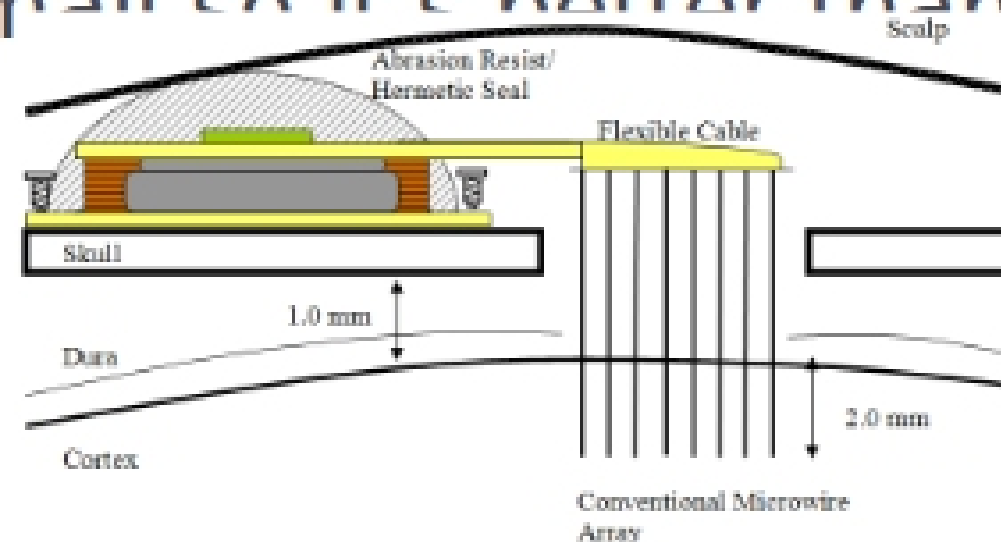


Low Power Embedded FWIRE System Using Integrate-and-Fire

By Nicholas Wulf

What Is FWIRE?

- ▶ Stands for Florida Wireless Implantable Recording Electrodes
- ▶ Currently being developed by the Computational NeuroEngineering Lab (CNEL) here at UF
- ▶ Implanted under the skin
 - ▶ Invasive enough to analyze individual neurons
 - ▶ Wireless & small so it's better than other invasive methods



Why Study the Brain?

- ▶ **Enables neurotechnologies for curing neurological disorders**
 - ▶ Movement disabilities
 - ▶ Epilepsy
 - ▶ Spinal cord injury
 - ▶ Stroke

