Personalized, Predictive and Pervasive Wellness

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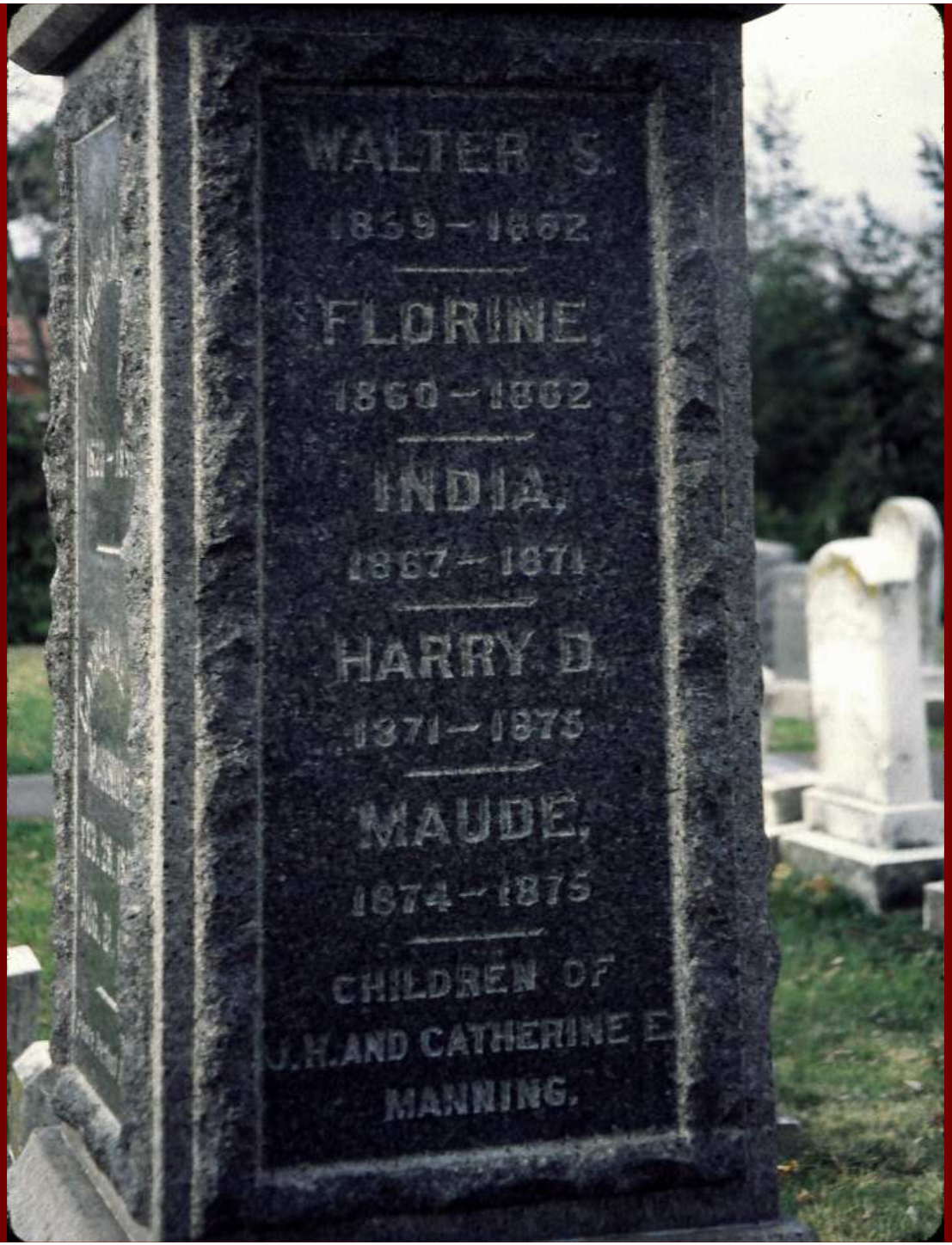
Editor, MedicalAutomation.org


WALTER S.
1859-1862
FLORINE,
1860-1862
INDIA,
1867-1871
HARRY D.
1871-1875
MAUDE,
1874-1875
CHILDREN OF
J.H.AND CATHERINE E.
MANNING.

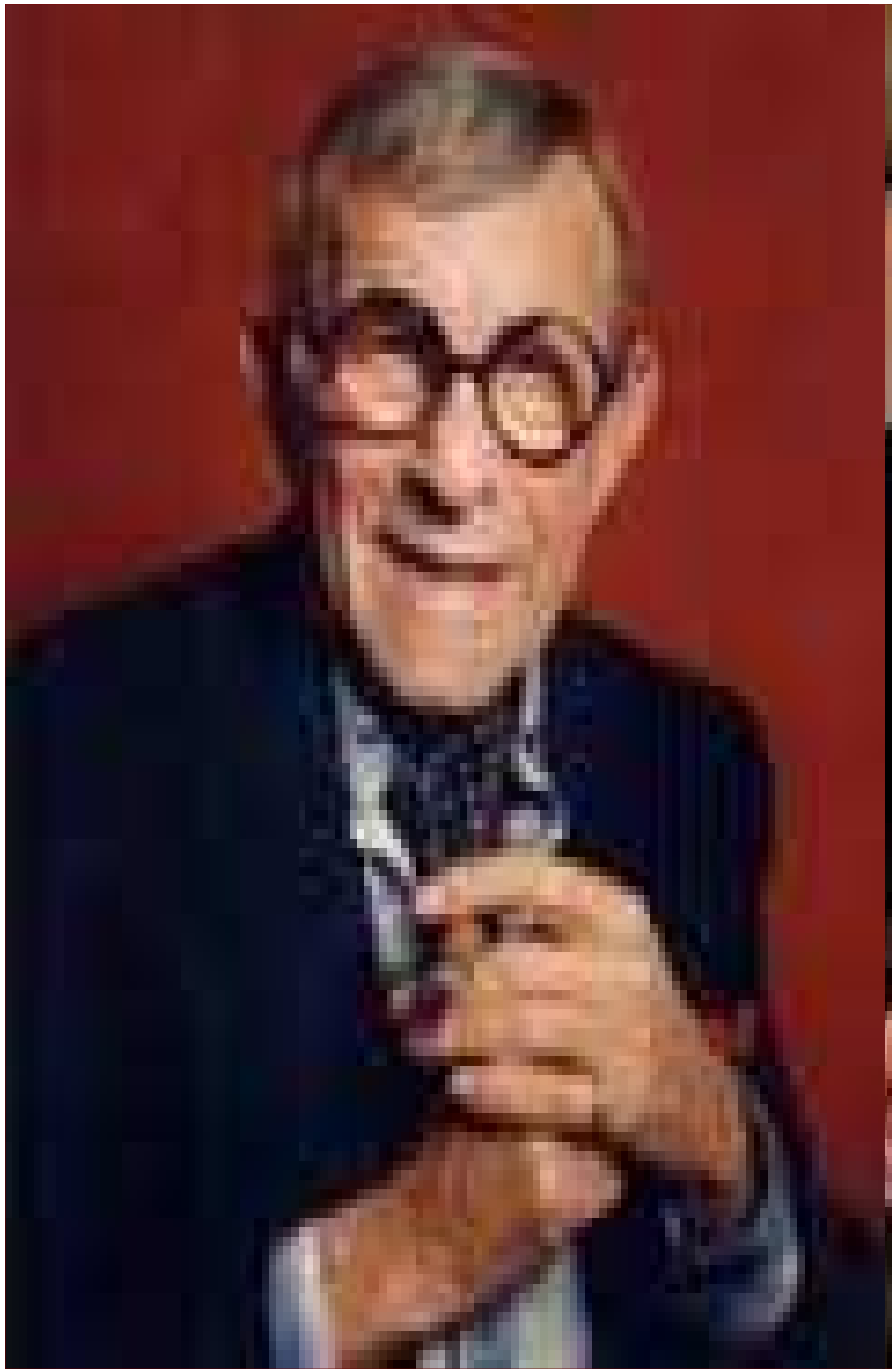
CDC&P's relative factors in premature death

- Genetics 30%
- Social 15%
- Environmental 5%
- Health care 10%
- Behavior 40%

Leading causes of death and costs in the US

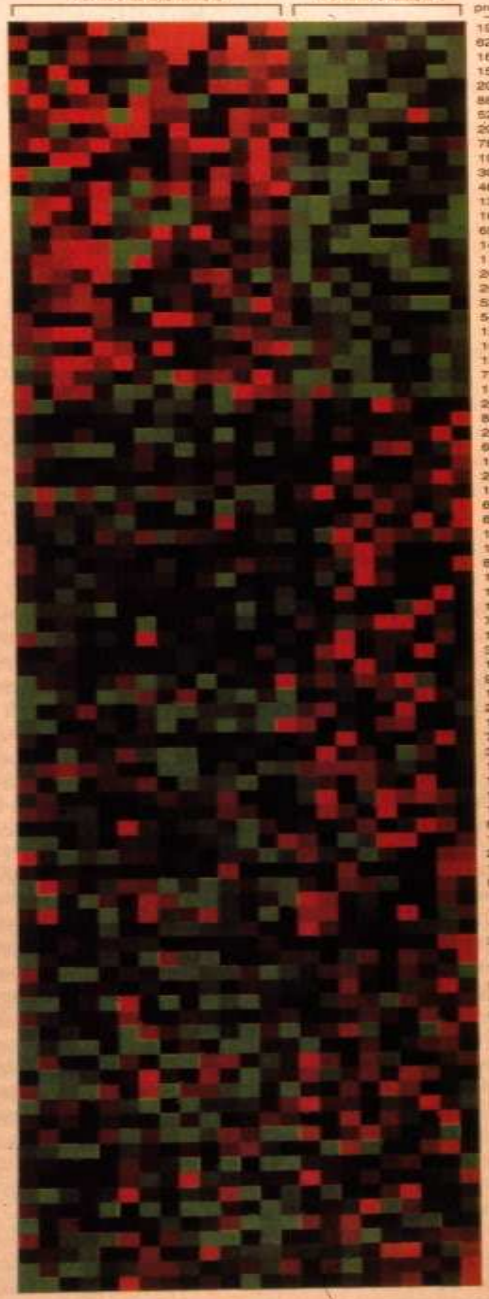
1. heart disease	595,444-	$190 billion
2. cancer	573,855-	$227 billion
3. chronic lung	137,789+	$65 billion
4. stroke	129,180-	$34 billion
5. accidents	118,043+	$308 billion
6. Alzheimer's	83,308+	$70 billion
7. diabetes	68,905-	$112 billion
8. kidney disease	50,472+	$61 billion
9. pneumonia/flu	50,003-	$40 billion
10. suicide	37,793+	$36 billion


Elderly
people




100

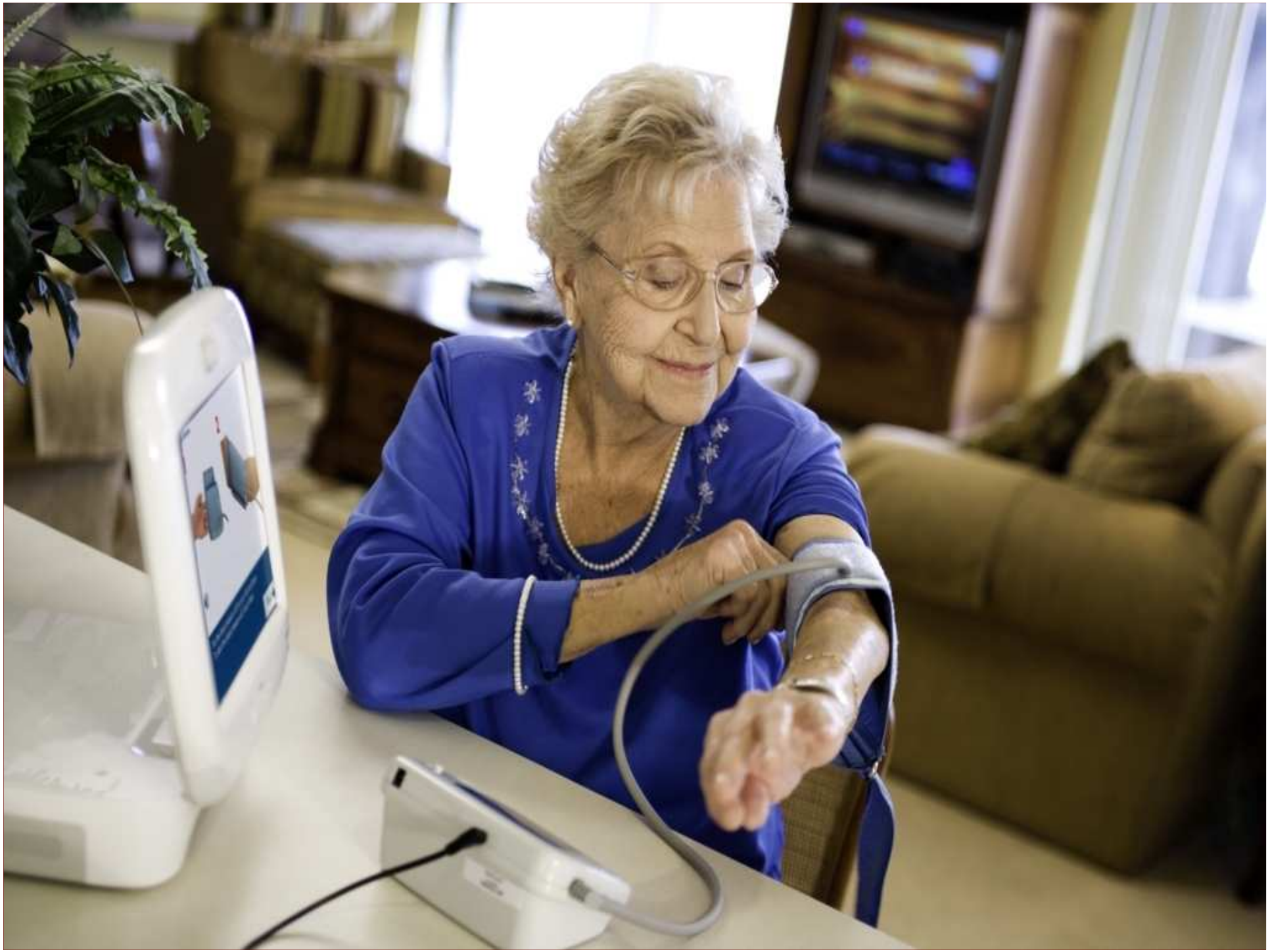

Wellness
Relationship
Physical
Financial
Healthy
Foods
Service
Ways
San
Emotional
Exercise
Environmental
helpful
board
Health
interview
UC
options
safety
good
Budget
Intellectual
Resolutions
stress
Better
Easy
campus
Occupational
Sleep
well
Spiritual
lifestyle
Others
Day
Relax
Resource
tips
Napping
bulletin
Earth
incorporate
Social
Learn
Keep
Diego
top
Balance



probe set	protein	average intensity, non-metastatic	average intensity, metastatic	permutational p-value
1997_at	Retinoblastoma 1	3606	1998	0.004
624_at	GTP-binding protein (RAB3B)	134	23	0.005
1611_s_at	Interferon (IFN-γ)	111	39	0.007
1548_s_at	Interleukin 10 (IL10)	381	171	0.007
2042_s_at	c-myb	117	36	0.010
885_g_at	Integrin α-3 chain	507	297	0.018
529_at	Human dual-specificity protein phosphatase	1309	440	0.016
2070_i_at	Protein kinase (JNK1)	241	71	0.024
785_at	Nedd-4-like ubiquitin-protein ligase WWP2	273	107	0.026
1912_s_at	APC	1367	516	0.034
304_at	Guanine Nucleotide Exchange Factor 2	47	10	0.035
463_g_at	Nuclear factor I B3	3367	1654	0.036
1380_at	Keratinocyte growth factor	239	140	0.036
1600_at	Tyrosine kinase (TXK)	322	193	0.037
654_at	MXI1	3264	1812	0.037
1467_at	Epidermal growth factor receptor kinase substrate (Eps8)	960	471	0.037
1127_at	Ribosomal protein S6 kinase 2 (RPS6KA2)	857	368	0.040
2046_at	Erg protein (ets-related gene), 3' flank	716	365	0.044
2022_at	Rac protein kinase β	125	60	0.045
526_at	Heat shock protein 27 (HSP27)	489	269	0.046
547_s_at	TINUR= NGFI-B/nur77 β-type transcription factor homolog	314	11	0.047
1216_at	Protein kinase C (PKC) type β II	162	32	0.048
1012_at	p300/CBP-associated factor (P/CAF)	130	68	0.048
1511_at	p52 and p64 isoforms of N-Shc	996	670	0.049
726_f_at	Chorionic Somatomammotropin Hormone Cs-5	757	437	0.049
139_at	Guanylate kinase associated protein (GKAP)	52	26	0.050
205_g_at	Homeobox 1.4	15	213	0.050
829_s_at	Glutathione S-transferase-P1c	2882	11495	0.000
239_at	Cathepsin D (catD)	2889	6098	0.001
652_g_at	Replication protein A 14k D subunit (RPA)	790	1530	0.003
1693_s_at	Tissue inhibitor of metalloproteinases (HUMTIMP)	158	3185	0.004
2062_at	MAC25	3356	11374	0.004
191_at	Mucin (MUC8)	192	370	0.004
651_at	Replication protein A 14k D subunit (RPA)	217	615	0.006
671_at	SPARC/osteonectin	4165	8589	0.007
1818_at	Ras-Like Protein Tc10	578	1318	0.007
1741_s_at	Insulin-like growth factor binding protein-2	417	2012	0.008
841_at	Protein kinase C-binding protein RACK17	72	447	0.009
1321_s_at	Tumor-associated membrane protein homolog (TMP)	33	184	0.009
1143_s_at	FGF Receptor K-Sam, Alt. Splice 3	90	343	0.009
1173_g_at	Spermidine/Spermine N1-Acetyltransferase, Alt. Splice 2	2401	3486	0.009
709_at	β-tubulin gene, clone m40	3393	5071	0.010
1319_at	X74764cds receptor protein tyrosine kinase	80	408	0.012
368_at	5T4 Oncofetal antigen	358	780	0.012
1001_at	Putative receptor tyrosine kinase (tie)	281	749	0.013
982_at	P1-Cdc46	558	847	0.013
1052_s_at	NF-IL6-β	864	1413	0.013
283_at	Ubiquinol cytochrome-c reductase core I	2645	4256	0.013
1054_at	Replication factor C, 37-kD subunit	332	543	0.015
770_at	Glutathione peroxidase	674	1979	0.016
317_at	D55696 Cysteine protease	513	1451	0.016
1563_s_at	Tumor necrosis factor receptor	928	1675	0.017
190_at	Mitogen induced nuclear orphan receptor (MINOR)	60	212	0.017
1007_s_at	Receptor tyrosine kinase DDR	1758	2943	0.018
1606_at	Receptor protein-tyrosine kinase (HEK9)	120	767	0.018
925_at	γ-interferon-inducible protein (IP-30)	767	1340	0.019
1544_at	Bloom's syndrome protein (BLM)	443	695	0.019
215_g_at	Homeobox protein (HOX7)	10	277	0.019
1137_at	Leukemia virus receptor 2 (GLVR2)	270	619	0.019
503_at	RNA polymerase II subunit (hsRPB10)	1774	2865	0.021
1305_s_at	Cytochrome P-450LTBV	365	641	0.023
1470_at	DNA polymerase delta small subunit	577	1444	0.023
1196_at	RCC1 exons#7–14	220	537	0.025
214_at	Homeobox protein (HOX7)	1284	2617	0.025
1782_s_at	Oncoprotein 18 (Op18)	3241	4669	0.025
735_s_at	Protein Kinase Ht31, Camp-Dependent	11	129	0.028
926_at	(clone 14VS) metallothionein-IG (MT1G)	212	546	0.028
428_s_at	mRNA fragment for β-2 microglobulin.	5916	9573	0.029
311_s_at	Fibronectin, Alt. Splice 1	551	2039	0.030
1226_at	TNF-α converting enzyme	123	206	0.031
1771_s_at	Platelet-derived growth factor receptor alpha	382	621	0.032
1985_s_at	X73066cds NM23-H1	4199	6670	0.033
1825_at	Ras GTPase-activating-like protein (IQGAP1)	369	682	0.034
1637_at	MAPKAP kinase (3pK)	67	172	0.036
609_f_at	Metallothionein I-B	3146	4404	0.036
1970_s_at	FGFR2	274	681	0.037
1379_at	M59371 Protein tyrosine kinase	345	752	0.037
2058_s_at	Integrin β-5 subunit	630	1046	0.039
1939_at	Phosphoprotein p53	445	932	0.040
1104_s_at	Heat shock protein (hsp 70)	1993	4117	0.042
133_at	Cathepsin C	442	763	0.043
2024_s_at	Lyn B	53	257	0.044
702_f_at	Homeotic Protein Hpx-5	344	518	0.044
892_at	Tumor antigen (L6)	53	179	0.044
1721_g_at	Mad2	603	1070	0.045
861_g_at	Mutator gene (hMSH2)	721	1057	0.045
2069_s_at	α1(E)-catenin	2467	3507	0.046

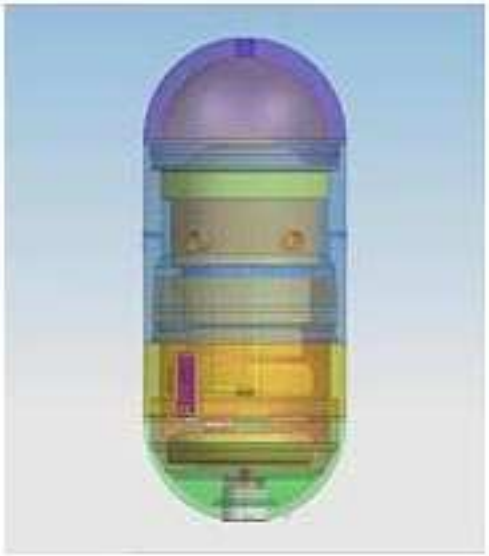
Test	Normal Range
Electrolytes:	
Bicarbonate	22–33 mmol/L
Calcium	8.5–10.5 mg/dL
Chloride	95–105 mmol/L
Magnesium	1.5–3.0 mg/dL
Phosphorus	2.0–4.5 mg/dL
Potassium	3.5–5.0 mmol/L
Sodium	135–145 mmol/L
Liver function tests:	
ALT (SGPT)	0–50 IU/L
AST (SGOT)	0–45 IU/L
Bilirubin	0–1.5 mg/dL
Alkaline phosphatase (AP)	35–115 IU/L
GGT	30–60 IU/L
Kidney function tests:	
Blood urea nitrogen (BUN)	8–20 mg/dL
Creatinine	0.6–1.5 mg/dL
Other blood tests:	
Albumin (total serum)	3.0–5.5 g/dL
Amylase	50–160 IU/L
Creatine phosphokinase (CPK)	Men: 20–150 IU/L Women: 10–80 IU/L
Lactate (lactic) dehydrogenase	100–250 IU/L
Testosterone	Men: 200–1,200 µg/dL Women: 20–60 µg/dL

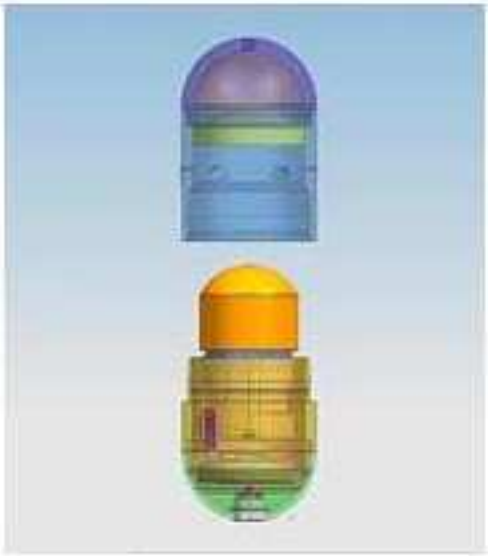

Dr. D. Holmes
Morton
1990

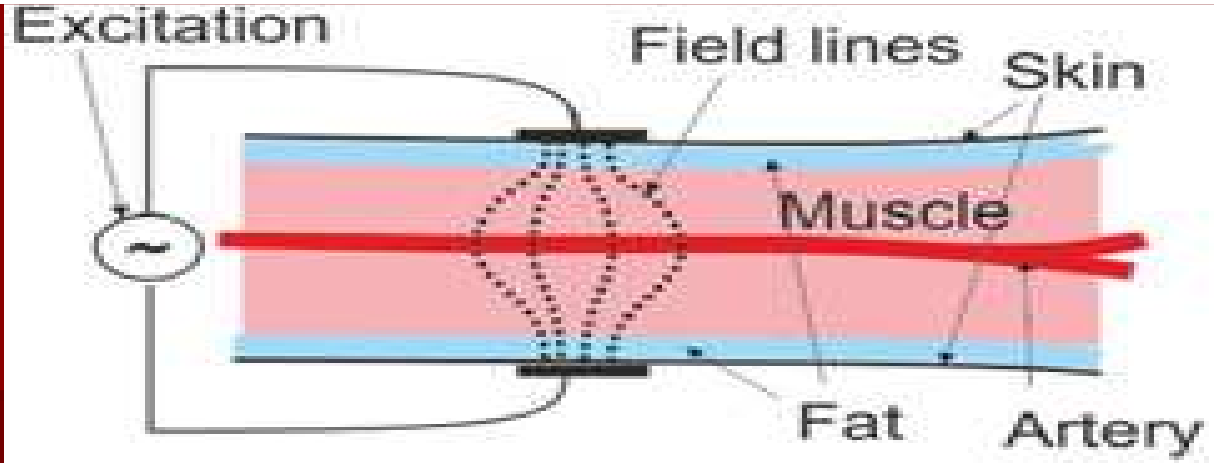


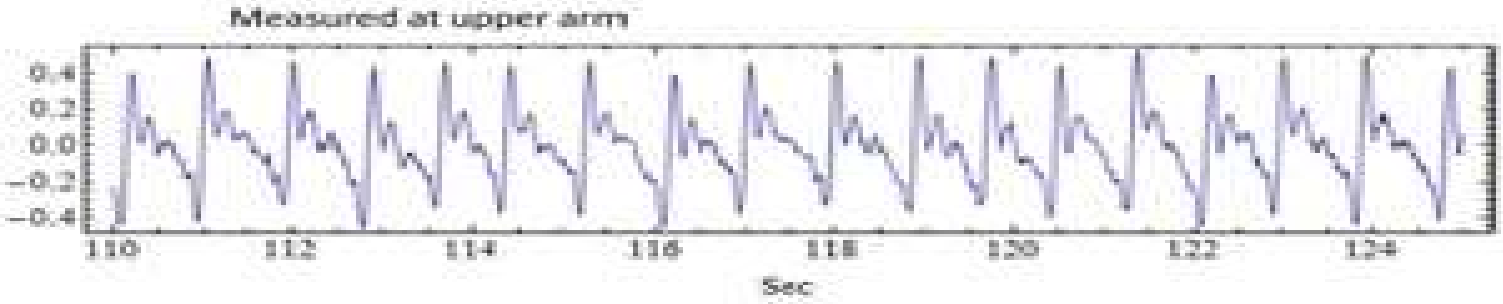
PHILIPS

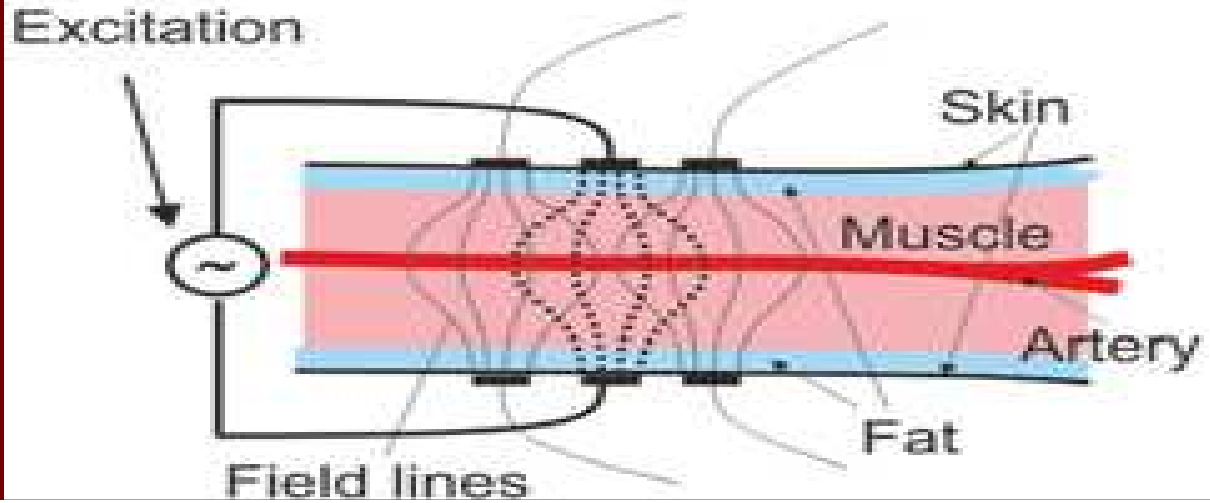
sense and simplicity






Excitation
Field lines
Skin
Muscle
Fat
Artery


Measured at upper arm
0.4
0.2
0.0
−0.2
−0.4
110
112
114
116
118
120
122
124
Sec


Excitation
Skin
Muscle
Artery
Fat
Field lines


symphony

Rank	Member State	Total Population	Males	Females
1	Japan	74.6	71.9	77.3
2	Australia	73.2	70.8	75.5
3	France	73.1	69.3	76.9
4	Sweden	73.0	71.2	74.9
5	Spain	72.8	69.8	75.7
6	Italy	72.7	70.0	75.4
7	Greece	72.5	70.5	74.6
8	Switzerland	72.5	69.5	75.5
9	Monaco	72.4	68.5	76.3
10	Andorra	72.3	69.3	75.2
11	San Marino	72.3	69.5	75.0
12	Canada	72.0	70.0	74.0
13	Netherlands	72.0	69.6	74.4
14	United Kingdom	71.7	69.7	73.7
15	Norway	71.7	68.8	74.6
16	Belgium	71.6	68.7	74.6
17	Austria	71.6	68.8	74.4
18	Luxembourg	71.1	68.0	74.2
19	Iceland	70.8	69.2	72.3
20	Finland	70.6	67.2	73.7
21	Malta	70.5	68.4	72.5
22	Germany	70.4	67.4	73.5
23	Israel	70.4	69.2	71.6
24	United States	70.0	67.6	72.6
25	Cyprus	69.8	68.7	70.9
26	Dominica	69.8	67.2	72.3
27	Ireland	69.6	67.5	71.7
28	Denmark	69.4	67.2	71.5
29	Portugal	69.3	65.9	72.7
30	Singapore	69.3	67.4	71.2