**What is Whole Body Cryotherapy (also referred to as WBC or Cryo)?**

**PHYSIOLOGY OVERVIEW:**

WBC from review of various studies and sources shows two very prominent systemic responses. “Cold Shock” (dropping the skin temperature on a whole-body level and primarily around the core where the concentration of thermoreceptive (nerve ending neurons) are located send distress signals to the brain. The reactivity in the brain is two-fold. First, there is a Central Nervous System (CNS) reaction whereby the hypothalamus directs the endocrine system to release endorphins in vast amounts quickly. Additionally, cold shock protein (norepinephrine) is released in the brain (said to be twice the average producing levels). Norepinephrine is a powerful anti-inflammatory protein which inhibits TNFa production (an inflammatory cytokine produced by the immune system in response to injury, foreign bodies, etc.) Endorphins are the feel-good hormone; elevating mood, with an opioid-like response, blocking pain reception signals. This CNS response is the Symptomatic reaction we get with whole body cryotherapy to pain and inflammation, quickly reducing feeling of pain. Patients experience improved range of motion with pain reduction almost immediately as restrictive connective tissue relaxes without pain reception.

Additionally, during the process, the brain senses rapid heat transfer (hypothermic simulation) due to extreme skin temperature change, thus creating a parasympathetic (Autonomic Nervous System) reaction with circulation. Blood draws from the extremities to the core to protect from heat transfer. This occurs within 30-seconds to one minute of exposure. Blood pooling in the core oxygenates and is enriched with nutrients. Upon exit of the chamber, as the skin temperature rapidly rewarms, the brain releases the blood supply back to the extremities with a vasodilation estimated to be 3:1. Ironically, over the short duration exposure, there is little change in core temp. This process flushes areas of injury of toxic waste and bad cells replenishing with good blood to stimulate cellular regeneration. This is the systemic circulation benefit dealing with underlying condition (Regen). This process should not be thought of as comparable to ice or immersion. It does not have a gradual metabolic effect, it has a rapid thermogenic and peripheral effect with the added chemical release mentioned above.

At US Cryotherapy centers, we complement the systemic whole body cryotherapy (followed by a brief period of re-warming for rapid revascularization) with targeted cold air treatments to a specific injured area. Again, we flush an area as our devices cool the skin (locally) causing a “run” from the temperature. This signals the body to hold the blood supply back an additional time (adding to the anti-inflammatory result in an area, followed by targeted delivery of that supply into the area with a considerable depth of penetration (3.5cm measured in two studies done at Illinois State) compared to 2.4 with ice.

The body can be amazing in healing itself. However, with whole body inflammation and chronic conditions, sometimes efficiencies break down. To accelerate recoveries, sympathetic stimulation (implied stress – cold shock) can reset the system while producing excess amounts of very functional and productive hormones and proteins to do their jobs. The effects are multiplied when the body is circulating at a highly productive level with full transport and delivery to all extremities.

**TREATMENT PROCESS:**

The process of whole body cryotherapy at US Cryotherapy involves walking in an ambient temperature cold room for a set duration of time. The exposure to cold shock rapidly changes skin temperature without affecting your core. The desired clinical range of skin temperature drop is 30-45 degrees from start to finish of treatment measured in or around the core region (shoulder, chest, triceps). At US Cryotherapy, we measure and record...
every treatment session with start and exit temperatures to enable us to adjust treatment exposure times as we know BMI and vascularity as well as size play a role in skin temperature drops.

You will be given a full explanation of the process, benefits and safety instructions by a US Cryotherapy certified staff member to ensure an optimal experience. Prior to chamber entry, you will be provided with necessary protective wear. Our whole-body cryotherapy chambers can accommodate multiple users at one time, (may vary by location and size of chamber).

Cold air therapy in the whole-body chamber is a dry fresh, oxygenated air — due to the lack of moisture (humidity) or wind chill, and is not painful like an ice bath or immersion. During the treatment, your skin temperature will decrease between 30-45 degrees over 2.5 to 3.5 minutes inside the chamber. All first-time customers start at 2.5 minutes. You will immediately warm after exiting the chamber, with full range of motion in your muscles and joints, unlike water or ice treatments, where the joints remain stiff for hours. Even if you don’t like being cold, this process will rejuvenate your body, skin and mind, and you will leave feeling warmer than when you arrived.

During your experience, you will listen to music to pass the time and an attendant will be monitoring your every movement through a large glass window or door at the technician station outside the chamber. The chamber doors are incapable of locking, so if you feel uncomfortable, you can easily exit the chamber at any time. If you are intimidated about going alone, no worries, our friendly staff is always available to go in with you, and most often at our centers, there’s a member always willing to introduce a first-time visitor as a companion inside the chamber.

THE MARKET AND US CRYOTHERAPY ADVANTAGES:

The market for Whole Body Cryotherapy (WBC) and its publicized Alternative Health benefits for the body continue to emerge in the United States. The FDA currently does not recognize the device or treatments as regulated or approved medical devices for any specific medical indications. There are 4 specified claims in Europe with 220+ supportive clinical studies available on the National Institutes of Health (Pub Med) of which 95% of have been performed in the walk-in electric refrigerated systems comparable to the US Cryotherapy products. There is very little safety or clinical data available with the use of the nitrogen (forced air) sauna systems.

US Cryotherapy started the Whole Body Cryotherapy market in the US with its first treatment center in Roseville (Greater Sacramento CA) in April of 2011 to establish a new holistic way of helping the body recover, raise awareness, build a brand, and grow organically. We did so with the intent of offering a novel new wellness center and a full services model that would be sustainable and affordable for the customer. In six years, we have treated over 500,000 people across the nation and are growing rapidly as word of mouth spreads about the advantages of whole body cryotherapy delivered specifically at a US Cryotherapy center. There are currently 13 centers open to the public with an expected 30 to be in operation by end of 2017.

We are unlike the nitrogen sauna operators (open faced single person systems) or distributors who have focused on expensive and exclusive novelty treatments lacking focus on sustainability, outcomes or safety. At US Cryotherapy centers, memberships and unlimited use options average less than 3-4 treatments at a competing sauna locale, with a full complement of treatments such as targeted cold air devices, hydro massage, vibration plate stimulators, compression therapy, and facial rejuvenation treatments. Services vary slightly by center. You wouldn’t go to the gym 3-4 times and expect a resounding result. Whole body cryotherapy is most beneficial when utilized as a lifestyle supplement, several times per week. We are the only company making that possible and easy for our customers.

US Cryotherapy is the brand people know and trust. We offer the Only True Whole Body Cryotherapy centers in the US. We take care of your recoveries because we take care of every part of the process from
manufacturing equipment, to building functional user friendly centers, to creating programs for our customers to enhance their quality of life as a routine rather than a single procedure. You can expect the same treatment, outcomes and service at any US Cryotherapy center from Coast to Coast, and if you are an Executive Member, you can use any location during your travels.

THE MARKET AND US CRYOTHERAPY ADVANTAGES:

The Only Competitors

In July of 2016, the FDA released a Consumer Health Alert related to the use of the nitrogen saunas and the inherent risk factors associated with exposing the body to nitrogen vapor (forced air burns in the lower extremities, dizziness or lightheadedness, respiratory and ocular concerns, and risk of death as seen with an incident due to asphyxiation in Nevada in November of 2015. July 5, 2016 FDA Statement on Liquid Nitrogen Sauna use. Clicking here will allow you to read their concerns, warnings, and comments.

There are 5+ different nitrogen sauna products in the market (most being imported from Europe). Several hundred of these systems are in use across the US in boutique Cryo centers being operated by independent owner/operators, spas & gyms.

US Cryotherapy is the only company in the Whole Body Cryotherapy market with a systematic treatment center concept and approach where customers can receive consistency in quality, care, service, expertise, value, outcomes — which is why we have gained the public’s trust. We are the only true whole body cryotherapy and we are truly different than all the others.

ABOUT US CRYOTHERAPY (CORPORATE):

US Cryotherapy is privately owned and operated by the Kramer Family. The business idea was brought by Linzie Kramer to his three sons (Kevin – CEO, Rob CFO, and Todd – Director of Operations) in 2010 after experiencing a treatment center in Europe. The Family began the business as a distributor and importer of German manufactured equipment by opening the first US retail center in April, 2011 in Roseville CA. This flagship center continues to treat thousands of customers per month with extreme user and membership loyalty dating back to the opening months. While awareness was growing in the US for the treatments and outcomes, US Cryotherapy sold various chambers and cold air devices to a few NBA/MLB/NFL/NCAA teams for their training rooms and built a second treatment center (as a replica franchise model location) in Davis CA in mid-2014. Shortly after opening the center in Davis, the Company’s direction changed due to equipment and service failures with through their existing relationship.

The family invested in R&D, finding a very capable partner in the Greater Sacramento Area to contract manufacture new and improved proprietary chambers. During 2015, the Company prepared for its equipment launch by building its infrastructure in Franchising and Sales, later opening its Corporate Offices in Davis CA in January, 2016. With the release of its C1 Recovery Single Room Chamber in November, 2015, the first Franchise system opened in Naples FL. Several other franchise centers and chamber sales followed throughout 2016 with the included release of the C4 2-room 4-person chamber mid-year. As of early 2017, US Cryotherapy has 13 treatment centers open to the public (9 franchise locations) and 4 company owned locations, having added Scottsdale AZ and Redondo Beach at Velocity Sports Performance to the Roseville and Davis Corporate list. US Cryotherapy has an additional 20+ signed franchisee’s in buildout. The Company is approved in 42 states as a Franchisor and is an SBA(7a) preferred Franchisor.

LOOKING FORWARD
US Cryotherapy is treating over 10,000 people per month across the country and growing steadily. Since opening its doors in 2011, total numbers have amassed 550,000 chamber treatments. Their safety record is perfect. US Cryotherapy has established a safety and customer management protocol of electronic check-in and waiver screening, use of personal protective gear in the chamber, pre-use check list and skin temperature monitoring, data entry for every treatment, and historical tracking for every chamber entry. There is nothing comparable in the market to this management and safety control system. Whole Body Cryotherapy, and the other modalities designed to complement recoveries offered at a US Cryotherapy center, have helped thousands of people feel better faster and naturally. Cold shock can sympathetically stimulate the body into repair mode with release of several key hormones and proteins and via enhanced circulation. In years to come, the use of US Cryotherapy centers will be accepted as commonplace as the practice of exercise, Yoga and good nutrition are for the body. The qualities the customer associates with a US Cryotherapy center (trust, expertise, value, sustainability, LIFESTYLE) are what make the Company the leader in the marketplace and will drive the continued evolution of holistic and alternative wellbeing through several days per week exposure to cold shock. It does a body and mind wonders!

Kramer Family Bios

Kevin M. Kramer
Co-Owner, Chief Operating Officer
https://www.linkedin.com/in/kevin-kramer-b1b40425

EXPERIENCE
Kevin is responsible for Executive Management and daily operations overseeing all functional divisions within US Cryotherapy Corporate (Direct Sales, Franchising, Company Owned Center Operations, and Manufacturing Partnerships). He focuses most of his daily activities on team building and evaluating infrastructure, Clinical Pathways, Marketing and Sales support, and external partnerships while representing the organization as the public face via media/press related events and speaking engagements. Kevin previously spent 20+ years across multiple segments in the pharmaceuticals industry: Sales, Marketing, Managed Care, Clinical and Product Development primarily in the field of Neurology. He has vast experience with management and team building, clinical protocol development and product performance metrics, contracting, product launch and optimization. He left the Pharma industry in early 2013 to run US Cryotherapy full-time as the CEO. At the time, the Company was emerging into product sales after having established proof of concept in the US with its flagship center in Roseville CA. In their 6-year history, Kevin has directed 13 US Cryotherapy center openings, seen over 500,000 successful and safe customer treatments administered, launched 3 clinical trials, and placed equipment in dozens of professional sports teams training rooms.

EDUCATION

BA Degree double major (Graphic Design & Communications) from The University of Notre Dame, 1991. Member of the Public Relations Society of America (PRSA) and Author’s Guild (Published Coalwater: Fiction, 2004 ISBN 10: 0595661629)
L. Robert Kramer, JD, MBA, ARM  
Co-Owner, Chief Financial Officer  
www.linkedin.com/in/robkramer13

EXPERIENCE
As Chief Financial Officer of US Cryotherapy, Rob is accountable for the administrative, financial, and risk management operations of the company. He manages the development of a financial and operational strategy, maintains metrics tied to that strategy, and oversees the ongoing development and monitoring of control systems designed to preserve company assets and report accurate financial results. Separately, Rob continues to be employed by Bickmore, a York Risk Services Company. Rob has been a Principal with that firm since 1990. He is part of the firm’s internal Executive Management Team. As President of Program Administration at Bickmore, Rob is responsible for developing and executing the practice area’s strategic plan. Rob has experience in various consultative areas, such as administration of numerous group self-insurance programs; formation of new group self-insurance programs; development of governing documents and coverage memoranda; meeting facilitation; development of requests for proposals; benchmarking studies; and review of contracts and agreements for proper transfer of risk. He has served as Managing Director of Program Administration, Administration Practice Department Director, and as Executive Director of nine public and private entity joint powers insurance authorities and private self-insurance group clients.

EDUCATION
Doctorate of Jurisprudence – McGeorge School of Law  
Master of Business Administration – California State University, Sacramento  
Bachelor of Arts, Accounting – University of Notre Dame  
Associate in Risk Management (ARM) – Insurance Institute of America

Linzie E Kramer  
Co-Owner, Director of International Business Development

EXPERIENCE
Linzie Kramer is a co-founder and co-owner of numerous business enterprises doing business under the Umbrella of a Parent Company: US Cryotherapy LLC. Upon Graduation from Law School, Linzie practiced as an assistant and Staff Judge Advocate in the United States Air Force attaining the rank of Captain before his Honorable Discharge. He became a Partner in the Law Firm of Leggett, Gianola, Dacey and Kramer in 1968 where he remained until 1985. During this period, he also engaged in entrepreneurial activities which included Banking, (serving as a Director) Restaurant construction and operations, Commercial office building, Apartment building and Recreational Park building and operation. During this time, he became part time City Attorney for the City of Vacaville California in 1973 where he remained until he transitioned full-time in 1985 and continued to serve in that capacity until his retirement in late 1990. Upon his retirement, he co-founded a
Todd Kramer  
Co-Owner, Director of Corporate Operations  

EXPERIENCE  
Todd was formerly a Senior Risk Control Consultant for Travelers Insurance with 10+ years of experience in the Safety & Loss Control industry. In late 2010, he oversaw construction, development and operations of the Roseville flagship US Cryotherapy center. He holds Certifications in Occupational Health & Safety through UC Davis and has his Associate in Risk Management (ARM) designation. Prior to his career in the Safety & Loss control industry, he was a Certified Personal Trainer (CPT) at 24-Hour Fitness, is a Nationally Certified Personal Trainer (CPT) through International Sports Science Association (ISSA), National Fitness Professional Association (NFPA), and United States Weightlifting Association (USWA).

Today, Todd is the Corporate Director of Operations for US Cryotherapy. He is principally responsible for all that is entailed within the function and operations of the centers (for both the Company owned locations and Franchise Division centers). Todd developed the online training modules for system-wide cohesive employee training and development, operational documents, and our customer management information system which includes digital physical readiness screening, service processing, customer management tracking and analytic data capturing reports. The US Cryotherapy systems are industry leading, cutting edge. There are no Cryotherapy centers in the world operating as efficiently as the US Cryotherapy systems.

EDUCATION  
Bachelor of Science (BS) in Finance and Risk Management – California State University, Sacramento (CSUS)  
Certified in Occupational Health & Safety - UC Davis Extension  
Associate in Risk Management (ARM)  
International Sports Science Association (ISSA), National Fitness Professional Association (NFPA), United States Weightlifting Association (USWA)
restricted liability coverages or workers comp by insurance underwriters, better outcomes as seen in all WBC studies on the NIH.

- 4 US Cryotherapy Company owned locations: Roseville CA, Davis CA, Scottsdale AZ, Redondo Beach CA at Velocity Sports Performance

- “Cold Shock” or cold air treatment over 3 minutes has a two-part response (chemical – release of endorphins and norepinephrine) and physiological (parasympathetic – blood flow or circulation enhancement)

- The feeling over three minutes is very tolerable. Misperceptions are that it would be too cold, when in fact the dry, non-humid air is cold, but not intolerable for a short duration, in fact many report it to be invigorating and feel immediately warmer shortly after the exposure.

- This treatment is not to be confused with icing or emersion. It is not temperature related either. It is a systemic skin shock or thermogenic stimulant which alerts the brain and body to accelerate protective healing mechanisms.

- Results of whole body cryotherapy should be determined exclusively by skin temperature reductions (drops of 30-45 degrees) measured around the core where the body’s thermoreceptor activity is greatest; it is not about the coldest temperatures of the unit as cited by nitrogen operators – if it were, all the studies would not have been done at -110C/-166F which is the temperature of the refrigeration systems? The irony is that many of the nitrogen operators use all the studies done in walk-in systems to promote their product, yet site temperatures of -240 to -300F as if that seems more effective?

- Cryotherapy is a non-medical, non-invasive procedure.

- The US Cryotherapy chambers and localized devices have not been FDA reviewed or 510K approved for medical indications now.

- Services provided at US Cryotherapy centers: Whole Body Cryotherapy (chamber), Localized cold air therapy (targeted spot treatments), Facial Rejuvenation cold air treatments, Hydro Massage bed, Normatec Compression, Vibration Plates (services vary by location)

- Average price points for consumer: Executive Membership rate - $79/mo. = 3 full service treatments (chamber + localized). Carryover if not used, reciprocal use at any location. No appointments necessary. Walk-in rates, full service treatment averages $35. Various packages available to fit customer needs, budget and schedules.

- US Cryotherapy expected to expand to 25+ locations nationwide by end of 2017

- Long term projection (5 years), 200+ locations

**CONTACT INFORMATION**

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To find Open US Cryotherapy Locations, visit: http://www.uscryotherapy.com/locations-list/