## Genes gained in Anomura BP TreeMap

	Conce gamed in 7 the mara Bi Tree map																	
ascospore formation		shell calcification		spermatid developmer	spermatogenesis	positive regulation of mRNA splicing, via spliceosome		genetic imprinting	postreplic repai	l cross–link	regulation of	bolymerase ii	OT RINA	negative regulation of transcription, DNA-templated	protein acetylation	blood coagulation intrinsic pathway	endopeptidase activity	positive regulation of peptidase activity
		myeloid cell sex			3,	double- break via home	repair	DNA-dependent DNA replication maintenance of genetic impring positive	with	mere regulation of DNA recombination	regula	ulation of tra	nslational nse to stres	culation of slational stion by Ir2 alpha osphorylation	positive regulation of peptidyl-sering dephorement dep	fibrin on of pe regulat	ation, ac clot ac ptidase ac ion	
sper nodulation		natid development		pollen		recomb DNA me		maintenance tr	NA splicing, via ansesterification reactions		transcription  positive regulation of translational initiation in stress	initia	lation of translation tion in response to asmic reticulum stress	d regulation of translational	regulation of peptidyl–serine dephosphorylation	of peptidas activity positive regula	phosphatase activity	ein cysteine-type
		megakaryoc developme	systen	maturati	sperm on capacitation	involved in embryo development		mRNA splicing, via spliceosome	nacromolecule methylation	pri-miRNA transcription by RNA polymerase I		ndoplasmic reticulum stress-induced elF2 tha dephosphorylation in resp		initiation in response to stress	positive regulation of nitrogen compound metabolic process	of cysteine endopeption activity involution apoptotic pr	-type dase pi ved in	rotein iquitination
mating plug formation		bone cell inflorescence development development			ventral spinal cord development	evasion of host		transport o	t, cycle	host cellular process	cellular response to cold	cellula respons to stres	se respo	lular onse to ooxia	androgen receptor signaling pathway regulation of PERK-mediated unfolded protein response		mediated PEF unfo	RK-mediated olded protein response
regulation of osteoblast org		gulation of agmoplast energy		regulati of	on regulation of cilium	immune response  biological proces		ss involved in	proces	ost by virus with host <sup>ost</sup>	establish cellu	OI .	to ionizing e to stressition		I-ka PERK-mediated unfolded nucleus kinase/N protein response naling signaling pathway			
		crotubule panization	homeosta	activit	y cell motility regulation	modulation by virus of host apoptotic process		viral proces	biological process involved in	modulation of process of other organism modulation by	cellular response to reactive oxygen species	cellular response to decreased	to oxygen	n levels	of PERK-mediated endo unfolded protein reticulu		olasmic of of unfolded e	ative regulation response to ndoplasmic iculum stress
	cilium ce		regulation of phosphatidylinosito 3-kinase activity	homeostas	. I of blatelet			viral proces	S with host	symbiont of host process		oxygen leve	ls to radia	ation egative	ATP synthesis	coupled	cell myeloid cell activation	activation
retina retina homeostasis	tive regit	regulation of biologic cilium kinase		process homeostas	regulation of microtubule-based S movement	meiotic c	cell cycle	cell cycle	intermediate filament-base process	requiation of	regulation of histone modification	H3–K9 modification	of histone of H3–K27 H	gulation histone H3-K27 ethylation	purine	proton transport ne	n immune response	esponse response
prolifera	ntion ne	negative			regulation of molecular function				cell cycle	regulation of cytokinesis	of histone	f histone H3 H3-K27	gulation negative  K27 methylation  3-K27 of histone		in immun			ukocyte
cellular glucose homeost	ture r	ell death positive egulation	platelet aggregatior	negative regulation	inorganic ion homeostasis	phraamonlast	cellular bud site selection	regulation of cell cycle process	regulation	cytokinesis	regulation	histone		nistone	puri proces triphosphate biosynthetic process	nucleoside triphosphate biosynthetic process activa	granulocyte	myeloid
homeostasis	of	-			regulation of metabolic process				of cell division	mitotic cytokinesis	of histone methylation		H3-K27 ethylation me	lysine ethylation	ribonucleoside triphosphate biosynthetic process		activation	leukocyte activation