	MutSpec vs Temperature (FishBase)	MutSpec vs Maturation (FishBase)	MutSpec vs MaximalLifespan (AnAge)	MutSpec vs Temperature + Maturation (Fish Base)	
	(Fishbase)	Lm	Tm	(AllAge)	Lm	Tm
Co rre lat io n	Spearman's rank correlation rho: data: TemperMut\$A_G and TemperMut\$Temperature S = 474663, p-value = 3.321e-05 alternative hypothesis: true rho is not equal to 0	Spearman's rank correlation rho: data: MATULmmut\$G_C and MATULmmut\$Lm S = 192684, p-value = 0.008235 alternative hypothesis: true rho is not equal to 0 sample estimates:	Spearman's rank correlation rho: data: MATUTmmut\$G_C and MATUTmmut\$Tm S = 242544, p-value = 0.0222 alternative hypothesis: true rho is not equal to 0 sample estimates:	Spearman's rank correlation rho data: AnAgeMut\$T_C and AnAgeMut\$Maximum.longevityyr s. S = 223911, p-value = 0.9219 alternative hypothesis: true rho is not equal to 0	Call: m(formula = T_C ~ scale(Temperature) * scale(Lm), data = allparameters) Residuals: Min	Call:
	sample estimates: rho -0.3581037 data: TemperMut\$T_C and TemperMut\$Temperature S = 256954, p-value = 0.002522 alternative hypothesis: true rho is not equal to 0 sample estimates:	rho -0.266859	rho -0.2219755	sample estimates: rho -0.009449996	Coefficients: Estimate Std. Error t value Pr(> t) (Intercept) 0.133998 0.008373 16.003 <2e-16 *** scale(Temperature) 0.019695 0.008442 2.333 0.023 * scale(Lm) -0.001413 0.009040 -0.156 0.876 scale(Temperature):scale(Lm) -0.003960 0.010934 -0.362 0.719	Coefficients: Estimate Std. Error t value Pr(> t) (Intercept) 0.131507 0.008055 16.325 < 2e-16 *** scale(Temperature) 0.024866 0.008083 3.076 0.00313 ** scale(Tm) -0.008903 0.008722 -1.021 0.31142 scale(Temperature):scale(Tm) -0.000811 0.009005 -0.090 0.92854
	rho 0.2648037 AFTER NORMALIZATION Spearman's rank correlation rho data: TemperMut\$T_C.NormalOnlyB yT and TemperMut\$Temperature				Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' '1 Residual standard error: 0.06685 on 60 degrees of freedom Multiple R-squared: 0.08655, Adjusted R-squared: 0.04088 F-statistic: 1.895 on 3 and 60 DF, p-value: 0.1401	Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' '1 Residual standard error: 0.062 on 61 degrees of freedom Multiple R-squared: 0.1815, Adjusted R-squared: 0.1412 F-statistic: 4.508 on 3 and 61 DF, p-value: 0.006387
	S = 325684, p-value = 0.4446 alternative hypothesis: true rho is not equal to 0 sample estimates: rho 0.06815333 Spearman's rank correlation rho data: TemperMut\$A_G.NormalOnly ByA and TemperMut\$Temperature S = 385666, p-value = 0.146 alternative hypothesis: true rho is not equal to 0 sample estimates:				$Call: \\ Im(formula = T_C \sim scale(Temperature) \\ + scale(Lm), data = allparameters) \\ Residuals: \\ Min 1Q Median 3Q \\ Max \\ -0.148531 -0.043140 -0.008988 \\ 0.044211 0.146448 \\ Coefficients: \\ Estimate Std. Error t value \\ Pr(> t) \\ (Intercept) 0.134190 0.008297 \\ 16.174 < 2e-16 ****$	Call:

rho	scale(Temperature) 0.019552	scale(Tm) -0.008600 0.007985
-0.1297411	0.008373 2.335 0.0228 *	-1.077 0.28564
	scale(Lm) -0.002592 0.008373	
WHAT WITH A G?	-0.310 0.7579	Signif. codes: 0 '***' 0.001 '**' 0.01
what with a_g.		** 0.05 '.' 0.1 ' '1
	Signif. codes: 0 '***' 0.001 '**' 0.01	0.03 . 0.1
0.11	Signii. codes: 0 *** 0.001 ** 0.01	D :1 1 . 1 . 1 . 0 0015 . 00
Call:	'* [*] 0.05 '.' 0.1 ' ' 1	Residual standard error: 0.0615 on 62
$lm(formula = A_G \sim$		degrees of freedom
scale(Temperature) *	Residual standard error: 0.06637 on 61	Multiple R-squared: 0.1814,
scale(Tm), data = allparameters)	degrees of freedom	Adjusted R-squared: 0.1549
	Multiple R-squared: 0.08455,	F-statistic: 6.867 on 2 and 62 DF,
Residuals:	Adjusted R-squared: 0.05454	p-value: 0.002023
Min 1Q Median	F-statistic: 2.817 on 2 and 61 DF,	•
3Q Max	p-value: 0.06758	Call:
-0.081267 -0.026615 -0.007707	p value. 0.00720	$lm(formula = scale(T C) \sim$
0.014225 0.135117	Call:	scale(Temperature) + scale(Tm), data =
0.014223 0.133117		` ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '
	$lm(formula = scale(T_C) \sim$	allparameters)
Coefficients:	scale(Temperature) + scale(Lm), data =	
Estimate Std.	allparameters)	Residuals:
Error t value Pr(> t)		Min 1Q Median 3Q Max
(Intercept) 0.067337	Residuals:	-1.7327 -0.6145 -0.1178 0.5956 2.0488
0.006327 10.643 1.56e-15 ***	Min 1Q Median 3Q Max	
scale(Temperature)	-2.1759 -0.6320 -0.1317 0.6477 2.1454	Coefficients:
-0.014702 0.006348 -2.316		Estimate Std. Error t value
0.0239 *	Coefficients:	Pr(> t)
scale(Tm)	Estimate Std. Error t value	(Intercept) -4.629e-16 1.140e-01
-0.009556 0.006851 -1.395		0.000 1.00000
	Pr(> t)	
0.1681	(Intercept) 2.199e-16 1.215e-01	scale(Temperature) 3.727e-01
scale(Temperature):scale(Tm)	0.000 1.0000	1.194e-01 3.122 0.00273 **
-0.005560 0.007073 -0.786	scale(Temperature) 2.864e-01	scale(Tm) -1.286e-01 1.194e-01
0.4349	1.227e-01 2.335 0.0228 *	-1.077 0.28564
	scale(Lm) -3.798e-02 1.227e-01	
Signif. codes: 0 '***' 0.001	-0.310 0.7579	Signif. codes: 0 '***' 0.001 '**' 0.01
'**' 0.01 '*' 0.05 '.' 0.1 ' '1		'* ['] 0.05 '.' 0.1 ' '1
	Signif. codes: 0 '***' 0.001 '**' 0.01	
Residual standard error:	'*', 0.05 '.', 0.1 ' ', 1	Residual standard error: 0.9193 on 62
0.04869 on 61 degrees of	0.00 . 0.1	degrees of freedom
freedom	Residual standard error: 0.9723 on 61	Multiple R-squared: 0.1814,
	degrees of freedom	
Multiple R-squared: 0.0903,	- Contract of the contract of	Adjusted R-squared: 0.1549
Adjusted R-squared:	Multiple R-squared: 0.08455,	F-statistic: 6.867 on 2 and 62 DF,
0.04556	Adjusted R-squared: 0.05454	p-value: 0.002023
F-statistic: 2.018 on 3 and 61	F-statistic: 2.817 on 2 and 61 DF,	
DF, p-value: 0.1207	p-value: 0.06758	Call:
		$lm(formula = scale(T_C) \sim 0 +$
MOREOVER:	Call:	scale(Temperature) + scale(Tm),
Call:	$lm(formula = scale(T C) \sim 0 +$	data = allparameters)
lm(formula = Temperature ~	scale(Temperature) + scale(Lm),	anparameters)
scale(T C) * scale(A G), data =	data = allparameters)	Residuals:
\ _ / \ \ _ //	data – anparameters)	
allparameters)	n	Min 1Q Median 3Q Max
	Residuals:	-1.7327 -0.6145 -0.1178 0.5956 2.0488
Residuals:	Min 1Q Median 3Q Max	
Min 1Q Median 3Q	-2.1759 -0.6320 -0.1317 0.6477 2.1454	Coefficients:
Max		

-19.1572 -4.7552 0.7703	Coefficients:	Estimate Std. Error t value
4.6829 11.5930	Estimate Std. Error t value	Pr(> t)
1.0025 11.0550	Pr(> t)	scale(Temperature) 0.3727 0.1184
G or :	1 7 7	
Coefficients:	scale(Temperature) 0.28642 0.12166	3.147 0.00252 **
Estimate Std.	2.354 0.0217 *	scale(Tm) -0.1286 0.1184
Error t value Pr(> t)	scale(Lm) -0.03798 0.12166	-1.086 0.28176
(Intercept) 16.0049	-0.312 0.7560	
0.8609 18.590 < 2e-16 ***	0.512 0.7500	Signif. codes: 0 '***' 0.001 '**' 0.01
		S
scale(T_C) 3.0589	Signif. codes: 0 '***' 0.001 '**' 0.01	'*' 0.05 '.' 0.1 ' ' 1
0.8804 3.475 0.000948 ***	'*' 0.05 '.' 0.1 ' ' 1	
scale(A G) -1.1890		Residual standard error: 0.9119 on 63
0.9333 -1.274 0.207495	Residual standard error: 0.9645 on 62	degrees of freedom
	degrees of freedom	<u> </u>
scale(T_C):scale(A_G) 0.8792		Multiple R-squared: 0.1814,
0.9322 0.943 0.349346	Multiple R-squared: 0.08455,	Adjusted R-squared: 0.1554
	Adjusted R-squared: 0.05502	F-statistic: 6.978 on 2 and 63 DF,
Signif. codes: 0 '***' 0.001	F-statistic: 2.863 on 2 and 62 DF,	p-value: 0.00183
'**' 0.01 '*' 0.05 '.' 0.1 ' ' 1	p-value: 0.06466	<u> </u>
0.02 . 0.1	p value. 0.00100	Call:
D 11 1 4 1 1 6005	0.11	
Residual standard error: 6.885	Call:	$lm(formula = scale(T_C) \sim 0 +$
on 61 degrees of freedom	$lm(formula = scale(T_C) \sim 0 +$	scale(Temperature), data =
Multiple R-squared: 0.2167,	scale(Temperature), data =	allparameters)
Adjusted R-squared:	allparameters)	
0.1782		Residuals:
F-statistic: 5.625 on 3 and 61	Residuals:	
		Min 1Q Median 3Q Max
DF, p-value: 0.001802	Min 1Q Median 3Q Max	-1.67386 -0.63249 -0.04528 0.58369
	-2.1557 -0.6148 -0.1217 0.6598 2.1147	2.15754
Call:		
lm(formula = Temperature ~	Coefficients:	Coefficients:
scale(T C) + scale(A G), data	Estimate Std. Error t value	Estimate Std. Error t value
\ = / \ \ = //		
= allparameters)	Pr(> t)	Pr(> t)
	scale(Temperature) 0.2883 0.1206	scale(Temperature) 0.4075 0.1142
Residuals:	2.39 0.0199 *	3.57 0.000684 ***
Min 1Q Median 3Q		
Max	Signif. codes: 0 '***' 0.001 '**' 0.01	Signif. codes: 0 '***' 0.001 '**' 0.01
-19.3869 -4.7812 0.4572	'*' 0.05 '.' 0.1 ' ' 1	'*' 0.05 '.' 0.1 ' ' 1
	0.03 . 0.1	0.05 . 0.1 1
4.5021 11.5473		
	Residual standard error: 0.9575 on 63	Residual standard error: 0.9132 on 64
Coefficients:	degrees of freedom	degrees of freedom
Estimate Std. Error t	Multiple R-squared: 0.08311,	Multiple R-squared: 0.166,
value Pr(> t)	Adjusted R-squared: 0.06856	Adjusted R-squared: 0.153
(Intercept) 15.9015 0.8532	F-statistic: 5.711 on 1 and 63 DF,	F-statistic: 12.74 on 1 and 64 DF,
	· · · · · · · · · · · · · · · · · · ·	*
18.638 < 2e-16 ***	p-value: 0.01986	p-value: 0.0006844
scale(T_C) 2.9136 0.8660		
3.364 0.00132 **		
scale(A G) -1.5153 0.8660		
-1.750 0.08511 .		
-1./30 0.08311 .		
Signif. codes: 0 '*** 0.001		
'**' 0.01 '*' 0.05 '.' 0.1 ' ' 1		
Residual standard error: 6.879		
on 62 degrees of freedom		
on 62 degrees of freedom		

	Multiple R-squared: 0.2053, Adjusted R-squared: 0.1796 F-statistic: 8.007 on 2 and 62 DF, p-value: 0.0008065					
N	128	97	106	110	64	65
of						
sp eci						
es						
Sc	https://github.com/polarsong/mt	https://github.com/polarsong/mtDN	https://github.com/polarsong/mtD	https://github.com/polarsong/mtDN	https://github.com/polarsong/mtDNA_m	https://github.com/polarsong/mtDNA_m
rip	DNA_mutspectrum/blob/Actino	A_mutspectrum/blob/Actinopterigii	NA_mutspectrum/blob/Actinopter	A_mutspectrum/blob/Actinopterigii	utspectrum/blob/Actinopterigii/Head/2S	utspectrum/blob/Actinopterigii/Head/2S
t	pterigii/Head/2Scripts/Vertebrat	/Head/2Scripts/VertebratePolymorp	igii/Head/2Scripts/VertebratePoly	/Head/2Scripts/VertebratePolymorp	cripts/VertebratePolymorphisms.MutSpe	cripts/VertebratePolymorphisms.MutSpe
	ePolymorphisms.MutSpecComp	hisms.MutSpecComparisons.Analys	morphisms.MutSpecComparisons	hisms.MutSpecComparisons.Analys	cComparisons.Analyses.Ecology.Actino	cComparisons.Analyses.Ecology.Actino
	arisons.Analyses.Ecology.Actin	es.Ecology.Actinopterygii.FishBase Data.ALL RANK CORR.R	.Analyses.Ecology.Actinopterygii .FishBaseData.ALL RANK CO	es.Ecology.Actinopterygii.FishBase Data.ALL RANK CORR.R	pterygii.FishBaseData.MultipleReg_Mat urity~Temp.R	pterygii.FishBaseData.MultipleReg_Mat urity~Temp.R
	opterygii.FishBaseData.ALL_R ANK CORR.R	Data.ALL_KAINK_CORR.R	RR.R	Data.ALL_RAINK_CORR.R	uniy~remp.k	unty~1emp.K
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ſ	WholeGenome vs	WholeGenome vs Maturation (FishBase)	WholeGenome vs	WholeGenome vs	WholeGenome vs Body	WholeGenome vs Temperature(FishBase) +
	Temperature (FishBase)		MaximalLifespan	Maturiation (AnAge)	Mass (AnAge)	Maturation(FishBase)
			(AnAge)			

		Lm	Tm				Lm	Tm
C or re la ti o n	Pearson's product-moment correlation data: log2(AGG\$FemaleMaturity Days) and AGG\$FrT t = -2.7871, df = 300, p-value = 0.005657 alternative hypothesis: true correlation is not equal to 0 95 percent confidence interval: -0.26694950 -0.04684676 sample estimates: cor -0.1588715 data: log2(AGG\$FemaleMaturity Days) and AGG\$FrG t = -3.6769, df = 300, p-value = 0.0002796 alternative hypothesis: true correlation is not equal to 0 95 percent confidence interval: -0.31318440 -0.09707033 sample estimates: cor -0.2076599	Pearson's product-moment correlation data: log2(AGG\$FemaleMaturityD ays) and AGG\$FrA t = 2.5363, df = 190, p-value = 0.01201 alternative hypothesis: true correlation is not equal to 0 95 percent confidence interval: 0.04038784 0.31450996 sample estimates: cor 0.1809612 data: log2(AGG\$FemaleMaturityD ays) and AGG\$FrT	Pearson's product-moment correlation data: log2(AGG\$FemaleMaturity Days) and AGG\$FrT t = -4.0306, df = 186, p-value = 8.105e-05 alternative hypothesis: true correlation is not equal to 0 95 percent confidence interval: -0.4099044 -0.1462413 sample estimates: cor -0.28342	Pearson's product-moment correlation data: log2(AGG\$FemaleMaturit yDays) and AGG\$FrA t = 2.9679, df = 204, p-value = 0.003357 alternative hypothesis: true correlation is not equal to 0 95 percent confidence interval: 0.06865682 0.33094580 sample estimates: cor 0.2034487 data: log2(AGG\$FemaleMaturit yDays) and AGG\$FrT t = -7.3526, df = 204, p-value = 4.624e-12 alternative hypothesis: true correlation is not equal to 0 95 percent confidence interval: -0.5593992 -0.3424218 sample estimates: cor -0.4576984 data: log2(AGG\$FemaleMaturit yDays) and AGG\$FrC t = 3.0345, df = 204, p-value = 0.002723 alternative hypothesis: true correlation is not equal to 0 95 percent confidence interval:	Pearson's product-moment correlation data: log2(AGG\$FemaleMaturit yDays) and AGG\$FrT t = -5.0863, df = 89, p-value = 2.01e-06 alternative hypothesis: true correlation is not equal to 0 95 percent confidence interval: -0.6199221 -0.2977171 sample estimates: cor -0.4745648 data: log2(AGG\$FemaleMaturit yDays) and AGG\$FrC t = 2.4411, df = 89, p-value = 0.01662 alternative hypothesis: true correlation is not equal to 0 95 percent confidence interval: 0.04698102 0.43405429 sample estimates: cor 0.2505021	Pearson's product-moment correlation data: log2(AGG\$FemaleMaturit yDays) and AGG\$FrT t = -3.7031, df = 124, p-value = 0.0003191 alternative hypothesis: true correlation is not equal to 0 95 percent confidence interval: -0.4648112 -0.1488685 sample estimates: cor -0.3155589 data: log2(AGG\$FemaleMaturit yDays) and AGG\$FrC t = 2.7439, df = 124, p-value = 0.006972 alternative hypothesis: true correlation is not equal to 0 95 percent confidence interval: 0.0671575 0.3975257 sample estimates: cor 0.2392541	Call: Im(formula = FrT ~ scale(Temperature) * scale(Maturity), data = AGGTEMPE) Residuals:	Call: Im(formula = FrT ~ scale(Temperature) * scale(Maturity), data = AGGTEMPE) Residuals:
	correlation is not equal to 0 95 percent confidence interval: -0.31318440 -0.09707033 sample estimates: cor	correlation is not equal to 0 95 percent confidence interval: -0.4479050 -0.1944362 sample estimates: cor		correlation is not equal to 0 95 percent confidence interval: -0.5593992 -0.3424218 sample estimates: cor -0.4576984 data: log2(AGG\$FemaleMaturit yDays) and AGG\$FrC t = 3.0345, df = 204, p-value = 0.002723 alternative hypothesis: true correlation is not equal to 0 95 percent confidence	correlation is not equal to 0 95 percent confidence interval: 0.04698102 0.43405429 sample estimates: cor	correlation is not equal to 0 95 percent confidence interval: 0.0671575 0.3975257 sample estimates: cor	-3.942 0.000138 *** scale(Maturity) -0.016741 0.003966 -4.221 4.85e-05 *** scale(Temperature):sc ale(Maturity) -0.001854 0.004659 -0.398 0.691467 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 '' 1 Residual standard error: 0.03978 on 116 degrees of freedom	-5.464 3.10e-07 *** scale(Maturity) -0.023345 0.005685 -4.106 7.93e-05 *** scale(Temperature):sc ale(Maturity) -0.008171 0.005267 -1.551 0.124 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1 Residual standard error: 0.03812 on 106 degrees of freedom
				interval: 0.07319492 0.33500116 sample estimates: cor 0.2078168			Multiple R-squared: 0.1882, Adjusted R-squared: 0.1672 F-statistic: 8.962 on 3 and 116 DF, p-value: 2.179e-05 Call: Im(formula = FrT ~ scale(Temperature) +	Multiple R-squared: 0.2674, Adjusted R-squared: 0.2467 F-statistic: 12.9 on 3 and 106 DF, p-value: 3.014e-07 Call: lm(formula = FrT ~ scale(Temperature) +

			scale(Maturity), data = AGGTEMPE)	scale(Maturity), data = AGGTEMPE)
			Residuals: Min 1Q Median 3Q Max -0.124858 -0.023289 0.002424 0.019246 0.114993	Residuals: Min 1Q Median 3Q Max -0.087127 -0.023234 0.000743 0.018729 0.141510
			Coefficients: Estimate Std. Error t value Pr(> t) (Intercept) 0.216464 0.003619 59.819 < 2e-16 *** scale(Temperature) -0.014851 0.003772 -3.937 0.000141 *** scale(Maturity) -0.016271 0.003772 -4.313 3.38e-05 *** Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' '1	Coefficients:
			Residual standard error: 0.03964 on 117 degrees of freedom Multiple R-squared: 0.1871, Adjusted R-squared: 0.1732 F-statistic: 13.46 on 2 and 117 DF, p-value: 5.475e-06 Call: lm(formula =	Residual standard error: 0.03837 on 107 degrees of freedom Multiple R-squared: 0.2508, Adjusted R-squared: 0.2368 F-statistic: 17.91 on 2 and 107 DF, p-value: 1.956e-07 Call: lm(formula =
			scale(FrT) ~ scale(Temperature) + scale(Maturity), data = AGGTEMPE) Residuals: Min 1Q Median 3Q Max	scale(FrT) ~ scale(Temperature) + scale(Maturity), data = AGGTEMPE) Residuals: Min 1Q Median 3Q Max -1.9837 -0.5290 0.0169 0.4264 3.2219

					-2.86412 -0.53423	
					0.05561 0.44147	Coefficients:
					2.63781	Estimate
					2.03701	Std. Error t value
					Coefficients:	Pr(> t)
					Estimate	(Intercept)
					Std. Error t value	9.747e-17 8.330e-02
					Pr(> t)	0.000 1
					(Intercept)	scale(Temperature)
					4.712e-17 8.301e-02	-4.726e-01 8.868e-02
					0.000 1.000000	-5.329 5.53e-07 ***
					scale(Temperature)	scale(Maturity)
					-3.407e-01 8.654e-02	-3.844e-01 8.868e-02
					-3.937 0.000141 ***	-4.335 3.31e-05 ***
					scale(Maturity)	
					-3.732e-01 8.654e-02	Signif. codes: 0 '***'
					-4.313 3.38e-05 ***	0.001 '**' 0.01 '*'
						0.05 '.' 0.1 ' ' 1
l					Signif. codes: 0 '***'	
					0.001 '**' 0.01 '*'	Residual standard
l					0.05 '.' 0.1 ' ' 1	error: 0.8736 on 107
					0.03 . 0.1	
					5 11 1 1 1	degrees of freedom
					Residual standard	Multiple R-squared:
					error: 0.9093 on 117	0.2508, Adjusted
					degrees of freedom	R-squared: 0.2368
					Multiple R-squared:	F-statistic: 17.91 on 2
					0.1871, Adjusted	and 107 DF, p-value:
					R-squared: 0.1732	1.956e-07
					F-statistic: 13.46 on 2	1.9000 07
					and 117 DF, p-value:	
						C 11
					5.475e-06	Call:
						lm(formula =
					Call:	$scale(FrT) \sim 0 +$
					lm(formula =	scale(Temperature) +
					$scale(FrT) \sim 0 +$	scale(Maturity),
					scale(Temperature) +	data =
					scale(Maturity),	AGGTEMPE)
					data =	
						Residuals:
					AGGTEMPE)	
					D :1 1	Min 1Q Median
					Residuals:	3Q Max
					Min 1Q	-1.9837 -0.5290
l					Median 3Q	0.0169 0.4264
					Max	3.2219
					-2.86412 -0.53423	
l					0.05561 0.44147	Coefficients:
					2.63781	Estimate
					4.03/01	
					G 07 1	Std. Error t value
l					Coefficients:	Pr(> t)
					Estimate	scale(Temperature)
l					Std. Error t value	-0.47256 0.08827
					Pr(> t)	-5.354 4.89e-07 ***
-	J	<u> </u>		<u>L</u>		

				scale(Temperature)	scale(Maturity)
				-0.34067 0.08617	-0.38439 0.08827
				-3.954 0.000132 ***	-4.355 3.04e-05 ***
				scale(Maturity)	
				-0.37325 0.08617	
					Signif. codes: 0 '***
				-4.332 3.13e-05 ***	0.001 '**' 0.01 '*'
					0.05 '.' 0.1 ' ' 1
				Signif. codes: 0 '***'	
				0.001 '**' 0.01 '*'	Residual standard
				0.05 '.' 0.1 ' ' 1	error: 0.8696 on 108
					degrees of freedom
				Residual standard	Multiple R-squared:
				error: 0.9054 on 118	0.2508, Adjusted
				degrees of freedom	R-squared: 0.2369
1				Multiple R-squared:	F-statistic: 18.08 on 2
				0.1871, Adjusted	and 108 DF, p-value:
				R-squared: 0.1733	1.693e-07
				F-statistic: 13.58 on 2	
1				and 118 DF, p-value:	Call:
				4.936e-06	lm(formula =
1				1.7500 00	scale(FrT) ~ 0 +
				C-II.	
				Call:	scale(Temperature),
				lm(formula =	data = AGGTEMPE)
				$scale(FrT) \sim 0 +$	
				scale(Temperature),	Residuals:
				data = AGGTEMPE)	Min 1Q Median
				Ź	3Q Max
				Residuals:	-2.4959 -0.4454
				Min 1Q Median	-0.0535 0.4359
				3Q Max	3.4630
				-2.5877 -0.4248	
				0.0315 0.5867	Coefficients:
				2.7099	Estimate
					Std. Error t value
l				Coefficients:	Pr(> t)
l				Estimate	scale(Temperature)
l				Std. Error t value	-0.34529 0.08989
				Pr(> t)	-3.841 0.000206 ***
				scale(Temperature)	1 0 (***)
				-0.24042 0.08898	Signif. codes: 0 '***'
				-2.702 0.0079 **	0.001 '**' 0.01 '*'
					0.05 '.' 0.1 ' ' 1
				Signif. codes: 0 '***'	
				0.001 '**' 0.01 '*'	Residual standard
				0.05 '.' 0.1 ' ' 1	error: 0.9385 on 109
				1	degrees of freedom
				Residual standard	Multiple R-squared:
					o 1102 - Squared:
				error: 0.9707 on 119	0.1192, Adjusted
				degrees of freedom	R-squared: 0.1111
				Multiple R-squared:	F-statistic: 14.75 on 1
l				0.0578, Adjusted	and 109 DF, p-value:
				R-squared: 0.04988	0.000206
				-1 0.0 .7 00	
	1	l .			

							F-statistic: 7.3 on 1 and 119 DF, p-value: 0.007903	
N of s p e ci	302	192	188	206	91	126	120	110
S cr ip t	https://github.com/polarsong/mtDNA_mutspectrum/blob/WholeGenomesBranch/Head/2Scripts/WholeGenomeAnalyses.EcologyAndMutSpecChordata.NoOverlap.ActinopterygiiOnlyFishBase.R	https://github.com/polarsong/ mtDNA_mutspectrum/blob/ WholeGenomesBranch/Head/ 2Scripts/WholeGenomeAnal yses.EcologyAndMutSpecCh ordata.NoOverlap.Actinopter ygiiOnlyFishBase.R	https://github.com/polarson g/mtDNA_mutspectrum/blo b/WholeGenomesBranch/H ead/2Scripts/WholeGenome Analyses.EcologyAndMutS pecChordata.NoOverlap.Ac tinopterygiiOnlyFishBase.R	https://github.com/polarson g/mtDNA_mutspectrum/bl ob/WholeGenomesBranch/ Head/2Scripts/WholeGeno meAnalyses.EcologyAndM utSpecChordata.NoOverlap .ActinopterygiiOnly.R	https://github.com/polarson g/mtDNA_mutspectrum/bl ob/WholeGenomesBranch/ Head/2Scripts/WholeGeno meAnalyses.EcologyAnd MutSpecChordata.NoOverl ap.ActinopterygiiOnly.R	https://github.com/polarson g/mtDNA_mutspectrum/bl ob/WholeGenomesBranch/ Head/2Scripts/WholeGeno meAnalyses.EcologyAnd MutSpecChordata.NoOverl ap.ActinopterygiiOnly.R	https://github.com/pol arsong/mtDNA_muts pectrum/blob/WholeG enomesBranch/Head/ 2Scripts/WholeGeno meAnalyses.Ecology AndMutSpecChordata .NoOverlap.Actinopte rygiiOnlyFishBase.R	https://github.com/pol arsong/mtDNA_muts pectrum/blob/WholeG enomesBranch/Head/ 2Scripts/WholeGeno meAnalyses.Ecology AndMutSpecChordata .NoOverlap.Actinopte rygiiOnlyFishBase.R
Fi g ur es								

Maturation Lm vs TM (FishBase)	Temperature vs Maturation Lm (FishBase)	Temperature vs Maturation Tm (FishBase)	Temperature (FishBase) vs MaximalLifespan (AnAge)	Maturation (FishBase) vs MaximalLifespan (AnAge)

-		I a	I a		T *
С	Spearman's rank correlation rho	Lm			
0					Spearman's rank correlation rho
rr	data: MATULMTM\$Lm and	data: TEMPMATULM\$Lm and	data: TEMPMATUTM\$Tm and	data: ANAGETEMP\$Temperature and	
el	MATULMTM\$Tm	TEMPMATULM\$Temperature	TEMPMATUTM\$Temperature	ANAGETEMP\$Maximum.longevityyrs.	data: ANAGEMATLM\$Lm and
at	S = 3838500, p-value $< 2.2e-16$	S = 29562841, p-value = 1.282e-12	S = 21243590, p-value = 1.141e-11	S = 10501627, p-value = 3.03e-05	ANAGEMATLM\$Maximum.longevityyrs.
i	alternative hypothesis: true rho is not equal	S = 1020722, p-value < 2.2e-16			
О	to 0	to 0	to 0	to 0	alternative hypothesis: true rho is not equal
n	sample estimates:	sample estimates:	sample estimates:	sample estimates:	to 0
	rho	rho	rho	rho	sample estimates:
	0.6823805	-0.3062001	-0.3095067	-0.2141839	rho
					0.5399325
					Tm
					Spearman's rank correlation rho
					data: ANAGEMATTM\$Tm and
					ANAGEMATTM\$Maximum.longevityyrs.
					S = 969449, p-value $< 2.2e-16$
					alternative hypothesis: true rho is not equal
					to 0
					sample estimates:
					rho
					0.7321639
					0.7321039
N	417	514	460	376	Lm
o					238
f					
S					Tm
р					281
e					
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S	https://github.com/polarsong/mtDNA mutsp	https://github.com/polarsong/mtDNA_mutsp	https://github.com/polarsong/mtDNA_mutsp	https://github.com/polarsong/mtDNA_mutsp	https://github.com/polarsong/mtDNA mutsp
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