

targeting could have therapeutic potential. Inactivation of TSLP expression or its receptor signaling can effectively control cancer progression and metastasis (1).

*Applications:*

- In treatments to control cancer invasion and spreading
- Cancer treatment that circumvents cancer-induced immune suppression
- As a means to augment anti-tumor immune responses
- For the development of prognostic markers for disease outcome in cancer patients

*Inventors:* Arya Biragyn (NIA), Warren J. Leonard (NHLBI)

*Relevant Publications:*

1. Olkhanud PB, Rochman Y, Bodogai M, Malchinkhuu E, Wejksza K, Xu M, Gress RE, Hesdorffer C, Leonard WJ, Biragyn A. Thymic stromal lymphopoietin is a key mediator of breast cancer progression. *J Immunol.* 2011;V:186, In Press.

2. De Monte L, Reni M, Tassi E, Clavenna D, Papa I, Recalde H, Braga M, Di Carlo V, Doglioni C, Protti MP.

Intratumor T helper type 2 cell infiltrate correlates with cancer-associated fibroblast thymic stromal lymphopoietin production and reduced survival in pancreatic cancer. *J Exp Med.* 2011 Mar 14;208(3):469–478. [PubMed: 21339327]

3. Pedroza-Gonzalez A, Xu K, Wu TC, Aspod C, Tindle S, Marches F, Gallegos M, Burton EC, Savino D, Hori T, Tanaka Y, Zurawski S, Zurawski G, Bover L, Liu YJ, Banchereau J, Palucka AK. Thymic stromal lymphopoietin fosters human breast tumor growth by promoting type 2 inflammation. *J Exp Med.* 2011 Mar 14;208(3):479–490. [PubMed: 21339324]

*Patent Status:* U.S. Provisional Application No. 61/416,619 filed November 23, 2010 (HHS Reference No. E-019-2011/0-US-01)

*Licensing Status:* Available for licensing.

*Licensing Contact:* Patrick P. McCue, PhD; 301-435-5560; mccuepat@mail.nih.gov

*Collaborative Research Opportunity:* The National Institute on Aging, Immunotherapeutics Unit, is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize clinical application of TSLP in cancers. Please contact Nicole Guyton, PhD at 301-435-3101 or [darackn@mail.nih.gov](mailto:darackn@mail.nih.gov) for more information.

**System and Method for Producing Nondiffracting Light Sheets That Improves the Performance of Selective Plane Illumination Microscopy (SPIM)**

*Description of Technology:* The technology offered for licensing relates

to a system and method of producing nondiffracting beams of light that spatially overlap, but do not interfere with each other when intersecting the detection plane of an optical arrangement. The system includes an illumination source (i.e., ultrafast laser) for transmitting a beam of light through the optical arrangement that includes a diffraction grating for diffracting the light beam to produce beams of light having different wavelengths, which are then passed through an annular aperture that transforms the beams of light into nondiffracting beams having different wavelengths. The method can be readily utilized in Selective Plane Illumination Microscopy (SPIM), a system that provides optical sectioning of a sample that is labeled with fluorescent dyes. SPIM can provide quantitative three-dimensional maps of the distribution of a fluorophore within the sample with high spatiotemporal resolution and an excellent signal-to-noise ratio. The standard SPIM technique however produces nonuniform axial resolution, which is caused by the diffraction of the laser beam through the sample, causing degradation in the optical sectioning, and forcing a compromise between field of view and axial resolution. Techniques for decoupling field of view and axial resolution have previously utilized nondiffracting beams (e.g., Bessel beams) for sample illumination. The resulting interference from multiple nondiffracting beams degrades the quality of optical sectioning and the quality of the image. The present technology utilizing nondiffracting noninterfering beams is intended to alleviate the problems associated with the currently used SPIM techniques.

*Applications:* In Selective Plane Illumination Microscopy (SPIM) used for optical sectioning and imaging of biological samples.

*Development Status:* Proof of concept has been demonstrated.

*Inventors:* Andrew York, Yicong Wu, Hari Shroff (NIBIB)

*Relevant Publications:*

1. Durnin J, Micheli J Jr, Eberly JH. Diffraction-free beams. *Phys Rev Lett.* 1987 Apr 13;58(15):1499–1501.
2. Greger K, Swoger J, Stelzer EH. Basic building units and properties of a fluorescence single plane illumination microscope. *Rev Sci Instrum.* 2007 Feb;78(2):023705. [PubMed: 17578115]
3. Fahrbach F, Rohrbach A. Microscopy with Non-diffracting Beams. Abstract at 2009 Focus on Microscopy Conference, [http://www.focusonmicroscopy.org/2009/PDF/281\\_Fahrbach.pdf](http://www.focusonmicroscopy.org/2009/PDF/281_Fahrbach.pdf).
4. Rohrbach A. Artifacts resulting from imaging in scattering media: a theoretical prediction. *Opt Lett.* 2009 Oct 1;34(19):3041–3043. [PubMed:

19794809]

*Patent Status:* U.S. Provisional Application No. 61/360,352 filed 30 Jun 2010, entitled “System and Method of Producing Nondiffracting Light Sheets by a Multiplicity of Spatially Overlapping, Minimally Interfering Nondiffracting Optical Beams” (HHS Reference No. E-118-2010/0-US-01)

*Licensing Status:* Available for licensing.

*Licensing Contacts:*

- Uri Reichman, PhD, MBA; 301-435-4616; [UR7a@nih.gov](mailto:UR7a@nih.gov)

- Michael Shmilovich, Esq.; 301-435-5019; [shmilovm@mail.nih.gov](mailto:shmilovm@mail.nih.gov)

*Collaborative Research Opportunity:* The NIBIB Section on High Resolution Optical Imaging is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize the nondiffracting Light Sheets for SPIM. Please contact Hari Shroff at 301-435-1995 or [hari.shroff@nih.gov](mailto:hari.shroff@nih.gov) for more information.

Dated: April 14, 2011.

**Richard U. Rodriguez,**

*Director, Division of Technology Development and Transfer, Office of Technology Transfer, National Institutes of Health.*

[FR Doc. 2011-9571 Filed 4-19-11; 8:45 am]

**BILLING CODE 4140-01-P**

**DEPARTMENT OF HEALTH AND HUMAN SERVICES**

**National Institutes of Health**

**National Institute of Environmental Health Sciences; Amended Notice of Meeting**

Notice is hereby given of a change in the meeting of the Board of Scientific Counselors, NIEHS, March 20, 2011, 7 p.m. to March 22, 2011, 12:30 p.m., Doubletree Guest Suites, 2515 Meridian Parkway, Research Triangle Park, NC, 27713 which was published in the **Federal Register** on February 23, 2011, 76 FR 36.

This **Federal Register** Notice has been amended to change the meeting date. The meeting will be held Sunday, May 22, 2011 at 7 p.m. through Tuesday, May 24, 2011 at 12:30 p.m. The meeting is partially closed to the public.

Dated: April 12, 2011.

**Jennifer S. Spaeth,**

*Director, Office of Federal Advisory Committee Policy.*

[FR Doc. 2011-9492 Filed 4-19-11; 8:45 am]

**BILLING CODE 4140-01-P**