P R O C E E D I N G S

AMERICAN ASSOCIATION OF VETERINARY PARASITOLOGISTS

52nd Annual Meeting
July 14-17, 2007
WASHINGTON, DC

and

MEMBERSHIP DIRECTORY
AMERICAN ASSOCIATION OF VETERINARY PARASITOLOGISTS
AWARDS HISTORY

Distinguished Veterinary Parasitologists
1985  Jitender P. Dubey
1986  Norman D. Levine
1987  E. J. Lawson Soulsby
1988  Jeffrey F. Williams
1989  K. Darwin Murrell
1990  William C. Campbell
1991  Jay Hal Drudge and Eugene T. Lyons
1992  Gilbert F. Otto
1993  Thomas R. Klei
1994  Peter M. Schantz
1995  James C. Williams
1996  T. Bonner Stewart
1997  J. Owen D. Slocombe
1998  J. Ralph Lichtenfels
1999  Roger K. Prichard
2000  Edward L. Roberson
2001  Byron L. Blagburn
2002  Sidney A. Ewing
2003  Louis C. Gasbarre
2004  David S. Lindsay
2005  Jorge Guerrero
2006  John W. McCall

2007 Distinguished Veterinary Parasitologist Award Winner

Ronald Fayer
Biographical Sketch

RONALD FAYER, Ph.D.

Ronald Fayer, Ph.D. was born in 1939 in Philadelphia and grew up in nearby New Jersey. In his formative years he enjoyed hiking and camping as a Boy Scout eventually earning the rank of Eagle Scout. He was on the varsity wrestling team in high school and was offered an athletic scholarship to attend college. Instead, he elected to support his family in their grocery store. He eventually enrolled at the University of Alaska Fairbanks, graduated with a BS degree in Biology (1962) and pursued graduate studies with Dr. Datus Hammond at Utah State University in Logan, Utah. Fellow graduate students included Bill Chobotar, Ken Todd, John Ernst, and C.A. Speer among others. His Master’s thesis (1964) was on the efficacy of amprolium against coccidiosis in calves and his PhD dissertation (1968) was on in vitro cultivation of *Eimeria bovis*. As it happened, this was exactly the expertise that the USDA’s Beltsville Parasite Laboratory (BPL) was looking for. Dr. David Doran at BPL had developed excystation and freeze-preservation methods for coccidia, in preparation for growing coccidia in cell culture. Dr. Fayer was hired to develop those cell culture methods and conduct studies using those methods.

The economically important *Eimeria* species were his initial research focus. His studies, utilizing several avian *Eimeria* species led to the first published report that demonstrated the utility of cell culture for screening anticoccidial drugs to inhibit development of *Eimeria*. Dr. Fayer also developed in vitro cultivation methods for other protozoan parasites including *Toxoplasma*, *Besnoitia*, *Isospora*, *Hepatozoon*, and *Sarcocystis*. Several of these studies involved testing of compounds to block entry into cells or to inhibit development of intracellular parasites.

When Dr. Fayer turned his attention to *Sarcocystis* the life cycle was unknown and some “experts” considered it a fungus. Dr. Fayer captured common grackles, obtained zoites from cysts in their leg muscles, and inoculated the zoites into cultured cells where they became intracellular and developed into sexual stages. This discovery of typical coccidian sexual stages in the life cycle of *Sarcocystis* led to widespread in vivo studies to complete the life cycle. With support from numerous collaborating scientists, studies were devoted to completing the life cycle in carnivores that were fed intramuscular cysts from herbivores. Fecal stages from carnivores were then fed to herbivores where previously unrecognized asexual stages were detected in intravascular sites throughout the body, often associated with severe morbidity or mortality. The life cycles of *Sarcocystis* species in wildlife were also elucidated but most studies documented pathological effects, primarily in cattle, but also in sheep, pigs and horses. Immunopathological and metabolic perturbations associated with development of asexual stages resulted in heart lesions, abortions, retarded growth, and mortality. He identified tumor necrosis factor, little known at the time, as an underlying contributor to the disease. These studies were conducted with assistance from numerous collaborators from many institutions but most prominently were Dr. A.J. Johnson of Walter Reed Army Institute of Research and R.G. Leek, J.P. Dubey and T.H. Elsasser of the USDA’s Agricultural Research Service (ARS).

Preceding the advent of AIDS, Dr. Fayer’s research emphasis shifted to *Cryptosporidium* and has encompassed molecularly based surveys of prevalence in livestock;
effects of disinfectants, heat, and cold on oocyst survival; immunological and cytokine responses in mouse models and calves; passive immunotherapy with colostral antibody; anti-crypto drug efficacy; mechanical transport hosts; identification of major new species based on molecular and biological characteristics; and use of molluscan shellfish as bio-indicators of fecal pollution in surface waters. His book “Cryptosporidium and Cryptosporidiosis” is widely recognized as the primary reference on crypto for researchers, water treatment specialists, veterinarians, and health care workers. He and colleagues conducted similar studies on Giardia and Microsporidia of livestock, wildlife, and companion animals. These studies led to the first reports of the microsporidian Enterocytozoon bieneusi in cattle and in wildlife species in North America. Recent studies with collaborators in NOAA and the Harbor Branch Oceanographic Institution have led to the first report of Microsporidia in marine mammals- bottlenose dolphins. Again, numerous collaborators supported the aforementioned studies on Cryptosporidium, Giardia, and Microsporidia, especially, J.M. Trout and M. Santin of the ARS, Lihua Xiao at the CDC, Una Ryan at Murdoch University, E.J. Lewis of NOAA’s National Marine Fisheries Service, and T. Graczyk at Johns Hopkins University.

Dr. Fayer has served in a variety of administrative capacities in the Agricultural Research Service including Research Leader, Laboratory Chief, National Program Leader for Parasitology and Toxicology, Director of the Animal Parasitology Institute, and Acting Assistant Area Director for the Northeastern States. He has served on the editorial boards of five scientific journals and as President of the Helminthological Society of Washington, the American Association of Veterinary Parasitologists, and the American Society of Parasitologists. He has served on numerous scientific committees for each of these societies and for the International Society of Protistologists.

For his contributions to research Dr. Fayer received the H.B. Ward Medal from the American Society of Parasitologists, the National Distinguished Scientist of the Year Award from the Agricultural Research Service, two Superior Service Awards and the Plow Award presented by Secretaries of the U.S. Department of Agriculture, and the Presidential Rank Award for Distinguished Senior Professional in the Career Civil Service presented by the President of the United States. As a recipient of a Senior Fullbright Fellowship he conducted research at the Universidad Complutense’s College of Veterinary Medicine in Madrid, Spain with Professor Jose Maria Alunda.

He has served as Adjunct Professor of Parasitology at the University of Pennsylvania, Cornell University, and the University of Queensland (Australia). In addition to organizing and/or chairing many symposia and sessions at national and international meetings, he has been an invited speaker at over 220 meetings and university lectures throughout the United States as well as in Canada, Mexico, Costa Rica, Brazil, Colombia, Spain, England, France, Germany, the Netherlands, Senegal, China, Japan, India, Thailand, Australia, and New Zealand.

Dr. Fayer has authored or co-authored 334 refereed original research articles and book chapters. He holds three patents, is editor or co-author of five books, and has recently finished co-editing a completely revised 2nd edition of Cryptosporidium and Cryptosporidiosis.

He and his wife Nancy live in Ellicott City, Maryland. He has two children, Ann Michelle and Robert, and two step-children Ashley and Brad. He and Nancy enjoy travel, kayaking, cooking for friends and family, and music. She plays the piano, he plays clarinet.
AMERICAN ASSOCIATION OF VETERINARY PARASITOLOGISTS
AWARDS HISTORY

Hoechst-Roussel Agri-Vet Company
Graduate Student Research Award
1987  Lora G. Rickard
1988  Debra A. Cross
1989  Stephen C. Barr
1990  Jim C. Parsons
1991  Carlos E. Lanusse
1992  David G. Baker
1993  Rebecca A. Cole
1994  Ray M. Kaplan
1995  Steve T. Storandt
1996  A. Lee Willingham III
1997  Carla C. Siefker
1998  Ryan M. O’Handley
1999  John S. Mathew
2000*  Sheila Abner
2001  Andrew Cheadle
2002  No recipient
2003  Mary G. Rossano
2004  Andrea S. Varela
2005  Alexa C. Rosypal
2006  Sheila M. Mitchell
2007  Martin K. Nielsen

*As of 2000, this award was renamed the “Intervet Graduate Student Research Award”.

Distinguished Service
1976  Rurel R. Bell
1983  Terrance J. Hayes
1987  Norman F. Baker
1988  Donald E. Cooperrider
1994  S. D. “Bud” Folz
1997  Honorico Rick Ciordia
2006  Raffaele “Raf” Roncalli
American Association of Veterinary Parasitologists
52nd Annual Meeting
Grand Hyatt Washington Hotel, Washington, DC

AMERICAN ASSOCIATION OF VETERINARY PARASITOLOGISTS
Founded 1956

Officers 2006-2007

President Daniel E. Snyder
Elanco Animal Health
Greenfield, IN

President-Elect David S. Lindsay
Virginia Tech
Blacksburg, VA

Vice-President Susan E. Little
Oklahoma State University
Stillwater, OK

Secretary/Treasurer Alan A. Marchiondo
IVX Animal Health, Inc.
St. Joseph, MO

Immediate Past-President Ann R. Donoghue
PR Pharmaceuticals, Inc.
Fort Collins, CO

2006-2007 AAVP Committee Chairs

Program – Susan E. Little, Stillwater, OK
Archives – Tom Nolan, Philadelphia, PA
Historian - Raf Roncalli, Milltown, NJ
Awards - Alexa C. Rosypal, Chapel Hill, NC
Constitution/Bylaws - Gil Myers, Magnolia, KY
Education - Dwight Bowman, Ithaca, NY
Finance - Larry Cruthers, Corapeake, NC
Newsletter - Patrick Meeus, Kalamazoo, MI
Nominations - Pat Payne, Manhattan, KS
Outreach/Research - David Granstrom, Beltsville, MD
Publications/Internet - Heather Stockdale, Auburn, AL
Student Representative - Isabelle Verzberger, Charlottetown, PEI, Canada
List Serve Manager - Bert Stromberg, St. Paul, MN
PAST PRESIDENTS
OF THE
AMERICAN ASSOCIATION OF
VETERINARY PARASITOLOGISTS

1956-1958  L. E. Swanson  
1958-1960  Fleetwood R. Koutz  
1960-1962  Wendell H. Krull  
1962-1964  Saeed M. Gaafar  
1964-1966  E. D. Besch  
1966-1968  George C. Shelton  
1968-1970  John H. Greve  
1970-1972  Harold J. Griffiths  
1972-1973  Donald E. Cooperrider  
1973-1975  Demetrice L. Lyles  
1975-1977  Harold J. Smith  
1977-1979  Norman F. Baker  
1979-1981  Edward L. Roberson  
1981-1983  Jeffrey F. Williams  
1983-1985  John B. Malone  
1985-1986  Robert M. Corwin  
1986-1987  K. Darwin Murrell  
1988-1989  Harold C. Gibbs  
1989-1990  Bert E. Stromberg  
1990-1991  Roger K. Prichard  
1992-1993  Ronald Fayer  
1993-1994  George A. Conder  
1994-1995  Charles H. Courtney  
1995-1996  Byron L. Blagburn  
1996-1997  Peter M. Schantz  
1997-1998  James C. Williams  
1998-1999  Louis C. Gasbarre  
2000-2001  Thomas J. Kennedy  
2001-2002  Anne M. Zajac  
2003-2004  Craig R. Reinemeyer  
2004-2005  Linda S. Mansfield  
2005-2006  Ann R. Donoghue  
2006-2007  Daniel E. Snyder
PAST SECRETARY-TREASURERS
OF THE
AMERICAN ASSOCIATION OF
VETERINARY PARASITOLOGISTS

Wendell H. Krull  1956-1959
Edward G. Batte  1960
Donald E. Cooperrider  1961-1969
Rurel Roger Bell  1969-1977
Terrance J. Hayes  1978-1983
Vassilios J. Theodorides  1983-1986
Thomas J. Kennedy  1993-1998
Daniel E. Snyder  1998-2004
Alan A. Marchiondo  2004-

PAST AAVP ANNUAL MEETINGS

1956  1st Annual Meeting – SAN ANTONIO, TX  16 OCT
1957  2nd Annual Meeting – COLUMBUS, OH  17 AUG
1958  3rd Annual Meeting – PHILADELPHIA, PA  18 AUG
1959  4th Annual Meeting – KANSAS CITY, MO  23 AUG
1960  5th Annual Meeting – DENVER, CO  14 AUG
1961  6th Annual Meeting – WEST LAFAYETTE, IN  20 AUG
1962  7th Annual Meeting – MIAMI BEACH, FL  12 AUG
1963  8th Annual Meeting – NEW YORK CITY, NY  28 JUL
1964  9th Annual Meeting – CHICAGO, IL  19 JUL
1965  10th Annual Meeting – PORTLAND, OR  11 JUL
1966  11th Annual Meeting – LOUISVILLE, KY  13-14 JUL
1967  12th Annual Meeting – DALLAS, TX  9 JUL
1968  13th Annual Meeting – BOSTON, MA  21 JUL
1969  14th Annual Meeting – MINNEAPOLIS, MN  13 JUL
1970  15th Annual Meeting – LAS VEGAS, NV  22 JUN
1971  16th Annual Meeting – DETROIT, MI  18 JUL
1972  17th Annual Meeting – NEW ORLEANS, LA  17 JUL
1973  18th Annual Meeting – PHILADELPHIA, PA  15 JUL
1974  19th Annual Meeting – DENVER, CO  21 JUL
1975  20th Annual Meeting – ANAHEIM, CA  13 JUL
1976  21st Annual Meeting – CINCINNATI, OH  19 JUL
1977  22nd Annual Meeting – ATLANTA, GA  11 JUL
1978  23rd Annual Meeting – DALLAS, TX  17 JUL
1979  24th Annual Meeting – SEATTLE, WA  22-24 JUL
1981  26th Annual Meeting – ST. LOUIS, MO  19-20 JUL
1982  27th Annual Meeting – SALT LAKE CITY, UT  18-19 JUL
1983  28th Annual Meeting – NEW YORK, NY  17-18, JUL
1984  29th Annual Meeting – NEW ORLEANS, LA  15-17 JUL
1985 30th Annual Meeting – LAS VEGAS, NV  22-24 JUL
1986 31st Annual Meeting – ATLANTA, GA  20-22 JUL
1987 32nd Annual Meeting – CHICAGO, IL  19-21 JUL
1988 33rd Annual Meeting – PORTLAND, OR  17-18 JUL
1989 34th Annual Meeting – ORLANDO, FL  16-18 JUL
1990 35th Annual Meeting – SAN ANTONIO, TX  21-24 JUL
1991 36th Annual Meeting – SEATTLE, WA  28-30 JUL
1992 37th Annual Meeting – BOSTON, MA  2-4 AUG
1993 38th Annual Meeting – MINNEAPOLIS, MN  17-20 JUL
1994 39th Annual Meeting – SAN FRANCISCO, CA  9-12 JUL
1995 40th Annual Meeting – PITTSBURGH, PA  6-10 JUL
(Joint meeting with the American Society of Parasitologists)
1996 41st Annual Meeting – LOUISVILLE, KY  20-23 JUL
1997 42nd Annual Meeting – RENO, NV  19-22 JUL
1998 43rd Annual Meeting – BALTIMORE, MD  25-28 JUL
1999 44th Annual Meeting – NEW ORLEANS, LA  10-13 JUL
2000 45th Annual Meeting – SALT LAKE CITY, UT  22-25 JUL
2001 46th Annual Meeting – BOSTON, MA  14-17 JUL
2002 47th Annual Meeting – NASHVILLE, TN  13-16 JUL
2003 48th Annual Meeting – DENVER, CO  19-23 JUL
2004 49th Annual Meeting – PHILADELPHIA, PA  24-28 JUL
(Joint meeting with the American Society of Parasitologists)
2005 50th Annual Meeting – MINNEAPOLIS, MN  16-19 JUL
2006 51st Annual Meeting – HONOLULU, HI  15-18 JUL
2007 52nd Annual Meeting – WASHINGTON, DC  14-17 JUL
AAVP 52nd ANNUAL MEETING
Grand Hyatt Washington Hotel

REGISTRATION
Independence
Saturday, 15 July 2006, 1:00 PM – 6:00 PM
Sunday, 16 July 2006, 8:00 AM – 5:00 PM
Monday, 17 July 2006, 8:00 AM – 12:00 Noon

SPEAKER READY ROOM
Cherry Blossom
Saturday, 15 July 2006, 1:00 PM – 6:00 PM
Sunday, 16 July 2006, 8:00 AM – 6:00 PM
Monday, 17 July 2005, 8:00 AM – 6:00 PM

SOCIAL PROGRAM
Welcoming Reception – Bayer Health Care, Animal Health
Independence FGHI
Saturday, 14 July 2007, 7:00 PM – 9:00 PM

AAVP Graduate Student/Post Doc Luncheon/Mixer
Independence E
Sunday, 15 July 2007, Noon – 1:30 PM

Merial Ltd Social
Independence A
Sunday, 15 July 2007, 7:00 PM – 9:00 PM

Novartis Animal Health Social
Independence A
Monday, 16 July 2007, 7:00 PM – 9:00 PM

AAVP 52nd ANNUAL MEETING
Washington Convention Center (9th & L)
President’s AVMA/AAVP Joint Symposium
Tuesday, 17 July 2007, 8:00 AM – 12:00 Noon

EDUCATORS SESSION
Companion Animal Parasite Council (CAPC) Sponsored Lunch
Independence FGH
Tuesday, 17 July 2007, 12:30 PM – 1:30 PM
Veterinary Parasitology Education
Independence FGH
Tuesday, 17 July 2007, 1:30 PM – 4:00 PM
52nd ANNUAL AAVP MEETING SPONSORS

EVENT SPONSORS
BAYER HEALTH CARE, ANIMAL HEALTH – Evening Social
COMPANION ANIMAL PARASITE COUNCIL – Educators Luncheon
FORT DODGE ANIMAL HEALTH – Coffee break
Merial, LTD – Evening Social
NOVARTIS ANIMAL HEALTH - Evening Social
SCHERING-PLOUGH ANIMAL HEALTH – Coffee break

CORPORATE SPONSORS
BAYER HEALTH CARE, ANIMAL HEALTH1, 2
FORT DODGE ANIMAL HEALTH2
IDEXX2
INTERVET, INC.3
IVX ANIMAL HEALTH, INC.4
MERIAL, LTD2, 5
NOVARTIS ANIMAL HEALTH2

1AAVP Best Student Paper Presentation Awards; 2Tick and Tick-borne Diseases Symposium; 3Honorarium for AAVP Graduate Student Award; 4In-Kind Meeting and Annual Association Support; 5Honorarium for Distinguished Veterinary Parasitologist Award

GENERAL MEETING SPONSORS
AVOGADRO, INC.
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DIVERGENCE, INC.
EAST TENNESSEE CLINICAL RESEARCH, INC.
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STILLMEADOW, INC.
TRS LABS, INC.
YOUNG VETERINARY RESEARCH SERVICES

The American Association of Veterinary Parasitologists (AAVP) gratefully acknowledges the above companies for their support and sponsorship of the 2007 annual meeting.
NOTES
FOOD, FRIENDS AND FUN.

Don't miss the reception for the 2007 meeting of the AAVP, sponsored by Bayer.

Saturday, July 14, 2007 | 7–9 P.M.
Independence Room FGHI | Grand Hyatt Washington Hotel
Join your colleagues for an evening of hors d’oeuvres, drinks and conversation at the Bayer reception.

We hope to see you there.
Please join us for a Capitol Celebration at the 52nd Annual Meeting of the AAVP in Washington, D.C.

Cocktails & Hors d’oeuvres will be served.

Hyatt Washington Hotel | Independence Ballroom A | Sunday, July 15 | 7:00-9:00 p.m.

Sponsored by Merial.
Join us for Dinner & Jazz

Sponsored by:
Novartis Animal Health US, Inc.

Monday, July 16, 7:00 – 9:00pm

Independence A Room
Grand Hyatt – Washington, DC
## American Association of Veterinary Parasitologists
### 52nd Annual Meeting
#### Grand Hyatt Washington Hotel, Washington, DC

**SATURDAY JULY 14**
- **CHERRY BLOSSOM**
  - SPEAKER READY ROOM
  - 1:00 PM - 6:00 PM
- **INDEPENDENCE BCD**
  - 8:00 AM - 12:00 PM
- **INDEPENDENCE FG**
  - 8:00 AM - 12:00 PM
- **FRANKLIN SQUARE**
  - AAVP Executive Committee / Board Meeting / Lunch
  - 8:00 AM – 1:00 PM

**SUNDAY JULY 15**
- **INDEPENDENCE BCD**
  - 8:00 AM - 12:00 PM
- **INDEPENDENCE FG**
  - 8:00 AM - 12:00 PM
- **FRANKLIN SQUARE**
  - AAVP Executive Committee / Board Meeting / Lunch
  - Noon – 1:30 PM

**MONDAY JULY 16**
- **INDEPENDENCE BCD**
  - 8:00 AM - 12:00 PM
- **INDEPENDENCE FG**
  - 8:00 AM - 12:00 PM
- **INDEPENDENCE DE**
  - 1:30 PM – 3:30 PM
- **INDEPENDENCE BC**
  - 1:30 PM – 3:30 PM
- **INDEPENDENCE E**
  - AAVP Graduate Student Luncheon/Mixer
  - Noon – 1:30 PM
- **INDEPENDENCE A**
  - MERAL SOCIAL
  - 7:00 – 9:00 PM

**TUESDAY JULY 17**
- **INDEPENDENCE BCD**
  - 8:00 AM - 12:00 PM
- **INDEPENDENCE FG**
  - 8:00 AM - 12:00 PM
- **INDEPENDENCE DE**
  - 1:30 PM – 3:30 PM
- **INDEPENDENCE BC**
  - 1:30 PM – 3:30 PM
- **INDEPENDENCE FGH**
  - 12:30 – 4:00 PM
- **INDEPENDENCE F**
  - 12:30 – 4:00 PM
- **INDEPENDENCE HI**
  - 12:30 – 4:00 PM
- **BAYER WELCOME SOCIAL**
  - 7:00 - 9:00 PM
- **NOVARTIS SOCIAL**
  - 7:00 – 9:00 PM
- **AAVP MEETING CONVENE**
  - OPENING SESSION
  - 2:00 PM – 2:30 PM
  - OPENING REMARKS: President Daniel Snyder
  - VP/Program Chair: Susan Little
  - 2:20 PM – 2:40 PM
  - Opening Session: Novel Concepts in Tick Control and Understanding Tick-borne Diseases
- **BREAK 4:00 – 4:30 PM**
- **FARRAGUT/LAFAYETTE**
  - 4:30 – 5:45 PM
- **INDEPENDENCE BCD**
  - 4:30 – 6:00 PM
- **INDEPENDENCE FG**
  - 4:30 – 6:00 PM
- **INDEPENDENCE DE**
  - 4:30 – 6:00 PM
- **INDEPENDENCE BC**
  - 4:30 – 6:00 PM
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- **NOVARTIS SOCIAL**
  - 7:00 – 9:00 PM
8:00 AM-1:00 PM  AAVP Executive Committee Meeting & Luncheon. Franklin Square
   All AAVP officers and committee chairs please plan to attend!

1:00 PM-6:00 PM  Registration Independence Registration Desk.
   ...and throughout the meeting, 8 AM-5 PM on July 15, 2007
   8 AM-12 PM on July 16, 2007

1:00 PM-6:00 PM  Speaker Ready Room. Cherry Blossom.
   ...and throughout the meeting, 8 AM-6 PM on July 15, 2007
   8 AM-4 PM on July 16, 2007

2:00 PM-4:00 PM  Opening Session Independence BCD

2:00 PM  Opening Remarks.
   President: Dan Snyder
   Vice President and Program Chair: Susan Little

Opening Session/Session I.
   Independence BCD
   Topic: Novel Concepts in Tick Control and Understanding Tick-borne Diseases
   Moderator: Susan Little

2:30  1  Targeting the tick/pathogen interface for development of vaccines for control of ticks and tick-borne diseases.
   Katherine M. Kocan, José de la Fuente and Edmour F. Blouin.

3:00  2  The natural history of *Amblyomma americanum*-associated ehrlichiae. Michael J. Yabsley.


4:00-4:30 PM BREAK

**A special thanks to our many sponsors.**

The American Association of Veterinary Parasitologists gratefully acknowledges the support of our many sponsors, friends, and colleagues.

Thank you for making this meeting possible.

**GENERAL MEETING SUPPORT**

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**OPENING SESSION ON TICKS AND TICK-BORNE DISEASES**

Bayer Animal Health
Fort Dodge Animal Health
IDEXX
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Novartis Animal Health US, Inc.

**EDUCATORS SESSION**

An educational grant from the Companion Animal Parasite Council

**EVENING SOCIALS/BREAKS**

Bayer Animal Health
Fort Dodge Animal Health
Merial Ltd.
Novartis Animal Health
Schering-Plough Animal Health
<table>
<thead>
<tr>
<th>Time</th>
<th>Session II</th>
<th>Independence BCD</th>
<th>Topic: Ticks and Tick-borne Diseases</th>
<th>Moderators: Ann Donoghue and Michael Yabsley</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:30</td>
<td>4</td>
<td>Movement of <em>Rhipicephalus sanguineus</em> adults between co-housed dogs during active feeding. Susan E. Little*, Joe Hostetler, and Katherine M. Kocan</td>
<td></td>
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<tr>
<td>4:45</td>
<td>5</td>
<td>Species diversity and seasonal dynamics of ticks (Acarí: Ixodidae) populations from some regions of Romania. Mariana Ioniță*, Ioan Liviu Mitrea, Florin Minculescu, Marius Cătălin Buzatu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5:00</td>
<td>6</td>
<td>Experimental transmission of <em>Hepatozoon americanum</em> to rodents and an alternate mode of transmission to a dog. Eileen Johnson*, Kelly Allen, Roger J Panciera, Susan E. Little, Sidney A. Ewing and Mason Reichard</td>
<td></td>
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</tr>
<tr>
<td>5:15</td>
<td>7</td>
<td>Occurrence and risk factors associated with infection with <em>Cyttauxzoon felis</em> in domestic cats from Oklahoma. Mason V. Reichard and Kristen A. Baum*</td>
<td></td>
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</tr>
<tr>
<td>5:30</td>
<td>8</td>
<td>Species susceptibility to <em>Ehrlichia chaffeensis</em> infection <em>in vitro</em> Andrea S. Varela-Stokes* and David E. Stallknecht</td>
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<table>
<thead>
<tr>
<th>Time</th>
<th>Session III</th>
<th>Farragut/Lafayette</th>
<th>Topic: Ruminant Anthelmintics</th>
<th>Moderators: Ray Kaplan and Andy DeRosa</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:30</td>
<td>9</td>
<td>Bioequivalence study of two albendazole products in cattle. Gheorghe Solcan, Liviu I. Mitrea*, Ana Csuma, Mircea Fântânariu, Carmen Solcan</td>
<td></td>
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</tr>
<tr>
<td>4:45</td>
<td>10</td>
<td>Moxidectin resistance on a small ruminant farm in Virginia. Joseph P. Tritschler, Michaela P.L. Dismann</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5:00</td>
<td>11</td>
<td>A novel approach for combining the use of in vitro and in vivo data to measure and detect emerging MOX resistance in gastrointestinal nematodes of goats. Ray M. Kaplan*, Anand N. Vidyashankar, Sue B. Howell, Jennifer M. Neiss, Lisa H. Williamson, and Thomas H. Terrill</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5:15</td>
<td>12</td>
<td>The influence of several anthelminthic drugs on the cattle gastrointestinal strongylates eggs in vitro. Hovhannes Z. Naghashyan*, and Levon A. Movsisyan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5:30</td>
<td>13</td>
<td>Cow/calf parasite control practices in Kentucky – 2006 survey. Gil Myers*</td>
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</table>

7:00 - 9:00 PM
BAYER SPONSORED WELCOME SOCIAL in Independence FGHI
<table>
<thead>
<tr>
<th>Time</th>
<th>Session IV</th>
<th>Session V</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00</td>
<td>Intervet/AAVP Outstanding Graduate Student Talk – Martin K. Nielsen</td>
<td>A survey of wild canids from South Carolina for antibodies to <em>Leishmania infantum</em> and <em>Trypanosoma cruzi</em>. A. C. Rosypal*, R. R. Tidwell, D. S. Lindsay</td>
</tr>
<tr>
<td>8:45</td>
<td>Identification of cryptic species in the <em>Trichomonas gallinae</em> morphological complex by molecular characterization. Richard W. Gerhold*, Michael J. Yabsley, and John R. Fischer</td>
<td>Antibody kinetics to <em>Sarcocystis aucheniae</em> in alpacas under field and experimental conditions and molecular detection by PCR. Armando L. Hung, Nino Arias, Cesar Martinez and Ana Murguia</td>
</tr>
<tr>
<td>9:45</td>
<td>Prevalence and diversity of <em>Hepatozoon</em> spp. in naturally-infected dogs from the southeastern United States. Kelly E. Allen*, Mason Reichard, Eileen Johnson, Bernhard Kaltenboeck, Susan Little</td>
<td>Ultrastructure characteristics of <em>Besnoitia darlingi</em> tachyzoites Brumpt, 1913 (Protozoa: Sarcocystidae) of the Michigan strain MIBD1. Linda S. Mansfield, Hany M. Elsheikha*</td>
</tr>
</tbody>
</table>

10:00-10:30 AM BREAK sponsored by Schering-Plough Animal Health
### Sunday July 15, 2007, Late Morning

**Session IV, Cont. Independence BCD**

**Topic: Student Presentations**

**Moderators:** David Stansfield and Alexa Rosypal

10:30 22  **Nematode parasites of wild caught African green monkeys (Chlorocebus sabaeus) on St Kitts, West Indies.** Bonnie Mitchell*, Prather McNeal-Hutchinson, Rosina C Krecek

10:45 23  **Toxocara vitulorum** in beef calves in North Central Florida. Gabriel Davila*, Max Irsik and Ellis C. Greiner

11:00 24  **Experimental and natural trematode infections in piscivorous birds.** Cynthia M. Doffitt*, D. Tommy King, and Linda M. Pote

11:15 25  **Helminth parasites in dogs in Grenada, West Indies.** Camille-marie Coomansingh*, Rhonda D. Pinckney, Calum N.L. Macpherson, Diana Stone

11:30 26  **Comparison of diagnostic techniques for detecting intestinal parasites of captive baboons.** Kristene M. Gray*, Mason V. Reichard, and Roman R. Wolf

11:45 27  **Infection of Babesia gibsoni** in confiscated pit bull terriers. Todd J. Yeagley* and Mason V. Reichard

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**Session VI, Independence FG**

**Topic: Protozoa of Food Animals**

**Moderators:** Monica Santin and David Lindsay


10:45 45  **A longitudinal study of Giardia duodenalis** genotypes in dairy cows. James M. Trout*, M. Santin, and R. Fayer

11:00 46  **A longitudinal study of Cryptosporidium species and genotypes in dairy cattle from birth to maturity.** Mónica Santín, James M. Trout, and Ronald Fayer

11:15 47  **Characterization and attenuation of Eimeria meleagrindis from the Turkey.** H. David Chapman and Thilakar Rathinam*

11:30 48  **Intracellular levels of the viral symbiont CPV in Cryptosporidium parvum correlate with fecundity of the parasite in dairy calves.** J. Higgins, C. O’Brien, J. Abrahante, M. Abrahamsen, R. Fayer, K. Kniel, M. Jenkins*

11:45 49  **The evaluation of ISCOMs incorporating triterpene saponins isolated from native plants and the recombinant antigen SO7 for in ovo immunization of chickens against Eimeria tenella infection.** V. Berezin, A. Bogoyavlenskiy, V. Tolmacheva, N. Makhmudova, S. Khudyakova1, S. Levandovskaya, E. Omirtaev, I. Zaitceva, G. Tustikbaeva, P. Alekseyuk, I. Korotetckiy, R. Barfield, K. Miska, M. Jenkins, R. Fetterer*

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**12:00-1:30 PM AAVP GRADUATE STUDENT LUNCHEON/MIXER – Independence E**

Regular members – Lunch on your own

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### Sunday July 15, 2007, Early Afternoon

**1:30 PM-3:45 PM  Session IV, Cont.**  
**Independence BCD**  
**Topic: Student Presentations**  
**Moderators: Ellis Greiner and Mason Reichard**

**1:30  28** Differences in antibody production and local gene expression between parasite resistant hair sheep and susceptible wool sheep infected with *Haemonchus contortus*. Kathryn M. MacKinnon*, Frans N. Kooyman, Anne M. Zajac, Isis K. Mullarky and David R. Notter

**1:45  29** Anthelmintic resistance on sheep and goat farms in the southeastern United States. Sue B. Howell*, Joan M. Burke, James E. Miller, Thomas H. Terrill, Elide Valencia, Mimi J. Williams, Lisa H. Williamson, Anne M. Zajac, and Ray M. Kaplan

**2:00  30** Effect of feeding sericea lespedeza hay on fecal egg counts in horses. Julie V. Vargas*, Anand N. Vidyashankar, Thomas H. Terrill, Jorge A. Mosjidis, Ray M. Kaplan

**2:15  31** Evaluation of selected immune responses to *Haemonchus contortus* infection in Gulf Coast Native compared with Suffolk lambs. Krishna P. Shakya*, James E. Miller, David W. Horohov

**2:30  32** Confirmation of hosts and life stages in the *Bolbophorus damnificus* life cycle. Marlena C. Yost*, Linda M. Pote, Brian S. Dorr

**2:45  33** Lung pathology and association of *Wolbachia* with naturally occurring heartworm disease in dogs and cats. Julie Levy, Patricia Dingman*, Laura Kramer, Michael Lappin, Calvin Johnson, Ellis Greiner

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**CONTINUED ON NEXT PAGE**

### Sunday July 15, 2007, Early Afternoon

**1:30 PM-3:45 PM  Session VII.**  
**Independence FG**  
**Topic: Flea and Tick Control**  
**Moderators: Pat Payne and Bill Stich**

**1:30  50** Dinotefuran: a novel third-generation neonicotinoid for safe and effective long-term flea control on cats. Albert A. Ahn*

**1:45  51** Dinotefuran: a safe and effective third-generation neonicotinoid for flea control on dogs. Albert A Ahn*

**2:00  52** How fast is fast in the flea and tick claim race? Thomas. A. Miller*, Marvin Sharp, and Larry Nouvel

**2:15  53** Do any of the “natural” spot-on products sold for treatment of flea and tick infestations really work? Thomas. A. Miller*, Marvin Sharp, and Larry Nouvel

**2:30  54** *Rdl* gene polymorphism and sequence analysis in strains of the cat flea *Ctenocephalides felis*. S. Brunet, A. Boeckh, M. Murray*, J.C. Audonnet, and M. Soll

**2:45  55** Validation of an Adult and Larval Packet Tests (APTs) to evaluate tick susceptibility. P. A. Payne*, M. W. Dryden, R. J. Miller, A. Lowe, V. Smith, S. Mailen, and A. Whistler

---

**CONTINUED ON NEXT PAGE**
3:00  34  *Toxoplasma gondii* and schizophrenia: Evaluation of the mood stabilizing agent valproic acid as a preventative for toxoplasmosis in mice. David Goodwin, Sheila M. Mitchell, Jeannine Strobl, and David S. Lindsay

3:15  35  Ultrastructure of monozoic cysts of *Cystoisospora canis* grown in cell culture. Sheila M. Mitchell*, Anne M. Zajac and David S. Lindsay

3:30  36  *Giardia*, it’s a snap or not Marjory A. Artzer*, Patricia A. Payne, Michael W. Dryden, Vicki Smith

---

3:00  56  Efficacy of a topically applied spot-on formulation of metaflumizone on cats against the adult cat flea, *Ctenocephalides felis*, flea egg hatch and adult flea emergence. Michael W. Dryden1*, Patricia A. Payne, Vicki Smith, and D. Rugg

3:15  57  Efficacy of fipronil (9.8% w/w) plus (s)-methoprene (8.8% w/w) and imidacloprid (8.8% w/w) plus permethrin (44% w/w) against *Dermacentor variabilis* (American Dog Tick) on dogs. M. W. Dryden*, P. A. Payne, V. Smith, A. Lowe, S. Mailen, S. J. Gross, D. S. Carithers

3:30  58  Abstract withdrawn.

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3:45-4:00 PM BREAK
### Sunday July 15, 2007, Late Afternoon

#### 4:00 PM – 6:00 PM  Session VIII.

**Independence BCD**

**Topic: Small Animal Parasites**

**Moderators: Bob Arther and Araceli Lucio-Forster**

<table>
<thead>
<tr>
<th>Time</th>
<th>Item</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:00</td>
<td>59</td>
<td>A survey of western states for heartworm (<em>Dirofilaria immitis</em>) infection and protocols for heartworm diagnosis and prevention. D. Bowman*, C. Torre, C. Mannella</td>
</tr>
<tr>
<td>4:15</td>
<td>60</td>
<td>Predictive values of survey and contrast radiographs in the diagnosis of <em>Spirocerca lupi</em> in apparently healthy dogs, St Kitts, West Indies. M. M. Fisher*, J. P. Morgan, R. C. Kreeck, P. Kelly</td>
</tr>
<tr>
<td>4:30</td>
<td>61</td>
<td>Prevalence of dermatomycosis and other parasitic disease in dogs and cats with skin diseases, examined in two university clinics from Romania. I. Mitrea, G. Darabus, M. Ionita, N. Mederle</td>
</tr>
<tr>
<td>4:45</td>
<td>62</td>
<td>Prevalence determination of fecal-borne parasites detected by zinc sulfate and sugar centrifugal flotation in feline samples from a shelter in upstate New York. Araceli Lucio-Forster*, Dwight D. Bowman</td>
</tr>
<tr>
<td>5:00</td>
<td>63</td>
<td>Efficacy of milbemycin oxime in the treatment of dogs experimentally infected with <em>Crenosoma vulpis</em>. G. Conboy*, A. Bourque, L. Miller, W. Seewald, R. Schenker</td>
</tr>
<tr>
<td>5:15</td>
<td>64</td>
<td>Advantage Multi™ (10% imidaclorpid + 2.5% moxidectin) for the treatment and control of <em>Trichuris vulpis</em> infections of dogs. R. G. Arther*, S. D. Charles, L. R. Cruthers, T. Janes, D. J. Kok</td>
</tr>
<tr>
<td>5:45</td>
<td>66</td>
<td>Comparison of three serological tests for the detection of <em>Heterophyes heterophyes</em> antibodies in experimentally infected dogs. H. M. Elsheikha*, A. Elshazly</td>
</tr>
</tbody>
</table>

### Sunday July 15, 2007, Late Afternoon

#### 4:00 PM – 5:30 PM  Session IX.

**Independence FG**

**Topic: Equine Parasitology**

**Moderator: Martin Nielsen**

<table>
<thead>
<tr>
<th>Time</th>
<th>Item</th>
<th>Authors</th>
</tr>
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<tbody>
<tr>
<td>4:00</td>
<td>67</td>
<td>Efficacy of pyrantel pamoate in horses against a macrocyclic lactone-resistant isolate of <em>Parascaris equorum</em>. CR Reinemeyer*, and AA Marchiondo</td>
</tr>
<tr>
<td>4:15</td>
<td>68</td>
<td>Comparison of two fecal parasite egg recovery techniques in equine veterinary medicine. Thomas R. Bello*, and Tammy M. Allen</td>
</tr>
<tr>
<td>4:30</td>
<td>69</td>
<td>Statistical approach to measure efficacy of anthelmintic treatment on horse farms. R. M. Kaplan*, A. N. Vidyashankar, S. Chan</td>
</tr>
<tr>
<td>4:45</td>
<td>70</td>
<td>An intensive approach to therapy of clinical EPM. Thomas R. Bello*, and Tammy M. Allen</td>
</tr>
<tr>
<td>5:00</td>
<td>71</td>
<td>Incidental isolation of microfilariae in preparations of equine peripheral blood mononuclear cells and their effect on immunologic assays. D. K. Howe*, M. Yeargan, E. Lyons, C. Breathnach, D. W. Horohov</td>
</tr>
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</table>

### 5:30 PM-7:00 PM

Parasite Resistance Committee Meeting

**Independence FG**

### 7:00 - 9:00 PM

**MERAL SPONSORED SOCIAL in Independence A**
Monday July 16, 2007, Early Morning

8:00 AM-12:00 PM Session X – Special
Session; Independence DE

**Topic: The role of fecal egg count reduction tests in identifying anthelmintic resistance in cattle nematodes**

**Moderators:** Craig Reinemeyer and Anne Zajac

8:00  **73** Fecal Egg Count Reduction Test (FECRT) Standardization Recommendations for Cattle – An Introduction. B.E. Stromberg*

8:15  **74** Fecal egg counting procedures / techniques – considerations for FECRT. Andrew A. DeRosa*

8:30  **75** Arithmetic versus geometric means for estimating percent reduction in FECRT. James A. Thompson*

8:45  **76** Statistical considerations in the performance and analysis of fecal egg count reduction tests in cattle. Ray M. Kaplan* and Anand N. Vidyashankar

9:00  **77** Proposed standardized testing protocol for anthelmintic resistance determination. Harold Newcomb, William Kvasnicka, Donald Bliss, Karla Hart, James Miller, Bert Stromberg*, Louis Gasbarre, Thomas Craig and Laird Laurence

9:15  **78** Recommendations for standardization of fecal egg count reduction tests in cattle. Ray M. Kaplan* and Anand N. Vidyashankar

9:30  **79** Fecal culture procedures / techniques for fecal egg reduction test (FERT) in cattle. T. M. Craig*

9:45  **80** Status of DNA Technology to Differentiate Nematode Eggs and L3’s. Michael B. Hildreth* and Aaron F. Harmon

Monday July 16, 2007, Early Morning

8:00 AM-10:00 AM Session XI.

Independence BC

**Topic: Interesting Diagnostic Cases**

**Moderators:** Gary Conboy and Heather Stockdale

8:00  **86** Demodecosis in a free-ranging mule deer (*Odocoileus hemionus*) from Colorado. Lora R. Ballweber*, J. J. Andrews, L. A. Baeton, and Z. Holder

8:15  **87** Severe infestation of horses with *Dermacentor albipictus*, the winter tick, in southeastern Oklahoma. Susan E. Little*, J. L. Talley, D. Sorrell, and E. M. Johnson

8:30  **88** *Diocotphyma renale* infection in a dog. Karen Snowden*, N. Ronald, T. Craig, C. Collins, D. Huebner

8:45  **89** Peritoneal infection of *Mesocestoides* sp. tetrathyridia in a cat. Mason V. Reichard*, Amy C. Blessington, Eileen M. Johnson, and Candice E. Akers

9:00  **90** *Eurytrema procyonis* and pancreatitis in a cat. Kristin K. Vynhal, Stephen C. Barr, William E. Hornbuckle, Amy E. Yeager, Susan E. Wade, Marguerite F. Frongillo, Kenneth W. Simpson, Dwight D. Bowman*

9:15  **91** His names not Bob but he is a cat; *Vigisospirura* in a domestic cat. T. M. Craig*, A. Buchanan, V. Marlow, and R. Marlow

9:30  **92** Chronic *Eucoleus boehmi* infection in a mixed breed dog. P. A. Payne*, M. W. Dryden, V. Smith, A. Lowe, S. Mailen

9:45  **93** Heterobilharziasis in a dog. N. Wilson, E. M. Johnson*, J. Brunker, and J. Ritchey.

10:00-10:15 AM BREAK

sponsored by Fort Dodge Animal Health

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### Monday July 16, 2007, Late Morning

#### Session X cont.
**Independence DE**
**Topic:** The role of fecal egg count reduction tests in identifying anthelmintic resistance in cattle nematodes  
**Moderators:** Craig Reinemeyer and Anne Zajac

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
</tr>
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<tbody>
<tr>
<td>10:15</td>
<td>Structure of a national database for parasite evaluation by fecal egg count.</td>
<td>William G. Kvasnicka*, Donald H. Bliss, and Harold Newcomb</td>
</tr>
<tr>
<td>10:30</td>
<td>Summary results from national database on fecal worm egg counts.</td>
<td>Donald H. Bliss*, William G. Kvasnicka, and Harold Newcomb</td>
</tr>
<tr>
<td>10:45</td>
<td>FECR Test of anthelmintics in Kentucky beef calves.</td>
<td>Gil Myers*, Patty Scharko, Jim Miller, and Harold Newcomb</td>
</tr>
<tr>
<td>11:00</td>
<td>Can sharp anthelmintic decisions be made using a blunt diagnostic tool? Disparities between FECRT and worm counts in New Zealand cattle infected with ML-resistant Cooperia.</td>
<td>J. Wrigley and M.J. McArthur*</td>
</tr>
<tr>
<td>11:15</td>
<td>Effective use of combination anthelmintic treatments in controlling resistant cattle nematode parasites.</td>
<td>Larry L. Smith*, and L. C. Gasbarre</td>
</tr>
</tbody>
</table>

#### PANEL DISCUSSION:
**The role of fecal egg count reduction tests in identifying anthelmintic resistance in cattle nematodes**  
**Moderators:** Craig Reinemeyer and Anne Zajac

### Monday July 16, 2007, Late Morning

#### Session XII.
**Independence BC**
**Topic:** Interesting Diagnostic Cases, Round 2  
**Moderators:** Rhonda Pinckney and Sheila Mitchell

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:15</td>
<td>Intestinal obstruction in a cat due to Taenia taeniaeformis.</td>
<td>Rebecca S. Wilcox, Dwight D. Bowman*, Stephen C. Barr, and James M. Euclid</td>
</tr>
<tr>
<td>10:45</td>
<td>Fatal amoebiasis in Oriole Warblers (Hypergerus atriceps).</td>
<td>Karen Snowden*, William Wigle, Joseph Flanagan</td>
</tr>
<tr>
<td>11:00</td>
<td>Balantidium coli in your nonhuman primate colony: commensal ciliate or potential pathogen?</td>
<td>Trisha R. Putro, B.S. Latg*, and Wanda West.</td>
</tr>
<tr>
<td>11:15</td>
<td>Duodenal crypt abscess associated with Giardia lamblia infection in a 27-year-old man.</td>
<td>Attef M. Elshazly*, Nashwa A. Elsaied, and Hany M. Elsheikha</td>
</tr>
<tr>
<td>11:30</td>
<td>Simultaneous occurrence of pulmonary and hepatic hydatid cysts in a 10-year-old girl.</td>
<td>Attef M. Elshazly* and Hany M. Elsheikha</td>
</tr>
</tbody>
</table>

#### 12:00-1:30 PM LUNCH
### Monday July 16, 2007, Early Afternoon

1:30 PM-3:30 PM  Session XIII.
**Independence DE**

**Topic: Immunology and Host/Parasite Interactions**

**Moderators:** Patrick Meeus and Joseph Urban

1:30  100  Helminth infection induces a persistently altered pulmonary environment dominated by alternatively activated macrophages. Joshua J Reece*, Mark C Siracusa, Joseph F Urban, and Alan L Scott

1:45  101  Alveolar macrophages isolated from the lungs of pigs infected with *Ascaris suum* exhibit a unique phenotype. Gloria I. Solano-Aguilar, A. Kendall, M. Restrepo, N. Schoene, E. Beshah, H. Dawson, J. Urban*

2:00  102  A TGF-β homologue identified from *Ascaris suum* 4th stage larvae (L4): Evidence for development-related transcription and incomplete gene splicing. Dante S. Zarlenga* and Joseph F. Urban Jr

2:15  103  Strain-dependent differences in host response to *Schistosoma mansoni* infection in murine model: Role of eosinophils in bilharzial nodules. H. S. Hussein, B. L. Doughty, H. M. Elsheikha

2:30  104  Clinicopathological effects of infection with *Schistosoma mansoni* and simultaneous exposure with Malathion in Outbred albino mice. Hany M. Elsheikha* and Hussein S. Hussein

2:45  105  Protective immunity of channel catfish against parasite *Ichthyophthirius*. De-Hai Xu*, P. Klesius, C. Shoemaker

3:00  106  Oxidation defense in mosquitoes benefits malaria parasites. Qian Han*, Seong-Ryu Kim, Howard Robinson, Yi-Gui Gao, Nancy Vogelaar, Haizhen Ding, and Jianyong Li

3:15  107  Toxoplasmosis: Pattern of Th1/Th2 cytokine production in naturally infected women. Attef M. Elshazly* and Hany M. Elsheikha

### Monday July 16, 2007, Late Afternoon

4:00 PM – 6:00 PM  
**AAVP Business Meeting/Awards**

**Independence FGH**

President Dan Snyder

4:00 PM-4:30 PM  **PRESIDENTIAL ADDRESS**-Dan Snyder

4:30 PM-5:30 PM  **AAVP BUSINESS MEETING**

5:30 PM-6:00 PM  **AAVP AWARDS/PICTURES**

All award recipients, including student travel grant awardees, and all students in the paper competition, please plan to attend!

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7:00 - 9:00 PM  
**NOVARTIS ANIMAL HEALTH SPONSORED SOCIAL**

in  
**Independence BCD**

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4:00-4:30 PM BREAK
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 AM</td>
<td>AAVP/AVMA PRESIDENT’S SYMPOSIUM</td>
</tr>
<tr>
<td>8:00 AM</td>
<td>Topic: Use of a National Pet Hospital’s Electronic Database and Practice Surveys for Nationwide Epidemiologic Studies of Parasites of Companion Animals</td>
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<tr>
<td>8:00 AM</td>
<td>Moderator: Dan Snyder</td>
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<tr>
<td>8:00-10:00</td>
<td>Session XIV.</td>
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<tr>
<td>8:00 AM</td>
<td>Description of a national pet hospital’s electronic database.</td>
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<tr>
<td>8:15 AM</td>
<td>Findings on the epidemiology of feline heartworm diseases in the United States.</td>
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<tr>
<td>8:35 AM</td>
<td>An epidemiological analysis of heartworm preventives.</td>
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<tr>
<td>9:00 AM</td>
<td>American Heartworm Society canine heartworm infection (Dirofilaria immitis) survey.</td>
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<tr>
<td>9:45 AM</td>
<td>AM BREAK</td>
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<tr>
<td>10:00 AM</td>
<td>Prevalence and risk factors for flea and tick infestations.</td>
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<tr>
<td>10:45 AM</td>
<td>Geography and epidemiology of feline nematode and protozoan parasites.</td>
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<tr>
<td>11:30 AM</td>
<td>Roundtable Discussion – All Speakers</td>
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<tr>
<td>12:00 PM</td>
<td>LUNCH</td>
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<tr>
<td>12:30 PM</td>
<td>Session XV.</td>
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<tr>
<td>1:30 PM</td>
<td>A, B, C, D or E: Writing Exam Questions.</td>
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<tr>
<td>2:00 PM</td>
<td>Implementation of techniques to allow in-class assessment of student learning: applications for veterinary parasitology instruction.</td>
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<tr>
<td>2:30 PM</td>
<td>Do I have to know this for the test? Reinforcing concepts.</td>
</tr>
<tr>
<td>3:00 PM</td>
<td>Detailed photomicroscopic examination of Haemonchus contortus.</td>
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<tr>
<td>3:15 PM</td>
<td>Enhancement of Parasitology courses education and training by online multimedia interactive presentations: Preliminary evaluation.</td>
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<tr>
<td>4:00 PM</td>
<td>MEETING ADJOURNS – SAFE TRAVELS!</td>
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