NEUROKINESIS CORPORATION

Charting A New Course for EP Diagnostics

an EXECUTIVE SUMMARY

(UPDATED 010124)

"The best way to predict the future is to create it."

– ALAN KAY
American Computer Scientist

NEURO-KINESIS

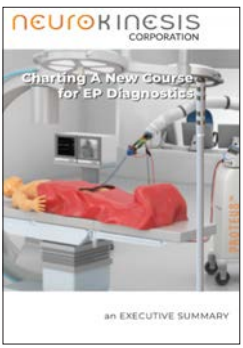
Neuro-Kinesis Corp. ("NKC") is a development stage medical device technology company that is creating next-generation surgical tools incorporating advanced biosensor systems that can provide real-time biofeedback where the monitoring of precise environmental status points can greatly enhance a patient's procedural outcome. It lead product candidate is the Huygens™ Catheter, a next-generation electrophysiology mapping catheter that utilizes a proprietary smart, micro-miniature electrode array with advanced artificial intelligence assisted guidance to provide a level of diagnostic cardio-mapping capabilities that are currently not available. NKC believes that such technology holds the promise of improving the outcome for the thousands of patients dealing with complex arrhythmia cases where the current state-of-the-art is unable to provide the diagnostic data needed to provide more effective prognostic treatment.

NKC's goal is to integrate its advanced catheter-mapping technology with its sophisticated robotic guidance system to provide a level of mapping resolution and detail that exceeds the current art by a factor of 200x. This technology has the potential to improve the indices of success, reduce morbidity, and obtain a better clinical outcome for the patient, and for the physician.

on the **COVER**

NKC's Huygens™ Catheter and the NKC Operating Suite

NKC has developed a major breakthrough in substrate and anatomical mapping of endocardial tissue for catheter-based cardio-diagnostic disease detection in electrophysiology. Pictured on the cover is the Huygens™ Catheter which is capable of capturing bioelectric signals on the low voltage spectrum with a resolution 200x greater then current EP catheters. In the background can also be seen the NKC Operating Suite and the Proteus II™ Robotic Arm Catheter Navigation system.



the **company**

Neuro-Kinesis Corporation (NKC) is a Delaware corporation formed in 2019 for the purpose of developing the founders' two-decades of research and development into catheter-based mapping and catheter navigation control for the Electrophysiology (EP) field in order to create an innovative new diagnostic mapping catheter that utilizes a proprietary smart, micro-miniature electrode array with advanced artificial intelligence assisted guidance to provide a diagnostic cardio-mapping capability that is currently not available.

To that end NKC has developed three advanced and patented medical device technologies that form the core for its comprehensive EP operating suite solution, that can advance the diagnostic abilities of the EP physician and allow them to make better prognosticative strategies for affecting cure.

The three technologies are; the Huygens™ Catheter, which incorporates a novel re-imagining of the process of bio-impedance data collection for generating an EP heart map, the Proteus™ II Robotic Arm, which brings robotic assisted catheter guidance into a new era of control and reliability, and the Lorentz Active Sheath™, which delivers smart guidance tracking to catheter steering and introducer technology.

These technologies are part of the NKC Operating Suite that combines all the elements of the EP art, diagnostic mapping, live imaging, patient biometric monitoring, catheter navigation, and tissue ablation, into a unified system that is controlled by a proprietary central Programmable Logic Controller (PLC). In addition to providing live, in theater control of all the various

systems, the PLC also provides digital data compilation, local and cloud storage of the collected data, and secure wireless communication to the patient's health records and any affiliated healthcare providers.

To date, NKC has achieved all of its initial milestones including:

1. Proof of concepts on all technologies.
1. IP protection with over 100 patents both domestic and international related to its catheter guidance, smart catheter, and smart catheter sheath inventions.
2. Completed its installation of its clean room and wet lab facilities for in-house prototype testing and development.
3. Completed initial third party validation studies with Sandia National Labs on Huygens™ Catheter capabilities.
4. Development of the electro-mechanical phase of it Proteus™ II Robotic Arm navigation system.
5. Confirmed integration of its catheter technology to the Abbott/St. Jude EnSite X mapping system.
6. Developed strategic relationships with key partners for next-phase prototype development.

The company is in preparation to begin its pre-clinical Animal Validation study to provide the data needed to submit to the FDA seeking a **Humanitarian Use Device (HUD) with a Humanitarian Device Exemption (HDE)** that will allow the company to begin its initial human clinical trial.

With this success so far, the Company is confident that its solution for advancing the EP diagnostic and therapeutic art could mean better outcomes for the more than 40 million people suffering from EP-related disease such as AFib.

NKC in 30 seconds

WHO WE ARE

- Development stage medical device technology company
- Delaware corporation founded in 2019
- Consolidated to advance its founders 20 years of research and development into their proprietary technologies.

INDUSTRY SECTOR

- Medical device technology for Health Sciences
- Core competency in advancing integration of SMART technology to surgical tools.
- Focus on developing advanced diagnostic and guidance platforms for the Electrophysiology field.

CURRENT TECHNOLOGY

- **Huygens™ Catheter** – advanced diagnostic EP mapping catheter that provides a 200x increase in bioelectric signal capture.
- **Proteus™ Robotic Arm** – Integrated robotic assisted catheter guidance system using AI and machine learning to emulate human navigation with precision computer control.
- **Lorentz Active Sheath** – Catheter introducer and steering sheet using embedded electronics to facilitate catheter location and positioning during EP procedures.

INTELLECTUAL PROPERTY

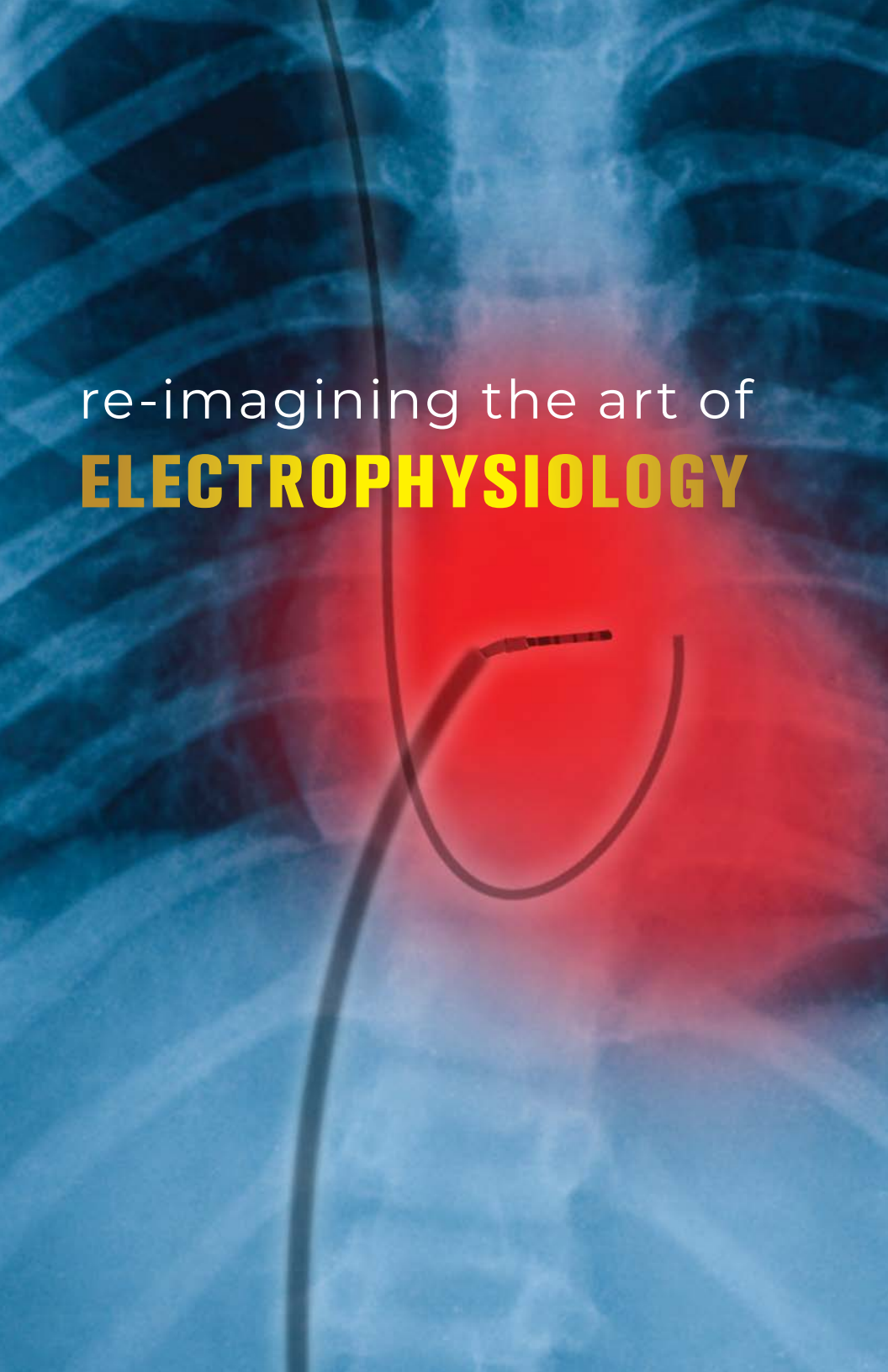
- Filed 106 patents domestically and internationally on it various technology platforms.
- Owns all assets and IP associated with the filed patents including its current EP technologies, the CGCI systems, the MOSFET catheter, and several other SMART medical device innovations.

MARKET OPPORTUNITY

- In the EP Catheter sector alone, NKC will participate in a global $3.53 billion market.
- The global medical device market size is $577 billion
- Both sectors are expected to see growing growth over the next 10 years with key global leaders in the space seeking ways to advance their market share through new technology acquisition.

CURRENT NEED

- NKC is seeking funding to completes its stated 2024-2025 milestone for FDA HUD and HDE approval and potential acquisition negotiation.


re-imagining the art of
ELECTROPHYSIOLOGY

Understanding The Problem

For the past two decades, the visionaries behind NKC have been working to re-imagine the art of catheter-based diagnostic mapping and navigation in the electrophysiology field.

Electrophysiology, or EP, is the study of the electrical activities of the heart for the purpose of being able to detect and correct anomalies in energy flow which cause disruptions to the regular rhythm of the heart. An irregular heart rhythm, such as arrhythmia or tachycardia, or a disease, such as Atrial fibrillation (AFib), can have dire consequences including stroke, heart attack, or death. Being able to diagnose and then correct abnormalities in the electric signals that control the beating of the heart is the work of the EP physician.

"By giving the EP physician a better diagnostic tool, we are providing a better outcome for their patients."

– Josh Shachar
NKC CEO and CIO

Key to the success of the EP physician is the ability to maneuver a thin catheter in the patient's body and guide it into the beating heart chamber where it can be guided around the interior space to allow small electrodes located on the tip of the catheter to detect and measure bioelectric signals that will allow the EP physician the ability to both create a visual map of the geometry inside the patient's heart, but also an idea of where electrical flow is being disrupted. From there the EP physician can make decisions on how to ablate areas of the heart in order to reroute the disrupted current so as to restore proper heart rhythms.

Although physician-guided, catheter-based disease treatment has become a growing and accepted standard

for procedures such as AFib ablation, endovascular coiling, transurethral prostatectomy and endoscopic exploration, such procedures do not come without significant risk. These risks can include minimal effectiveness requiring repeat procedures, vascular injury, organ perforation, blood clotting, septic infections, and as mentioned before; death.

NKC was established to try and address the three major areas of limitation present in the current state-of-the-art of EP catheter mapping; the ability to isolate important bioelectric signals from random environmental noise, the inability to capture low-voltage bioelectric signals which may be indicative of, and causal to complex arrhythmia issues, and the inefficient dependence on manual manipulation of a catheter to provide a clear and exacting map of the patient's heart.

The Noise Issue

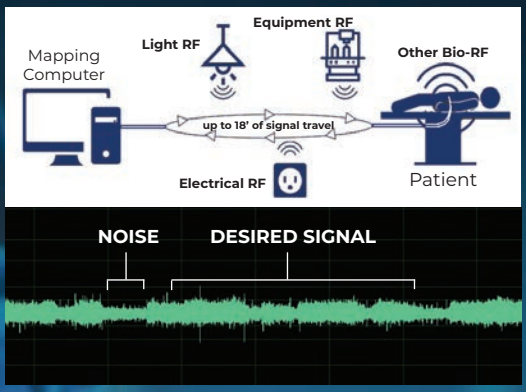
Current cardio mapping technology requires an analog RF signal to travel up to six meters along the length of the catheter to capture the bioelectric signals needed to plot both location and bio-tissue viability. As a result, the signal is subject to degradation due to many causes including:

- Inconsistent power regulation within the amplifier.
- Degradation of the signal as it travels down the length of the catheter to the electrode due to faulty material, the actual distance being covered, and the ability to control and measure the signal being output by the electrode tip.
- Pollution of the signal due to the ambient electrical "noise" of all the surrounding tissue the catheter is moving through.
- Quality of the sensing electrode to isolate targeted tissue impedance versus all the other extraneous and ambient noise.

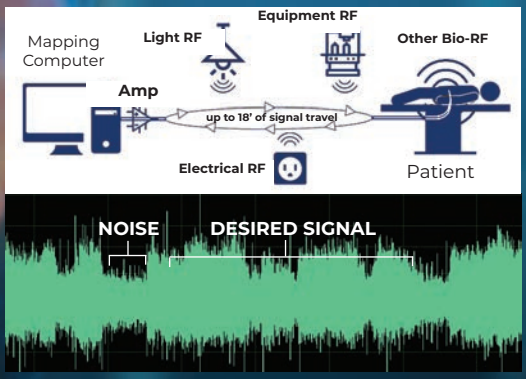
REMOVING THE NOISE

Current catheter-based EP mapping requires the capture of small microvolt readings by the mapping catheter's electrodes, which are then transmitted as analog RF information up to six-meters to an external mapping station in order to measure the biopotential of the tissue. As such, these signal captures are subject to both signal degradation as well as signal contamination from the myriad of surrounding environmental elements that generate noise. This includes operating room equipment as well as the bloodpool inside the patients heart.

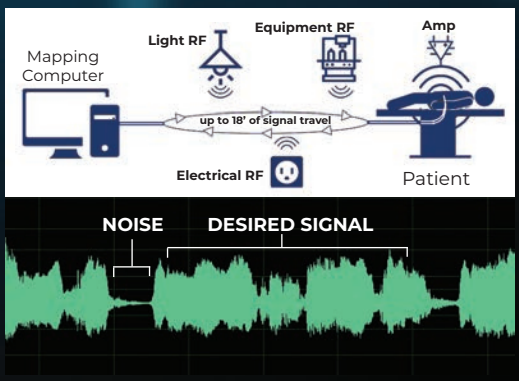
The figure on the right shows the traditional signal path for EP cardiac mapping and the various sources that create pollution in the signal making it hard to discern noise from needed bioelectric tissue measurement.



This figure shows the current method to add signal amplification at the mapping station source in order to boost signal fidelity. Though this helps, the wave spectrum shows that noise is equally amplified along with the bioelectric tissue measurement.



This last figure shows the vast improvement in signal fidelity that the Huygens™ Catheter brings to bioelectric signal capture when the signal amplification, filtering and processing occurs at the catheter tip. Further that this method then allows the analog signal to be converted to a digital format before traveling back to the mapping computer, thereby preserving an accurate and much higher resolution data capture.



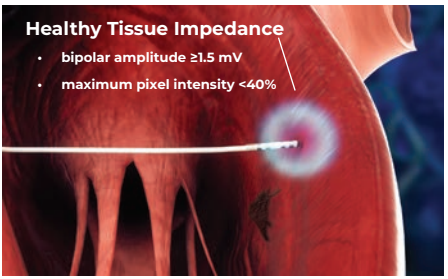
The signal path for heart mapping is not a one-way road. Not only must an electrical signal travel cleanly to the electrode tip, but for substrate mapping, electrical energy is transmitted to the catheter electrodes and then discharged against the tissue being examined for a measurement to be taken. Then the resulting reading is sent back down the catheter to the diagnostic equipment for decoding into a language the mapping station can interpret and display. Since the signal is at the millivolt level in a radio frequency analog spectrum, it is easy to see how difficult it is to maintain a consistent, quality power transmission flow for accurate biotissue measurements.

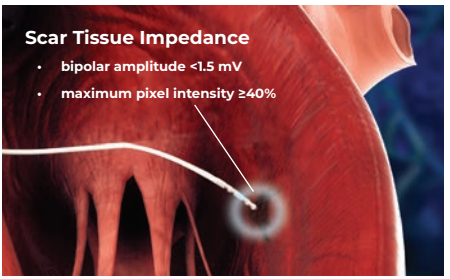
As a result, the struggle to capture clean, accurate readings of the bioconductivity of the patient's heart tissue by the catheter's electrodes that are not polluted by either signal degradation, or the addition of any of the myriad noise sources the signal encounters on its journey, continues to be a limitation for the physician to gather all the data that could be captured in order to make better prognostic decisions.

Seeing the Trees From The Forest

With an understanding of the first issue, the second issue becomes apparent. Current EP mapping catheters are only able to accurately measure bioimpedance electrical signals that lie in the 100μV (microvolt) and higher range. Such signals are generally accurate in reading tissue bioconductivity issues for simple arrhythmia issues which account for about 60% of most EP ablation procedures. These higher voltage signals are able to rise above the environmental noise floor discussed in order to be accurately mapped.

Over the years there has been a growing concern and belief that complex arrhythmia cases, those requiring multiple ablations or more invasive treatment, are the result of low-voltage disruptions in the range of 100μV or less. The inability to see these smaller "trees" from the forest of noise and





To create an accurate heart map for treating AFib, the mapping catheter must be able to detect the small bioimpedance and biopotential differentials between healthy tissue that can efficiently carry electrical signals for proper heart pacing, and the scar tissue that cannot. With current technologies, the lower fidelity electrode sensors can often miss small scars or not be able to detect the gradation of bioelectric differentials to properly define the edges of the non-conductive tissue. The Huygens™ Catheter electronic platform will overcome this limitation by enabling a high fidelity measurement of the low voltage scar tissue below 100μV microvolt range.

giant redwoods of high-voltage signals, continues to be a major limitation to the EP art.

Navigating the Terrain

Effective EP ablation is entirely dependent upon the ability of the EP physician to define and create both an accurate map of the geometry and geography of the patient's heart as well as the "geology" or the quality of the surface and the underlying tissue to determine not only where bioelectric signals are being disrupted, but also the best paths that can be taken to reroute the signals to restore healthy sinus rhythm.

Although the general structure of the human heart is well known, when it comes to a patient with AFib or other heart diseases where proper rhythm is not being produced, the EP physician must be able to map the anomalies that are occurring specifically in the patient's heart in order to effect cure.

To do this the EP physician must guide a one millimeter thin flexible catheter from the patient's groin or neck, through the arterial system and into the right atrium of the heart. From there, only using their familiarity with the heart's anatomy, their learned manual dexterity, and live imaging from a fluoroscopy or other imaging source, the physician must move the tip

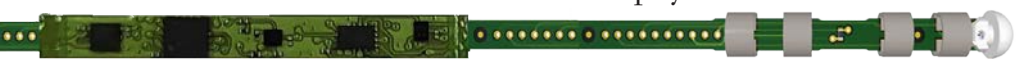
In a typical EP ablation procedure, the EP physician must be able to effectively guide the mapping catheter into the patient's heart (image on the left) and then manually navigate around the chambers to collect as many data-points of biopotential readings in order to create as accurate a heart-map (image on the right) as is possible within the time constraints of the procedure, in order to make prognostic decisions on where and how to make their ablation points to restore heart rhythm fidelity.

of the catheter to contact as many target points as they can inside the heart in order to take bioelectric differential readings to create a map. A standard mapping procedure requires the collection of up to 40,000 points of measurement.

This is akin to trying to navigate a fish line inside of a balloon and trying to put a dot on every part of the interior to see the shape. Hard enough, but now shrink that balloon down to the size and irregular shape of a chamber of the heart and start pushing on that balloon to simulate the besting of a heart. It is easy to see that despite the dexterity of even the best EP physician, the ability to fully grid map the endocardial surface of the heart to get as detailed map as possible, is indeed impossible.

Creating A New Standard

Through over two decades of research and experience, NKC believes it has created a new technology platform that can create a new standard in catheter-based mapping the will significantly change patient outcomes not only in the field of electrophysiology, but also other severe disease diagnostic issues where better biopotential signal capture combined with enhanced catheter navigation would be a game changer for both patient and physician.



the NKE Technology Platform

To provide a solution to the current limitation in EP mapping, NKC has developed a comprehensive technology platform that integrates all of the company's research and development into smart electronics, robotics, AI, and embedded micro-miniature systems to allow the EP physician to map the electrophysiology of the endocardial tissue of their patients at a level of resolution that has not been possible before.

The NKC Operating Suite consists of three proprietary and patented technologies created by NKC that work synchronistically together and communicate seamlessly with existing EP and operating room systems to increase the efficacy of the EP diagnostic mapping procedure, which in turn can lead to a significant increase in successful first time corrective ablation procedures for the more than one-million patients facing this procedure each year.

The NKC technology platform centers around three lead product candidates:

- **THE HUYGENS™ CATHETER**

The Huygens™ Catheter pushes the envelope of the current EP mapping art. With its advanced sensor-electrode technology, its proprietary distal-end signal processing and digitally transmitted data communication, the Huygens™ Catheter is poised to provide solutions and advances to the EP physician, that will have a meaningful impact on patient treatment.

- **THE PROTEUS™ II ROBOTIC ARM**

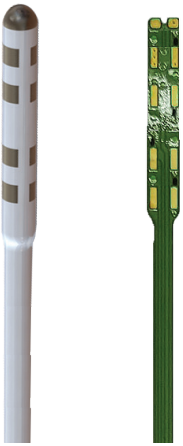
The PROTEUS™ II Robotic Arm is the next generation development phase for the Proteus™ Guidance System. The PROTEUS™ II merges all the electromechanical

developmental achievements in miniaturizing the robotic assisted guidance technology with AI and Machine Learning to produce a system that can emulate the precision and tactile movements of the EP physician's hand to create a seamless virtual Human-In-The-Loop integration between the physician and the machine.

- **THE LORENTZ ACTIVE SHEATH™**

The Lorentz Active Sheath™ serves as both an introducer sheath and a steering sheath for the Huygens™ Catheter. The sheath incorporates active electronics and a smart capability that enables its position and orientation to be tracked via an industry-standard position detection system. Additionally, the electrode signals also serves as a triangulation point for aiding in determining the position and tip deflection of the Huygens™ Catheter.

These three innovations are the foundation of the full NKC Operating Suite which brings into a unified platform all the major components required



The HUYGENS™ CATHETER provides a level of bio-impedance and biopotential signal detection and measurement that is not currently available. By incorporating all data capture and processing into the distal end of the catheter tip, the issue of noise contamination is all but eliminated.

The PROTEUS II ROBOTIC ARM incorporates two decades of research into advanced robotic-assisted catheter guidance, and adds next-gen AI and real-time translation of the physicians hand movements that allows an EP physician to create a high-resolution 3D heart-map that is 200x higher in fidelity.

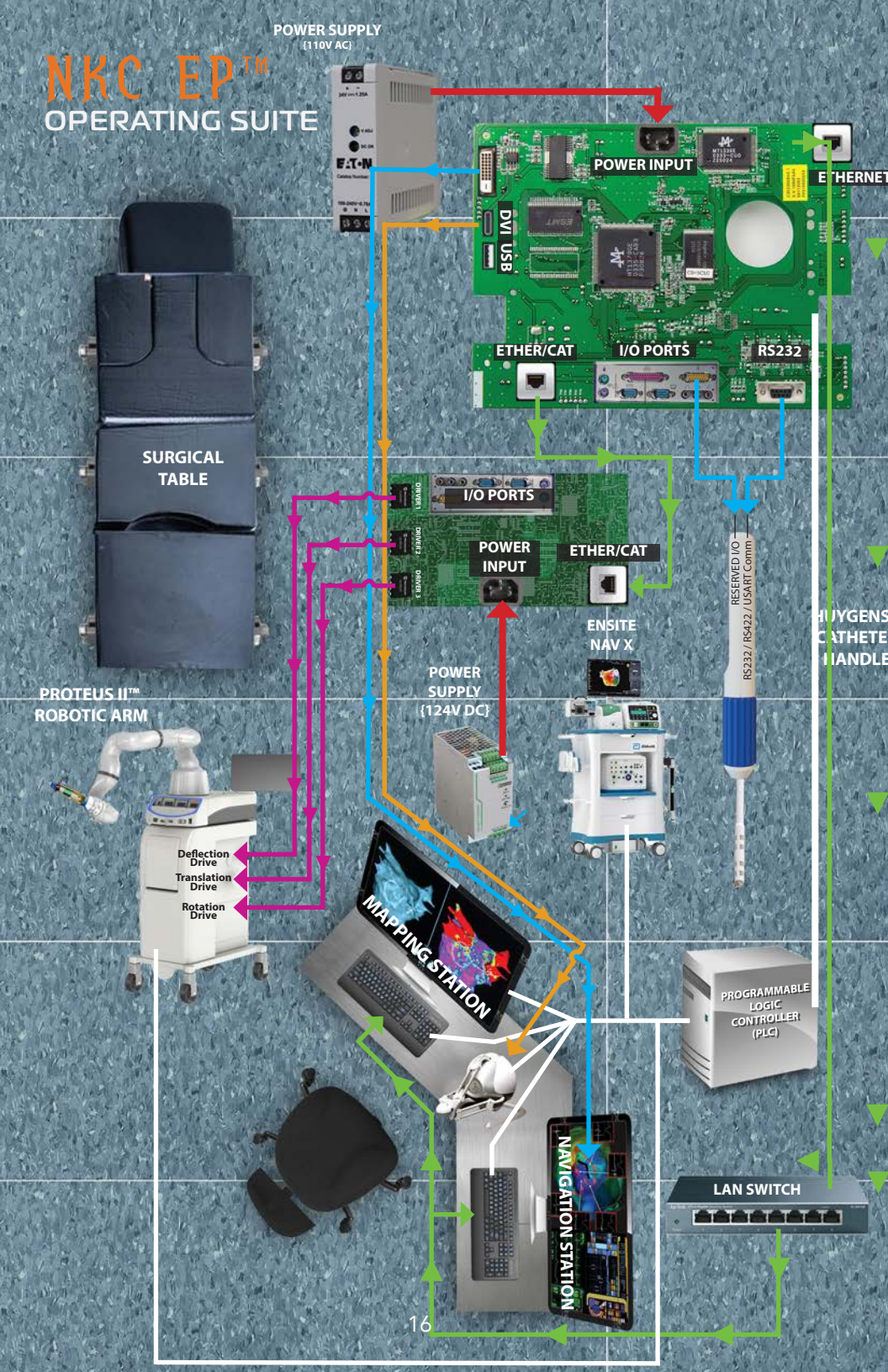
The LORENTZ ACTIVE SHEATH™ takes active catheter steering for robotic guidance to a new level by adding electrode sensing which provide location and movement tracking of the sheath's position in the patient's body, but also assists in providing triangulation location for the position and deflection degree of the HUYGENS™ CATHETER tip as it navigates inside the patient's heart.

for an EP physician to perform most standard EP procedures including catheter guidance, tissue mapping, ablation point targeting, real-time patient data display and data capture, local and cloud-based data exchange, and system control and management. The full NKC Operating Suite modules include:

- The Huygens™ Catheter
- The Huygens™ Catheter Handle
- The Proteus™ II Robotic Arm
- The Proteus™ II Cobot Operating Cart
- The Lorentz Active Sheath™
- The NKC Programmable Logic Controller
- The Ensite NavX Mapping Station
- The NKC Navigation Station
- The NKC Power Supply and Distribution System
- The NKC Data Recorder and Communications Hub
- The NKC Ethernet/LAN/ WiFi Routing Switch

As a whole, the system provides unification of all the parameters needed by the EP physician during a cardio mapping and ablation procedure. These include:

- the internal data and power streams to be controlled and routed.
- the acquired biopotential data capture to be converted and displayed as a high resolution 3D map.
- the correlation of the generated map's positional points to be utilized by the navigation system to accurately move the catheter as desired by the EP physician
- the ability of the EP physician to monitor patient status and vitals, and for all the data to be captured and stored/ shared as part of the patient's protected health record.


NKC EP™
OPERATING SUITE
POWER SUPPLY
(110V AC)
POWER INPUT
ETHERNET
DVI
USB
ETHER/CAT
I/O PORTS
RS232
SURGICAL TABLE
I/O PORTS
POWER INPUT
ETHER/CAT
DRIVER 1
DRIVER 2
DRIVER 3
RESERVED I/O
RS232 / RS422 / USART Comm
HUYGENS
CATHETE
HANDLE
ENSITE NAV X
POWER SUPPLY (124V DC)
PROTEUS II™ ROBOTIC ARM
Deflection Drive
Translation Drive
Rotation Drive
MAPPING STATION
PROGRAMMABLE LOGIC CONTROLLER (PLC)
NAVIGATION STATION
LAN SWITCH

the HUYGENS™ CATHETER

On the previous page: NKC's CEO and CIO Josh Shachar examines the latest prototype of the Huygens™ Catheter. In the background can be seen the CGCI (Catheter Guidance Control and Imaging) system which was the predecessor to the Proteus™ Robotic Arm technology.

The centerpiece of the NKC technology suite is the Huygens™ Catheter, which aims to improve the resolution of signal detection of the EP mapping catheter by an order of magnitude that has not been possible before

The basis of the Huygens™ Catheter is centered on the ability of a measuring apparatus employing a catheter fitted with an advanced bioelectrode technology to capture bioelectric activity in its native form at its source. As discussed earlier, the current technology, with its pure analog capture and post-processing algorithms, distorts and masks the true nature of the complex bioelectrical wavefronts and "washes out" the substantial clinical details which can result in a limited or inaccurate map which can lead to an imperfect diagnosis as to the underlying nature of the disease mechanism.

NKC's solution to the current limitations of the existing measuring apparatus is to move all the biosignal data capture, signal amplification, and data analysis from the proximal end of the catheter outside of the patient's body and integrate it into a single processing system located on the distal end of the catheter right at the bioelectrode reading source. At that point, the clean analyzed reading can be converted to an incorruptible digital signal that can then be transmitted to the mapping software system. An obvious solution, but one which required an incredible level of engineering, math, science, and more than a decade of extensive R&D to develop.

The Huygens™ Catheter employs a unique array of bioelectrodes with signal

amplification and processing located on a flexible circuit board (FCB) inside the catheter's tip. The Huygens™ Catheter enables an accurate "one- to-one" correlation between signal capture and analysis in order to form an electrophysiological map.

The Huygens™ Catheter incorporates several distinct features that meet the critical clinical requirements and address the deficiencies in the existing mapping and ablating technologies. These include:

- An ability to provide a correlation between substrate and anatomical mapping
- Improved amplification and signal pre-processing
- Proprietary orientation-independent electrode configuration
- Lossless optical data communication and photo-voltaic power
- Intelligent contact sensing
- Force control haptic integration
- AI and Machine Learning protocols
- An open architecture platform

With its advanced sensor-electrode technology, the Huygens™ Catheter as it exists today can accurately measure bioelectric signals as low as 25μV in both the DC potential as well as the tissue contact impedance conductivity for the same tissue area in a single mapping procedure. When coupled with the Proteus™ Robotic Arm and the NKC EP Operating Suite, the Huygens™ Catheter becomes the central key in finally providing a potential comprehensive standard in EP mapping technology for capturing the global dynamics of wavefront activation in the human heart and other tissues.

In doing this, NKC is hoping to advance both the diagnostic and therapeutic care the physician can provide.

the HUYGENS™ difference

With the HUYGENS™ Catheter the NKC engineering team has taken all the advancements made with its previous catheter technology and moved it into an entirely new level of sophistication in advancing the art of RF Catheter Mapping. The Huygens™ Catheter manages all the functions that used to take large machines outside the patient's body receiving corrupted and degraded analog signals from a mapping catheter over 6' to 9' away in order to create a heart map and moved it into a signal capturing and processing lab located in the catheter's tip.

The HUYGENS™ Catheter removes the barriers that have limited EP mapping and for the first time provides an EP physician an ability to do both anatomical and substrate mapping with a fidelity that is over 200x greater then current mapping software systems provide.

1

The sensor electrodes on the catheter capture a bioimpedance reading of the endocardial tissue for topographical mapping of the surface. This reading can be as small as 25mv. In addition to bioimpedance, the electrode can also measure biopotential signals for substrate mapping at the same time.

2

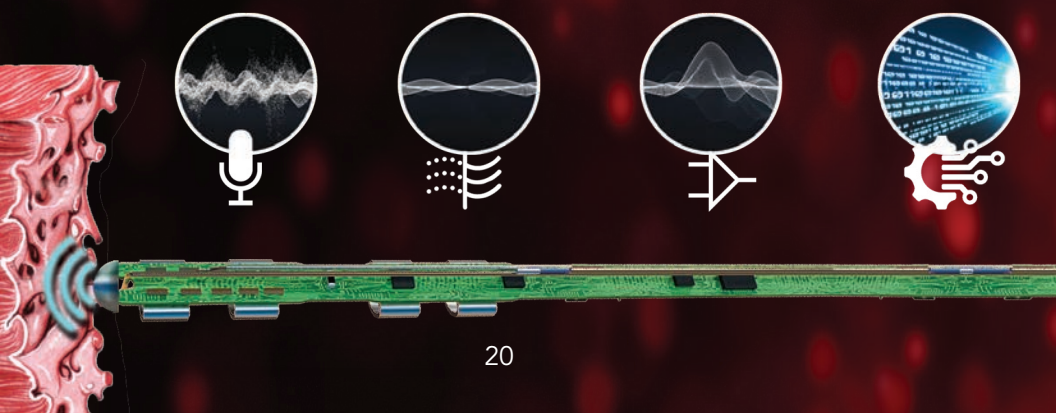
The captured signal is then run through a sophisticated filtering algorithm which is able to make a distinction between the bio-current tissue signal and all the rest of the noise. The noise is filtered out and the clean bioelectric signal is passed onto the next stage.

3

The clean bioelectric signal is then passed through a proprietary amplification algorithm which boosts the millivolt signal into easy to read microvolt level while still preserving all the signal's information.

4

Finally the cleaned and amplified analog signal is converted into a digital data stream before it is sent by fibreoptic cable to the mapping station. This process completely eliminates any potential for signal degradation to occur during its travel.




the
PROTEUS™
TWO ROBOTIC ARM
LSPV
RSPV
LIPV
RIPV
CS
Ens
CORPOR
NEURO-KINESIS
CORPORATION

On the previous page: The PROTEUS II™ Robotic Arm is the current evolution of NKC's robotic-assisted catheter guidance system that uses advanced AI, machine learning and state-of-the-art robotics to control the precision navigation of the HUYGENS™ Catheter inside a patient's heart.

NKC has taken all of its expertise in the field of robotic-assisted catheter control and guidance and packaged it into a modular system that provides precision control of an EP catheter in three axes of movement; deflection, translation, and rotation, utilizing three independent drive systems to control catheter movement.

The PROTEUS™ II Robotic Arm is the result of over two decades of research and development into advancing robotic-assisted catheter guidance systems for the EP physician. Beginning in 1996 with the development of the Catheter Guidance Control and Imaging system (CGCI), which used eight electromagnetic lobes in a 9-ton machine to allow for precise control of a catheter in the 3D space inside a human body, the engineering team has continued to advance its discoveries to refine the technology in order to meet both the demanding needs of the physician as well as the economic realities of the healthcare system.

In 2020, NKC introduced the PROTEUS™ I Robotic Arm, which reduced the 9-ton CGCI system to a shoe box-sized plug and play technology that used the team's advances in micro-electro miniaturization and catheter navigation to begin the to develop the ability of the technology to meet the specific criteria the engineering team had set:

1. The ability to interpret and execute the interplay between the information coming from the catheter, the imaging systems, the mapping software and the real-time decisions for movement coming from the EP physician.

2. the ability to execute automatic grid mapping of the heart chamber,

3. the ability to perform a programmed ablation strategy set by the EP physician,

4. the ability to perform return to point navigation

With the completion of the Proteus™ I Robotic Arm, which reconciled all the issues for addressing the electromechanical challenges for the revisioining of the technology, NKC focused on developing its next-generation Proteus™ II Robotic Arm.

The Proteus™ II takes all the innovation of the Proteus™ I and is working to combine it with new advanced AI capabilities in a form structure that mimic s actual human movement of the catheter in a way that will bring the technology several steps closer to blending the intuitive tactile capabilities of the EP physician with the precision control, repeatability and speed efficiency of robotic guidance to create a seamless virtual integration between the physician and the machine.

The current development track includes:

- Adaptation of the KUKA LBR Medical Robotic Arm to handle the gross movement articulations of the Proteus™ II

- Development of the Proteus™ II Robotic Hand which will be used to perform the fine detail guidance movements of the Robotic Arm.

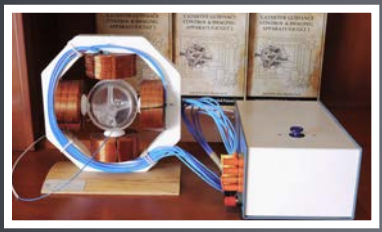
- Fabrication of the Proteus™ II Cobot operating cart to house all the computer interface and power systems for the system.

- Development of the software, firmware, and UI/UX integration of the Proteus™ II Robotic Arm.

The Proteus™ system provides a clear advantage in advancing both the diagnostic and the therapeutic art of EP.

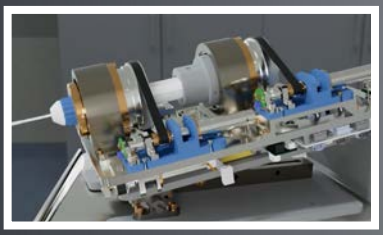
the evolution of a ROBOT

The evolution of NKC's catheter guidance vision from the nine-ton CGCI™ to the futuristic Proteus™ II Robotic Arm shows the ingenuity of the NKC engineering team.



The vision for creating a robotic-assisted catheter guidance system began in 1996 with the filing of the first patent titled "Method and Apparatus for Catheter Guidance Control and Imaging.". Pictured here is the first desktop prototype for the CGCI

Development of the CGCI continued with over ninety patents being filed, and the installation of five CGCI Operating Suites around the world. Pictured here is the CGCI-II installation at the company's headquarters.

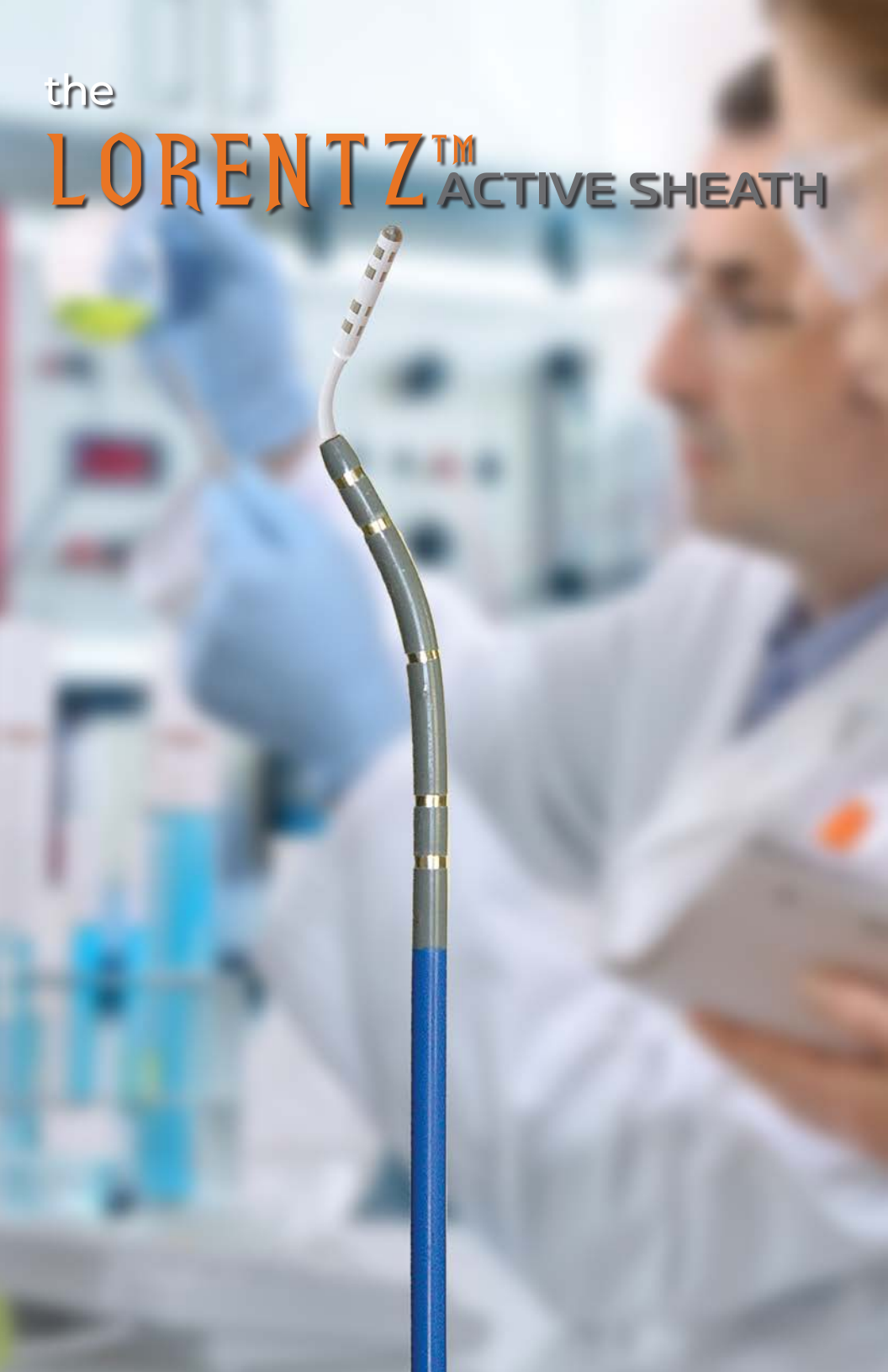


In 2022 NKC introduced the Proteus™ I Robotic Arm that took all the CGCI guidance technology and reduced it down to a shoe box sized plug and play system that validated the proof-of-concept goals for the electro-mechanical requirements of the technology.

Pictured here is the Proteus™ I Robotic Arm with the Huygens™ Catheter mounted on a surgical arm at an operating table. The Proteus™ I is able to control the navigation of the Huygens™ Catheter in all three axis of direction; rotation, translation and deflection.

The Proteus™ II Robotic Arm re-imagines robotic catheter navigation by taking all the advances in the electro-mechanical engineering of the Proteus™ I and combining it with AI, machine learning, programmable logic control, and tactile human movement emulation.

Pictured here is a prototype design of the Proteus™ II Robotic Arm Gripper with the Huygens™ Catheter which will be able to mimic the movement of the EP physician's hand from the controller into precision zero-latency catheter tip navigation inside the patient's heart.


the
LORENTZ™
ACTIVE SHEATH

On the previous page: The Lorentz Active Sheath™ is engineered to provide both a flexible catheter introducer/ steering sheath with SMART active electronics that provide real-time feedback to the EP physician on positioning and orientation during an EP procedure.

The Lorentz Active Sheath™ (LAS) serves as both an traditional introducer sheath and a steering sheath but with the addition of active electronics and a smart capability that enables tracking of the sheath's position and orientation via an industry-standard detection system designed to facilitate access and stability of the diagnostic mapping catheter.

As an introducer sheath, the LAS works to provide a protective conduit that is first inserted into a patient's body during a catheter-based procedure, such as an EP ablation, through which other surgical instruments, such as the EP mapping and ablation catheters are guided. As the LAS is constructed of a larger less pliable material then the mapping catheter, the EP physician is able to maneuver the sheath from the point of entry on the patient's body to a position just outside the heart and with this conduit in place, to efficiently and safely move the mapping catheter into the patient's atrium for the mapping or ablation procedure.

As a steering sheath, the LAS is designed to facilitate catheter access and stability of the mapping and ablation catheter to a wide variety of vessel takeoffs and challenging anatomical areas including the endocardial tissue contact points in target sites of atrial fibrillation.

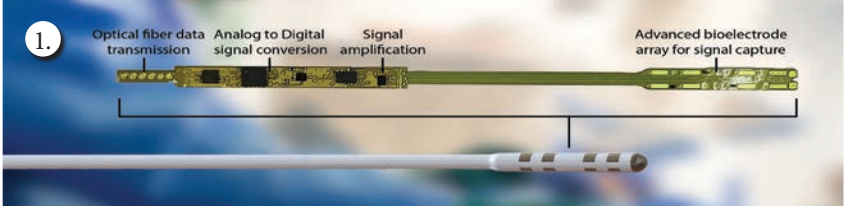
What sets the LAS apart form other introducer and steering sheaths is the addition of advanced electronics embedded in a series of

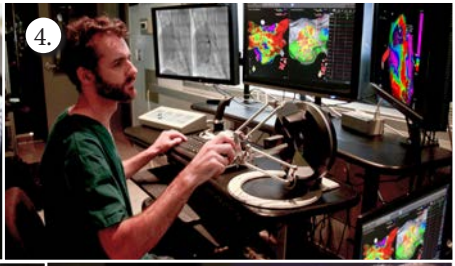
electrodes that are coupled to the LAS that allow the position and orientation of the sheath to be tracked. The signals received by the LAS are used to calculate an accurate and reliable assessment of the actual position of the LAS within the patient. The electrode signals also serve to create a reference frame which is then used to act as a motion compensation filter and fiducial alignment system for the movement of the LAS-hosted medical tool, such as a mapping catheter.

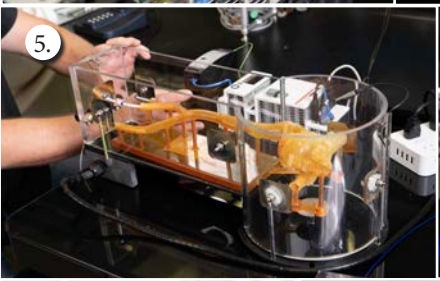
This ability to be able to accurately track position, movement, and deflection geometry is critical when it comes to robotic guidance of a catheter. Whereas in a manually guided EP procedure, the EP physician can see the position of the catheter on the fluoroscopy screen, a robotic system is unable to "see" anything. Instead it must relay on the triangulation data it receives from the exterior electrodes on the patient's body which only provide a position in 3D space of the catheter tip.

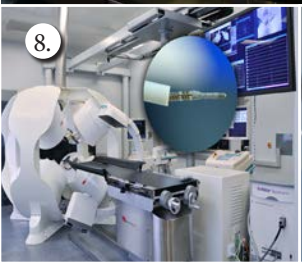
For robotic guidance, the catheter tip position is important, but more critical is to know the distance the catheter has moved into the heart space and at what angle the catheter and the catheter tip has moved within that distance. The LAS allows a zero-point to be established for the catheter tip and the LAS before entering the heart. From there, any ingress, egress, or deflection of the catheter can be calculated, tracked and stored.

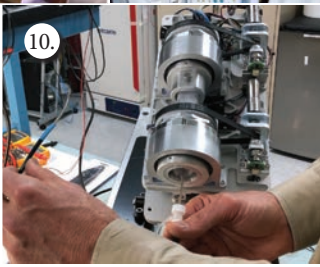
That information can then be used by the physician to do effective grid-mapping of the heart once the cardinal points have been established, and as importantly, to allow programmable return to-point navigation during the therapeutic part of the procedure.











***1.** The Huygens™ Catheter patented microprocessor "lab-on-a-chip" located in the proximal tip of the catheter provides a fidelity of resolution that is 200x higher than current heart mapping catheters. **2.** The Proteus™ II Robotic Arm represents the next evolution of NKC's robotic assisted catheter guidance system. **3.** The NKC Programmable Logic Controller (PLC) operates much like a combination traffic cop and universal translator at the intersection of all data throughput in the NKC EP Operating Suite. **4.** An EP physician can use a force-feedback Haptic controller to guide the catheter in an EP procedure. **5.** The NKC Wet Lab allows various testing procedures to be performed including this test to triangulate the Huygens™ Catheter with the Ensite NavX system. **6.** An engineer feeds the Huygens™ Catheter into the Wet Lab heart model using the Huygens™ Catheter Handle. **7.** Engineers perform integration work on the EnSite NavX Mapping Station. **8.** The CGCI System, the MOSFET Catheter, and the Lorentz Active Sheath™ were part of the early stage development work that led to the current NKC EP technology platform. **9.** The Proteus™ Catheter Handle was engineered to work in conjunction with the Proteus™ Robotic Arm and the Huygens™ Catheter to provide exacting robotic guidance control of a catheter during an EP procedure. **10.** An engineer does bench testing of the Proteus™ I Robotic Arm's three independent drive systems to control the rotation, translation and deflection of the Huygens™ Catheter.*

neuro-kinesis
board of directors

The NKC Board of Directors provides strategic guidance and vision for the company's research and engineering programs. The Board plays a key role in directing and prioritizing NKC's investment and serves as a critical liaison between the company and the major leaders and influencers in the relative medical and business communities. NKC's Board of Directors is led by well recognized scientists, a Nobel Laureate, business leaders, and entrepreneurs who have vast expertise and who are recognized as important influencers in their respective fields. The Board of Directors is committed to advancing the NKC mission.

Josh **Shachar**

CHAIRMAN

Dr. Roger **Kornberg,** PhD

DIRECTOR

2006 NOBEL LAUREATE

DIRECTOR OF THE SCIENCE ADVISORY BOARD

Dr. Eli **Gang,** MD

DIRECTOR

DIRECTOR OF CLINICAL EP AT BROTMAN HOSPITAL

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Dr. Thomas **CHEN,** MD

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PROFESSOR OF NEUROSURGERY AND PATHOLOGY AT UNIVERSITY OF SOUTHERN CALIFORNIA

Frank **ADELL**

DIRECTOR

BUSINESS ENTREPRENEUR

Dr. Eustaquio **ABAY II,** MD

DIRECTOR

RESPECTED LEADER IN NEUROSURGERY

neuro-kinesis executive team

NKC's Executive Team is comprised of experienced individuals who have accumulated substantive track records of success in their specific fields of endeavor. Their dynamic and targeted focus has allowed NKC to meet all the challenges of bringing a wholly new medical technology innovation from concept to pre-regulatory validation. The company is now well-positioned to take its success from the lab to the marketplace to provide a major leap forward in the field of electrophysiology mapping and disease diagnostics.

Josh **Shachar**
CHIEF EXECUTIVE OFFICER
and CHIEF TECHNOLOGY OFFICER

Dr. Eli **Gang, MD**
CHIEF MEDICAL OFFICER
and STUDY DIRECTOR

Dr. Thomas **CHEN, MD**
DIRECTOR OF NEUROSURGERY

neuro-kinesis
engineering and product development team

The NKC Engineering and Product Development Team's primary responsibility is in the design and development of the NKC intelligent EP catheter and robotic navigation. All design, engineering and testing for the components of the technology platforms are first visioned and prototyped here. The team is also in charge of all initial validation and verification testing of the platforms as well as the hardware, software and communication integration between all the components of the NKC Operating Suite.

neuro-kinesis
regulatory and administrative team

The NKC Regulatory and Administrative Team are central to helping assure the critical day-to-day operations and fiscal responsibility of the company as well as navigating and facilitating the regulatory requirements of the various certifying bodies in order to move the technologies into clinical use.

strategic partners

NKC has developed strong strategic relationships with a wide variety of organizations and companies with a multi-discipline of expertise. Each relationship shares its core competency for long-term partnering in furthering NKC's vision for its EP catheter and robotic navigation technologies. NKC's strategic partners are pivotal to moving the company's efforts forward by providing shared knowledge for product validation and eventual commercialization.

Abbott

ST. JUDE MEDICAL

A collaborative agreement provides NKC with the Ensite NavX Mapping Station, which is the gold-standard in EP mapping technology, as well as technical support for interface integration of the Huygens™ Catheter and the NKC EP Operating Suite.

Harbor-UCLA MEDICAL CENTER

Is the host for NKC's initial Pre-Clinical Animal Study to determine the Huygens™ Catheter's efficacy and safety. The study will be done by co-Principal Investigators, Dr. Eli Gang, Professor of Medicine at the David Geffen School of Medicine at UCLA at their 20,0000-square-foot research lab.

Sandia National Laboratories

Under a collaborative agreement, Sandia National Labs has performed validation studies of the Huygens™ Catheter to ensure the catheter's ability to meet or exceed the signal capture capabilities of the current EP mapping catheter standard.

PALADIN MEDICAL®
Your Champion for Product Success

Paladin Medical is an independent contractor that provides advisory and strategic planing services for charting the best course of action paths for FDA and EU regulatory approval.

intertek
Total Quality. Assured.

Intertek provide regulatory medical compliance testing and data preparation for Type CF IEC 60601-1 certification that certifies that the NKC technology meets the technical standards for the safety and essential performance of the device's intended purpose.

Qualio

Qualio provides the management software system that integrates with NKC's Quality Management System protocols to allow the Company to document the policies, procedures, and controls required for ongoing product quality assurance, employee safety, and regulatory approval.

SAI Global provides its services as the Notified Body for EU market regulatory certification. The Notified Body assesses the conformity of a medical device to meet the various EU countries requirements before being placed on the market.

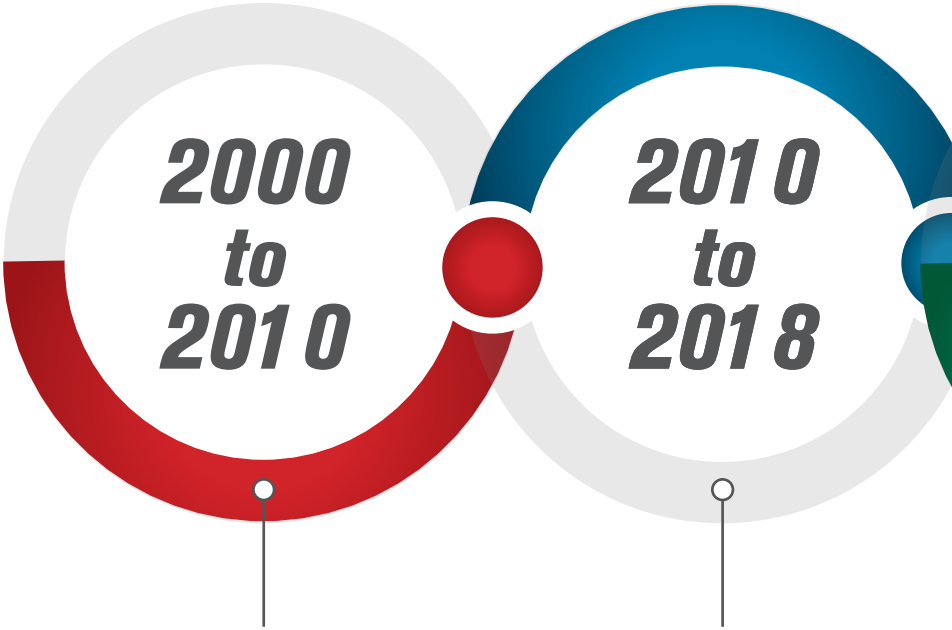
Seisa Medical provides prototype and potential to scale manufacturing of the Huygens™ Catheter. Though only providing prototype services at this time Seisa is able to expand its offering to NKC to include 510K generation services and vertically-integrated device manufacturing capabilities.

Kuka provides its LBR Medical Robotic Arm as part of the new Proteus™ II Robotic Arm technology. The LBR Medical Robotic Arm provides complete articulated control on seven axis points and is already fully certified FDA Medical Device with IEC 60601-1 and IEC 62304certification.

"The path to where we are has been long and filled with unanticipated challenges and obstacles. We have meet all the massive engineering and technological problems we encountered, and each one helped us advance our understanding and ability to make the platform better. It is not surprising that we now find ourselves at the nexus of need where the science for this solution meets the patient demand, the physician's requirements, the marketplace's interest, and the global effort to democratize medicine. The timing is perfect and we have an answer."

– Josh Shachar
Founder, CEO and Inventor of the Technology

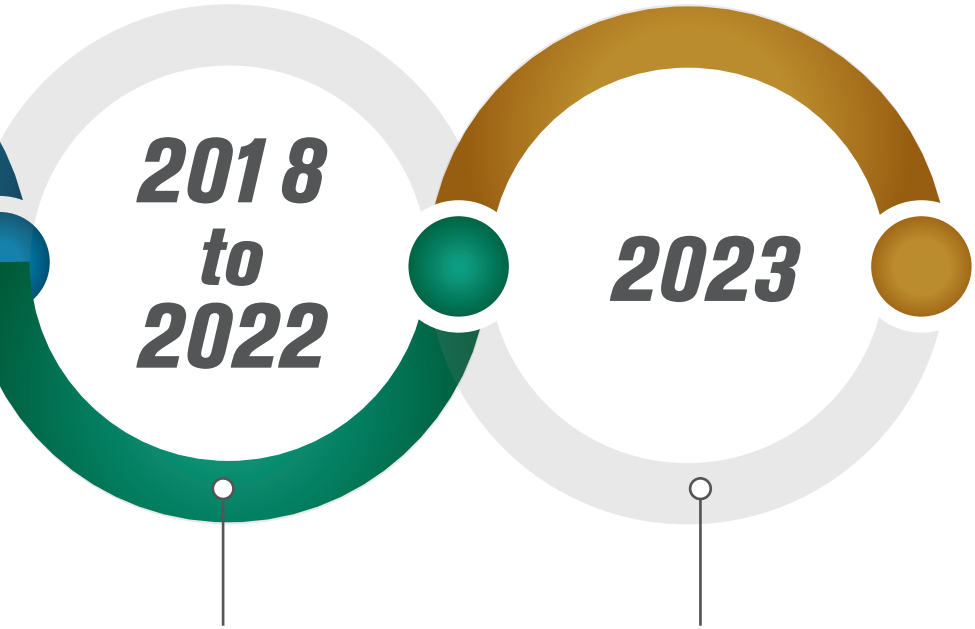
milestones **achieved**



- *1996 - First patent filed for CGCI, the predecessor to the Proteus™ Robotic Guidance technology.
- CGCI prototype constructed and proof of concept achieved.
- Initial animal studies successfully performed with CGCI-1
- Initial prototypes for the MOSFET Catheter, the predecessor to the Huygens™ Catheter, and the Lorentz Active Sheath are completed.
- Over fifty more patents related to the CGCI, MOSFET and Lorentz are filed by the end of the decade.

- CGCI-2 is constructed and validated.
- CGCI-2 Operating Suite is installed at University Hospital of La Paz in Madrid, Spain to conduct initial 20 patient study which is completed successfully.
- CGCI receives ISO-13485, IEC 60601-1, IEC, UL Certification, and CE mark.
- Two additional human studies involving 74 patients are completed in Madrid.
- Two additional CGCI Operating Suites are installed in Prague and South Korea.

Though founded in 2019, NKC represents the efforts of over two decades of work in developing its novel EP catheter and catheter guidance system. Below are some of the major milestones the company has achieved along the way.



- By 2018, over 80 patents have been created securing the catheter and catheter guidance system IP.
- In 2019, NKC is incorporated and begins operations with transfer of all previous IP and assets to the company.
- Development begins on the Huygens™ Catheter and the Proteus™ Robotic Arm.
- Prototype development of the Huygens™ and the Proteus™ I are finalized and initial validation studies of the catheter are completed with Sandia National Labs.
- An additional 10 patents are filed related to the new innovations created with the Huygens™ and Proteus™.

- Development and testing of the Proteus™ II robotic guidance system.
- Phase I validation of Huygens™ Catheter from Sandia Nation Labs
- Development of protocols for an initial animal study to validate the safety and efficacy of the Huygens™ Catheter.
- Initial testing of the Huygens™ Catheter to simultaneously capture bioimpedance and biopotential signals.
- NKC continues ongoing plans for FDA approval of an HUD with an HDE as well as continuing discussions with potential buyers and licensees for its technologies.

going **forward**

NKC has set very aggressive goals for its development path for the 2023 - 2024 calendar. Although validation and market approval for commercialization of its Huygens™ Catheter will continue to be a primary goal, the company is additionally focusing in bringing its Proteus™ II to operational standard and finalizing the remaining interface and communication needs of its NKC Operating Suite. In specific, the company has set the following milestones for completion by the end of Q4 2023.

2023 Q3 – Q4 GOALS

- Finish electrical and firmware refinements to Huygens™ Catheter for prototype manufacture in Q1 2024.
- Test and validate ability of the Huygens™ Catheter to concurrently measure both biopotential and bioimpedance signals.
- Finalize design specifications and acquire prototype for Proteus™ II Robotic Arm Gripper, and perform initial navigation control tests.
- Manufacture needed catheters to be used in Harbor-UCLA animal study.
- Finalize all components for the Huygens™ Catheter handle for prototype manufacture in Q1 2024.
- Continue development and test of all software, firmware and GUI/GUE platforms on the Proteus™ II Robotic Arm to be ready for Man-In-Loop testing by Q1 2024.
- Finalize all software and firmware development for the integration of the EnSite NavX into the NKC Operating Suite for wet lab bioimpedance testing in Q1 2024

THE PRIORITY

The Company's priority is to make the needed quantity of the Huygens™ Catheter prototype that will be used for conducting the in-vivo large animal studies and the validation study to prove the biopotential signal capabilities that differentiate the Huygens™ Catheter for application in the EP field. Upon completion of the animal study and the validation study and with the acquired data in hand, the Company plans to present the opportunity to all major players in the medical device industry who could capitalize on the application of the Huygens™ Catheter technology for an EP disease field of use. The Company plans to complete a transaction with the bidder who has the most attractive offer. If the transaction is a licensing of the technology as opposed to a sale of the Company, the funds generated from such a transaction should increase the Company's market capitalization and should make the Company self-sufficient and remove the need for future fund raising.

NOTICE TO INVESTORS

To date, NKC has been very successful in achieving the goals it has set. This is due in great part to the confidence and trust of its family of investors. Their continued support is what allows us to move forward to achieving both the humanitarian and commercial success we believe our technology platform can bring.

To achieve the next-step milestones outlined in this Executive Summary, NKC is offering investors a Convertible Note for the aggregate of $2,500,000 which upon filing and approval of its amended Articles of Incorporation with the Delaware Secretary of State, will be converted to Series B Preferred Stock in its upcoming $3,750,000 Private Placement equity raise.

If you are interested in participating in this offer, please contact NKC's Director of Investor Relations at info@neuro-kinesis.com

SAFE HARBOR STATEMENT

The information in this brochure contains forward-looking statements. These statements relate to future events or our future financial performance. In some cases, you can identify forward-looking statements by hearing terminology such as “may”, “should”, “expects”, “plans”, “anticipates”, “believes”, “estimates”, “predicts”, “potential” or “continue” or the negative of these terms or other comparable terminology.

These statements are only predictions and involve known and unknown risks, uncertainties and other factors that may cause our or our industry’s actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. Except as required by applicable law, including the securities laws of the United States, we do not intend to update any of the forward-looking statements to conform these statements to actual results.

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