

Stanford



Stephen Skirboll

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CLINICAL OFFICES

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Bio

CLINICAL FOCUS

- Neurological Surgery
- Neurosurgery

ACADEMIC APPOINTMENTS

- Associate Professor - University Medical Line, Neurosurgery
- Member, Bio-X
- Member, Stanford Cancer Institute

HONORS AND AWARDS

- Journal of Neuro-Oncology Award, Congress of Neurological Surgeons, (2011)

PROFESSIONAL EDUCATION

- Board Certification: Neurological Surgery, American Board of Neurological Surgery (2002)
- Residency: University of Washington Dept of Surgery (1997) WA
- Internship: University of Washington Dept of Surgery (1990) WA
- Medical Education: University of Pennsylvania Office of the Registrar (1989) PA
- BA, Case Western Reserve University , Psychology and Natural Sciences (1983)
- MD, University of Pennsylvania , Medicine (1989)

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

My research focuses on screening strategies to identify and characterize cancer stem cells (CSCs) in human gliomas. We are pursuing this in several ways: 1) a novel colony-forming antibody live cell array to identify distinct CSC surface phenotypes, 2) RNAi screens to identify kinases critical for CSC tumorigenicity, 3) high throughput small molecule and chemical screens to identify compounds that selectively kill or target CSCs, and 4) identifying CSCs using the tumor specific EGFRvIII

Publications

PUBLICATIONS

- **Targeting a Glioblastoma Cancer Stem-Cell Population Defined by EGF Receptor Variant III.** *Cancer research*
Emlet, D. R., Gupta, P., Holgado-Madruga, M., Del Vecchio, C. A., Mitra, S. S., Han, S., Li, G., Jensen, K. C., Vogel, H., Xu, L. W., Skirboll, S. S., Wong, A. J.
2014; 74 (4): 1238-1249
- **An RNAi Screen Identifies TRRAP as a Regulator of Brain Tumor-Initiating Cell Differentiation** *CELL STEM CELL*
Wurdak, H., Zhu, S., Romero, A., Lorgner, M., Watson, J., Chiang, C., Zhang, J., Natu, V. S., Lairson, L. L., Walker, J. R., Trussell, C. M., Harsh, G. R., Vogels, et al
2010; 6 (1): 37-47
- **Health-related quality-of-life status in Veterans with spinal disorders** *QUALITY OF LIFE RESEARCH*
Boakye, M., Moore, R., Kong, M., Skirboll, S. L., Arrigo, R. T.
2013; 22 (1): 45-52
- **Patterns of care and survival for glioblastoma patients in the Veterans population** *JOURNAL OF NEURO-ONCOLOGY*
Arrigo, R. T., Boakye, M., Skirboll, S. L.
2012; 106 (3): 627-635
- **Pituitary Adenomas Can Appear as Hypermetabolic Lesions in 18F-FDG PET Imaging** *JOURNAL OF NEUROIMAGING*
Ryu, S. I., Tafti, B. A., Skirboll, S. L.
2010; 20 (4): 393-396
- **Reversal of Preoperative Catatonic State by Surgical Resection of an Adult-onset Craniopharyngioma Case Report and Review of the Literature** *COGNITIVE AND BEHAVIORAL NEUROLOGY*
Massengale, J., Tafti, B. A., Large, L., Skirboll, S.
2009; 22 (1): 67-71
- **Cargo areas of pickup trucks: an avoidable mechanism for neurological injuries in children** *JOURNAL OF NEUROSURGERY*
German, J. W., Klugh, A., Skirboll, S. L.
2007; 106 (5): 368-371
- **"Paradoxical" transtentorial herniation due to CSF drainage in the presence of a hemicraniectomy** *NEUROLOGY*
Fields, J. D., Lansberg, M. G., Skirboll, S. L., Kurien, P. A., Wijman, C. A.
2006; 67 (8): 1513-1514
- **Intracranial dural arteriovenous fistula causing a myelopathy** *SPINAL CORD*
Perkash, I., Punj, V., Ota, D. T., Lane, B., Skirboll, S.
2002; 40 (9): 438-442
- **Surface passivation of a microfluidic device to glial cell adhesion: a comparison of hydrophobic and hydrophilic SAM coatings** *BIOMATERIALS*
Cox, J. D., Curry, M. S., Skirboll, S. K., Gourley, P. L., Sasaki, D. Y.
2002; 23 (3): 929-935
- **Neurotrophin-3 modulates noradrenergic neuron function and opiate withdrawal** *MOLECULAR PSYCHIATRY*
Akbarian, S., Bates, B., Liu, R. J., Skirboll, S. L., Pejchal, T., Coppola, V., Sun, L. D., Fan, G., Kucera, J., Wilson, M. A., Tessarollo, L., Kosofsky, B. E., Taylor, et al
2001; 6 (5): 593-604

- **Magnetic source imaging and brain surgery: presurgical and intraoperative planning in 26 patients** *JOURNAL OF NEUROSURGERY*
Alberstone, C. D., Skirboll, S. L., Benzel, E. C., Sanders, J. A., Hart, B. L., Baldwin, N. G., Tessman, C. L., Davis, J. T., Lee, R. R.
2000; 92 (1): 79-90
- **Revascularization and bypass procedures for cerebral aneurysms** *NEUROSURGERY CLINICS OF NORTH AMERICA*
Newell, D. W., Skirboll, S. L.
1998; 9 (4): 697-?
- **Intracranial vascular anastomosis using the microanastomotic system - Technical note** *JOURNAL OF NEUROSURGERY*
Newell, D. W., Dailey, A. T., Skirboll, S. L.
1998; 89 (4): 676-681
- **Noninvasive physiologic evaluation of the aneurysm patient** *NEUROSURGERY CLINICS OF NORTH AMERICA*
Skirboll, S., Newell, D. W.
1998; 9 (3): 463-?
- **Functional cortex and subcortical white matter located within gliomas** *NEUROSURGERY*
Skirboll, S. S., OJEMANN, G. A., Berger, M. S., LETTICH, E., Winn, H. R.
1996; 38 (4): 678-684
- **INVIVO CHANGES OF CATECHOLAMINES IN HEMIPARKINSONIAN MONKEYS MEASURED BY MICRODIALYSIS** *EXPERIMENTAL NEUROLOGY*
Skirboll, S., Wang, J., MEFFORD, I., Hsiao, J., Bankiewicz, K. S.
1990; 110 (2): 187-193
- **METHODOLOGY OF MICRODIALYSIS OF NEOSTRIATUM IN HEMIPARKINSONIAN NONHUMAN-PRIMATES** *EXPERIMENTAL NEUROLOGY*
Wang, J., Skirboll, S., AIGNER, T. G., Saunders, R. C., Hsiao, J., Bankiewicz, K. S.
1990; 110 (2): 181-186
- **SURVIVAL OF ADULT 5-HT NEURONS FOLLOWING INTRAOCULAR TRANSPLANTATION** *BRAIN RESEARCH*
Skirboll, S. L., Verhofstad, A., Olson, L.
1989; 484 (1-2): 257-267
- **NERVE GROWTH-FACTOR CAN INFLUENCE GROWTH OF CORTEX CEREBRI AND HIPPOCAMPUS - EVIDENCE FROM INTRAOCULAR GRAFTS** *NEUROSCIENCE*
ERIKSDOTTERNILSSON, M., Skirboll, S., Ebendal, T., Olson, L.
1989; 30 (3): 755-766
- **NGF TREATMENT PROMOTES DEVELOPMENT OF BASAL FOREBRAIN TISSUE GRAFTS IN THE ANTERIOR-CHAMBER OF THE EYE** *EXPERIMENTAL BRAIN RESEARCH*
ERIKSDOTTERNILSSON, M., Skirboll, S., Ebendal, T., Hersh, L., Grassi, J., Massoulie, J., Olson, L.
1989; 74 (1): 89-98