

DNA, mRNA copy number changes; sequencing of DNA; miRNA levels in cancer; or identifying targets of transcription factors.

Furthermore, given the intensity of effort in linking gene expression with diseases, it is only a matter of time before diagnosis and prognosis of certain ailments can be performed on the basis of gene expression. At the present, most such analyses require costly apparatus and labor-intensive laboratory procedures.

**Development Status:** In the process of developing prototypes.

**Inventors:** Javed Khan (NCI) *et al.*

**Publications:**

1. H Pandana, KH Aschenbach, D Lenski, M Fuhrer, J Khan, RD Gomez. A versatile biomolecular charge based sensor using oxide-gated carbon nanotube transistor arrays. *IEEE Sens J*, Special Issue, July 2008, in press.

2. K Aschenbach, H Pandana, J Lee, J Khan, M Fuhrer, D Lenski, RD Gomez. Detection of nucleic acid hybridization via oxide gated carbon nanotube field effect transistors (invited). *Proceedings of SPIE MEMS and Nanotechnologies*, Volume 6959 (2008), in press.

**Patent Status:**

U.S. Patent Application No. 60/743,524 filed 17 Mar 2006 (HHS Reference No. E-056-2007/0-US-01).

PCT Application No. PCT/US2007/06809 filed 19 Mar 2007, which published as WO 2007/109228 on 27 Sep 2007 (HHS Reference No. E-056-2007/0-PCT-02).

U.S. Patent Application No. 11/723,369 filed 19 Mar 2007 (HHS Reference No. E-056-2007/0-US-03).

**Licensing Status:** Available for non-exclusive or exclusive licensing.

**Licensing Contact:** Cristina Thalhammer-Reyero, Ph.D., M.B.A.; 301-435-4507; [thalhamc@mail.nih.gov](mailto:thalhamc@mail.nih.gov).

**Collaborative Research Opportunity:** The Oncogenomics Section, Center for Cancer Research, National Cancer Institute, is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize electrical detection of nucleic acid and protein levels. Please contact Javed Khan, M.D. at 301-435-2937 or [khanjav@mail.nih.gov](mailto:khanjav@mail.nih.gov) for more information.

### Segmenting Colon Wall Via Level Set Techniques

**Description of Technology:** Virtual Colonoscopy (VC) has become a more prevalent and accepted method of colorectal cancer diagnosis. An essential element for detecting cancerous polyps using VC, in conjunction with computer-aided detection, is the

accurate segmentation of the colon wall. While the inner boundary of the colon wall, the lumen-mucosal boundary, has often been the focus of previous segmentation work, detection of the outer wall, the serosal tissue boundary, allows for the segmentation of the colon wall, which is useful in determining potential polyps, muscular hypertrophy, and diverticulitis of the colon. Unfortunately, automatic determination of the outer colon wall position often is difficult due to the low contrast between CT attenuation values of the colon wall and the surrounding fat tissue. This invention is a level set based method to determine, from a CT colonography (CTC) scan, the location of the colon serosal tissue boundary. After determining this location, the algorithm segments the entire colon wall at subvoxel accurate precision.

In this algorithm, the loops in the colon caused by over-distention are detected and removed when the centerline calculation is performed. Also, a newly developed method for the detection and segmentation of the outer wall of the colon is used to connect collapsed portions where the lumen segmentation failed to produce a connected centerline. These two methods allow for a complete and accurate centerline to be calculated in uniformly distended colons as well as colons containing segments which are over and/or under-distended.

**Applications:** Diagnostics.

**Inventors:** Robert L. Van Uitert, Ronald M. Summers, Ingmar Bitter (CC).

**Publications:**

1. R Van Uitert, I Bitter. Subvoxel precise skeletons of volumetric data based on fast marching methods. *Med Phys*. 2007 Feb;34(2):627-638.

2. RL Van Uitert, RM Summers. Automatic correction of level set based subvoxel precise centerlines for virtual colonoscopy using the colon outer wall. *IEEE Trans Med Imaging*. 2007 Aug;26(8):1069-1078.

3. RM Summers, J Yao, PJ Pickhardt, M Franaszek, I Bitter, D Brickman, V Krishna, JR Choi. Computed tomographic virtual colonoscopy computer-aided polyp detection in a screening population. *Gastroenterology*. 2005 Dec;129(6):1832-1844.

4. R Van Uitert, I Bitter, RM Summers, JR Choi, PJ Pickhardt. Quantitative assessment of colon distention for polyp detection in CT virtual colonoscopy. *Proc SPIE Int Soc Opt Eng*. (2006) 6143,61431B:451-457; published online 13 Mar 2006, doi 10.1117/12.653205.

5. R Van Uitert, I Bitter, RM Summers. Detection of colon wall outer boundary and segmentation of the colon wall based on level set methods. *Conf Proc*

*IEEE Eng Med Biol Soc*. 2006;1:3017-3020.

6. G Iordanescu, RM Summers. Benefits of centerline analysis for CT colonography computer-aided polyp detection. *Proc SPIE Int Soc Opt Eng*. (2003) 5031:388-397; published online 02 May 2003, doi:10.1117/12.485797.

7. G Iordanescu, RM Summers. Automated centerline for computed tomography colonography. *Acad Radiol*. 2003 Nov;10(11):1291-1301.

**Patent Status:** U.S. Patent Application No. 11/810,704 filed 05 Jun 2007 (HHS Reference No. E-298-2006/0-US-01).

**Licensing Status:** Available for licensing.

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

Dated: April 28, 2008.

**Steven M. Ferguson,**

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

[FR Doc. E8-9871 Filed 5-5-08; 8:45 am]

**BILLING CODE 4140-01-P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### National Institutes of Health

#### National Cancer Institute; Notice of Closed Meetings

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. Appendix 2), notice is hereby given of the following meetings.

The meetings 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; The Colon Cancer Family Registry.

**Date:** May 29, 2008.

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

**Agenda:** To review and evaluate grant applications.

**Place:** Marriott Courtyard Gaithersburg Washingtonian Ctr, 204 Boardwalk Place, Gaithersburg, MD 20878.

**Contact Person:** Gerald G. Lovinger, PhD, Scientific Review Officer, Special Review and Logistics Branch, Division of Extramural Activities, National Cancer Institute, 6116 Executive Blvd., Room 8101, Bethesda, MD

20892-8329, 301/496-7987,  
 lovingeg@mail.nih.gov.

*Name of Committee:* National Cancer Institute Special Emphasis Panel; Molecular and Cellular Oncology.

*Date:* June 4-5, 2008.

*Time:* 8 a.m. to 6 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Gaithersburg Marriott Washingtonian Center, 9751 Washingtonian Boulevard, Gaithersburg, MD 20878.

*Contact Person:* Michael B. Small, PhD, Scientific Review Officer, Division of Extramural Activities, National Cancer Institute, National Institutes of Health, 6116 Executive Blvd., Room 8127, Bethesda, MD 20892-8328, 301-402-0996, smallm@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: April 29, 2008.

**Jennifer Spaeth,**

*Director, Office of Federal Advisory Committee Policy.*

[FR Doc. E8-9874 Filed 5-5-08; 8:45 am]

**BILLING CODE 4140-01-P**

**DEPARTMENT OF HEALTH AND HUMAN SERVICES**

**National Institutes of Health**

**National Cancer Institute; Notice of Meeting**

Pursuant to section 10(a) of the Federal Advisory Committee Act, as amended (5 U.S.C. Appendix 2), notice is hereby given of a meeting of the National Cancer Institute Board of Scientific Advisors.

The meeting will be open to the public, with attendance limited to space available. Individuals who plan to attend and need special assistance, such as sign language interpretation or other reasonable accommodations, should notify the Contact Person listed below in advance of the meeting.

*Name of Committee:* National Cancer Institute Board of Scientific Advisors.

*Date:* June 23-24, 2008.

*Time:* June 23, 2008, 8 a.m. to 6 p.m.

*Agenda:* Director's Report; Ongoing and New Business; Reports of Program Review Group(s); and Budget Presentation; Reports of Special Initiatives; RFA and RFP Concept Reviews; and Scientific Presentations.

*Place:* National Institutes of Health, Building 31, 31 Center Drive, 6th Floor, Conference Room 10, Bethesda, MD 20892.

*Time:* June 24, 2008, 8:30 a.m. to 12 p.m.

*Agenda:* Reports of Special Initiatives; RFA and RFP Concept Reviews; and Scientific Presentations.

*Place:* National Institutes of Health, Building 31, 31 Center Drive, 6th Floor, Conference Room 10, Bethesda, MD 20892.

*Contact Person:* Paulette S. Gray, PhD, Executive Secretary, Director, Division of Extramural Activities, National Cancer Institute, National Institutes of Health, 6116 Executive Boulevard, 8th Floor, Rm. 8001, Bethesda, Md 20892, 301-496-5147, graypp@mail.nih.gov.

Any interested person may file written comments with the committee by forwarding the statement to the Contact Person listed on this notice. The statement should include the name, address, telephone number and when applicable, the business or professional affiliation of the interested person.

In the interest of security, NIH has instituted stringent procedures for entrance onto the NIH campus. All visitor vehicles, including taxicabs, hotel, and airport shuttles will be inspected before being allowed on campus. Visitors will be asked to show one form of identification (for example, a government-issued photo ID, driver's license, or passport) and to state the purpose of their visit.

Information is also available on the Institute's/Center's home page: [deainfo.nci.nih.gov/advisory/bsa.htm](http://deainfo.nci.nih.gov/advisory/bsa.htm), where an agenda and any additional information for the meeting will be posted when available.

(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: April 29, 2008.

**Jennifer Spaeth,**

*Director, Office of Federal Advisory Committee Policy.*

[FR Doc. E8-9875 Filed 5-5-08; 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. Appendix 2), 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 G—Education.

*Date:* June 24, 2008.

*Time:* 8 a.m. to 6 p.m.

*Agenda:* To review and evaluate grant applications.

*Place:* Crowne Plaza Washington Silver Spring, 8777 Georgia Ave., Silver Spring, MD 20910.

*Contact Person:* Sonya Roberson, PhD, Scientific Review Officer, Resources and Training Review Branch, Division of Extramural Activities, National Cancer Institute, 6116 Executive Blvd., Room 8109, Bethesda, MD 20892, 301-594-1182, [robersons@mail.nih.gov](mailto:robersons@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: April 29, 2008.

**Jennifer Spaeth,**

*Director, Office of Federal Advisory Committee Policy.*

[FR Doc. E8-9877 Filed 5-5-08; 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. Appendix 2), 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 J—Population and Patient-Oriented Training; Population and Patient-Oriented Training.