

Selected Advances in Stroke Care and Research from the **UCLA Stroke Center**

- **First device therapy for acute ischemic stroke**
 - MERCI Retriever
 - Invented at UCLA
- **Leading device therapies for cerebral aneurysms**
 - Guglielmi detachable coil, Matrix coil
 - Invented at UCLA
- **Leading catheter therapy for intracranial arteriovenous malformations and fistulae**
 - Onyx as liquid embolic agent for intracranial arteriovenous malformations and fistulae
 - Developed at UCLA
- **First MRI demonstration of successful reversal of advanced stroke injury in humans**
- **First validated instrument for paramedic recognition of stroke**
 - Los Angeles Prehospital Stroke Screen (LAPSS)
- **First prehospital neuroprotective treatment of stroke trial**
 - Field Administration of Stroke Therapy - Magnesium (FAST-MAG)
- **First stroke device studied utilizing FDA approved exception from informed consent under emergency circumstances**
- **First multi-center trial of body weight-supported treadmill training and drug therapies for stroke**
- **First clinical cellphone PACS system for remote review of CT and MRI scans in acute stroke**
 - Developed at UCLA
- **First US multicenter trial of endoscopic treatment for acute intracerebral hemorrhage**
- **First routine use of intraoperative digital subtraction angiography for evaluation after surgical aneurysm and AVM treatment**
- **First Neuro ICU-adjacent comprehensive stroke imaging center with CT, PET, 3T MRI**
- **First ICU and ED robot for remote monitoring of stroke patients**
- **First cerebral blood flow laboratory to use bedside xenon CBF studies and TCD for stroke critical care and research**
- **First clinical information system with acute stroke management dashboard**
- **First to deploy write-once, write-everywhere stroke note for clinical documentation and automated quality and research database completion**
- **First systematic secondary prevention program for cerebral atherosclerosis**
 - Preventing Recurrence of Thrombo-embolic Events through Co-ordinated Treatment (Stroke PROTECT Program)
- **First accredited undergraduate program for Student Stroke Research**
 - UCLA Student Stroke Team
- **First accredited undergraduate program for Stroke Community Education and Research**
 - UCLA Stroke Force
- **First confirmation that stroke diagnosis in the field by paramedics and neurologists by cell phone is highly accurate**
 - Field Administration of Stroke Therapy - Magnesium (FAST-MAG)
- **First validation of wearable, remote wireless health monitoring for stroke**
 - Developed by UCLA Wireless Health Institute faculty and students