

Supplemental Figures

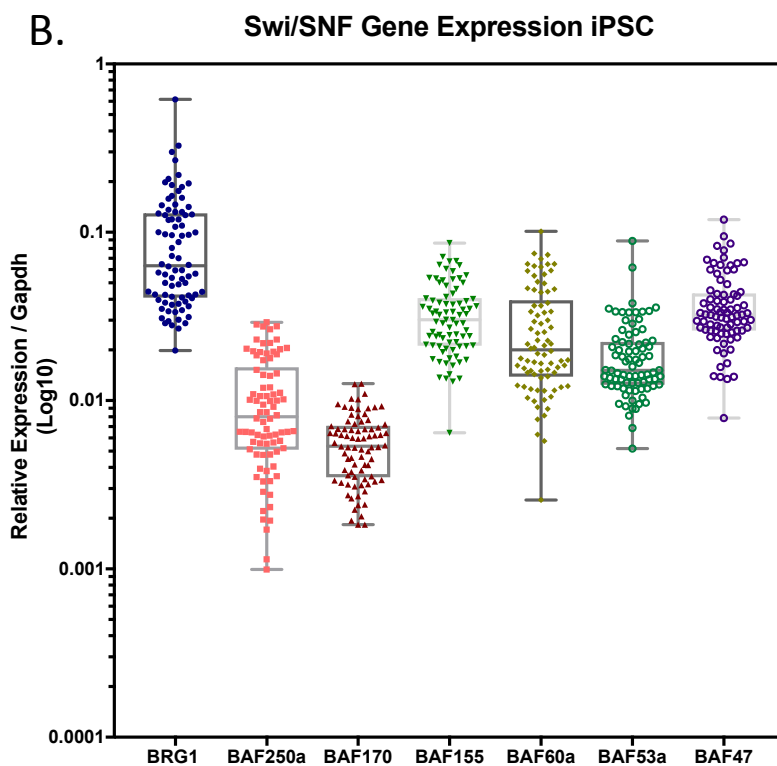
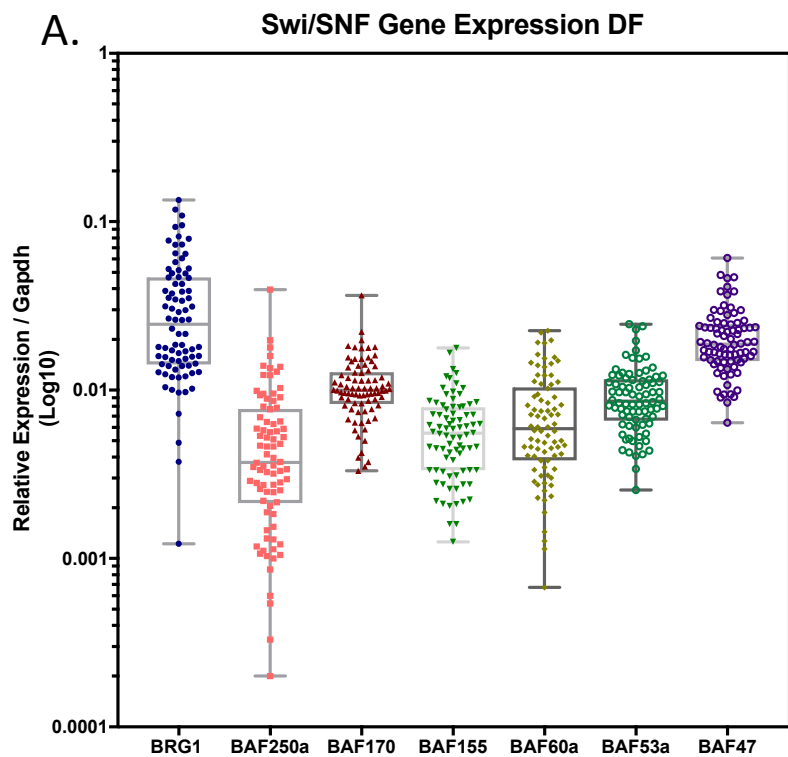


Figure S1. Variability of SWI/SNF Expression in DF and iPSCs

Gene expression values for SWI/SNF subunits in DF (A) and iPSC (B) on a Log10 scale. Following iPSC Reprogramming the variability of expression is reduced for *BRG1*, *BAF250a*, *BAF170*, and *BAF155* compared to DF.

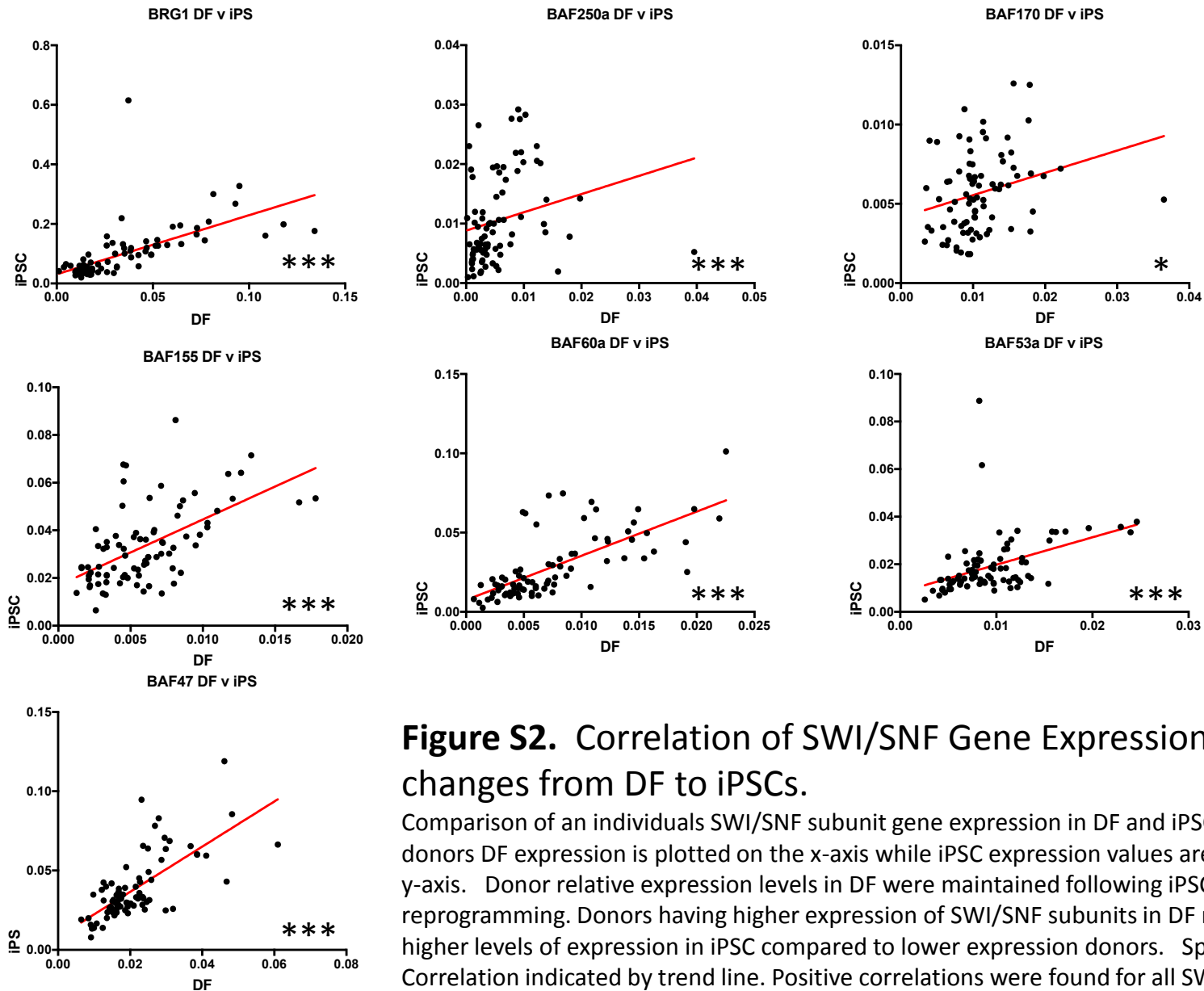
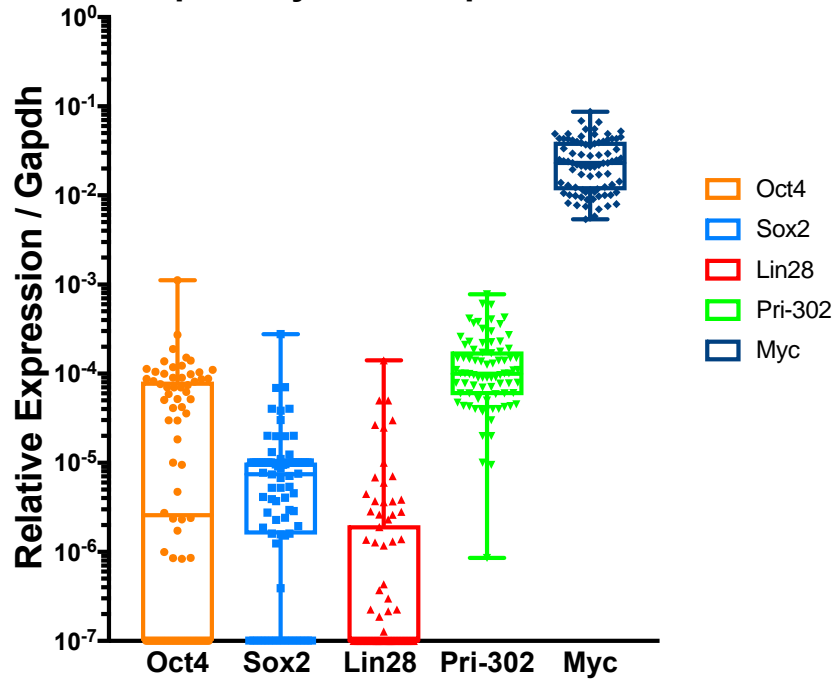


Figure S2. Correlation of SWI/SNF Gene Expression changes from DF to iPSCs.

Comparison of an individuals SWI/SNF subunit gene expression in DF and iPSCs. Each donors DF expression is plotted on the x-axis while iPSC expression values are plotted the y-axis. Donor relative expression levels in DF were maintained following iPSC reprogramming. Donors having higher expression of SWI/SNF subunits in DF maintained higher levels of expression in iPSC compared to lower expression donors. Spearman Correlation indicated by trend line. Positive correlations were found for all SWI/SNF subunits tested. *= $p \leq 0.05$, **= $p \leq 0.01$, ***= $p \leq 0.001$

A. Pluripotency Gene Expression DF



B. Pluripotency Gene Expression iPSC

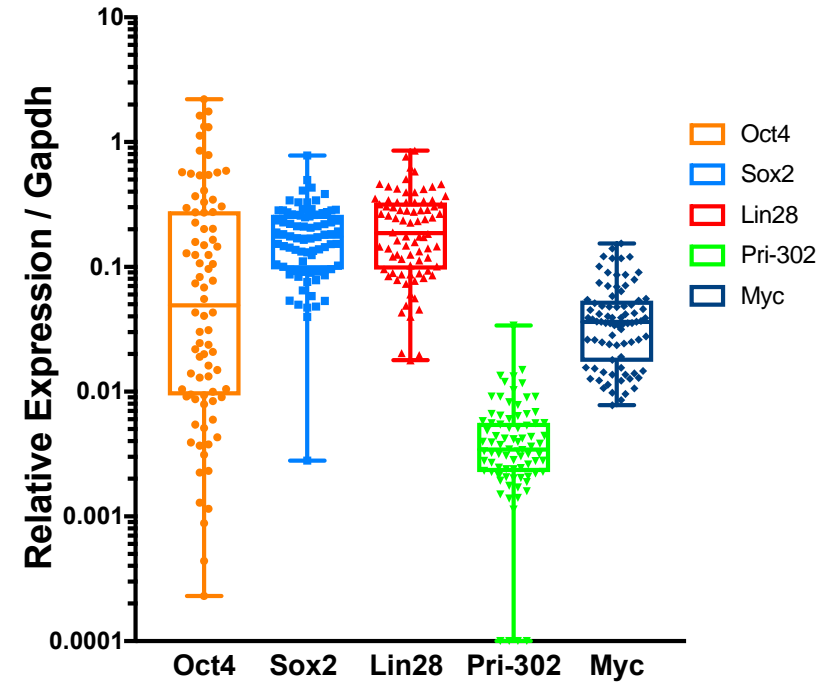


Figure S3. Pluripotency-Associated Gene Expression in DF and iPSCs

GAPDH-normalized pluripotency-associated gene expression levels in DF (A) and iPSCs (B). Gene expression levels of *Oct4*, *Sox2*, *Lin28*, *Pri-miR-302*, and *Myc* were increased following iPSC reprogramming.

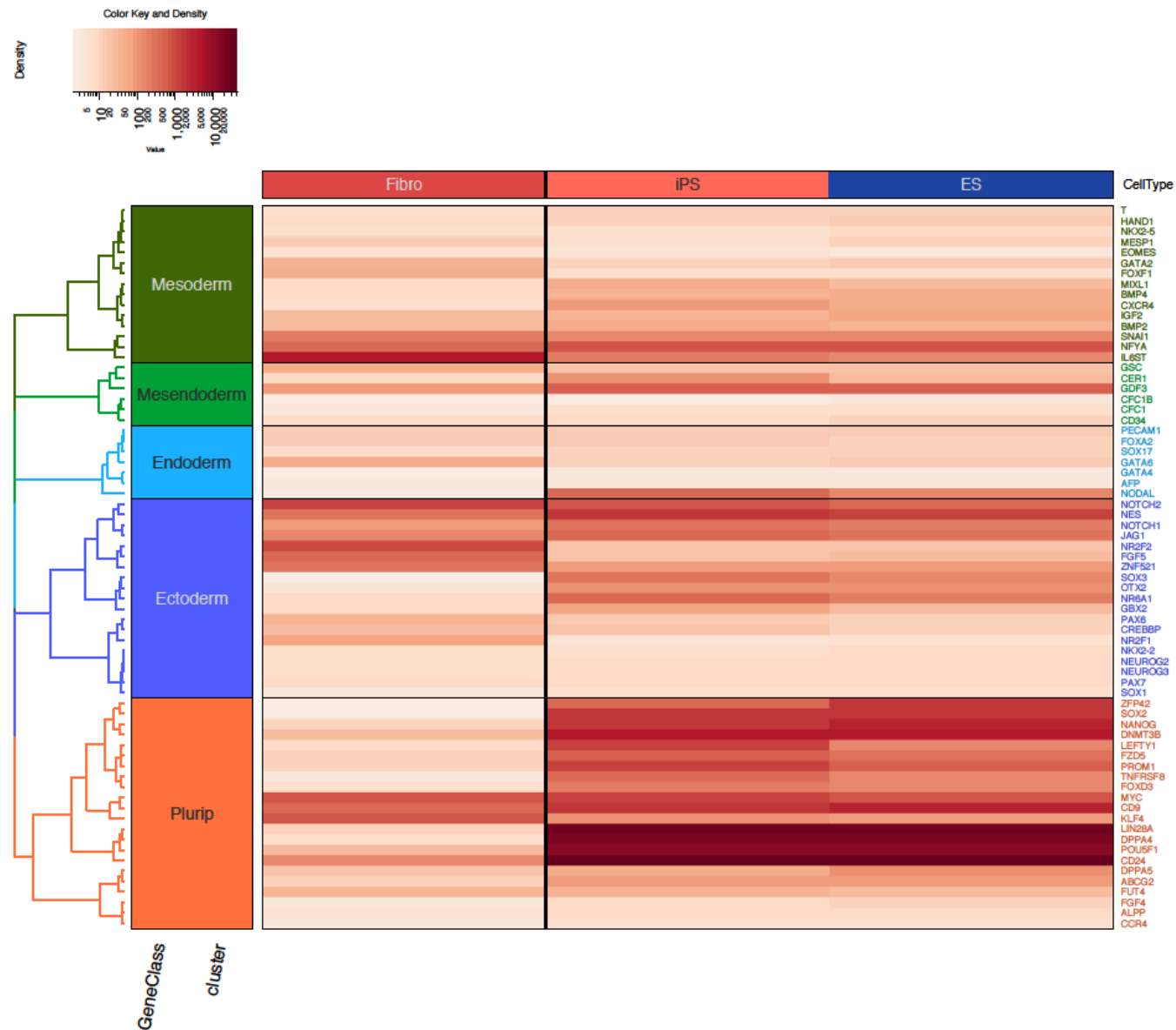


Figure S4. Pluripotency-Associated Differentiation-Associated Gene Expression in DFs, iPSCs and ESCs.

Nanostring analysis for the expression levels of 69 genes, comprising of markers of pluripotency and differentiation in cohort DFs, iPSCs and embryonic stem cell lines H1 and H9.

Table S1. Cohort Demographics and Reprogramming Efficiencies

Sample ID	Sample Number	Sex	Ancestry	Age	Number of IPS Colonies Generated	Percent Reprogramming Efficiency
EF1	1	Female	European American	64 yrs	72	0.03
EF2	2	Female	European American	43 yrs	833	0.33
EM4	4	Male	European American	22 yrs	1655	0.66
AM9	9	Male	African American	47 yrs	626	0.25
EF10	10	Female	European American	31 yrs	421	0.17
AF11	11	Female	African American	42 yrs	541	0.22
EF12	12	Female	European American	23 yrs	1139	0.46
EM13	13	Male	European American	49 yrs	568	0.23
EM14	14	Male	European American	50 yrs	156	0.06
EM15	15	Male	European American	49 yrs	553	0.22
AM16	16	Male	African American	37 yrs	769	0.31
EM17	17	Male	European American	40 yrs	572	0.23
AF18	18	Female	African American	36 yrs	502	0.20
AM19	19	Male	African American	23 yrs	627	0.25
AM20	20	Male	African American	38 yrs	3105	1.24
AM21	21	Male	African American	40 yrs	1051	0.42
AF22	22	Female	African American	46 yrs	1382	0.55
AM23	23	Male	African American	28 yrs	1842	0.74
AF24	24	Female	African American	25 yrs	2349	0.94
AF25	25	Female	African American	25 yrs	2146	0.86
EF26	26	Female	European American	42 yrs	2452	0.98
EF27	27	Female	European American	48 yrs	2185	0.87
AM29	29	Male	African American	48 yrs	2327	0.93
AM30	30	Male	African American	43 yrs	1951	0.78
AF31	31	Female	African American	28 yrs	2226	0.89
EF32	32	Female	European American	24 yrs	600	0.24
EF33	33	Female	European American	37 yrs	315	0.13
EF34	34	Female	European American	33 yrs	2674	1.07
EF35	35	Female	European American	20 yrs	1954	0.78
EF36	36	Female	European American	29 yrs	1506	0.60
EF37	37	Female	European American	21 yrs	677	0.27
EF38	38	Female	European American	20 yrs	1981	0.79
EF39	39	Female	European American	29 yrs	47	0.02
AF40	40	Female	African American	23 yrs	1866	0.75
AF41	41	Female	African American	23 yrs	1701	0.68
AF42	42	Female	African American	31 yrs	2174	0.87
AF43	43	Female	African American	31 yrs	2624	1.05
AF44	44	Female	African American	30 yrs	2068	0.83
AM45	45	Male	African American	30 yrs	2363	0.95
AF46	46	Female	African American	29 yrs	944	0.38
AF47	47	Female	African American	38 yrs	2390	0.96
AF48	48	Female	African American	30 yrs	1500	0.60
EF49	49	Female	European American	20 yrs	728	0.29
AM50	50	Male	African American	24 yrs	3429	1.37
AF51	51	Female	African American	28 yrs	443	0.18
AM52	52	Male	African American	45 yrs	1397	0.56
AM53	53	Male	African American	35 yrs	2537	1.01
AM54	54	Male	African American	35 yrs	2014	0.81
AM55	55	Male	African American	33 yrs	2234	0.89
AF56	56	Female	African American	40 yrs	870	0.35
EM57	57	Male	European American	25 yrs	1272	0.51
AM58	58	Male	African American	27 yrs	2664	1.07
EM59	59	Male	European American	31 yrs	2829	1.13
EF60	60	Female	European American	26 yrs	2605	1.04
AF61	61	Female	African American	40 yrs	1336	0.53
AF62	62	Female	African American	38 yrs	1014	0.41
AF63	63	Female	African American	26 yrs	2397	0.96
EF64	64	Female	European American	40 yrs	1682	0.67
AM65	65	Male	African American	22 yrs	1510	0.60
AF66	66	Female	African American	21 yrs	586	0.23
EM67	67	Male	European American	26 yrs	1584	0.63
AM68	68	Male	African American	49 yrs	1220	0.49
EF74	74	Female	European American	28 yrs	1446	0.58
EF75	75	Female	European American	47 yrs	1568	0.63
EM76	76	Male	European American	30 yrs	1302	0.52
EM77	77	Male	European American	26 yrs	580	0.23
EM78	78	Male	European American	53 yrs	1075	0.43
AM79	79	Male	African American	44 yrs	538	0.22
AM80	80	Male	African American	52 yrs	1189	0.48
AM81	81	Male	African American	46 yrs	157	0.06
AM82	82	Male	African American	51 yrs	2455	0.98
AM83	83	Male	African American	47 yrs	1564	0.63
EM85	85	Male	European American	23 yrs	385	0.15
EM86	86	Male	European American	50 yrs	568	0.23
EM87	87	Male	European American	21 yrs	625	0.25
EM88	88	Male	European American	38 yrs	1211	0.48
EM89	89	Male	European American	45 yrs	1085	0.43
EM90	90	Male	European American	49 yrs	887	0.35
EM91	91	Male	European American	26 yrs	1453	0.58
EM92	92	Male	European American	39 yrs	935	0.37