Gutkind JS. Proteomic analysis of laser-captured paraffin-embedded tissues: a molecular portrait of head and neck cancer progression. Clin Cancer Res. 2008 Feb 15;14(4)1002–1014. [PubMed: 18281532].

Patent Status: U.S. Provisional Application No. 61/186,582 filed June 6, 2009 (HHS Reference No. E–300–2008/0–US–01).

Licensing Status: Available for licensing.

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

Collaborative Research Opportunity: The NIDCR, OPCB, is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize the use of DSG3 as a biomarker for detecting metastastatic spread of squamous cell carcinoma tumors. Please contact David W. Bradley, PhD at *bradleyda@nidcr.nih.gov* for more information.

Dated: March 1, 2010.

Richard U. Rodriguez,

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

[FR Doc. 2010–4761 Filed 3–4–10; 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.

Long Acting Ophthalmic Analgesic Eye Drops

Description of Invention: This invention is directed to the discovery that resiniferatoxin (RTX) produces a three to four day analgesic effect when topically applied to the cornea. Efficacy for RTX as an effective analgesic has been demonstrated in vivo in rats. Importantly, unlike currently available analgesics, RTX left the blink reflex intact and did not impact mechanical sensitivity. RTX also did not impair epithelial wound healing and functioned without detectable damage to the cornea.

RTX is a potent agonist of the transient receptor potential channel, subfamily V, member 1 (TRPV1). TRPV1 is involved in pain sensation and is expressed only in select neurons. Unlike other local analgesics that target a wide breadth of neurons, RTX targets only those neurons that express TRPV1, leaving the important blink reflex and mechanical sensitivity of the eye unaffected.

Applications:

- An ophthalmic analgesic for post-operative eye pain.
- An ophthalmic analgesic for acute or chronic eye injury.
- Applicable to both human and veterinary patients.

Advantages:

- Both long lasting and reversible.
- Does not impair epithelial wound healing, leaves the blink reflex intact, and functions without detectable damage to the cornea.

Development Status:

- Early stage.
- Demonstrated efficacy *in vivo* in rats.

Market: Twenty-six million people worldwide experience neuropathic pain, resulting in healthcare costs of over three billion dollars per year.

Inventors: Michael J. Iadarola, Andrew J. Mannes, Jason M. Keller, Kendall Mitchell, Brian D. Bates (NIDCR).

Publication: In preparation.

Patent Status: U.S. Provisional Application No. 61/247,881 filed 01 Oct 2009 (HHS Reference No. E–117–2009/0–US–01).

Licensing Status: Available for licensing.

Licensing Contact: Charlene Sydnor, PhD; 301–435–4689; *sydnorc@mail.nih.gov*.

Collaborative Research Opportunity: The National Institute of Dental and Craniofacial Research, Laboratory of Sensory Biology, Neurobiology and Pain Therapeutics Section, is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize this technology. Please contact David W. Bradley, PhD at 301–402–0540 or *bradleyda@nidcr.nih.gov* for more information.

Novel Compositions for Use as Bone Scaffolds and Enhancers of Bone Regeneration

Description of Invention: This invention is directed to the discovery that a mixture of an organic polymer and inorganic particles may hold therapeutic utility as a biomaterial for artificial bone scaffolds, injectable bone-filling materials, and enhancement of new bone generation. This composition has demonstrated utility in vivo in mice.

The inventors have discovered a means of producing a stably homogenous mixture of the organic polymer and inorganic particles by crosslinking the two components. In contrast to current technologies, this invention not only imparts sufficient mechanical and load-bearing strength but also provides a suitable environment for new bone formation. Importantly, since the chemical reaction applied to make this biomaterial does not produce any harmful molecules or heat, it can be used in an injectable form. Bone formation or replacement is often a desired therapy for bone loss or defects due to fractures or bone degenerative diseases.

Applications:

- Injectable bone-filling materials.
- Artificial bone sponge for bone defect.
- Artificial bone sponge for bone cell culture in bone and mineralization research.

Advantages:

- Combines bone-like strength and a suitable environment for new bone formation
- Injectable.

Development Status:

- Early stage.
- Tested *in vivo* in mice.

Market: According to Freedoniagroup.com, the US orthopedic implant market was $14.3 billion in 2007 and is expected to grow 8.9 percent annually through 2012. (*http://www.freedoniagroup.com/Orthopedic-Implants.html,* accessed December 2, 2009.)

Inventors: EunAh Lee and Pamela Robey (NIDCR) et al.

Publication: In preparation.

Patent Status:

• U.S. Provisional Application No. 61/004,940 filed 30 Nov 2007 (HHS Reference No. E–042–2007/0–US–01).

• PCT Application No. PCT/US2008/012064 filed 22 Oct 2008, which published as WO 2009/073068 on 11 Jun 2009 (HHS Reference No. E–042–2007/0–PCT–02).

Licensing Status: Available for licensing.

Licensing Contact: Charlene Sydnor, PhD; 301–435–4689; *sydnorc@mail.nih.gov.*

Collaborative Research Opportunity: The National Institute of Dental and Craniofacial Research, Craniofacial and Skeletal Diseases Branch, is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize this technology. Please contact David W. Bradley, PhD at 301–402–0540 or *bradleyda@nidcr.nih.gov* for more information.

Gamma Substituted Peptide Nucleic Acids

Description of Invention: PNAs are nuclease/protease resistant synthetic nucleic acid analogs capable of forming very stable and highly sequence-specific complexes with DNA. Scientists at the NIH have developed novel peptide nucleic acids (PNAs) that contain a unique sidechain that can attach any small ligand, peptide, or carbohydrate to complementary DNA for rapid optimization. This invention could revolutionize the way in which multivalent display is used in research as well as help develop new medications.

Applications:

• Controlled interactions ensure only a single stoichiometry is attained.

• Simple access to a wide range of multivalent platforms.

Development Status: Early stage.

Inventors: Daniel Appella (NIDDK)

Patent Status: U.S. Provisional Application No. 61/162,175 filed 20 Mar 2009 (HHS Reference No. E–151–2009/0–US–01).

Licensing Status: Available for licensing.

Licensing Contact: Charlene Sydnor, PhD; 301–435–4689; *sydnorc@mail.nih.gov.*

Collaborative Research Opportunity: The National Institute of Diabetes and Digestive and Kidney Diseases, Laboratory of Bioorganic Chemistry, Drug-Receptor Interactions Section, is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize this technology. Please contact Dr. Daniel Appella at *appellad@niddk.nih.gov* for more information.

Use of Modified Peptide Nucleic Acids for Visualizing DNA

Description of Technology: The compounds described in this technology may be useful in the development of nucleic acid detection kits for various pathogens.

Technologies for genomic detection most commonly use DNA probes to hybridize to target sequences, and require the use of Polymerase Chain Reaction (PCR) to amplify target sequences. Replacing the DNA probe with peptide nucleic acid (PNA) can greatly eliminate the need for PCR because the binding strength of PNAs to complementary DNA is stronger than DNA binding to complementary DNA. In addition, PNAs are nuclease and protease resistant, and form very stable and highly sequence-specific complexes with DNA.

This technology describes a method of making pure enantiomers of trans-tert-butyl-2-aminocyclopentylcarbamate (tcycp) and methods of modifying PNAs by incorporating tcycp compounds into the PNA. This technology may also be practical for detecting infectious agents such as anthrax, avian flu, tuberculosis (TB), severe acute respiratory syndrome (SARS), human papilloma virus (HPV) and human immunodeficiency virus (HIV).

Applications:

• Very stable diagnostic method to detect nucleic acids without using Polymerase Chain Reaction (PCR).

• Binding to complementary DNA can be seen by eye.

• Visual detection of anthrax has been shown.

• Useful for outside of a laboratory environment.

Development Status: Early stage.

Inventors: Daniel Appella *et al.* (NIDDK).

Patent Status: U.S. Patent Application No. 12/441,925 filed 19 Mar 2009 (HHS Reference No. E–308–2006/2–US–02).

Licensing Status: Available for licensing.

Licensing Contact: Charlene Sydnor, PhD; 301–435–4689; *sydnorc@mail.nih.gov.*

Collaborative Research Opportunity: The National Institute of Diabetes and Digestive and Kidney Diseases, Laboratory of Bioorganic Chemistry, Drug-Receptor Interactions Section, is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize this technology. Please contact Dr. Daniel Appella at *appellad@niddk.nih.gov* for more information.

Dated: March 1, 2010.

Richard U. Rodriguez,

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

[FR Doc. 2010–4759 Filed 3–4–10; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

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Methods To Increase Stability of Recombinant Vaccinia-Vectored Vaccines and Increase Expression of a Foreign Gene Inserted in Such Vaccines

Description of Invention: The technology offered for licensing is in the field of vaccinia-based recombinant vaccines. In particular the invention relates to methods of stabilizing the recombinant virus, thus resulting in efficient production of the vaccine and efficient expression of the inserted gene. Stabilization of the recombinant virus is achieved by the insertion of the exogenous gene into an intergenic region (IGR) of the viral genome (i.e. Modified Vaccinia Ankara, MVA), where the IGR is flanked by open reading frames of conserved poxvirus genes. Furthermore, the invention relates to plasmids vectors useful to