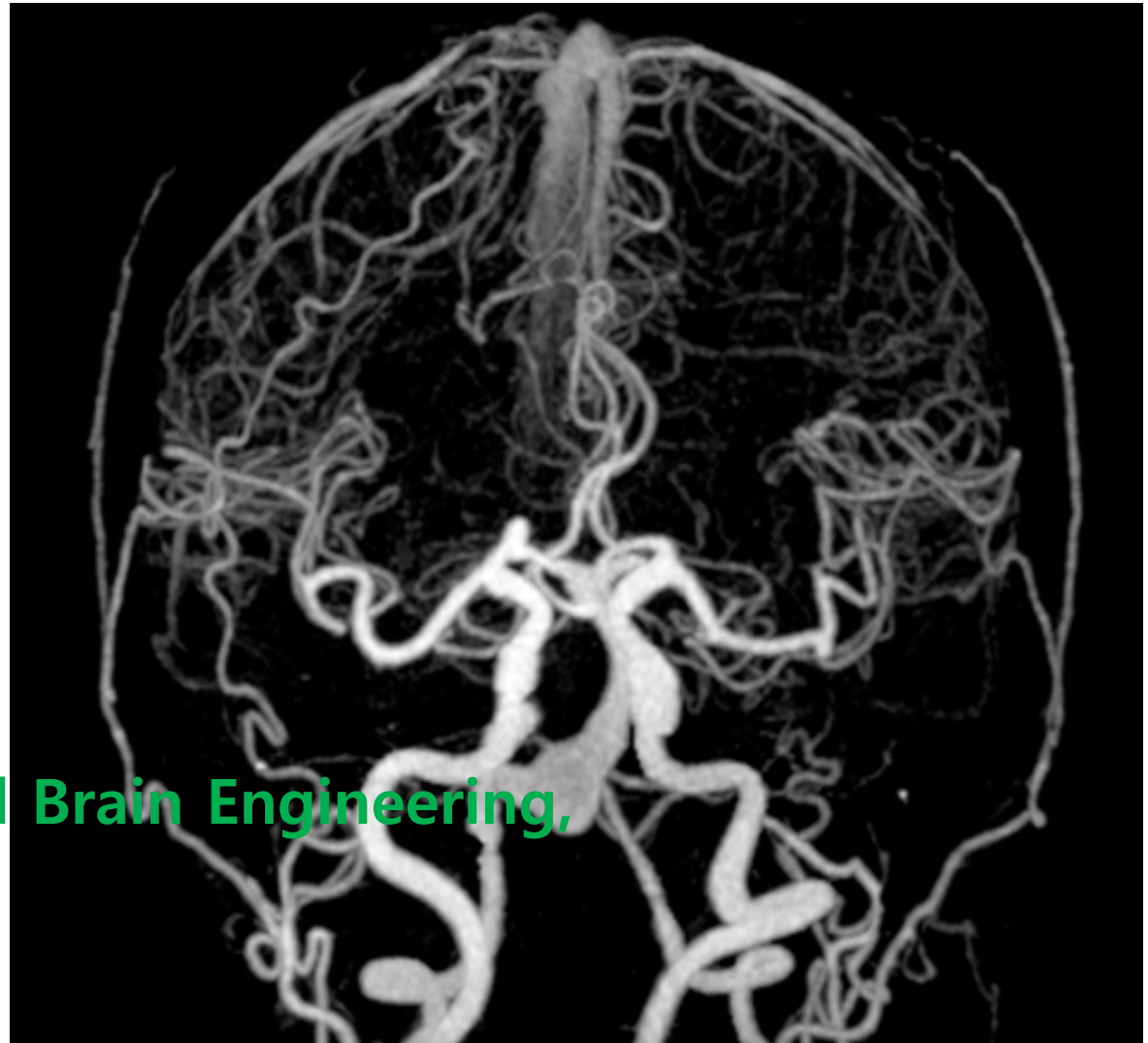


Neuro-forensic science: who did a lie?

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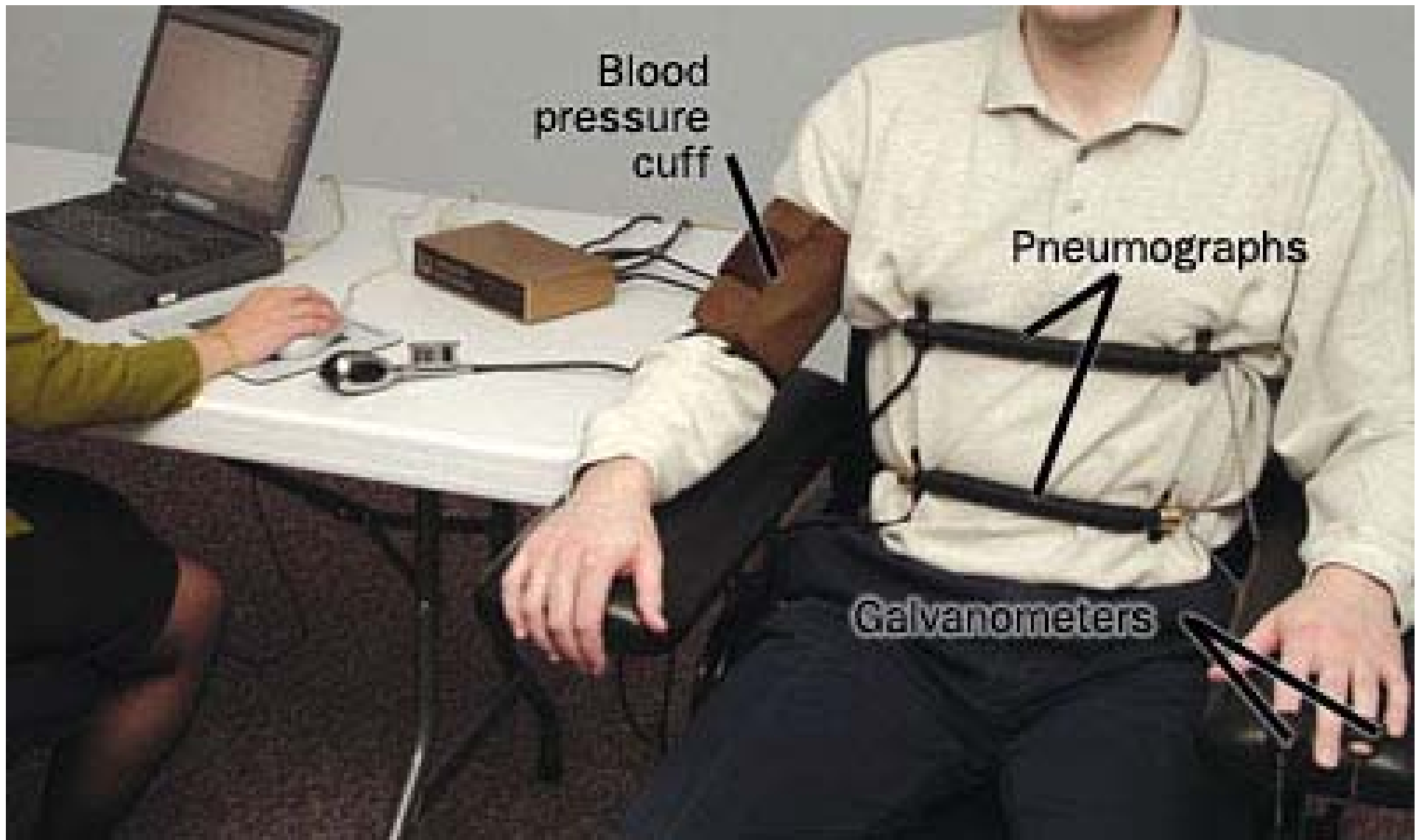
Malintent



Important standards in neuro-forensic science

- Daubert standard [Bendectin, 1974]
- Frye Standard [no twilight zone]
- M'Naghten Rule [should be sound mind]

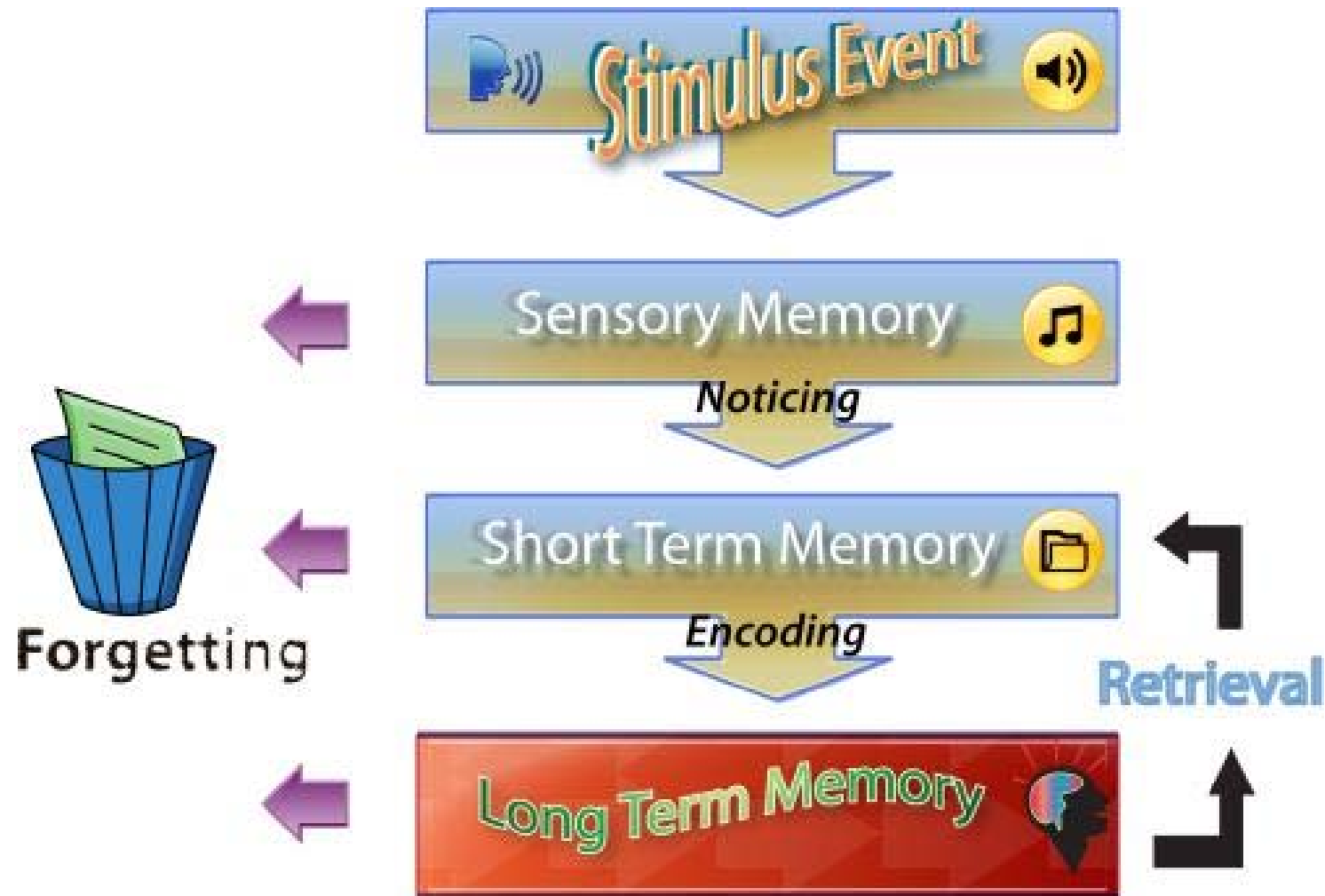
Polygraph



The ideas underlying the polygraphs

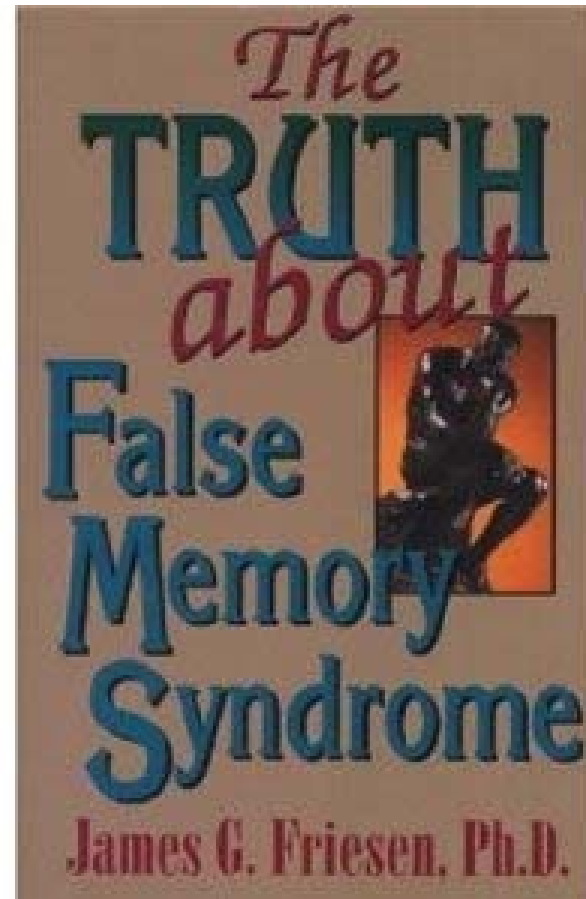
- highly nervous: sweat (skin conductance), stress hormone, heartbeat
- familiar or unfamiliar (P300, EEG)
- memory retrieval or story creation (fMRI)
- truth or lie (7 vs. 14 regions)
- knowledge: guilty knowledge test

Short-term memory Retrieval (STEMER)



No lie MRI?

- False memory syndrome



Minority report: PreCog

