are the source of IL–13, and are activated by CD1 expressing intestinal epithelial cells. Tissue removed from UC patients were also shown to contain increased numbers of nonclassical NKT cells that produce markedly increased amounts of IL–13. In addition, these NKT cells are cytotoxic for epithelial cells, supporting the concept that epithelial damage is a key factor in UC.

Applications: Development of IL–13 and CD1 based therapeutics to treat or prevent ulcerative colitis.

Development Status: Small animal model studies.

Inventors: Warren Strober, Ivan Fuss, Frank Heller, Richard Blumberg (NIAID).

Related Publications:

1. IJ Fuss et al. Nonclassical CD1d-restricted NK T cells that produce IL–13 characterize an atypical Th2 response in ulcerative colitis. J Clin Invest. 2004 May;113(10):1490–1497. [PubMed: 15146247].

2. F Heller et al. Oxazolone colitis, a Th2 colitis model resembling ulcerative colitis, is mediated by IL–13-producing NK–T cells. Immunity 2002 Nov;17(5):629–638. [PubMed: 12433369].

Patent Status:

- U.S. Patent No. 7,666,411 issued 23 Feb 2010 (HHS Reference No. E–131–2002/0–US–02).
- U.S. Patent Application No. 12/709,029 filed 19 Feb 2010 (HHS Reference No. E–131–2002/0–US–10).
- International patent/patent application filings.

Related Technologies: Related IBD technologies also available for licensing include IL–13 mutant and chimeric molecules (HHS Reference No. E–003–2005/0) and NF-kappa B decoy oligonucleotides (HHS Reference No. E–108–2005/0).

Licensing Status: Available for licensing.

Licensing Contact: Sury Vepa, PhD, J.D.; 301–435–5020; *vepas@mail.nih.gov*.

Dated: October 12, 2010.

Richard U. Rodriguez,

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

[FR Doc. 2010–26153 Filed 10–15–10; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Government-Owned Inventions; Availability for Licensing

AGENCY: National Institutes of Health, Public Health Service, HHS.

ACTION: Notice.

SUMMARY: The inventions listed below are owned by an agency of the U.S. Government and are available for licensing in the U.S. in accordance with 35 U.S.C. 207 to achieve expeditious commercialization of results of Federally-funded research and development. Foreign patent applications are filed on selected inventions to extend market coverage for companies and may also be available for licensing.

ADDRESSES: Licensing information and copies of the U.S. patent applications listed below may be obtained by writing to the indicated licensing contact at the Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, Rockville, Maryland 20852–3804; telephone: 301/496–7057; fax: 301/402–0220. A signed Confidential Disclosure Agreement will be required to receive copies of the patent applications.

Mouse Anti-Mouse CXCL9 (Mig) Monoclonal Antibodies

Description of Invention: This technology describes monoclonal antibodies against mouse chemokine (C–X–C motif) ligand 9 (CXCL9), also known as Monokine induced by gamma interferon (Mig). CXCL9 is a secreted protein that functions to attract white cells and increased expression of CXCL9 has been linked to several diseases. The inventors at the NIH generated over 100 anti-mouse CXCL9 antibodies from a CLXL9/Mig knockout mouse and further characterized several antibodies to show neutralization of CXCL9. As such, these antibodies could be used to measure concentrations of mouse CLXL9 in laboratory samples and block the activity of CXCL9 in injected mice. These antibodies are suitable for ELISA and Western blot. The antibodies have not been tested in flow cytometry or immunohistochemistry, but may also be useful for these applications.

Applications

- ELISA assays for detection and measurement of CXCL9.
- Neutralization of CXCL9 activity in mouse models and *in vitro* assays to study the role of CXCL9 in immune response and disease.

Advantages: Can be used in mice without eliciting endogenous antibodies reacting against the injected anti-CXCL9.

Development Status: The technology is currently in the pre-clinical stage of development.

Inventors: Joshua M. Farber and Hongwei H. Zhang (NIAID).

Patent Status: HHS Reference No. E–198–2009/0—Research Tool. Patent protection is not being pursued for this technology.

Licensing Status

Available for licensing.

Licensing Contact: Whitney A. Hastings; 301–451–7337; *hastingw@mail.nih.gov.*

Signal-to-Noise Enhancement in Imaging Applications Using a Time-Series of Images

Description of Invention: The invention offered for licensing relates to the field of imaging and specifically to the field of medical imaging. The apparatus and method of the invention provide for noise reduction in imaging applications that use a time-series of images. In one embodiment of the invention, a time-series of images is acquired using a same imaging protocol of the same subject area, but the images are spaced in time by one or more time intervals (*e.g.,* 1, 2, 3 * * * seconds apart). A sub-region is projected across all of the images to perform a localized analysis (corresponding X–Y pixels or X–Y–Z voxels are analyzed across all images) that identifies temporal components within each sub-region. Subsequently, within the sub-regions, only those temporal components are selected whose amplitude is above a predetermined amplitude threshold. The images are then reconstructed using the sub-regions with reduced components. A maximal-intensity-projection (MIP) is applied in the temporal domain (tMIP) in order to obtain a single image with reduced noise (this can be done either at the sub-region level or at the reconstructed image level). The technology can be applied to a broad spectrum of medical imaging technologies such as MRI, X-Ray, CT and others.

Applications: Medical imaging and diagnostics applied to MRI, X-Ray, CT scans or other imaging modalities including PET, SPECT, ultrasound or optical.

Advantages: Enhancing signal-to-noise of medical imaging techniques.

Development Status

- Proof of concept has been demonstrated. Data is available.

• Need to acquire further data to establish clinical utility of the method and to further optimize the protocol.

Market

• According to market research reports the market for medical imaging equipment industry in the United States is approximately $9.0 billion now and has been growing by approximately 7.6% annually.

• The United States market for computed tomography (CT) scanning systems is estimated to touch $3.6 billion by the end of 2009. The U.S. accounts for over 50.0% of the worldwide market.

• Worldwide MRI equipment market is estimated to reach $5.5 billion by 2010, according to new report by Global Industry Analysts, Inc. (*http://www.strategyr.com/Magnetic_Resonance_Imaging_MRI_Equipment_Market_Report.asp*). In the United States the market for such equipment is estimated at $1.9 billion for 2008, as stated the same report. The very high-field MRI systems market in the United States is projected to reach $968 million by the year 2010. Very High-Field Systems also represent the fastest growing segment, as hospitals and clinics upgrade old equipment with state-of-the-art systems.

• Enhancements in imaging technologies to achieve better image clarity, reliability and speed are being constantly pursued by medical imaging companies. Technologies that offer such improvements therefore present excellent commercial potential. Thus the subject invention which can be applied in a broad spectrum of imaging technologies offers such good commercial potential.

Inventors: Han Wen and Vinay Pai (NHLBI).

Relevant Articles

1. Fish DA, Grochmalicki J, Pike ER. Scanning singular-value-decomposition method for restoration of images with space-variant blur. J Opt Soc Am A, 13(3), pp. 464–469, March 1996.

2. Du X, Dunxu Y, Cuihua L, Jing L. "A novel approach to SVD-based image filtering improvement," International Conference on Computer Science and Software Engineering, vol 6, pp. 133–136, 2008.

Patent Status: U.S. Provisional Application No. 61/266,442 filed 03 Dec 2009 (HHS Reference No. E–292–2009/0–US–01).

Related Technologies: Image denoising techniques such as singular value decomposition (SVD).

Licensing Status: Available for licensing.

Licensing Contacts

• Uri Reichman, PhD, MBA; 301–435–4616; *UR7a@nih.gov.*

• John Stansberry, PhD; 301–435–5236; *stansbej@mail.nih.gov.*

Collaborative Research Opportunity: The National Heart, Lung, and Blood Institute is seeking statements of capability or interest from parties interested in collaborative research to implement the technology described above on specific commercial platforms. Please contact Denise Crooks, PhD at 301–435–0103 or via e-mail at *crooksd@nhlbi.nih.gov* for more information.

Inverse Agonists of the TSH Receptor for the Treatment of Thyroid Cancer and Hyperthyroidism

Description of Invention: This technology features small molecule inverse agonists of the thyroid-stimulating hormone (TSH) receptor that may be readily synthesized, and are likely to prove effective for oral administration. These compounds may potentially be used to treat recurrent thyroid cancer and some cases of hyperthyroidism, and also represent unique tools for investigating the role of TSH receptor signaling in these diseases.

According to the National Cancer Institute, over 37,000 new cases of thyroid cancer were diagnosed in the United States in 2008. Approximately 10% to 30% of patients thought to be disease-free after initial treatment will develop recurrent cancer or metastases, and unless the recurrence is detected early, the prognosis is generally poor.

As the TSH receptor is known to stimulate proliferation of thyroid cancer cells, it has been suggested that suppression of basal TSH receptor signaling may improve outcomes in the treatment of recurrent thyroid cancer. The compounds disclosed in this technology suppress basal signaling by the TSH receptor, and are thus excellent candidates for a suppression-based treatment approach.

Applications

• Lead compounds for the development of therapeutics for recurrent or metastatic thyroid cancer.

• Lead compounds for the development of therapeutics for hyperthyroidism associated with constitutive TSH receptor signaling.

• Tool for probing the role of basal TSH signaling in normal endocrine function and in disease states.

Development Status: In vitro studies in primary human thyrocytes have been performed.

Inventors: Marvin C. Gershengorn and Susanne Neumann (NIDDK); Wenwei Huang and Craig J. Thomas (NHGRI).

Relevant Publications

1. S Neumann, W Huang, E Eliseeva, S Titus, CJ Thomas, MC Gershengorn. A small molecule inverse agonist for the human thyroid-stimulating hormone receptor. Endocrinology. 2010 Jul;151(7):3454–3459. [PubMed: 20427476]

2. S Moore, H Jaeschke, G Kleinau, S Neumann, S Costanzi, JK Jiang, J Childress, BM Raaka, A Colson, R Paschke, G Krause, CJ Thomas, MC Gershengorn. Evaluation of small-molecule modulators of the luteinizing hormone/choriogonadotropin and thyroid stimulating hormone receptors: Structure-activity relationships and selective binding patterns. J Med Chem. 2006 Jun 29;49(13):3888–3896. [PubMed: 16789744]

3. S Neumann, G Kleinau, S Costanzi, S Moore, BM Raaka, CJ Thomas, G Krause, MC Gershengorn. A low molecular weight antagonist for the human thyrotropin receptor with therapeutic potential for hyperthyroidism. Endocrinology. 2008 Dec;149(12):5945–5950. [PubMed: 18669595]

Patent Status: U.S. Provisional Application No. 61/322,138 filed 08 Apr 2010 (HHS Reference No. E–067–2010/0–US–01).

Related Technologies

• HHS Reference No. E–223–2006/0.
• HHS Reference No. E–223–2006/1.
• HHS Reference No. E–284–2008/0.

Licensing Status: Available for licensing.

Licensing Contact: Tara Kirby, PhD; 301–435–4426; *tarak@mail.nih.gov.*

Collaborative Research Opportunity: The NIDDK Office of Technology Transfer and Development is seeking statements of capability or interest from parties interested in collaborative research to further develop inverse agonists of the TAS receptor. Please contact Marguerite J. Miller at 301–496–9003 or *millermarg@mail.nih.gov* for more information.

Small-Molecule TSH Receptor Modulators for Diagnosis and Treatment of Thyroid Disease and Cancer

Description of Invention: NIH investigators have discovered a series of low molecular weight thyroid-stimulating hormone (TSH) receptor modulators for use in evaluation and treatment of thyroid diseases, including thyroid cancer, hypothyroidism, and hyperthyroidism. Certain compounds

encompassed by this technology are more potent and/or more specific TSH receptor activators than currently-available compounds; also, as small molecules, these compounds are orally available and are expected to be less costly and more straightforward to produce than recombinant protein counterparts currently on the market.

According to the National Cancer Institute, over 37,000 new cases of thyroid cancer were diagnosed in the United States in 2008, and over 1,500 people died of this disease. These numbers reflect a progressive increase in the incidence of thyroid cancer over the last several years. Because most cases of thyroid cancer are diagnosed in patients between the ages of 20 and 54, these patients will undergo decades of follow-up monitoring after cancer treatment. For the last decade, recombinant TSH protein has been used in this follow-up to increase detection sensitivity for recurrent or metastatic thyroid cancer, and to eliminate side effects associated with withdrawal of hormone replacement therapy. A small-molecule TSH receptor agonist encompassed by this technology would have utility similar to recombinant TSH, but would have several distinct advantages. For example, as a small molecule, rather than a recombinant protein, such a compound would be orally available, and would be less difficult and expensive to produce. These compounds are also more potent and/or specific for the TSH receptor than other known small-molecule TSH receptor agonists. In addition to use in thyroid cancer screening, these compounds may also be useful for adjunctive treatment (with radioactive iodide) of thyroid cancer, and certain forms of hypothyroidism.

Hyperthyroidism, or an overactive thyroid gland, affects about 1% of people in the United States and is often caused by autoimmune over-stimulation of the thyroid gland (Graves' disease), or by thyroid tumors. Drugs currently used for treatment of hyperthyroidism inhibit synthesis of thyroid hormones; the TSH receptor antagonist compounds encompassed by this technology have the advantage of directly inhibiting activity of the TSH receptor, rather than inhibiting thyroid hormone synthesis.

Applications

- Diagnostic tools for evaluation and treatment of thyroid cancer.
- Therapeutics for thyroid cancer, hyperthyroidism, and hypothyroidism.

Market: Approximately 1 in 13 Americans suffers from a thyroid disorder, and 10 million have a thyroid-related condition that requires ongoing immunodiagnostic monitoring.

Development Status: Early stage.

Inventors: Marvin C. Gershengorn et al. (NIDDK)

Publications

1. Moore S, Jaeschke H, Kleinau G, Neumann S, Costanzi S, Jiang JK, Childress J, Raaka BM, Colson A, Paschke R, Krause G, Thomas CJ, Gershengorn MC. Evaluation of small-molecule modulators of the luteinizing hormone/choriogonadotropin and thyroid stimulating hormone receptors: structure-activity relationships and selective binding patterns. J Med Chem. 2006 Jun 29;49(13):3888–3896. [PubMed: 16789744]

2. Neumann S, Kleinau G, Costanzi S, Moore S, Raaka BM, Thomas CJ, Krause G, Gershengorn MC. A low molecular weight antagonist for the human thyrotropin receptor with therapeutic potential for hyperthyroidism. Endocrinology 2008 Dec;149(12):5945–5950. [PubMed: 18669595]

3. Unpublished data are also available for review under a CDA.

Patent Status

HHS Reference Nos. E–223–2006/0 and E–223–2006/1—

- International Patent Application No. PCT/US2007/011951 filed 17 May 2007, which published as WO 2007/136776 on 29 Nov 2007
- National Phase entered in Australia, Canada, Europe, Japan, and the United States

HHS Reference No. E–284–2008/0—

- International Patent Application No. PCT/US2008/011958 filed 20 Oct 2008.

Licensing Status: Available for licensing.

Licensing Contact: Tara L. Kirby, PhD; 301–435–4426; *tarak@mail.nih.gov*.

Collaborative Research Opportunity: The NIDDK Clinical Endocrinology Branch is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize small molecule TSH receptor modulators. Please contact Marguerite J. Miller at 301–496–9003 or *millermarg@mail.nih.gov* for more information.

Dated: October 12, 2010.

Richard U. Rodriguez,

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

[FR Doc. 2010–26160 Filed 10–15–10; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute of General Medical Sciences; Notice of Closed Meeting

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of the following meeting.

The meeting will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Institute of General Medical Sciences Special Emphasis Panel; Review of Minority Biomedical Research Neuro Grant Applications.

Date: November 12, 2010.

Time: 8:30 a.m. to 5 p.m.

Agenda: To review and evaluate grant applications.

Place: Hyatt Regency-Bethesda, 7400 Wisconsin Avenue, One Bethesda Metro Center, Bethesda, MD 20814.

Contact Person: John J. Laffan, Ph.D., Scientific Review Officer, Office of Scientific Review, National Institute of General Medical Sciences, National Institutes of Health, Natcher Building, Room 3AN18J, Bethesda, MD 20892, 301–594–2773, *laffanjo@mail.nih.gov.*

(Catalogue of Federal Domestic Assistance Program Nos. 93.375, Minority Biomedical Research Support; 93.821, Cell Biology and Biophysics Research; 93.859, Pharmacology, Physiology, and Biological Chemistry Research; 93.862, Genetics and Developmental Biology Research; 93.88, Minority Access to Research Careers; 93.96, Special Minority Initiatives, National Institutes of Health, HHS)

Dated: October 12, 2010.

Jennifer Spaeth,

Director, Office of Federal Advisory Committee Policy.

[FR Doc. 2010–26185 Filed 10–15–10; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute of Diabetes and Digestive and Kidney Diseases; Amended Notice of Meeting

Notice is hereby given of a change in the meeting of the National Institute of