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## NCI Launches Next Phase of Alliance for Nanotechnology in Cancer Program

**September 4, 2015**

The National Cancer Institute (NCI) has again awarded several five-year, multi-institution grants in continued support of its Alliance for Nanotechnology in Cancer program. Given the progress to date of the Alliance, the NCI approved a third phase of the program with a sizable investment in funding. The Alliance program is dedicated to using nanotechnology solutions towards solving cancer biology and oncology problems as well as developing new cancer interventions based on nanotechnology. The program was established in 2004 and funds efforts at academic centers which are engaged in research and translation of new technologies to the clinical environment

The third phase of the program will be composed of Centers of Cancer Nanotechnology Excellence (CCNE), Innovative Research in Cancer Nanotechnology (IRCN - U01 grants), Cancer Nanotechnology Training Centers (CNTC), and the Nanotechnology Characterization Laboratory (NCL). The CCNEs and IRCNs are dedicated to the advancement of novel and existing nanotechnology platforms and their translation into applications within clinical oncology and/or to address major issues in cancer biology. The Cancer Nanotechnology Training Centers will continue to develop the next-generation of cancer researchers in the area of nanotechnology and are offered in partnership with NCI's Center for Cancer Training (CCT), all T32 awards are administered by the CCT. The NCL will continue to serve as a hub for the pre-clinical characterization of nanomaterials as well as assisting in the process of bringing nanotechnologies to the Food and Drug Administration as investigational new drug (IND) or device (IDE) submissions.

Research organizations receiving NCI funds as part of the Alliance program are:

*(listed in alphabetical order)*

### Centers of Cancer Nanotechnology Excellence

- **California Institute of Technology** and **University of California at Los Angeles**

Principal Investigators: **James Heath, Ph.D., and Michael Phelps, Ph.D.**

Title: *Nanosystems Biology Cancer Center*

- **Memorial Sloan Kettering** and **Cornell University**, New York, NY

Principal Investigators: **Michelle Bradbury, M.D., Ph.D., and Ulrich Wiesner, Ph.D.**

Title: *MSKCC-Cornell Center for Translation of Cancer Nanomedicine*

- **Northwestern University**, Evanston, IL

Principal Investigators: **Chad Mirkin, Ph.D., and Leonidas Plataniias, M.D., Ph.D.**

Title: *Nucleic Acid-Based Nanoconstructs for the Treatment of Cancer*

- **Stanford University**, Palo Alto, CA

Principal Investigators: *Sanjiv Sam Gambhir, M.D., Ph.D., and Shan Wang, Ph.D.*

Title: *Center for Cancer Nanotechnology Excellence for Translational Diagnostics*

- **University of North Carolina at Chapel Hill**, Chapel Hill, NC

Principal Investigators: *Leaf Huang, Ph.D., and Joel Tepper, M.D.*

Title: *Nano Approaches to Modulate Host Cell Response for Cancer Therapy*

- **Washington University**, St. Louis, MO

Principal Investigators: *Samuel Achilefu, Ph.D., and Gregory Lanza, M.D., Ph.D.*

Title: *Center for Multiple Myeloma Nanotherapy*

### **Innovative Research in Cancer Nanotechnology**

- **Case Western Reserve University**, Cleveland, OH

Principal Investigator: *Efstathios Karathanasis, Ph.D.*

Title: *Treatment of Glioblastoma Using Chain-Like Nanoparticles*

- **Emory University**, Atlanta, GA

Principal Investigators: *Lily Yang, M.D., Ph.D., and Hui Mao, Ph.D.*

Title: *Stroma Breaking Theranostic Nanoparticles for Targeted Pancreatic Cancer Therapy*

- **University of California at Davis**, Davis, CA

Principal Investigators: *Kit Lam, M.D.*

Title: *The rodent eye as a non-invasive window for understanding cancer nanotherapeutics*

- **University of California at Los Angeles**, Los Angeles, CA

Principal Investigators: *Hsian-Rong Tseng, Ph.D. and Edwin Posadas, M.D.*

Title: *Thermoresponsive NanoVelcro CTC Purification System for Prostate Cancer Profiling*

- **University of California at Los Angeles**, Los Angeles, CA

Principal Investigators: *Andre Nel, M.D., Ph.D., Timothy Donahue, M.D., Huan Meng, Ph.D., and Jeffrey Zink, Ph.D.*

Title: *UCLA Multifunctional Mesoporous Silica Nanoparticle Platform for Treatment of Pancreas Cancer*

- **University of Chicago**, Chicago, IL

Principal Investigators: *Wenbin Lin, Ph.D. and Ralph Weichselbaum, M.D.*

Title: *Nanoscale Metal-organic Frameworks for Light Triggered and X-ray Induced Photodynamic Therapy of Head and Neck Cancers*

- **University of North Carolina at Chapel Hill** and **University of Nebraska**

Principal Investigators: [Alexander Kabanov, Ph.D.](#), [Rihe Liu, Ph.D.](#), and [Tatiana Bronich, Ph.D.](#)

Title: *Targeted Core Shell Nanogels for Triple Negative Breast Cancer*

### Cancer Nanotechnology Training Centers

*The awards for CNTCs, T32 grants, are offered in partnership with NCI's Center for Cancer Training (CCT) and all T32 awards are administered by the CCT.*

- **Johns Hopkins University**, Baltimore, MD

Principal Investigator: [Denis Wirtz, Ph.D.](#)

Title: *Predoctoral and Postdoctoral Training Program in Nanotechnology for Cancer Research*

- **Northwestern University**, Evanston, IL

Principal Investigator: [Gayle Woloschak, Ph.D.](#)

Title: *Cancer Nanotechnology Training Program*

- **Stanford University**, Palo Alto, CA

Principal Investigators: [Jianghong Rao, Ph.D.](#), and [Dean Felsher, M.D., Ph.D.](#)

Title: *Cancer-Translational Nanotechnology Training Program*

- **University of North Carolina at Chapel Hill**, Chapel Hill, NC

Principal Investigator: [Alexander Kabanov, Ph.D.](#)

Title: *Carolina Cancer Nanotechnology Training Program*

- **University of Texas at MD Anderson Cancer Center**, Houston, TX

Principal Investigators: [Konstantin Sokolov, Ph.D.](#), [Sunil Krishnan, M.D.](#), and [Rebecca Richards-Kortum, Ph.D.](#)

Title: *Interdisciplinary Translational Pre/Postdoctoral Program in Cancer Nanotechnology*

Learn more about the [NCI Alliance for Nanotechnology in Cancer Program](#).

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