

LSUHSC-NO Technologies Available for Licensing

Dental

- Apparatus and Methods for Fabricating Nanofibers by Reactive Electrospinning
- Etching Alumina Ceramics
- Fluoride-Releasing Compositions
- Sleeve Attachment System and Method for Use in Preparation of Overdentures
- Sonic and Ultrasonic Surgical Tips

Devices

- A Device for Cutting and Holding a Cornea During a Transplant Procedure
- Apparatus and Methods for Fabricating Nanofibers by Reactive Electrospinning
- Biodegradable Porous Device for Long-Term Drug Delivery with Constant Rate Release and Method of Making Device
- Intracorneal Astigmatic Onlay
- Sleeve Attachment System and Method for Use in Preparation of Overdentures
- Sonic and Ultrasonic Surgical Tips

Medical

AIDS/HIV

- Method of Prevention or Treatment of AIDS by Inhibition of Human Immunodeficiency Virus
- Non-Infectious, Protease Defective HIV Particles and Nucleic Acid Molecules Encoding Therefor

Cancer and Cancer-Related

- Cancer Detection: Human Glucocorticoid Receptor 1A Promoter and Splice Variants
- Platelet-Activating Factor Antagonist Inhibition of Angiogenesis and Tumor Growth Induced by Basic Fibroblast Growth Factor
- Purging Leukemia Cells from Hematopoietic Stem Cells
- Method to Enhance Tissue Accumulation of Radiolabeled Compounds

Herpes

- Method for Inhibiting Herpes Infection
- Use of Non-Steroidal Anti-Inflammatory Agents to Prevent Recurrences of Herpes Virus Infection

Infectious Diseases

- Method of Inhibiting Human Metapneumovirus and Human Coronavirus in the Prevention and Treatment of Severe Acute Respiratory Syndrome (SARS)

Kidney/Renal

- Maintaining Kidney Function during Surgery or Trauma

Obesity

- Method And Composition for Treating Obesity and Related Disorders
- Obesity Control and Monitoring Cachexia: Azaftig

Ophthalmology

- Fast, Scalable 4-D Visualization of Sectional Images
- Long-Term Glaucoma Drainage Implant
- Method for Inhibiting Herpes Infection
- Topical Lysostaphin Therapy for Staphylococcus Ocular Infections
- Use of Non-steroidal Anti-Inflammatory Agents to Prevent Recurrences of Herpes Virus Infection

Title: **Sleeve Attachment System and Method for Use in Preparation of Overdentures**

Description: This invention relates to a sleeve attachment system and method for more precise and rapid preparation of over dentures and an implant borne bar system used to support an overdenture.

ID: 4-02-29

Inventor(s): Paulino Castellon
William Rogers

Owner: Louisiana State University Health Sciences Center - New Orleans

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Development Phase: Prototype

State of Research: On-going

Patent Status: Application
US Issued Patent # : not yet assigned

Industries Keywords: Medical devices ➤ support, surgical, treatment

Disease Keywords: dental, oral

Other Keywords: Implants, stable attachment system, Prosthodontics

Title: Etching alumina ceramics

Description: This invention involves a thermochemical process that readily produces significantly roughened surfaces on densely sintered alumina. The resulting roughened alumina components have numerous uses in the dental restorative and orthodontic fields, including orthodontic brackets, crowns, onlays, inlays, veneers, and the like. The technique is readily adapted to be used in either a dental office or a laboratory environment.

ID: 4-97-18

Inventor(s): Nikhil Sarkar & Avishai Sadan

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Development Phase: Prototype

References: Int. J. Prosthodont 1996 vol. 9 pp. 434-439 Zeng, K. et al., "Flexure tests on dental ceramics,"

Patent Status: US Issued Patent # : 6,277,295

Industries Keywords: medical devices ➤ safety, support, surgical, treatment

Other Keywords: dental restorative field, orthodontics, brackets, crowns, onlays, inlays, veneers

Title: Fluoride-Releasing Compositions

Primary Inventors: Dr. Xiaoming Xu
Dr. John O. Burgess
Dr. Xingzhe Ding
Dr. Long Ling

Description: A technology has been developed by which chelating monomers and fluoride-releasing compositions that may be incorporated into dental composite restorative materials or other dental materials, to produce materials with high fluoride release rates, and high fluoride recharge capability. Such resins may be used in dental restorative materials to help reduce the level of dental caries in patients, particularly the level of caries occurring on the margins of the restorative materials.

Patent Status: Application filed March 5, 2003, Patent issued March 9, 2004
US Issued Patent # 6,703,518

Notes: Applications for the chelating monomers and fluoride-releasing monomers of the present invention include: dental restorative materials such as composite resins, resin-modified glass ionomers, sealant, liners, cements, provisional/ temporary materials, dental adhesives (bonding agents), denture base resins, and orthodontic adhesives. Alternatively, polymers and composites made from the novel chelating monomers and their metal chelates may be used in the preparation of ion exchange resins, which may be used, in the separation of metals, fluoride ions, and other anions by chemical manufacturers or analytical laboratories; or in the removal of hazardous metals or unwanted fluoride from industrial waste water. The chelating monomers may also be used to coat metal surfaces including dental and medical implants to enhance protection or bonding.

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Title: **Sonic and Ultrasonic Surgical Tips**

Description: Dr. Lemon has invented sonic and ultrasonic tips that can be used to enhance the overall performance of surgical procedures, including medical, endodontic, and dental procedures.

ID: 4-03-04

Inventor(s): Ronald Lemon, DMD

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Development Phase: Prototype

Patent Status: Application

Industries medical devices ➤ device, hardware, surgical
Keywords: research tool ➤ equipment

Other Keywords: bones, dental, inflammation, oral, Surgery, periosteal elevator, surgical debris, soft tissues, teeth, bone, removal, endodontic

Title: **Biodegradable Porous Device for Long-Term Drug Delivery with Constant Rate Release and Method of Making the Same**

Description: Our biodegradable porous drug delivery device provides controlled and sustained therapeutic drug levels for extended periods of time. The important advantage to using biodegradable systems is that surgery is not required to remove the waste delivery device after the drug administration period due to the degradation of the polymer matrix. One disadvantage associated with the use of biodegradable systems is that the polymers do not deliver the drug at a constant rate and for a long enough period to achieve the required therapeutic effect. The reservoir type system has the advantage that it provides a constant rate of release. However, several disadvantages include the possibility of leaks or ruptures, burdensome manufacturing expense, and the requirement of additional surgery to remove the empty carrier. Our delivery device combines the features and advantages of both the biodegradable matrix drug delivery systems and the reservoir type drug delivery systems without the disadvantages inherent in the two separate delivery systems.

Inventor(s): Dachuan Yang
Gholam A. Peyman
Bahram Khoobehi

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ID: 5141996

Patent Status: US Issued Patent # : 5516522

Industries medical devices ➤ delivery, treatment
Keywords: therapeutic ➤ pro-drug

Disease cancer, infectious, inflammation, metabolic, pharmaceuticals
Keywords:

Title: **A Device for Cutting and Holding a Cornea During a Transplant Procedure**

Description: A surgical instrument, more particularly a corneal trephine instrument and method for transplanting a cornea.

ID: 4-02-15

Inventor: James Lin

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State of Research: Designed

Patent Status: Application
US Patent Tracking# : SN/10/615,059

Industries Keywords: medical devices ➤ optical, surgical, treatment

Disease Keywords: ophthalmological, transplantation

Other Keywords: Cornea, transplant, button, suture

Title: Intracorneal Astigmatic Onlay

Description: An intracorneal astigmatic, rectangular onlay has been discovered that can correct for astigmatism by physically adjusting the shape of the cornea. This astigmatic onlay can be narrow or wide and can easily be placed in the stroma of the cornea. The onlay can be placed on top of a laser ablation or on a spherical lens, which in turn was implanted either under a tissue flap or in a stromal pocket. The astigmatic onlay is easy to position at precisely the correct angle to compensate for the astigmatism-causing meridional distortion. This invention greatly increases the utility and practicality of intracorneal spherical lenses and makes it easy to position the astigmatic correcting ridge at precisely the correct angle to compensate for the astigmatism. The invention greatly decreases the inventory needed to compensate for both spherical and astigmatic corrections. For example, spherical corrections from +5 D to -5 D at 0.25 D intervals might require 40 lenses, but with this invention the addition of a correction for astigmatism up to 5 D at 0.25 D increments would require only 20 additional onlays, for a total of 60 lenses and onlays. By contrast, 800 lenses are required for the same range of corrections if a single lens is used to correct for both astigmatism and spherical errors.

ID: 4-99-11

Inventor(s): Herbert E. Kaufman

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Patent Status: US Issued Patent # : 6,228,113

Industries medical devices ➤ optical, surgical, treatment

Keywords:

Disease ophthalmological

Keywords:

Other Astigmatism, meridional distortion, intracorneal, spherical errors,
Keywords: vision correction

Title: **Apparatus and Methods for Fabricating Nanofibers by Reactive Electrospinning**

Description: This invention expands the application scopes of the electrospinning process and allows the production of nanofibers (diameters ranging from tens to hundreds of nanometers) of cross-linked polymers and many other new materials.

ID: 4-03-11

Inventor(s): Xiaoming Xu

Owner: Louisiana State University Health Sciences Center - New Orleans

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Development Phase: Prototype

State of Research: Pilot study highly successful

Patent Status: Provisional Patent: filed 9/5/2003

Industries Keywords: therapeutic ➤ drug delivery, transplant, wound healing
research tool ➤ equipment
medical devices ➤ delivery, optical, safety, treatment
diagnostic ➤ marker
chemical ➤ bioseparation, electrochemistry, polymers
agricultural ➤ aquaculture, bioremediation

Other Keywords: aging, AIDS, dental, diabetes, ophthalmological, transplantation, filtration, fiber-reinforced nanocomposites, wound dressing, drug delivery, artificial organs, micro-electrical systems, optical system

Title: **Method of Prevention or Treatment of AIDS by Inhibition of Human Immunodeficiency Virus**

Description: The invention relates to a method of prevention or treatment of acquired immune deficiency syndrome (AIDS). More specifically, the invention relates to a method of inhibiting infection by the viral etiologic agent of AIDS through administration of an inhibitory peptide.

Inventor(s): William R. Gallaher

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Patent Status: Issued - U.S. Patent # : 4,880,779

Disease Keywords: AIDS, HIV, immune, peptides, therapeutic, prevention, treatment, virus, inhibitory, amino acid, sequence, immunodeficiency

Title: **Non-infectious, Protease Defective HIV Particles and Nucleic Acid Molecules Encoding Therefore**

Description: This invention is directed toward mutated DNA, proteins, or protein fragments and particles from the L-2 cell line. The invention is also directed to diagnostic, prophylactic and therapeutic methods of making and using the DNA, proteins and particles.

One theory for the sudden onslaught of the HIV particles on the CD4.sup.+ cells is that this onslaught is made by "defective" HIV particles. These new, defective particles are not recognized by the body's immune system. These defective particles have mutations in some of the key polypeptides of an HIV viral particle, yet somehow are still able to affect sufficient damage on the CD4.sup.+ cells by means other than the classical invasion of the cells.

Thus, there exists a need to detect such defective HIV particles in the infected population; both for asymptomatic carriers, as well as for ARC (AIDS Related Complex) or AIDS patients. Furthermore, a need exists for prophylactic, immunogenic, and therapeutic agents for such defective particles, as well as polypeptides or fragments of polypeptides derived from the particles or their mutant nucleic acid sequences. This need exists due to the fact that mutations found in L-2 particles are normally produced in HIV infected individuals, so that development of immunity to them by natural or artificial means is a key to thwarting the pathogenic process leading to ARC and AIDS. This invention provides these advantages and more.

ID: P-M 5491

Inventor(s): Ron Luftig

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Patent Status: US Issued Patent # : 6,328,976

Industries
Keywords: diagnostic ➤ DNA probe
genomics ➤ mutation
research tool ➤ antibody, Elisa, immunoassay, reagent
screening ➤ assay, detection
therapeutic ➤ vaccine

Disease
Keywords: AIDS, HIV, polypeptides, AIDS vaccine

Title: **Three-dimensional Ex-vivo Angiogenesis System**

Description: This invention is an in vitro tissue angiogenesis and vasculogenesis system that allows the outgrowth of micro-vessels from a three-dimensional tissue fragment implanted in a matrix. The three-dimensional structure of the tumor or other tissue is maintained in the matrix, including blood vessels. In another aspect, the method allows for the proliferation of a tissue specimen, thus increasing the mass of cells available for subsequent transplant; and the method also provides for the proliferation of blood vessels from the tissue mass, thus enhancing the chance of successful engraftment.

In addition to evaluating responses in tumors, this invention allows the evaluation or the promotion of angiogenic responses in other tissues or organs undergoing physiologic or pathophysiologic changes. Such other applications include, for example, the evaluation of embryologic tissues, the promotion of angiogenesis in wounds, in cardiac muscle; or conversely the evaluation of the inhibition of angiogenesis in inflamed tissues of rheumatic disorders, or in skin conditions such as psoriasis. Other applications include the induction of angiogenesis in a tissue transplant, including an autologous transplant or reimplantation of pituitary, adrenal, pancreatic, other endocrine tissues, or other peptide- or amine-producing tissues.

ID: 4-98-06

Inventor(s): Eugene A. Woltering
Seza A. Gulec

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Patent Status: PCT Application # : 20020177121

Industries Keywords: diagnostic ➤ Assay
screening ➤ Assay
therapeutic ➤ angiogenesis, tissue engineering, transplant, wound healing

Disease Keywords: autoimmune, cancer, cardiovascular, dermatologic, endocrine, inflammation, ObGyn, transplation, vasculogenesis, neovascularization, engraftment

Title: **Method to Enhance Tissue Accumulation of Radiolabeled Compounds**

Description: A method of administering a radioisotopic compound by infusion that can increase efficacy of the administration to about five times higher than prior bolus injection or short infusion methods. This method enhances the tumor to background ratio by increasing the actual radioligand accumulated inside the target cells. This technique works for any radiolabeled compound whose cellular uptake is limited by a cellular process of either binding to a cellular receptor or to a transport protein.

ID: 4-97-10

Inventor(s): Eugene A. Woltering
Gregory D. Espenan

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Patent Status: Issued US Issued Patent # : 6180082

Industries medical devices ➤ delivery, diagnosis, imaging, measurement,
Keywords: surgical, treatment
diagnostic ➤ imaging, marker, measurement, radioisotope

Disease cancer, radiology
Keywords:

Title: **Platelet-Activating Factor Antagonist Inhibition of Angiogenesis and Tumor Growth Induced by Basic Fibroblast Growth Factor**

Description: A method to decrease tumor growth by inhibiting basic fibroblast growth factor ("bFGF")-stimulated tumor angiogenesis by treatment with a platelet-activating factor antagonist that binds to intracellular binding sites. These intracellular-binding platelet-activating factor antagonists were found to inhibit both in vivo and in vitro tumor growth and angiogenesis where the angiogenesis is stimulated by basic fibroblast growth factor.

Inventor(s): Jay D. Hunt, III
Haydee E. Bazan
Victor L. Marcheselli
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ID: 4-00-28

Patent Status: Applied for.
PCT Application # : 20020169158

**Industries
Keywords:** therapeutic ➤ angiogenesis

**Disease
Keywords:** blood, cancer, fibrosis, tumor growth, cancer therapy, inhibition

Title: **Purging Leukemia Cells from Hematopoietic Stem Cells**

Description: A gene therapy system that selectively kills leukemia cells in bone marrow, while leaving stem cells unaffected. All cells in a mixture of stem cells and leukemia cells are transfected with a high efficiency gene transfer vector. The vector carries a eukaryotic expression construct encoding a toxin gene. This toxin gene is expressed only in leukemia cells, not in stem cells. Differential expression of the toxin gene in leukemia cells and stem cells may be achieved by placing the coding sequence under the control of an appropriate promoter, such as the RSV promoter or the SV40 promoter. High gene expression has been demonstrated in a panel of transformed leukemia cell lines, but no gene expression in transformed, CD34-selected, primary human stem cells. The treatment will be useful not only for leukemia patients, but also for other cancer patients undergoing autologous bone marrow transplants (e.g., breast or lymphoma cancers).

Inventor(s): Paul Schwarzenberger
Jay Kolls

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ID: 4-98-04

Patent Status: US Issued Patent # : 6,461,869

Industries
Keywords: therapeutic ➤ cell therapy, gene therapy

Disease
Keywords: cancer, leukemia, bone marrow, promoter, gene expression, cancer patients

Title: **Cancer Detection: Human Glucocorticoid Receptor 1A Promoter and Splice Variants**

Description: A method to detect the presence of cancerous lymphocytes in a human and a method to determine the responsiveness of a patient with cancerous lymphocytes to future treatment with glucocorticoids.

ID: 4-97-20

Inventor(s): Wayne V. Vedeckis, Ph.D.

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Patent Status: Issued
US Issued Patent # : 6,649,341

Industries
Keywords: diagnostic ➤ Detection
genomics ➤ gene splicing, receptor, regulate
screening ➤ Detection
therapeutic ➤ cell, cell signalling, cell therapy, gene therapy, hormone

Other
Keywords: blood, cancer, leukemia, T-cell acute lymphoblastic leukemia, Glucocorticoid hormone treat, blood cell cancers, cancerous lymphocytes, human glucocorticoid receptor

Title: **Long-term Glaucoma Drainage Implant**

Description: An implantable ocular device to decrease intraocular pressure by draining aqueous humor from the anterior chamber of the eye into an extraocular space above the sclera and below the conjunctiva and Tenon's layers. The device includes a conduit attached to an episcleral drainage plate having a porous posterior surface for cellular in-growth and attachment by the sclera. The plate has a smooth anterior surface and a porous posterior surface. This device uses porous surfaces to enhance cellular infiltration and in-growth to increase apposition with surrounding tissues, decrease micro-movement of the implant, and thereby decrease the fibrous capsule formation surrounding the episcleral plate. Long-term failure of glaucoma drainage devices has been linked to thickening of the filtering bleb due to excessive fibrous capsule formation.

ID: 5882327

Inventor(s): Jean Jacob

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Patent Status: US Issued Patent # : 5,882,327

**Industries
Keywords:** medical devices ➤ optical, surgical, treatment

**Disease
Keywords:** Ophthalmological

**Other
Keywords:** glaucoma, ocular device, implant, cellular infiltration

Title: **Topical Lysostaphin Therapy for Staphylococcus Ocular Infections**

Description: A method has been discovered for using lysostaphin as an effective antibiotic for topical treatment of Staphylococcus corneal infections (keratitis). Lysostaphin applied topically to the cornea by eye drops killed bacteria within the cornea; lysostaphin reduced the number of bacteria from approximately 10,000,000 viable bacteria colony forming units ("CFU") in the untreated eye to essentially no viable bacteria in the treated eyes. Treatment by lysostaphin was more potent than any of the smaller antibiotics that have been previously tested (e.g., tetracyclines, erythromycins, cephalosporins, vancomycin, aminoglycosides, or fluoroquinolones). Moreover, topical application of lysostaphin was effective against the highly antibiotic-resistant Staphylococcus strains.

ID: 4-98-07

Inventor(s): Richard J. O'Callaghan

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Patent Status: Issued
US Issued Patent # : 6,315,996

Industries agricultural ➤ bacteria
Keywords: medical devices ➤ delivery, optical, treatment
therapeutic ➤ antibiotic

Disease infectious, ophthalmological
Keywords:

Other topical application, eye drops, keratitis, antibiotic, cornea
Keywords:

Title: **Surface Modifications for Enhanced Epithelialization**

Description: A synthetic device for cornea augmentation and replacement that increases corneal epithelium cell adhesion and migration. This system allows epithelial cells to spread and attach faster than existing systems, as well as providing an underlying textured surface that allows the cells to resist the shear force induced in vivo by the blinking of the eyelid. Moreover, the resulting epithelial layer closely resembles a natural epithelial layer. The material can be used, for example, as a corneal onlay, an epikeratophakia lenticule, an intracorneal augmentation device, or an artificial cornea.

ID: 4-99-14

Inventor(s): Jean Jacob & Jingjing Bi

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Patent Status: US Patent 6,689,165 Issued 2/10/2004

Industries therapeutic ➤ wound healing

Keywords: medical devices ➤ optical, surgical, treatment
agricultural ➤ veterinary

Other transplataion, ophthamological, aging, corneal onlay, wound

Keywords: healing, epikeratophakia lenticule, intracorneal augmentation device, artificial cornea, eyes

- Title:** **Fast, Scalable 4-D Visualization of Sectional Images**
- Description:** This invention extends conventional 2-D confocal microscopes into interactive 4-D systems. Through this software-powered imaging platform that leverages innovative image processing and distributed computing technologies, users can define a volume-of-interest (VOI) in a sequence of 2-D images, track the VOI and display the tracked 3D-volumes, all in real-time. In a specific application, this volume rendering platform is combined with a white-light confocal microscope to allow a user to control the operation of the microscope, navigate thick tissue and material samples, and effectively visualize their internal structure.
- ID:** 4-06-07
- Inventor(s):** Balasubramanian, Madhusudhanan; Reynaud, Juan; Beuerman, Roger; Iyengar, Sitharama ; Karki, Bijaya
- Owner:** Louisiana State University Health Sciences Center - New Orleans
- Contact:** [James Hardy](#), Dir. of the Office of Technology Development
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- Patent Status:** Under prosecution
- Applications:** The tracking and visualization architecture portions of this invention benefit any application which builds 3-D volumes from optical section images, including:
- Diagnostic confocal microscopy, for example in ophthalmology clinics
 - Laser confocal microscopy, for example in immunohistochemistry
 - Telemedicine
 - Systems to examine live cells
 - Systems for scanning and evaluation of structure of complex materials, for example in forensic analysis and manufacturing quality assurance

Advantages:

- Software platform converts standard depth-enabled 2-D imaging equipment to full 4-D capability without re-engineering of mechanical components
- Algorithms to process compressed data provide memory efficiency along with real-time performance
- Dual-buffer technology provides seamless transition across individual volume segments, even under resource-constrained operation
- Extensible to leverage external/distributed computing resources for computationally intensive operations, including volume rendering

Abstracts:

This platform enables a user to smoothly navigate through a rendering of the original specimen, in space and across depths. The computational framework developed leverages a multi-threaded, parallel computation system architecture for tracking a volume-of-interest within a microscopic specimen, efficiently and in real time. It further utilizes reliable multicast for collective-communication operations, and real-time tracking technology to allow smooth navigation of the composite image. The system is extensible, with the ability to distribute data and leverage additional slave computers to provide additional computing power where necessary. A prototype of this technology has been built, which demonstrates performance on real-life image samples and sequences.

Keywords

Imaging, Diagnostic, Software Platform, Telemedicine, Research Tool, Immunohistochemistry, QA, Real-time

Title: **Method for Inhibiting Herpes Infection**

Description: The topical administration of a plasmid encoding a Type I interferon such as interferon .alpha.1 (IFN-.alpha.1) to the cornea has potent anti-herpes activity. The method may be used to treat or prevent herpes infections not only in the eye, but also in other portions of the oropharyngeal region, and in other mucous membranes including the genitalia. By limiting viral replication, the treatment reduces the initial spread of virus, and thereby also reduces the establishment of latent infections. The method provides a low-cost, non-invasive treatment for HSV infection that may either be administered by physicians or other health care personnel, or self-administered by patients.

Inventor(s): Daniel J. J. Carr

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ID: 4-99-08

References: Proc. Soc. Exp. Biol. Med. 2001 226 Carr, D.J.J., P. Härle, and B.M. Gebhardt. "The immune response to ocular herpes simpl J. Virol 2002 Carr, D.J.J. and S. Noisakran. "The anti-viral efficacy of the murine interferon-a1 transgene against ocul

Patent Status: US Issued Patent # : 6,365,576

Industries genomics ➤ pharmacogenomics
Keywords: therapeutic ➤ antiviral, virus

Disease genitourinary, herpes, infectious, ophthalmological, topical
Keywords: administration, plasmid, interferon transgene, non-invasive treatment for HSV infection

Title: **Use of Non-steroidal Anti-Inflammatory Agents to Prevent Recurrences of Herpes Virus Infection**

Description: Herpes simplex virus causes one of the most common infections of mankind. It recurs frequently not only in the eye, but also as cold sores on the lip and as genital infections. At present, an antiviral agent acyclovir can reduce recurrences 50- 70% -- depending on the study and the organ. It is by no means uniformly effective and is a very expensive drug. We have found that certain inhibitors can also inhibit recurrences of herpes. These seem to be at least as effective as the antiviral approach to further reduce recurrences. Although the antiviral can reduce recurrences, it does not prevent viruses from appearing in the bodily fluids and does not prevent spread of this infection either to sexual partners or other contacts. Results today indicate that our special non-steroidal anti-inflammatory agents may well reduce the likelihood of infection and spread of virus.

ID: 4-01-10

Inventor(s): Emily D. Varnell
Bryan M. Gebhardt
Herbert E. Kaufman

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Patent Status: Application
PCT Application # : US03/11819

Industries therapeutic ➤ virus
Keywords:

Disease dermatologic, genitourinary, herpes, infectious, ObGyn,
Keywords: ophthalmological, reproductive medicine

Other herpes simplex virus types 1 and 2, HSV-1, HSV-2, ocular
Keywords: herpetic infection

Title: **Maintaining Kidney Function During Surgery or Trauma**

Description: Kappa-opioid agonists prevent the impairment of renal function otherwise caused by the combination of gaseous anesthesia and surgery or severe trauma. Not only do these agents preserve renal function and maintain urine output, they also maintain plasma electrolyte concentration and osmolality by reducing renal loss of sodium and potassium when compared to other diuretic agents. The preservation of urine flow as well as the ability to retain body sodium, potassium, calcium, and osmolality during surgery or severe trauma under gaseous anesthesia are novel and unique properties associated only with kappa opioid agonists.

The kappa opioid agonists may be used in surgical patients with normal cardiovascular function, but are particularly useful in patients with compromised cardiovascular and/or renal function.

Inventor(s): Daniel R. Kapusta

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ID: 4-95-03

Patent Status: US Issued Patent # : 6,468,971

Industries medical devices ➤ surgical, treatment

Keywords: therapeutic ➤ analgesic, anesthetic, transplant

Disease cardiovascular, transplantation, renal, kidney, diuretic,

Keywords: homeostasis, osmolality, electrolyte concentration, sodium, potassium, calcium

Title: **Obesity Control and Cachexia Monitoring: Azaftig**

Description: This invention pertains to the detection of a propensity for cachexia (significant weight loss) and to the control of obesity. Azaftig detection in urine or other body fluids will allow early identification of patients in which weight loss may become a problem. Azaftig may aid fat loss in humans in which obesity is a threat to health.

ID: 4-02-01

Inventor(s): Julio E. Figueroa, II, Chandan Prasad, Parakat Vijayagopal

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Patent Status: Issued
US Patent # 6,274,550

Keywords: AIDS, cancer, cardiovascular, diabetes, endocrine, HIV, metabolic, obesity, weight loss, wasting

Therapeutic Implications To help predict and control obesity and wasting

Title: **Method and Composition for Treating Obesity and Related Disorders**

Description: The invention describes a synergistic method and composition for treating obesity or related disorders in animals using an anorectic agent and dehydroepiandrosterone (DHEA). The composition effectively diminishes caloric intake, may alter metabolism, weight gain, or a combination thereof.

Inventor(s): Johnny Porter
Frank Svec

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Development Phase: Preclinical

Patent Status: US Issued Patent # : 5,795,880

Industries agricultural ➤ animal
Keywords: chemical ➤ food chemistry
therapeutic ➤ drug delivery

Disease cardiovascular, diabetes, hepatic, metabolic, obesity
Keywords:

Other pharmaceutical composition, weight loss, anorectic, renal,
Keywords: metabolite

Title: **Method of Inhibiting Human Metapneumovirus and Human Coronavirus in the Prevention and Treatment of Severe Acute Respiratory Syndrome (SARS)**

Description: The present invention relates to peptides that show significant antiviral activity against viral respiratory disease. More particularly, the invention relates to the use of peptides to inhibit membrane fusion and infection by human metapneumovirus and human coronavirus in prevention and treatment of Severe Acute Respiratory Syndrome, otherwise known as SARS.

ID: 4-03-19

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Patent Status: US Patent Application# : SN 60/466,978

Industries therapeutic ➤ peptides
Keywords:

Disease respiratory, infectious, immune
Keywords:

Other SARS, Virus, Coronavirus, Severe Acute Respiratory Syndrome
Keywords: