

List of autosomal recessive diseases included in the UMCG gene panel

<b>Disease</b>	<b>Links</b>	<b>Gene</b>
<b>Andermann Syndrome</b>	<a href="http://www.omim.org/entry/218000">http://www.omim.org/entry/218000</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=1496">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=1496</a>	SLC12A6
<b>Aspartylglucosaminuria</b>	<a href="http://www.omim.org/entry/208400">http://www.omim.org/entry/208400</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=93">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=93</a>	AGA
<b>Ataxia Telangiectasia</b>	<a href="http://www.omim.org/entry/208900">http://www.omim.org/entry/208900</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=GB&amp;Expert=100">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=GB&amp;Expert=100</a>	ATM
<b>Bloom Syndrome</b>	<a href="http://www.omim.org/entry/210900">http://www.omim.org/entry/210900</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=GB&amp;Expert=125">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=GB&amp;Expert=125</a>	BLM (RECQL3)
<b>Canavan's Disease</b>	<a href="http://omim.org/entry/271900">http://omim.org/entry/271900</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=141">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=141</a>	ASPA
<b>Citrullinemia type 1</b>	<a href="http://www.omim.org/entry/215700">http://www.omim.org/entry/215700</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=247525">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=247525</a>	ASS1
<b>Congenital disorder of glycosylation type 1A</b>	<a href="http://www.omim.org/entry/212065">http://www.omim.org/entry/212065</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=79318">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=79318</a>	PMM2
<b>Congenital Nephrotic Syndrome, Finnish Type</b>	<a href="http://www.omim.org/entry/256300">http://www.omim.org/entry/256300</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=839">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=839</a>	NPHS1
<b>D-Bifunctional Protein Deficiency</b>	<a href="http://www.omim.org/entry/261515">http://www.omim.org/entry/261515</a>	HSD17B4
<b>Epidermolysis Bullosa</b>	<a href="http://www.omim.org/entry/226700">http://www.omim.org/entry/226700</a> <a href="http://www.omim.org/entry/226600">http://www.omim.org/entry/226600</a>	LAMA3, LAMB3, LAMC2, COL7A1
<b>Familial Dysautonomia</b>	<a href="http://www.omim.org/entry/223900">http://www.omim.org/entry/223900</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=1764">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=1764</a>	IKBKAP
<b>GM2 Gangliosidosis, mainly Tay Sachs Disease</b>	<a href="http://www.omim.org/entry/272800">http://www.omim.org/entry/272800</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=845">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=845</a>	HEXA
<b>GRACILE Syndrome</b>	<a href="http://www.omim.org/entry/603358">http://www.omim.org/entry/603358</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=53693">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=53693</a>	BCS1L
<b>Hypophosphatasemia</b>	<a href="http://omim.org/entry/241500">http://omim.org/entry/241500</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=436">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=436</a>	ALPL
<b>Infantile Sialic Acid Storage Disease</b>	<a href="http://www.omim.org/entry/269920">http://www.omim.org/entry/269920</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=834">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=834</a>	SLC17A5
<b>Krabbe's Disease</b>	<a href="http://www.omim.org/entry/245200">http://www.omim.org/entry/245200</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=487">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=487</a>	GALC
<b>Lipoamide Dehydrogenase Deficiency</b>	<a href="http://www.omim.org/entry/246900">http://www.omim.org/entry/246900</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=GB&amp;Expert=2394">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=GB&amp;Expert=2394</a>	DLD
<b>Leukoencephalopathy with Vanishing White Matter</b>	<a href="http://www.omim.org/entry/603896">http://www.omim.org/entry/603896</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=GB&amp;Expert=135">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=GB&amp;Expert=135</a>	EIF2B1, EIF2B2, EIF2B3,

<b>Disease</b>	<b>Links</b>	<b>Gene</b>
		EIF2B4, EIF2B5
<b>Metachromatic Leukodystrophy</b>	<a href="http://omim.org/entry/250100">http://omim.org/entry/250100</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=512">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=512</a>	ARSA
<b>Mitochondrial Recessive Ataxia Syndrome</b>	<a href="http://www.omim.org/entry/607459">http://www.omim.org/entry/607459</a>	POLG
<b>Mitochondrial DNA depletion syndromes type 4A</b>	<a href="http://www.omim.org/entry/203700">http://www.omim.org/entry/203700</a>	POLG
<b>Mitochondrial DNA Depletion Syndrome type 4 B</b>	<a href="http://www.omim.org/entry/613662">http://www.omim.org/entry/613662</a>	POLG
<b>Mucopolidosis IV</b>	<a href="http://omim.org/entry/252650">http://omim.org/entry/252650</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?lng=EN&amp;Expert=578">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?lng=EN&amp;Expert=578</a>	MCOLN1
<b>Mucopolysaccharidosis I (Hurler, Hurler-Scheie)</b>	<a href="http://omim.org/entry/607014">http://omim.org/entry/607014</a> <a href="http://omim.org/entry/607015">http://omim.org/entry/607015</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?lng=EN&amp;Expert=579">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?lng=EN&amp;Expert=579</a>	IDUA
<b>Mucopolysaccharidosis III, Sanfilippo Syndrome</b>	<a href="http://omim.org/entry/252900">http://omim.org/entry/252900</a> <a href="http://omim.org/entry/252920">http://omim.org/entry/252920</a> <a href="http://omim.org/entry/252930">http://omim.org/entry/252930</a> <a href="http://omim.org/entry/252940">http://omim.org/entry/252940</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?lng=EN&amp;Expert=581">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?lng=EN&amp;Expert=581</a>	SGSH, NAGLU, HGSNAT, GNS
<b>Mucopolysaccharidosis IV, Morquio Syndrome</b>	<a href="http://omim.org/entry/253000">http://omim.org/entry/253000</a> <a href="http://omim.org/entry/253010">http://omim.org/entry/253010</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?lng=EN&amp;Expert=582">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?lng=EN&amp;Expert=582</a>	GALNS, GLB1
<b>Mucopolysaccharidosis VI, Maroteaux-Lamy Syndrome</b>	<a href="http://omim.org/entry/253200">http://omim.org/entry/253200</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?lng=EN&amp;Expert=583">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?lng=EN&amp;Expert=583</a> <a href="http://www.maroteaux-lamy.com/en-gb/pages/hcp/index.aspx">http://www.maroteaux-lamy.com/en-gb/pages/hcp/index.aspx</a>	ARSB
<b>Mucopolysaccharidosis VII, Sly Syndrome</b>	<a href="http://omim.org/entry/253220">http://omim.org/entry/253220</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?lng=EN&amp;Expert=584">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?lng=EN&amp;Expert=584</a>	GUSB
<b>Muscle Eye Brain Disease/ Muscular Dystrophy-Dystroglycanopathy (congenital with Brain and Eye Anomalies)</b>	<a href="http://www.omim.org/entry/253280">http://www.omim.org/entry/253280</a> <a href="http://omim.org/entry/614643">http://omim.org/entry/614643</a> <a href="http://omim.org/entry/615041">http://omim.org/entry/615041</a>	POMGNT1; FKRP, ISPD, TMEM5,
<b>Neuronal Ceroid Lipofuscinosis, Types 1,2</b>	<a href="http://omim.org/entry/256730">http://omim.org/entry/256730</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=79263">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=79263</a> <a href="http://omim.org/entry/204500">http://omim.org/entry/204500</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=168491">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=168491</a>	PPT1, TPP1
<b>Neuronal Ceroid Lipofuscinosis Type 3, Batten-Spielmeyer-Vogt's Disease</b>	<a href="http://omim.org/entry/204200">http://omim.org/entry/204200</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=79264">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=79264</a>	CLN3
<b>Neuronal Ceroid Lipofuscinosis Type 5, Finnish Variant</b>	<a href="http://www.omim.org/entry/256731">http://www.omim.org/entry/256731</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=168491">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=168491</a>	CLN5
<b>Neuronal Ceroid Lipofuscinosis Type 8 &amp; Progressive Epilepsy and</b>	<a href="http://omim.org/entry/610003">http://omim.org/entry/610003</a> <a href="http://www.orpha.net/consor/cgi-">http://www.orpha.net/consor/cgi-</a>	CLN8

<b>Disease</b>	<b>Links</b>	<b>Gene</b>
<b>Mental Retardation</b>	<a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=1947">bin/OC_Exp.php?Expert=1947</a>	
<b>Niemann-Pick's Disease</b>	<a href="http://omim.org/entry/257220">http://omim.org/entry/257220</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=646">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=646</a> <a href="http://omim.org/entry/257200">http://omim.org/entry/257200</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=77292">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=77292</a>	NPC1, SMPD1
<b>Nijmegen Breakage Syndrome</b>	<a href="http://omim.org/entry/251260">http://omim.org/entry/251260</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=647">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=647</a>	NBN
<b>Osteopetrosis</b>	<a href="http://www.ojrd.com/content/4/1/5">http://www.ojrd.com/content/4/1/5</a> <a href="http://omim.org/entry/259700">http://omim.org/entry/259700</a> <a href="http://www.orpha.net/consor4.01/www/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=667">http://www.orpha.net/consor4.01/www/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=667</a>	TCIRG1
<b>Osteogenesis Imperfecta, Type VII</b>	<a href="http://omim.org/entry/610682">http://omim.org/entry/610682</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=666">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=666</a>	CRTAP
<b>Polycystic Kidney Disease</b>	<a href="http://omim.org/entry/263200">http://omim.org/entry/263200</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=731">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=731</a>	PKHD1
<b>Pontocerebellar Hypoplasia Type 1</b>	<a href="http://omim.org/entry/607596">http://omim.org/entry/607596</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=2254">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=2254</a>	VRK1
<b>Pontocerebellar Hypoplasia Type 2 (A,B &amp; C)</b>	<a href="http://www.omim.org/entry/277470">http://www.omim.org/entry/277470</a> <a href="http://www.omim.org/entry/612389">http://www.omim.org/entry/612389</a> <a href="http://www.omim.org/entry/612390">http://www.omim.org/entry/612390</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=2524">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=2524</a>	TSEN54, TSEN2, TSEN34
<b>Pontocerebellar Hypoplasia Type 6</b>	<a href="http://omim.org/entry/611523">http://omim.org/entry/611523</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=166073">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=166073</a>	RARS2
<b>Rhizomelic Chondrodysplasia Punctata</b>	<a href="http://omim.org/entry/215100">http://omim.org/entry/215100</a> <a href="http://omim.org/entry/222765">http://omim.org/entry/222765</a> <a href="http://omim.org/entry/600121">http://omim.org/entry/600121</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=177">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=177</a>	PEX7, GNPAT, AGPS
<b>Sjögren-Larsson Syndrome</b>	<a href="http://omim.org/entry/270200">http://omim.org/entry/270200</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=816">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=816</a>	ALDH3A2
<b>Spinal Musculaire Atrophy (SMA), type 0/1)</b>	<a href="http://omim.org/entry/253300">http://omim.org/entry/253300</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=70">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=EN&amp;Expert=70</a>	SMN1
<b>Smith-Lemli-Opitz Syndrome</b>	<a href="http://omim.org/entry/270400">http://omim.org/entry/270400</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=GB&amp;Expert=818">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Lng=GB&amp;Expert=818</a>	DHCR7
<b>Zellweger Syndrome</b>	<a href="http://omim.org/entry/214100">http://omim.org/entry/214100</a> <a href="http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=912">http://www.orpha.net/consor/cgi-bin/OC_Exp.php?Expert=912</a>	PEX1