

# RAINFOREST IN THE DESERT



STC.UNNM

THE INNOVATION DOOR TO  
THE UNIVERSITY OF NEW MEXICO

# STC Overview



**STC.UNM serves and supports all of the University's academic programs, from science and medicine to fine arts and business management.**

**STC.UNM was formed in 1995.**



**STC.UNM**  
THE INNOVATION DOOR TO  
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# STC's NM Based Start-Up Companies



ThermoDynamic Films



Tyrosine Pharma



# STC's NM Based Start-Up Companies



ThermoDynamic Films



Tyrosine Pharma



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- ❖ Founded in 2001
- ❖ Computational modeling toolkit, an object-oriented framework for engineering projects
  - ❑ Captures current simulation best practices and enhances the use of associated design and engineering software tools
- ❖ Founded and developed by Malcolm Panthaki, CTO; Dan Meyer, President
- ❖ Received about \$10 million in venture capital from Flywheel Ventures, Sun Mountain Capital, and New Mexico Angels, ITU Ventures (Calif.), Fort Washington Capital Partners Group (Ohio), Athenian Venture Partners (Ohio)



# STC's NM Based Start-Up Companies



ThermoDynamic Films



Tyrosine Pharma



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- ❖ Founded in 2006
- ❖ Develops and markets innovative high-throughput cell and bead-based screening solutions for use throughout the life sciences.
- ❖ Founded by Terry Dunlay, CEO
- ❖ Technology developed by UNM's Dr. Larry Sklar, Professor of Pathology and Dr. Bruce Edwards, Research Professor of Pathology
- ❖ Raised over \$3.3 million in private equity from Verge Fund, Village Ventures , New Mexico Community Capital, and Prolog Ventures (Missouri)

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P.D. LABORATORIES



# NANO MR

- ❖ Founded in 2006
- ❖ nanoMR has developed the first system for rapid isolation of rare cells from complex matrices at levels of 1 cell/mL or lower.
  - ❑ Viable captured cells can be further processed (e.g. rapid culturing for antibiotic sensitivity testing), or to provide purified DNA for molecular testing.
- ❖ Dr. Victor Esch, President & CEO
- ❖ Large Facility in Albuquerque, NM; Starting FDA trials
- ❖ Raised \$21 million in venture capital since launching in 2006 with investors including vSpring Capital, Sun Mountain Capital, The Dow Chemical Company, Excel Venture (Mass.), Healthcare Ventures (Mass.)

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P.D. LABORATORIES





- ❖ Founded in 2007
- ❖ New Mexico-based company developing defect-free, gallium-nitride nanowire semiconductors
- ❖ Founded by Petros Varangis, Ph.D., President
- ❖ Developed by Stephen D. Hersee, Ph.D.
- ❖ Nanocrystal shares exclusivity of this intellectual property with another start-up company called glō AB, located in Sunnyvale, California
- ❖ Investors include Verge Fund along with investors in Taiwan

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Tyrosine Pharma



P.D. LABORATORIES



# Azano

Pharmaceuticals, Inc.

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- ❖ Founded in 2007
- ❖ Produces a C-reactive protein (CRP) and an anti-inflammatory derivative of CRP to help treat kidney failure associated with lupus and other autoimmune inflammatory pathogens
- ❖ Founded by Puente Partners, LLC a venture development company in Albuquerque
- ❖ A management team of Waneta Tuttle, PhD of Southwest Medical Ventures, Stuart Rose, PhD and Loraine V. Upham

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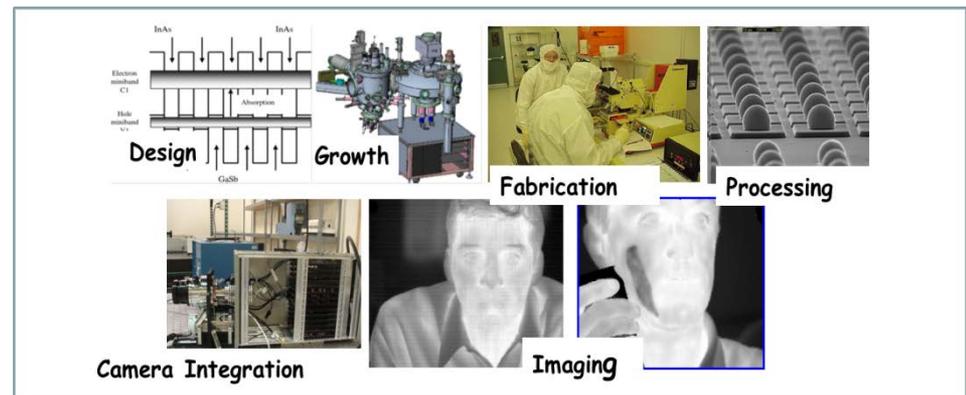


Tyrosine Pharma





- ❖ Founded in 2009
- ❖ A noninvasive diagnostic and detection system for skin cancer, based on a portable infrared imaging
- ❖ Co-founded by UNM researchers Sanchita Krishna, CSO and Sanjay Krishna, CTO
- ❖ Currently no outside investments, obtained phase 2 SBIR grants and IRS 48D grant



# STC's NM Based Start-Up Companies



ThermoDynamic Films



Tyrosine Pharma



- ❖ Founded in 2010
- ❖ Austin, TX based start-up developing a unique dry powder drug delivery device
  - ❑ Have 1st human clinical data – confirms 80% to human lung – 3x better than any other devices
  - ❑ Other benefits – pure drug/no formulation required; effective at low flow rates down to 15 liters/min
  - ❑ Working device prototypes for one, two and three drug simultaneous delivery
- ❖ Bob Curtis, CEO
- ❖ Seed capitalization from Cottonwood Technology Fund

# STC's NM Based Start-Up Companies



ThermoDynamic Films



Tyrosine Pharma





- ❖ Founded in 2010
- ❖ Manufactures and distributes superhydrophobic (LotusShield™) and superhydrophilic (HydroPhil™) coatings. The superhydrophilic (LotusShield™) was co-developed at Sandia National Laboratory and the University of New Mexico
  - ❑ This nano-scale coating mimics the nano-scale roughness of the lotus leaf to provide superior water repellency.
- ❖ Founded by Lawrence Chavez, CEO and Mark Walztoni, CBO
- ❖ Investors include New Mexico Angels, Flywheel Ventures' New Mexico Gap Fund, and strategic partner



# STC's NM Based Start-Up Companies



ThermoDynamic Films



Tyrosine Pharma



# Wedge Health Communications



- ❖ Founded in 2010
- ❖ Health IT related to risks of alcohol consumption and online alcohol server training program
  - ❑ Way To Serve is an exciting, media-rich training program to help you get your New Mexico online alcohol server training on your own computer at your own pace, 24/7. No need to travel to a class.
- ❖ Developed by Gill Woodall, UNM Center on Alcoholism, Substance Abuse, and Addictions (CASAA)

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ThermoDynamic Films



Tyrosine Pharma



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P.D. LABORATORIES





[www.avisapharma.com](http://www.avisapharma.com)

- ❖ Founded in 2010
- ❖ Avisa Pharma™ Inc., (“Avisa”) is an early stage company developing a proprietary, point-of-care biomarker BreathTest for the rapid and accurate detection and monitoring of urease producing multi-drug resistant pathogens.
  - ❑ Such pathogens compromise lung functionality, morbidity/mortality in patients with Ventilator Associated Pneumonia (VAP) and Cystic Fibrosis (CF).
- ❖ David Joseph, CEO
- ❖ Raised \$950K in convertible note
  - ❑ Seeking \$2M A Round for CF definitive trial and FDA and CE Mark Approvals



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ThermoDynamic Films



Tyrosine Pharma



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P.D. LABORATORIES



# AgilVax, Inc.

[www.agilvax.com](http://www.agilvax.com)



- ❖ Founded in 2011
- ❖ Albuquerque based start-up company developing superior vaccines and integrated platforms for rapid vaccine discovery and delivery using virus-like particle (VLP) based platforms.
  - ❑ It is the only vaccine discovery platform that simultaneously facilitates both vaccine discovery and implementation.
  
- ❖ Founded by Waneta Tuttle,
- ❖ Dr. Stuart Rose, Current CEO
  
- ❖ Raised \$500,000 from board members, seeking additional \$2 million to conduct animal studies for testing vaccines against acne and other indications



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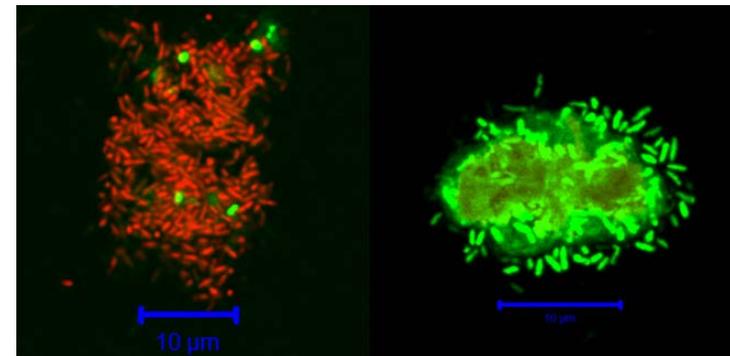
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# Oligocide, Inc.



- ❖ Founded in 2011
- ❖ Albuquerque, NM based start up company focusing on development of a robust, expansive, and novel antimicrobial materials platform.
  - ❑ Anitmicrobial Surfaces, Paints, Plastics, Sealants, Antimicrobial Fabrics, Fibers and Cloths and Papers, Self-Cleaning Antimicrobial Surfaces, Medical Devices, Air and Water Purification, Numerous Additional Applications
- ❖ Chuck Call, CEO
- ❖ Completed an initial closing of \$175,000 in seed-stage funding from a consortium of angel investors



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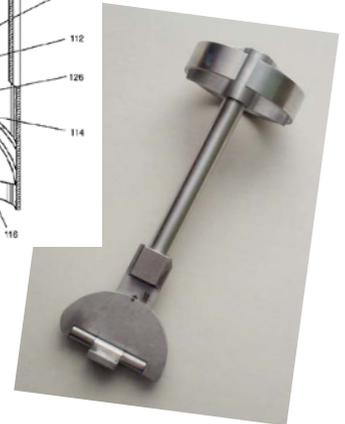
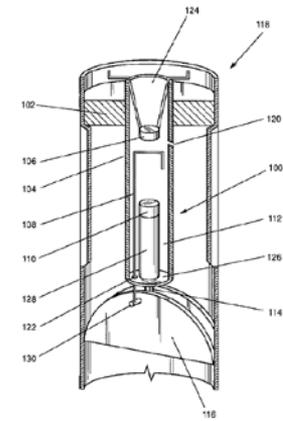
P.D. LABORATORIES





**TransMixSafeLock**

- ❖ Founded in 2011
- ❖ Albuquerque, NM based start-up company commercializing a patented device for preventing the transmix of fluids in tanks
  - ❑ Initial application in the transmix prevention of gasoline and diesel in gas station tanks
  - ❑ Additional applications in preventing transmix of alternative fuels and other liquids
- ❖ Dr. Trish Selcher, Founder
- ❖ Endre Zsigmond, Inventor
- ❖ Existing Prototype
  - ❑ Purely mechanical device, no power source required
  - ❑ Inexpensive to manufacture
  - ❑ Simple to install
  - ❑ Large Market
- ❖ Privately funded



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P.D. LABORATORIES



# ThermoDynamic Films

- ❖ Founded in 2010
- ❖ Market - optical refrigeration- method that utilizes a laser beam to cool a crystal within a device that experiences internal heat generation.
  - ❑ Technology- A combination of semiconductor lasers together with the intracavity enhancement methods to construct a compact optical cryocooler that increases cooling efficiency of an optical refrigerator.
  - ❑ Applications include superconducting microelectronics to cooling sensors for satellite reconnaissance systems
- ❖ Dr. Richard Epstein, CEO
- ❖ Developed by Dr. Mansoor Sheik-Bahae, UNM's Dept. Physics & Astronomy
- ❖ Currently using SBIR funding and establishing strategic partners



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ThermoDynamic Films



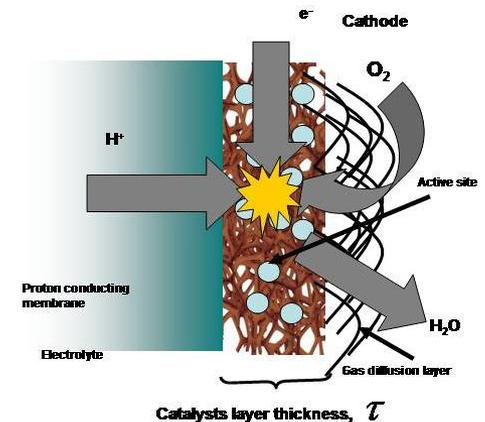
Tyrosine Pharma



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- ❖ Founded in 2012
- ❖ Albuquerque based start-up company focusing on non-platinum fuel cell catalysts
  - ❑ Technology is focused on the cathode side derived from a variety of different precursors
- ❖ Founded by Paul Short, CEO
- ❖ Verge Fund has invested \$1 Million



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Tyrosine Pharma

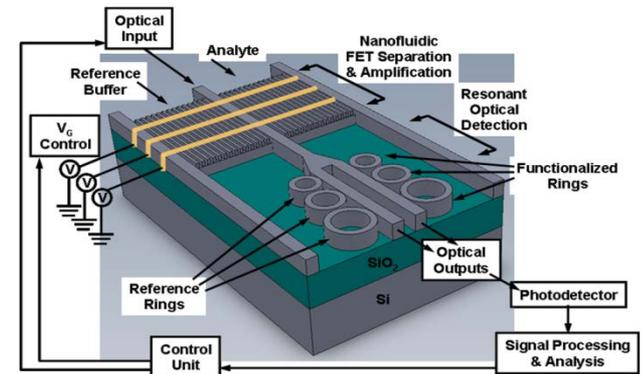


# P.D. Laboratories



P.D. LABORATORIES

- ❖ Founded in 2012
- ❖ Medical device company —to detect protein biomarkers indicative of the presence of cardiac disease, cancer, and infectious diseases in blood
  - ❑ Products will detect proteins indicative of the presence of cardiac disease, cancer, and infectious diseases in blood. Healthcare professionals can use these methods to accurately diagnose patients in a single test
- ❖ Founded by Joaquin Duran, CEO and Harry Pappas, COO
- ❖ Developed by Sang Han and Mani Hossein-Zadeh, UNM's Chemical & Nuclear Engineering
- ❖ Currently private investments
  - ❑ Seeking first round of \$600,000



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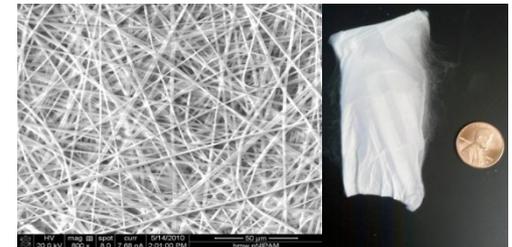
ThermoDynamic Films



Tyrosine Pharma



- ❖ Founded in 2012
- ❖ Company focused on the development of innovative bioactive microporous scaffolds for wound dressing and tissue engineering applications
  - ❑ Novel method to produce tailorable nano- and micro- fibrous mats from non-traditional materials



- ❖ Founded by the New Mexico Angels
- ❖ New Mexico Angels have invested \$50,000

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**Tyrosine Pharma**



# Tyrosine Pharma

- ❖ Founded in 2012
- ❖ A novel therapeutic agent to reduce brain damage, especially in stroke patients
  - ❑ Novel peptide sequence; derivative of naturally occurring striatal-enriched tyrosine phosphatase (STEP) protein
  - ❑ Will be prescribed for every case of cerebral stroke
    - Saves lives (patients demand; physicians prescribe)
    - Increases quality of life (insurance companies will save)
- ❖ Founded by the New Mexico Angels
- ❖ New Mexico Angels have invested \$15,000

