# 2018 Texas Life Science Forum | Presenting Companies

## 206 Ortho

*Lowell, Massachusetts | Jeff D'Agostino | jdagostino@206ortho.com | http://206ortho.com*

206 Ortho has developed and patented a unique bioresorbable, high strength material to repair broken bones eliminating the need for implant removal. 206 Ortho's technology was designed with nature in mind to mimic the natural composite structure of bone. It is designed to support the bone during healing then is resorbed by the body to get the patient back to their life the first time, eliminating removal surgeries and complications. The versatility of the material allows it to have the potential to be substituted for metal implants in many orthopedic applications pins, screws, plates, nails, staples and more in the $8+ Billion Trauma and Extremities market. Replacing permanent metal implants has the potential to improve patient care, quality of life and eliminate the billions of dollars spent annually on elective surgeries to remove implants. 206 Ortho's resorbable composite delivers the next generation in orthopedic care.

## Adroit Surgical

*Oklahoma City, Oklahoma | Paul Hagen | phagen@adroitsurgical.com | www.adroitsurgical.com*

Adroit Surgical's patented direct Vie laryngoscope is a self- contained, battery powered, disposable scope that takes advantage of a closed circular tube with a beveled end to visualize the vocal cords. The light is transmitted through the side wall of the tube from end to end as well as within the lumen of the tube to give the user the best illumination of the target tissue with minimal chance of light obstruction by secretions or blood.

## AesculaTech

*Los Angeles, California | Andrew Bartynski | andrew@aescula.tech*

AesculaTech develops temperature responsive smart materials for use in medical devices. We are PhD chemical engineers that have created and patented a material which can be applied as a liquid and solidifies when it comes into contact with the body (liquid at low temperature, solid at body temperature). AesculaTech's first product is a treatment for the 30 million patients in the US with dry eye syndrome. The device adapts to the unique anatomy of each patient's tear duct and blocks the drainage of tears, increasing the amount of fluid present on the surface of the eye and relieving symptoms. Beyond dry eye, we are building this platform technology for drug delivery to the eye, wound healing, tissue scaffolding, cosmetics, and additive manufacturing.

## Affigen

*Saint Louis, Missouri | Jonathan Feldmann | jp@affigen.com | www.affigen.com*

Affigen develops therapies that selectively and exclusively target the aberrant cellular populations that define a range of human diseases, including cancer and autoimmunity. We do this by identifying Cell Lineage-Specific Proteins (CLSPs) that are expressed solely on the surface of diseased cells, and by manufacturing disease-identifying drugs that have the ability to destroy only the cells that bear a given CLSP. Because CLSPs are not only different from disease-to-disease, but often from patient-to-patient as well, this requires the ability to produce therapies on a patient-specific basis. Our lead program targets a well-known but heretofore undruggable CLSP that defines a range of largely incurable leukemias and lymphomas. Affigen is developing a platform for producing first-in-class, tumor-identifying monoclonal antibodies and CAR-T cells against this target, with the aim of enabling treatment with unprecedented safety and efficacy in these cancers. Development in additional hematological malignancies and in solid tumors will begin this year.

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## Agilvax

*Houston, Texas | Federica Pericle | fpericle@agilvax.com | www.agilvax.com*

Agilvax discovers and develops targeted cancer immunotherapies using its proprietary discovery and development technology. Agilvax's lead product, AX09, is being developed as an immunotherapy for the treatment of triple-negative breast cancer (TNBC), which is the most aggressive form of breast cancer, by inhibiting the function of a novel cancer target; xCT. xCT is a novel molecular mechanism that is overexpressed on invasive cancer cells and contributes to tumor growth and metastatic progression in multiple cancers. In preclinical breast cancer models AX09 impaired tumor growth and reduced metastatic progression with no observed toxicity. Agilvax has also demonstrated that combination with chemotherapy strongly enhanced the anti-metastatic and anti-tumor potential of the individual treatments.

## Airway Medical Innovations

*Houston, Texas | Julio Alonso | julio@airwaymedicalinnovations.com | www.airwaymedicalinnovations.com*

Airway Medical Innovations is a specialized medical device company focused on the development of a new revolutionary medical device for the management of the human airway and the endotracheal intubation procedure, and therefore for the initial critical management of medical emergencies in severely ill or injured patients. Dr Julio Alonso, founder of the company, an Intensive Care Clinician working in hospital and pre-hospital medicine in Australia, and the AMI team have the vision to make this difficult, life-saving medical procedure, much safer and easier to perform, therefore allowing pre-hospital personnel (paramedics, rural and remote doctors, NGO doctors) to learn and perform safely this procedure, allowing the necessary initial resuscitation of the critically ill or injured patient and saving lives on the field.

## Amina Health

*Kitchener, Ontario, Canada | Robert Green | bobby@vitameter.org | www.aminahealth.com*

Amina Health allows users to test micronutrient levels, starting with ferritin and vitamin D, with a drop of blood. Test results as accurate as standard clinical tests take 5 minutes and produce the result on the electronic reader & on our mobile app. Users can track their levels over time and receive recommendations for customized supplements based on their recent test results and certain physical paramters.

## Aperta Biosciences

*Saint Louis, Missouri | Forrest Cox | forrest@apertabio.com | www.apertabio.com*

Aperta Biosciences develops safe and effective therapies for chronic inflammatory diseases of the ocular surface. Our lead program, APT-001 for the treatment of chronic blepharitis, is a "protected repurposing" with the potential for a rapid initial approval via the 505(b)(2) regulatory pathway, in an indication that is void of satisfactory treatment options and that represents a multi-billion-dollar peak revenue opportunity. APT-001 is currently in pre-clinical development, with an anticipated pre-IND meeting with FDA in the first half of 2019, and with the commencement of clinical studies in Q4'19.

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## AuriGen Medical

*Dublin, Ireland | John Thompson | john.thompson@aurigenmedical.com | http://AuriGenMedical.com*

AuriGen medical is an Irish electrophysiology and structural heart company dedicated to improving the treatment options for the millions around the world with atrial fibrillation. We are developing the a novel cardiac implant which treats the stroke and arrhythmia risk associated with atrial fibrillation. Acute and chronic pre-clinical studies have been completed in IMMR Paris, providing proof of concept and confirming ease of implantation. By addressing the unmet needs of over 200 thousand longstanding AF patients who require redo procedures each year, the annual market opportunity is over $2B dollars. We have a world class clinical, commercial and engineering team. The founders are an intensive care physician, with senior management experience in the pharma industry and a former lead R&D engineer from Medtronic's cardiac division. AuriGen Medical recently ranked first out 1200 companies to secure EU backing and €2.5M in non-dilutive funding, clear validation of our management, market and technology.

## Aviara Pharmaceuticals

*Houston, Texas | George Holland | gholland@aviarapharma.com | www.aviarapharma.com*

Aviara has worldwide development license to a portfolio of orally active small molecule alpha-4 integrin antagonists which have promising high-impact therapeutic potential in oncology and inflammatory diseases. Currently, our alpha-4 integrin antagonist program is focused on development of therapeutic agents for overcoming Minimal Residual Disease relapse in blood cancer patients. Alpha-4 integrin antagonists act to disrupt the protective adhesion of cancerous cells residing within the bone marrow niche, thus making these cancerous cells susceptible to the apoptotic activity of chemotherapy. In initial experiments, AVA3486, an unoptimized early discovery compound, demonstrated a substantially improved survival in NOD/SCID Mice bearing Human Acute Lymphoblastic Leukemia (ALL) cells (LAX7R). These studies are being extended with a group of compounds optimized for activity and drug-like properties and from which a clinical development candidate will be selected. Other portfolio compounds are being developed for hematopoietic stem cell mobilization for transplant therapy and inflammatory cardiovascular diseases.

## Beta Cat Pharmaceuticals

*Houston, Texas | Rahul Aras | raras@betacatpharma.com | www.betacatpharma.com*

Beta Cat Pharmaceuticals is a venture-backed, clinical stage biotechnology company developing novel targeted cancer therapeutics. The company's lead product, Tegavivint, is a potent and selective inhibitor of the Wnt/B-catenin signaling pathway, which is implicated in cell proliferation, differentiation, migration, apoptosis, immune evasion and stem cell renewal. Tegavivint has demonstrated pre-clinical in vivo efficacy in several cancer models, including desmoid tumors, acute myeloid leukemia (AML), osteosarcoma, and multiple solid tumor types. The Company is enrolling a Phase I clinical study to evaluate safety and efficacy of Tegavivint in patients with desmoid tumors.

# 2018 Texas Life Science Forum | Presenting Companies

### BioAesthetics

*Durham, North Carolina | Nicholas Pashos | npashos@bio-aesthetics.com | www.bio-aesthetics.com*

BioAesthetics was founded in 2015 as a Tulane University spin-out with the mission to improve reconstruction options for breast cancer patients after they undergo mastectomies. BioAesthetics' initial product is a tissue-engineered nipple-areolar complex (NAC). This product will be provided to plastic and reconstructive surgeons as an off-the-shelf ready, acellular, NAC graft. During the breast reconstruction phase, after a mastectomy, the surgeon would engraft the NAC graft in position onto the patient's reconstructed breast. The patient's body would then use this NAC graft as a building frame to regenerate their own NAC. This patent-pending product is currently in the pre-clinical phase.

### BioCapital Holdings

*Houston, Texas | Micheal Easley | Michael.Easley@BioCapitalHoldings.com | www.BioCapitalHoldings.com*

Yeast has long been used to make bread & beer. Resequence yeast's genome and yeast becomes an efficient factory producing many other beneficial compounds. BioCapital Holdings, LLC ("BCH") develops scientific intellectual property into affordable, everyday solutions. BCH utilizes patented yeast devices, in combination with simple ingredients, to produce a variety of compounds, each with specific applications. With numerous patents applied for and issued, BCH's compound portfolio is wide and diverse including steviol glycoside, carotenoids, oxidized zinc, vulcanized zinc, chitinase, carbosugars, lycopene, oxidized silver and BCH BioFoams. Big yawn? Imagine (2 of 100's): A drinking cup, straw or to-go food container you use and then crumple up and add to your garden to promote plant growth? Post Hurricane Harvey with homes constructed of hard BCH BioFoam that weighs 20% of typical gypsum board and is almost impervious to water, mold, mildew, termites and UV rays?

### BioLum Sciences

*Houston, Texas | Edward Allegra | ecallegra@biolumsciences.com*

We have invented a personal management device for asthma and other chronic respiratory diseases. Our device, the BioSense AMD, scans exhaled breath and provides a reading that indicates lung function using disease biomarkers. In order to treat asthma effectively, patients need to know their lung function on a day-to-day and sometimes hourly basis. With our product, users can identify airway inflammation, optimize drug therapy, and potentially increase asthma control. In turn, allowing for a personalized solution that is otherwise largely unavailable.

### BrainCheck

*Houston, Texas | Yael Katz | yael@braincheck.com*

BrainCheck provides cognitive assessment and management technology to physicians, helping them deliver personalized cognitive care and get reimbursed.

### BreviTest Technologies

*Houston, Texas | Elizabeth Hoff | elizabeth@fannininnovation.com | http://fannininnovation.com*

BreviTest Technologies is developing a biomedical assay platform technology that could allow consumers, patients, caregivers, and others to more easily detect and quantify molecules of interest from a variety of sample types like blood, saliva, urine and water. This approach provides for a compact point-of-care diagnostic platform that is sensitive, specific and rapid. The BreviTest platform can be applied to a broad array of diagnostic tests, including those in emergency and non-emergency settings, allergen detection, home monitoring of chronic diseases as well as physiological conditions.

# 2018 Texas Life Science Forum | Presenting Companies

## Concure Oncology

*Mercer Island, Washington | Kevin Kelley | kevin.kelley@concureoncology.com | http://breastmicroseed.com*

We are a medical device and services company committed to easing the burden for women facing early-stage breast cancer. Our device is the first to enable precise delivery of low dose rate radiation to the breast and achieve reliable consistent outcomes. The device is FDA cleared, our device and method patents have been issued, and we are now selling our device and services in the US.

## Cord Blood Plus

*Galveston, Texas | Larry Denner | ladenner@utmb.edu*

Cord Blood Plus discovered technology for unlimited expansion of human cord blood stem cells to produce a variety of hematopoietic cells for many indications with an initial focus on protection from infection in breast cancer chemotherapy patients.

## CorInnova

*Houston, Texas | William Altman | keith.svagerko@corinnova.com | www.corinnova.com*

Based at Johnson & Johnson Innovation's JLABS @ TMC in Houston, CorInnova is developing a soft robotic non-blood contacting biventricular cardiac assist device for the treatment of heart failure (HF) which increases output, promotes heart recovery and potentially prevents HF following a heart attack. The device promises to treat many of the 92+% of patients ineligible for existing cardiac assist devices due its minimally invasive implantation, its likely shorter length of stay (4 vs. 30 days), and the lack of blood contact related adverse events, expanding the eligible patient population 3 to 4X to an addressable market of up to $15 billion, similar in size to the pacemaker market.

## D&P Bioinnovations

*San Diego, California | Derek Dashti | dcdashti@dpbioinnovations.com | http://www.dpbioinnovations.com*

D&P Bioinnovations, LLC, [D&P] is a regenerative medicine company focused on repairing damaged organs with engineered biomaterials and stem cells. The company has developed a platform immunomodulatory off-the-shelf absorbable medical device implant to regenerate damaged organs: gastro-intestine, blood vessels, nerves, tendons/ligaments, liver, and muscle. From this technology platform, D&P's first therapeutic indication is developing an implantable, bioresorbable medical device to regenerate a damaged esophagus (organ providing food to the stomach).

## DiaStem

*Houston, Texas | David C Bonner | dbonner@stematix.com | www.diastemllc.com*

DiaStem(tm) LLC is a regenerative medicine therapy company incorporated in Texas that is currently fast-tracking a stem cell treatment for Type 1 Diabetes in clinical trials at the University of California, Irvine. DiaStem partners have already obtained approval in The Bahamas for another approach developed earlier in Argentina and are treating patients in the Bahamas. The DiaStem approach for which we now seek funding is a next-generation technology pioneered in Australia and is to be brought into the U. S. with FDA approval.

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## Entvantage Diagnostics

*Austin, Texas | Joe Skraba | jskraba@entvantagedx.com | www.entvantagedx.com*

ENTvantage Dx, is a clinical trial stage diagnostics company that provides physicians with timely information on the cause of upper respiratory illnesses with rapid, in-office diagnostic tests. Our first product is a first-of-its-kind diagnostic kit that can definitively diagnose bacterial sinusitis and differentiate it from the more common viral sinusitis. The FDA Class II diagnostic kit, with patents issued in all major territories, will allow clinicians to easily perform a rapid, in-office assay to determine if a patient is positive for bacterial pathogens commonly associated with upper respiratory infections. The U.S. market opportunity exceeds $2 billion annually for these tests. This information will allow clinicians to reduce the amount of antibiotics prescribed to treat these illnesses, increase revenue to the clinic using established CPT reimbursement codes and decrease the standard-of-care treatment costs with the use of the Entvantage diagnostic kit.

## Esperance Pharmaceuticals

*Houston, Texas | Hector Alila | Hector@esperancepharma.com | https://esperancepharma.com*

Esperance Pharmaceuticals, Inc. is a privately held company developing a new class of targeted anticancer drugs that selectively kill cancer cells without harming normal cells. Targeting occurs through binding to specific receptors on the cell's surface. Esperance's drugs target and kill even cells known to be resistant to chemotherapeutic drugs. Esperance and MD Anderson Cancer Center have formed a Strategic Alliance to accelerate the clinical development of EP-100 for the treatment of women with ovarian cancer and breast cancer.

## Evaheart

*Houston, Texas | Tadashi Motomura | tmotomura@evaheart-usa.com | www.evaheart-usa.com*

Evaheart, Inc. is a late-stage medical device company (Houston, Texas) conducting the US and CE mark clinical trials for EVAHEART® 2 Left Ventricular Assist Device System (EVA2), for bridge to transplantation and destination therapy. The EVA2 is a durable LVAD with physiologic responsiveness, superior hemocompatibility, and an innovative new "Double Cuff Tipless" inflow design to address major adverse events, in particular, stroke. Post-LVAD stoke is seen with all current competitors' products, with no definitive solution. EVA2 with Double Cuff Tipless Inflow will be a potential game changer of the LVAD field; the majority of the $1.9B market currently shared by Medtronic and Abbot. Evaheart is anticipating PMA for bridge to transplant by 2021-2022, closely followed by destination therapy, and increased annual sales above 1,000 devices in 5 years worldwide. We have licensed the technology from the manufacturer, raised $23M to date, and are now raising our series A funding.

## Forbius

*Austin, Texas | Sandra Sinclair | Sandra@forbius.com | www.forbius.com*

Forbius' medicines are designed to radically transform patients' lives. We use our strength in biological understanding and diverse protein engineering technologies to design superior inhibitors of validated pathways. We have particularly deep expertise in targeting the transforming growth factor-beta (TGF-β) and epidermal growth factor receptor (EGFR) pathways. For both of these pathways, there is a significant body of evidence validating their role as drivers of multiple life-threatening conditions, including cancer and fibrosis. However, in the case of the EGFR pathway, the majority of patients do not benefit from currently marketed EGFR inhibitors; in the case of the TGF-β pathway, no agent targeting this pathway has yet been approved. By using multiple complementary platform technologies, Forbius' team overcame barriers that prevented the development of effective therapeutics targeting these pathways.

# 2018 Texas Life Science Forum | Presenting Companies

## Forward Science

*Stafford, Texas | Robert Whitman | RWhitman@ForwardScience.com | www.ForwardScience.com*

Forward Science is a privately held biotechnology company based in Houston, Texas. OralID, Forward Science's flagship product, is an award winning oral cancer screening device that allows clinicians to discover abnormalities that may not be seen under traditional white light examinations. With the success of OralID, Forward Science continued to focus on moving science forward in the oral healthcare industry by launching advanced diagnostic testing products (CytID, hpvID, phID, PathID) along with treatment options (SalivaMAX and SalivaCAINE). In addition to developing proprietary, state-of-the-art products, Forward Science has partnered with industry leaders to provide new and effective solutions to the oral community. Forward Science designs, develops, and manufactures their products in-house, ensuring the highest quality of standards coupled with superior customer service. Forward Science has quickly evolved into the industry leader for providing oral healthcare products worldwide.

## Gold Flex Life Sciences

*Galveston, Texas | Chris Frederickson | cfrederickson@goldflexls.com | http://goldflexls.com*

Gold Flex Life Sciences develops research tools, diagnostics services and therapeutic services using trace elements that are intended to improve health and treat diseases. The experienced team of Medical Doctors, Investigators, and Engineers at Gold Flex Life Sciences, Inc. have developed an elegant solution for the safe and localized treatment of osteoarthritis. The patented Gold Flex Therapy allows doctors to intervene and stop the progression of osteoarthritis, reduce or eliminate painful joints, restore mobility and significantly improve patient's quality of life.

## Harmonic Bionics

*Austin, Texas | Youngmok Yun | mok@harmonicbionics.com*

Harmonic Bionics, Inc. develops rehabilitation robots to improve the clinical efficacy and productivity of neuro-rehabilitation for stroke, traumatic brain injury (TBI) and other neurological disorders. The company was founded in 2016 as a spin-off of The Univ. of Texas at Austin to commercialize the lab's rehabilitation robot technology developed under support of the National Science Foundation, NASA, and partner rehab hospitals (with over $2.2M in non-dilutive funding). Our rehabilitation robots are well known in the research community and have received many prominent media features (CNBC, SXSW, BBC, Business Insider, Smithsonian). The robots are currently going through pre-clinical trials at our partner rehab hospitals and research labs, and we aim to push the frontiers in the field of neuro-muscular recovery.

## HealthTech Solutions (HTS)

*Coralville, Iowa | Dalton Shaull | dalton@txpchat.com*

TXP Chat™ is an artificial intelligent HIPAA-compliant mobile software application platform that is engineered specifically to optimize clinical communication and decision making during complex, multidisciplinary solid-organ transplant cases. TXP Chat™ current mission is to fix the broken supply chain of connecting organ supply to demand. Our real-time communication platform replaces call centers reliant on phones and faxes, provides a HIPAA compliant audit trail, reduces costs, increases organ utilization with real-time decision support with Artificial Intelligence, and capturing significant foregone revenues as a result.

# 2018 Texas Life Science Forum | Presenting Companies

## Immatics US

*Houston, Texas | Stephen Eck | Eck@immatics.com | http://immatics.com*

Immatics is a clinical-stage biopharmaceutical company active in the discovery and development of T-cell redirecting immunotherapies for the treatment of cancer. Our transformative product candidates are - best in class - Adoptive Cell Therapies and Bispecific TCR molecules. These products are directed against tumor targets that have been identified and validated by Immatics' proprietary and world-leading XPRESIDENT® technology. Our mission is to deliver the power of T-cell redirecting immunotherapies to cancer patients.

## Inpro Medical

*Houston, Texas | Onur Fidaner | onur@inpromedical.com*

Pressure injuries affect 1.2M patients annually in the US alone. Pressure injuries reduce the quality of life of patients and result in non-reimbursable costs to the hospitals. Currently, only sophisticated hospital systems can afford the workflows for efficient management of pressure injuries. These workflows are costly for smaller hospitals and nursing homes. Inpro Medical's solution uses EHR-integrated machine learning software for automatic risk analysis to assess each patient based on their medical history and suggests appropriate workflows to healthcare providers. We also offer a wearable sensor suite, which enables continuous risk assessment during hospital stay. The wearables consist of pressure sensors integrated with bandages and hospital garments, continuously measuring the pressure map in at-risk areas. Sensor data is combined with the medical history data to calculate real-time pressure ulcer risk for the patient and suggest an action plan to minimize the risk.

## Intelligent Implants

*Houston, Texas | Juan Pardo | juan@intelligentimplants.ie*

Spinal fusion treats chronic pain and dysfunction in the spine. Failure rates due to non-unions are 40% in risk groups. It is the number one cost driver in ORs. By Incorporating wireless implantable bioelectronics into standard spinal fusion implants our technology can stimulate bone growth and decrease the risk of non-unions by more than 75%. Furthermore, using electrical measurements we can directly measure bone growth and aggregate data to minimize the use of CTs/MRIs and track progress, benefiting patients, physicians and payers.

## K94 Discoveries

*Shreveport, Louisiana | Ross Barrett | ross@bvmcap.com*

K94 Discoveries, Inc, is an early stage, private biotechnology company developing targeted drugs to treat pancreatic cancer and other cancers. The company's technology is based on the knowledge that many tumor cells over express receptors for luteinizing hormone releasing hormone (LHRH). K94 has developed a drug, LHRH-Curcumin (LHRH-C), that targets tumor cells expressing LHRH receptors (LHRH-R) and causes cancer death.

## Life Warmer

*Plano, Texas | Rick Thomson | rick.thomson@lifewarmer.com | http://lifewarmer.com*

Life Warmer's mission is to develop simplified treatment devices, utilizing the highest and most applicable technologies, in order to enhance the delivery and outcomes of trauma, surgical, and critical care, and to then get these improved devices into the hands of care providers as soon as safely possible.

# 2018 Texas Life Science Forum | Presenting Companies

## Nanospectra Biosciences

*Houston, Texas | David Jorden | david.jorden@nanospectra.com | www.nanospectra.com*

Nanospectra has developed medical device technology (AuroLase Therapy) that harnesses the optical properties of proprietary gold nanoparticles to achieve highly selective ablation via the thermal destruction of cells. The metabolically and biologically inert particles preferentially accumulate in the leaky vasculature of tumors via well accepted tumor biology. Consequently, as the delivered laser energy is sub-ablative in the absence of nanoshells, the clinical proposition is a treatment zone conformal to the tumor to the greatest extent possible and, importantly, the sparing of healthy tissue. The primary human clinical indication being pursued is the treatment via ablation of prostate lesions for low-intermediate clinically significant prostate cancer while the core technology is applicable to other solid tumor indications as a platform. The underlying intellectual property is also sublicensed in the fields of dermatology and veterinary medicine under milestone and royalty agreements plus either strategic or exclusive supply agreements for the enabling nanoshells.

## NERv Technology

*Kitchener, Ontario, Canada | Amr Abdelgawad | aabdelgawad@ne-rv.com | www.ne-rv.com*

With every surgery, comes a potential risk that a complication could occur after the surgical procedure. NERv is developing a medical device to detect anastomotic leakage (the leakage of gastrointestinal fluid into the abdominal cavity) after a surgical procedure, in real time. The biochip aims to save lives and reduce the risks that are associated with surgeries by monitoring key biomarkers following the surgical procedure. By assessing the body's natural biomarkers, the biochip identifies the complication and sends the information obtained to NERv's integrated system. NERv's aim is to decrease the burden on surgeons and patients after a high-risk surgery and eliminate unnecessary medical costs for the health care system.

## Netnoids Rx Laboratories

*Houston, Texas | Bhuvanesh Dave | Davebhuvanesh@gmail.com*

NetNoids is a JLABS Houston resident company focused on developing rare cancer laboratory-services. NetNoids was created to enable pharmaceutical & biotech companies and research institutions to conduct preclinical studies using 3-dimentional Patient Derived Organoid (PDO) tumor models. PDOs can are derived from patient cancer and retain the characteristics of their respective cancers. Netnoids will have two tracks of business (i) Personalized Medicine (ii) Testing Novel molecules for finding cures for rare cancer. Personalized medicine will involve growing organoids for individual patients of all cancer subtypes and testing potential clinical trial therapies to get best possible outcomes for patients. In our second track NetNoids will generate 40 PDOs each for rare cancers to test drug therapy options (target and efficacy) at preclinical stage and treatment options for precision medicine. This is a repeatable business model, NetNoids PDOs will generate superior qualitative data analytics enabling clients to "fast track" FDA clinical-trial approval.

## Noleus Technologies

*Sugar Land, Texas | Swarna Balasubramaniam | swarna@noleustechnologies.com*

Noleus treats postoperative ileus by mitigating intestinal swelling that occurs after abdominal operations. This is the main driver of post-op hospital stay. Noleus is a device placed at the end of surgery and is connected to an external vacuum suction pump. The surgeon then removes the device in 2 days at the bedside via the tube exit site. Noleus saves hospital money and surgeons time by enabling patients to eat and be discharged sooner from the hospital.

# 2018 Texas Life Science Forum | Presenting Companies

## Noninvasix

*Houston, Texas | Graham Randall | grandall@noninvasix.com | www.noninvasix.com*

Noninvasix is developing non-invasive precision oxymetry, which will allow doctors for the first time to accurately monitor oxygen adequacy within organs without invasive catheters. Inadequate organ oxygenation is a major cause of death and permanent disability in hospitals. The technology was developed with over $6M in DoD and NIH grant funding at UTMB and is protected by seven issued patents. It has been tested in humans, and we successfully negotiated a de novo 510k pathway with the FDA. Our beachhead market is neonatal intensive care where hypoxic-ischemic brain injuries cause 23% of neonatal mortality and cost U.S. hospitals $7B per year. A 3rd-party value analysis found that the average 12 bed NICU would save $1.1M/yr by using our device to avoid the costs of treating these brain injuries. Noninvasix graduated from Philips Healthcare's early startup engagement program, and recently raised $1M from investors, including the TMC Venture Fund and angelMD.

## Novelus Biotechnology

*Sunderland, Maryland | Simon Selwood | sselwood@novelusbio.com | http://novelusbio.com*

The world's first pacemaker was implanted in 1958 but 70 years on the technology hasn't changed. Novelus Biotechnology offers a paradigm shift in cardiac treatment. Our patented technology aims to convert a patient's own cardiac tissue in to pace-maker like cells effectively regenerating a patient's natural pacemaker. It is based upon a well-defined gene therapy process delivering selective transcription factors via an inducible vector. Cardiomyocytes within the patient's heart are directly transformed in to pacemaker-like cells. Our solution will provide a 'natural' autonomic response to a recipient's activity level, emotional stresses and other stimuli.

## OcciGuide

*Dallas, Texas | Jillian Fink | Jillian@occiguide.com | www.occiguide.com*

OcciGuide is a device that enables all providers to break their patient's headache pain in under ten minutes with a targeted, localized, non sedating procedure.

## Odin Technologies

*Chicago, Illinois | Steven Hansen | shansen@odinhealthtech.com | www.odinhealthtech.com*

Odin Technologies aims to cut hospital expenses and improve patient care by preventing unnecessary surgeries do to the inaccurate diagnosis of compartment syndrome. Odin will accomplish this by providing healthcare professionals with a more accurate, easy-to-use diagnostic device. To further develop the technology and Odin's team, the company is currently being accelerated at TMCx; a highly selective medical device accelerator program in Houston. At TMCx, Odin is developing a high-fidelity prototype, conducting pre-clinical studies, creating strategic partnerships, and pursuing market traction.

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## Patients We Share

*Houston, Texas | Chris Staffel | cstaffel@patientsweshare.com | www.patientsweshare.com*

Patients We Share is putting useful HIPPA-compliant mobile applications in the hands of healthcare providers, generating quality data, and creating the foundation of a transformative healthcare ecosystem intelligence platform. PWS makes recommending a healthcare provider as simple as a few taps on your mobile phone. Created by medical doctors who understand the healthcare ecosystem and the frustrations of poor patient referrals, PWS' mission is to get patients to the right provider at the right time, for the right reasons. Our strategy employs three main phases designed to first grow the PWS health-care network by delivering secure messaging and "smart referrals", secondly leverage the PWS network to deliver high quality, personalized health education content and products all curated by PWS providers and thirdly provide deep insights into the healthcare ecosystem by offering a healthcare ecosystem intelligence platform powered by our cognitive computing engine.

## Pegwin

*Bellaire, Texas | Douglas Dotan | douglas.dotan@pegwin.io | http://pegwin.io*

Addressing the problem of preventable patient harm, Pegwin uses modern software technologies, such as Medical Artificial Intelligence (mAI), Machine Learning (ML), and Predictive Modeling. Physicians and nurses, at the bedside, will receive real-time knowledge on a patient's potential risk for harm making caregivers' actions more effective while reducing their workload. EHR/EMR (Electronic Health Records/Electronic Medical Records) in use today at virtually every hospital in the US are designed to input and display medical information, but don't provide much in the way of analysis or correlation of data. Pegwin is designed to be EHR agnostic will be integrated into the hospitals EHR systems though industry standards-based APIs. Pegwin analyzes multiple variables from the patients records (age, weight, etc.) to the latest sensor readings (temperature, blood oxygen saturation level, blood pressure, breathing rate, etc.) and using predictive analytics, mAI, and Machine Learning algorithms calculates probabilities for potential preventable harm events.

## PolyVascular

*Houston, Texas | Henri Justino | info@polyvascular.com | www.polyvascular.com*

Congenital heart disease (CHD) is the most common birth defect, and a leading cause of childhood mortality in the developed world. Many CHD patients require heart valve replacement early in life, particularly for conditions affecting the pulmonary valve (PV). Until recently, dysfunctional PVs could only be replaced via open-heart surgery, and their poor durability committed patients to multiple repeat surgeries throughout their lives. The advent of catheter-based implantation offers a less-invasive route to PV replacement, with reduced risk, expense, and recovery time. Unfortunately, this important advance is only available for adolescents and adults, because current valves are not available in diameters suitable for small children, and their delivery systems are too bulky for their small groin vessels. To address this unmet need, PolyVascular has developed polymeric PVs that can be fabricated in any diameter, including small diameters for toddlers. Our valve can even be expanded to accompany a child's growth.

### rHDL Technologies

*Houston, Texas | Aundrietta Duncan | aundriettad@fannininnovation.com*

rHDL THERAPEUTICS is actively developing a novel nanoparticulate drug delivery platform capable of targeting specific cells for multiple disease indications. Our platform technology harnesses the body's natural delivery mechanism by mimicking the structure of endogenous high density lipoproteins (HDL). rHDL has been successfully used to deliver therapeutic amounts of siRNA to cancer cells of numerous origins, both in in vitro and in vivo, which over-express the Apolipoprotein A1 receptor, scavenger receptor class B type 1 (SR-B1). Taking advantage of this alteration in cancer cells offers us the ability to deliver therapeutics only to tissues of interest. Published and preliminary data demonstrate that rHDL particles are protected from the body's natural defense mechanisms, exhibit prolonged circulation time, are non-toxic, and can effectively reduce tumor burden in animal models. We are currently pursuing aligned strategic collaborations for rapid development of this technology into clinical usage.

### SafKan - Ear Care

*Houston, Texas | Sahil Diwan | sahil@safkanhealth.com | https://safkanhealth.com*

SafKan has developed the first and only automated ear cleaning device, the OtoSet, for the 610 million people worldwide with excess or impacted earwax. According to the AAO-HNS: 190M children, 255M adults, and 164.7M elderly people have excess or impacted earwax. Earwax removal is currently the most common ear-related procedure leading to complaint and settlement. Today's earwax removal procedure takes 20-30 minutes with a primary care physician and nurse using an Ear & Bladder Syringe. This leads to a large number of unnecessary referrals to otolaryngologists. SafKan's OtoSet uses automated pulsed irrigation and continuous suction to dislodge and dispose of excess earwax in just 35 seconds. The OtoSet can be used by any healthcare professional.

### Salarius Pharmaceuticals

*Houston, Texas | David Arthur | darthur@salariuspharma.com | http://salariuspharma.com*

Salarius Pharmaceuticals is an oncology company developing novel epigenetic therapies for cancer treatment. Salarius's therapy targets the LSD1 enzyme, which is widely implicated as a driver of cancer growth and metastasis. Salarius has developed a novel LSD1 inhibitor that shows increased efficacy and safety compared to the competition. Salarius will begin treating human patients in 2018 with Ewing sarcoma (rare pediatric bone cancer), in addition to prostate cancer, breast cancer, and ovarian cancer.

### Sana Health

*San Anselmo, California | Richard Hanbury | richard@sana.io | www.sana.io*

Founder developed Sana to save his own life from the ravages of extreme chronic pain. The device is a wearable mask, it uses patented audio-visual stimulation, couple with a biometric feedback loop to guid the user into a deep state of relaxation for the management of pain and the improvement of sleep. Sana has just concluded a 75 person study with Stanford and Special Operations Command, that against placebo showed a 2x increase in relaxation, a 3x decrease in pain, and a 5x increase in HRV. Sana is about to start pivotal FDA study with Mount Sinai, with PI Dr David Putrino, one of the worlds top experts on neuromodulation for pain management. Just closed a $4m seed round to get through FDA, and will be raising Series A after that to get to market.

# 2018 Texas Life Science Forum | Presenting Companies

## Saranas

*Houston, Texas | Zaffer Syed | zaffer@saranas.com | www.saranas.com*

Saranas has developed a patented bleed monitoring system for vascular access procedures by enabling physicians to mitigate downstream consequences by addressing bleeding complications immediately, improving patient outcomes and lowering healthcare costs.

## Simergent

*Oklahoma City, Oklahoma | Steve Lindo | sjlindo@simergent.com | www.simergent.com*

Simergent is developing the Archimedes home dialysis system that delivers therapy to a sleeping patient each night. Our automated peritoneal dialysis (APD) device focuses on specific needs for emerging markets. Our technology enables our dialysis device cost to be up to 85% less expensive than traditional home devices, allowing the home nocturnal dialysis market to save millions in healthcare costs, while delivering safe and effective therapy more quickly than currently available devices. It supports faster training with fewer nursing staff using a color touch screen.

## Siva Therapeutics

*Austin, Texas | Len Pagliaro | len.pagliaro@sivatherapeutics.com | www.sivatherapeutics.com*

Targeted Hyperthermia has multiple beneficial effects on tumors, and it promises to be more selective than chemotherapy, less destructive than radiation, and without the risks of surgical treatment. Siva has raised over $2.1MM to date, $1.7MM through grants and $400,000 through angel investors, in addition to founder contributions. The company is currently raising a $6.0MM Series A financing round, which will enable Siva to complete preclinical studies, to receive an Investigational Device Exemption (IDE) from the FDA and to achieve first in human clinical. First in human studies will place the Company in a strong position for Series B financing and a Pivotal clinical trial.

## Spitfire Pharma

*South San Francisco, California | John Nestor | jnestor@eumederis.com*

The obesity-driven Metabolic Syndrome, and its liver manifestation, non-alcoholic steatohepatitis (NASH), are increasingly common worldwide. Spitfire Pharma, Inc. is working to demonstrate clinical efficacy of its candidate SP-1373, a QW, potent and balanced GLP-1/glucagon receptor dual agonist. Unlike most candidates for treatment of NASH, which are focused on liver-only signs, in obese, NASH-afflicted animals treated with SP-1373 we find a rapid return to the chow-fed, lean normal status. Thus SP-1373 rapidly normalizes both the hepatic and the broader metabolic dysfunctions of obesity-driven diseases (liver and body weight, hepatosteatosis, NAS, ALT, liver fibrosis profoundly suppressed). We seek funding for clinical proof of efficacy in NAFLD/NASH.

# 2018 Texas Life Science Forum | Presenting Companies

## Stream Biomedical

*The Woodlands, Texas | Gary Gage | gg@streambiomed.com | www.streambiomedical.com*

Stream Biomedical is developing a therapeutic recombinant protein shown preclinically to provide dramatic functional improvement when administered after neurologic insult. The initial target therapeutic application is treatment of acute stroke. Later targets include traumatic brain injury (TBI) and Alzheimer's/dementia. The protein has proven preclinically to be neuroprotective; in other words, it protects neurons (fundamental cells of the brain) and limits the effects of injury or degeneration once administered. There is currently no neuroprotective pharmacologic solution on the market. It has also been shown to support neurologic repair: it is both angiogenic (helps create new intracranial blood vessels) and neurogenic (helps proliferate new "baby" neurons in the brain and fosters them to become functional "adult" neurons). When injected, it effectively crosses the blood brain barrier and homes to the site of injury. Most importantly, it has been demonstrated to provide full post-acute-stroke functional recovery in preclinical models of stroke.

## Theratome Bio

*Indianapolis, Indiana | Michael Coleman | mcoleman@theratomebio.com | www.theratomebio.com*

Theratome Bio is developing a new class of biologics derived from factors secreted by adult stem cells. The Company's TheratomeTM technology is a platform technology that has demonstrated robust potential in preclinical models to reduce damage from stroke and ischemic brain injury, reduce kidney damage in acute kidney injury, and increase the shelf-life and function of donor organs. Theratome Bio's lead product is a cell free injectable biologic that is at the late preclinical stage of development with the company having completed GMP manufacturing of Master Cell Bank and successful pre-IND meeting with US FDA. The company is seeking development partners and Series A1 investment of $2 million for GMP manufacturing and IND-enabling toxicology studies.

## Twister Biotech

*Houston, Texas | Chris Coker | chris.coker@twisterbiotech.com | www.twisterbiotech.com*

Baylor College of Medicine spinout, Twister Biotech, Inc. has eradicated ovarian cancer without harming healthy cells in culture. Animal trials are commencing. Twister is developing aerosolizable gene therapies that safely and locally drug key targets governing ovarian cancer, cancers which metastasize to the lung, and idiopathic pulmonary fibrosis via proprietary MiniVectors. MiniVectors are nanostructured DNA circles that safely and readily penetrate cells to enlist cellular machinery to downregulate genetic targets (including "undruggable" targets) or to deliver healthy genes. MiniVectors persist for the lifetime of the cell and do not readily integrate into a patient's genome. Personalized therapies, including combination therapies, are possible. MiniVectors can be stored safely without refrigeration for more than five years. Twister enjoys an international, exclusive license to key issued background intellectual property. Multiple follow-on patent applications are in place or development.

### Vax-Immune

*Houston, Texas | Leonard Weisman | lweisman@vaximmune.com | www.vaximmune.com*

The identification of infection takes too long, is too expensive and inaccurate more than 25% of the time. LabReady® and MY LabReady™ by Vax-Immune™ are unique platform technologies that improve the diagnosis of infection by moving the laboratory to the patient. These devices make diagnosing infection faster, easier, less costly, and more accurate. They re-imagine the lab where everything happens in the LabReady® bottles. LabReady® is a proprietary, portable, disposable, hand-held device. It collects, protects, processes, and prepares the sample from the patient through transport, so when it arrives at the laboratory, infection can be immediately diagnosed. MY LabReady™ is for at-home use and allows the patient to diagnose and treat their infection without leaving their home. Both devices strip out the inefficient time lapse and loss of organisms or sample quality between sample collection and diagnosis, resulting in faster, more accurate results, with better patient outcomes at lower costs.

### VenoStent

*Nashville, Tennessee | Timothy Boire | tim.boire@venostent.com*

VenoStent, Inc. is developing an external stent to improve the quality and length of life for the >2 million – and growing – dialysis patients globally. While hemodialysis serves as the primary lifeline for 450,000 end-stage renal disease (ESRD) patients in the US, 40-60% of the access sites, or artery-vein connections created in the arm to remove toxins from the blood, collapse and fail within the first year. This causes significant suffering for patients, costs approximately $1B for the Centers for Medicare and Medicaid Services (CMS), and results in repeated and unnecessary surgeries. Our artery-mimetic device, SelfWrap, intends to reduce access site failures to improve the quality and length of life for ESRD patients and save millions in healthcare costs. Moreover, this technology can be applied anytime a vein-artery connection is made, including coronary and peripheral artery bypass grafting, with external stenting potentially representing a new paradigm in stenting.

### VerteCore

*Natchez, Mississippi | Paul Leake | Paul.Leake@vertecore.com | www.vertecore.com*

VerteCore created a line of safe, effective, cost conscious wearables to relieve back pain without opioids, and surgery. The VerteCore Lift® addresses the need for pre-surgery options by providing safe, convenient, effective decompression of the intervertebral discs(IVD's). This new and innovative design was created to answer the needs of Physicians and Patients alike. People with varied issues, such as bulging and herniated discs, sciatica, functional scoliosis, S I Joint dysfunction and stenosis have successfully used the Lift to decompresses their IVD's, while enabling them to continue with daily activities. Statistically, 80% of the populace will experience back pain at some point in their lives. Back pain is the leading cause of loss worker productivity, and continues to drive opioid usage. Thus making effective pain relief that does not rely on drugs very appealing. As healthcare continues to migrate towards performance based initiatives, VerteCore's high value proposition products are well positioned.

### Volumetric

*Houston, Texas | Bagrat Grigoryan | bagrat@volumetricbio.com | http://volumetricbio.com*

We will change the world through the generation, validation, and long-term storage of bespoke and patient-matched vascularized tissues and organs. Our initial technology enables customers to utilize vascularized tissue models for drug testing, and eventually therapeutic application in the clinic.

### Zennea

*Surrey, British Columbia, Canada | Ryan Threlfall | ryan@zenneatech.com*

Zennea is a sleep-wearable medical device company. Our mission is to end sleepless nights for chronic snorers and their sleeping partners. This problem accounts for 30 million people chronically sleep-deprived because of their own snoring in the US alone, not counting their sleeping partners. To this end, Zennea is developing and commercializing ZENS, a regulated sleep-wearable product that reduces snoring. ZENS adheres to the underside of the chin, externally reducing airway restrictions by stimulating the hypoglossal nerve which controls the genioglossus muscle group. This activation clears the oropharynx space, increasing upper airway airflow and reduces snoring by keeping muscles in the upper airway active. The device is wireless and is held in place by a custom, daily-disposable adhesive pad to comfortably and non-invasively mould to the natural shape of the jaw.