

Subject Index to Volume 38

- Abstracts
European Society for Pediatric Research, 1995 meeting, 423
Latinoamerican Society of Pediatric Endocrinology, 1994 meeting, 621
- Acylcarnitine, profiling, diagnostic indicator for inborn errors of metabolism, automated electrospray tandem mass spectrometry role, 324
- ADD, *see* Attention deficit disorder
- Adenosine, endogenous, role, reducing ischemic brain injury, neonatal rats, 306
- Adenoviruses, replication-deficient, gene transfer and, fetal sheep, 844
- Adolescent
bone and liver alkaline phosphatase and osteocalcin, reference values for, 955
cytokine production pattern after remission of asthma, after stimulation with *Dermatophagoides farinae*, 187
growth hormone effects on ovarian function, 763
insulin-dependent diabetes mellitus and, growth and final height, 607
ovarian function, endocrine and ultrasound parameters, menstrual irregularities and, 974
uremia, dialysis and, insulin secretion and growth failure, 379
- Airway, upper, contribution to respiratory response during seizures, piglets, 61
- Airway obstruction, tidal breathing patterns and, infants, 218
- Alanine, transport and utilization, during postnatal development, rat, 81
- Aldosterone, effects water and electrolyte metabolism in colonic mucosal epithelium, preterm rats, 356
- Alkaline phosphatase, bone and liver, osteocalcin levels and, children and adolescents, 955
- All-trans-retinoic acid treatment, hemodynamic function and heart development effects, 342
- American Pediatric Society, presidential address, 1995 meeting, 819
- Amino acids
nitrogen balance changes in, after overnight fasting, perinatal and adult rats, 1018
transport and utilization, during postnatal development, rat, 81
- Anaphylactic reaction, bee sting, allergic children, plasma catecholamine levels, 998
- 4-Androstenedione, 17 α -hydroxyprogesterone and testosterone, analysis by isotope dilution/gas chromatography-mass spectrometry, children, 76
- Anemia
aplastic, bone marrow fibroblast exhibition of reduced IL-6 production, children with, 716
chronic fetal, atrial natriuretic peptide role in renal adaptation to, 722
- Angiotensin II, receptor levels, renin-angiotensin system, fetal sheep, 896
- Antigen serotyping, M and T, field inversion gel electrophoresis and, epidemiology of group A *Streptococcus* infections, comparison study, 988
- Apnea
laryngeal chemoreflex-induced, β -endorphin involvement, piglets, 205
obstructive, hypoxemia and, submental and diaphragmatic muscle activity during, preterm infants, 298
- Arachidonic acid, docosahexaenoic acid and, distribution in liver, infants, 361
- Arginine metabolism, nitric oxide synthesis and, persistent pulmonary hypertension of newborn, 17
- Arterial blood gas, values in fetal lamb, 528
- Arthritis, juvenile rheumatoid, pain levels, descriptive study, 194
- Asphyxia, effects, pharmacokinetics of ceftazidime, term infants, 808
- Aspirin, *versus* indomethacin treatment, patent ductus arteriosus, preterm infants with RDS, 886
- Asthma, remission of, cytokine production pattern, after stimulation with *Dermatophagoides farinae*, adolescents, 187
- Atopic disease, IgA1-cleaving bacteria levels, in pharynx of infants with, 182
- Attention deficit disorder, catecholamine response after glucose ingestion, 539
- Award, 1995 John Howland, acceptance by Floyd W. Denny, Jr., 1036
- Bacteria, IgA1-cleaving, levels in pharynx of infants with atopic disease, infants, 182
- Bee sting, anaphylactic reaction to, allergic children, plasma catecholamine levels, 998
- Behavior, problem, long-term study of stability and change, 612
- Behavioral effects, catecholamine response after glucose ingestion, children with ADD, 539
- Behavioral predictors, immune function and starting school, 1009
- Betamethasone, cardiovascular and metabolic effects, preterm sheep born by cesarean section, 709
- Bile acids, synthesis, liver and, 156
- Bile pigment metabolism, bilirubin esterification and, developing chick, 349
- Biliary atresia, extrahepatic, serum hyaluronic acid and procollagen propeptide levels as prognostic tool, 568
- Bilirubin
encephalopathy, visual evoked potential abnormalities and, sulfadimethoxine treatment, rats, 258
esterification, bile pigment composition and, developing chick, 349
excessive levels, long-term neurologic deficits and, 949
- Blood coagulation, hyperinsulinemia effects on development of, fetus, 169
- Blood flow
cerebral
norepinephrine responses, nitric oxide and β -adrenergic effects on, fetus and neonate, 237
oxygenation and, indomethacin effects, normal and ventilated fetal lamb, 243
dilatation and, neonatal intestine, 783
uterine, embryo development, diabetes during pregnancy effects, fetal rat, 598
- Body composition, fat-free mass measurement, infants, 411
- Bone, alkaline phosphatase, reference values, healthy children and adolescents, 955
- Bone marrow, fibroblast, reduced IL-6 production and, children with aplastic anemia, 716
- BPD, *see* Bronchopulmonary dysplasia
- Brain
damage/injury
dizocilpine maleate and L-NAME comparison, effects on lesion size and hyperemia, 644
hypoxic-ischemic, caffeine use during pregnancy effects, neonate, 312
hypoxic-ischemic, status epilepticus effects on, postnatal rats, 251
ischemic, reduction by endogenous adenosine, neonatal rats, 306
edema, short- vs. long-term hypoxia-ischemia effects, MRI analysis, neonatal rat, 113
functional development after intrauterine hypoxia-ischemia, cerebellar granule cell analysis and, 107
phenylalanine concentrations in, patients with phenylketonuria, magnetic resonance spectroscopy measurement, 657
temperature, energy utilization rate, magnetic resonance spectroscopy analysis of relationship, 919
- Breathing, periodic, temporal structure changes with postnatal development, preterm infants, 533
- Breathing patterns, tidal, assessment for monitoring of bronchial obstruction, infants, 218
- Bronchial obstruction, tidal breathing pattern assessment for monitoring of, infants, 218
- Bronchopulmonary dysplasia, furosemide effects on airway relaxation, infants, 280

- Bypass bridge, effects on oxygenation and hemodynamics, during veno-arterial ECMO, neonates, 124
- Ca²⁺, levels in fetal heart with retinoic acid-induced malformations, rats, 892
- Caffeine, use during pregnancy, hypoxic-ischemic brain damage, neonate, 312
- Cardiorespiratory arousal, submental and diaphragmatic muscle activity during, preterm infants, 298
- Cardiovascular responses, betamethasone therapy, preterm sheep born by cesarean section, 709
- Catecholamine, plasma levels, after bee sting, allergic children, 998
- CD8 lymphocytes, activation marker expression, HIV-1-infected children, 390
- Ceftazidime, pharmacokinetics, asphyxia effects on, term infants, 808
- Central nervous system, hypoxia-ischemia, quisqualate effects on nitric oxide synthase neurons, role, reducing damage after, neonatal rat, 912
- Cerebellar granule cells, brain functional development after intrauterine hypoxia-ischemia and, 107
- Cerebral artery, occlusion, L-NAME effects, reducing infarct volume during, rats, 652
- Cerebral hematoma, prostanoid role, enhancing vasoconstrictions to leukotriene C₄, piglets, 119
- Cerebral response, maternal cocaine injection, fetal sheep, 943
- Cerebral vasculature, immaturity of, intracranial hemorrhage and, neonates, 493
- Chemoreceptor, responsiveness, ketamine, morphine, pentobarbital, and propranolol effects on, fetal sheep, 938
- Chemotherapy, liposome role drug delivery, 7
- Child Behavior Checklist, problem behavior and, long-term study of stability and change, 612
- Children
 HIV-1-infected, CD8 lymphocyte activation marker expression in, 390
 sickle cell disease, 6-keto-prostaglandin F_{1α} and thromboxane plasma levels, 95
- Chronic lung disease, *see* Lung disease, chronic
- Coagulation, hyperinsulinemia effects on development of, fetus, 169
- Cocaine use, *see under* Substance abuse
- Cognitive effects, catecholamine response after glucose ingestion, children with ADD, 539
- Contractile response, maturation of, effects, pulmonary vascular reactivity, newborn pigs, 25
- Corticosteroid therapy, acute lymphoblastic leukemia, obesity after treatment, 86
- Cortisol, insulin and, effects on surfactant protein mRNA levels, 513
- Cranial irradiation, acute lymphoblastic leukemia, obesity after treatment, 86
- Crying, after heel prick, sucrose effects on reducing, preterm infants, 332
- Cyanosis, congenital heart disease and, sympathetic activity regulation, 55
- Cysteamine therapy, intravenous, nephropathic cystinosis and, 579
- Cystic fibrosis, airway epithelial cells, high molecular weight glycoconjugates and, 42
- Cytokines, intratumoral production, hematopoiesis and, children with hepatoblastoma, 555
- Cytomegalovirus infection, effects, endothelial cell and fibroblast growth factor production, 1003
- Cytopenias, immune-mediated, neonates, 993
- Denny, Floyd W., Jr., John Howland Award, 1032
- Dermatophagoides farinae*, cytokine production pattern during remission of asthma, after stimulation with, adolescents, 187
- Development, *see also* Growth
 dopaminergic inhibitory mechanism operation during, puberty, 91
 postnatal
 age-related susceptibility to carbon tetrachloride hepatotoxicity, 140
 alanine transport and utilization during, rat, 81
 quotient, long-chain polyunsaturated fatty acids effects on, 4-month-old infants, 262
 receptor-mediated endocytosis and, 835
- Dexamethasone, surfactant protein gene expression effects, streptozotocin-induced rat lungs, 870
- Diabetes mellitus
 insulin-dependent, growth and final height, children, 607
 during pregnancy, uterine blood flow and embryo development, 598
- Diaphragm, muscle activity during obstructive apnea and cardiorespiratory arousal, preterm infants, 298
- Diarrhea, rotavirus, jejunal mucosal recovery and, oral TGF-α effects on, piglets, 173
- Dilation, flow-induced, neonatal intestine, 783
- Dioxin, polychlorinated biphenyl, immunologic effects after exposure, 404
- Docosahexaenoic acid, arachidonic acid and, distribution in liver, infants, 361
- Dopaminergic inhibitory mechanism, operation during development, puberty, 91
- Ductus arteriosus, patent, aspirin *versus* indomethacin treatment, infants with RDS, 886
- ECMO, *see* Oxygenation, extracorporeal membrane
- Edema, brain, hypoxia-ischemia, short- vs. long-term exposure, effects, brain edema, MRI analysis, neonatal rat, 113
- EGF, *see* Epidermal growth factor
- Electrophoresis, field inversion gel, antigen serotyping and, epidemiology of group A *Streptococcus* infections, 988
- End-expiratory pressure, positive, during KL₄ surfactant instillation, role, enhancing pulmonary distribution, RDS and, 211
- Endocrine parameters, ovaries, adolescents with menstrual irregularities and, 974
- Endocytosis, receptor-mediated, 835
- β-Endorphin, laryngeal chemoreflex and, piglets, 205
- Endothelial cells, growth factor production, cytomegalovirus infection effects, 1003
- Endothelium, smooth muscle cell contractility effects, pulmonary vascular reactivity, newborn pigs, 25
- Energy utilization rate, brain temperature and, magnetic resonance spectroscopy analysis of relationship, 919
- Enteral nutrition, intestinal motor function and, preterm infants, 133
- Epidermal growth factor, TGF-α, and EGF-receptor immunolocalization, lung injury and, 851
- Erythropoietin, recombinant human, effects on hemoglobin, preterm infants, 729
- European Society for Pediatric Research, abstracts for 1995 meeting, 423
- Expiratory flow, forced, rapid thoracoabdominal compression measurements, neonatal lambs, 664
- Fat-free mass, measurement in infants, 411
- Fc receptor, IgG transport by placental trophoblast, 1
- Fetus
 β-adrenergic and nitric oxide effects on norepinephrine, cerebral blood flow and, 237
 angiotensin II receptor levels, renin-angiotensin system, sheep, 896
 chemoreceptor responsiveness after hypoxemia, ketamine, morphine, pentobarbital, and propranolol effects on, sheep, 938
 chronic anemia and, atrial natriuretic peptide role in renal adaptation to, 722
 chronic hyperglycemic, glucose suppression of insulin secretion, 754
 cocaine-exposed, cerebral response to maternal injection, sheep, 943
 development, maternal diabetes and, 598
 gene transfer and replication-deficient adenoviruses, sheep, 844
 glycogen storage disease type II, prenatal diagnosis, 103
 HLA class II-deficient combined immunodeficiency, genetic markers and prenatal diagnosis, 812
 hyperinsulinemia effects on development of coagulation, 169
 hypoxia-ischemia
 brain functional development after, cerebellar granule cell analysis, 107
 short- vs. long-term exposure, effects, brain edema, MRI analysis, rat, 113
 nitric oxide effects on vascular tone and limb reduction, rats, 905
 vasopressin effects on lung liquid volume, sheep, 30
- Fibroblasts, growth factor production, cytomegalovirus infection effects, 1003
- Fragile X syndrome
 reduced cyclic AMP production, cytogenetic and molecular correlation, 639
 repeat amplification mechanism and timing, 629
- Furosemide, airway relaxation effects, bronchopulmonary dysplasia, 280
- Ganglion, nodose, *int-2* gene influence on development of, 485
- Gene transfer, adenoviral vector for, fetal sheep, 844

- Genetic studies
 fragile X syndrome, repeat amplification mechanism and timing, 629
 glycogen storage disease type II, prenatal diagnosis, 103
 growth hormone deficiency type IB, phenotypic characteristics, 962
 heart disease, effect of weaning on serum lipoprotein concentration, 522
 HLA class II-deficient combined immunodeficiency, genetic markers and prenatal diagnosis, 812
- Genotypes, hepatitis C virus, in serum and liver, children with chronic hepatitis C, 618
- GH, *see* Growth hormone
- Glottal patency, during seizures, piglets, 932
- Glucocorticoid receptor, expression by ligand, fetal rat lung cells, 506
- Glucocorticoid stimulation, sympathetic innervation and, heart development effects, 479
- Glucocorticoids
 mineralocorticoids, effects on mRNA expression colon ion transporters, infant rats, 164
 role, growth delay after liver transplantation, 366
- Glucose
 catecholamine response after ingestion of, children with ADD, 539
 suppression, insulin secretion, chronic hyperglycemic fetal sheep, 754
- Glycine metabolism, pathways in hepatocytes, fetal sheep, 775
- Glycogen storage disease, type II, prenatal diagnosis, 103
- Growth, *see also* Development
 birth to final height, small-for-gestational age infants, 733
 catch-up, at 2 years of age, small-for-gestational age infants, 267
 delay, after liver transplantation, underlying mechanisms, 366
 final height and, children with insulin-dependent diabetes mellitus, 607
 quality, fat-free mass measurement and, infants, 411
 receptor-mediated endocytosis and, 835
 retardation, intrauterine, catch-up growth at 2 years of age, 267
 slow, vitamin B₆ levels association with, breast-fed infants, 740
- Growth hormone
 deficiency
 isolated central hypothyroidism and, 967
 type IB, phenotypic characteristics and genetic studies, 962
 effects on ovarian function, puberty and, 763
 secretion, long-term alterations in, dietary protein restriction effects, rats, 747
 therapy, adipocyte mRNA levels in, GH deficiency and Prader-Willi syndrome patients, 418
- Heart
 development, hemodynamic function and, All-*trans*-retinoic acid treatment effects on, 342
 ischemic contracture, mechanical and metabolic characterization, 228
 malformations, retinoic acid-induced, Ca²⁺ levels, rats, 892
 reducing equivalent shuttles in developing myocardium, neonate, 221
- Heart disease
 congenital
 pulmonary vasculature visualization by intravascular ultrasound, infants and children, 36
 retinoic acid-induced, rats, 892
 sympathetic activity regulation, 55
 serum lipoprotein concentration and, effect of weaning on, 522
- Heel lancing, sucrose effects reducing pain, preterm infants, 332
- Height, final, growth and
 children with insulin-dependent diabetes mellitus, 607
 small-for-gestational age infants, 733
- Hematopoiesis, intratumoral cytokine production and, children with hepatoblastoma, 555
- Hemoglobin, recombinant human erythropoietin effects on, preterm infants, 729
- Hemorrhage, intracranial, cerebral vasculature immaturity and, neonates, 493
- Hepatitis C, chronic, genotypes in serum and liver, children, 618
- Hepatoblastoma, hematopoiesis and intratumoral cytokine production, children, 555
- Hepatocyte, fetal, serine and glycine metabolism pathways, fetal sheep, 775
- Hepatotoxicity, age-related susceptibility to carbon tetrachloride, 140
- HIV, *see* Human immunodeficiency virus
- HLA class II-deficient combined immunodeficiency, genetic markers and prenatal diagnosis, 812
- Hormonal regulation, testosterone secretion and, cells isolated from testes, infants and children, 592
- Hormone therapy, cardiovascular and metabolic effects, preterm sheep born by cesarean section, 709
- Human immunodeficiency virus-1
 CD8 lymphocyte activation marker expression in, children, 390
 maternal-child transmission, identification of factors involved in, 384
tat, neuroblast adhesion to, infants and children, 792
- Hyaluronic acid, serum, procollagen propeptide levels, role, prognostic indicator of extrahepatic biliary atresia, 568
- 17 α -Hydroxyprogesterone, 4-androstenedione and testosterone, analysis by isotope dilution/gas chromatography-mass spectrometry, children, 76
- Hyperemia, cerebral, dizocilpine maleate effects, 644
- Hyperglycemia, chronic, glucose suppression of insulin secretion, fetal sheep, 754
- Hyperinsulinemia, blood coagulation development effects, fetus, 169
- Hyperoxia
 hydroxyl radical mediation and, preterm infants, 286
 propylthiouracil effects on lung injury after, rats, 292
 pulmonary neutrophil comparison, adult and neonatal rats after, 857
- TGF- α secretion by alveolar macrophages, postnatal rabbits after, 49
- Hypertension
 persistent pulmonary, arginine metabolism and nitric oxide synthesis, neonate, 17
 pulmonary, acute respiratory failure, inhaled nitric oxide vs. inhaled prostacyclin, piglets, 198
- Hypoplasia, lung, short-term obstruction of trachea role in reversing, fetal sheep, 690
- Hypothyroidism, isolated central, short stature and, 967
- Hypoxemia
 chemoreceptor responsiveness and, ketamine, morphine, pentobarbital, and propranolol effects on, fetal sheep, 938
 theophylline effects on metabolic and ventilatory response to, during quiet sleep, piglets, 926
- Hypoxia, antenatal vitamin E effects on changes induced by, neonatal rats, 685
- Hypoxia-ischemia
 brain damage, status epilepticus effects, postnatal rats, 251
 brain damage and, caffeine use during pregnancy effects, neonate, 312
 intrauterine, brain functional development effects, cerebellar granule cell analysis and, 107
 quisqualate destruction of nitric oxide synthase neurons, role, reducing damage after, neonatal rat, 912
 short- vs. long-term exposure, effects, brain edema, MRI analysis, neonatal rat, 113
- IGF, *see* Insulin-like growth factor
- IgG, *see* Immunoglobulin G
- Immune function, starting school and, adrenocortical and behavioral predictors of, 1009
- Immunodeficiency, HLA class II-deficient combined, genetic markers and prenatal diagnosis, 812
- Immunoglobulin A, secretory, bacteria capable of cleaving, levels in pharynx of infants with atopic disease, 182
- Immunoglobulin G, transport by placental trophoblast, 1
- Immunolocalization, TGF- α , EGF, and EGF-receptor, lung injury and, 851
- Immunologic effects, dioxin and polychlorinated biphenyl exposure, 404
- Immunosuppressive, HLA-derived peptides as, 275
- Inborn errors of metabolism, acylcarnitine and amino acid profiling as diagnostic tool, automated electrospray tandem mass spectrometry role, 324
- Indomethacin
 cerebral blood flow and oxygenation effects, normal and ventilated fetal lamb, 243
versus aspirin treatment, patent ductus arteriosus, preterm infants with RDS, 886
- Infant
 absorption of supplemental iron, 373
 asphyxia effects on ceftazidime pharmacokinetics, 808
 atopic disease, IgA1-cleaving bacteria levels, in pharynx of infants with, 182

- breast-fed, vitamin B₆ levels association with slow growth in, 740
- bronchopulmonary dysplasia, furosemide, airway relaxation effects, 280
- development quotient, long-chain polyunsaturated fatty acids effects on, 4-month-old, 262
- excessive bilirubin levels, long-term neurologic deficits and, 949
- fat-free mass measurement, 411
- HIV-1 and, maternal child vertical transmission, identification of factors involved in, 384
- HIV-1 *tat*, neuroblast adhesion to, 792
- lung function testing, tidal breathing pattern role, 218
- myocardial contracture and ischemia, mechanical and metabolic characterization, 228
- persistent pulmonary hypertension, arginine metabolism and nitric oxide synthesis, 17
- preterm
- betamethasone treatment, cardiovascular and metabolic effects, sheep born by cesarean section, 709
 - chronic lung disease, IL-8 effects, 11
 - chronic lung disease oxidative stress role in development of, 286
 - enteral nutrition, intestinal motor function and, 133
 - intrauterine vitamin B₁₂ uptake, 585
 - obstructive apnea and cardiorespiratory arousal, after hypoxemia, submental and diaphragmatic muscle activity during, 298
 - periodic breathing, temporal structure changes with postnatal development, 533
 - RDS, aspirin *versus* indomethacin treatment of patent ductus arteriosus, 886
 - recombinant human erythropoietin effects on hemoglobin, 729
 - sucrose effects reducing pain during heel lancing, 332
- pulmonary vascular disease, intravascular ultrasound visualization feasibility, 36
- small-for-gestational age
- catch-up growth at 2 years of age, 267
 - full-term, growth from birth to final height, 733
- TGF- α secretion by alveolar macrophages, postnatal rabbits after hyperoxia, 49
- Inflammatory response, meningeal, group B *Streptococcus*, neonatal piglet, 981
- Insulin
- cortisol and, effects on surfactant protein mRNA levels, 513
 - secretion
 - glucose suppression of, chronic hyperglycemic fetal sheep, 754
 - growth failure and, adolescents with uremia on dialysis, 379
 - long-term alterations in, dietary protein restriction effects, rats, 747
- Insulin-like growth factor, binding protein-3 and IGF-I, levels during adolescence and childhood, 149
- Int-2* gene, nodose ganglion development influence, 485
- Interleukin-6, bone marrow fibroblast effects, children with aplastic anemia, 716
- Interleukin-8, neutrophil chemoattractants, effects, chronic lung disease of prematurity, 11
- Interleukin-1, receptor antagonist, effects on hemodynamic manifestations of group B streptococcal sepsis, 704
- Intestine, neonatal, flow-induced dilation and, 783
- Intracranial pressure, thoracoabdominal compression effects on, neonatal lambs, 664
- Ion transporters, colon, mRNA expression in, glucocorticoids and mineralocorticoids effects on, infant rats, 164
- Iron, supplemental, absorption of, early infancy, 373
- Ischemia
- brain injury and, endogenous adenosine role in reducing, neonatal rats, 306
 - myocardial contracture and, mechanical and metabolic characterization, 228
- IUGR, *see* Growth retardation, intrauterine
- Jaundice, visual evoked potential abnormalities and, sulfadimethoxine treatment effects on, rats, 258
- Jejunal mucosa, recovery, rotavirus diarrhea and, oral TGF- α effects on, piglets, 173
- John Howland Award presentation, to Floyd W. Denny, Jr., 1032
- Jugular venous occlusion, near-infrared spectroscopy and, role, measuring cerebral venous oxyhemoglobin saturation, 319
- Kawasaki disease, effects on migration of umbilical cord endothelial cells, 501
- Ketamine, chemoreceptor responsiveness effects, fetal sheep, 938
- Kidney
- disease, end-state, insulin secretion and growth failure, adolescents with uremia on dialysis, 379
 - function, angiotensin II receptor levels and, fetal sheep, 896
- Laryngeal chemoreflex, β -endorphin involvement in apnea induced by, piglets, 205
- Latinoamerican Society of Pediatric Endocrinology, abstracts of 1994 meeting, 621
- Leukemia
- acute lymphoblastic, obesity after treatment, 86
 - childhood acute, late effects and side effects, long-term survivors, follow-up study, 802
- Leukotriene B₄, effects, chronic lung disease of prematurity, 11
- Leydig cell activation, hormonal regulation of early postnatal phase, 592
- Limb reduction, nitric oxide-induced, fetal rats, 905
- Lipid, exogenous, placental transfer and, pregnant rabbit, 1026
- Lipoprotein concentration, serum, effect of weaning on, heart disease and, 522
- Liposome, role, drug delivery for chemotherapy, 7
- Liver
- alanine transport and utilization during postnatal development, rat, 81
 - alkaline phosphatase, reference values, healthy children and adolescents, 955
- arachidonic acid and docosahexaenoic acid distribution in, infants, 361
- bile acid and bilirubin synthetization, 150
- bilirubin esterification and bile pigment metabolism, developing chick, 349
- disease, growth delay after transplantation, underlying mechanisms, 366
- hepatitis C, genotypes in serum and liver, children, 618
- nitrogen balance changes in amino acids and hormone levels, after overnight fasting, perinatal and adult rats, 1018
- transplantation, growth delay after, underlying mechanisms, 366
- Lung
- disease, chronic
 - IL-8, leukotriene B₄, and platelet-activating factor effects, preterm infant, 11
 - oxidative stress role in development of, ventilated preterm infants, 286 - function, dexamethasone and exogenous surfactant therapy effects on, 676
 - function tests, tidal breathing patterns and, infants, 218
 - injury
 - propylthiouracil effects, after hyperoxia, rats, 292
 - TGF- α , EGF, and EGF-receptor immunolocalization, 851 - liquid volume, vasopressin effects, fetal sheep, 30
 - streptozotocin-induced, dexamethasone effects on surfactant protein gene expression, rats, 870
 - surfactant deficiency, intratracheal pulmonary *versus* mechanical ventilation, rabbits, 878
 - surfactant protein B developmental and glucocorticoid regulation, fetus, 668
- Lymphoproliferative disease, X-linked, review study, 471
- Macrophages, alveolar, TGF- α secretion by, postnatal rabbits after hyperoxia, 49
- Magnetic resonance imaging, hypoxia-ischemia, short- vs. long-term exposure, effects, brain edema, neonatal rat, 113
- Magnetic resonance spectroscopy, ³¹P and ¹H, brain temperature and energy utilization rate relationship, 919
- Mammary tumor virus, *int-2* gene and, nodose ganglion development influence, 485
- Maternal cocaine injection, cerebral response to, fetal sheep, 943
- Maternal-child interactions, HIV-1 transmission
- CD8 lymphocyte activation marker expression in, 390
 - identification of factors involved in, 384
- Mental retardation, fragile X syndrome, repeat amplification mechanism and timing, 629
- Metabolic response, hypoxemia, theophylline effects, during quiet sleep, piglets, 926
- Mineralocorticoids, glucocorticoids and, effects on mRNA expression colon ion transporters, infant rats, 164
- Monoclonal antibody, reshaped, protective effects, respiratory syncytial virus, rats, 543
- Mononuclear phagocytic system, liposomes and, role, drug delivery for chemotherapy, 7

- Morphine, chemoreceptor responsiveness effects, fetal sheep, 938
- Motor activity, intestinal, postnatal change in, 133
- Myocardium, developing, reducing equivalent shuttles in, newborn heart, 221
- L-NAME, *see* *N*^G-nitro-L-arginine methyl ester
- NDMA, *see* *N*-methyl-D-aspartic acid
- Neonate
- β -adrenergic and nitric oxide effects on norepinephrine, cerebral blood flow and, 237
 - hypoxia-ischemia
 - brain damage, caffeine use during pregnancy effects, 312
 - quisqualate destruction of nitric oxide synthase neurons, role, reducing damage after, rats, 912
 - intracranial pressure, thoracoabdominal compression effects on, neonatal lambs, 664
 - myocardial contracture and ischemia, mechanical and metabolic characterization, 228
 - periodic breathing, temporal structure changes with postnatal development, 533
 - persistent pulmonary hypertension, arginine metabolism and nitric oxide synthesis, 17
- Nephropathic cytinosis, intravenous cysteamine therapy effects, 579
- Neuroblast adhesion, HIV-1 *tat*, infants and children, 792
- Neurodevelopment quotient, long-chain polyunsaturated fatty acids effects on, 4-month-old infants, 262
- Neurologic deficits, excessive bilirubin levels and, neonates, 949
- Neuronal injury, NMDA receptor and nitric oxide comparison, lesion size and cerebral hyperemia effects, 644
- Neutropenia, immune-mediated, neonates, 993
- Neutrophil
- chemoattractant, IL-8, leukotriene B₄, and platelet-activating factor, effects, chronic lung disease of prematurity, 11
 - pulmonary, comparison study, adult and neonatal rats after hyperoxia, 857
- N*^G-nitro-L-arginine methyl ester
- dizocilpine maleate and, effects on lesion size and hyperemia, comparison study, 644
 - effects, reducing infarct volume during cerebral artery occlusion, rats, 652
- Nitric oxide
- β -adrenergic and, effects on norepinephrine, cerebral blood flow and, fetus and neonate, 237
 - inhaled, *vs.* inhaled prostacyclin, pulmonary hypertension with acute respiratory failure, piglets, 198
 - vascular tone and limb reduction effects, during fetal development, rats, 905
- Nitric oxide synthase
- arginine metabolism and, persistent pulmonary hypertension of newborn, 17
 - neurons, quisqualate destruction of, role, reducing damage after hypoxia-ischemia, neonatal rat, 912
 - perinatal inhibition, effects, neonatal growth and induction of hypertrophic pyloric stenosis, rats, 768
- Norepinephrine, cerebral blood flow and, nitric oxide and β -adrenergic effects on, fetus and neonate, 237
- Nutritional status, fat-free mass measurement and, infants, 411
- Obesity, after acute lymphoblastic leukemia treatment, 86
- Ornithine decarboxylase, tyrosine kinase activity and, juvenile polyps, 574
- Osteocalcin, reference values, healthy children and adolescents, 955
- Ovarian function, growth hormone effects on, puberty and, 763
- Ovarian parameters, endocrine and ultrasound, adolescents with menstrual irregularities and, 974
- Oxidative stress, role, development of chronic lung disease, preterm infants, 286
- Oxygenation
- cerebral blood flow and, indomethacin effects, normal and ventilated fetal lamb, 243
 - extracorporeal membrane, veno-arterial, bypass bridge opening effects on oxygenation and hemodynamics, neonates, 124
- Oxyhemoglobin saturation, cerebral venous, near-infrared spectroscopy and jugular venous occlusion measurement, 319
- Pain assessment, juvenile rheumatoid arthritis, descriptive study, 194
- Pediatrics, language of, presidential address, 819
- Pentobarbital, chemoreceptor responsiveness effects, fetal sheep, 938
- Phenylketonuria, phenylalanine concentrations in brain, magnetic resonance spectroscopy measurement, 657
- Placental trophoblast, IgG transport mechanism, 1
- Platelet-activating factor, effects, chronic lung disease of prematurity, 11
- Polychlorinated biphenyl, dioxins and, immunologic effects after exposure, 404
- Polyps, juvenile, ornithine decarboxylase and tyrosine kinase activity, 574
- Polyunsaturated fatty acids, long-chain, effects on development quotient, 4-month-old infants, 262
- Prader-Willi syndrome, growth hormone therapy effects on adipocyte mRNA levels in, 418
- Pregnancy
- caffeine use during, effects on hypoxic ischemia, neonate, 312
 - diabetes during, uterine blood flow and embryo development, rats, 598
- Presidential address
- American Pediatric Society, 1995: Disease, War, and Biology: Languages for Medicine—and Pediatrics, 819
 - Society for Pediatric Research, 1995: Marrying our Medicine to Biology, 830
- Propranolol, chemoreceptor responsiveness effects, fetal sheep, 938
- Propylthiouracil, lung injury effects, after hyperoxia, rats, 292
- Prostacyclin, inhaled, *vs.* inhaled nitric oxide, pulmonary hypertension with acute respiratory failure, piglets, 198
- Prostanoid, role, enhancing vasoconstrictions to leukotriene C₄, cerebral hematoma and, piglets, 119
- Protein restriction, dietary, long-term alterations in growth hormone and insulin secretion after temporary, rats, 747
- Puberty
- development during, effects on IGF binding protein-3 and IGF-I levels, 149
 - growth hormone effects on ovarian function, 763
- Pulmonary neutrophils, comparison study, adult and neonatal rats after hyperoxia, 857
- Pulmonary stenosis, sympathetic activity regulation, 55
- Pulmonary surfactant, CTP:phosphocholine cytidyltransferase by cytosolic lipids in rat type II pneumocytes during development, 864
- Pulmonary vascular reactivity, contractile response maturation and endothelial modulation effects, newborn pigs, 25
- Pulmonary vasculature, intravascular ultrasound feasibility, infants and children, 36
- Quisqualate, nitric oxide synthase neuron destruction and, role, reducing damage after hypoxia-ischemia, neonatal rat, 912
- RDS, *see* Respiratory distress syndrome
- Renin-angiotensin system, angiotensin II receptor levels, fetal sheep, 896
- Respiratory distress syndrome
- aspirin *versus* indomethacin treatment of patent ductus arteriosus, preterm infants, 886
 - positive end-expiratory pressure during KL₄ surfactant instillation, role, enhancing pulmonary distribution, 211
- Respiratory failure, acute, pulmonary hypertension with, inhaled nitric oxide *vs.* inhaled prostacyclin, piglets, 198
- Respiratory response, during seizures, upper airway contribution to, piglets, 61
- Respiratory support, during seizures, glottal patency and, piglets, 932
- Respiratory syncytial virus, reshaped monoclonal antibody RSHZ19 protective efficacy, rats, 543
- Retinoic acid, heart malformations and, Ca²⁺ levels, rats, 892
- School, immune function and, adrenocortical and behavioral predictors of, 1009
- Seizure
- glottal patency during, piglets, 932
 - upper airway contribution to respiratory response during, piglets, 61
- L-Selectin, levels in umbilical cord blood, increase with gestational age, 336
- Sepsis, group B streptococcal
- IL-1 receptor antagonist effects on hemodynamic manifestations of, 704
 - TNF- α antibodies effects on, neonatal rats, 551
- Serine metabolism, pathways in ovine fetal hepatocytes, 775
- Sickle cell disease, 6-keto-prostaglandin F_{1 α} and thromboxane plasma levels, 95
- Sleep, quiet, theophylline effects on metabolic and ventilatory response to hypoxemia during, piglets, 926

- Small intestine, motor function, enteral nutrition and, preterm infants, 133
- Smooth muscle, myosin heavy chain isoform expression, 697
- Society for Pediatric Research, presidential address, 1995 meeting, 830
- Spectrometry
electrospray tandem mass, role, diagnosing inborn errors of metabolism by acylcarnitine profiling, 324
isotope dilution/gas chromatography-mass, 17α -hydroxyprogesterone, 4-androstenedione, and testosterone analysis, children, 76
- Spectroscopy
magnetic resonance, phenylalanine concentrations in brain, patients with phenylketonuria, 657
near-infrared, jugular venous occlusion and, role, measuring cerebral venous oxyhemoglobin saturation, 319
- Spirometry, rapid thoracoabdominal compression method, measuring forced expiratory flow, neonatal lambs, 664
- Stature, short, isolated central hypothyroidism and, 967
- Status epilepticus, effects on hypoxic-ischemic brain damage, postnatal rats, 251
- Stenosis, hypertrophic pyloric, perinatal nitric oxide synthase inhibition effects on retardation of, rats, 768
- Streptococcus*
group A, epidemiology of infections, M and T antigen serotyping and field inversion gel electrophoresis, comparison study, 988
group B
meningeal inflammatory response, neonatal piglet, 981
sepsis, IL-1 receptor antagonist effects on hemodynamic manifestations of, 704
TNF- α antibodies effects on, neonatal rats, 551
- Submental muscle activity, during obstructive apnea and cardiorespiratory arousal, preterm infants, 298
- Substance abuse, maternal cocaine injection, cerebral response, fetal sheep, 943
- Sucrose, heel lancing pain reduction effects, preterm infants, 332
- Sudden infant death syndrome, obstructive apnea and cardiorespiratory arousal and, submental and diaphragmatic muscle activity during, preterm infants, 298
- Sulfadimethoxine, visual evoked potential abnormalities and jaundice, rats, 258
- Sulfate transport, glycoconjugates and, cystic fibrosis airway epithelial cells, 42
- Surfactant
deficiency, intratracheal pulmonary *versus* mechanical ventilation, rabbits, 878
KL₄, end-expiratory pressure during instillation of, role, enhancing pulmonary distribution, RDS and, 211
production, glucocorticoid receptor mediation of, 506
protein, mRNA levels, insulin and cortisol effects on, 513
protein B, developmental and glucocorticoid regulation, fetal lung, 668
protein gene expression, dexamethasone effects, streptozotocin-induced rat lungs, 870
therapy, dexamethasone and exogenous, prenatal, lung function effects, 676
- Sympathetic activity, regulation, congenital heart disease, 55
- Sympathetic innervation, glucocorticoid stimulation, heart development effects, 479
- Teniposide, liposomal formulation and, role, drug delivery for chemotherapy, 7
- Testosterone
4-androstenedione and 17α -hydroxyprogesterone, analysis by isotope dilution/gas chromatography-mass spectrometry, children, 76
secretion, growth hormone responses and, cells isolated from testes, infants and children, 592
- Tetralogy of Fallot, sympathetic activity regulation, 55
- TGF, *see* Transforming growth factor
- Theophylline, metabolic and ventilatory response to hypoxemia, during quiet sleep, piglets, 926
- Thrombocytopenia, immune-mediated, neonates, 993
- Thrombosis, hyperinsulinemia effects on coagulation development and, fetus, 169
- Thromboxane plasma levels, sickle cell disease, children, 95
- TNF, *see* Tumor necrosis factor
- Tracheal obstruction, short-term, role, reversing lung hypoplasia, fetal sheep, 690
- Transforming growth factor- α
effects on jejunal mucosal recovery in rotavirus diarrhea, piglets, 173
EGF, and EGF-receptor immunolocalization, lung injury and, 851
secretion by alveolar macrophages, postnatal rabbits after hyperoxia, 49
- Transplantation, *see* specific types
- Tumor, germ cell, tumor markers CA 125 and CA 19-9 in cord blood during infancy and, 797
- Tumor markers, CA 125 and CA 19-9, in cord blood during infancy, use in germ cell tumors, 797
- Tumor necrosis factor- α , antibodies effects on group B *Streptococcus*, neonatal rats, 551
- Tyrosine kinase, ornithine decarboxylase activity and, juvenile polyps, 574
- Ultrasound
intravascular, pulmonary vasculature visualization and, infants and children, 36
parameters, ovaries, adolescents with menstrual irregularities and, 974
- Umbilical cord
blood
cytokine receptor expression, 397
polymorphonuclear leukocytes, D-*myo*-Inositol 1,4,5-triphosphate generation, 564
L-selectin levels, increase with gestational age, 336
tumor markers CA 125 and CA 19-9 during infancy, use in germ cell tumors, 797
endothelial cells, Kawasaki disease effect on migration of, 501
- Uremia, insulin secretion and growth failure, adolescents on dialysis, 379
- Vascular tone, nitric oxide effects, fetal rats, 905
- Vasopressin, lung liquid volume and, fetal sheep, 30
- Ventilation, intratracheal pulmonary, *versus* mechanical, surfactant deficiency, rabbits, 878
- Ventilatory response, hypoxemia, theophylline effects, during quiet sleep, piglets, 926
- Vitamin B₆, levels, association with slow growth, breast-fed infants, 740
- Vitamin B₁₂, intrauterine uptake, preterm and full-term infants, 585
- Vitamin E, antenatal, effects on hypoxia-induced changes, neonatal rats, 685
- Water metabolism, colonic mucosal epithelium, aldosterone effects, preterm rats, 356
- X-linked lymphoproliferative disease, review study, 471