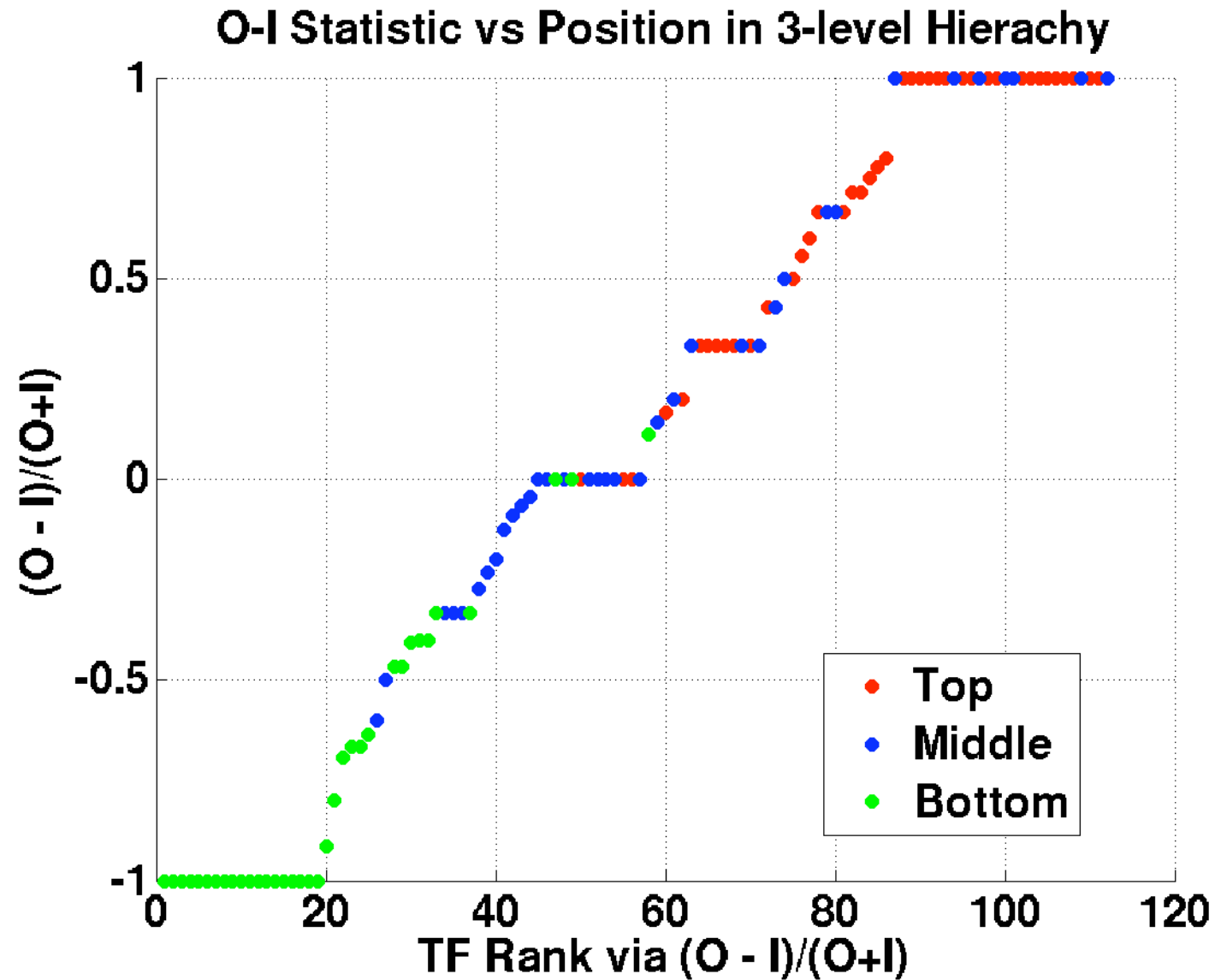
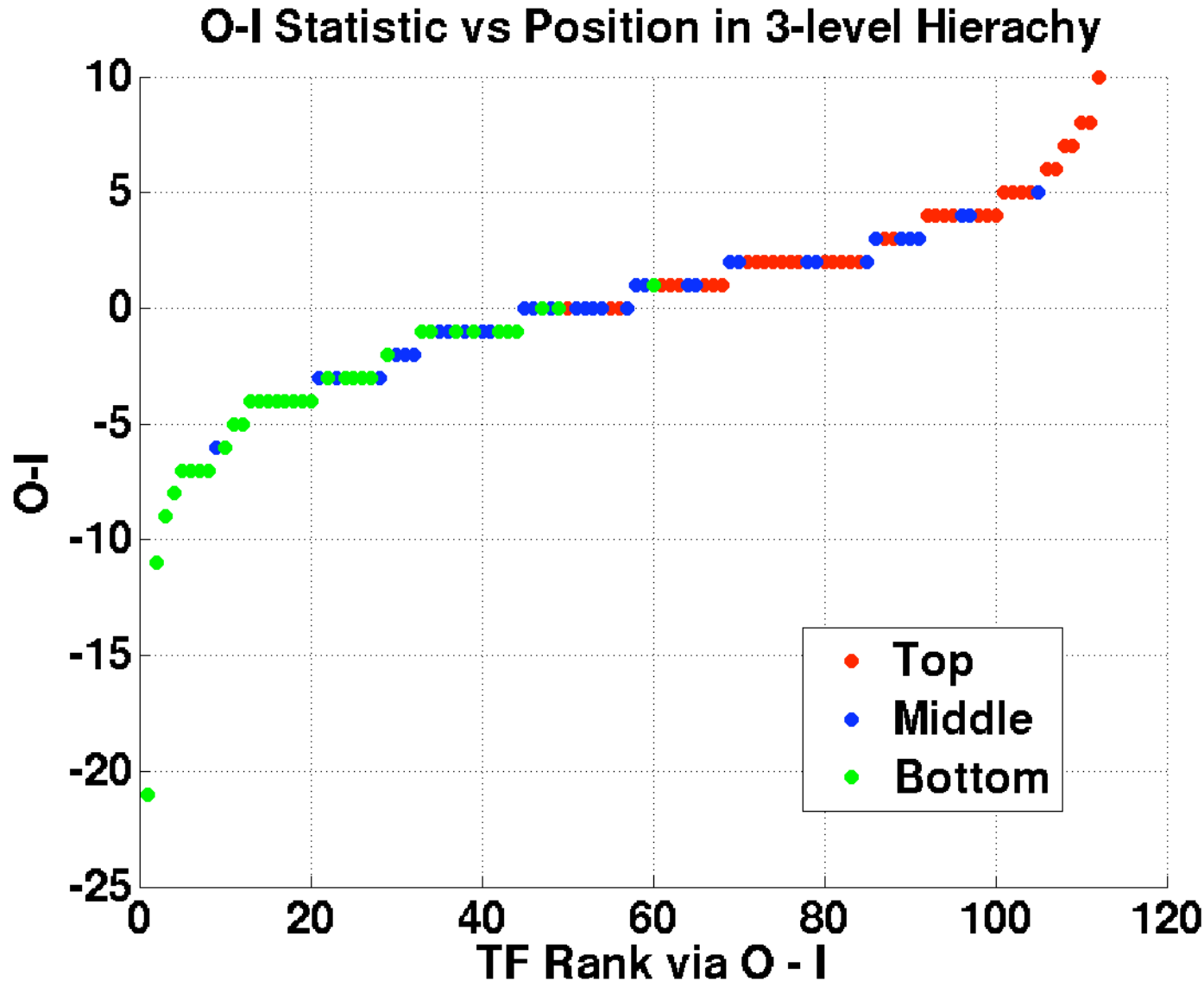


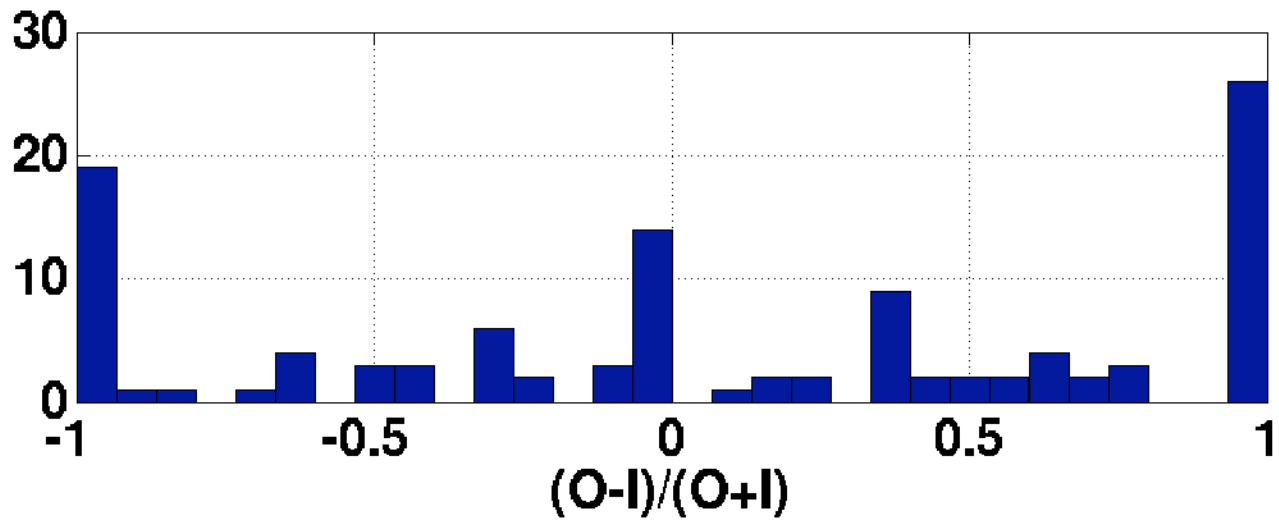
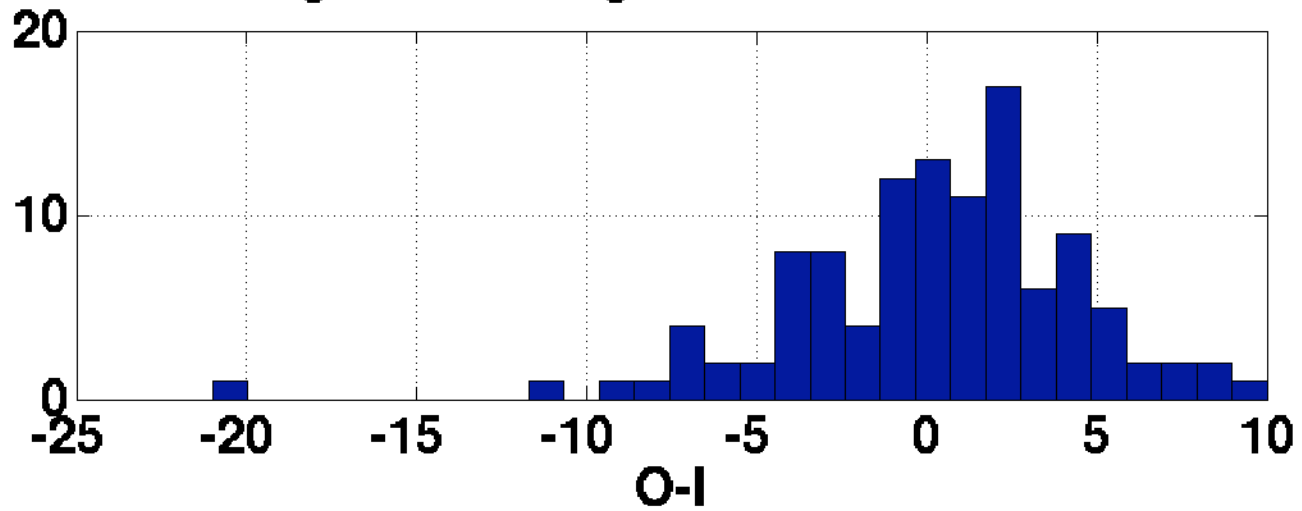
KKY's 3-level hierarchy = KKYopt3



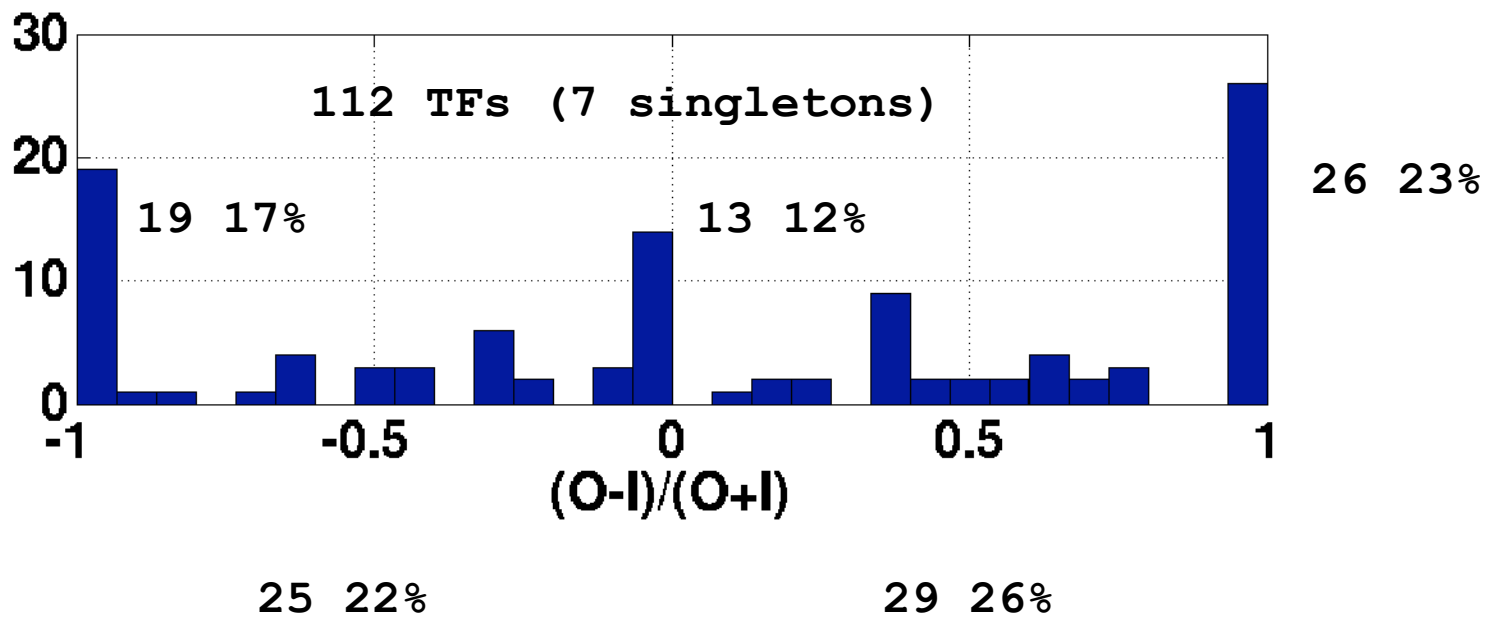
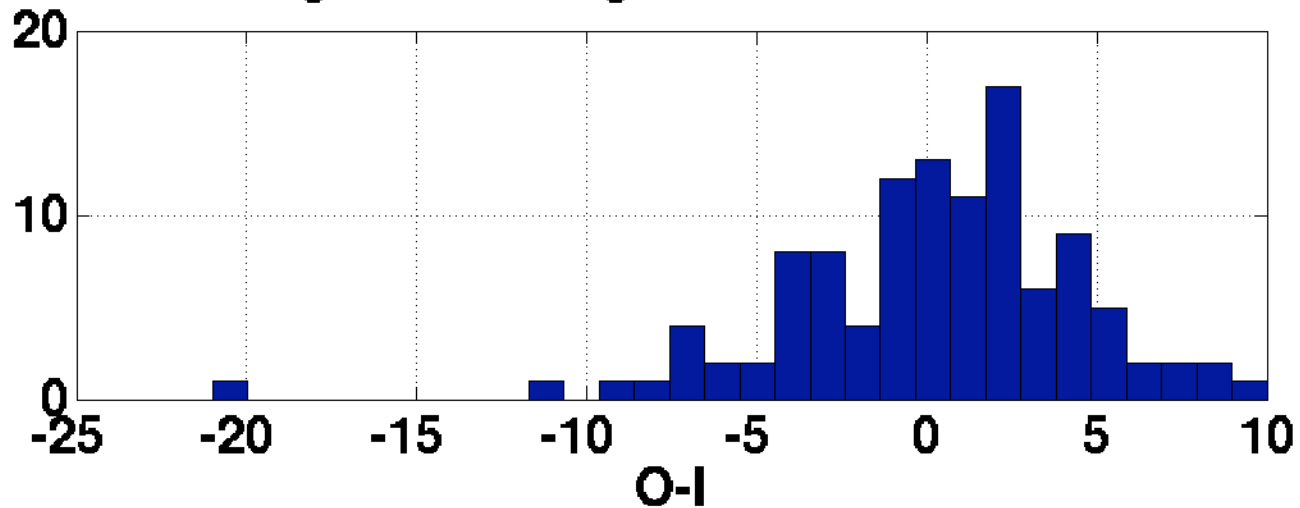
KKY's 3-level hierarchy = KKYopt3



Histograms of Degree Distribution Calcs



Histograms of Degree Distribution Calcs



7 Singleton TFs

BRF1

ESRRA

FAM48A

MAFF

WRNIP1

XRCC4

ZNF274

35 TFs in Bottom layer of KKYopt3

ATF3	IRF4
BDP1	MAFK
BHLHE40	MXI1
BRCA1	NFE2
BRF2	POLR3A
CTCF1	POU5F1
E2F4	PRDM1
E2F6	RDBP
EGR1	SMARCC1
FOSL1	SMARCC2
FOSL2	SP2
FOXA1	SREBF2
GATA3	STAT1
GTF2F1	TFAP2A
HNF4A	THAP1
HSF1	USF2
IRF4	ZEB1
	ZNF143
	ZZZ3

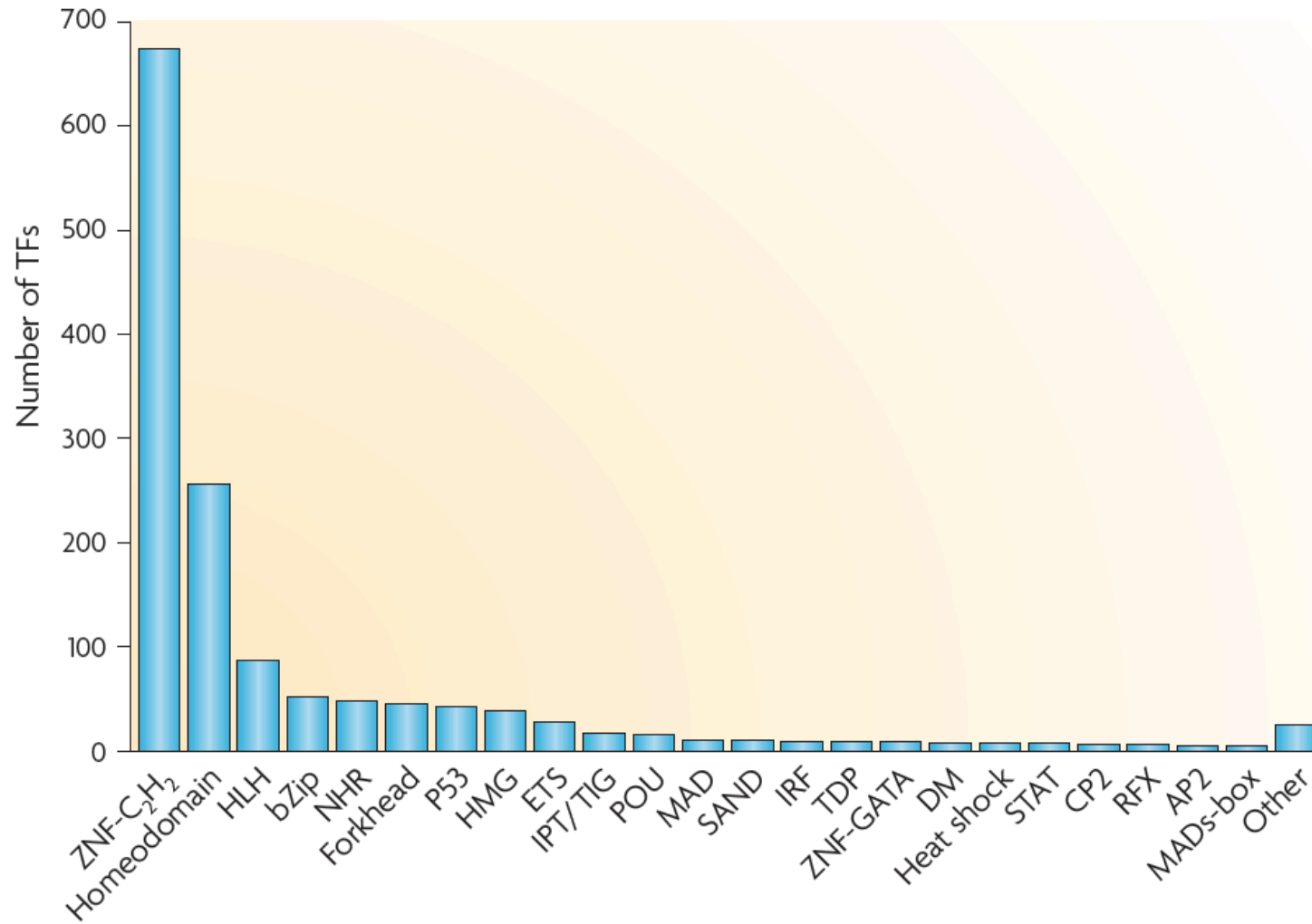
36 TFs in Middle layer of KKYopt3

BATF	NR2C2
BCL11A	NR3C1
BCL3	NRF1
BCLAF1	PAX5
CEBPB	POU2F2
CHD2	PPARGC1A
ELF1	RFX5
ETS1	RXRA
FOS	SIN3A
FOXA2	SIRT6
GATA1	SP1
GATA2	STAT2
HNF4G	TAF7
IRF3	TAL1
JUND	TCF4
MAX	USF1
MEF2A	ZBTB33
MYC	ZNF263

41 TFs in Top layer of KKYopt3

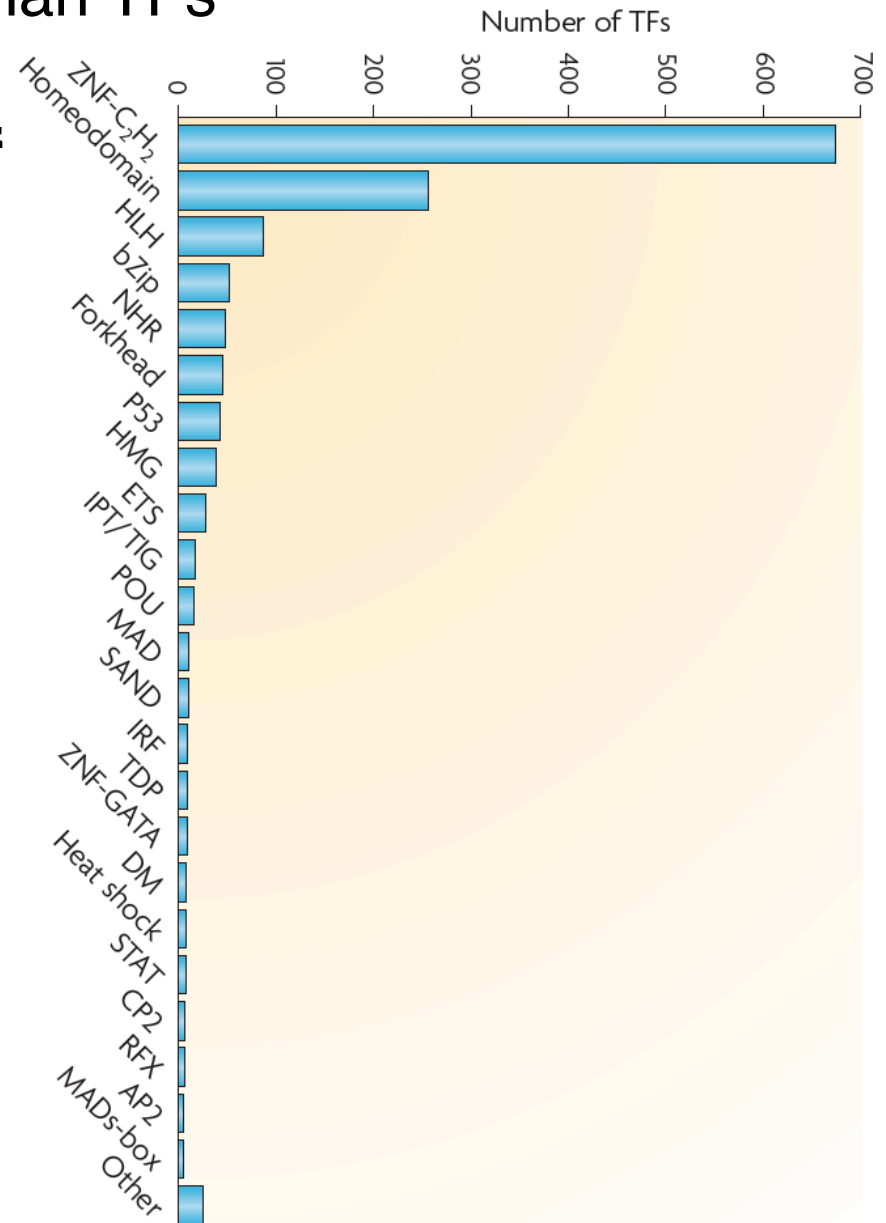
CCNT2	PBX3
CTBP2	RAD21*
CTCF	REST
E2F1	SETDB1
EBF1	SIX5
ELK4	SMARCA4
EP300*	SMARCB1
ESR1	SMC3
GABPA	SPI1
GTF2B*	SREBF1
HDAC2*	SRF
HEY1	STAT3
HMGN3	SUZ12
IRF1	TAF1*
JUN	TBP*
KAT2A	TCF12
MEF2C	TFAP2C
NANOG	TRIM28
NFKB1	YY1
NFYA	ZBTB7A
NFYB	

Overlap of ENCODE TFs with Nick Luscombe's Census of Human TFs

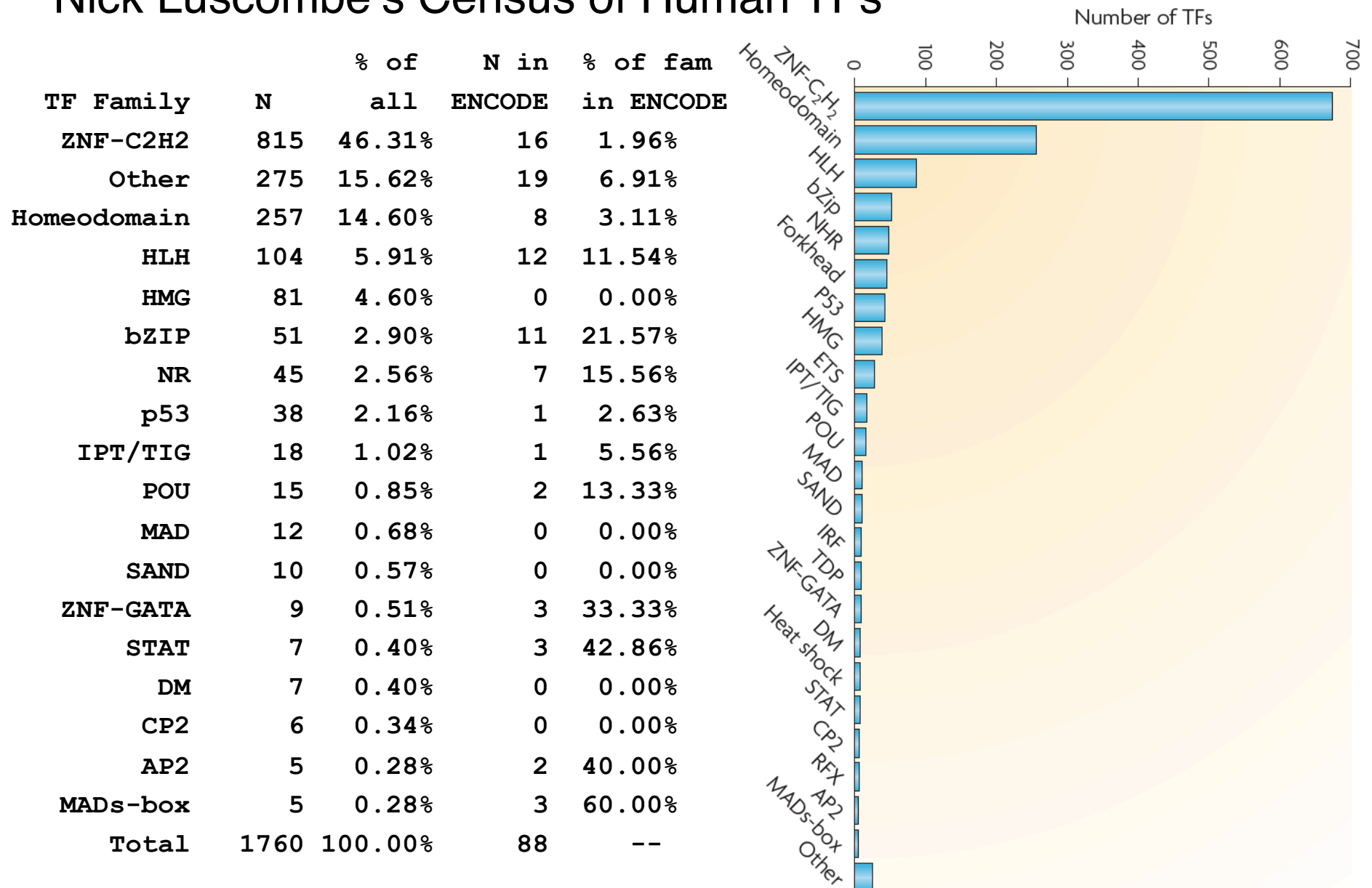


Overlap of ENCODE TFs with Nick Luscombe's Census of Human TFs

TF Family	N	% of all	N in ENCODE	% of fam in ENCODE
ZNF-C2H2	815	44.32%	16	1.96%
Other	275	14.95%	19	6.91%
Homeodomain	257	13.97%	8	3.11%
HLH	104	5.66%	12	11.54%
HMG	81	4.40%	0	0.00%
x	79	4.30%	4	5.06%
bZIP	51	2.77%	11	21.57%
NR	45	2.45%	7	15.56%
p53	38	2.07%	1	2.63%
IPT/TIG	18	0.98%	1	5.56%
POU	15	0.82%	2	13.33%
MAD	12	0.65%	0	0.00%
SAND	10	0.54%	0	0.00%
ZNF-GATA	9	0.49%	3	33.33%
STAT	7	0.38%	3	42.86%
DM	7	0.38%	0	0.00%
CP2	6	0.33%	0	0.00%
AP2	5	0.27%	2	40.00%
MADs-box	5	0.27%	3	60.00%
Total	1839	100.00%	92	--



Overlap of ENCODE TFs with Nick Luscombe's Census of Human TFs



Overlap of ENCODE TFs with Nick Luscombe's Census of Human TFs

4	BCL3	TFSS	---
5	BCLAF1	TFSS o	---
8	CCNT2	Other	---
11	CTBP2	TFSS	---
21	EP300	TFNS	---
34	GTF2B	TFNS	---
36	HDAC2	HISase	---
38	HMGN3	ChromStr	---
47	KAT2A	HISase	---
58	NFYA	TFSS a	---
62	NRF1	TFSS o	---
65	POLR3A	Pol3F	---
68	PPARGC1A	TFSS	---
70	RAD21	ChromStr	---
71	RDBP	TFNS	---
75	SETDB1	HISase x	---
76	SIN3A	TFNS	---
77	SIRT6	HISase	---
79	SMARCA4*	ChromRem	---
80	SMARCB1*	ChromRem	---
83	SMC3	ChromStr	---
94	TAF1	TFNS	---
95	TAF7	TFNS	---
97	TBP	TFNS	---
103	TRIM28	HISase	---

25 ENCODE TFs
without TF family annotations
in Luscombe census

Overlap of ENCODE TFs with Nick Luscombe's Census of Human TFs

88 ENCODE TFs
with TF family annotations
in Luscombe census

1	ATF3	TFSS a	bZIP	31	GATA1	TFSS a	ZNF-GATA
2	BATF	TFSS a	bZIP	32	GATA2	TFSS a	ZNF-GATA
3	BCL11A	TFSS b	ZNF-C2H2	33	GATA3	TFSS a	ZNF-GATA
6	BDP1	Pol3F x	Homeodomain	35	GTF2F1	TFNS x	Other
7	BHLHE40	TFSS a	HLH	37	HEY1	TFSS a	HLH
9	CEBPB	TFSS a	bZIP	39	HNF4A	TFSS a	NR
10	CHD2	ChromStr x	Homeodomain	40	HNF4G	TFSS a	NR
12	CTCF	TFSS a	ZNF-C2H2	41	HSF1	TFSS a	Other
13	CTCFL	TFSS a	ZNF-C2H2	42	IRF1	TFSS a	Other
14	E2F1	TFSS a	Other	43	IRF3	TFSS a	Other
15	E2F4	TFSS a	Other	44	IRF4	TFSS a	Other
16	E2F6	TFSS a	Other	45	JUN	TFSS a	bZIP
17	EBF1	TFSS a	IPT/TIG	46	JUND	TFSS a	bZIP
18	EGR1	TFSS a	ZNF-C2H2	48	MAFF	TFSS a	bZIP
19	ELF1	TFSS a	Other	49	MAFK	TFSS a	bZIP
20	ELK4	TFSS a	Other	50	MAX	TFSS a	HLH
22	ESR1	TFSS a	NR	51	MEF2A	TFSS a	MADs-box
23	ESRRA	TFSS a	NR	52	MEF2C	TFSS a	MADs-box
24	ETS1	TFSS a	Other	53	MXI1	TFSS a	HLH
25	FOS	TFSS a	bZIP	54	MYC	TFSS a	HLH
26	FOSL1	TFSS a	bZIP	55	NANOG	TFSS a	Homeodomain
27	FOSL2	TFSS a	bZIP	56	NFE2	TFSS a	bZIP
28	FOXA1	TFSS a	Other	57	NFKB1	TFSS a	p53
29	FOXA2	TFSS a	Other	59	NFYB	TFSS a	Other
30	GABPA	TFSS a	Other	60	NR2C2	TFSS a	NR

Overlap of ENCODE TFs with Nick Luscombe's Census of Human TFs

61	NR3C1	TFSS a	NR	100	TFAP2A	TFSS a	AP2
63	PAX5	TFSS a	Other	101	TFAP2C	TFSS a	AP2
64	PBX3	TFSS a	Homeodomain	102	THAP1	TFSS c	Other
66	POU2F2	TFSS a	POU	104	USF1	TFSS a	HLH
67	POU5F1	TFSS a	POU	105	USF2	TFSS a	HLH
69	PRDM1	TFSS a	ZNF-C2H2	106	YY1	TFSS a	ZNF-C2H2
72	REST	TFSS a	ZNF-C2H2	107	ZBTB33	TFSS a	ZNF-C2H2
73	RFX5	TFSS a	Other	108	ZBTB7A	TFSS a	ZNF-C2H2
74	RXRA	TFSS a	NR	109	ZEB1	TFSS a	ZNF-C2H2
78	SIX5	TFSS a	Homeodomain	110	ZNF143	TFSS a	ZNF-C2H2
81	SMARCC1*	ChromRem x	Homeodomain	111	ZNF263	TFSS b	ZNF-C2H2
82	SMARCC2*	ChromRem x	Homeodomain	112	ZNF274	TFSS a	ZNF-C2H2
84	SP1	TFSS a	ZNF-C2H2	113	ZZZ3	TFSS b	Homeodomain
85	SP2	TFSS a	ZNF-C2H2				
86	SPI1	TFSS a	Other				
87	SREBF1	TFSS a	HLH				
88	SREBF2	TFSS a	HLH				
89	SRF	TFSS a	MADs-box				
90	STAT1	TFSS a	STAT				
91	STAT2	TFSS a	STAT				
92	STAT3	TFSS a	STAT				
93	SUZ12	HISase x	ZNF-C2H2				
96	TAL1	TFSS b	HLH				
98	TCF12	TFSS a	HLH				
99	TCF4	TFSS a	HLH				

END

Histograms of Degree Distribution Calcs (1 bin per rank)

