



About Us

ForwardGro has combined best in class greenhouse growing practices, business management, medical cannabis research, and patient advocacy to become one of Maryland's premier growers of medical cannabis. The team understands the plant-related benefits of growing cannabis in an energy-efficient and sustainable greenhouse environment will result in the most consistent product possible.

While the medical value of cannabis is known, and accepted in many states, there are still many new uses and science-based opportunities yet to be determined. ForwardGro Medical Director, Dr. Deb Kimless, has been actively pursuing data through pro bono individualized treatments of patients suffering from a range of conditions including: epilepsy, arthritis, cancer and pain management. In states where medical cannabis is currently legal, she has assisted patients in developing tailored treatment plans using different methods of administration, and varying cannabinoid ratios to influence patient response. A specialist in the Endocannabinoid System (ECS), a signaling system that maintains physiological balance throughout the body, she's demonstrated how cannabis treatments work with the ECS to treat pain and other medical conditions. Additional and ongoing research demonstrates the potential for cannabis-related treatments for disease and other medical conditions far beyond what is currently known. Dr Kimless is an internationally recognized speaker.

ForwardGro Patient Advocate, Gail Rand, who has a family member who suffers from epilepsy, became passionately involved in the Maryland legislature in 2013 as a parent advocate. She played an integral role in helping to pass the 2014 medical cannabis legislation in Maryland, as well as the 2015 legislation that further improved the program. She is the founder of StopTheSeizures.org, a parental advocacy group for the legalization of medical cannabis in Maryland for children with epilepsy. Rand's expertise working on behalf of patients, will help ensure that ForwardGro will bring high-quality medical cannabis to patients in need in the state of Maryland.

Company Background

ForwardGro and ForwardExtracts have combined best in class business management, medical cannabis research, greenhouse growing practices, product manufacturing, and patient advocacy to become Maryland's premier grower of medical cannabis and related products. The team was united in 2014 by a common goal – to bring legal, accessible and quality medical cannabis to the state of Maryland. Through years of research, industry and professional relationship building, and business planning, the team is ready to grow having secured its Stage 1 license from the Maryland Medical Cannabis Commission. The team will begin immediately to finalize greenhouse plans in order to secure Stage 2 licenses to begin growing, and have products available for purchase in the second half of 2017.

Looking Forward

In 2013 when Mike McCarthy and Gary Mangum, co-founders of Maryland's largest greenhouse operation learned the state was considering legalizing cannabis for medical use, they were very interested in learning about the growing process. Their initial research showed the vast majority of cannabis being produced via indoor growing facilities, which went against everything the duo knew from a lifetime of working in agriculture, growing plants in controlled greenhouse environments utilizing the sun and changing seasons to grow consistent, quality plant products of all descriptions.

In early 2014, McCarthy and Mangum were introduced to Debra Kimless, MD, a board certified anesthesiologist with a subspecialty in pain medicine. Kimless had been studying the effects of cannabis on a variety of medical conditions ranging from simple pain management, as a positive replacement for opioids, and as a treatment component for major disease. Kimless' first-hand experience in helping patients in legal states through individualized treatments, and her willingness to share her knowledge has made her a leading voice at cannabis- related conferences and symposiums around the world.

In March 2014, Mangum testified before the Maryland legislature related to agricultural expertise on the topic of growing, and was interviewed by WBAL-TV (<http://bit.ly/2aE41pV>) in an Eastern Shore greenhouse where he discussed the simplicity, energy savings, and sustainability of greenhouse growing as compared to artificial indoor environments. It was this WBAL-TV piece that led Gail Rand to reach out to Mangum as they were both parents that could relate to the struggles around epilepsy and the impact it has on families.

Gail Rand, a CPA, financial consultant and working mom whose son suffers from epilepsy was passionately pursuing cannabis legislation in Maryland. She played an integral role in helping pass the 2014 medical cannabis legislation (SB923/HB881), as well as the 2015 legislation that improved the program. She founded StopTheSeizures.org, a parental advocacy group for the legalization of medical cannabis in Maryland for children with epilepsy. She is CEO and founder of Grand Consulting, LLC, focused in the cannabis industry.

Greenhouse Growing

As founders of Bell Nursery, the nation's seventh largest greenhouse operation, Mike McCarthy and Gary Mangum, have deep roots in Maryland agriculture. Mangum's family owned greenhouses in Montgomery County as far back as the 19th century. The duo started their careers with Creative Plantings, the nation's first, and ultimately one of the largest interiorscape service providers, owned by Mangum's parents. They purchased the entire operation in 1992 and Bell Nursery began selling to Home Depot soon after. In 2008, Bell was named Home Depot Supplier of the Year, and today, Depot's single largest live goods supplier, with operations in six states and the District of Columbia. Recently Mangum and Bell Nursery were chosen for the 2016 Innovation Award, presented by the Montgomery County Chamber of Commerce for their work with pollinator preservation and for their widely celebrated environmental growing practices.

Based on their success in growing live goods, McCarthy and Mangum quickly saw the potential for growing cannabis in a greenhouse environment. Greenhouses are efficient, sustainable, require less energy and result in a more consistent, robust product. McCarthy and Mangum are experts in Integrated Pest Management, an industry best practice for reducing pesticide usage through more hands on and natural treatment of pests, which means fewer chemicals used in growing best in class flowers, including cannabis.

Medicinal Value

While the medical value of cannabis is known, and accepted in many states, there are still many new uses and science opportunities yet to be revealed. Kimless has been actively pursuing data through pro bono individualized treatments of patients suffering from a range of conditions including: epilepsy, arthritis, cancer and pain. In states where medical cannabis is currently legal, she's assisted patients in developing tailored treatment plans using different methods of administration and varying cannabinoid ratios to influence patient response. She's become a specialist in the Endocannabinoid System (ECS), a signaling system that maintains physiological balance throughout the body. She has demonstrated how cannabis treatments work with the ECS to treat pain and other medical conditions.

Ongoing research demonstrates the potential for cannabis related treatments for disease and other medical conditions far beyond what is currently known. Kimless is on the leading edge of these discoveries through both Kimless' own pro bono medical research, and relationships with others on the forefront of medical cannabis worldwide.

Patient Advocacy

The Forward Team is naturally passionate about patient advocacy. As parents of children who suffer from seizures, both Mangum and Rand have a personal interest in cannabis as a valid and proven medical treatment. Kimless has witnessed first-hand the potential for medical treatments using cannabis microdoses and topical therapies. The uses of medical cannabis have only begun to be tapped, and the team plans to be at the forefront in developing new treatments, studying and learning from the world's most preeminent researchers.

Moving Forward

By late 2015 the Forward team was assembled and putting long hours into developing their application to earn Stage 1 license. Over the 40 days allotted by the state they worked endless hours to create a personalized application that speaks to the team's passion. The all encompassing effort paid off in August 2016 when the state of Maryland announced Stage 1 licenses for ForwardGro to establish greenhouse growing facilities for the purpose of growing medical cannabis. Upon production site approval and issuance of the Stage 2 license, ForwardGro products will be cultivated. The team expects products to be available to Maryland licensed dispensaries and processors several months later.

ForwardExtracts will work with processors to produce top quality medical products so patients have access to clean, consistent, standardized, whole plant medicines. ForwardExtracts will develop top of the line cannabinoid and terpene products in many forms including oils, lotions, suppositories, capsules and more. ForwardExtracts' products will be available for purchase by licensed retailers throughout the state of Maryland.

By uniting the passion for compassionate medical care with sustainable growing practices, ForwardGro and ForwardExtracts promise to be the leaders in providing clean, quality cannabis and cannabis-based medical products to patients throughout Maryland.

Fact Sheet

Mission

Enhance the lives of patients through creating the best of class medical cannabis and cannabis-related products that leverage the latest in medicine, science and technology.

Goals

- Cultivate clean, standardized, and reproducible quality medical cannabis in an energy efficient manner.
- Meet customer needs by selling cannabis and cannabis related products with a large variety of cannabinoid profiles and routes of administration at a variety of price ranges.
- Provide cannabis to dispensaries throughout the state to ensure quality medicine and medicinal products are readily available to patients throughout Maryland.
- Hire and train positive, knowledgeable, compassionate, and skillful employees.
- Rigorously observe and enforce the cannabis laws and regulations in Maryland.
- Participate in our community through education on the impact of medical cannabis and its potential benefits.

Leadership Team

Gary Mangum and Mike McCarthy – National leaders in the greenhouse growing industry. Co-founders of the 7th largest ornamental horticulture grower in America, with 425 acres of greenhouse and farmland producing over 100 million plants a year.

Deb Kimless, M.D. – Licensed anesthesiologist and dedicated researcher of medical use of cannabis for pain management, cancer, and as opioid replacement.

Gail Rand, CPA – Certified public accountant who has a professional background in financial audits, process improvement and systems management. Rand has been actively involved in the Maryland legislative process surrounding medicinal cannabis and its potential uses for her son who has epilepsy.

Operations

ForwardGro will produce best in class medical cannabis in state-of-the-art greenhouse facilities. ForwardGro products will be available for purchase by licensed processors and retailers throughout the state of Maryland.

ForwardExtracts will produce top quality medical cannabis products, including concentrates, capsules, cartridges, suppositories, tinctures, oils, and topicals. ForwardExtracts' products will be available for purchase by licensed retailers throughout the state of Maryland.

Facilities

Several sites currently owned by the company's principals and zoned for agriculture are under consideration. The site that is ultimately selected will have highly secure state-of-the-art greenhouses facilities.

Why Greenhouse

Greenhouse growing is the most efficient, cost effective way to produce consistent plant material year round, regardless of climate.

1. Energy Efficient – utilize natural sunlight and airflow to control light and temperature.
2. Natural – create a more robust product with less artificial supplementation.
3. Sustainable – reduce chemical usage through best practice Integrated Pest Management strategies.
4. Security – able to set up an environment that provides top of the line security throughout the facility.

Varieties

Initial varieties/strains will be selected by Kimless based on latest research and case studies of the most effective medical treatments.

ForwardExtracts

ForwardExtracts will work with licensed processors to produce top of the line cannabinoid and terpene infused products. We will ensure that patients have access to clean, consistent, standardized, whole-plant medicinal products are produced. Together we will create a wide selection of cannabis products including, but not limited to, the following:

- Concentrates
- Cartridges
- Oils
- Tinctures
- Suppositories
- Capsules
- Topical applications

New products will be developed and produced as medical science and technology evolve.

Timeline

November 2015 – Submitted Stage 1 application for growing and processing license

August 2016 – Maryland Medical Cannabis Commission issued Phase 1 licenses

120 days – Build or retrofit greenhouse facilities

ASAP after 120 days – Secure Stage 2 license from the state of Maryland

After Stage 2 license is issued – Start cultivation

Q2/Q3 2017 – Cannabis flower available for purchase by dispensaries and processors.

Ongoing Education & Medical Research

Our medical director is actively involved in developing case studies related to pain and cancer and was selected to present her findings locally at numerous conferences. In 2016 alone, she was invited to present to the Harvard CannMed conference, Israel's cannabis conference, and King's College in London, England.

Leadership



Mike McCarthy

Mike McCarthy serves as chief executive officer and chief operating officer of ForwardGro and ForwardExtracts. He is co-founder and former president and chief executive officer of Bell Nursery USA, with an emphasis on company finance and operations. Under the 30 plus-year leadership of McCarthy with co-founder and brother-in-law, Gary Mangum, Bell has grown to become the nation's sixth largest ornamental horticulture grower, and single largest live goods supplier to The Home Depot, the company's only customer. This entrepreneurial power duo have started and led a number of related businesses in horticulture, agribusiness and greenhouse growing. He retired from Bell in 2010.

McCarthy's interest in green businesses started when he went to work for Mangum's parents in the 1970s. Starting as a maintenance technician with Creative Plantings, McCarthy oversaw plant maintenance and interiorscaping for clients in DC, Virginia and Maryland. He stayed on growing the family business to the fourth largest interiorscape firm in the country.

McCarthy currently serves as president of global manufacturing for International Green Structures (IGS). IGS offers a total economic model that solves the global housing crisis by converting agricultural residue into durable panels and pairing it with a pre-engineered framing system, providing emerging nations with the opportunity to purchase or produce sustainable, durable building structures. In this role, McCarthy works with the senior leadership team on corporate operations strategy and product development.

In addition to his work with IGS, McCarthy is involved in extensive real estate partnerships and other business investments, including Buddy Home Furnishings with 14 franchise locations in Pennsylvania and Texas, and Aqualok, an environmentally friendly storm water management tool with green roof applications. He is a lifelong Marylander who holds a bachelor of science in business from Mary Washington College.



Gary Mangum

Gary Mangum serves as Vice President and Chief Horticulture Officer of ForwardGro. In an unrelated capacity, he is also associated with Bell Nursery, purchased from his parents in 1992 with partner, Mike McCarthy. Bell operates today in six states. There is no business affiliation or relationship between the two companies.

Mangum is a recognized leader in the agriculture industry. Recently, he has worked with members of the broader environmental community and represented the horticulture industry on legislative issues. Over the past four years, pollinator protection and forage creation for our nation's pollinators have become trademark issues for Mangum. His team of greenhouse and horticultural experts have a high degree of social responsibility as part of their core values. As an early adopter and one of the first in Maryland, of Integrated Pest Management (IPM), Bell Nursery has reduced pesticide use by almost 70% per square foot over the past 12 years. These practices will be utilized and the newest technologies will be incorporated in this innovative new business to replicate "Best In Class" horticultural experiences in medical cannabis in Maryland. Although Mangum will not have an active role in ForwardGro, he will serve as the company's Chief Horticulturist utilizing a combination of skills and greenhouse plant physiology instinct that will be hard to match in the state. Quick to say he's never grown this particular plant, Mangum will oversee ForwardGro's Master Grower, who joined the company from California, and his team which includes Maryland-based IPM experts.

In 2015, Mangum was appointed by the Governor to serve on the Executive Board of the Maryland Stadium Authority, and in 2016, to the Critical Area Commission for the Chesapeake & Atlantic Coastal Bays. Mangum finds the latter role to be particularly gratifying, given his interest in the Chesapeake Bay. During his 35 years in agriculture, he has been involved a leadership capacity in most industry-related trade organizations, and writes a widely read business column in *GrowerTalks Magazine*.

Mangum devotes both time and resources to many outside interests, all designed to help others. He personally supports and advocates for severely-injured veterans, and recently, for Gold Star Families in Maryland. His interests in veterans affairs started by helping connect servicemen and women recovering at Walter

Reed's Warrior Transition Brigade with activities such as boating, hunting, fishing and everyone's favorite, target shooting. Being able to offer long term-employment opportunities to veterans is part of partners Mangum and McCarthy's goal related to this new endeavor.

Mangum and McCarthy continue to contribute both personal and business resources in west Baltimore by working directly with community leaders and with professionals in the Governor's Office of Community Initiatives to help disrupt the cycle of poverty. Over the years, Mangum has long promoted Bell Nursery's support of The Home Depot Foundation, United Way, and the Believe in Tomorrow Children's Foundation. As ForwardGro's business develops, the company will follow a similar path when it comes to community involvement.



Debra Kimless, M.D.

Dr. Debra Kimless, is the medical director for ForwardGro and ForwardExtracts. She has spent the past three years immersing herself in all aspects of medical cannabis, including scientific and medical applications for the treatment of patients. She has traveled the world studying under the most respected experts in cannabis medicine and science, most notably, in both the Netherlands and in Israel, two countries regarded as best practice models in the use of medical cannabis.

Kimless is widely regarded by her peers as one of the most experienced physicians specializing in the endocannabinoid system (“ECS”), micro dose, topical therapies, and how medical cannabis can be beneficial to help treat medical conditions as well as reduce or replace opioids for pain relief. She is frequently invited to speak at industry leading conferences and symposiums regarding the use of medical cannabis, and shares her knowledge by consulting with patients in legal states pro bono, to introduce cannabis as a medicinal option. She has first-hand experience in successfully aiding patients with various medical conditions. She helps patients tailor their treatment plans by using different methods of administration and cannabinoid ratios, which influence patient response.

Kimless’ passion for education extends to physicians, other health care workers, patients, and the general public where she gives lectures to help explain how medical cannabis can be used as an effective tool to regain and maintain health. She shares the knowledge she gains from patients with her peers in this country and around the globe. In 2016 was invited to present at Harvard’s CannMed, Israel’s Cann10 conference, and at the prestigious Doherty Lab of the Wolfson Centre for Age-Related Diseases at Kings College, in London, England.

Kimless graduated magna cum laude from Muhlenberg College with a double major in natural sciences and biology where she was selected to be part of Phi Beta Kappa honor society. She went on to medical school at Rutgers, and residency at Temple University Hospital. She is a boarded Anesthesiologist with a subspecialty certification in Pain Medicine. Kimless spent 15 years in private practice where she served on the executive board of one of the largest Anesthesiology groups in the country.



Gail Rand

Rand serves as chief financial officer and patient advocate for ForwardGro and ForwardExtracts. She has worked as an internal and external business consultant for over 20 years, with a focus on audit and advisory services, process improvement, treasury management, and systems consulting.

While at PricewaterhouseCoopers, she performed annual financial statement audits, system implementations, and special projects for telecommunications, hospitality, and technology companies, with a focus on Fortune 500 clients.

Rand served as treasury manager for ARINC, a private defense and aerospace company. She achieved efficiencies through system administration of the cash management tool and improving the processes around cash management functions, and managed benefit plans with trust assets totaling \$600 million. In 2014, ARINC was acquired by Rockwell Collins (NYSE: COL). There her role shifted to development of Lean process plans that improved business strategies when they were deployed.

Rand is a parent advocate, whose son suffers from epilepsy. She has been passionately involved in the Maryland cannabis laws and regulations since 2013. She played an integral role in helping to pass the 2014 medical cannabis legislation in Maryland, as well as the 2015 legislation that further improved the program. She is also a founder of StopTheSeizures.org, a parental advocacy group for the legalization of medical cannabis in Maryland for children with epilepsy. In March 2015, Rand formed Grand Consulting, LLC, a consulting company focused in the cannabis industry. Since then, Rand has been working in the cannabis industry on business plans, applications for licenses, project management, and strategic management. In 2015, she received the Courage Award given by Americans for Safe Access.

Rand is a graduate of the University of Virginia, with distinction, and a licensed Certified Public Accountant in the State of Maryland.