

*Inventors:* Thomas P. Conrads (NCI) *et al.*

#### Relevant Publications

1. BL Hood, MM Darfler, TG Guiel, B Furusato, DA Lucas, BR Ringeisen, IA Sesterhenn, TP Conrads, TD Veenstra, DB Krizman. Proteomic analysis of formalin-fixed prostate tissue. *Mol Cell Proteomics* 2005 Nov;4(11):1741–1753.

2. DA Prieto, BL Hood, MM Darfler, TG Guiel, DA Lucas, TP Conrads, TD Veenstra, DB Krizman. Liquid tissue™: proteomic profiling of formalin fixed tissues. *Biotechniques* 2005 Jun;38:S32–S35.

3. DS Kirkpatrick, SA Gerber, SP Gygi. The absolute quantification strategy: A general procedure for the quantification of proteins and post-translational modifications. *Methods* 2005 Mar;35(3):265–273.

4. AM Hawkrige *et al.* Quantitative mass spectral evidence for the absence of circulating brain natriuretic peptide (BNP-32) in severe human heart failure. *Proc Natl Acad Sci USA* 2005 Nov 29;102(48):17442–17447.

5. L Anderson and CL Hunter. Quantitative mass spectrometric MRM assays for major plasma proteins. *Mol Cell Proteomics* 2006 Apr;5(4):573–588.

*Patent Status:* PCT Application No. PCT/US2007/003478 filed 4 Sep 2008 (HHS Reference No. E-204–2006/0–PCT-01).

*Licensing Status:* Available for licensing.

*Licensing Contact:* Whitney Hastings; 301–451–7337; [hastingw@mail.nih.gov](mailto:hastingw@mail.nih.gov).

#### Tools To Identify Candidates for Effective Cancer Therapy: Antibodies to Human Asparagine Synthetase

*Description of Technology:* Scientists at the National Institutes of Health (NIH) have developed peptide-specific polyclonal antibodies against human asparagine synthetase (ASNS), the enzyme that forms asparagine from aspartate using ATP. ASNS serves as a key biomarker for acute lymphoblastic leukemia (ALL) and other malignancies because these cancer cells express little or no ASNS compared to normal cells. As a result, these leukemia cells must acquire asparagine from the bloodstream to survive and proliferate to form tumors. Patients with ALL can be treated with L-asparaginase (L-ASP) to break down asparagine in the body and starve leukemia cells by preventing them from acquiring asparagine. The anti-ASNS antibodies could be used to detect ASNS levels in patient samples to help select patients that could benefit from L-ASP therapy. Studies at the NIH have shown that L-ASP therapy may

prove to be a useful treatment for other types of cancer besides leukemia.

#### Applications

- Diagnostic tool to detect levels of asparagine synthetase (ASNS) in human samples to identify cancer patients that can benefit from L-asparaginase (L-ASP) treatment.

- Screening tool to identify other cancer cell types treatable by L-ASP therapy, such as ovarian cancer cells, which show diminished ASNS levels.

- Research tool to quantitate levels of ASNS in laboratory procedures, including various immunoassays, flow cytometry, and tissue sample analysis.

*Advantages:* These antibodies have been validated in immunoassays that showed that ASNS expression in a strong predictor of L-ASP efficacy in NCI-60 ovarian cancer cell lines.

*Inventors:* Paul K. Goldsmith *et al.* (NCI).

#### Relevant Publications

1. PL Lorenzi *et al.* Asparagine synthetase as a causal, predictive biomarker for L-asparaginase activity in ovarian cancer cells. *Mol Cancer Ther.* 2006 Nov;5(11):2613–2623.

2. KJ Bussey *et al.* Integrating data on DNA copy number with gene expression levels and drug sensitivities in the NCI-60 cell line panel. *Mol Cancer Ther.* 2006 Apr;5(4):853–867.

3. PL Lorenzi *et al.* Asparagine synthetase as a predictive biomarker for L-asparaginase activity in ovarian cancer cells. *Mol Cancer Ther.* 2008 Oct;7(10):3123–3128.

*Patent Status:* HHS Reference No. E-101–2006/0—Research Tool. Patent protection is not being pursued for this technology.

*Licensing Status:* Available for licensing under a Biological Materials License Agreement.

*Licensing Contact:* Samuel E. Bish, Ph.D.; 301–435–5282; [bishse@mail.nih.gov](mailto:bishse@mail.nih.gov).

#### Mouse Model With Targeted Disruption of the Neurofibromatosis Type-1 (Nf1) Gene

*Description of Technology:* This invention relates to a mouse model having a targeted disruption of the neurofibromatosis type-1 (NF1) gene.

The neurofibromatosis (NF1) gene shows significant homology to mammalian GAP and is an important regulator of the Ras signal transduction pathway. To study the function of NF1 in normal development and to develop a mouse model of NF1 disease, the inventors have used gene targeting in ES cells to generate mice carrying a null mutation at the mouse Nf1 locus.

Although heterozygous mutant mice, aged up to 10 months, have not exhibited any obvious abnormalities, homozygous mutant embryos die in utero. Embryonic death is likely attributable to a severe malformation of the heart. Interestingly, mutant embryos also display hyperplasia of neural crest-derived sympathetic ganglia. These results identify new roles for NF1 in development and indicate that some of the abnormal growth phenomena observed in NF1 patients can be recapitulated in neurofibromin-deficient mice. In addition, lethally-irradiated wild type mice transplanted with fetal liver cells taken from NF1 null embryos develop a form of juvenile chronic myelomonocytic leukemia (JMML) that is very similar to what is seen in children with NF1 disease.

#### Applications

- Research tool in studying some forms of human neuron diseases/injuries in addition to juvenile chronic myelomonocytic leukemia (JMML).

- Testing various therapeutic treatments for this disease.

*Inventors:* Neal G. Copeland *et al.* (NCI).

*Patent Status:* HHS Reference No. E-162–2004/0—Research Tool. Patent protection is not being pursued for this technology.

*Licensing Status:* Available for licensing under a Biological Materials License Agreement.

*Licensing Contact:* Betty Tong, Ph.D.; 301–594–6565; [tongb@mail.nih.gov](mailto:tongb@mail.nih.gov).

Dated: May 27, 2009.

**Richard U. Rodriguez,**

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

[FR Doc. E9–12874 Filed 6–2–09; 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; 2009 NIH Director's Pioneer Award Interviews.

*Date:* June 15–17, 2009.

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

*Agenda:* To review and evaluate grant applications.

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

*Contact Person:* Shan R. McCollough, Program Analyst, Division of Genetics and Developmental Biology, National Institute of General Medical Sciences, Building 45, Center Drive, Room 3AS13F, Bethesda, MD 20892, 301–594–3555, [smccollough@nigms.nih.gov](mailto:smccollough@nigms.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: May 15, 2009.

**Jennifer Spaeth,**

*Director, Office of Federal Advisory Committee Policy.*

[FR Doc. E9–12230 Filed 6–2–09; 8:45 am]

**BILLING CODE 4140–01–M**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### National Institutes of Health

#### National Institute of Environmental Health 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 Environmental Health Sciences Special Emphasis Panel; Environmental Sensors for Personal Exposure Assessment Administrative Meeting.

*Date:* June 17, 2009.

*Time:* 1 p.m. to 2:30 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* NIEHS Keystone, Keystone Park, 530 Davis Drive, Durham, NC 27713 (Telephone Conference Call).

*Contact Person:* RoseAnne M McGee, Associate Scientific Review Officer, Scientific Review Branch, Division of Extramural Research and Training, Nat. Institute of Environmental Health Sciences, P.O. Box 12233, MD EC–30, Research Triangle Park, NC 27709, (919) 541–0752, [Mcgee1@niehs.nih.gov](mailto:Mcgee1@niehs.nih.gov).

(Catalogue of Federal Domestic Assistance Program Nos. 93.115, Biometry and Risk Estimation—Health Risks from Environmental Exposures; 93.142, NIEHS Hazardous Waste Worker Health and Safety Training; 93.143, NIEHS Superfund Hazardous Substances—Basic Research and Education; 93.894, Resources and Manpower Development in the Environmental Health Sciences; 93.113, Biological Response to Environmental Health Hazards; 93.114, Applied Toxicological Research and Testing, National Institutes of Health, HHS)

Dated: May 26, 2009.

**Jennifer Spaeth,**

*Director, Office of Federal Advisory Committee Policy.*

[FR Doc. E9–12878 Filed 6–2–09; 8:45 am]

**BILLING CODE 4140–01–P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### National Institutes of Health

#### National Cancer Institute; 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 Cancer Institute Initial Review Group; Subcommittee F—Manpower & Training; NCI–F Manpower & Training Grants.

*Date:* June 23–24, 2009.

*Time:* 8 a.m. to 10 a.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Doubletree Hotel Washington, DC, 1515 Rhode Island Ave, Washington, DC 20005.

*Contact Person:* Lynn M. Amende, PhD, Scientific Review Officer, Resources and Training Review Branch, Division of Extramural Activities, National Cancer Institute, NIH, 6116 Executive Blvd., Room 8105, Bethesda, MD 20892, 301–451–4759, [amendel@mail.nih.gov](mailto:amendel@mail.nih.gov).

(Catalogue of Federal Domestic Assistance Program Nos. 93.392, Cancer Construction; 93.393, Cancer Cause and Prevention Research; 93.394, Cancer Detection and Diagnosis Research; 93.395, Cancer Treatment Research; 93.396, Cancer Biology Research; 93.397, Cancer Centers Support; 93.398, Cancer Research Manpower; 93.399, Cancer Control, National Institutes of Health, HHS)

Dated: May 21, 2009.

**Jennifer Spaeth,**

*Director, Office of Federal Advisory Committee Policy.*

[FR Doc. E9–12880 Filed 6–2–09; 8:45 am]

**BILLING CODE 4140–01–P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### National Institutes of Health

#### National Cancer Institute; 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 Cancer Institute Special Emphasis Panel; ARRA SEP T32s.

*Date:* June 24, 2009.

*Time:* 10 a.m. to 12 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Doubletree Hotel Washington DC, 1515 Rhode Island Avenue, NW., Washington, DC, 20005.

*Contact Person:* Lynn M Amende, PhD, Scientific Review Officer, Resources and Training Review Branch, Division of Extramural Activities, National Cancer Institute, 6116 Executive Boulevard, Room 8105, Bethesda, MD 20892–8328, 301–451–4759, [amendel@mail.nih.gov](mailto:amendel@mail.nih.gov).

(Catalogue of Federal Domestic Assistance Program Nos. 93.392, Cancer Construction; 93.393, Cancer Cause and Prevention Research; 93.394, Cancer Detection and Diagnosis Research; 93.395, Cancer