## COMPARATIVE MEDICINE

VOLUME 69 | NUMBER 6 | DECEMBER 2019

Editorial

**441** Pain as a Clinical Factor and Experimental Variable in Research Rodents *Mark A Suckow, and Patricia V Turner* 

Overview

- 443 Ethical and IACUC Considerations Regarding Analgesia and Pain Management in Laboratory Rodents Larry Carbone
- **451 A Review of Pain Assessment Methods in Laboratory Rodents** *Patricia V Turner, Daniel SJ Pang, and Jennifer LS Lofgren*
- **468 Clinical Management of Pain in Rodents** Patricia L Foley, Lon V Kendall and Patricia V Turner
- **490** A Review of Strain and Sex Differences in Response to Pain and Analgesia in Mice *Jennifer C Smith*
- **501 Influence of Pain and Analgesia on Cancer Research Studies** Douglas K Taylor
- **510** Defining and Managing Pain in Stroke and Traumatic Brain Injury Research *Christina M Larson, George L Wilcox, and Carolyn A Fairbanks*
- 520 A Review of the Effects of Pain and Analgesia on Immune System Function and Inflammation: Relevance for Preclinical Studies George J DeMarco and Elizabeth A Nunamaker
- 535 Influence of Pain and Analgesia on Orthopedic and Wound-healing Models in Rats and Mice Monika K Huss, Stephen A Felt, and Cholawat Pacharinsak
- **546** The Influence of Pain and Analgesia in Rodent Models of Sepsis Kelsey C Carpenter, John M Hakenjos, Christopher D Fry, and Jean A Nemzek
- 555 The Study of Pain in Rats and Mice Christina M Larson, George L Wilcox, and Carolyn A Fairbanks
  571 Interacting Influences of Sleep Pain and Analgesic Medications on Sleep Studies in Roder
- 571 Interacting Influences of Sleep, Pain, and Analgesic Medications on Sleep Studies in Rodents Linda A Toth
- 580 Information for Authors

## 584 AALAS Position Statement on the Humane Care and Use of Laboratory Animals

585 Coming Up In JAALAS

Guest editors Dr Mark A Suckow, DACLAM, and Dr Patricia V Turner, DACLAM assembled this Special Topic issue. Dr Mark Suckow is an Associate Vice President for Research, and Attending Veterinarian at the University of Kentucky. Dr Pat Turner is the Corporate Vice President of Global Animal Welfare with Charles River. An introduction and a summary of the articles included in this issue are in their guest editorial.



*Comparative Medicine* (ISSN 1532-0820) is published 6 times in February, April, June, August, October, and December by the American Association for Laboratory Animal Science, 9190 Crestwyn Hills Dr., Memphis, Tennessee 38125. Periodicals postage is paid at Memphis, Tennessee, 38125 and additional mailing offices. POSTMASTER: Send all address changes to the American Association for Laboratory Animal Science, 9190 Crestwyn Hills Dr., Memphis, TN 38125.