

BIOMEDICAL ONTOLOGY

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Project data is available at http://gminer.mcw.edu



http://bioontology.org

National Center for Biomedical Ontology hosts a wide variety of Ontologies that provide a structure for knowledge in many critical areas



1.5B Data Points trapped in International **Repository - Daring Rescue in Progress!**





We use NCBO tools and an automated pipeline to match ontology terms to GEO text (concept mapping) and manually review to create the index.

Use Linked Tag Clouds to navigate the GEO data to find GEO records associated with strains or anatomical regions. Tag Clouds also provide a summary of the search results as well as an intuitive navigation aid.

Series GSE1775 Status Title Organism(s) Experiment type Summary	Query DataSets for GSE1775 Public on Sep 20, 2004 Comparison of renal transcript levels in Dahl Salt-sensitive (S) rat with S.R congenic rat containing a BP QTL Rattus norvegicus Expression profiling by array Kidney samples from three Dahl Salt-sensitive S rats were compared with kidney samples from three S.R(9)x3A congenic rats Keywords = Blood Pressure Keywords = Quantitative trait locus Keywords = Augustian (Second) Keywords = rat Keywords = congenic Keywords: parallel sample		
Lots of in the te easy to	valuable information is encoded ext of the records but is not access or repurpose.	Can we get more information in the records? Can we I points stored in G	

bud						Ontology ter
Anatomy terms			Rat Strains			Ontology: Bat Strain Or
tomy terms and of trunk accumbens nucleus adipose d cortex adrenal gland medulla amygdala artilage autopod biceps femoris bile bile one marrow bowel Drain brain flac muscle tissue cardiovascular system brai Cortex cerebral hemisphere ra 1 cervical vertebra 2 chest cochlea issue coronary artery cranium cending colon descending thoracic aorta otor nucleus of vagus X nerve dorsal root trium epididymis epiphyseal plate Action and the art Appendix a artery blood Drain hand heart hypothalamus immune system kidney kidney cortex left kidney limb liver nephron nerve nervous system peripheral nervous system plasma quadriceps renal artery renal vein right kidney sciatic nerve seru spinal Cord spinal nerve spleen submandibular gland supraoptic nucleus testis trunk ureter urine vein kidney Has annotations that reference 571 GEO accession IDs.			Rat Str COP-(D10Mgh8-D10Ra CI.COP-(D3Rat130-D3 CI/N AI AO BB BI CI-(D10Rat15-D10Rat D11Wox5)/Rhd DRY IR LA/NJcr-cp LAD LEW/Pit LEW/SsN I P:NP-(D4Rat119-D4Rat SD SD/H N SHA/Bru SHR AA BP CD LEW/Pit LEW SD/NTi SS.SHR-(D2I SS/JrMco z Z-Leprob/d	rains at4)/Shul ACI.COP-(D3Mgh16- BRat114)/Shul ACI.COP-(D6Rat80- BN BP CAS CD congenic strain 29) DA.ACI-(D10Rat2-D10Rat6) DSS E3 EHC Eker F344 GH LE LE/Orl LEC LEJ/Hkm LEW LH LOU MNS N/N NE/Ins NP t55)/lusm P/lusm PD PKD rat ISCFCEN SD/NTac SHR.WKY-(D2Rat10-D2Mgh13)		Ontology: <u>Rat Strain On</u> Back Parent closures [rat strain] Child closures [SS.SHR-(D2Rat61-D2)] P.NP-(D4Rat119-D4Rat ACI.COP-(D6Rat80-D6 SHR.WKY-(D2Rat40-D) [SS.SR-(D9Rat89-D9M)] Has 3 direct annotati [GEO accession [GSE12724] GSE12725 [GSE413] Has 23 closure anno
s t		« Prev 1 2 3 4 5	6 7 8 9 10 !	57 58 Next »		
GEO accessi	on	Description				
n stomach stomach mucosi prnical organ submandibular <u>GDS1251</u> Acute hypo			nsion effect on kidneys			GEO accession
GDS1545 Salt sensitive hypertension: kidney (RG-U34			-U34A)			GDS1452
GDS1546		Salt sensitive hypertension: kidney (RG-	ension: kidney (RG-U34B)			0001402
GDS1547	GDS1547 Salt sensitive hypertension: kidney (RC			34C)		<u>GD52946</u>
GDS1572	Annotations	s via Cloud				0.000700
GDS1581 GDS1582 GDS2361 GDS2710 GDS2901	blood kidne	Anatomy terms CY plasma serum		Rat Strains SD SD/HsdFcen SD/NTac SDJ SDN SHR SHR/NTac SS SS.SHR-(D2Rat61-D2Mco18) SS SR-(D9Rat89-D9Mco27VMco, SS/Jr SS/JrMco	/Mco	Sample GSM132 Status Title
	kidney AND	SS at reference 11 GEO accession IDs. I	imited to the first 100	records.		Sample type Source Name
	GEO accession	Description				Organism(s)
	GDS2710	Salt-sensitive hyperten	sion model: kidney			Characteristics
	GDS574	Renal function and diet	ary salt			
	GSE1775	Comparison of renal tra	inscript levels in Dahl Salt-	-sensitive (S) rat with S.R congenic rat containing a BP QTL		
	GSE599	Dietary salt and renal fu	unction			
	atomy terms nent of trunk ac nd cortex adrer cartilage autopic cone marrow bic putamen cecur bral cortex pra 1 cervical v tissue coronar scending colon notor nucleus of etrium epididyr adrenal gla hypothalar plasma q plasma q spinal nucleus te construction construction bic construction c	atomy terms The second	A A A A A A A A A A A A A A A A A A A	atomy terms Rat Sti ent of trunk accumbers nucleus adjoose dicotex adrenal gland medulla amyddia scrillage autopod biceps femoris blie blie blie potemen cecum central nervous system putamen cecum central nervous system putamen cecum central nervous system putamen cecum central nervous system potent cortex cerebral hemisphere ra 1 cervical vertebra 2 chest continea issue coronay ratery cranitu sending colon descending thoracic aorta terium epididymis epiphyseal plate COP DA DA ACI-(D10Rat15-D10Rat DB AE3-(D11GaT2-D11Woo5)/RAD DRY GHOm/Mow HS IR LANJacrop LD DU EW/CH LEW/CH LEW/CH LEW/SN NP/Lam OM P PNP-(D4Rat15-D10Rat tissue coronay ratery cranitu epididymis epiphyseal plate adrenal gland aorta artery blood Drain hard beam quadricops neral adraty real win right kidney sciatic nerve serum plasma quadricops neral adraty real win right kidney sciatic nerve serum spinal Cord spinal nerve spicen submandibular gland supraoptic nucleus tests trunk unter unine win Ma BP CD LEW/FR LEE DIsplaylog 1-1 of 71 in total 1 Perv 1 2 3 4 5 0 7 8 0 10 - 1 0 Image: Displaylog 1-1 0 for 1 in total 1 Displaylog 1-1 0 for 1 in total 1 Displaylog 1-1 0 for 1 in total 1 Perv 1 2 3 4 5 0 7 8 0 10 - 1 0 Image: Displaylog 1-1 0 for 1 in total 1 Displaylog 1-1 0 for	Idd atomy draws words and only draws words	Image: server and serve

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INDEX							
Bra	ain	11	hits				
	Forebrain	5	hits				
	Hindbrain	3	hits				
	Amygdyla	3	hits				
SS	rats	23	hits				
	SS/Jr	9	hits				
	SS/NHsd	10	hits				
	S.R(9)x3a	4	hits				
	•••	•					

information out of GEO by identifying text and creating an Index of the GEO link this index to the billions of data GEO to extract more information?



thoracic aorta

