

# key word index

## problems of cryobiology and cryomedicine, volume 24

3 $\beta$ -hydroxysteroid dehydrogenase 47

### a

ATP 140  
acid resistance 28  
adaptation, *cross* 38  
adaptive response 38  
adjuvant arthritis 249  
adrenocorticocytes 47  
aldosterone 47  
alginate microspheres 222  
alginate-gelatin matrices 292  
amphiphilic compounds 231  
anemia 312  
antibodies, *monoclonal* 262  
apoptosis 249  
arthritis, *adjuvant* 249

### b

biology, *system* 193  
biomacromolecules 83  
bone marrow cells 118  
bone, *structural and metabolic characteristics* 279

### c

carp  
    *Prussian* 149  
    *silver* 140  
catalase 67  
cell(s)  
    *bone marrow* 118, 238  
    *fetal*  
        *liver* 16, 118, 238, 249, 292  
        *neural* 67  
    *hemopoietic stem* 118, 238  
    *mesenchymal stromal/stem* 16, 222  
    *osteogenic* 279  
    *regulatory T*  
ceruloplasmin 67  
chemotherapy 312  
cluster crystallization 102  
cold exposure 279  
collagen 262  
combined cryoprotective solutions [cryopreservatives] 222  
conformational changes 83  
concentration of sperm 140  
cord [placental] blood 312  
cranio-skeletal injury 67  
creatinine 75  
cross adaptation 38  
cryodestruction 354

cryo-electron

*microscopy* 193  
    *tomography* 193

cryoinjury 302

cryopreservation

*of bone marrow cells* 118, 238  
    *of cumulus cells* 57  
    *of fetal liver cells* 16, 118, 238, 249  
    *of fragments of organs* 132  
    *of granulosa cells* 57  
    *of sperm* 140  
    *of yeast* 268

cryopreservatives [cryoprotective media] 102, 149, 222

cryopreserved

*bone marrow* 322  
    *cord blood, preparations of* 312, 332  
    *fetal*  
        *liver cells* 16, 118, 292  
        *neural cells* 67  
    *placenta extract* 75

cryoprotectant(s) 102, 149

cryoprotection 83

cryoresistance 302

cryosurgery 354

crystallization, *cluster* 102

culture 57

cumulus 57

### d

DMSO 47

decellularization 346

dehydration 83

derma 3

diabetes, *pyo-inflammatory complications of*

*diagram of state* 102

dimethyl sulfoxide 47

dynamics 193

### e

ecological niche 302

elasticity 346

elastin 262

electron paramagnetic resonance 28, 212

embryos, *Prussian carp* 149

endotoxemia 332

epilepsy 354

epithelium 3

erythrocyte(s) 28, 312

*mammal* 231

extracellular matrix 346

extract 132

*of placenta* 28, 75



- experimental  
     *renal failure* 75  
     *liver failure* 292  
 exposure, stepwise 222
- f**  
 fat subcutaneous 3  
 fetal  
     *bovine serum* 47  
     *cells*  
         *neural* 67  
         *of liver, cryopreserved* 16, 118, 292  
 fish species 302  
 fluorescent dye 47  
*foxp3* gene  
 fragments of organs 132  
 freeze-thawing 38  
 freezing 212, 262
- g**  
 gene  
     *foxp3* 322  
     *ido* 16  
 glomerular filtration rate 75  
 graft 346  
 graft-versus-host disease 322  
 granulosa 57
- h**  
 hemopoietic stem cells 118, 238  
 hemolysis 312  
 hemorrhage 67  
 hepatic failure model 292  
 hormone stimulation 140  
 homeostasis, *correction of* 332  
 hydrophilic pores 302  
 hyperconcentration 212  
 hypertonic stress 231  
 hypothermia 279
- i**  
*ido* gene 16  
 immobilization 268  
 implantation 292  
*in silico* 193  
 indoleamine 2,3-dioxygenase 16  
 intracerebral tumors 354  
 ionizing radiation 262
- j**  
 JC-1 47
- l**  
 lipid peroxidation 67
- liver 67  
     *cells, cryopreserved fetal* 16, 238, 249  
 localomics 193  
 low temperature 83  
     *storage* 28
- m**  
 mammal *erythrocytes* 231  
 melanocytes 3  
 metabolic changes 332  
 mesenchymal stromal/stem cells 16, 222  
 micromachining 193  
 microscopy, *cryo-electron* 193  
 molecular machines 193  
 monoclonal antibodies 262  
 monocyte-phagocyte system 249
- n**  
 neural cells, *fetal* 67  
 neurosurgery 354
- o**  
 obsessive-compulsive disorder  
 optical density 262  
 organs, *fragments of* 132  
 osteogenic cells 279  
 oxidative stress 38  
 ozone 38
- p**  
 Parkinson's disease 354  
 peptides 132  
 peroxidation, *lipid* 67  
 placenta, *extract of* 28, 75  
 pores, *hydrophilic* 302  
 potassium cations 231  
 protease inhibitors 132  
 pyo-inflammatory complications of diabetes 332
- r**  
 radiation, *ionizing* 262  
 renal failure, *experimental* 75
- s**  
*Saccharomyces cerevisiae* 38  
 salinity of water 302  
 skin 3  
 sperm 140, 302  
 sphericity index 312  
 spin Hamiltonian 193  
 state, *diagram of* 102  
 stem cells 3, 118, 238  
 stereotaxis 354

stress  
    *hypertonic* 231  
    *oxidative* 38  
structural and conformational changes 83  
structural analysis 193  
structure 102  
spectra [EPR], *structure of* 212  
subcutaneous fat 3  
superoxide dismutase 67  
survival 149

## **t**

T cells, *regulatory* 322  
temperature  
teratogenicity 149  
tissue engineering 346  
tomography, cryo-electron 193  
trehalose 268  
tumors, *intracerebral* 354

## **v**

viability 268  
vitrification 102, 222

## **w**

water salinity 302

## **y**

yeast 268

