



PHOTO AVAILABLE: Laser Research Funded By Sturge-Weber Foundation

U.C. Irvine wound-healing response in laser-irradiated skin study underway.

For Immediate Release

MT. FREEDOM, N.J./EWorldWire/Feb. 4, 2009 --- A novel approach to modulate the wound-healing response in laser-irradiated skin using a drug called "Rapamycin" is being developed in the Beckman Laser Institute and Medical Clinic (BLIMC) at University of California, Irvine. The study, partially funded by the Sturge-Weber Foundation (<http://www.sturge-weber.org>), is led by Wangcun Jia, Ph.D., and J. Stuart Nelson, M.D., Ph.D.

In the laser treatment of port wine stain birthmarks (PWS), malformed blood vessels can be injured selectively using advanced laser techniques. However, since blood vessel injury is still a wound, the damaged blood vessels will be regenerated to some extent by the body's self-healing ability. Consequently, the degree of PWS blanching seen following laser treatment remains variable and unpredictable.

In the preclinical studies using the in-vivo rodent window chamber model, it was shown that Rapamycin can inhibit the reformation of laser-damaged blood vessels, which would always regenerate if only laser irradiation was applied.

Rapamycin has been approved by the Food and Drug Administration (FDA) to fight tissue rejection following organ transplants. Rapamycin is also known for inhibiting the production of a protein involved in constructing blood vessel wall.

FDA approval to use Rapamycin to improve PWS laser therapy has been recently obtained, and a clinical trial is being carried out in BLIMC to determine whether the combined use of laser therapy and Rapamycin will improve PWS therapeutic outcome.

Port wine birthmarks are the chief hallmark of Sturge-Weber syndrome, a rare neurological condition characterized by possible seizures, glaucoma as well as a facial port wine birthmark.

The Sturge-Weber Foundation, founded in 1987, is an international organization serving individuals and families affected by Sturge-Weber syndrome and other port wine birthmark conditions with education, research, public information and friendly support.

"We are proud to be funding this investigation which will profoundly change the way we treat the vascular malformation associated with these rare syndromes and, with further research, we may have the potential to treat the affected brain vascular malformations as well," said Karen L. Ball, president and CEO.

Visit <http://www.sturge-weber.org> for more information.

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AVAILABLE MEDIA: : Wangcun Jia, Ph.D. (size: 0.4 k)

Partially funded by the Sturge-Weber Foundation, Rapamycin study is led by Wangcun Jia, Ph.D.
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