Animal Use Alternatives Thesaurus Terminology - Alphabetical Listing

Go to the National Agricultural Library Thesaurus for more terminology

This shows an alphabetical listing of all the terms along with its associated wordblock.

(taxonomic nomenclature)  A  B  C  D  E  F  G  H  I  J  K  L  M  N  O  P  Q  R  S  T  U  V  W  X  Y  Z

(taxonomic nomenclature)
BT1: Organisms
NT1: Anguilla anguilla
NT1: Brachydanio rerio
NT1: Daphnia magna
NT1: Drosophila melanogaster
NT1: Escherichia coli
NT1: Hyallela azteca
NT1: Limulus polyphemus
NT1: Macaca fascicularis
NT1: Macaca mulatta
NT1: Macaca nemestrina
NT1: Neurospora crassa
NT1: Oryzias latipes
NT1: Pimephales promelas
NT1: Pseudomonas fluorescens
NT1: Rhizopus nigricans
NT1: Vibrio fischeri
NT1: Xenopus laevis

(return to top)

A

abiotic injuries *
USE: abiotic stress

abiotic stress
UF: abiotic injuries *
UF: stress, abiotic *
BT1: animal stress
BT2: animal welfare
BT3: Animal Care and Welfare
BT3: bioethics
BT4: ethics
BT5: philosophy
BT6: Human and Social Issues
NT1: cold stress
abnormal behavior
  BT1: animal behavior
  BT2: Life Sciences
  NT1: stereotyped behavior
  RT: animal welfare

acute dermal toxicity
  BT1: acute toxicity
  BT2: toxicity
  BT3: toxicology
  BT4: Product Testing and Toxicology

acute inhalation toxicity
  BT1: acute toxicity
  BT2: toxicity
  BT3: toxicology
  BT4: Product Testing and Toxicology

acute oral toxicity
  BT1: acute toxicity
  BT2: toxicity
  BT3: toxicology
  BT4: Product Testing and Toxicology
  RT: fixed dose procedure
  RT: lethal dose 50
  RT: up-and-down method

acute toxic class method
  BT1: animal tests
  BT2: laboratory tests
  BT3: Biomedical and Laboratory Methods

acute toxicity
  BT1: toxicity
  BT2: toxicology
  BT3: Product Testing and Toxicology
  NT1: acute dermal toxicity
  NT1: acute inhalation toxicity
  NT1: acute oral toxicity
  NT1: dermal sensitization
  NT1: eye irritation
  NT1: skin irritation

adapted feeding
  BT1: animal feeding
  BT2: animal husbandry
  BT3: Animal Care and Welfare
advisory committees
BT1: committees
BT2: organizations
BT3: Human and Social Issues
NT1: Interagency Coordinating Committee on the Validation of Alternative Methods

air temperature *
USE: ambient temperature

algae
BT1: Organisms

alternatives to animal testing *
USE: animal use alternatives

ambient temperature
UF: air temperature *
BT1: animal environment
BT2: Animal Care and Welfare

Ames test
BT1: bioassays
BT2: assays
BT3: laboratory tests
BT4: Biomedical and Laboratory Methods
RT: mutagenicity

amphibians
BT1: vertebrates
BT2: animals
BT3: Organisms
NT1: caecilians
NT1: frogs
NT2: tadpoles
NT1: newts

amphipods
BT1: invertebrates
BT2: animals
BT3: Organisms
RT: Hyallela azteca

analgesia
UF: analgesiometry *
BT1: animal welfare
BT2: Animal Care and Welfare
BT2: bioethics
BT3: ethics
BT4: philosophy
BT5: Human and Social Issues
RT: pain
analgesic activity *
USE: analgesic effect

analgesic effect
UF: analgesic activity *
UF: analgesic properties *
UF: antinociceptive effect *
BT1: medicinal properties
BT2: pharmacology
BT3: Life Sciences

analgesic properties *
USE: analgesic effect

analgesics
BT1: neurotropic drugs
BT2: drugs
BT3: Product Testing and Toxicology

analgesiometry *
USE: analgesia

anesthesia
BT1: animal handling
BT2: animal husbandry
BT3: Animal Care and Welfare
NT1: anesthesia reversal
NT1: depth of anesthesia
RT: anesthetics

anesthesia reversal
BT1: anesthesia
BT2: animal handling
BT3: animal husbandry
BT4: Animal Care and Welfare

anesthetics
BT1: neurotropic drugs
BT2: drugs
BT3: Product Testing and Toxicology
NT1: general anesthetics
NT1: local anesthetics
RT: anesthesia

Anguilla anguilla
UF: European eel *
BT1: (taxonomic nomenclature)
BT2: Organisms
RT: fishes
animal anatomy
BT1: Life Sciences

animal behavior
UF: animal response (behavior) *
BT1: Life Sciences
NT1: abnormal behavior
NT2: stereotyped behavior
NT1: displacement activities
NT1: feeding behavior
NT1: maternal behavior
NT1: social behavior
NT2: social dominance
NT2: social facilitation

Animal Care and Welfare
NT1: animal environment
NT2: ambient temperature
NT2: animal housing
NT3: animal rooms
NT3: animal space requirements
NT3: cage design
NT3: cage size
NT3: cages
NT4: nest boxes
NT4: perches
NT3: group housing
NT3: litter (bedding)
NT3: operating rooms
NT3: pair housing
NT3: pens
NT3: stocking rate
NT2: environmental enrichment
NT3: nestlets
NT3: social enrichment
NT2: lighting
NT2: shade
NT2: ventilation and air circulation
NT1: animal health
NT2: morbidity
NT3: ascites
NT2: mortality
NT1: animal husbandry
NT2: animal feeding
NT3: adapted feeding
NT3: feed withdrawal
NT3: water deprivation
NT2: animal handling
NT3: anesthesia
NT4: anesthesia reversal
NT4: depth of anesthesia
Animal Use Alternatives Alphabetical Report

NT3: animal use refinement
NT3: blood sampling
   NT4: saphenous vein puncture
   NT4: sublingual vein puncture
NT3: capture of animals
NT3: herding
NT3: postoperative care
NT3: preoperative care
NT3: restraint of animals
NT3: surgery
   NT4: laser surgery
NT2: animal identification
   NT3: radio frequency identification
NT2: stocking rate
NT2: training (animals)
NT1: animal use alternatives
NT2: animal use reduction
NT2: animal use refinement
NT2: animal use replacement
NT1: animal welfare
NT2: analgesia
NT2: animal preferences
NT2: animal stress
   NT3: abiotic stress
   NT4: cold stress
      NT5: hypothermia
   NT4: heat stress
   NT3: distress
NT2: animal use refinement
NT2: animal well-being
NT2: death
NT3: euthanasia
   NT4: asphyxiation
   NT4: cervical dislocation
   NT4: decapitation
NT2: distress
NT2: pain
NT1: training of animal technicians

animal cell lines
   BT1: cell lines
   BT2: in vitro culture
      BT3: culture techniques
         BT4: Biomedical and Laboratory Methods
         BT4: Non-whole Animal Systems
   RT: mouse lymphoma assay

animal choices *
USE: animal preferences

animal density *
USE: stocking rate

animal disease models
BT1: animal models
BT2: animal experiments
   BT3: Biomedical and Laboratory Methods

animal environment
BT1: Animal Care and Welfare
   NT1: ambient temperature
   NT1: animal housing
   NT2: animal rooms
   NT2: animal space requirements
   NT2: cage design
   NT2: cage size
   NT2: cages
   NT3: nest boxes
   NT3: perches
   NT2: group housing
   NT2: litter (bedding)
   NT2: operating rooms
   NT2: pair housing
   NT2: pens
   NT2: stocking rate
   NT1: environmental enrichment
   NT2: nestlets
   NT2: social enrichment
   NT1: lighting
   NT1: shade
   NT1: ventilation and air circulation

animal experiments
BT1: Biomedical and Laboratory Methods
   NT1: animal models
   NT2: animal disease models
   NT1: surgery
   NT2: laser surgery

animal feeding
BT1: animal husbandry
   BT2: Animal Care and Welfare
   NT1: adapted feeding
   NT1: feed withdrawal
   NT1: water deprivation

animal handlers *
 USE: animal technicians

animal handling
BT1: animal husbandry
   BT2: Animal Care and Welfare
NT1: anesthesia
NT2: anesthesia reversal
NT2: depth of anesthesia
NT1: animal use refinement
NT1: blood sampling
NT2: saphenous vein puncture
NT2: sublingual vein puncture
NT1: capture of animals
NT1: herding
NT1: postoperative care
NT1: preoperative care
NT1: restraint of animals
NT1: surgery
NT2: laser surgery
RT: standard operating procedures

animal health
BT1: Animal Care and Welfare
NT1: morbidity
NT2: ascites
NT1: mortality

animal housing
BT1: animal environment
    BT2: Animal Care and Welfare
NT1: animal rooms
NT1: animal space requirements
NT1: cage design
NT1: cage size
NT1: cages
NT2: nest boxes
NT2: perches
NT1: group housing
NT1: litter (bedding)
NT1: operating rooms
NT1: pair housing
NT1: pens
NT1: stocking rate

animal husbandry
BT1: Animal Care and Welfare
NT1: animal feeding
NT2: adapted feeding
NT2: feed withdrawal
NT2: water deprivation
NT1: animal handling
NT2: anesthesia
    NT3: anesthesia reversal
    NT3: depth of anesthesia
    NT2: animal use refinement
    NT2: blood sampling
NT3: saphenous vein puncture
NT3: sublingual vein puncture
NT2: capture of animals
NT2: herding
NT2: postoperative care
NT2: preoperative care
NT2: restraint of animals
NT2: surgery
NT3: laser surgery
NT1: animal identification
NT2: radio frequency identification
NT1: stocking rate
NT1: training (animals)
RT: euthanasia

animal identification
UF: marking of animals *
BT1: animal husbandry
BT2: Animal Care and Welfare
NT1: radio frequency identification

animal law
UF: animal legislation *
UF: animal regulations *
BT1: legislation
BT2: Government, Law, and Regulations

animal legislation *
USE: animal law

animal models
UF: models, animal *
BT1: animal experiments
BT2: Biomedical and Laboratory Methods
NT1: animal disease models
SN: Animals with conditions similar to human diseases.

animal numbers
BT1: Biomedical and Laboratory Methods
RT: animal use reduction
RT: experimental design

animal preferences
UF: animal choices *
UF: choices, animal *
UF: preferences, animal *
BT1: animal welfare
BT2: Animal Care and Welfare
BT2: bioethics
BT3: ethics
BT4: philosophy
animal regulations *
USE: animal law

animal response (behavior) *
USE: animal behavior

animal rooms
BT1: animal housing
BT2: animal environment
BT3: Animal Care and Welfare

animal space requirements
UF: space requirements *
BT1: animal housing
BT2: animal environment
BT3: Animal Care and Welfare
RT: cage size
RT: stocking rate

animal stress
BT1: animal welfare
BT2: Animal Care and Welfare
BT2: bioethics
BT3: ethics
BT4: philosophy
BT5: Human and Social Issues
NT1: abiotic stress
NT2: cold stress
NT3: hypothermia
NT2: heat stress
NT1: distress

animal technicians
UF: animal handlers *
BT1: people
BT2: Human and Social Issues
RT: training of animal technicians

animal testing alternatives *
USE: animal use alternatives

animal testing reduction *
USE: animal use reduction

animal testing refinement *
USE: animal use refinement

animal testing replacement *
USE: animal use replacement
animal tests
  BT1: laboratory tests
  BT2: Biomedical and Laboratory Methods
NT1: acute toxic class method
NT1: eye irritation tests
NT1: fixed dose procedure
NT1: local lymph node assay
NT1: up-and-down method

animal training *
USE: training (animals)

animal use alternatives
UF: alternatives to animal testing *
UF: animal testing alternatives *
BT1: Animal Care and Welfare
NT1: animal use reduction
NT1: animal use refinement
NT1: animal use replacement

animal use reduction
UF: animal testing reduction *
UF: reduction, animal testing *
BT1: animal use alternatives
  BT2: Animal Care and Welfare
  BT1: experimental design
  BT2: Biomedical and Laboratory Methods
RT: animal numbers

animal use refinement
UF: animal testing refinement *
UF: refinement, animal testing *
BT1: animal handling
  BT2: animal husbandry
    BT3: Animal Care and Welfare
    BT1: animal use alternatives
    BT2: Animal Care and Welfare
BT1: animal welfare
  BT2: Animal Care and Welfare
  BT2: bioethics
    BT3: ethics
    BT4: philosophy
    BT5: Human and Social Issues

animal use replacement
UF: animal testing replacement *
UF: replacement, animal testing *
BT1: animal use alternatives
  BT2: Animal Care and Welfare
RT: computer software
RT: simulation

animal welfare
BT1: Animal Care and Welfare
BT1: bioethics
BT2: ethics
BT3: philosophy
  BT4: Human and Social Issues
NT1: analgesia
NT1: animal preferences
NT1: animal stress
NT2: abiotic stress
NT3: cold stress
  NT4: hypothermia
NT3: heat stress
NT2: distress
NT1: animal use refinement
NT1: animal well-being
NT1: death
NT2: euthanasia
  NT3: asphyxiation
  NT3: cervical dislocation
  NT3: decapitation
NT1: distress
NT1: pain
RT: abnormal behavior
RT: Institutional Animal Care and Use Committees

animal well-being
UF: animal wellbeing *
UF: well-being, animal
BT1: animal welfare
BT2: Animal Care and Welfare
BT2: bioethics
BT3: ethics
BT4: philosophy
  BT5: Human and Social Issues

animal wellbeing *
USE: animal well-being

animals
UF: nonhuman animals *
BT1: Organisms
NT1: animals in education
NT1: invertebrates
NT2: amphipods
NT2: cephalopods
NT2: earthworms
NT2: insects
NT2: macroinvertebrates
NT2: sea urchins
NT2: laboratory animals
NT2: germ-free animals
NT3: specific pathogen-free animals
NT2: laboratory mammals
NT3: laboratory primates
NT3: transgenic animals
NT1: vertebrates
NT2: amphibians
NT3: caecilians
NT3: frogs
NT4: tadpoles
NT3: newts
NT2: birds
NT3: chickens
NT3: pigeons
NT2: fishes
NT2: mammals
NT3: cats
NT3: dogs
NT3: gerbils
NT3: guinea pigs
NT3: hamsters
NT3: mice
NT3: nonhuman primates
NT4: chimpanzees
NT4: monkeys
NT3: rabbits
NT3: rats
NT2: reptiles

animals in education
BT1: animals
BT2: Organisms
BT1: Science Education

anti-anxiety agents *
USE: tranquilizers

anti-inflammatory activity
UF: anti-inflammatory effect *
UF: anti-inflammatory properties *
UF: antiinflammatory activity *
UF: antiinflammatory effect *
UF: antiinflammatory properties *
BT1: medicinal properties
BT2: pharmacology
BT3: Life Sciences

anti-inflammatory drugs
BT1: drugs
BT2: Product Testing and Toxicology

anti-inflammatory effect *
USE: anti-inflammatory activity

anti-inflammatory properties *
USE: anti-inflammatory activity

antibody production
BT1: Biomedical and Laboratory Methods
RT: ascites

antiinflammatory activity *
USE: anti-inflammatory activity

antiinflammatory effect *
USE: anti-inflammatory activity

antiinflammatory properties *
USE: anti-inflammatory activity

antinociceptive effect *
USE: analgesic effect

anxiolytics *
USE: tranquilizers

artificial neural networks *
USE: neural networks

artificial skin
BT1: Non-whole Animal Systems

ascites
BT1: morbidity
BT2: animal health
BT3: Animal Care and Welfare
RT: antibody production

asphyxiation
BT1: euthanasia
BT2: death
BT3: animal welfare
BT4: Animal Care and Welfare
BT4: bioethics
BT5: ethics
BT6: philosophy
BT7: Human and Social Issues

assays
BT1: laboratory tests
Animal Use Alternatives Alphabetical Report

**BT1: Non-whole Animal Systems**

**NT1: video technology**

**NT2: enzyme-linked immunosorbent assay**

**NT3: bioluminescent bacterial genotoxicity test**

**NT1: germ-free animals**

**NT1: somatic mutation and recombination assay**

**NT1: yeast mutagenicity assay**

**NT1: immunoassay**

**NT1: Ames test**

**NT1: bioluminescence assays**

**NT1: bioluminescent bacterial genotoxicity test**

**NT1: bone marrow micronucleus assay**

**NT2: cell transformation assay**

**NT2: cytotoxicity assays**

**NT2: eye irritation tests**

**NT2: frog embryo teratogenesis assay--Xenopus**

**NT2: fungal viability assay**

**NT2: Limulus amebocyte lysate assay**

**NT2: local lymph node assay**

**NT2: mouse lymphoma assay**

**NT2: somatic mutation and recombination assay**

**NT2: yeast mutagenicity assay**

**NT2: enzyme-linked immunosorbent assay**

**BT2: Biomedical and Laboratory Methods**

**NT1: bioassays**

**NT2: Ames test**

**NT2: bioluminescence assays**

**NT3: bioluminescent bacterial genotoxicity test**

**NT2: bone marrow micronucleus assay**

**NT2: cell transformation assay**

**NT2: cytotoxicity assays**

**NT2: eye irritation tests**

**NT2: frog embryo teratogenesis assay--Xenopus**

**NT2: fungal viability assay**

**NT2: Limulus amebocyte lysate assay**

**NT2: local lymph node assay**

**NT2: mouse lymphoma assay**

**NT2: somatic mutation and recombination assay**

**NT2: yeast mutagenicity assay**

**NT1: immunoassay**

**NT2: enzyme-linked immunosorbent assay**

**audiovisual aids**

**BT1: Organisms**

**RT: Pseudomonas fluorescens**

**RT: Vibrio fischeri**

**baseline values**

**USE: normal values**

**bioassays**

**BT1: assays**

**BT2: laboratory tests**

**BT3: Biomedical and Laboratory Methods**

**NT1: Ames test**

**NT1: bioluminescence assays**

**NT2: bioluminescent bacterial genotoxicity test**

**NT1: bone marrow micronucleus assay**

**NT1: cell transformation assay**

**NT1: cytotoxicity assays**
NT1: eye irritation tests
NT1: frog embryo teratogenesis assay--Xenopus
NT1: fungal viability assay
NT1: Limulus amebocyte lysate assay
NT1: local lymph node assay
NT1: mouse lymphoma assay
NT1: somatic mutation and recombination assay
NT1: yeast mutagenicity assay

biochemistry
BT1: Life Sciences
NT1: biodegradation
NT1: enzymes
NT2: enzyme activity
NT1: pharmacokinetics
NT1: structure activity relationships
NT2: quantitative structure activity relationships

biocompatibility
BT1: product properties
BT2: products
BT3: Product Testing and Toxicology

biodegradation
BT1: biochemistry
BT2: Life Sciences

bioethics
BT1: ethics
BT2: philosophy
BT3: Human and Social Issues
NT1: animal welfare
NT2: analgesia
NT2: animal preferences
NT2: animal stress
NT3: abiotic stress
NT4: cold stress
NT5: hypothermia
NT4: heat stress
NT3: distress
NT2: animal use refinement
NT2: animal well-being
NT2: death
NT3: euthanasia
NT4: asphyxiation
NT4: cervical dislocation
NT4: decapitation
NT2: distress
NT2: pain

bioluminescence assays
UF: Microtox (R) *
BT1: bioassays
BT2: assays
BT3: laboratory tests
BT4: Biomedical and Laboratory Methods
NT1: bioluminescent bacterial genotoxicity test

bioluminescent bacterial genotoxicity test
UF: Mutatox (R) assay *
BT1: bioluminescence assays
BT2: bioassays
BT3: assays
BT4: laboratory tests
BT5: Biomedical and Laboratory Methods

biomarkers
BT1: indicators
BT2: Biomedical and Laboratory Methods
RT: enzyme activity
RT: metabolites

Biomedical and Laboratory Methods
NT1: animal experiments
NT2: animal models
NT3: animal disease models
NT2: surgery
NT3: laser surgery
NT1: animal numbers
NT1: antibody production
NT1: culture techniques
NT2: in vitro culture
NT3: cell culture
NT4: cloning (cells)
NT3: cell lines
NT4: animal cell lines
NT4: human cell lines
NT3: coculture
NT3: enrichment culture
NT3: explants
NT3: organ culture
NT3: ovule culture
NT3: tissue culture
NT4: embryo culture
NT4: human tissue cultures
NT1: dosage
NT2: inhibitory concentration 50
NT2: lethal concentration 50
NT2: lethal dose 50
NT2: no observed adverse effect level
NT1: equipment
NT2: bioreactors
NT2: laboratory equipment
NT3: hollow fiber reactors
NT2: medical devices
NT1: experimental design
NT2: animal use reduction
NT2: endpoints
NT3: humane endpoints
NT1: indicators
NT2: biomarkers
NT2: indicator species
NT1: laboratory methods
NT2: cryopreservation
NT2: polymerase chain reaction
NT1: laboratory tests
NT2: animal tests
NT3: acute toxic class method
NT3: eye irritation tests
NT3: fixed dose procedure
NT3: local lymph node assay
NT3: up-and-down method
NT2: assays
NT3: bioassays
NT4: Ames test
NT4: bioluminescence assays
NT5: bioluminescent bacterial genotoxicity test
NT4: bone marrow micronucleus assay
NT4: cell transformation assay
NT4: cytotoxicity assays
NT4: eye irritation tests
NT4: frog embryo teratogenesis assay--Xenopus
NT4: fungal viability assay
NT4: Limulus amebocyte lysate assay
NT4: local lymph node assay
NT4: mouse lymphoma assay
NT4: somatic mutation and recombination assay
NT4: yeast mutagenicity assay
NT3: immunoassay
NT4: enzyme-linked immunosorbent assay
NT2: nonanimal tests
NT2: skin tests
NT3: skin irritancy tests
NT4: patch test
NT3: skin prick test
NT1: statistics
NT2: estimation
NT3: risk assessment
NT2: normal values
NT2: prediction

bioreactors
BT1: equipment
birds
BT1: vertebrates
BT2: animals
BT3: Organisms
NT1: chickens
NT1: pigeons

blood collection *
USE: blood sampling

blood drawing *
USE: blood sampling

blood sampling
UF: blood collection *
UF: blood drawing *
BT1: animal handling
BT2: animal husbandry
BT3: Animal Care and Welfare
NT1: saphenous vein puncture
NT1: sublingual vein puncture

bone marrow cells
BT1: cells
BT2: Life Sciences

bone marrow micronucleus assay
UF: micronucleus test *
BT1: bioassays
BT2: assays
BT3: laboratory tests
BT4: Biomedical and Laboratory Methods

Brachydanio rerio
UF: Danio rerio *
UF: zebrafish *
BT1: (taxonomic nomenclature)
BT2: Organisms
RT: fishes

breeding
BT1: Life Sciences
NT1: lines
NT2: inbred lines
NT1: strains

(return to top)
cadavers
BT1: Non-whole Animal Systems

caecilians
BT1: amphibians
BT2: vertebrates
BT3: animals
BT4: Organisms

cage density *
USE: stocking rate

cage design
BT1: animal housing
BT2: animal environment
  BT3: Animal Care and Welfare
BT1: design
  BT2: Human and Social Issues
  RT: environmental enrichment
  
cage size
BT1: animal housing
BT2: animal environment
  BT3: Animal Care and Welfare
  RT: animal space requirements
  RT: cages


cages
BT1: animal housing
BT2: animal environment
  BT3: Animal Care and Welfare
NT1: nest boxes
NT1: perches
  RT: cage size


capture of animals
BT1: animal handling
BT2: animal husbandry
  BT3: Animal Care and Welfare

carcinogenicity
UF: oncogenicity
BT1: toxicity
  BT2: toxicology
  BT3: Product Testing and Toxicology

CASE *
USE: computer automated structure evaluation

cats
BT1: mammals
BT2: vertebrates
BT3: animals
BT4: Organisms

cell culture
BT1: in vitro culture
BT2: culture techniques
BT3: Biomedical and Laboratory Methods
BT3: Non-whole Animal Systems
NT1: cloning (cells)

cell lines
BT1: in vitro culture
BT2: culture techniques
BT3: Biomedical and Laboratory Methods
BT3: Non-whole Animal Systems
NT1: animal cell lines
NT1: human cell lines

cell transformation assay
BT1: bioassays
BT2: assays
BT3: laboratory tests
BT4: Biomedical and Laboratory Methods

cells
BT1: Life Sciences
NT1: bone marrow cells
NT1: hybridomas
NT1: keratinocytes
NT1: kidney cells
NT1: liver cells
NT1: stem cells
NT2: embryonic stem cells

cephalopods
BT1: invertebrates
BT2: animals
BT3: Organisms

cervical dislocation
BT1: euthanasia
BT2: death
BT3: animal welfare
BT4: Animal Care and Welfare
BT4: bioethics
BT5: ethics
chickens
BT1: birds
BT2: vertebrates
BT3: animals
BT4: Organisms

chimpanzees
UF: Pan troglodytes *
BT1: nonhuman primates
BT2: mammals
BT3: vertebrates
BT4: animals
BT5: Organisms

choices, animal *
USE: animal preferences

chronic toxicity
BT1: toxicity
BT2: toxicology
BT3: Product Testing and Toxicology

cloning (cells)
BT1: cell culture
BT2: in vitro culture
BT3: culture techniques
BT4: Biomedical and Laboratory Methods
BT4: Non-whole Animal Systems
RT: genetics

coculture
BT1: in vitro culture
BT2: culture techniques
BT3: Biomedical and Laboratory Methods
BT3: Non-whole Animal Systems

codes of practice
BT1: standards
BT2: Government, Law, and Regulations

cold stress
BT1: abiotic stress
BT2: animal stress
BT3: animal welfare
BT4: Animal Care and Welfare
BT4: bioethics
BT5: ethics
BT6: philosophy
Animal Use Alternatives Alphabetical Report

BT7: Human and Social Issues
NT1: hypothermia

committees
BT1: organizations
BT2: Human and Social Issues
NT1: advisory committees
NT2: Interagency Coordinating Committee on the Validation of Alternative Methods
RT: Institutional Animal Care and Use Committees

computer automated structure evaluation
UF: CASE *
BT1: computer software
BT2: Non-whole Animal Systems
RT: structure activity relationships

computer models
BT1: computer software
BT2: Non-whole Animal Systems

computer programmes *
USE: computer software

computer programs *
USE: computer software

computer software
UF: computer programmes *
UF: computer programs *
BT1: Non-whole Animal Systems
NT1: computer automated structure evaluation
NT1: computer models
NT1: expert systems
NT1: interactive programs
NT1: neural networks
NT1: virtual reality
RT: animal use replacement

Corrositex (R) *
USE: skin irritancy tests

cosmetics
BT1: products
BT2: Product Testing and Toxicology

cosmetics testing
BT1: product testing
BT2: Product Testing and Toxicology

cryopreservation
BT1: laboratory methods
BT2: Biomedical and Laboratory Methods

culture techniques
BT1: Biomedical and Laboratory Methods
BT1: Non-whole Animal Systems
NT1: in vitro culture
NT2: cell culture
NT3: cloning (cells)
NT2: cell lines
NT3: animal cell lines
NT3: human cell lines
NT2: coculture
NT2: enrichment culture
NT2: explants
NT2: organ culture
NT2: ovule culture
NT2: tissue culture
NT3: embryo culture
NT3: human tissue cultures

cynomolgus monkeys *
USE: Macaca fascicularis

cytotoxicity
BT1: toxicity
BT2: toxicology
BT3: Product Testing and Toxicology

cytotoxicity assays
BT1: bioassays
BT2: assays
BT3: laboratory tests
BT4: Biomedical and Laboratory Methods

D

Danio rerio *
USE: Brachydanio rerio

Daphnia magna
BT1: (taxonomic nomenclature)
BT2: Organisms

death
BT1: animal welfare
BT2: Animal Care and Welfare
Animal Use Alternatives Alphabetical Report

BT2: bioethics
BT3: ethics
BT4: philosophy
BT5: Human and Social Issues

NT1: euthanasia
NT2: asphyxiation
NT2: cervical dislocation
NT2: decapitation

decapitation
BT1: euthanasia
BT2: death
BT3: animal welfare
BT4: Animal Care and Welfare
BT4: bioethics
BT5: ethics
BT6: philosophy
BT7: Human and Social Issues

depth of anesthesia
UF: plane of anesthesia *
BT1: anesthesia
BT2: animal handling
BT3: animal husbandry
BT4: Animal Care and Welfare

dermal irritancy tests *
USE: skin irritancy tests
dermal irritation *
USE: skin irritation
dermal sensitization
UF: skin sensitization *
BT1: acute toxicity
BT2: toxicity
BT3: toxicology
BT4: Product Testing and Toxicology

design
BT1: Human and Social Issues
NT1: cage design
discomfort *
USE: pain
displacement activities
BT1: animal behavior
BT2: Life Sciences
distress
UF: mental stress *
UF: psychological stress *
UF: stress, psychological *
BT1: animal stress
BT2: animal welfare
BT3: Animal Care and Welfare
BT3: bioethics
BT4: ethics
BT5: philosophy
BT6: Human and Social Issues

BT1: animal welfare
BT2: Animal Care and Welfare
BT2: bioethics
BT3: ethics
BT4: philosophy
BT5: Human and Social Issues

DNA
BT1: genetics
BT2: Life Sciences

dogs
BT1: mammals
BT2: vertebrates
BT3: animals
BT4: Organisms

dosage
BT1: Biomedical and Laboratory Methods
NT1: inhibitory concentration 50
NT1: lethal concentration 50
NT1: lethal dose 50
NT1: no observed adverse effect level
RT: drugs
RT: experimental design

Draize eye test *
USE: eye irritation tests

Draize rabbit eye test *
USE: eye irritation tests

Drosophila melanogaster
BT1: (taxonomic nomenclature)
BT2: Organisms
RT: insects

drug testing
BT1: product testing
BT2: Product Testing and Toxicology
drug toxicity
BT1: toxicity
BT2: toxicology
BT3: Product Testing and Toxicology

drugs
BT1: Product Testing and Toxicology
NT1: anti-inflammatory drugs
NT1: neurotropic drugs
NT2: analgesics
NT2: anesthetics
NT3: general anesthetics
NT3: local anesthetics
NT2: opioids
NT2: sedatives
NT2: tranquilizers
RT: dosage

dummies *
USE: mannequins

(\textit{return to top})

E

earthworms
BT1: invertebrates
BT2: animals
BT3: Organisms

ecological toxicity *
USE: ecotoxicity

ecotoxicity
UF: ecological toxicity *
UF: ecotoxicology *
BT1: toxicity
BT2: toxicology
BT3: Product Testing and Toxicology

ecotoxicology *
USE: ecotoxicity

efficacy testing
BT1: Product Testing and Toxicology

ELISA *
USE: enzyme-linked immunosorbent assay

embryo culture
BT1: tissue culture
BT2: in vitro culture
BT3: culture techniques
BT4: Biomedical and Laboratory Methods
BT4: Non-whole Animal Systems

embryonic stem cells
BT1: stem cells
BT2: cells
BT3: Life Sciences

embryotoxicity
BT1: toxicity
BT2: toxicology
BT3: Product Testing and Toxicology

endotoxins
BT1: toxic substances
BT2: toxicology
BT3: Product Testing and Toxicology
RT: Limulus amebocyte lysate assay

endpoints
BT1: experimental design
BT2: Biomedical and Laboratory Methods
NT1: humane endpoints

enrichment culture
BT1: in vitro culture
BT2: culture techniques
BT3: Biomedical and Laboratory Methods
BT3: Non-whole Animal Systems

environmental enhancement *
USE: environmental enrichment

environmental enrichment
UF: environmental enhancement *
BT1: animal environment
BT2: Animal Care and Welfare
NT1: nestlets
NT1: social enrichment
RT: cage design
SN: Enhancing the environment of confined animals in order to encourage natural behaviors and improve their quality of life. [Jensen & Kreger, 1997.]

enzyme activity
enzyme-linked immunosorbent assay
UF: ELISA *
BT1: immunoassay
BT2: assays
BT3: laboratory tests
BT4: Biomedical and Laboratory Methods

enzymes
BT1: biochemistry
BT2: Life Sciences
NT1: enzyme activity

equipment
BT1: Biomedical and Laboratory Methods
BT1: Non-whole Animal Systems
NT1: bioreactors
NT1: laboratory equipment
NT2: hollow fiber reactors
NT1: medical devices

Escherichia coli
BT1: (taxonomic nomenclature)
BT2: Organisms

estimation
BT1: mathematical models
BT2: Non-whole Animal Systems
BT1: statistics
BT2: Biomedical and Laboratory Methods
NT1: risk assessment

ethics
BT1: philosophy
BT2: Human and Social Issues
NT1: bioethics
NT2: animal welfare
NT3: analgesia
NT3: animal preferences
NT3: animal stress
NT4: abiotic stress
NT5: cold stress
NT6: hypothermia
NT5: heat stress
NT4: distress
NT3: animal use refinement
NT3: animal well-being
NT3: death
NT4: euthanasia
NT5: asphyxiation
NT5: cervical dislocation
NT5: decapitation
NT3: distress
NT3: pain

European eel *
USE: Anguilla anguilla
euthanasia
UF: humane killing *
UF: mercy killing *
BT1: death
BT2: animal welfare
BT3: Animal Care and Welfare
BT3: bioethics
BT4: ethics
BT5: philosophy
BT6: Human and Social Issues
NT1: asphyxiation
NT1: cervical dislocation
NT1: decapitation
RT: animal husbandry

experimental design
BT1: Biomedical and Laboratory Methods
NT1: animal use reduction
NT1: endpoints
NT2: humane endpoints
RT: animal numbers
RT: dosage
RT: indicators
RT: statistics
RT: validation

expert systems
BT1: computer software
BT2: Non-whole Animal Systems

explants
BT1: in vitro culture
BT2: culture techniques
BT3: Biomedical and Laboratory Methods
BT3: Non-whole Animal Systems

eye irritation
BT1: acute toxicity
BT2: toxicity
BT3: toxicology
BT4: Product Testing and Toxicology

eye irritation tests
UF: Draize eye test *
UF: Draize rabbit eye test *
UF: ocular irritation test *
BT1: animal tests
BT2: laboratory tests
BT3: Biomedical and Laboratory Methods
BT1: bioassays
BT2: assays
BT3: laboratory tests
BT4: Biomedical and Laboratory Methods
RT: skin irritancy tests

(return to top)

F

facility management
BT1: Human and Social Issues

fathead minnow *
USE: Pimephales promelas

feed deprivation *
USE: feed withdrawal

feed withdrawal
UF: feed deprivation *
BT1: animal feeding
BT2: animal husbandry
BT3: Animal Care and Welfare

feeding behavior
BT1: animal behavior
BT2: Life Sciences

FETAX *
USE: frog embryo teratogenesis assay--Xenopus

fishes
BT1: vertebrates
BT2: animals
BT3: Organisms
RT: Anguilla anguilla
RT: Brachydanio rerio
RT: Oryzias latipes
fixed dose procedure
BT1: animal tests
BT2: laboratory tests
BT3: Biomedical and Laboratory Methods
RT: acute oral toxicity

frog embryo teratogenesis assay--Xenopus
UF: FETAX *
BT1: bioassays
BT2: assays
BT3: laboratory tests
BT4: Biomedical and Laboratory Methods
RT: Xenopus laevis

frogs
BT1: amphibians
BT2: vertebrates
BT3: animals
BT4: Organisms
NT1: tadpoles
RT: Xenopus laevis

fungal viability assay
BT1: bioassays
BT2: assays
BT3: laboratory tests
BT4: Biomedical and Laboratory Methods

fungi
BT1: Organisms
RT: Neurospora crassa

G

general anesthetics
BT1: anesthetics
BT2: neurotropic drugs
BT3: drugs
BT4: Product Testing and Toxicology

genetics
BT1: Life Sciences
NT1: DNA
NT1: line differences
NT1: mutants
NT2: knockout mutants
NT1: polymerase chain reaction
NT1: RNA
NT1: strain differences
RT: cloning (cells)

genotoxicity
BT1: toxicity
BT2: toxicology
BT3: Product Testing and Toxicology

ergibils
BT1: mammals
BT2: vertebrates
BT3: animals
BT4: Organisms

germ free animals *
USE: germ-free animals

gerf-free animals
UF: axenic animals *
UF: germ free animals *
UF: germfree animals *
UF: gnotobiotic animals *
UF: pathogen free animals (complete) *
UF: pathogen-free animals (complete) *
BT1: laboratory animals
BT2: animals
BT3: Organisms
NT1: specific pathogen-free animals

gerffree animals *
USE: germ-free animals

gnotobiotic animals *
USE: germ-free animals

Government, Law, and Regulations
NT1: guidelines
NT1: legislation
NT2: animal law
NT1: policy
NT1: regulations
NT1: standards
NT2: codes of practice
NT2: standard operating procedures

group housing
BT1: animal housing
BT2: animal environment
Animal Use Alternatives Alphabetical Report

BT3: Animal Care and Welfare

guidelines
BT1: Government, Law, and Regulations
RT: regulations

guinea pigs
BT1: mammals
BT2: vertebrates
BT3: animals
BT4: Organisms

(return to top)

H

hamsters
BT1: mammals
BT2: vertebrates
BT3: animals
BT4: Organisms

heat shock proteins
BT1: physiology
BT2: Life Sciences

heat stress
BT1: abiotic stress
BT2: animal stress
BT3: animal welfare
BT4: Animal Care and Welfare
BT4: bioethics
BT5: ethics
BT6: philosophy
BT7: Human and Social Issues

hepatocytes
USE: liver cells

hepatotoxicity
BT1: toxicity
BT2: toxicology
BT3: Product Testing and Toxicology

herding
BT1: animal handling
BT2: animal husbandry
BT3: Animal Care and Welfare
history
BT1: Human and Social Issues

hollow fiber reactors
BT1: laboratory equipment
  BT2: equipment
    BT3: Biomedical and Laboratory Methods
    BT3: Non-whole Animal Systems

household products
BT1: products
  BT2: Product Testing and Toxicology

Human and Social Issues
NT1: design
  NT2: cage design
NT1: facility management
NT1: history
NT1: human-animal relations
NT1: organizations
NT2: committees
  NT3: advisory committees
    NT4: Interagency Coordinating Committee on the Validation of Alternative Methods
NT1: people
NT2: animal technicians
NT2: researchers
NT3: principal investigators
NT2: veterinarians
NT1: philosophy
NT2: ethics
NT3: bioethics
  NT4: animal welfare
    NT5: analgesia
    NT5: animal preferences
    NT5: animal stress
    NT6: abiotic stress
      NT7: cold stress
      NT8: hypothermia
      NT7: heat stress
    NT6: distress
    NT5: animal use refinement
    NT5: animal well-being
    NT5: death
    NT6: euthanasia
      NT7: asphyxiation
      NT7: cervical dislocation
      NT7: decapitation
    NT5: distress
    NT5: pain
NT1: zoonoses
human cell lines
BT1: cell lines
BT2: in vitro culture
BT3: culture techniques
BT4: Biomedical and Laboratory Methods
BT4: Non-whole Animal Systems

human tissue cultures
BT1: tissue culture
BT2: in vitro culture
BT3: culture techniques
BT4: Biomedical and Laboratory Methods
BT4: Non-whole Animal Systems

human-animal interactions *
USE: human-animal relations

human-animal relations
UF: human-animal interactions *
BT1: Human and Social Issues

humane endpoints
BT1: endpoints
BT2: experimental design
BT3: Biomedical and Laboratory Methods

humane killing *
USE: euthanasia

Hyallela azteca
BT1: (taxonomic nomenclature)
BT2: Organisms
RT: amphipods

hybridomas
BT1: cells
BT2: Life Sciences

hypothermia
BT1: cold stress
BT2: abiotic stress
BT3: animal stress
BT4: animal welfare
BT5: Animal Care and Welfare
BT5: bioethics
BT6: ethics
BT7: philosophy
BT8: Human and Social Issues

(return to top)
IACUC *
USE: Institutional Animal Care and Use Committees

IC50
USE: inhibitory concentration 50

ICCVAM *
USE: Interagency Coordinating Committee on the Validation of Alternative Methods

immunoassay
BT1: assays
BT2: laboratory tests
BT3: Biomedical and Laboratory Methods
NT1: enzyme-linked immunosorbent assay

in vitro culture
BT1: culture techniques
BT2: Biomedical and Laboratory Methods
BT2: Non-whole Animal Systems
NT1: cell culture
NT2: cloning (cells)
NT1: cell lines
NT2: animal cell lines
NT2: human cell lines
NT1: coculture
NT1: enrichment culture
NT1: explants
NT1: organ culture
NT1: ovule culture
NT1: tissue culture
NT2: embryo culture
NT2: human tissue cultures

inbred lines
BT1: lines
BT2: breeding
BT3: Life Sciences

indicator species
BT1: indicators
BT2: Biomedical and Laboratory Methods
BT1: Organisms

indicators
BT1: Biomedical and Laboratory Methods
NT1: biomarkers
Animal Use Alternatives Alphabetical Report

NT1: indicator species
RT: experimental design

inhibitory concentration 50
UF: IC50
BT1: dosage
BT2: Biomedical and Laboratory Methods

insects
BT1: invertebrates
BT2: animals
BT3: Organisms
RT: Drosophila melanogaster

Institutional Animal Care and Use Committees
UF: IACUC *
NT1: membership
NT1: protocol review
NT1: whistleblowing
RT: animal welfare
RT: committees
RT: laboratory animals

interactive programs
BT1: computer software
BT2: Non-whole Animal Systems

Interagency Coordinating Committee on the Validation of Alternative Methods
UF: ICCVAM *
BT1: advisory committees
BT2: committees
BT3: organizations
BT4: Human and Social Issues
RT: validation

invertebrates
BT1: animals
BT2: Organisms
NT1: amphipods
NT1: cephalopods
NT1: earthworms
NT1: insects
NT1: macroinvertebrates
NT1: sea urchins
RT: Limulus polyphemus

irritant properties
BT1: product properties
BT2: products
BT3: Product Testing and Toxicology
K

keratinocytes
BT1: cells
BT2: Life Sciences

kidney cells
BT1: cells
BT2: Life Sciences

knockout mutants
BT1: mutants
BT2: genetics
BT3: Life Sciences

L

laboratory animals
BT1: animals
BT2: Organisms
NT1: germ-free animals
NT2: specific pathogen-free animals
NT1: laboratory mammals
NT2: laboratory primates
RT: Institutional Animal Care and Use Committees

laboratory equipment
BT1: equipment
BT2: Biomedical and Laboratory Methods
BT2: Non-whole Animal Systems
NT1: hollow fiber reactors

laboratory mammals
BT1: laboratory animals
BT2: animals
BT3: Organisms
NT1: laboratory primates

laboratory methods
UF: methods, laboratory
UF: techniques, laboratory
Animal Use Alternatives Alphabetical Report

BT1: Biomedical and Laboratory Methods
NT1: cryopreservation
NT1: polymerase chain reaction

laboratory primates
BT1: laboratory mammals
BT2: laboratory animals
BT3: animals
BT4: Organisms
RT: monkeys
RT: nonhuman primates

laboratory tests
UF: testing, laboratory *
BT1: Biomedical and Laboratory Methods
NT1: animal tests
NT2: acute toxic class method
NT2: eye irritation tests
NT2: fixed dose procedure
NT2: local lymph node assay
NT2: up-and-down method
NT1: assays
NT2: bioassays
NT3: Ames test
NT3: bioluminescence assays
NT4: bioluminescent bacterial genotoxicity test
NT3: bone marrow micronucleus assay
NT3: cell transformation assay
NT3: cytotoxicity assays
NT3: eye irritation tests
NT3: frog embryo teratogenesis assay--Xenopus
NT3: fungal viability assay
NT3: Limulus amebocyte lysate assay
NT3: local lymph node assay
NT3: mouse lymphoma assay
NT3: somatic mutation and recombination assay
NT3: yeast mutagenicity assay
NT2: immunoassay
NT3: enzyme-linked immunosorbent assay
NT1: nonanimal tests
NT1: skin tests
NT2: skin irritancy tests
NT3: patch test
NT2: skin prick test

LAL *
USE: Limulus amebocyte lysate assay

laser surgery
BT1: surgery
BT2: animal experiments
BT3: Biomedical and Laboratory Methods
BT2: animal handling
BT3: animal husbandry
BT4: Animal Care and Welfare

LC 50 *
USE: lethal concentration 50

LC50 *
USE: lethal concentration 50

LD(50) *
USE: lethal dose 50

LD50 *
USE: lethal dose 50

legislation
BT1: Government, Law, and Regulations
NT1: animal law
RT: regulations

lethal concentration 50
UF: LC 50 *
UF: LC50 *
BT1: dosage
BT2: Biomedical and Laboratory Methods

lethal dose 50
UF: LD(50) *
UF: LD50 *
BT1: dosage
BT2: Biomedical and Laboratory Methods
RT: acute oral toxicity

Life Sciences
NT1: animal anatomy
NT1: animal behavior
NT2: abnormal behavior
NT3: stereotyped behavior
NT2: displacement activities
NT2: feeding behavior
NT2: maternal behavior
NT2: social behavior
NT3: social dominance
NT3: social facilitation
NT1: biochemistry
NT2: biodegradation
NT2: enzymes
NT3: enzyme activity
NT2: pharmacokinetics
NT2: structure activity relationships
NT3: quantitative structure activity relationships
NT1: breeding
NT2: lines
NT3: inbred lines
NT2: strains
NT1: cells
NT2: bone marrow cells
NT2: hybridomas
NT2: keratinocytes
NT2: kidney cells
NT2: liver cells
NT2: stem cells
NT3: embryonic stem cells
NT1: genetics
NT2: DNA
NT2: line differences
NT2: mutants
NT3: knockout mutants
NT2: polymerase chain reaction
NT2: RNA
NT2: strain differences
NT1: pharmacology
NT2: medicinal properties
NT3: analgesic effect
NT3: anti-inflammatory activity
NT1: physiology
NT2: heat shock proteins
NT2: metabolites
NT2: susceptibility

lighting
BT1: animal environment
BT2: Animal Care and Welfare

Limulus amebocyte lysate assay
UF: LAL *
BT1: bioassays
BT2: assays
BT3: laboratory tests
BT4: Biomedical and Laboratory Methods
RT: endotoxins

Limulus polyphemus
BT1: (taxonomic nomenclature)
BT2: Organisms
RT: invertebrates

line differences
BT1: genetics
BT2: Life Sciences
lines

lines
BT1: breeding
BT2: Life Sciences
NT1: inbred lines
RT: line differences
RT: strains

litter (bedding)
BT1: animal housing
BT2: animal environment
BT3: Animal Care and Welfare

liver cells
UF: hepatocytes
BT1: cells
BT2: Life Sciences

LLNA *
USE: local lymph node assay

local anesthetics
BT1: anesthetics
BT2: neurotropic drugs
BT3: drugs
BT4: Product Testing and Toxicology

local lymph node assay
UF: LLNA *
UF: murine local lymph node assay *
BT1: animal tests
BT2: laboratory tests
BT3: Biomedical and Laboratory Methods
BT1: bioassays
BT2: assays
BT3: laboratory tests
BT4: Biomedical and Laboratory Methods

Macaca fascicularis
UF: cynomolgus monkeys *
BT1: (taxonomic nomenclature)
BT2: Organisms
RT: monkeys
Macaca mulatta
UF: rhesus monkeys *
BT1: (taxonomic nomenclature)
  BT2: Organisms
  RT: monkeys

Macaca nemestrina
UF: pigtailed macaques *
BT1: (taxonomic nomenclature)
  BT2: Organisms
  RT: monkeys

macroinvertebrates
BT1: invertebrates
  BT2: animals
    BT3: Organisms

mammals
BT1: vertebrates
  BT2: animals
    BT3: Organisms
  NT1: cats
  NT1: dogs
  NT1: gerbils
  NT1: guinea pigs
  NT1: hamsters
  NT1: mice
  NT1: nonhuman primates
    NT2: chimpanzees
    NT2: monkeys
  NT1: rabbits
  NT1: rats

mannequins
UF: dummies *
UF: mannikins *
BT1: Non-whole Animal Systems

mannikins *
USE: mannequins

marking of animals *
USE: animal identification

maternal behavior
BT1: animal behavior
  BT2: Life Sciences

mathematical models
BT1: Non-whole Animal Systems
NT1: estimation
NT2: risk assessment
RT: simulation

medaka *
USE: Oryzias latipes

medical devices
BT1: equipment
BT2: Biomedical and Laboratory Methods
BT2: Non-whole Animal Systems
BT1: products
BT2: Product Testing and Toxicology

medical materials
BT1: products
BT2: Product Testing and Toxicology

medicinal properties
BT1: pharmacology
BT2: Life Sciences
NT1: analgesic effect
NT1: anti-inflammatory activity

membership
BT1: Institutional Animal Care and Use Committees

mental stress *
USE: distress

mercy killing *
USE: euthanasia

metabolites
BT1: physiology
BT2: Life Sciences
RT: biomarkers

methods, laboratory
USE: laboratory methods

mice
BT1: mammals
BT2: vertebrates
BT3: animals
BT4: Organisms

micronucleus test *
USE: bone marrow micronucleus assay

Microtox (R) *
USE: bioluminescence assays

models, animal *
USE: animal models

monkeys
BT1: nonhuman primates
BT2: mammals
BT3: vertebrates
BT4: animals
BT5: Organisms
RT: laboratory primates
RT: Macaca fascicularis
RT: Macaca mulatta
RT: Macaca nemestrina

morbidity
BT1: animal health
BT2: Animal Care and Welfare
NT1: ascites

mortality
BT1: animal health
BT2: Animal Care and Welfare

mouse lymphoma assay
BT1: bioassays
BT2: assays
BT3: laboratory tests
BT4: Biomedical and Laboratory Methods
RT: animal cell lines

murine local lymph node assay *
USE: local lymph node assay

mutagenicity
BT1: toxicity
BT2: toxicology
BT3: Product Testing and Toxicology
RT: Ames test

mutants
BT1: genetics
BT2: Life Sciences
NT1: knockout mutants

Mutatox (R) assay *
USE: bioluminescent bacterial genotoxicity test
N

nephrotoxicity
BT1: toxicity
BT2: toxicology
 BT3: Product Testing and Toxicology

nest boxes
BT1: cages
BT2: animal housing
BT3: animal environment
 BT4: Animal Care and Welfare

nestlets
BT1: environmental enrichment
BT2: animal environment
BT3: Animal Care and Welfare

neural networks
UF: artificial neural networks *
BT1: computer software
BT2: Non-whole Animal Systems

neuroleptics *
USE: tranquilizers

Neurospora crassa
BT1: (taxonomic nomenclature)
BT2: Organisms
RT: fungi

neurotoxicity
BT1: toxicity
BT2: toxicology
 BT3: Product Testing and Toxicology

neurotropic drugs
BT1: drugs
 BT2: Product Testing and Toxicology
NT1: analgesics
NT1: anesthetics
 NT2: general anesthetics
 NT2: local anesthetics
NT1: opioids
NT1: sedatives
NT1: tranquilizers

newts
BT1: amphibians
BT2: vertebrates
BT3: animals
BT4: Organisms

no observed adverse effect level
UF: no observed effect level *
UF: NOAEL *
UF: NOEL *
BT1: dosage
BT2: Biomedical and Laboratory Methods

no observed effect level *
USE: no observed adverse effect level

NOAEL *
USE: no observed adverse effect level

NOEL *
USE: no observed adverse effect level

Non-whole Animal Systems
NT1: artificial skin
NT1: audiovisual aids
NT2: video technology
NT1: cadavers
NT1: computer software
NT2: computer automated structure evaluation
NT2: computer models
NT2: expert systems
NT2: interactive programs
NT2: neural networks
NT2: virtual reality
NT1: culture techniques
NT2: in vitro culture
NT3: cell culture
NT4: cloning (cells)
NT3: cell lines
NT4: animal cell lines
NT4: human cell lines
NT3: coculture
NT3: enrichment culture
NT3: explants
NT3: organ culture
NT3: ovule culture
NT3: tissue culture
NT4: embryo culture
NT4: human tissue cultures
NT1: equipment
NT2: bioreactors
NT2: laboratory equipment
NT3: hollow fiber reactors
NT2: medical devices
NT1: mannequins
NT1: mathematical models
NT2: estimation
NT3: risk assessment
NT1: nonanimal tests
NT1: physical models
NT2: plastinated models
NT1: simulation
NT1: validation

nonanimal tests
BT1: laboratory tests
BT2: Biomedical and Laboratory Methods
BT1: Non-whole Animal Systems

nonhuman animals *
USE: animals

nonhuman primates
BT1: mammals
BT2: vertebrates
BT3: animals
BT4: Organisms
NT1: chimpanzees
NT1: monkeys
RT: laboratory primates

normal values
UF: baseline values *
BT1: statistics
BT2: Biomedical and Laboratory Methods

ocular irritation test *
USE: eye irritation tests

oncogenicity
USE: carcinogenicity

operating rooms
UF: surgical suites *
BT1: animal housing
BT2: animal environment
BT3: Animal Care and Welfare
RT: surgery

opioids
BT1: neurotropic drugs
BT2: drugs
BT3: Product Testing and Toxicology

organ culture
BT1: in vitro culture
BT2: culture techniques
BT3: Biomedical and Laboratory Methods
BT3: Non-whole Animal Systems

Organisms
NT1: (taxonomic nomenclature)
NT2: Anguilla anguilla
NT2: Brachydanio rerio
NT2: Daphnia magna
NT2: Drosophila melanogaster
NT2: Escherichia coli
NT2: Hyallela azteca
NT2: Limulus polyphemus
NT2: Macaca fascicularis
NT2: Macaca mulatta
NT2: Macaca nemestrina
NT2: Neurospora crassa
NT2: Oryzias latipes
NT2: Pimephales promelas
NT2: Pseudomonas fluorescens
NT2: Rhizopus nigricans
NT2: Vibrio fischeri
NT2: Xenopus laevis
NT1: algae
NT1: animals
NT2: animals in education
NT2: invertebrates
NT3: amphipods
NT3: cephalopods
NT3: earthworms
NT3: insects
NT3: macroinvertebrates
NT3: sea urchins
NT2: laboratory animals
NT3: germ-free animals
NT4: specific pathogen-free animals
NT3: laboratory mammals
NT4: laboratory primates
NT2: transgenic animals
NT2: vertebrates
NT3: amphibians
NT4: caecilians
NT4: frogs
NT5: tadpoles
NT4: newts
NT3: birds
NT4: chickens
NT4: pigeons
NT4: fishes
NT3: mammals
NT4: cats
NT4: dogs
NT4: gerbils
NT4: guinea pigs
NT4: hamsters
NT4: mice
NT4: nonhuman primates
NT5: chimpanzees
NT5: monkeys
NT4: rabbits
NT4: rats
NT3: reptiles
NT1: bacteria
NT1: fungi
NT1: indicator species
NT1: plants
NT2: transgenic plants
NT1: yeasts

organizations
BT1: Human and Social Issues
NT1: committees
NT2: advisory committees
NT3: Interagency Coordinating Committee on the Validation of Alternative Methods

Oryzias latipes
UF: medaka *
BT1: (taxonomic nomenclature)
BT2: Organisms
RT: fishes

ovule culture
BT1: in vitro culture
BT2: culture techniques
BT3: Biomedical and Laboratory Methods
BT3: Non-whole Animal Systems

(return to top)
pain
UF: discomfort *
BT1: animal welfare
BT2: Animal Care and Welfare
BT2: bioethics
  BT3: ethics
    BT4: philosophy
      BT5: Human and Social Issues
RT: analgesia

pair housing
BT1: animal housing
BT2: animal environment
  BT3: Animal Care and Welfare
RT: social enrichment

Pan troglodytes *
USE: chimpanzees

patch test
BT1: skin irritancy tests
BT2: skin tests
  BT3: laboratory tests
    BT4: Biomedical and Laboratory Methods

pathogen free animals (complete) *
USE: germ-free animals

pathogen-free animals (complete) *
USE: germ-free animals

PCR *
USE: polymerase chain reaction

pens
BT1: animal housing
BT2: animal environment
  BT3: Animal Care and Welfare

people
BT1: Human and Social Issues
NT1: animal technicians
NT1: researchers
  NT2: principal investigators
  NT1: veterinarians

perches
BT1: cages
BT2: animal housing
  BT3: animal environment
Animal Use Alternatives Alphabetical Report

BT4: Animal Care and Welfare

personal care products  
BT1: products  
BT2: Product Testing and Toxicology

pesticides  
BT1: products  
BT2: Product Testing and Toxicology

pharmacokinetics  
BT1: biochemistry  
BT2: Life Sciences  
RT: pharmacology

pharmacology  
BT1: Life Sciences  
NT1: medicinal properties  
NT2: analgesic effect  
NT2: anti-inflammatory activity  
RT: pharmacokinetics

pharmacotoxicity *  
USE: toxicity

philosophy  
BT1: Human and Social Issues  
NT1: ethics  
NT2: bioethics  
NT3: animal welfare  
NT4: analgesia  
NT4: animal preferences  
NT4: animal stress  
NT5: abiotic stress  
NT6: cold stress  
NT7: hypothermia  
NT6: heat stress  
NT5: distress  
NT4: animal use refinement  
NT4: animal well-being  
NT4: death  
NT5: euthanasia  
NT6: asphyxiation  
NT6: cervical dislocation  
NT6: decapitation  
NT4: distress  
NT4: pain

photoirritation *  
USE: phototoxicity
phototoxicity
UF: photoirritation *
BT1: toxicity
BT2: toxicology
    BT3: Product Testing and Toxicology

physical models
BT1: Non-whole Animal Systems
NT1: plastinated models

physiology
BT1: Life Sciences
NT1: heat shock proteins
NT1: metabolites
NT1: susceptibility

pigeons
BT1: birds
BT2: vertebrates
    BT3: animals
    BT4: Organisms

pigtailed macaques *
USE: Macaca nemestrina

Pimephales promelas
UF: fathead minnow *
BT1: (taxonomic nomenclature)
    BT2: Organisms

plane of anesthesia *
USE: depth of anesthesia

plants
BT1: Organisms
    NT1: transgenic plants

plastinated models
BT1: physical models
    BT2: Non-whole Animal Systems

policy
BT1: Government, Law, and Regulations
    RT: regulations

polymerase chain reaction
UF: PCR *
BT1: genetics
    BT2: Life Sciences
    BT1: laboratory methods
    BT2: Biomedical and Laboratory Methods
postoperative care
UF: postsurgical care *
BT1: animal handling
BT2: animal husbandry
BT3: Animal Care and Welfare
RT: surgery

postsurgical care *
USE: postoperative care

preanesthesia *
USE: preoperative care

prediction
BT1: statistics
BT2: Biomedical and Laboratory Methods

preferences, animal *
USE: animal preferences

preoperative care
UF: preanesthesia *
BT1: animal handling
BT2: animal husbandry
BT3: Animal Care and Welfare
RT: surgery

principal investigators
BT1: researchers
BT2: people
BT3: Human and Social Issues

product properties
BT1: products
BT2: Product Testing and Toxicology
NT1: biocompatibility
NT1: irritant properties

product testing
BT1: Product Testing and Toxicology
NT1: cosmetics testing
NT1: drug testing

Product Testing and Toxicology
NT1: drugs
NT2: anti-inflammatory drugs
NT2: neurotropic drugs
NT3: analgesics
NT3: anesthetics
NT4: general anesthetics
Animal Use Alternatives Alphabetical Report

NT4: local anesthetics
NT3: opioids
NT3: sedatives
NT3: tranquilizers
NT1: efficacy testing
NT1: product testing
NT2: cosmetics testing
NT2: drug testing
NT1: products
NT2: cosmetics
NT2: household products
NT2: medical devices
NT2: medical materials
NT2: personal care products
NT2: pesticides
NT2: product properties
NT3: biocompatibility
NT3: irritant properties
NT1: safety testing
NT1: screening
NT1: toxicology
NT2: toxic substances
NT3: endotoxins
NT2: toxicity
NT3: acute toxicity
NT4: acute dermal toxicity
NT4: acute inhalation toxicity
NT4: acute oral toxicity
NT4: dermal sensitization
NT4: eye irritation
NT4: skin irritation
NT3: carcinogenicity
NT3: chronic toxicity
NT3: cytotoxicity
NT3: drug toxicity
NT3: ecotoxicity
NT3: embryotoxicity
NT3: genotoxicity
NT3: hepatotoxicity
NT3: mutagenicity
NT3: nephrotoxicity
NT3: neurotoxicity
NT3: phototoxicity
NT3: subacute toxicity
NT3: subchronic toxicity
NT3: sublethal effects
NT3: teratogenicity
NT2: toxigenesis

products
BT1: Product Testing and Toxicology
protocol review
BT1: Institutional Animal Care and Use Committees

Pseudomonas fluorescens
BT1: (taxonomic nomenclature)
BT2: Organisms
RT: bacteria

psychological stress *
USE: distress

QSAR *
USE: quantitative structure activity relationships

quantitative structure activity relationships
UF: QSAR *
BT1: structure activity relationships
BT2: biochemistry
BT3: Life Sciences

radio frequency identification
UF: RFID (radio frequency identification) *
Animal Use Alternatives Alphabetical Report

BT1: animal identification
BT2: animal husbandry
BT3: Animal Care and Welfare

rats
BT1: mammals
BT2: vertebrates
BT3: animals
BT4: Organisms

reduction, animal testing *
USE: animal use reduction

refinement, animal testing *
USE: animal use refinement

regulations
BT1: Government, Law, and Regulations
RT: guidelines
RT: legislation
RT: policy
RT: standards

replacement, animal testing *
USE: animal use replacement

reptiles
BT1: vertebrates
BT2: animals
BT3: Organisms

researchers
BT1: people
BT2: Human and Social Issues
NT1: principal investigators

restraint of animals
BT1: animal handling
BT2: animal husbandry
BT3: Animal Care and Welfare

RFID (radio frequency identification) *
USE: radio frequency identification

rhesus monkeys *
USE: Macaca mulatta

Rhizopus nigricans
BT1: (taxonomic nomenclature)
BT2: Organisms
RT: yeasts
risk assessment
  BT1: estimation
  BT2: mathematical models
  BT3: Non-whole Animal Systems
  BT2: statistics
  BT3: Biomedical and Laboratory Methods
RT: screening

RNA
  BT1: genetics
  BT2: Life Sciences

S

safety testing
  BT1: Product Testing and Toxicology

saphenous vein puncture
  BT1: blood sampling
  BT2: animal handling
  BT3: animal husbandry
  BT4: Animal Care and Welfare

Science Education
  NT1: animals in education
  NT1: veterinary education

screening
  BT1: Product Testing and Toxicology
  RT: risk assessment

sea urchins
  BT1: invertebrates
  BT2: animals
  BT3: Organisms

sedatives
  BT1: neurotropic drugs
  BT2: drugs
  BT3: Product Testing and Toxicology

shade
  BT1: animal environment
  BT2: Animal Care and Welfare
simulation
  BT1: Non-whole Animal Systems
  RT: animal use replacement
  RT: mathematical models

skin corrosivity tests *
USE: skin irritancy tests

skin irritancy tests
  UF: Corrositex (R) *
  UF: dermal irritancy tests *
  UF: skin corrosivity tests *
  BT1: skin tests
  BT2: laboratory tests
    BT3: Biomedical and Laboratory Methods
  NT1: patch test
  RT: eye irritation tests

skin irritation
  UF: dermal irritation *
  BT1: acute toxicity
  BT2: toxicity
    BT3: toxicology
    BT4: Product Testing and Toxicology

skin prick test
  BT1: skin tests
  BT2: laboratory tests
    BT3: Biomedical and Laboratory Methods

skin sensitization *
USE: dermal sensitization

skin tests
  BT1: laboratory tests
    BT2: Biomedical and Laboratory Methods
  NT1: skin irritancy tests
    NT2: patch test
    NT1: skin prick test

SMART assay *
USE: somatic mutation and recombination assay

social behavior
  BT1: animal behavior
    BT2: Life Sciences
  NT1: social dominance
    NT1: social facilitation

social dominance
  BT1: social behavior
social enrichment
BT1: environmental enrichment
BT2: animal environment
BT3: Animal Care and Welfare
RT: pair housing

social facilitation
BT1: social behavior
BT2: animal behavior
BT3: Life Sciences

somatic mutation and recombination assay
UF: SMART assay *
BT1: bioassays
BT2: assays
BT3: laboratory tests
BT4: Biomedical and Laboratory Methods

SOP *
USE: standard operating procedures

space requirements *
USE: animal space requirements

specific pathogen-free animals
BT1: germ-free animals
BT2: laboratory animals
BT3: animals
BT4: Organisms

standard operating procedures
UF: SOP *
BT1: standards
BT2: Government, Law, and Regulations
RT: animal handling

standards
BT1: Government, Law, and Regulations
NT1: codes of practice
NT1: standard operating procedures
RT: regulations

statistics
BT1: Biomedical and Laboratory Methods
NT1: estimation
NT2: risk assessment
NT1: normal values
NT1: prediction
RT: experimental design

stem cells
BT1: cells
  BT2: Life Sciences
NT1: embryonic stem cells

stereotyped behavior
UF: stereotypic behavior *
UF: stereotypies *
BT1: abnormal behavior
  BT2: animal behavior
  BT3: Life Sciences

stereotypic behavior *
USE: stereotyped behavior

stereotypies *
USE: stereotyped behavior

stocking density *
USE: stocking rate

stocking rate
UF: animal density *
UF: cage density *
UF: stocking density *
BT1: animal housing
  BT2: animal environment
    BT3: Animal Care and Welfare
BT1: animal husbandry
  BT2: Animal Care and Welfare
RT: animal space requirements

strain differences
BT1: genetics
  BT2: Life Sciences
RT: strains

strains
BT1: breeding
  BT2: Life Sciences
RT: lines
RT: strain differences

stress, abiotic *
USE: abiotic stress

stress, psychological *
USE: distress
structure activity relationships
BT1: biochemistry
BT2: Life Sciences
NT1: quantitative structure activity relationships
RT: computer automated structure evaluation

subacute toxicity
BT1: toxicity
BT2: toxicology
BT3: Product Testing and Toxicology

subchronic toxicity
BT1: toxicity
BT2: toxicology
BT3: Product Testing and Toxicology
SN: The adverse effects occurring as a result of the repeated daily dosing of a chemical to experimental animals for part (not exceeding 10 per cent) of the life span.

sublethal effects
BT1: toxicity
BT2: toxicology
BT3: Product Testing and Toxicology

sublinguinal vein puncture
BT1: blood sampling
BT2: animal handling
BT3: animal husbandry
BT4: Animal Care and Welfare

surgery
BT1: animal experiments
BT2: Biomedical and Laboratory Methods
BT1: animal handling
BT2: animal husbandry
BT3: Animal Care and Welfare
NT1: laser surgery
RT: operating rooms
RT: postoperative care
RT: preoperative care

surgical suites *
USE: operating rooms

susceptibility
BT1: physiology
BT2: Life Sciences
tadpoles
BT1: frogs
BT2: amphibians
BT3: vertebrates
BT4: animals
BT5: Organisms

techniques, laboratory
USE: laboratory methods

teratogenicity
BT1: toxicity
BT2: toxicology
BT3: Product Testing and Toxicology

testing, laboratory *
USE: laboratory tests

tissue culture
BT1: in vitro culture
BT2: culture techniques
BT3: Biomedical and Laboratory Methods
BT3: Non-whole Animal Systems
NT1: embryo culture
NT1: human tissue cultures

toxic substances
BT1: toxicology
BT2: Product Testing and Toxicology
NT1: endotoxins

toxicity
UF: pharmacotoxicity *
BT1: toxicology
BT2: Product Testing and Toxicology
NT1: acute toxicity
NT2: acute dermal toxicity
NT2: acute inhalation toxicity
NT2: acute oral toxicity
NT2: dermal sensitization
NT2: eye irritation
NT2: skin irritation
NT1: carcinogenicity
NT1: chronic toxicity
NT1: cytotoxicity
NT1: drug toxicity
NT1: ecotoxicity
Animal Use Alternatives Alphabetical Report

NT1: embryotoxicity
NT1: genotoxicity
NT1: hepatotoxicity
NT1: mutagenicity
NT1: nephrotoxicity
NT1: neurotoxicity
NT1: phototoxicity
NT1: subacute toxicity
NT1: subchronic toxicity
NT1: sublethal effects
NT1: teratogenicity

toxicology
BT1: Product Testing and Toxicology
NT1: toxic substances
NT2: endotoxins
NT1: toxicity
NT2: acute toxicity
NT3: acute dermal toxicity
NT3: acute inhalation toxicity
NT3: acute oral toxicity
NT3: dermal sensitization
NT3: eye irritation
NT3: skin irritation
NT2: carcinogenicity
NT2: chronic toxicity
NT2: cytotoxicity
NT2: drug toxicity
NT2: ecotoxicity
NT2: embryotoxicity
NT2: genotoxicity
NT2: hepatotoxicity
NT2: mutagenicity
NT2: nephrotoxicity
NT2: neurotoxicity
NT2: phototoxicity
NT2: subacute toxicity
NT2: subchronic toxicity
NT2: sublethal effects
NT2: teratogenicity
NT1: toxigenesis

toxigenesis
BT1: toxicology
BT2: Product Testing and Toxicology

training (animals)
UF: animal training *
UF: training of animals *
BT1: animal husbandry
BT2: Animal Care and Welfare
training of animal technicians
BT1: Animal Care and Welfare
RT: animal technicians

training of animals *
USE: training (animals)

tranquilizers
UF: anti-anxiety agents *
UF: anxiolytics *
UF: neuroleptics *
BT1: neurotropic drugs
BT2: drugs
BT3: Product Testing and Toxicology

transgenic animals
BT1: animals
BT2: Organisms

transgenic plants
BT1: plants
BT2: Organisms

up-and-down method
BT1: animal tests
BT2: laboratory tests
BT3: Biomedical and Laboratory Methods
RT: acute oral toxicity

validation
BT1: Non-whole Animal Systems
RT: experimental design
RT: Interagency Coordinating Committee on the Validation of Alternative Methods

ventilation and air circulation
BT1: animal environment
BT2: Animal Care and Welfare
vertebrates
  BT1: animals
  BT2: Organisms
  NT1: amphibians
  NT2: caecilians
  NT2: frogs
  NT3: tadpoles
  NT2: newts
  NT1: birds
  NT2: chickens
  NT2: pigeons
  NT1: fishes
  NT1: mammals
  NT2: cats
  NT2: dogs
  NT2: gerbils
  NT2: guinea pigs
  NT2: hamsters
  NT2: mice
  NT2: nonhuman primates
  NT3: chimpanzees
  NT3: monkeys
  NT2: rabbits
  NT2: rats
  NT1: reptiles

veterinarians
  BT1: people
  BT2: Human and Social Issues

veterinary education
  BT1: Science Education

Vibrio fischeri
  BT1: (taxonomic nomenclature)
  BT2: Organisms
  RT: bacteria

video technology
  BT1: audiovisual aids
  BT2: Non-whole Animal Systems

virtual reality
  BT1: computer software
  BT2: Non-whole Animal Systems

(return to top)
water deprivation
   BT1: animal feeding
   BT2: animal husbandry
       BT3: Animal Care and Welfare

well-being, animal
   USE: animal well-being

whistleblowing
   BT1: Institutional Animal Care and Use Committees

X

Xenopus laevis
   BT1: (taxonomic nomenclature)
       BT2: Organisms
       RT: frog embryo teratogenesis assay--Xenopus
           RT: frogs

Y

yeast mutagenicity assay
   BT1: bioassays
       BT2: assays
       BT3: laboratory tests
           BT4: Biomedical and Laboratory Methods

yeasts
   BT1: Organisms
       RT: Rhizopus nigricans

Z

zebrafish *
USE: Brachydanio rerio

zoonoses

BT1: Human and Social Issues

Last Updated 8/8/05