

H. D. Becker*, D. D. Reeder and J. C. Thompson.
University of Texas Medical Branch, Galveston,
Texas.

10:30 469. *Effect of pentagastrin and secretin on gastric adenylyl cyclase.* O. Holian*, L. M. Nyhus, C. T. Bombeck*. Department of Surgery, The Abraham Lincoln School of Medicine, University of Illinois at the Medical Center, Chicago, Illinois.

10:45 470. *Stimulation of gastrointestinal tract DNA synthesis by pentagastrin.* M. R. Enoch*, P. D. Guthrie*, and L. R. Johnson. University of Texas Medical School at Houston, Houston, Texas.

APS SESSION 52 FRIDAY MORNING, AUGUST 24
109 BAUSCH AND LOMB HALL

G. I. TRANSPORT

Chairperson: H. J. Binder

9:00 471. *Effects of amiloride on the nutrient membrane of the in vitro frog gastric mucosa.* G. Carrasquer, M. Dinno*, D. G. Fravert*, A. K. Olson*, and M. Schwartz. Departments of Medicine and Physics, University of Louisville, Kentucky.

9:15 472. *Site of action of Ba⁺⁺ on in vitro frog gastric mucosa with microelectrode technique.* J. O'Callaghan*, S. S. Sanders, R. L. Shoemaker, and W. S. Rehm. Medical Center, University of Alabama in Birmingham, Alabama.

9:30 473. *Anomalous response of intercellular potentials of in vitro frog gastric mucosa to change in (K⁺) in presence of Ba⁺⁺.* W. S. Rehm, J. O'Callaghan*, S. S. Sanders and R. L. Shoemaker. University of Alabama in Birmingham, Medical Center, Birmingham, Alabama.

9:45 474. *Stimulation of gastric mucosa adenylylase (AC) by histamine (H) and its methyl derivatives and its blockade by H₂ receptor antagonist.* C. F. Code and T. P. Dousa. Departments of Physiology and Medicine, Mayo Clinic and Mayo Foundation, Rochester, Minnesota.

10:00 475. *Effects of metiamide an H-2 antihistamine, on gastric H⁺ and pepsin secretion in the dog in response to various stimuli.* R. G. Gibson*, G. Hutchison*, and B.I. Hirschowitz, Department of Medicine, University of Alabama Medical Center, Birmingham, Alabama.

10:15 476. *Sodium activation of intestinal brush-border sucrase: Desensitization by fractionation of mem-*

brane solubilized with sodium dodecyl sulfate and Mg⁺⁺ dependent resensitization. A. Mahmood* and F. Alvarado. University of Puerto Rico, Medical School, San Juan, Puerto Rico.

10:30 477. *Pathophysiology of cestode infections: Movements of water and electrolytes in the rat jejunum infected with the tapeworm, Hymenolepis diminuta.* R. B. Podesta and D. F. Mettrick (intr. by J. Machin). Department of Zoology, University of Toronto, Toronto, Canada.

10:45 478. *The mechanism of bicarbonate secretion in rabbit ileum exposed to cholera toxin.* K. A. Hubel. Department of Medicine, University of Iowa, Iowa City, Iowa.

11:00 479. *Electrical properties and diffusion potentials of gall bladders from various species.* R. T. Gelarden* and R. C. Rose. The Pennsylvania State University, College of Medicine, Hershey, Pennsylvania.

11:15 480. *Effect of acetazolamide on water and electrolyte secretion by the common bile duct.* D. L. Nahrwold and R. C. Rose. The Pennsylvania State University, College of Medicine, Hershey, Pennsylvania.

APS SESSION 53 FRIDAY MORNING, AUGUST 24
115 HARKNESS HALL

HYPERBARIA AND RADIATION

Chairperson: S. M. Michaelson

9:00 481. *An electronystagmographic study of post-rotatory nystagmus duration, number of beats, and frequency in 10 atmospheres absolute helium and oxygen and during decompression.* C. B. Jensen*, S. J. Brumleve, and B. DeBoer. Department of Physiology and Pharmacology, University of North Dakota, Grand Forks, North Dakota.

9:15 482. *Depression effect of respiring helium-oxygen (80-20%) on the heart rate in the unanesthetized male normotensive and spontaneously hypertensive rats.* Y. C. Lin. University of Hawaii School of Medicine, Honolulu, Hawaii.

9:30 483. *Temporal characteristics of the simple muscle twitch under hyperbaric O₂, N₂, He, and Ar conditions.* T. K. Akers. Department of Physiology and Pharmacology, University of North Dakota, Grand Forks, North Dakota.

8:15

8:45 484. *Physiologic response of rats to hypothermia induced by exposure to 2450 MHz microwave radiation.* R. D. Phillips, E. L. Hunt, and N. W. King. Biology Department, Battelle Pacific Northwest Laboratories, Richland, Washington.

9:30

10:00 485. *Thermal regulation in Long-Evans rats exposed to 2450 MHz microwave radiation.* W. M. Houk*, S. M. Michaelson, and A. Longacre, Jr*. University of Rochester, School of Medicine and Dentistry, Department of Radiation Biology and Biophysics, Rochester, New York.

9:45

10:15 486. *Factors influencing radiation induced incapacitation in the rat.* E. L. Gasteiger and M. Windt*. Department of Physical Biology, New York State Veteranian College and Section of Neurobiology and Behavior, Division of Biology, Cornell University, Ithaca, New York.

10:15 492. *Evidence for con. deficiency in the N. tin*, C. A. Harris* of Medicine, McGill*

10:30 493. *Effect of angiotens continuous slow he R. E. Shade* and l ology and Biophysic ical Units, Memphis*

APS SESSION 54
114 HARKNESS HALL

FRIDAY MORNING, AUGUST 24

ENDOCRINES II

Chairperson: D. E. Scott

8:30

9:00 487. *Right atrial receptors mediate the adrenocortical response to small hemorrhage.* G. L. Cryer* and D. S. Gann. The Johns Hopkins University School of Medicine, Baltimore, Maryland.

8:45

9:15 488. *The importance of thyrotropin releasing hormone (TRH) on thyroid gland homeostasis in normal and X-irradiated beagles as determined by a radio-immunoassay for canine thyroid stimulating hormone (TSH).* W. J. Quinlan* and S. M. Michaelson. University of Rochester, School of Medicine and Dentistry, Department of Radiation Biology and Biophysics, Rochester, New York.

9:00

9:30 489. *Effect of complete hypothalamic deafferentation on the secretion of TSH in rats.* E. Hefco* and L. Krulich. Department of Physiology, University of Texas, Southwestern Medical School, Dallas, Texas.

9:15

9:45 490. *Effect of thyrocalcitonin on calcium and magnesium metabolism in the spinal rat.* N. E. Naftchi, A. T. Viau*, G. H. Sell* and E. W. Lowman*. Institute of Rehabilitation Medicine, New York University Medical Center, New York, New York.

9:30

10:00 491. *Cholinergic and α -adrenergic participation in centrally-induced natriuresis.* M. Morris and R. Orias (intr. by V. Sallee). Department of Physiology, University of Texas Southwestern Medical School, Dallas, Texas.