenocorticism in Standard Poodles. 2013 (NC State College of Veterinary Medicine Comparative Medicine and Translational Research Clinical Genomics Pilot Projects). (Passed initial review. Awaiting decision after oral presentation April 2013)

**Maggi RG, Cherry N.** Enrichment Media and IVD Kit for Enhanced *Bartonella* Detection. 2013 (NIH- SBIR Ph II Grant [11374717 2R44AI088823-02 A1]) $1,084,385.

**Maggi RG.** Bacteriophage anti-bacterial therapy for veterinary applications. 2013 (Nine Sigma) $254,325.

**Maggi RG, Breitschwerdt EB.** *Bartonella* species prevalence in healthy blood donors. 2012 (National Blood Foundation) $74,832.59.

**Maggi RG, Mascarelli PM.** Prevalence of hemotropic *Mycoplasma* species in little brown bats (*Myotis lucifugus*) affected with the White Nose Syndrome (WNS). 2012 (Morris Animal Foundation) $10,750.

**Maggi RG.** Blood quantification in feed fleas. (Merial) $18,780. (Testing Service Agreement)

**Mariani CL, Borst LB, Suter SE (PI).** Immunophenotyping and proliferation of canine CNS round cell tumors. 2012 (ACVIM Foundation) $12,976. (not funded).

**Mariani CL, Borst LB, Suter SE (PI).** Assessment of immunophenotype and proliferative potential of canine central nervous system round cell tumors. 2012 (NCSU Maggie and Winston Canine Oncology Research Fund) $12,015. (not funded)

**Cavanagh AA, Musulin SE.** Investigation of various techniques to produce canine platelet-rich plasma. February 2013 (Firestone Canine Research Endowment) $2,874. (not funded)

**Cavanagh AA, Musulin SE.** Investigation of various techniques to produce canine platelet-rich plasma. February 2013 (ACVECC Research Grant) $4,352. (not funded)

**Olby NJ (Co-PI) Laine R.** Spinal Cord Injury Mitigation by Biologic Therapeutic Submitted as an SBIRS to NIH for $181,493. (not funded)

**Olby NJ (Co-PI), Lim JH.** Optimization of a method for isolation, purification and expansion of adult Schwann cells from dorsal cutaneous cervical nerves in dogs. 2013 (American Kennel Club Canine Health Foundation, Inc.) $12,960. (pending)

**Laster S, Olivry T (Co-PI).** Workshop on Allergy and Inflammation: a New Focus for NCSU. 2012 (NCSU SEED) $2,450. (not funded by NCSU SEED. Status March 31, 2013: approved for funding by CCMTR)

**Olivry T, Bizikova P (co-PIs) Pilot evaluation of the efficacy and safety of a caninized anti-TNF-alpha monoclonal antibody to treat refractory atopic dermatitis in dogs. 2013 (Nexvet Biopharma Pty Ltd, Kew, Victoria, Australia), $40,270. (Status March 31, 2013: preapproved, awaiting final signature on contract)

Hammerberg B, **Olivry T** (co-PI). Allergic disease therapy using anti-IgE monoclonal antibodies from canine B cells. 2013-2014 (Chancellor Innovation Fund, NCSU, Raleigh, NC, USA), $67,474. (Status March 31, 2013: submitted, awaiting decision)

Fogle J, **Olivry T** (co-PI): Characterization of the prostaglandin D2 receptor 2 (PD2R2, CRTH2) in dogs. 2013 (LEO Pharma, Copenhagen, Denmark), $71,303. (Status March 31, 2013: preapproved, currently negotiating contract)

**Sherman BL** (PI). The use of Trazodone to reduce anxiety in cats during veterinary visits. 2013 (Winn Feline Foundation) $16,697. (not funded)

Casey R (PI), **Sherman BL** (Co-I). Novel tests of individual differences: a visit and pilot study to investigate potential application to selection of military working dogs. 2012-2013 (ONR-Global Visitor Support Program Proposal) $17,806. (not funded)

**Sherman BL**, Gruen ME, Case BC. Investigate and restore performance in canines with post-trauma or behavioral issues. 2013-2014 (Department of Defense (W81XWH-USSOCOM, Subcontract with K2 Solutions) NCSU Total $515,652. (Program cancelled, not funded)

**Stevens BJ**, **Sherman BL**. The use of Trazodone to reduce anxiety in cats during veterinary visits. Spring 2013. CVM Internal Grant.

Won IJ, **Stoskopf MK**. SBIR Marine Aquaculture Noninvasive Health Monitoring System 2012 (NOAA) $100,000. (submitted not funded)

Won IJ, **Stoskopf MK**. SBIR Marine Aquaculture Noninvasive Health Monitoring System. 2013 (NOAA) $100,000. (submitted)

**Stoskopf MK**, Harms C, Macdonald J, Nelson S. The physiologic asis for improving treatment of sea turtles suffering from cold stun syndrome 2013 (Morris Animal Foundation) $162,941. (submitted, not funded)

**Stoskopf MK**, et al. Ocean Acidification: Metabolic dynamics of physiological responses of bivalve mollusks to ocean acidification. (National Science Foundation) $904,218. (submitted)


15. **Grants Received as Principal and Co-Investigator.**

**Atkins CE** (PI), Keene B, DeFrancesco T, Meurs K, Tou S, Ames M. Evaluation of C635, In comparison to benazepril, in dogs with heart failure caused by left atrio-ventricular valvular insufficiency. 5/21/2012-5/20/2014 (CEVA Santa Animale) $48,840.

**Atkins CE**, **DeFrancesco T**. Clinical efficacy of BNP in canine cardiac disease. Year 3 (Antech Laboratories) $15,200. (gifts)
Atkins CE (Co-PI), Ames M. Prevalence of aldosterone breakthrough in client-owned dogs receiving ACE-Inhibitors for cardiac and glomerular disease. 2013 (CEVA Santa Animale) $13,872.


Archibald K, Bailey CS (PI), Lewbart G. Semen Collection, Evaluation, and cryopreservation in Tarantulas. 2012 (Triangle Research Foundation) $5,000. (student first-author)

Poole DH, Poore M, Bailey CS (Co-I), Huntington G. Effects of fescue toxicosis on blood supply to the reproductive tract of cattle. 2013 (NC Cattlemen’s Association) $6,528.


Blikslager AT. Role of lubiprostone in the treatment of murine DSS colitis. 2012-2013 (Sucampo Inc.) $199,950.


Blikslager AT. Does large colon resection and anastomosis affect survival in horses with large colon volvulus? 2012 (North Carolina Horse Council) $4,154.


Campbell NB, Reid P, Davis JL. The pharmacokinetics and sedative effects of detomidine hydrochloride following oral-transmucosal administration in swine. 2012 (American College of Laboratory Medicine) $14,070.

Gilger BC. Safety and efficacy studies on adjunctive use of topical glaucoma drops with the Bimatoprost SR implant. October 2012 – October 2013 (Allergan, Inc, Irvine, CA) $75,000. (Testing Service Agreement)
Gilger BC. A 5-day comparative topical ocular tolerability/safety study of two formulations of RX-10045 and cyclosporine in New Zealand White Rabbits. September 2012 – May 2013 (Celtic Therapeutics, Inc., NY, NY) $23,000. (Testing Service Agreement)

Gilger BC. Use of a subconjunctival sustained release cyclosporine compound for treatment of canine KCS. January 2012-December 2012 (Auritec, Inc.) $6,000.


Gookin JL, Jones S. Merial Veterinary Scholars Program. January 1, 2013-December 31, 2013 (Merial) $20,000. Total direct costs from 2004 to date = $192,625.00.

Gookin JL (PI), Foster DM, Sherry B. IFN-α/β as a therapeutic target for promoting intestinal epithelial stem cell proliferation and clearance of Cryptosporidium parvum infection. July 1, 2012-June 30, 2013 (USDA Formula Funds) $20,000.

Hansen BD, Nordone S. Validation of continuous measurement of central venous hemoglobin saturation as a cardiopulmonary monitoring tool in critically ill dogs. July 1, 2012-June 30, 2013 (CVM Internal Grant) $10,800.


Magestro, L (PI), Hauck ML (Advisor). Targeting metastatic pathways. Summer 2012 (Triangle Community Foundation) $5,000.

Hauck ML. Targeting the metastatic phenotype in canine soft tissue sarcoma cell lines. Summer 2012 (Morris Animal Foundation [VSS]) $4,000,

Hauck ML (PI), Chappell KH (co-PI). Multicenter non-controlled pilot field study to assess the maximum tolerated dose and efficacy of Bgt226 tablets when administered for up to 4 weeks in treatment cohorts of increasing doses to client-owned dogs with B-cell lymphoma. March 15, 2012-March 14, 2013 (Novartis Animal Health) $178,090.

Johannes CM, Musser M, Hauck ML (co-I), Suter SE. Effect of Toceranib on cell proliferation and downstream signaling in canine Leukemia cell lines harboring FLT3 mutations. September 1, 2012-August 31, 2012 (Pfizer, Inc.) $4,325.

Hawkins EC (PI), Bazzle L (CoI), Posner L (CoI), Hansen B (Col). Development of volumetric capnography as a clinical tool for the serial assessment of pulmonary function in conscious dogs. 2012 (CVM Research Grant - Clinical Initiative for Companion Animal Health) $5,967.
**Hess PR (PI), Hauck ML, Musser ML.** Investigation of major histocompatibility complex class I molecule downregulation in canine tumors. October 1, 2012-September 30, 2013 (ACVIM Foundation) $6,318.

Musser M, **Hess PR.** Investigation of MHC class I molecule downregulation in canine tumors 2012 (ACVIM Foundation) $6,318. (Corresponding author/trainee first author)


**Hess PR.** Preliminary evaluation of the cytotoxic potential of the mAb, B5, and a B5-saporin conjugate. July 1, 2012-June 30, 2013 (CCMTR Oncology Core) $4,500.

**Gookin J (PI), Jones SL (Co-PI).** CVM Summer Research Internship. 2012 (Merial Limited) $20,000.

Sheats MK (PI), Jones SL (Supervisor/Mentor). Targeting the Marcks-Family Proteins to Inhibit Neutrophil Migration. August 1, 2012-July 31, 2013 (NIH/ORIP) $634,500 total, $126,900 this grant year.

**Keene BW, McLaughlin AC.** Human factors in training interventional veterinary cardiologists. 2012 - present (ACVIM) $5,000.

Shea D (PI), **Kennedy-Stoskopf S (Co-PI representing CVM).** Southeast Regional Climate Center. 2010-2014 (US Department of Interior and US Geological Survey) $1,527,123. (Has funded graduate student stipend for 2 years for Lauren Charles Smith.


**Lascelles D (PI), Tuohy JL, Hauck ML (co-I), Fogle J.** Phenotypic and functional characterization of differences between monocytes in dogs with and without osteosarcoma March 1, 2013-March 1, 2014 (AKC Canine Health Foundation) $12,960.

**Lascelles BDX (PI).** A pilot field study to evaluate efficacy endpoints and the effect of low dose oral meloxicam in cats with degenerative joint disease (supplement). October 17, 2011-October 31, 2013 (Boehringer Ingelheim Vetmedica) $58,150.


**Lascelles BDX (PI).** MAF Fellowship Training: Evaluation of central sensitization associated with painful osteoarthritis in dogs (Application for Dr. Mila Freire). August 9, 2012-August 8, 2014 (Morris Animal Foundation) $100,000.

**Lascelles BDX (PI).** Pilot efficacy of an extended release analgesic in a canine stifle arthroscopy model. July 1, 2012-June 30, 2013 (Farnam Companies Inc.) $85,495.
Lascelles BDX (PI). Studies into the presence of and measurement of central sensitization associated with chronic painful disease in dogs: Phase I. June 1, 2012-May 31, 2014 (Boehringer Ingelheim) $124,940.

Lewbart GA, Harms CA. Veterinary Medical Services Rendered to the Museum of Natural Sciences 2012-2013 (NC DENR) $25,000.


Lewbart GA, Harms CA. Sea Turtle Research Fieldwork. 2000-present (SC DNR) $3,600 per year to support veterinary student participation in ongoing fieldwork.


Marcellin-Little DJ (PI), Harrysson OLA (co-PI), Tuohy J, Horn T. Evaluation of the skin-implant interface in trandermal osseointegrated prostheses. January 2012 (NCSU RSIF grant) $26,005.

Muñana KR (Site Investigator). A pivotal, randomized, blinded, placebo-controlled, clinical field study evaluating the effectiveness and safety of imepitoin in dogs with idiopathic epilepsy. September 2012 – September 2013 (Boehinger Ingelheim Vetmedica, Inc) $35,000.


Rodrigues Hoffman A, Suchodolsky J, Olivry T (collaborator). Do allergen challenges alter the skin and gut microbiome in mite hypersensitive atopic dogs? 2013. (ACVD/AAVD Research Grant), $20,000. (Status: Funded, but no funds requested for NCSU (covered by T.O.’s funds to help junior PI at Texas A&M).

Olivry T. (PI). Investigations on the pruritogenic and inflammatory response to allergens in a canine model of atopic dermatitis. 2013 (Stiefel, a GSK company, Research Triangle Park, NC, USA) $52,417

Roe S (PI), Lascelles BDX (Co-I). Influence of an intramedullary pin on the stability of a feline ilial fracture stabilized with a bone plate. April 1, 2012-March 31, 2013 (ACVS Foundation) $6,571.
Dorman D (PI), Sherman BL (Co-I), Gruen ME (Co-I), Fish R (Co-I). Developing the second generation of improvised explosive device detector dog, 2011-2012 (Office of Naval Research [NCSU subcontract #K2-NCSU-0493]) ~$925,000. (Note: Dorman and Sherman continuation of 0.20 FTE funding through May 31, 2013)

Sherman BL. The use of Trazodone in laboratory cats. 2013 (Behavioral Medicine Fund) $2,500.


Eggleston D, Stoskopf MK. Marine Facilities Development Grant for MRI Addition to CMAST 2012 (National Science Foundation) $350,000.

Suter SE. Molecular characterization of five canine lymphoid tumor cell lines. July 1, 2012-June 30, 2013 (CVM Grant) $17,700.


Pritchard J, Wood MW. Plasma B cell activating factor concentrations are a marker of active immune-mediated thrombocytopenia in dogs. 2013 (Firestone Canine Research Endowment Grant) $2,500.

Wood MW. IL-15 promotes urothelial barrier repair during acute canine E. coli UTI. 2012-2013 (CVM New Investigator/Feasibility Grant) $14,882.
ADJUNCT AND ASSOCIATE FACULTY ACHIEVEMENTS

Dr. D. G. Baden, Adjunct Professor, Aquatics, Wildlife & Zoo Medicine

- Member, Board of Director of the Marine Biotechnology Center of Innovation funded by the NC Biotechnology Center. This is a state-wide marine biotechnology effort amongst the NC universities of higher learning.
- Participated as a Center Director for a UNC system-wide review of marine science at the various institutions, carried out by AAAS as requested by President Ross. The review included included supplied documents from the institutions followed by site visits to each coastal element.
- Completion of the MARBIONC building, a $30M public private partnership building at UNCW Center for Marine Science. Building was funded by Federal DOC and UNCW in a 50:50 partnership.
- Completion of a major MOU with Sea Aquarium in Curacao for the development of a marine laboratory/ship base/submarine port for research in the ocean realm. Base has student and faculty housing, on-site administration, a 1000 ft submarine and a refurbished NOAA vessel as a ship of opportunity.
- Translation of the UNCW Center for Marine Science into the CREST Research Park, a Millennium campus for the UNC system.

Dr. G. Chanoit, Adjunct Assistant Professor, Surgery

Research Seminars
Ascione R, Bailey M, Chanoit G. Proposal for a Regional Pre-clinical Biomedical Research Centre at Langford: the roadmap to the future? School of Veterinary Sciences, University of Bristol Combined C&CR and I&I seminar, July 2012.

Chanoit G. Comparative Cardiothoracic Research In Bristol: Past, present, future Research lunch- School of Veterinary Sciences, University of Bristol March 2012.

Publications

Grants

Dr. D. Dombroski, Adjunct Lecturer, Aquatics, Wildlife & Zoo Medicine

- Dr. Dan Dombrowski, Chief Veterinarian for the NC Museum of Natural Sciences, accepted a $1,000 check from Dr. Scotty Gibbs, President of the North Carolina Veterinarian Medical Association. The funds will be used to support the operations of the Museum’s Window on Animal Health, located in the Museum’s Nature Research Center.

Dr. J. A. Dye, Adjunct Associate Professor, Internal Medicine

**Manuscripts and Book Chapters**


**Abstracts**

MI Gilmour, E Mutlu, E Boykin, M Daniels, C King, QT Krantz, I George, MD Hays, J Lehmann, **J Dye**, M Higuchi, CW Lee. Effect of fuel composition on chemistry and pulmonary toxicity in mice exposed to biomass pyrolysis vapor (SOT, March 2013).

**Invited Lectures and Presentations**


**Dye JA**. "Flame retardants in the environment: Cats as Sentinels for Humans?" NC One Health Collaborative, Spring semester lecture series, January 2013.


Dr. R. B. Ford, Professor Emeritus, Small Animal Internal Medicine

**Publications**


Dr. D. H. Johnson, Adjunct Assistant Professor, Aquatics, Wildlife & Zoo Medicine

- Vice President, Association of Exotic Mammal Veterinarians, 2012-present

Publications

Presentations

Johnson DH. Western Veterinary Conference, Las Vegas, NV, February 17-21, 2013.


Johnson DH. Symposium of the American Board of Veterinary Practitioners, San Antonio, TX, April 13-14, 2012.

Dr. D. Levine, Adjunct Professor, Small Animal Surgery

Books/Book Chapters


Abstracts from Proceedings


Dr. C. Mathews, Adjunct Professor, Equine Surgery

- Initial patent filing for “Prevention of Wound Colonization by MRSA using Saccharomyces for Competitive Exclusion.” Research in this area is now ongoing at the vet school.

Dr. N. A. Monteiro-Riviere, Professor Emerita, Investigative Dermatology and Toxicology

Original Works in Peer-Reviewed Journals


Book Chapters


Abstract from Scientific and Professional Veterinary Conferences


He T, Sippel K, Inman AO, El-Shafei A, Monteiro-Riviere NA, King MW. Novel 3D scaffold designs for tissue engineering applications using textile technologies. The 9th World Biomaterials Congress, Chengdu, China, June 2012.


National and International Panels


Monteiro-Riviere NA. “Penetration and Toxicity of Nanoparticles in Skin”, United States Food and Drug Association (FDA), Applied Sciences Course on Nanotechnology. USFDA, White Oak Campus, Silver Spring, Maryland. May 7, 2012.


Grants Awarded


Editorial Boards
Associate Editor-Interdisciplinary Reviews- WIREs in Nanomedicine and Nanobiotechnology (2005-2008 planning stages), 2008- present

82
Dr. D. M. Mulcahy, Adjunct Associate Professor, Aquatics, Wildlife & Zoo Medicine

Publications


Dr. J. Norton, Adjunct Associate Professor, Laboratory Animal Medicine

- American Association for Laboratory Animal Science, Government Relations Committee, 2012
- NIEHS Grant Reviewer & Chair, 2012, 2013

Scientific Presentations


Grants
North JN (PI). American Association for Laboratory Animal Science, Grants for Laboratory Animal Science (GLAS) – “The Effects of Vibration on Mouse Physiology,” 2012-2013, $36,000. This grant provides funding to determine amplitude and frequency of vibration resulting in perturbations of mouse physiology and thresholds for research interference.
North JN (PI). American College of Laboratory Animal Medicine (ACLAM) Foundation – “Physiological effects of vibration in mice and rats,” 2012-2013, $16,120. This grant provides additional funding to augment studies for determination of detrimental levels of vibration in mice and rats.

Publications

Dr. B. Schopler, Adjunct Assistant Professor, Avian Medicine

- BBC film released “Madagascar, Lemurs and Spies”
- Continued work on hibernation in dwarf lemurs, paper pending revisions
- Mentored 4 veterinary students from NCSU-CVM