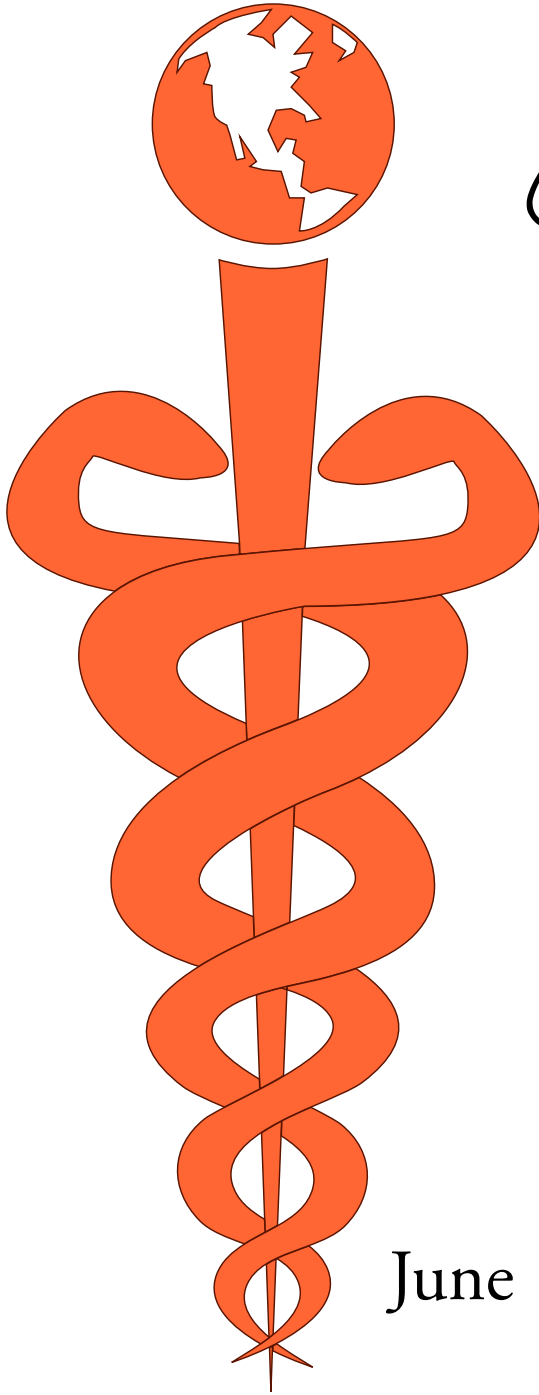


COMPARATIVE & EXPERIMENTAL MEDICINE AND PUBLIC HEALTH RESEARCH SYMPOSIUM



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Collaborate

合作

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Sahayōga

June 14 & 15, 2010

Program & Schedule



Sponsored by the College of Veterinary Medicine, Center for Public Health, Graduate School of Medicine, Tennessee AgResearch, the UT Graduate School, and the UTK Office of Research

Welcome

Once again, the University of Tennessee (UT) Agricultural Campus is hosting a symposium for UT investigators with animal and human health interests. Interest in this symposium is growing explosively, and the symposium is rapidly becoming a calendar event for the Knoxville campuses of UT. Comparative and Experimental Medicine (CEM), a graduate program that is shared by the College of Veterinary Medicine and the Graduate School of Medicine, initiated this symposium in 2007 as an event to showcase the research of students and new investigators in their program. Last year, the symposium was opened to participants throughout the Knoxville campuses, and there was a four-fold increase in presentations with representation from 16 different UT departments and programs. This year, the Center for Public Health has teamed with the CEM to produce a joint *Comparative & Experimental Medicine and Public Health Research Symposium* hosting an even larger group of scientists including 85 presenters representing 19 different UT departments and programs.

The *Comparative & Experimental Medicine and Public Health Research Symposium* provides an excellent venue for students and new investigators to gain experience presenting their work as oral presentations. In addition, the gathering of UT investigators with related and varying interests provides opportunities for the creation of new ideas, collaborations, and networks that will enhance health-related research at the

Knoxville campuses of the university. The joint sponsorship of the symposium by the College of Veterinary Medicine, the UT Center for Public Health, the Graduate School of Medicine, Tennessee AgResearch, the UT Graduate School, and the UTK Office of Research Administration is unprecedented and signifies both a shared recognition of the need for such a symposium and a cooperative spirit in bringing this exciting event to reality.

Lastly, it is important to mention that the speakers to be presenting their research are an incredibly diverse group, and this international diversity is celebrated on the program's cover with the inclusion of the word *collaborate* in ? different languages, which are spoken by one or more of the presenters.

We are happy to welcome all participants and attendees and hope the experience will be as positive as it is promising.



Joseph DiPietro, Vice President
University of Tennessee
Institute of Agriculture



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We wish to acknowledge the following university programs and individuals, without whom this event would not be possible:

College of Veterinary Medicine

Center for Public Health

Tennessee AgResearch

Graduate School of Medicine

UTK Office of Research

UT Graduate School

Misty Bailey

James Lawler

Joseph Bartges

Karla Matteson

Tammy Berry

Leon ND Potgieter

Debra L. Butenko

Kim Rutherford

Michael Cunningham

Anik Vasington

Paul Campbell Erwin

Michael Zemel

Laura Dotson

We appreciate the contributions of session moderators and judges.

Thanks also to the UTCVM chapter of Phi Zeta, 2009 Center of Excellence Summer Student Research Program participants, and our sponsors and exhibitors.

James Thompson, *Dean*
College of Veterinary Medicine

Brad Fenwick, *Vice Chancellor for Research*
UTK Office of Research

James Neutens, *Dean*
Graduate School of Medicine

William F. Brown, *Dean*
Tennessee AgResearch

Carolyn R. Hodges, *Vice Provost*
UT Graduate School

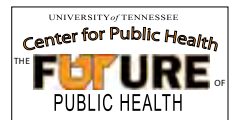
Robert Rider, *Dean*
College of Education, Health & Human Sciences

Schedule at a Glance

Monday, June 14

	Room	Event
8:30-9:00		
9:00-10:00		Keynote address: Dr. Steven N. Blair, "Exercise is Medicine"
10:30-12:00	See session matrix (p. 6)	New investigation presentations
12:00-1:00		
1:30-??	See session matrix (p. 6)	New investigator presentations

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COLLEGE of VETERINARY MEDICINE

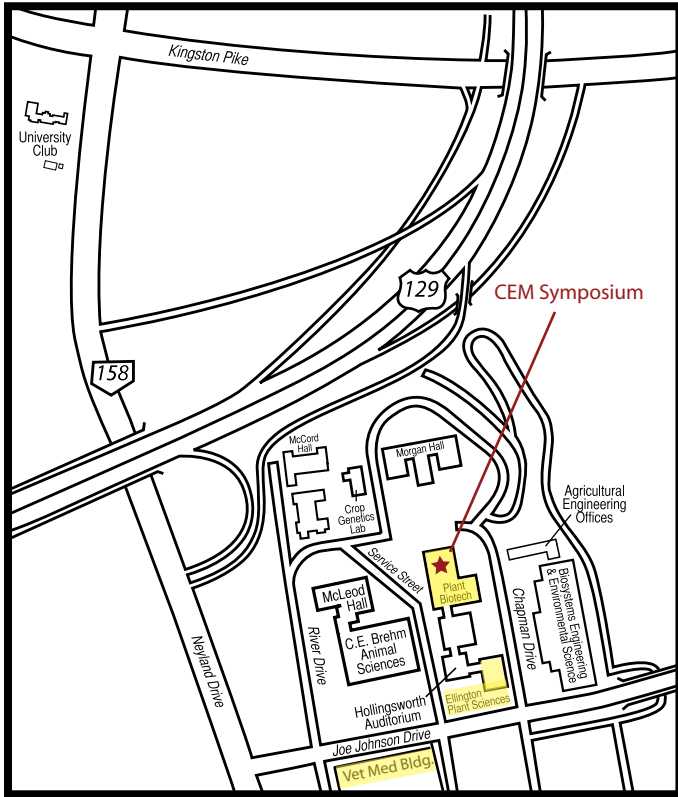


Tuesday, June 15

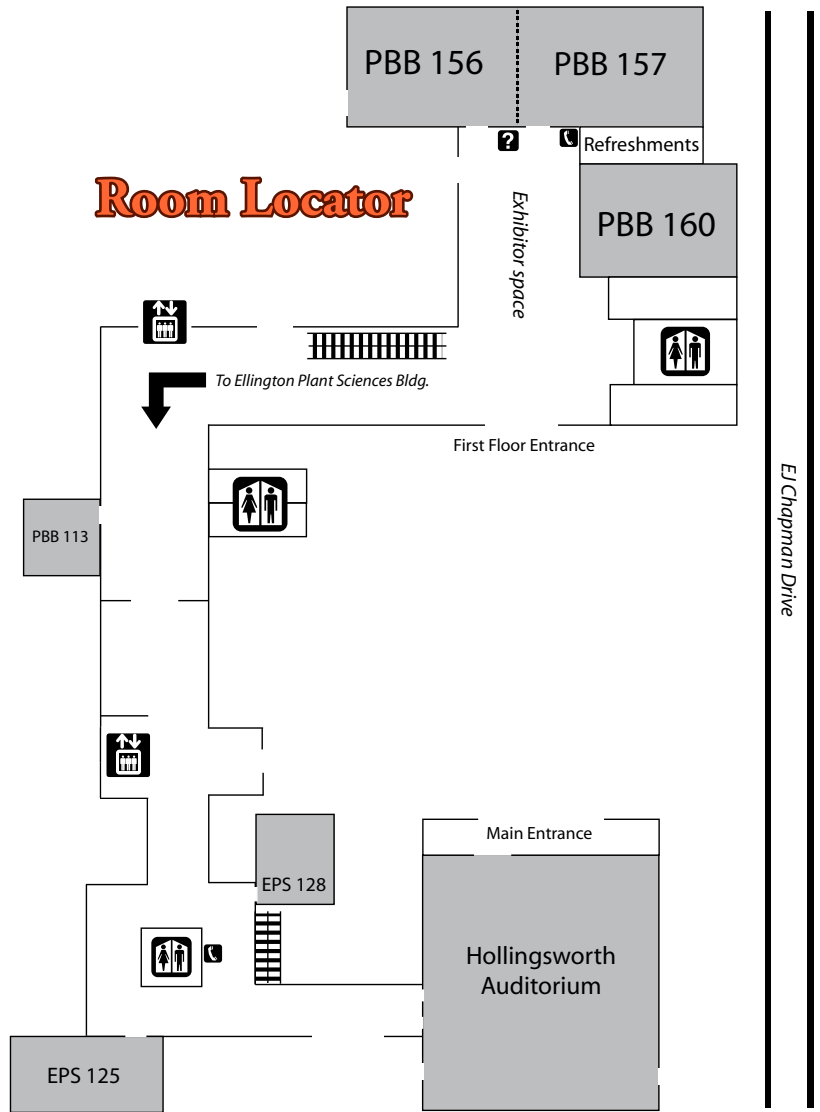
	Room	Event
8:30-9:00		
9:00-10:00		Keynote address: Dr. Arnold I. Caplan, "Adult Mesenchymal Stem Cells and Their Use in Various Therapies"
10:30-12:00	See session matrix (p. 7)	New investigator presentations
12:00-1:00	PBB 156	Luncheon
1:30-?	See session matrix (pp. 8-9)	New investigator presentations
6:00	Hollingsworth Auditorium	Awards banquet & after-dinner address: Sam Venable, "Warning! Living Can Be Hazardous to Your Health"

PBB, Plant Biotechnology Building

Location Information



University of Tennessee Agricultural Campus



Parking

Faculty & staff with a valid parking permit for a main (east) campus lot may park in lot 66—across from Ellington Plant Sciences—at no additional cost or ride the “T” (free for all UT faculty, staff, & students with ID). The T: East to West circles every 15 minutes between 7:00 am and 6:00 pm. Students with valid permits should park in designated student parking areas.

Session Matrix (Abstracts on pp. 14-51)

Monday, June 14, Morning

	Public Health	Pharmacology & Pharmicokinetics
	Rm. PBB 160	Rm. PBB 113
10:30 am	1. (Murphy)	7. ponazuril (Prado)
10:45 am	2. (Dotson)	8. (Durtschi)
11:00 am	3. (Carberry)	9. (Love)
11:15 am	4. (Busingye)	10. (Burke)
11:30 am	5. (Pedigo)	11. (DiRuzzo)
11:45 am	6. (Techathuvanan)	

Monday, June 14, Afternoon

	Public Health	Bacterial Virulence & Transmission
	Rm. EPS 125	Rm. PBB 157
	12. (Harmon)	17. (Eberlein)
1:30 pm		
	13. (Weisent)	18. (Black)
1:45 pm		
	14. (Al-Wadei)	19. (Solyman)
2:00 pm		
	15. (Mao)	20. E. Coli (Kerro Dego)
2:15 pm		
	16. (Cannon)	21. (Tadros)
2:30 pm		
	BREAK	BREAK
2:45 pm		

Monday, June 14, *Afternoon*

Innovative Biomedical Technologies		Nutrition & Metabolism	
Rm. EPS 125		Rm. PBB 157	
22. (Leonard)		30. (Coletta)	
3:00 pm			
23. (Vu)		31. (Curry)	
3:15 pm			
24. (Minkin)		32. (Gouffon)	
3:30 pm			
25. (Cai)		33. (Stancliffe)	
3:45 pm			
26. (Y.-L. Chen)		34. (Ji)	
4:00 pm			
27. (Shi)		35. (Kalupahana)	
4:15 pm			
28. (Wang)		36. (Wyatt)	
4:30 pm			
29. (Beeler)			
4:45 pm			

Tuesday, June 15, *Morning*

	Viral Pathology & Immunity	Nutrition & Metabolism	Oncology & Cancer Cell Biology
	Rm.	Rm.	
10:15 am	37. (Mulik)	44. (Booker)	51. (Nualsanit)
10:30 am	38. (Suryawanshi)	45. (Hurst)	52. (Rathore)
10:45 am	39. (Sharma)	46. (Kalupahana)	53. (Huang)
11:00 am	40. (Sundararajan)	47. (Siriwardhana)	54. (McCartt)
11:15 am	41. (Ganapathy)	48. (Smart)	55. (Liggett)
11:30 am	42. (Davis)	49. (Gomes)	56. (A. Wells)
11:45 am	43. (Horn)	50. (Siriwardhana)	

Tuesday, June 15, *Afternoon*

Clinical Sciences	Bovine Diseases & Theriogenology	Oncology & Cancer Cell Biology
Rm.	Rm.	
57. (Villarino)	62. (Di Croce)	68. (Choudhary)
1:30 pm		
58. (Lembcke)	63. (Young)	69. (Lee)
1:45 pm		
59. (Elliott)	64. (Gillespie)	70. (Richardson)
2:00 pm		
60. (J. Chen)	65. (Almeida)	71. (Bahn)
2:15 pm		
61. (Chameroy)	66. Strep Uberis (Prado)	72. (Whitlock)
2:30 pm		
BREAK	67. Strep uberis (Kerro Dego)	BREAK
2:45 pm		

Tuesday, June 15, *Afternoon*

Clinical Sciences		Oncology & Cancer Cell Biology	
Rm. ??		Rm.	
73. (Westermeyer)		81. (Srnkovski)	
3:00 pm			
74. (Macready)		82. (Brown)	
3:15 pm			
75. (Cekanova)		83. (LeBlanc)	
3:30 pm			
76. (Dhar)		84. (Baron)	
3:45 pm			
77. (Malcom)		85. (Headrick)	
4:00 pm			
78. (Erickson)		86. (Durant)	
4:15 pm			
79. (Owens)		87. (Close)	
4:30 pm			
80. (P. Brown)		88. (K. Wells)	
4:45 pm			

Featured Speakers



Dr. Steven N. Blair

*Professor, Division of Health Aspects of Physical Activity,
Department of Exercise Science, University of South Carolina*

“Exercise is Medicine”

Monday Keynote Address

Steven N. Blair, PED, is a professor at the Arnold School of Public Health at the University of South Carolina. Dr. Blair is a fellow in the American College of Epidemiology, Society for Behavioral Medicine, American College of Sports Medicine, American Heart Association, and American Academy of Kinesiology and Physical Education. He is the recipient of three honorary doctoral degrees from universities in Belgium, the United States, and the United Kingdom. His many awards from professional associations include the Honor Award from the American College of Sports Medicine and the Robert Levy Lecture and Population Science Research Awards from the American Heart Association. In addition, Dr. Blair was granted a MERIT Award from the National Institutes of Health and is one of the few individuals outside the US Public Health Service to be awarded the Surgeon General’s Medallion. He has delivered lectures to medical, scientific, and lay groups in 48 states and 30 countries, relaying his research focuses on the associations between lifestyle and health, with a specific emphasis on exercise, physical fitness, body composition, and chronic disease. With over 450 papers and chapters in the scientific literature, Dr. Blair is one of the most highly cited exercise scientists, with over 24,000 citations to his work. He was also the Senior Scientific Editor for the US Surgeon General’s Report on Physical Activity and Health.

Arnold I. Caplan, PhD

Professor of Biology; Director, Skeletal Research Center, Case Western Reserve University

“Adult Mesenchymal Stem Cells and Their Use in Various Therapies”

Tuesday Keynote Address

Dr. Harris is a professor of medicine and co-director of the MD/PhD program at the Sanford School of Medicine. Between 1985 and 1996, Harris was the director of the Lipid Research Laboratory at the Kansas University Medical Center in Kansas City. In 1996, he moved to the University of Missouri-Kansas City as a professor of medicine and held the Daniel J. Lauer/Missouri Chair in Lipid Metabolism. He also served as the co-director of the Lipid and Diabetes Research Center at the Mid America Heart Center of Saint Luke’s Hospital in Kansas City. Over the last 25 years, Harris’s research has focused primarily on fish oils (omega-3 fatty acids) and cardiovascular disease, and he has been the principal investigator on three NIH grants focusing on omega-3 fatty acids and human lipid metabolism.

His current project is examining the effects of niacin and omega-3 fatty acids, separately and in combination, on lipid and glucose metabolism in patients with metabolic syndrome. He has also been examining the potential of a blood test he developed to measure omega-3 fatty acid levels as a new risk factor for cardiovascular disease. In collaboration with his new colleagues at the Cardiovascular Research Center, he will be expanding his research program to include studies of the cellular and biochemical mechanisms by which omega-3 fatty acids allow the heart to resist ischemic stress. He has over 120 publications.



Featured Speakers

Dr. Asha Kallianpur

*Assistant Professor, Institute for Medicine and Public Health
Vanderbilt Epidemiology Center, Vanderbilt University Medical Center*
“Title”



Dr. Tairo Oshima directs the Institute of Environmental Microbiology at the Kyowa Kako Company in Tokyo, Japan, and is a professor emeritus from the Tokyo University of Pharmacy and Life Science and the Tokyo Institute of Technology. From 2002-2007, he was head of the Research Promotion k, and the focus of his talk, has been concentrated on polyamines, organic compounds that are essential in both eukaryotic and prokaryotic cells. Inhibition of cellular polyamine synthesis leads to cell growth suspension or severely retards cell growth.

Roger Cone, PhD

*Chairman of Molecular Physiology,
Director, Institute for Obesity and Metabolism, Vanderbilt University*
“The Central Melanocortin System and Energy Homeostasis”



Dr. Roger Cone joined Vanderbilt in 2008, but previously, he was director of the Center for the Study of Weight Regulation (CSWR) at Oregon Health and Science University, and senior scientist at the Vof the obesity in humans, responsible for about 5% of cases. Dr. Cone has received numerous awards for his research, including the Ernst Oppenheimer Award of the U.S. Endocrine Society, the Berthold Memorial Award of the German Endocrine Society, and the Ipsen Prize in Endocrinology.

Featured Speakers



Sam Venable

Storyteller, humorist, and columnist for the Knoxville News Sentinel

“Warning! Living Can Be Hazardous to Your Health” – Featured After-dinner Address

Sam Venable has been a beloved columnist for the Knoxville News Sentinel since 1985, giving readers healthy doses of East Tennessee humor and “you-gotta-laugh-to-keep-from-cryin’” anecdotes about life in general. In the 15 years before that, he served as the newspaper’s outdoors editor.

Sam is a native of Knoxville and a graduate of the University of Tennessee with a degree in journalism and minor studies in forestry and wildlife management. Winner of more than three dozen national and regional writing awards, Sam has also been widely published outside the newspaper field. He sold his first magazine article as a senior in college and since has compiled more than 150 periodical credits to his record. Sam is the author of ten books, the most recent

being *Someday I May Find Honest Work: A Newspaper Humorist’s Life*, and has been a contributing author for numerous other books, including writing the new introduction for Carson Brewer’s classic collection about the Great Smokies, *A Wonderment of Mountains*. In addition, he has been the subject of articles in such publications as Southern Living magazine and “The Encyclopedia of Appalachia.”

In recent years, Sam has become increasingly popular on the stand-up comedy circuit. He delivers his bizarre look at life on a wide variety of topics—everything from how to speak “hillbillyese,” to the insanity of ever-present warning labels, as well as coping with the nutty life in which we live, and the perils of growing older. In his spare time, Sam enjoys hunting, fishing, hiking and swimming.