

NCBiotech Company Directory



August 2013



**North Carolina
Biotechnology Center**

ncbiotech.org/directory

NCBiotech Company Directory 2013



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Advantage North Carolina

North Carolina's 500+ companies enjoy outstanding quality of life in addition to:

- Workforce Training
- Collaborative Community
- Low Business Costs

Top Regional Biotechnology Assets

EASTERN

Regional Office: Greenville
Phone: 252-328-9981

Sector Strengths:

- Ag Biotech
- Functional Biofuels
- Marine Biotech

ncbiotech.org/east

PIEDMONT TRIAD

Regional Office: Winston-Salem
Phone: 252-725-6672

Sector Strengths:

- Regenerative Medicine
- Nanobiotechnology
- Medical Devices

ncbiotech.org/triad

SOUTHEASTERN

Regional Office: Wilmington
Phone: 910-763-5747

Sector Strengths:

- Marine Biotech
- Contract Research
- Pharmaceuticals and Nutraceuticals

ncbiotech.org/southeast

GREATER CHARLOTTE

Regional Office: Charlotte
Phone: 704-687-8563

Sector Strengths:

- Bioinformatics
- Health and Nutrition
- Biomedical Technologies

ncbiotech.org/charlotte

RESEARCH TRIANGLE PARK

Headquarters: Research Triangle Park
Phone: 919-541-9366

Sector Strengths:

- Biomanufacturing
- Contract Research
- Ag Biotech

ncbiotech.org

WESTERN

Regional Office: Asheville
Phone: 828-290-1431

Sector Strengths:

- Medical Devices
- Natural Products
- Fermentation

ncbiotech.org/west

Companies 1 – Ae

13C Molecular Inc. (*Fayetteville*) provides stable-isotope labeled, custom synthesized organic compounds to the pharmaceutical and biomedical industries.

www.13cmolecular.com

AAIPharma Services Corp. (*Wilmington and Durham*) provides drug product development services such as formulation development, analytical chemistry and manufacturing. The company's solid-dose manufacturing facility provides clinical and commercial supplies on contract.

www.aaiapharma.com

AccuGenomics Inc. (*Wilmington*) develops gene expression tests to diagnose and monitor cancer treatment.

www.accugenomics.com

Ace Bio-PharmTech LLC (*High Point*) uses asymmetric synthesis technologies to develop R&D processes, formulations of branded and generic pharmaceuticals, and active pharmaceutical ingredients.

www.acebiopharm.com

Achelos Therapeutics Inc. (*Chapel Hill*) develops therapeutics for the treatment of migraine and peripheral pain.

www.achelos.com

Actavis U.S. (*Lincolnton*) manufactures OTC and prescription hydrocortisone, anti-fungal and permethrin products as creams, ointments, liquids and suppositories.

www.actavis.us

Adherex Technologies Inc. (*Research Triangle Park*) develops cancer therapeutics. Its lead product under development is Eniluracil, an oral dihydropyrimidine dehydrogenase inhibitor to improve the tolerability and effectiveness of oncology drugs.

www.adherex.com

Adhezion Biomedical LLC (*Hudson*) develops and produces cyanoacrylate-based medical adhesive, wound care and microbial barrier products for connective tissue (human skin).

www.adhezion.com

Adroit Pharmaceutical Development LLC (*Durham*) identifies new and improved formulations and process technologies. Its primary focus is on inhalation and dermatological product development.

www.adroitpharmdev.com

ADS Pharma Consulting LLC (*Apex*) provides drug development services, including active pharmaceutical ingredient route development and manufacturing, analytical, pre- and formulation development, clinical batch manufacture and CMC regulatory affairs.

www.adspharma.net

Advanced Animal Diagnostics Inc. (*Durham*) develops and commercializes diagnostics to detect and manage disease states, reproductive, nutritional and overall health status of production animals. AAD's first product is a diagnostic test for mastitis in dairy cows.

www.advancedanimaldiagnostics.com

Advanced Liquid Logic Inc. (*Morrisville*) uses digital microfluidics to develop molecular diagnostics, bioassays and life-science research tools.

www.liquid-logic.com

Advanced Tear Diagnostics LLC (*Raleigh*) develops and markets a point-of-care lab testing system designed to assist eye-care physicians in detecting and quantifying biomarkers associated with external ocular disorders.

www.teardiagnosics.com

Aegis Women's Health Technologies Inc. (*Raleigh*) develops medical devices to help reduce recurrent urinary tract infections in women.

www.AegisWHT.com

Aerial Biopharma LLC (*Morrisville*) develops biologic and small-molecule central nervous system therapeutics, including treatments for narcolepsy and chronic pain.

www.aerialbio.com

Aerie Pharmaceuticals Inc. (*Research Triangle Park*) researches and develops treatments for glaucoma.

www.aeriepharma.com

Aerocrine Inc. USA (*Morrisville*) designs and develops products to aid in diagnosis and control of respiratory disease.

www.aerocrine.com



Affinergy LLC (*Durham*) uses biotechnology methods to create application-specific coatings for orthopedic and cardiovascular medical devices. Affinergy discovers peptides that can capture, deliver and retain specific proteins, drugs or cells.

www.affinergy.com

AgBiome Inc. (*Research Triangle Park*) conducts discovery and early stage research using crop microbiome to identify products that reduce risk and improve yields.

www.agbiome.com

Agile Sciences Inc. (*Raleigh*) has identified small molecules that inhibit and disperse bacterial biofilms. The company is investigating applications in medicine, agriculture and industry.

www.agilesci.com

Ajinomoto North America (*Raleigh*) manufactures pharmaceutical-grade amino acids and custom-blended amino acid mixtures.

www.ajiaminoscience.com

Alaeras Inc. (*Cary*) designs and manufactures drug-delivery products. The company is developing a platform technology for dry powder nasal vaccines that do not require refrigeration.

www.alaeras.com

Alderon BioSciences Inc. (*Beaufort*) develops point-of-care diagnostics.

Alera Labs LLC (*Research Triangle Park*) provides contract research analytical chemistry, in vitro toxicology and preformulation services.

www.aleralabs.com

Algaen Corp. (*Winston-Salem*) is exploring microalgae to develop, produce and market products and technologies for the nutraceutical, pharmaceutical and bio-energy industries.

www.algaen.com

Alganomics LLC (*Southport*) is researching and developing algae-culturing systems to create bioproducts, including biofuels.

www.algaeresource.com

Algnomics Inc. (*Chapel Hill*) uses phenotyping and genomics to develop diagnostics and therapeutics for chronic pain and related conditions.

www.algnomics.com

Alion Science and Technology Inc.

(*Durham*) provides toxicology research, animal husbandry, inhalation engineering and biochemistry services. Alion operates four bioscience research laboratories in the Triangle.

www.alionscience.com

Allergy Partners Extract Laboratory

(*Asheville*) produces extracts that are used to treat allergic disease, asthma and immunology.

www.allergypartners.com

Almac Clinical Services (*Durham*) provides clinical trial material manufacturing, packaging and distribution services.

www.almacgroup.com/clinical-trial-supply

Almac Diagnostics (*Durham*) offers services for biomarker discovery, assay development and validation, and delivery of biomarker assays.

www.almacgroup.com

ALP Life Sciences LLC (*Black Mountain*) is developing diagnostics and therapeutics for liver diseases and related inflammatory diseases.

www.alplifesciences.com

AlphaVax Inc. (*Research Triangle Park*)

develops vaccine technology with applications in infectious disease, cancer and biodefense threats.

www.alphavax.com

American Distillation Inc. (*Leland*)

manufactures industrial-grade ethyl alcohol and offers contract manufacturing services such as distillation, dehydration, reaction, carbon treating and blending.

www.americandistillation.net

Andersen Products Inc. (*Haw River*) provides contract packaging and sterilization services for medical device manufacturers. The company also manufactures a variety of surgical tubes and pumps.

www.anpro.com

Andersen Scientific Inc. (*Morrisville*) provides ethylene oxide sterilization and validation services, including package testing, shelf life and accelerated aging. Andersen's sterilization cycles include microbiological and other testing.

www.ansci.us

Annias Immunotherapeutics Inc. (*Chapel Hill*) is developing a therapeutic vaccine for the treatment of malignant brain tumors.

Antech Diagnostics Inc. (*Morrisville*) provides clinical and veterinary hematology analysis, clinical chemistry, urinalysis and coagulation testing.

www.antechglp.com

Appealing Products Inc. (*Raleigh*) develops products for forensics and personal protection from toxic materials such as inorganics, gases and poisons in foods, animal feeds and liquids.

www.appealingproducts.com

Applied Catheter Technologies Inc.

(*Winston-Salem*) develops drug-coated catheters for male urethral stricture and abdominal adhesions.

www.appliedcatheter.com

Applied Micro Products Inc. (*Chapel Hill*)

manufactures wood preservation products such as AMP21, a natural carbon source encased in a time-release delivery system.

www.appliedmicroproducts.com

Aptiv Solutions (*Durham*) offers drug and medical device development services including preclinical, CMC and GxP compliance consultancy, regulatory services, adaptive clinical trials, pharmacovigilance, clinical staffing and other operational clinical support.

www.aptivsolutions.com

Arbovax Inc. (*Raleigh*) develops vaccines against arthropod-borne diseases. Arbovax's technology modifies arthropod-borne viruses (arboviruses) to prevent them from replicating in mammalian cells.

www.arbovax.com

Archer Daniels Midland Co. (*Southport*)

makes citric acid used in soft drinks and food products.

www.adm.com

Companies Ar – Be

Ardeal Pharma Inc. (*Brevard*) is developing stabilized sulforaphane for the dermal pharmaceutical and cosmetic markets.

Argos Therapeutics Inc. (*Durham*) develops immunotherapy treatments for cancer, HIV and autoimmune disorders.

www.argostherapeutics.com

Array BioPharma Inc. (*Morrisville*) develops targeted, small-molecule drugs to treat cancer and inflammatory diseases.

www.arraybiopharma.com

ArrayXpress Inc. (*Raleigh*) applies bioinformatics to optimize bioprocesses, increase diagnostic efficiency and provide contract research services, focusing on next generation genomics.

www.arrayxpress.com

Arysta LifeScience North America LLC (*Cary*) develops and manufactures crop protection products.

www.arysta-na.com

Ascletis Inc. (*Chapel Hill*) discovers and develops treatments for cancer, HIV and HCV.

www.ascletis.com

Asinex (*Winston-Salem*) designs small-molecule libraries and provides lead optimization, custom synthesis and other chemistry services. The Winston-Salem location is the company's U.S. headquarters.

www.asinex.com

Asklepios Biopharmaceutical Inc. (*Chapel Hill*) develops protein- and cellular-based therapies using a proprietary technology platform called Biological Nano Particles (BNP).

www.askbio.com

Asymchem Laboratories (*Morrisville*) provides contract chemical- and drug-manufacturing services. Asymchem's administrative headquarters is in North Carolina and its manufacturing plants are in China.

www.asymchem.com

ATEX Technologies Inc. (*Pinebluff*) designs, develops and manufactures medical textiles and component solutions for the medical industry.

www.atextechnologies.com

Attagene Inc. (*Morrisville*) has developed a pathway profiling technology to evaluate the impact of pharmaceuticals and environmental chemicals on over 100 transcription factors and 48 nuclear receptors.

www.attagene.com

Avioq Inc. (*Research Triangle Park*) develops, manufactures and distributes diagnostic assays and equipment for the detection of infectious diseases. FDA-approved products include screening and diagnostic assays for HIV-1 and HTLV-I/II.

www.avioq.com

Aviria Biosciences Inc. (*Durham*) combines novel compounds and FDA-approved drugs in an effort to develop an adjuvant therapeutic that will promote viral eradication to cure HIV.

www.aviriabio.com

Avoca Inc. (*Merry Hill*) develops and manufactures botanical extraction products and provides extraction services. Avoca also contracts with farmers to grow clary sage.

www.pharmachemlabs.com/divisions/avoca

b3bio Inc. (*Research Triangle Park*) develops RNA oligonucleotide-based drugs to treat cancer, inflammation and infection.

Banner Pharmacaps Inc. (*High Point*) researches, develops and produces gelatin-based oral dosage pharmaceutical products.

www.banpharm.com

BaseTrace (*Research Triangle Park*) develops DNA-based tracers for hydraulic fracturing to analyze groundwater.

www.basetrace.com

BASF Corp. (*Research Triangle Park*) researches and develops plant-health products such as fungicides, insecticides and herbicides. The RTP site represents the company's Crop Protection Chemicals business.

www.basf.com

BASF Plant Science (*Research Triangle Park*) conducts plant biotechnology research and develops agricultural products through its gene discovery platform, focusing on yield and quality traits in crops such as corn, soybean and rice.

www.basf.com/plantscience

Baxano Surgical Inc. (*Raleigh and Wilmington*) designs, develops and markets minimally invasive surgical technologies and devices to treat degenerative conditions of the spine.

www.baxanosurgical.com

Baxter Healthcare Corp. (*Marion*) produces intravenous and peritoneal dialysis solutions, as well as empty containers and component parts for other Baxter facilities.

www.baxter.com

Bayer CropScience LP (*Research Triangle Park, Morrisville and Clayton*) uses the tools of plant biotechnology to develop seeds and products for crop protection and non-agricultural pest control. The company's R&D Innovation Center and BioAnalytics and Regulatory Affairs operations are in Morrisville. The Clayton site performs pesticide research, specifically in turfgrasses and ornamentals.

www.bayercropscience.us

BD Diagnostics (*Burlington, Durham and Mebane*) develops and commercializes molecular diagnostic products for various cancers, including cervical, breast, ovarian and prostate.

www.bd.com/tripath/

BD Medical (*Wilson*) manufactures medical devices and injection- and infusion-based drug-delivery products.

www.bd.com

BD Technologies (*Research Triangle Park*) develops technologies for parenteral drug delivery, diabetes care, diagnostics and biosensors, and cell and tissue engineering. The RTP site is BD's Corporate Technology R&D center.

www.bd.com/technologies

Benson Hill Biosystems Inc. (*Research Triangle Park*) develops technologies to enhance yield in crop plants by improving the metabolic processes associated with photosynthesis.

www.bensonhillbio.com

NCBiotech has awarded more than \$22.2 million in small-company loans, which have been leveraged into more than \$2.6 billion in additional funding.

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Companies Be – Bi



Bent Creek Institute Inc. (*Asheville*) conserves and develops plant biodiversity assets and maintains the North Carolina Arboretum's Bent Creek Germplasm Repository. It also administers the U.S. Botanical Safety Laboratory, a consortium of university botanical research sites.
www.bentcreekinstitute.org

BestCo Inc. (*Mooresville*) manufactures confectionery-based dosage forms for non-prescription drug products and dietary supplements.
www.bestco.com

BHV Pharma Inc. (*Research Triangle Park*) develops therapeutics for metabolic disorders, including diabetes and obesity.
www.bhvpharma.com

Bio Marine Remediation LLC (*Cary*) develops and uses naturally occurring microbes, mechanical separators, coalescing units and filtration systems for the removal of contaminants from water and soil.
www.biomarineremediation.com

BioAgilytix Labs Inc. (*Research Triangle Park*) provides bioanalytical testing services such as assay development, assay validation and sample analysis.
www.bioagilytix.com

BioCI Systems Inc. (*Raleigh*) provides sterilization validation services and other contract laboratory testing services.
www.bioci.com

BioCryst Pharmaceuticals Inc. (*Durham*) designs and develops small-molecule pharmaceuticals that block key enzymes involved in infectious diseases, inflammatory diseases and cancer.
www.biocryst.com

BioCytics Inc. (*Huntersville*) researches and develops cellular therapies and personalized medicine technology to diagnose and treat cancer.
www.biocytics.com

BioDelivery Sciences International Inc. (*Raleigh*) develops drug delivery technologies in the areas of pain management and oncology supportive care.
www.bdsi.com

BioDeptronix LLC (*Chapel Hill*) develops technology that uses cultured lung cells to measure air quality.

BioDyne Water Reclamation Inc. (*Raleigh*) develops and provides biological wastewater treatment systems and services.
www.biodynegroup.com

Biofluidica Inc. (*Chapel Hill*) is developing a molecular assay system to detect circulating tumor cells (CTCs) in cancer patients.
www.biofluidica.com

BioGaia Biologics Inc. (*Raleigh*) develops and sells probiotic products.
www.biogaia.com

Biogen Idec (*Research Triangle Park*) develops and manufactures biological therapeutics to treat neurological disorders. It operates a large-scale manufacturing facility and customer-service center in RTP.
www.biogenidec.com

BioKier Inc. (*Chapel Hill*) develops treatments for diabetes and related disorders.
www.biokier.com

BioLeap LLC (*Chapel Hill*) provides drug-discovery and -design services using computational fragment-based drug-design technology.
www.bioleap.com

BioLink Life Sciences Inc. (*Cary*) provides contract product development support through custom synthesis and testing.
www.biolinkonline.com

Biolumidation LLC (*Winston-Salem*) provides contract research services, specializing in safety pharmacology studies to evaluate potential undesirable pharmacokinetic effects and providing assessments of abuse liability.
www.biolumidation.com

BioLume Inc. (*Wendell*) develops and commercializes bioluminescent (light producing) proteins for the food, beverage, cosmetic and diagnostic imaging markets.
www.biolumene.net

BioMarck Pharmaceuticals Ltd. (*Durham*) develops drugs to treat pulmonary diseases and disorders such as chronic obstructive pulmonary disease, asthma, chronic bronchitis and cystic fibrosis.
www.biomarck.com

bioMASON (*Research Triangle Park*) develops masonry material from a non-pathogenic bacterium, which induces cement materials in between aggregates such as sand.
www.biomason.com

BioMedica USA LLC (*Durham*) develops rapid and portable diagnostic systems and biosensor systems for point-of-care platform in blood coagulation, clinical immunology and drug monitoring.

www.biomedicausa.com

BioMedomics Inc. (*Morrisville*) develops assays and technologies for personalized medicine molecular diagnostics.

www.biomedomics.com

bioMérieux Inc. (*Durham*) develops in vitro products to diagnose infectious diseases, cancer and cardiovascular disease and to detect microorganisms in agri-foods, pharmaceuticals and cosmetics.

www.biomerieux-usa.com

Bioptigen Inc. (*Research Triangle Park*) develops in vivo optical imaging systems for biomedical applications.

www.bioptigen.com

Bioredux International Inc. (*Warrenton*) develops and sells bioremediation products for home, commercial and institutional use.

www.bioredux.com

BioResource International Inc. (*Morrisville*) discovers and develops animal feed enzymes.

www.briworldwide.com

BioShape Solutions Inc. (*Durham*) develops medical devices that deliver antibiotics to prevent and treat orthopedic implant infections.

www.bioshapesolutions.com

BioTrackers Inc. (*Charlotte*) develops bacterial, or microbe, source tracking technology.

BioVendor LLC (*Asheville*) sells biological reagents and research products, including enzyme-linked immunosorbent assay kits and other assays, antibodies, proteins and other molecules for life-sciences research. The Asheville site is the U.S. headquarters.

www.biovendor.com

Bioventus LLC (*Durham*) researches and develops biomaterials, cell-based therapies and other products to treat osteoarthritis and orthopedic injuries as well as related infections and pain.

www.bioventusglobal.com

BioZyme Inc. (*Apex*) develops cancer diagnostics and provides contract enzymological services.

www.biozyme-inc.com

Blue Ridge Institute for Medical Research (*Horse Shoe*) researches protein kinase enzymes and targeted cancer therapies.

www.brimr.org

Botanics Integrated LLC (*Research Triangle Park*) researches botanical extracts and develops biochemically standardized products for use in pharmaceuticals, natural products and cosmetics.

www.botanicsintegrated.com



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ALSTON & BIRD LLP
WWW.ALSTON.COM

North Carolina is home to 17 University of North Carolina System campuses, 35 private universities, 10 technology transfer offices and 58 community colleges as well as 37 commercial wet lab/incubator sites, dozens of core labs, which offer a wide range of services and highly specialized equipment, and seven research parks.

BotaniPharm LLC (*Candler*) develops botanical medicines using biologically standardized, forest-grown goldenseal.
www.botanipharm.com

Brite Bio Inc. (*Research Triangle Park*) provides contract research services, such as cell culture services, cell-based assays, biomarker assay development and gene expression profiling and characterization.
www.britebio.com

Burke Research Associates LLC (*Morganton*) conducts Phase III and IV clinical trials for gastrointestinal disorders such as ulcerative colitis, Crohn's disease and diverticulitis.

Burleson Research Technologies Inc. (*Morrisville*) provides laboratory services to clients from the biotechnology, pharmaceutical, chemical manufacturing and health-care industries with proof-of-concept, pre-clinical, clinical and toxicology studies.
www.brt-labs.com

C Change Surgical LLC (*Winston-Salem*) researches, patents and commercializes surgical technologies that reduce direct costs and improve procedural efficiency. C Change has focused to date on computerized, therapeutic temperature management technologies.
www.cchangesurgical.com

Calvert Laboratories Inc. (*Cary*) provides preclinical research and contract drug discovery and development services such as lead identification and lead optimization services.
www.calvertlabs.com

Camargo Pharmaceutical Services LLC (*Durham*) provides contract drug-development services, including formulation and testing, regulatory and all phases of clinical development.
www.camargopharma.com

Camras Vision (*Durham*) is developing a medical device to treat glaucoma.
www.camrasvision.com

Cancer Advances Inc. (*Durham*), a subsidiary of Cato Bioventures, develops therapeutics to treat gastrointestinal cancers.
www.canceradvancesinc.com

CanDiag Inc. (*Waxhaw*) develops and commercializes diagnostic blood tests designed to detect breast cancer.
www.candiaginc.com

Cannon Research Center (*Charlotte*) conducts clinical studies, translational research and other bench research activities for Carolinas Medical Center.
www.carolinashealthcare.org/cannon-research-center-centers-and-institutes

Capture Pharmaceuticals Inc. (*Chapel Hill*) develops oral and topical formulations of diethylenetriaminepentaacetic acid prodrugs as radionuclide decorporation agents.

CardioPharma Inc. (*Wilmington*) develops combinatorial products to treat cardiovascular disease.
www.cardio-pharma.com

Cardioxyl Pharmaceuticals Inc. (*Chapel Hill*) develops therapies for cardiovascular disease using nitroxyl technology.
www.cardioxyl.com

Carolina BioPharm Inc. (*Raleigh*) develops small-molecule cancer treatments.
www.carolinabiopharm.com

Carolina Immunochemistry LLC (*Winston-Salem*) develops immunological reagents as well as homogenous assays for vitamin D that can be run with equipment already present in most physician laboratories.

Liquid Chemistries Corp. (*Winston-Salem*) develops and manufactures clinical chemistry analyzers used in hospital, reference and physician labs.
www.carolinachemistries.com

Carolina Medical Products (*Farmville*) manufactures prescription and OTC liquids and ointments for oral and topical use.
www.carolinamedical.com

Catalent Pharma Solutions LLC (*Morrisville*) develops inhalation products and provides analytical testing, formulation and other scientific services.
www.catalent.com

Cathtek Inc. (*Winston-Salem*) develops and manufactures catheters and related accessories.
www.cathtek.com

Cato Research Ltd. (*Durham*) provides contract research services that range from design and management of preclinical and clinical studies to submission of regulatory documents.
www.cato.com

CEI Labs Inc. (*Cary*) provides industrial hygiene laboratory services such as asbestos testing, microbiology analysis and fungi analysis.
www.ceilabs.com

Cell Microsystems Inc. (*Chapel Hill*) develops bioscience research tools for use in analytical research laboratories. Its first product line is used for cell sorting and cell separation.
www.cellmicrosystems.com

Cellogene LLC (*Durham*) provides cell culture and cell engineering services. The company is also developing methods for isolating breast cancer tumor cells to support personalized breast cancer treatment.

CellSolutions LLC (*Greensboro*) develops liquid-based preparation and evaluation systems for cytology applications. The company's primary area of focus is women's health, including cervical cancer screening, pre-cancer detection and evaluation of infectious disease.
www.cellsols.com

Celplor LLC (*Raleigh*) provides molecular biology contract research services such as cDNA cloning, recombinant protein expression and purification, genotyping, stable cell line development, virus production and enzyme-linked immunosorbent assay (ELISA) development.

www.celplor.com

CEM Corp. (*Matthews*) designs and develops microwave laboratory instrumentation and scientific methods for life sciences, analytical laboratories and processing plants.

www.cem.com

Cempra Pharmaceuticals Inc. (*Chapel Hill*) develops antibiotics for treating drug-resistant bacterial infections.

www.cempra.com

Cenduit LLC (*Durham*) provides clinical trial drug supply management technology and services as well as clinical trial data collection and management services.

www.cenduit.com

Centice Corp. (*Morrisville*) develops computational sensor technology for pharmaceutical development, drug anti-counterfeiting, biotechnology, process manufacturing and homeland security applications.

www.centice.com

Cerenova LLC (*Raleigh*) develops technologies and treatments targeting neurological diseases.

www.cerenova.com

CertiRx Corp. (*Research Triangle Park*) develops products to prevent counterfeiting of pharmaceuticals and other products, including both printed authentication and microparticle taggants.

www.certirx.com

Chaperone Therapeutics Inc. (*Research Triangle Park*) develops small-molecular compounds for neurodegenerative diseases and noise-induced hearing loss.

www.chaperonetherapeutics.com

Charis Diagnostics LLC (*Raleigh*) offers custom assay development, monoclonal antibody development and production and other contract research services.

www.charisdiagnostics.com

Charles River Laboratories Inc. (*Raleigh and Durham*) provides drug discovery and development process services, including pathology and toxicology contract services.

www.criver.com

Charter Medical Ltd. (*Winston-Salem*) develops and manufactures products for the collection, separation, manipulation, transportation, storage and administration of blood, blood components and vital fluids in the biotechnology and pharmaceutical industries.

www.chartermedical.com

Chatham Therapeutics LLC (*Chapel Hill*) develops gene therapy-mediated cures for hemophilia.

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Innovations

Companies Ch – Co

Chelsea Therapeutics International Ltd.

(Charlotte) acquires and develops products for the treatment of various human diseases including central nervous system, rheumatoid arthritis, psoriasis and other inflammatory conditions.

www.chelsearx.com

Chematron Inc.

(Charlotte) manufactures textile chemicals and has the capability for contractual custom manufacture of specialty chemicals.

www.chematron.com

Chem-Bac Laboratories Inc.

(Charlotte) is an FDA-registered analytical testing laboratory.

www.chembac.com

ChemoGenics Biopharma LLC

(Research Triangle Park) provides drug discovery research services such as medicinal chemistry, DMPK, bioinformatics and preclinical models in cancer, inflammation and metabolic diseases.

www.chemogenicsbiopharma.com

ChemQ Bioscience LLC

(Research Triangle Park) develops new and cost-effective in vitro clinical diagnostics known as liquid base cytology products for the screening of cancer cells.

www.vitroprep.com

Chem-Tex Laboratories Inc.

(Concord) develops and manufactures specialty chemicals for the textile, paper and industrial polymer industries. One product, called Bac-Shield, contains a natural microbial extracted from snow crab shells.

www.chemtexlaboratories.com

Chemtura USA

(Gastonia) manufactures specialty chemicals and crop protection products.

www.chemtura.com

Chesson Laboratory Associates Inc.

(Durham) develops polymer-based medical products.

www.chessonlabs.com

Chiltern International Inc.

(Wilmington) conducts Phase I through IV global clinical trials across a broad range of therapeutic areas, functional service provision and contract staffing solutions.

www.chiltern.com

Chimerix Inc.

(Durham) develops oral antiviral therapeutics for viral diseases including adenoviruses, CMV, BK virus, HPV, HIV and HCV.

www.chimerix.com

Chirazyme Labs Inc.

(Greenville) produces enzymes for stereospecific epoxidation intermediates in pharmaceutical synthesis.

www.chirazyme.com

Cirrus Pharmaceuticals Inc.

(Durham) provides product development services, including physical and chemical characterization, formulation development, stability testing, process development as well as scale-up and technical transfer to manufacturing.

www.cirruspharm.com

CivaTech Corp.

(Raleigh) develops materials for radiation therapy, including stent applications.

www.civatech.com

CivaTech Oncology Inc.

(Research Triangle Park) develops radioactive polymer-based devices to treat localized tumors.

www.civatechoncology.com

CiVentiChem

(Cary) provides contract R&D services, medicinal chemistry, lead optimization, process R&D, cGMP synthesis of APIs for clinical trials, cGMP/GLP analytical services, CMC consulting and custom synthesis of pharmaceutical intermediates and APIs.

www.civentichem.com

Clearside Biomedical Inc.

(Research Triangle Park) develops and commercializes ophthalmic therapeutic products that use an ocular microinjection platform to target individual compartments of the eye.

www.clearsidebio.com

Clinical Sensors Inc.

(Chapel Hill) develops diagnostic tests and nitric oxide sensors for the early detection of sepsis.

Cmed Clinical Services

(Durham) provides clinical services to drug development organizations and manages early-phase studies (Phase I - IIb) with a focus in oncology, infectious disease, respiratory and cardiology.

www.cmedresearch.com

Cognosci Inc.

(Research Triangle Park) develops neurorestorative therapies for Alzheimer's disease, multiple sclerosis, traumatic brain injury, nerve crush and other disease and trauma indications.

www.cognosci.com



CoLucid Pharmaceuticals Inc. (*Durham*) develops therapies for central nervous system (CNS) disorders such as migraine, chronic pain and Alzheimer's disease.

www.colucid.com

Columbia Life Systems Inc. (*Chapel Hill*) is developing a computer controlled oxygen blender for therapeutic research.

Combs Lab Inc. (*Chapel Hill*) develops drug therapies for diabetes and is developing a noninsulin oral medication for Type 1 Diabetes.

www.combslab.com

Concentrx Pharmaceuticals LLC (*Chapel Hill*) develops inhalation drug delivery products, including a dry powder unit dose inhaler.

www.concentrxpharma.com

ConvaTec Inc. (*Greensboro*) manufactures products for ostomy, skin and advanced wound care.

www.convatec.com

Cook Medical (*Winston-Salem*) develops and manufactures devices used in gastrointestinal endoscopy to diagnose and treat esophageal, gastric, pancreatic, biliary and colonic disorders.

www.cookgroup.com

Coordination Therapeutics Inc. (*Chapel Hill*) develops nanoparticle formulations of platinum chemotherapeutics.

Cornerstone Therapeutics Inc. (*Cary*) acquires, develops and commercializes products for the hospital, niche respiratory and related specialty markets.

www.crtx.com

Corning Life Sciences (*Durham*) manufactures pipettes, conical and round-bottom tubes, cell inserts, tissue-culture plates and ADME/toxicology products.

www.corning.com

Cotton Incorporated's (*Cary*) Agricultural & Environmental Research Division improves cotton cultivation through genetic and biotechnology tools, enhancing yield, quality and resistance of cotton varieties.

www.cottoninc.com

Countervail Corp. (*Charlotte*) develops and commercializes products to protect against and treat exposure to chemical weapons and pesticide poisoning.

www.countervailcorp.com

Covidien Inc. (*Raleigh*) manufactures acetaminophen, the active ingredient in Tylenol®, at its pharmaceutical facility in Raleigh. Covidien also manufactures contrast media used in diagnostic imaging tests.

www.covidien.com

Craft Technologies Inc. (*Wilson*) provides analytical and method development services to identify specific compounds in biological materials, food and animal feed.

www.crafttechnologies.com

Creative Bioreactor Designs Inc. (*Winston-Salem*) develops, manufactures and sells custom bioreactors for tissue engineering and regenerative medicine applications.

www.creative-bioreactors.com

Cromoz Inc. (*Research Triangle Park*) develops non-toxic, water-soluble carbon nano tubes that can be used as a drug delivery tool to reduce the amount of drug used during chemotherapy and reduce potential drug side effects.

www.cromoz.com

Crop Microclimate Management Inc.

(*Apex*) researches and develops technologies to improve crop productivity by mitigating the impact of environmental stresses.

www.cropstress.com

CropSolution Inc. (*Cary*) develops agro-chemicals that protect crops from diseases, insect pests and weeds.

www.cropsolution.com

CTMG Inc. (*Greenville and Raleigh*) provides site-specific clinical research management services, including patient recruitment, personnel, expertise and systems.

www.ctmginc.com

CuraCaza (*High Point*) provides biologically active natural products to the pharmaceutical industry as part of the drug discovery process.

www.curacaza.com

Curl Bio LLC (*Durham*) develops drugs for the interrelated set of disorders involving type-II diabetes, obesity, metabolic syndrome and associated complications.

www.curlbio.com

Cygnus Technologies Inc. (*Southport*) develops immunochemical reagents and methods for analytical research and human and animal diagnostic applications.

www.cygnustechnologies.com

Cytex Therapeutics Inc. (*Durham*) develops bio-artificial devices to treat osteoarthritis and other musculoskeletal diseases.

www.cytextherapeutics.com

Cytomedix Inc. (*Durham*) is developing and commercializing platelet and adult stem cell separation products for tissue repair and regeneration.

www.cytomedix.com

Cytonet LLC (*Durham*) develops, produces and markets cell therapeutic products, including human liver cells, to treat liver diseases.

www.cytonetllc.com

Daily Manufacturing Inc. (*Rockwell*) manufactures vitamins, minerals and herbals. The company also manufactures products for other supplement companies with their own brand names.

www.daily-mfg.com

DARA BioSciences Inc. (*Raleigh*) develops and commercializes oncology treatments and supportive care.

www.darabio.com

DaVINCI Biomedical Research Products Inc. (*Garner*) is an AAALAC-accredited contract lab that performs GLP and non-GLP preclinical animal studies. DaVINCI specializes in regenerative medicine, cardiovascular, orthopedic and medical device applications.

www.davincibiomed.com

According to Battelle, North Carolina is third in the nation in the size of its life science sector. More than 58,000 North Carolinians have bioscience jobs now, and they earn an average \$78,000 a year.



NOVARTIS

Dharma Laboratories LLC (*Morrisville*) develops dosage forms, including oral solids, liquids, injectables, topicals and specialty products.
www.dharmapdlabs.com

DNA:SI Labs (*Burlington*) provides forensic DNA and identity testing services to law-enforcement and other government agencies.
www.dnasi.com

Dole Nutrition Research Laboratory (*Kannapolis*) conducts research on phytochemicals found in fruits and vegetables.
www.ncresearchcampus.net/partners-and-research/partners/dole-nutrition-research-laboratory

Drumetix Laboratories LLC (*Greensboro*) provides bioanalytical support for drug metabolism, pharmacokinetics and toxicokinetic (DMPK, ADME) studies, as well as LC-MS/MS analysis of small-molecule biomarkers, such as neurotransmitters, all-trans retinoic acid and creatinine.
www.drumetix.com

DSM Pharmaceuticals Inc. (*Greenville*) manufactures sterile injectables (liquid and freeze-dried), solid dose (tablets and capsules), semi-solid (creams and ointments) and liquid products.
www.dsm.com

Duke Clinical Research Institute (*Durham*) is an academic clinical research organization that conducts clinical research projects from pilot study to global trials, device trials to outcomes analyses.
www.dcri.duke.edu

DuPont Pioneer Center for Dryland Research - Coastal Plains (*Kinston*) conducts research on the conventional and transgenic development of corn, soybeans and other crops, with an emphasis on drought-resistant products.

Dyadic International Inc. (*Greensboro*) discovers, develops and manufactures proteins, enzymes, polypeptides and small molecules for use in the animal nutrition, detergent, ethanol, pulp and paper, biopharmaceutical, starch and textile markets.
www.dyadic.com

Eboo Pharmaceuticals Inc. (*Durham*) develops small-molecule drugs targeted at the opioid receptor family to treat Parkinson's disease, depression and other disorders.
www.eboopharma.com

Ecoblend LLC (*Pittsboro*) develops and manufactures organic weed- and pest-control products, using soy methyl esters as a main ingredient.
www.ecoblend.us

Effipharma Inc. (*Chapel Hill*) discovers and develops therapeutics to treat disorders of the central nervous system, with a particular focus on Parkinson's disease, Alzheimer's disease and other cognitive impairments, and schizophrenia.
www.effipharma.com

Efflux Biosystems LLC (*Morrisville*) provides contract research services, particularly genitourinary and gastrointestinal tract preclinical drug discovery services, to pharmaceutical, biotech and academic research organizations.
www.effluxbio.com

Ei, A Pharmaceutical SolutionWorks (*Kannapolis*) develops and manufactures liquid, semisolid and powder prescription and non-prescription skin-care and animal-health products.
www.eisolutionworks.com

Eisai Inc. (*Research Triangle Park*) discovers, develops and markets pharmaceuticals in three main therapeutic areas — neurology, gastrointestinal disorders and oncology/critical care. Eisai's RTP facility does pharmaceutical production and formulation R&D.
www.eisai.com

EMSL Analytical Inc. (*Morrisville, Charlotte and Kernersville*) provides analytical services, including microbiology, asbestos, indoor air quality and food testing.
www.emsl.com

EN-CAS Analytical Laboratories (*Winston-Salem*) provides GLP-compliant analytical chemistry contract services for agrochemical, veterinary and bioanalytical research. EN-CAS has experience with preclinical and clinical trials support, pesticides, herbicides and veterinary drugs.
www.en-cas.com

Enci Therapeutics Inc. (*Research Triangle Park*) ENCI is developing monoclonal antibody-based therapeutics to treat breast cancer.

ENCO Pharmaceutical Development Inc. (*Cary*) is a cGMP-compliant contract testing laboratory, with analytical development services ranging from raw-materials testing through Phase III stability studies and release testing as well as formulation-development services.
www.encopharma.com

Endacea Inc. (*Research Triangle Park*) develops A1 adenosine receptor antagonists as drug candidates for inflammation, including sepsis and asthma, and renal impairment. A subsidiary of the company, Endacea Diagnostics, is developing an HTRF endotoxin assay as a sensitive and specific biomarker for sepsis.
www.endacea.com

eNNOVEA-FPE NC (*Asheboro*) provides contract manufacturing of medical and industrial products, including injectors and syringes.

www.ennovea.com

EnSolve Biosystems Inc. (*Raleigh*) produces proprietary biological-based treatment systems to address oily bilge water, "frack" water, process waste streams and scrubber water. They also manufacture bioenzymatic degreasers and detergents and oil-spill cleanup products.

www.ensolve.com

Entegriion Inc. (*Research Triangle Park*) develops biologic and medical device technologies to enhance the safety and availability of the human blood supply. The company also provides blood supply-related contract R&D services to the U.S. Department of Defense.

www.entegriion.com

Entera Health Inc. (*Cary*) develops biotherapeutic products for enteropathy.

www.enterahealth.com

ENTEX Technologies Inc. (*Chapel Hill*) provides advanced biological and filtration wastewater treatment that can be customized for various industries.

www.entexinc.com

EntoGenetics Inc. (*Charlotte*) engineers the production of spider silk at a commercial scale through the genetic transformation of silkworms. Spider silk is a very strong fiber that has applications in the biomedical, defense and textile industries.

www.entogenetics.com

EntoGenex Biotechnology LLC (*Chapel Hill*) develops mosquito-control products using biological technologies such as Trypsin Modulating Oostatic Factor (TMOF), a small protein that interferes with digestion in mosquito larvae and leads to their starvation.

www.entogenex.com

ENVIGEN Pharmaceuticals Inc. (*Research Triangle Park*) develops classes of new small drug-like molecules to treat life-threatening diseases including cancer, HIV/AIDS and neurological disorders.

www.envigenpharma.com

Environmental Testing Solutions Inc. (*Asheville*) offers microbiological and chemical testing for drinking water and wastewater and aquatic biomonitoring toxicity testing.

www.etsnclab.com

EPL Inc. (*Durham*) provides histology, pathology and toxicology services. The company also offers biorepository storage, study monitoring and data reporting services for clinical trials.

www.epl-inc.com

Equalix Inc. (*Wilmington*) develops nanomaterials for the repair and regeneration of diseased, traumatized and aging tissues.

www.equalix.com

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Eton Bioscience Inc. (*Research Triangle Park*) specializes in DNA sequencing and offers other services such as gene and peptide synthesis, mutagenesis and mammalian cell expression.

www.etonbio.com

Eurofins Agrosience Services Inc.

(*Mebane*) provides contract research services, product development consulting and technical support to the crop protection, agricultural biotechnology and pest control industries.

www.eurofins.com/agrosienceservices.aspx

Exela Pharma Sciences LLC (*Lenoir*)

develops and manufactures injectable, ophthalmic and inhalation pharmaceuticals. The Lenoir site is a sterile manufacturing facility, compliant with cGMP and other FDA regulations.

www.exela.us

Exodos Life Science Partners (*Chapel Hill*) is

a semi-virtual pharmaceutical development company advancing product concepts through the 505(b)(2) process to early clinical proof-of-principle and sale.

www.exodosls.com

Expression Analysis Inc. (*Durham*) provides

gene expression and genotyping assays, DNA sequencing services, sequence enrichment technologies, marker-assisted breeding and bioinformatics support. The laboratory is CLIA-registered and supports GLP compliance.

www.expressionanalysis.com

Fair Products Inc. (*Cary*) manufactures and distributes tobacco crop care products including insecticides, sucker control, ripeners and fertilizers.

www.fairproductsinc.com

Fervent Pharmaceuticals LLC (*Greenville*) develops a non-hormonal product, FP-101, to treat vasomotor symptoms associated with menopause.

www.ferventpharma.com

FHI 360 (*Durham*) develops responses to HIV/AIDS and other health and nutrition concerns in resource-poor settings. The laboratory in Durham offers medical-device and pharmaceutical testing services.

www.fhi360.org

Novozymes, the world's largest enzyme producer, is joined by GlaxoSmithKline and many other major multinational companies with North American headquarters in North Carolina.

Fleming Laboratories Inc. (*Charlotte*)

manufactures animal pharmaceuticals.

Flexcell International Corp. (*Hillsborough*)

designs and manufactures products for cytomechanics research, studying cellular responses to mechanical forces such as tension or compression.

www.flexcellint.com

Foothills Bio-Energies (*Lenoir*) processes

biodiesel from locally available feedstocks such as oilseed crops and poultry fat.

www.foothillsbio-energies.com

Fresenius Kabi USA (*Raleigh*) manufactures

generic injectable pharmaceutical products in four therapeutic areas: anti-infective, anesthesia/analgesia, critical care and oncology.

www.appharma.com

FSC Pediatrics Inc. (*Charlotte*) develops and markets pharmaceutical products and medical devices, with a focus on unmet pediatric patient and practitioner needs.

www.fscpediatrics.com

Fujifilm Diosynth Biotechnologies USA

Inc. (*Morrisville*) provides biopharmaceutical contract process development and manufacturing.

www.fujifilmdiosynth.com

Furiex Pharmaceuticals Inc. (*Morrisville*)

conducts and finances early-stage preclinical and proof-of-concept drug development to clinical milestones with partner companies.

www.furiex.com

G1 Therapeutics Inc. (*Chapel Hill*) develops and commercializes small-molecule therapeutic agents to protect the bone marrow from radiation or chemotherapy damage.

www.g1therapeutics.com

G3 Packaging (*Asheville*) provides packaging and sterilization services, including validation testing and regulatory consulting for medical-device manufacturers and health-care providers.

www.g3packaging.com

Gaia Herbs Inc. (*Brevard*) grows and produces certified organic herbal products. All growing, manufacturing, processing, researching, packaging and distribution takes place in its North Carolina facilities.

www.gaiaherbs.com

Galaxy Diagnostics Inc. (*Research Triangle Park*) provides molecular diagnostic testing for emerging infectious diseases for both veterinary and human medicine.

www.galaxydx.com

GEM Tox Consultants & Labs Inc. (*Greenville*)

conducts research focused on cancer biotechnology, food safety and toxicology, with a special focus on cancer biomarker discovery and validation.

www.gemtolabs.com

Gene Facelift LLC (*Kernersville*) develops cosmetic gene therapy in a topical cream formulation to reduce wrinkles, regenerate collagen and restore aging skin.

www.genefacelift.com

GeneCentric Diagnostics Inc. (*Durham*)

develops molecular diagnostic assays to enable oncologists and their patients to make informed, individualized treatment decisions.

www.genecentric.com

Geneformation Technology Inc. (*Belmont*)

is a cytogenetics company that develops and commercializes cell culture technology for peripheral blood, bone marrow and amniotic fluid.

www.geneformation.com

General Dynamics Corp. (*Charlotte*)

develops and manufactures products that detect chemicals and biologicals.

www.gdatp.com

General Mills Agricultural Research

(*Kannapolis*) is developing an oat with higher and more consistent levels of beta-glucan in order to reduce cholesterol.

nrcr.ehclients.com/partners-and-research/partners/general-mills/

GENEWIZ Inc. (*Research Triangle Park*) provides custom DNA sequencing, gene synthesis, genomics, next-generation sequencing and molecular biology in a GLP/cGMP regulatory environment.

www.genewiz.com

Genova Diagnostics Inc. (*Asheville*) performs diagnostics and molecular genetics testing under federally designated clinical lab standards to support physicians in personalized chronic disease treatment and prevention.

www.gdx.net

Gentris Corp. (*Morrisville*) performs clinical pharmacogenomic testing and provides biorepository services under federally designated clinical lab standards.

www.gentris.com

Gerinda Therapeutics Inc. (*Cary*) develops targeted drugs for the treatment of Acute Myeloid Leukemia (AML) and other cancers.

GFS US LLC (*Winston-Salem*) researches and develops environmentally friendly enzyme, antimicrobial and microbial products for the Americas. Its areas of expertise include oil and gas, mining, bioremediation, aquaculture and agriculture.

www.globalfuturesolutions.com

GlaxoSmithKline (*Research Triangle Park and Zebulon*) develops and manufactures pharmaceutical products including anti-infectives and central nervous system, respiratory, gastrointestinal/metabolic and oncology drugs and vaccines. GSK's facility in Zebulon manufactures solid-dose products, including tablets and capsules. The plant also does granulation, drying and packaging, and contract manufacturing of antibiotics for other companies.

www.gsk.com

Global Oasis Technologies Inc. (*Durham*) develops diagnostics for water quality assessment.

www.globaloasistechnologies.com

Global Vaccines Inc. (*Research Triangle Park*) is a not-for-profit company that develops vaccines against developing-country diseases such as HIV/AIDS, polio, dengue fever, malaria and viral diarrhea (rotavirus).

www.globalvaccines.org

Goldsboro Laboratories LLC (*Goldsboro*) develops and manufactures vaccines for the swine, poultry and cattle divisions of Goldsboro Milling Company.

GrassRoots Biotechnology Inc. (*Durham*) employs a systems biology approach to develop and commercialize biofuel and food crops with increased yield, insect resistance and stress tolerance.

www.grassrootsbio.com

Greer Laboratories Inc. (*Lenoir*) develops and distributes animal and human allergy immunotherapy products and services.

www.greerlabs.com

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Companies Gr – Hu

Grifols Inc. (Research Triangle Park, Raleigh and Clayton) develops and produces medical treatments using blood or blood components for people with life-threatening disorders in a variety of therapeutic areas including immunology, pulmonology and hemostasis. Grifols' Clayton plant is the company's primary manufacturing facility, producing proteins to treat rare diseases, including immune deficiencies and genetic emphysema.

www.grifols.com

GTCAllison LLC (Mocksville) researches and develops diagnostic tests for animal pathogens.

www.gtcallison.com

Happy Jack Inc. (Snow Hill) manufactures insecticides and pharmaceutical preparations to treat dogs.

www.happyjackinc.com

HCEC LLC (Winston-Salem) isolates cells from donor corneas to grow replacement corneal tissue in the laboratory.

HDH Pharma Inc. (Morrisville) provides contract chemistry research services to pharmaceutical and biotechnology companies, including medicinal and process chemistry and custom synthesis.

www.hdhpharma.com

Health Decisions Inc. (Durham) is a global clinical research organization that specializes in applying adaptive principles to both trial design and operations.

www.healthdec.com

Heat Biologics Inc. (Chapel Hill) develops therapeutic vaccines to combat a range of cancers and infectious diseases.

www.heatbio.com

Helical Sciences Inc. (Greensboro) develops a rapid, polymerase chain reaction-based microbiological diagnostic product, with potential applications in water, food and beverage.

www.helicalsciences.com

Hemo Bioscience Inc. (Research Triangle Park) is an FDA-registered manufacturer of blood-typing reagents and diagnostics for the blood-banking industry.

www.hemobioscience.com

Hemodynamic Therapeutics (Durham) develops small-molecule combination therapy for obesity-related hypertension.

www.hemodynamictx.com

HepatoSys Inc. (Cornelius) develops technologies for functional restoration of donor livers for use in transplantation and production of hepatocytes for research.

www.hepatosys.com

High Point Clinical Trials Center (High Point) conducts Phase I and II clinical research studies for pharmaceutical companies.

www.hpctrialscenter.com

High Point Pharmaceuticals LLC (High Point) was spun out of TransTech Pharma to manage the development of drugs for obesity and diabetes.

www.highpointpharma.com

HOMS LLC (Pittsboro) develops, manufactures and markets natural products such as the Bite Blocker line of insect repellents and Bio Block organic insecticides.

www.homs.com

Hongene Biotechnology USA Inc.

(Morrisville) develops and manufactures bio-reagents such as nucleosides, nucleotides and phosphoramidite products.

www.hongeneusa.com

Hospira Inc. (Rocky Mount and Clayton) manufactures injectable hospital products at its facility in Rocky Mount. The facility also provides contract manufacturing services such as aseptic filling, lyophilization, terminal sterilization and more. Hospira's Clayton plant makes generic acute injectable drugs for intravenous use. The Clayton facility also provides contract manufacturing services.

www.hospira.com

Howard Associates LLC (Research Triangle Park) provides preclinical contract research services to the pharmaceutical industry. The company uses rodent models to predict the efficacy of experimental compounds, especially for CNS diseases, and to predict CNS side effects.

www.howardassociates.net

HRF Inc. (Raleigh) is a plasma center that provides human blood plasmas for bioscience research.

www.hrfinc.com

Humacyte Inc. (Morrisville) develops processes to engineer human tissue scaffolds that can be shaped into tubes, sheets or particulates for regenerative medicine uses. The current product focus includes vascular disease, therapeutic filling and soft-tissue repair.

www.humacyte.com



Hydro Service and Supplies Inc. (Durham) provides design, manufacturing and installation of high-purity water systems for laboratory and manufacturing processes. It also provides microbiological and enzymatic water testing services.

www.hydroservice.com

Hyperbranch Medical Technology Inc. (Durham) is a biosurgical device company focused on the design, development and manufacture of resorbable surgical sealants for general and specialty surgery use.

www.hyperbranch.com

ICON Clinical Research Inc. (Durham) provides drug development and clinical services, from compound selection to Phase I-IV clinical studies, in areas including oncology, cardiovascular and biosimilars.

www.iconplc.com

IDEXX Reference Laboratories Inc. (Greensboro) provides animal health diagnostic products and services for use in small animals, equine, poultry and dairy livestock. It also provides microbiology-based water-testing products.

www.idexx.com

ILS Genomics LLC (Research Triangle Park) provides genotyping, gene expression analysis and biologics product safety testing services.

www.ilsgenomics.com

Immunobenefit LLC (Chapel Hill) offers immune testing and development services for the nutrition and supplement industry, using cell culture, animal models and human studies.

www.immunobenefit.com

ImmunogeniX LLC (Asheville) provides a cryonics biorepository for storage of patient tumor cell samples, with the goal of using those cells in tumor vaccine immunology.

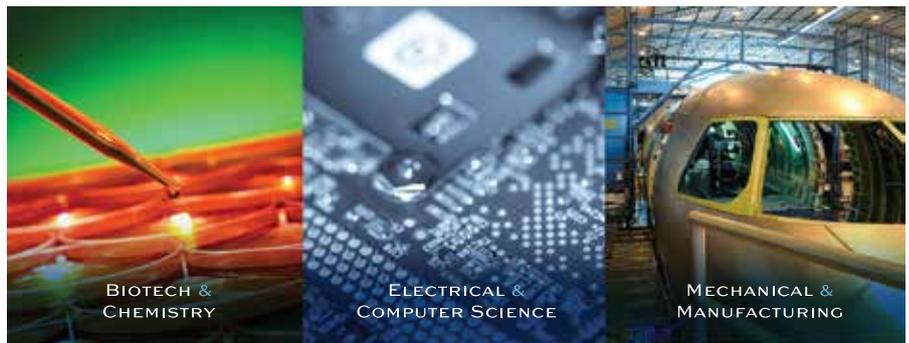
www.immunogenixresearch.com

ImmunoReagents Inc. (Raleigh) manufactures primary and secondary polyclonal antibodies used in research and in vitro diagnostics for the pharmaceutical and veterinary markets.

www.immunoreagents.com



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PATENT ATTORNEYS

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 F: 919.419.0383
WWW.JENKINSWILSON.COM

Companies In – Ke

Inanovate Inc. (*Durham*) develops nano-structured biochip substrates for high-throughput protein screening and analysis. The company also provides a variety of microarray services such as protein printing/arranging and assay development.

www.inanovate.com

INC Research Inc. (*Raleigh and Wilmington*) provides Phase I-IV contract research services across a variety of therapeutic areas, with the capability to work with special populations such as women and pediatrics.

www.incresearch.com

Indicus Pharma LLC (*Raleigh*) develops and manufactures generic formulations in oral solid dosage forms, parenterals and ophthalmics.

www.indicuspharma.com

Ingredion Inc. (*Winston-Salem*) manufactures sweeteners and starches from corn.

www.ingredion.com

Innovative Energy Solutions LLC (*Franklin*) manufactures specialty polymer coatings infused with an FDA-approved biocide, silver chloride. The coatings are used in health care and other commercial settings as a surface antimicrobial.

www.innovativesurfacecoatings.com

Innovative Neurophysiology Inc. (*Durham*) designs and develops advanced tools, equipment and methodology for neuroscience research.

www.inphysiology.com

InoLife Technologies Inc. (*Raleigh*) develops personalized medicine services and genetic testing for biomarkers including DNA testing for paternity and ancestral origin, response to Plavix medication and predisposition to certain diseases.

www.inol.info

Integrated Laboratory Systems Inc. (*Morrisville*) provides GLP toxicology, histopathology, molecular biology, and R&D services to government and commercial clients in agrochemical, biopharmaceutical and environmental industries.

www.ils-inc.com

Intelligent Implant Systems LLC (*Charlotte*) designs and develops medical devices for the spine.

www.intelligentimplantsystems.com

Intrexon Corp.'s (*Research Triangle Park*) AgBio division facilitates production of enhanced food, as well as proteins and ingredients produced in agricultural-based expression systems.

www.dna.com

inVentiv Health Clinical (*Cary*) provides global drug development services to pharmaceutical, biotechnology, generic drug and medical device companies.

www.inventivhealthclinical.com

Invitrox Inc. (*Research Triangle Park*) develops specialty disease diagnostics and therapeutic monitoring assays using the characteristics of microparticles to detect early signs of cellular damage.

www.invitrox.com

Ironwood Material Science Inc. (*Hurdle Mills*) develops biomaterials for use as bone cement and synthetic bone in dental and orthopedic applications.

JABB of the Carolinas Inc. (*Pine Level*) develops and manufactures fungal pesticides and biopesticide products. Products are distributed through its partner company, Terreghena.

Jenken Biosciences Inc. (*Research Triangle Park*) researches and develops small-molecule TLR-4 antagonists for potential treatment of inflammation associated with chronic liver disease, inflammatory bowel disease, diabetes and organ damage.

www.jenkenbio.com

JLA International Inc. (*Edenton*) provides testing and analytical services for the food and beverage industry. It also provides technical consulting services.

www.jlaglobal.com

Jubilant Clinsys Inc. (*Raleigh*) provides clinical research services in support of Phase I-IV drug development.

www.clinsys.com

K BioPharma LLC (*Cary*) develops and commercializes clinical-stage therapeutics for the treatment of anxiety and stress related disorders, peripheral neuropathy, Alzheimer's disease, mild cognitive impairment, multiple sclerosis-induced spasticity and glaucoma.

www.kbiopharma.com

KaryoLogic Inc. (*Durham*) provides chromosome analysis services, such as karyotyping of human, rat and mouse cell lines, to research laboratories.

www.karyologic.com

Katharos Inc. (*Apex*) is developing a phosphate-selective adsorption blood filtering medical device to treat high blood phosphate levels in end-stage renal disease hemodialysis patients.

KBI Biopharma Inc. (*Durham*) provides contract development and biopharmaceutical manufacturing services such as formulation, analytical method development, stability services, process development and API manufacturing.

www.kbibipharma.com

Kenactiv Innovations Inc. (*Snow Hill*) develops and manufactures bio-based fiber products from kenaf.

www.kenactiv.com

KeraNetics LLC (*Winston-Salem*) develops and commercializes keratin-based biomaterials for therapeutic and regenerative medical applications.

www.keranetics.com

EDUCATIONAL ASSISTANCE

Southeastern and eastern North Carolina's numerous academic research facilities are using the tools of marine biotechnology, agricultural biotechnology and biomanufacturing to find new crops, new medicines and new opportunities for producing biofuels.

King Bio Inc. (*Asheville*) develops and manufactures water-based homeopathic medicines and supplements for human and companion-animal health. King Bio also provides contract manufacturing services.

www.kingbio.com

Kowa Research Institute Inc. (*Morrisville*), a division of Kowa Company Ltd., develops therapeutic drugs for the treatment of diabetes, arteriosclerosis and atherosclerosis.

www.kowaus.com

Kreatech Inc. (*Durham*) develops and commercializes genetic disease detection and research products.

www.kreatech.com

Krenitsky Pharmaceuticals Inc. (*Chapel Hill*) discovers and develops drug candidates, with a focus on disorders of the nervous system.

www.kpi-pharma.com

LAAMScience Inc. (*Morrisville*) develops antimicrobial products such as medical masks and respirators, cleaning wipes and pet-care products.

www.laamscience.com

Laboratory Corporation of America (*Burlington, Kannapolis, RTP and Durham*) provides clinical and anatomical laboratory services, including clinical trials testing services, and offers a broad range of genomic and esoteric tests. LabCorp's Clinical Trials unit in Durham provides full-service laboratory testing including Phase I-IV trials, esoteric testing, biomarker development and companion diagnostics. LabCorp's facility in Kannapolis is a state-of-the-art biorepository that has the capacity to house 15 million samples. LabCorp's Center for Molecular Biology and Pathology in RTP provides laboratory testing services. LabCorp's Center for Occupational Testing in RTP provides urine, hair, oral fluid and point-of-collection drugs of abuse testing services.

www.labcorp.com

Laudiss Labs LLC (*Winston-Salem*) uses a nanotechnology platform to encapsulate natural organic plant lipophilic and hydrophilic bioactive molecules to develop OTC products for the cosmetic, pharmaceutical and veterinary industries.

Life Technologies Inc. (*Durham*) develops human and animal hepatic cell products and provides contract laboratory (in vitro) services, focused primarily on drug metabolism and toxicology.

www.invitrogen.com

LifeScape Biosciences Inc. (*Charlotte*) develops prescription and non-prescription (OTC) pharmaceutical products and medical foods made from FDA-designated generally regarded as safe (GRAS) substances.

www.lifescapebio.com

North Carolina is a world leader in vaccine research and manufacturing, with four of the top-five manufacturers operating major production facilities in the state.

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Companies Li – Mi



LipoScience Inc. (*Raleigh*) develops and markets clinical diagnostic applications of nuclear magnetic resonance spectroscopy, including the NMR LipoProfile® test, which is used to diagnose cardiovascular disease.

www.liposcience.com

Liquidia Technologies Inc. (*Morrisville*) utilizes its PRINT platform technology and GMP manufacturing capabilities to develop precisely engineered particles for improved delivery of biologics and small molecules for vaccine and therapeutic applications.

www.liquidia.com

LotusBioEFx LLC (*Chapel Hill*) develops venous catheters impregnated with nanoscale clusters of metal alloys to inhibit formation of bacterial biofilms.

www.lotusbioefx.com

mAbRx Inc. (*Wilmington*) develops therapeutic monoclonal antibodies primarily for cancer treatment.

www.mabrx.com

Magbio Genomics Inc. (*Raleigh*) develops, manufactures and sells magnetic-based kits for DNA analysis. The company focuses on high throughput nucleic acid purification technologies for DNA sequencing applications.

www.magbiogenomics.com

MARBIONC Development Group LLC (*Wilmington*) is a not-for-profit organization that develops and markets new products and technologies derived from marine and aquatic organisms.

www.marbionc.org

Marble Laboratories LLC (*Winston-Salem*) provides contract testing, process development, laboratory services and auditing to biotechnology companies.

Martin Protean LLC (*Research Triangle Park*) develops technology for determining the three-dimensional structure of a protein without requiring protein crystals.

www.martin-protean.com

MastCell Pharmaceuticals Inc. (*Raleigh*) develops therapeutic agents for the treatment of allergic disorders.

Maverick Biofuels Inc. (*Research Triangle Park*) converts biomass, municipal waste, coal and natural gas into petroleum-free fuels and plastics.

www.maverickbiofuels.com

MDx Health Inc. (*Wilmington*) develops gene methylation diagnostic tests for early cancer detection and personalized treatment decisions.

www.mdxhealth.com

Med-El Corp. (*Durham*) researches and develops cochlear implant technology. The Durham location manufactures cochlear implants and is also the North American headquarters.

www.medel.com/us

Medicago USA Inc. (*Durham*) develops vaccines based on proprietary manufacturing technologies and Virus-Like-Particles. The vaccines are manufactured using a transient protein expression system in *Nicotiana benthamiana*, a close relative of tobacco.

www.medicago.com

MedKoo Biosciences Inc. (*Chapel Hill*) manufactures small molecular anticancer reference agents for oncology research and provides drug discovery contract research services.

www.medkoo.com

MEDTOX Diagnostics Inc. (*Burlington*) manufactures and distributes diagnostic drug screening devices.

www.medtox.com

Merck & Co. Inc. (*Durham and Wilson*) manufactures elements of Varivax, a chicken-pox vaccine, at its facility in Durham. Merck's Wilson facility produces patented prescription products and performs granulation and tableting operations.

www.merck.com

Mercury Science Inc. (*Durham*) develops novel and customized methods of analytical analysis, with expertise in environmental analysis of soil, water and food.

www.mercuryscience.com

Meridian Laboratory Corp. (*Charlotte*) provides CLIA-certified and COLA-accredited patient testing services, as well as testing of water quality for use in dialysis.

www.meridianlaboratory.com

Merz Pharmaceuticals LLC (*Greensboro*) develops and commercializes products for the Merz Pharma Group in the therapeutic areas of neurology and dermatology.

www.merzusa.com

Metabolon Inc. (*Durham*) offers biochemical profiling services for the discovery of medical and agricultural biomarkers and pathways associated with disease and diagnostic products based on those discoveries.

www.metabolon.com

Metrics Inc. (*Greenville*) provides contract development and manufacturing of pharmaceutical products. Services include development of full-scale analytical methods, validation and testing, clinical trial materials and packaging.

www.metricsinc.com

Miacom Diagnostics Inc. (*Research Triangle Park*) develops in vitro diagnostic tests for pathogens causing acute systemic diseases.

www.miacom-diagnostics.com

The Research Triangle Park was formed in 1959, leading a global proliferation of research parks that continues today.

Micell Technologies (*Durham*) develops combination-product therapies for interventional cardiology. Its products include drug-eluting cardiovascular stents and balloons.

www.micell.com

Microbac Laboratories Inc. (*Wilson and Fayetteville*) offers chemical and microbiological testing services for the agrochemical, pharmaceutical, tobacco and consumer products industries at its GMP-compliant, ISO 17025 accredited (A2LA) laboratory in Wilson. Microbac offers microbiological testing and sampling services for wastewater, environmental and food safety purposes at its laboratory in Fayetteville.

www.microbac.com

Microban International Ltd. (*Huntersville*) develops and manufactures antimicrobial technologies used in consumer, industrial and medical products.

www.microban.com

Mimesis Inc. (*Greensboro*) produces tissue-specific extracellular matrices, derived from decellularized tissues, for culturing stem and progenitor cells.

Minu LLC (*Pittsboro*) researches and develops ophthalmology products.

Mispro Biotech Services Corp. (*Research Triangle Park*) provides contract research, vivarium space, remote animal husbandry services and remote facility management.

www.misprobiotech.com

Molecular Orthopaedics Inc. (*Chapel Hill*) develops gene therapies for osteoarthritis, with applications in human and animal health.

Molecular Toxicology Inc. (*Boone*) manufactures reagents, assay kits and other products for genetic toxicology research and testing, as well as products for industrial microbiology and quality control.

www.moltox.com

Molecules in Action LLC (*Chapel Hill*) provides custom molecular modeling, virtual drug screening, molecular simulations and consulting services.

www.moleculesinaction.com

Momentum Research Inc. (*Durham*) manages and directs Phase I-IV clinical research projects and specializes in cardiovascular clinical trials management.

www.momentum-research.com

MonomerChem Inc. (*Durham*) provides contract drug development services, including custom synthesis, medicinal chemistry, lead optimization and synthesis of reference standards and metabolites.

www.customsynthesis.com

More than 70 agricultural biotechnology companies have put down roots in North Carolina, including international giants BASF, Bayer CropScience, Syngenta, Novozymes and Monsanto.



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Companies Mo – Ne



Monsanto Co. (*Research Triangle Park, Mount Olive and Kannapolis*) in RTP analyzes the physiological traits of plants in the company's corn, soy and cotton research and development pipeline. Monsanto's Mt. Olive facility is a crops research station. The Monsanto Center for Food and Nutrition Research in Kannapolis focuses on improving the taste and nutritional quality of fruits and vegetables.

www.monsanto.com

MxBiotech LLC (*Greenville*) develops dermal wound healing products and has created a patented tissue scaffold technology for the treatment of chronic dermal wounds including diabetic foot ulcers.

www.mxbiotech.com

Mycorrhiza Biotech LLC (*Burlington*) researches the application of biotechnology in mycorrhizal fungi and truffles, including the development of bioremediation methods and detection assays.

www.mycorrhizabiotech.com

Mycosynthetix Inc. (*Hillsborough*) manages a large collection of fungal isolates and metabolites used in drug discovery and agrochemical and biofuels research.

www.mycosynthetix.com

NanoCor Therapeutics Inc. (*Chapel Hill*) develops an intracellular genetic protein therapy for the treatment of chronic heart failure.

www.nanocorthx.com

NanoMedica Inc. (*Winston-Salem*) provides ultrasensitive detection reagents and nanotechnology-based drug discovery services and tools to biopharmaceutical companies as well as DNA and RNA sequencing services.

www.nanomedica.com

NanoVector Inc. (*Raleigh*) is commercializing a plant virus nanoparticle to develop a family of targeted-delivery, small-molecule cancer drugs.

www.nanovectorinc.com

Natland International Corp. (*Morrisville*) provides contract research synthesis of pharmaceuticals and custom organic chemicals.

www.natland.com

Natural Products & Glycotechnology Research Institute Inc. (*Pittsboro*) develops new methods for the synthesis of oligosaccharides to be used in the development of vaccines or diagnostic tools.

Nature's Pearl Corp. (*Advance*) manufactures nutraceutical and cosmeceutical products from muscadine grape seeds and skins. Its products are manufactured in a cGMP facility and have been studied in clinical trials for efficacy.

www.naturespearlproducts.com

nContact Inc. (*Morrisville*) is developing a cardiac coagulation device for the endoscopic treatment of cardiovascular arrhythmias, including atrial fibrillation.

www.ncontactinc.com

NephroGenex Inc. (*Research Triangle Park*) develops kidney disease therapeutics, with a focus on diabetic nephropathy.

www.nephrogenex.com

Neuro10-9 Pharma Inc. (*Chapel Hill*) develops drug delivery technologies and nanomedicines that cross the blood brain barrier to reach the central nervous system.

www.neuro10-9.com

Neurocath LLC (*Asheville*) is developing a device to monitor blood sugar levels and administer glucose and insulin.

Neurogate Therapeutics Inc. (*Chapel Hill*) develops neurological agents to treat neuropathic pain and epilepsy.

North Carolina's academic institutions include four medical schools, three pharmacy schools, two land grant universities and numerous campuses providing specialized programs in such fields as biotechnology, agbiotech, nanotechnology, medical engineering and biomanufacturing.

NeuroRepair Therapeutics Inc. (*Research Triangle Park*) develops drugs for multiple sclerosis, with a lead compound that shows activity in neuroprotection, remyelination and neuroregeneration.

Neuroscience Research Institute of North Carolina (*Winston-Salem*) is a nonprofit corporation that conducts NIH-funded research on brain functions, alcoholism, Parkinson's disease, schizophrenia and pain regulations.

www.neurosciencenc.org

Neusentis (*Durham*) discovers, develops and commercializes small-molecule drugs that target ion channels, with a focus on epilepsy, pain and inflammatory disorders.

www.neusentis.com

NIRvana Sciences Inc. (*Research Triangle Park*) develops and commercializes near-infrared fluorescence dyes for use in medical diagnostics and optical imaging.

www.nirvanasciences.com

North Carolina Clinical Research (*Raleigh*) conducts Phase I-IV trials in a variety of therapeutic areas at its outpatient clinical research facility.

www.nccr.com

Nova Synthetix Inc. (*Chapel Hill*) is commercializing a non-toxic castor plant that produces a unique fatty acid in its seed oil that is used as a high-value chemical feedstock. It's contracting with growers and developing downstream markets for its castor product.

Novametrics (*Durham*) develops and manufactures blood coagulation diagnostic products.

www.novametrics.com

Novan Therapeutics (*Durham*) develops nitric oxide releasing nanoparticle technology, which has therapeutic potential in applications related to immune system response, wound healing and blood pressure regulation.

www.novantherapeutics.com

Novartis Animal Health US Inc. (*Greensboro*) researches, develops and commercializes animal-health products for pet owners, farmers and veterinarians. The Greensboro location is the U.S. headquarters and operations center for its veterinary health business.

www.ah.novartis.us

Novartis Vaccines and Diagnostics Inc. (*Holly Springs*) produces seasonal flu cell culture vaccine, pre-pandemic and pandemic vaccines.

www.novartisvaccines.com

NovaTarg Inc. (*Durham*) discovers, develops and commercializes new medicines to treat cancer and metabolic diseases.

www.novatarg.org

Novella Clinical Inc. (*Morrisville and Wilmington*) provides CRO support services to biopharmaceutical and medical device companies. Services range from protocol development through final clinical study report.

www.novellaclinical.com

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Companies No – Os

Novo Nordisk Pharmaceutical Industries Inc. (*Clayton*) manufactures insulin products and pre-filled insulin delivery devices.

www.novonordisk-clayton.com

Novolipid Inc. (*Research Triangle Park*) modifies known drugs by appending a proprietary labile fatty acid to create NCE conjugates with a high affinity for albumin. Its initial focus is in oncology applications.

www.novolipid.com

Novozymes North America Inc. (*Franklinton*) manufactures industrial enzymes, microorganisms and biopharmaceutical ingredients, which are used in more than 30 industries, including aquaculture, baking, biofuels, brewing, detergents, food products and textiles.

www.novozymes.com

NPBiosciences LLC (*Research Triangle Park*) develops platforms based on humanized mice to accelerate discovery and development of novel therapies.

www.npbiosciences.com

Nufarm Americas Inc. (*Morrisville*) manufactures and markets insecticides, fungicides, plant growth regulators and herbicides. This site serves as Nufarm's primary R&D facility in the United States.

www.nufarm.com

Nutra-Pharma Manufacturing Corp. of N.C. (*Lexington*) manufactures vitamins, supplements and other wellness products.

Nutraresearch LLC (*Research Triangle Park*) provides contract research on the effects of foods and food ingredients on disease and pre-disease conditions, such as obesity, diabetes and high blood pressure. Nutraresearch also distributes human primary cells and cell-based products.

www.nutraresearch.net

Nutrasorb NC LLC (*Kannapolis*) develops functional foods, dietary supplements and cosmetic ingredients using naturally concentrated phytonutrients such as anthocyanins from fruits and vegetables.

www.nutrasorb.com

Oak-Bark Corp. (*Riegelwood and Wilmington*) develops and manufactures semi-bulk and bulk chemicals, specializing in organosulfur products. The production facility is located in Riegelwood and the corporate office is located in Wilmington.

www.oak-bark.com

Ocean Therapeutics Inc. (*Cary*) in-licenses, out-licenses and develops new medicines and drug candidates from marine organisms in a variety of therapeutic areas.

www.oceantherapeutics.com

Ockham (*Cary*) provides full clinical research management to biotechnology and pharmaceutical organizations for their oncology trials. Ockham also provides strategic consulting in preclinical and clinical development.

www.ockham.com

Ocular Systems Inc. (*Winston-Salem*) provides corneal endothelial cells for transplantation, as well as related supplies and devices. It is an FDA-registered human tissue establishment.

www.ocularsystemsinc.com

Oncoscope Inc. (*Durham*) develops optical imaging systems for guided biopsy of epithelial tissues in the esophagus, colon, lung, cervix and bladder.

www.oncoscope.com

Oncotide Pharmaceuticals Inc. (*Research Triangle Park*) discovers and develops drugs that modulate protein phosphatases to disrupt cancer cells' ability to proliferate and survive.

www.oncotide.com

OpAns LLC (*Durham*) provides analytical services to support discovery, preclinical, toxicology and clinical studies.

www.opans.com

Oriel Therapeutics Inc. (*Durham*), a subsidiary of Sandoz, develops respiratory products as generic alternatives to patented drugs for asthma and COPD. It also develops and commercializes pre-metered unit and multidose dry powder delivery systems.

Oryx Bio Inc. (*Raleigh*) Bio develops biosensors and bioseparation products for use in bioanalysis research and biopharmaceutical production.

www.oryxbio.com

Osmotica Pharmaceutical Corp. (*Wilmington*) specializes in drug-delivery technologies and neurology-based therapies including a treatment for Parkinson's disease.

www.osmotica.com



Ovation Biotech Inc. (*Raleigh*) develops and commercializes advanced biofuel and renewable chemical technologies, including the use of algae as a feedstock, in partnership with N.C. State University.

www.ovationbiotech.com

Oxygen Biotherapeutics Inc. (*Morrisville*) develops medical and cosmetic products that deliver oxygen to tissues in the body that are oxygen-deprived as a result of a wound, brain injury, stroke or other condition.

www.oxybiomed.com

Pace Analytical Services Inc. (*Asheville*) provides inorganic and aquatic toxicity testing services, as well as sampling services for groundwater, wastewater and soil.

www.pacelabs.com

Pace Analytical Services Inc. (*Raleigh*) provides environmental testing services specializing in bioassay, metals, wet chemistry, microbiology and organics.

www.pacelabs.com/about-us/locations/raleigh-nc.html

PAREXEL International Corp. (*Durham*) provides drug-development and launch services, including clinical development, integrated advanced technologies, regulatory affairs consulting and commercialization services.

www.parexel.com

Parion Sciences Inc. (*Durham*) develops therapies that use topical inhibitors of the epithelial sodium channel to correct immune-system defects in respiratory diseases such as cystic fibrosis and COPD.

www.parion.com

Patheon Inc. (*Research Triangle Park and Morrisville*) provides contract development and manufacturing services, from preclinical development to commercial manufacturing in parenteral, solid, semisolid and liquid forms. Patheon's laboratory in RTP offers analytical development services supporting pre-clinical through registration batches.

www.patheon.com

Pathfinder Pharmaceuticals Inc. (*Durham*) specializes in early stage drug discovery, with a focus on cancer therapy.

www.pathfinderpharma.com



Pearl Therapeutics Inc. (*Raleigh*) develops combination therapies and formulations of inhaled drugs for chronic respiratory diseases such as asthma and COPD.

www.pearltherapeutics.com

Peptagen Inc. (*Raleigh*) develops nasally-administered cytotoxic T-lymphocyte nanoparticle vaccines for the prevention and treatment of pathogenic diseases and cancer, with a lead program in treatment of HIV/AIDS-related illness.

www.peptagen.com

Pfizer Global Supply (*Maxton*) develops and manufactures coccidiosis vaccines for use in Ovoject systems for poultry health.

www.pfizerpoultryhealth.com

Pfizer Inc. (*Sanford*) manufactures clinical trial and commercial materials for vaccines such as Prevnar and Meningitec.

www.pfizer.com

PharmaCore Inc. (*High Point*) provides custom organic synthesis, medicinal chemistry and GMP scale-up for drug discovery and development.

www.pharmacore.com

PharmaDirections Inc. (*Cary*) provides scientific and regulatory consulting for drug development and project management with a focus on preclinical, CMC and regulatory services.

www.pharmadirections.com

PharmAgra Labs Inc. (*Brevard*) conducts contract research and development in organic and medicinal chemistry. The company also offers cGMP preparation of drug substances for use in Clinical Trials as well as low volume API manufacturing.

www.pharmagra.com

PharmaLogika Inc. (*Willow Springs*) develops, manufactures and markets prescription medication and medical devices primarily for neurological diseases, as well as over-the-counter medications and supplements for humans and animals.

www.pharmalogika.com

PharmAthene Inc. (*Durham*) develops and manufactures biological and chemical defense products, including an anthrax vaccine.

www.pharmathene.com

Pharm-Olam International (*Research Triangle Park*) provides Phase I-IV clinical research services.

www.pharm-olam.com

PharmStar Pharmaceuticals Inc. (*Rocky Mount*) makes Aquaprin, an FDA-approved water-soluble aspirin.

www.pharmstarinc.com

Phenogen Sciences Inc. (*Charlotte*) provides predictive testing and risk assessment tools that help physicians proactively manage patient health.

www.phenogensciences.com

Companies Ph – Pr



Physcient Inc. (*Durham*) develops new surgical tools designed to decrease tissue damage during surgery.
www.physcient.com

Physicians Laboratories (*Kernersville*) produces and distributes Revival Soy protein products and diet products.
www.soy.com

PhytoChem Pharmaceuticals Inc. (*Cary*) is developing a prescription medical food for the treatment of metabolic processes and inflammation involved in breast cancer recurrence.
www.phytochem.com

Phytonix Corp. (*Asheville*) develops and commercializes biofuels from algae and cyanobacteria.
www.phytonix.com

PhytoPharmacon Inc. (*Garner*) discovers, develops and commercializes a portfolio of botanically-derived pharmaceuticals and medical foods.
www.phytopharmacon.com

Piedmont Biofuels (*Pittsboro*) is a community scale biodiesel producer, which makes and distributes fuel, provides laboratory testing to other biodiesel producers, and offers consulting services to the industry.
www.biofuels.coop

Piedmont Pharmaceuticals LLC (*Greensboro*) develops and licenses human health and animal health therapeutics with a focus on parasitology and drug delivery systems.
www.piedmontpharma.com

Piedmont Research Center (*Morrisville*), a division of Charles River, provides a full spectrum of in vivo and in vitro oncology research services.
www.criver.com/en-US/ProdServ/ByType/Discovery/Pages/about2.aspx

Pioneer Surgical Technology Inc. (*Greenville and Raleigh*) develops injectable biopolymers used as regenerative medicine in orthopedic applications.
www.pioneersurgical.com

Pique Therapeutics Inc. (*Durham*) develops therapeutic vaccines for the treatment of cancer.
www.piquetherapeutics.com

Pisgah Labs Inc. (*Pisgah Forest*) manufactures active pharmaceutical ingredients on a contract basis. Pisgah Labs' cGMP facility includes an aseptic manufacturing suite.
www.pisgahlabs.com

Plant Health Care Inc. (*Raleigh*) develops technologies to promote plant health and increase crop yields.
www.planthealthcare.com

Plureon Corp. (*Winston-Salem*) develops a technology platform based on pluripotent stem cells extracted from amniotic fluid and placentas. These cells may be used in regenerative medicine and other therapies.
www.plureon.com

Polyzen Inc. (*Apex*) designs and manufactures customized disposable medical devices.
www.polyzen.com

Powered Research LLC (*Research Triangle Park*) provides contract research services to small life sciences companies using established and novel nonclinical models.
www.poweredresearch.com

POZEN Inc. (*Chapel Hill*) develops products for the treatment of acute and chronic pain, and pain-related conditions.
www.pozen.com

PPD Inc. (*Wilmington, Durham and Morrisville*), a global contract research organization, provides drug discovery, development and life-cycle management services to pharmaceutical, biotechnology, medical device, academic and government organizations. PPD's RTP locations include clinical operations, medical communications, a preclinical lab and other drug development functions.
www.ppdi.com

PRA International Inc. (*Raleigh*), a global CRO, provides services for all phases of clinical development.
www.praintl.com

Precision BioSciences Inc. (*Durham*) develops technology to produce custom, genome-editing enzymes for human health and biological research. The technology is called Directed Nuclease Editor.
www.precisionbiosciences.com

Precision PlantSciences Inc. (*Durham*) develops Precision Biosciences' technology, called Directed Nuclease Editor, for agricultural applications.
www.precisionbiosciences.com



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Prima Biomed USA Inc. (*Cary*) is developing Cvac(tm), an autologous, dendritic-cell immune stimulant to treat ovarian cancer.

www.primabiomed.com.au

Proactive Genomics LLC (*Winston-Salem*) is developing a genetic test for men to assess their genetic risk for prostate cancer.

www.proactivegenomics.com/news.html

Proteovations (*Research Triangle Park*) provides services and new technologies for protein expression research, biomarker discovery and diagnostics, including protein identification and quantitation, shotgun proteomics and protein profiling.

www.proteomicsanalysiservices.com

ProTrials Research Inc. (*Chapel Hill*) provides services for Phase I-IV clinical trials in a variety of therapeutic areas.

www.protrials.com

Purdue Pharmaceuticals LP (*Wilson*) produces and packages oral solid-dosage tablets and is a distribution center for prescription products.

www.purduepharma.com

QOL Medical LLC (*Raleigh*) acquires, grows and commercializes existing or approved and complementary new metabolic disease and pediatric gastroenterology products.

www.qolmed.com

QPS Hepatic Biosciences (*Research Triangle Park*) specializes in hepatocyte research, drug metabolism, drug transporter services and in vitro drug-drug interactions.

www.qps.com

Qualiber Inc. (*Chapel Hill*) develops nanotechnologies to solve drug delivery challenges for siRNA, small molecules and gene-based therapeutics, with a focus on cancer, hepatitis and liver diseases.

www.qualiberinc.com

Qualicaps Inc. (*Whitsett*) manufactures empty two-piece capsules (gelatin and hypromellose) and encapsulation equipment under cGMP regulations for use by pharmaceutical, OTC and dietary-supplement manufacturers.

www.qualicaps.com

Qualitest Pharmaceuticals Inc. (*Charlotte*) manufactures generic pharmaceuticals. The company's solid-dose manufacturing facility in Charlotte also includes laboratory space for quality control and R&D.

www.qualitestrx.com

The NCBiotech AgBiotech Initiative is committed to helping expand the states \$77 billion annual agriculture economy to \$100 billion by 2020.

Quality Chemical Laboratories (*Wilmington*) offers contract analytical and microbiological testing services to pharmaceutical companies, including raw-material and finished-product testing, stability testing, method development and validation.

www.qualitychemlabs.com

Qualyst Transporter Solutions LLC (*Durham*) develops and commercializes cell-based drug toxicity-testing products used in pharmaceutical development, based on its proprietary hepatocyte technologies.

www.qualyst.com

QuarTek Corp. (*Greensboro*) develops nanotechnology processes with applications in antimicrobials, advanced textiles, nano-sensors, diagnostics and biofuels. The company also provides accelerator services for startup nanotechnology companies.

www.quartekcorp.com

Quintiles (*Durham and Morrisville*) is a contract research organization that provides clinical- and product-development services for pharmaceuticals, biosimilars and medical devices.

www.quintiles.com

Radiant Neurosciences LLC (*Durham*) develops medicines to treat neurodevelopmental disorders in children.

Regado Biosciences Inc. (*Durham*) discovers and develops injectable antithrombotics, including anticoagulants and antiplatelet agents.

www.regadobiosciences.com

Research Triangle Park Laboratories Inc. (*Raleigh*) provides contract analytical laboratory services for environmental, pharmaceutical, biotechnology, dietary supplements and manufacturing industries.

www.rtp-labs.com

RF Wastewater (*Raleigh*) focuses on biological wastewater treatment, using lignocellulosic materials as biofilm media for activated sludge system retrofits and upgrades.

www.rfwastewater.com

Rheomics Inc. (*Chapel Hill*) is developing technologies to measure fluid viscosity and cell membrane rigidity. These technologies will be incorporated into biomedical instruments designed to diagnose clotting disorders and cancer metastasis.

www.rheomics.com

Rho (*Chapel Hill*) provides clinical development and contract research services to the biotechnology, pharmaceutical and medical-device industries.

www.rhoworld.com

Ridge Diagnostics Inc. (*Research Triangle Park*) markets a blood test as an aid for diagnosing depression. Other products are being developed for treatment monitoring and for diagnosis of other neuropsychiatric diseases.

www.ridgedx.com

Rockwell Automation Life Sciences (*Cary*) provides automation control, process optimization and execution systems for manufacturers. Rockwell's Cary location is the headquarters for the Americas life-sciences division.

www.rockwellautomation.com/industries/lifesciences

RTI Health Solutions (*Research Triangle Park*) provides consulting and research services to help pharmaceutical, biotechnology, diagnostics and medical-device companies achieve their product development and market access objectives.

www.rtihealthsolutions.org

KeraNetics LLC received a \$150,000 NCBiotech loan in 2009 and earned \$26 million in follow-on funding, leading to five products under development. Bioptigen Inc. received a \$24,000 NCBiotech loan in 2004 and earned \$11 million in follow-on funding.

RTI International (*Research Triangle Park*) is a nonprofit organization that provides research and technical services to governments and businesses, including drug discovery and development, analytical chemistry, agriculture, medical device and diagnostics research.

www.rti.org

Salix Pharmaceuticals Inc. (*Raleigh*) develops and markets prescription pharmaceutical products for the treatment of gastrointestinal diseases.

www.salix.com

Salzburg Therapeutics Inc. (*Yadkinville*) is developing systems that deliver activated forms of anti-cancer drugs, nucleic acid drugs and nanoparticles directly to cancer cells.

www.sztipharm.com

Sandoz Inc. (*Wilson*) manufactures oral-dosage generic pharmaceuticals.

www.us.sandoz.com

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www.gtcc.edu

BIOTECHNOLOGY

Companies Sa – Sm



Sapheon Inc. (*Morrisville*) develops medical devices and technology to treat vascular diseases.

www.sapheoninc.com

SciIntl LLC (*Greensboro*) develops computation technologies to screen chemicals and target databases in order to identify and optimize leads for preclinical candidates. SciIntl's technologies can also be used to discover small molecule enzyme activators.

www.SciIntl.com

Scientific Analytical Institute Inc.

(*Greensboro*) conducts environmental, indoor-air-quality, forensic and materials testing.

www.sailab.com

SciKon Innovation Inc. (*Research Triangle Park*) develops medical and pharmaceutical biotools using tissue-engineering principles to include cell ecosystems, living thermodynamics, nutrient transport and delivery, and "cell systems" approaches.

www.scikoninnovation.com

Scioderm LLC (*Raleigh*) develops drugs to treat chronic skin diseases such as epidermolysis bullosa, psoriasis and diabetic ulcers.

www.sderm.com

Sciteck Inc. (*Fletcher*) provides forensic drug-testing services and diagnostic products. Sciteck develops, manufactures and sells products for biotechnology, urinalysis, clinical chemistry, toxicology, pharmaceuticals, treatment and safety applications.

www.sciteck.org

SCYNEXIS Inc. (*Durham*) offers fully integrated contract research services including medicinal chemistry, biological screening, ADMET-PK, process chemistry and cGMP manufacturing to discover and develop compounds for clinical testing.

www.scynexis.com

Seachaid Pharmaceuticals Inc. (*Durham*) discovers and develops human therapeutics.

www.seachaid.com

SenGenix Inc. (*Chapel Hill*) develops point-of-care blood diagnostic tests using fluorescently responsive sensors.

www.sengenix.com

SePRO Research & Technology Campus (*Whitakers*) acquires, develops, manufactures and markets products for aquatics and horticulture. SePRO's research and technology campus in Whitakers is the primary research and development site for the company.

www.sepro.com

Sequenom Center for Molecular Medicine LLC (*Morrisville*) develops and provides clinical diagnostic testing and genetic testing services for prenatal and eye conditions.

www.sequenom.com

Serum Source International Inc. (*Charlotte*) supplies animal serum for cell-culture research.

www.serumsourceintl.com

Shoaf Scientific Consultants Inc. (*Lexington*) provides consulting and research services for clients developing new methods for manufacturing biological and biochemical sensors and other biomedical products.

www.shoafbiochem.com

Shure Foods Inc. (*Greenville*) produces cold-structured crab by treating the uncooked crab meat with a protein binding agent.

www.shurefoods.com

SipcamAdvan (*Durham*) develops and manufactures herbicides, pesticides, fungicides and biocides.

www.sipcamadvan.com

SIRGA Advanced Biopharma Inc. (*Research Triangle Park*) discovers and develops small-molecule drugs to treat HIV and other drug-resistant infectious diseases.

www.sirgaab.com

Smart Perfusion LLC (*Denver*) is developing a device to expand the time an organ is viable for transplantation.

www.smartperfusion.com

SmartFlow Technologies Inc. (*Apex*) provides filtration, separation and purification for biotechnology, biofuels, biopharmaceutical processing, animal health care, dairy processing, enzyme manufacturing and wastewater.

www.smartflow-tech.com

Smithers Viscient LLC (*Snow Camp*) provides environmental testing services for the pharmaceutical, veterinary, agriculture, chemical and personal-care industries. The company's lab in Snow Camp conducts avian and wildlife toxicology testing.

www.smithersviscient.com

Solstas Lab Partners (Greensboro, High Point and Wilmington) provides laboratory testing services to hospitals, nursing homes, home health, clinics, urgent-care facilities and other businesses.

www.solstas.com

Southcot Inc. (Research Triangle Park) prepares and distributes carotene standards from natural sources and purifies them using preparative high-performance liquid chromatography.

www.carotenestandards.com

Southeastern Laboratories Inc. (Goldsboro) provides research and laboratory support to water and wastewater-treatment companies. SEL's analytical services include microbiological and chemical testing.

www.selaboratories.com

Southern Research Institute - Advanced Energy & Transportation Technologies (Durham) provides research and analytical services and facilities to government and commercial clients in energy, fuel and transportation technologies.

www.southernresearch.org/environment-energy/north-carolina-operations-advanced-energy-and-transportation-technologies

SOV Therapeutics Inc. (Morrisville) develops therapeutic treatments, with a focus on oral testosterone replacement therapies for adult men.

www.sovtherapeutics.com

SoyMeds Inc. (Davidson) is developing a seed-based expression platform that enables production of protein-based targets that can be used to diagnose and treat disease and address other unmet needs in the health-care industry.

www.soymeds.com

SP3 Polymer (Durham) provides contract research services, custom synthesis of PEGylated products and chemical derivatives.

www.sp3polymer.com

North Carolina's more-than 120 contract research and testing companies make NC the world's greatest concentration of such firms.

Specialty Scientific LLC (High Point) provides contract laboratory services including antimicrobial testing and other analytical and testing services.

www.specialtytesting.com

Sprout Pharmaceuticals Inc. (Raleigh) is developing a Phase III compound to treat hypoactive sexual desire disorder.

www.sproutpharma.com

Sterigenics (Charlotte and Haw River) provides gamma radiation and ethylene oxide sterilization for medical and pharmaceutical products.

www.sterigenics.com

Stiefel Laboratories Inc. (Research Triangle Park), a GSK company, develops skin-care therapies. The company's primary research and development facility is in RTP.

www.stiefel.com

Structure Medical Inc. (Mooresville) is a contract manufacturer of orthopedic medical devices, including implantable orthopedic fracture fixation and spinal instrumentation products.

www.structuremedical.com

Suncare Research Laboratories LLC (Winston-Salem) provides services to sunscreen and dermatological product manufacturers, including evaluation of sunscreen SPF and UVA protection.

www.suncarelab.com

SureMilk LLC (Research Triangle Park) develops products to diagnose and treat low caloric content in breast milk.

www.suremilk.com

Symmetry Biosciences Inc. (Research Triangle Park) provides contract research and specialized chemistry services to the biotech, pharmaceutical, medical device, agrochemical and fine chemical industries.

www.symmetrybiosciences.com





Synecor Labs (*Durham*) is an AAALAC-accredited large-animal, preclinical contract research organization. It provides preclinical testing services, specializing models for safety, toxicology and efficacy studies.

www.synecorlabs.com

Synereca Pharmaceuticals Inc. (*Chapel Hill*) develops orally active drugs that restore or increase the effectiveness of existing antibiotics.

www.synereca.com

Syngenta Biotechnology Inc. (*Research Triangle Park*) works in plant biotechnology to develop insect control and drought tolerance. Research Triangle Park is the company's central location for biofuels product development.

www.syngentabiotech.com

Syngenta Crop Protection Inc. (*Greensboro*) develops and markets weed-, insect- and disease-control products.

www.syngenta-us.com

Synpac Inc. (*Durham*) is developing a drug for the treatment of Pompe disease.

Synteract Inc. (*Morrisville*) provides customized Phase I through IV clinical development services, across multiple therapeutic areas including a notable depth in oncology, CNS, cardiovascular, respiratory and ophthalmology.

www.synteract.com

Synthon Pharmaceuticals Inc. (*Research Triangle Park*) develops and manufactures biological compounds such as antibodies and other human therapeutic proteins. Key therapeutic areas include oncology and multiple sclerosis.

www.synthon.com

Synthonix Inc. (*Wake Forest*) designs, manufactures and markets molecules to aid in drug discovery.

www.synthonix.com

TAB Clinical Trials (*Cary*) provides global clinical trial support from pre-IND stage of development to post-market approval for drugs and devices.

www.tabclinical.com

Tandem Labs Inc. (*Durham*) provides bioanalytical and immunoanalytical services, specializing in GLP-compliant LC/MS/MS bioanalytical services for all phases of drug discovery and development.

www.tandemlabs.com

Targacept Inc. (*Winston-Salem*) develops neuronal nicotinic receptors (NNRs) therapeutics for diseases and disorders of the nervous system.

www.targacept.com

TearScience Inc. (*Morrisville*) develops, markets and sells diagnostic and treatment medical devices for evaporative dry eye.

www.TearScience.com

Technology Crops International (*Winston-Salem*) designs, evaluates and develops specialty plant-derived oils for food, chemical, dietary supplement and personal care uses. The company manages the supply chain from soil to oil, providing traceability, consistent demand and quality control.

www.technologycrops.com

Teleflex (*Asheboro and Research Triangle Park*) designs, manufactures and distributes medical devices, surgical instruments and disposable medical products. Its facility in Asheboro manufactures disposable catheters and related products for critical and cardiac care.

www.teleflex.com

Tem Systems Inc. (*Durham*) is the developer and manufacturer of the ROTEM® hemostasis analyzer.

www.roteminc.com

Tengion Inc. (*Winston-Salem*) develops and manufactures human neo-organs and neo-tissues for regenerative medicine, using the Autologous Organ Regeneration Platform™.

www.tengion.com

TeraDiscoveries Inc. (*Research Triangle Park*) uses high-performance computing and the principles of personalized medicine to enable clients and partners to speed drug development, especially in oncology.

www.teradiscoveries.com

Tergus Pharma LLC (*Durham*) provides topical product development services utilizing in vitro penetration models and other tools. It also provides regulatory support and analytical testing services.

www.terguspharma.com

TerraStar Energy (*Lumberton*) develops and provides turn-key systems to convert environmentally harmful waste to biogas, methane, electricity, liquid fuels and solid and liquid fertilizers.

www.terrastarenergy.com

Teva Pharmaceuticals (*Greensboro*) manufactures Vicks and other OTC products.

www.tevapharm-na.com

The Hamner Institutes for Health Sciences (*Research Triangle Park*), a nonprofit research organization, focuses on research in chemical and drug safety and works with academic, industry and government partners to bring improved medicines from bench to bedside.

www.thehamner.org

TheraLogics Inc. (*Chapel Hill*) discovers and develops treatments for human diseases using human transcription factor NF- κ B technologies.

TIRF Technologies Inc. (*Morrisville*) develops and manufactures biosensor devices and reagentless assays for analysis of biomolecular interactions, using the technology of total internal reflection fluorescence (TIRF).

www.tirftechnologies.com

Toxicology Services Inc. (*Chapel Hill*) works with small and mid-sized pharmaceutical companies and CROs to plan, conduct and summarize toxicology studies, including PK/ADME studies.

www.toxicologyservices.net

Trana Discovery Inc. (*Cary*) provides a proprietary drug discovery technology platform that enables its partners to discover new treatments of bacterial, viral and fungal infectious diseases in humans, animals and crops.

www.tranadiscovery.com

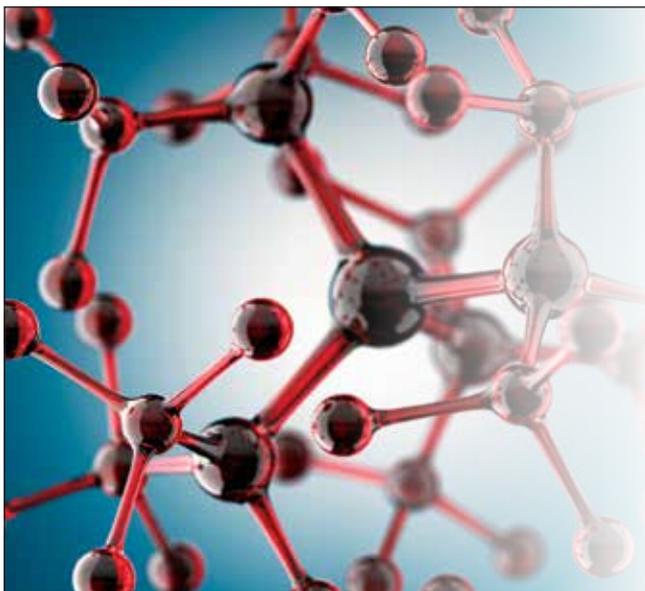
TransEnterix Inc. (*Morrisville*) designs and develops medical devices for minimally invasive surgery, including a surgical system called SPIDER™, which enables surgeons to perform an operation through a single site access.

www.transenterix.com

TransTech Pharma Inc. (*High Point*) develops and commercializes therapeutics for human diseases of the central nervous and cardiovascular systems, as well as diabetes, obesity and cancer.

www.ttpharma.com

An NCBiotech grant helped commercialize Duke University technology to become **Advanced Liquid Logic**. Boosted by \$468K in NCBiotech loans since 2003, ALL has earned \$55M in follow-on funding, holds hundreds patents, launched its first product in 2011 and now employs 80 North Carolinians.



Helping Biotechnology Do Business

Robinson Bradshaw's extensive experience advising pharmaceutical, biotechnology and personalized medicine companies and investors has made us one of the leading law firms in these fields.

Our clients range from publicly traded companies to early-stage start-ups and universities, from individual entrepreneurs to large financial investors. Our experience enables us to provide sophisticated advice in investment, M&A, financing and licensing transactions in biotechnology.



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Companies Tr – Ve



TransViragen Inc. (*Durham*) provides in vivo discovery research services, including a full suite of genetically modified mouse and rat model services, from custom-model generation to phenotyping.
www.transviragen.com

TransWorld Heart Corp. (*Monroe*) develops medical devices for the management of heart disease.
www.transworldmed.com/transworldheart/

Tranzyme Pharma (*Durham*) develops small-molecule drugs for gastrointestinal motility disorders.
www.tranzyme.com

Treyco Environmental Solutions (*Wilson*) created and manufactures a patented enzymatic degreaser product called TPP1.
www.treyco.net

Triad BioGreen Technologies Inc. (*Greensboro*) develops technology to produce and market algae-based biofuels.
www.triadbiogreen.com

Athenix received a \$150K NCBiotech loan in 2002 and was acquired in 2009 for \$365M by Bayer CropScience, whose North American headquarters is in NC.

Triangle Biofuels Industries Inc. (*Wilson*) produces biodiesel from virgin and waste vegetable oil, including locally-sourced soybean, canola, camelina and corn oils.
www.trianglebiofuels.com

Triangle BioSystems International (*Durham*) develops, produces, markets and supports biomedical analog signal processing products that advance the research and performance capabilities of its customers in the neurophysiology and ultrasound marketplace.
www.trianglebiosystems.com

Triangle Research Labs LLC (*Research Triangle Park*) specializes in hepatocyte production for use in research focused on drug metabolism, drug-drug interactions, drug transporters and hepatotoxicity.
www.triangleresearchlabs.com

Tribofilm Research Inc. (*Raleigh*) develops low-friction, thin-film coating and lubrication platforms for medical devices and for the aerospace and marine industries.
www.tribofilmresearch.com

TriE Medical Inc. (*Morrisville*) provides design, documentation, manufacturing and testing services for medical device development, with expertise in designing drug-delivery systems and biomedical monitoring devices.
www.triemedical.com

Tryton Medical Inc. (*Durham*) develops stent systems for the treatment of coronary artery bifurcation lesions.
www.trytonmedical.com

TUNTek LLC (*Durham*) develops technology and products for early detection of cancer and other chronic diseases.
www.tuntekllc.com

TyraTech Inc. (*Morrisville*) develops natural pesticides that are safe for humans and animals by targeting invertebrate-specific receptors.
www.tyratech.com

UCB Biosciences Inc. (*Raleigh*) develops therapeutics for the treatment of severe, life-threatening neurological and inflammatory diseases.
www.ucb.com

United Therapeutics Corp. (*Research Triangle Park*) develops and commercializes products to treat cardiopulmonary diseases, infectious diseases and cancer.
www.unither.com

Valeant Pharmaceuticals North America (*Durham*) develops and manufactures pharmaceuticals for neurology and dermatology markets.
www.valeant.com

Vascular BioSciences Inc. (*Durham*) develops technologies to detect and treat vascular-based disease.
www.vascularbiosciences.com

Vascular Pharmaceuticals Inc. (*Chapel Hill*) develops and commercializes therapeutic products to treat secondary complications of diabetes.
www.vascularpharma.com

Venganza Inc. (*Raleigh*) uses RNA interference technology to control plant pests and reduce the application of fungicides and other pesticides.
www.venganzainc.com

Vertellus Specialties Inc. (*Greensboro*) manufactures specialty chemicals for the agriculture, nutrition, pharmaceutical, medical and personal-care markets.
www.vertellus.com

Viamet Pharmaceuticals Inc. (*Durham*) discovers and develops small-molecule compounds that target metalloenzymes in infectious disease, oncology and crop protection.

www.viamet.com

ViiV Healthcare (*Research Triangle Park*), in conjunction with parent companies GlaxoSmithKline and Pfizer, develops drugs to treat HIV infection and disease.

www.viivhealthcare.com

Vijaya Pharmaceuticals LLC (*Research Triangle Park*) provides medicinal and synthetic organic chemistry services to the pharmaceutical and allied industries.

www.vijayapharma.com

Vindica Therapeutics Inc. (*Raleigh*) is developing an anti-thrombotic and anti-infective central venous catheter that provides controlled release of nitric oxide.

ViraSource LLC (*Research Triangle Park*) propagates and purifies BSL-2 viruses and provides animal models of viral infections and anti-viral immune responses.

www.virasource.com

WanGene Diagnostics Inc. (*Research Triangle Park*) is developing lateral-flow immunoassays and molecular diagnostic products.

West Pharmaceutical Services Inc. (*Kinston*) manufactures syringe plungers and IV system components, using compression molding.

www.westpharma.com

WIL Research (*Hillsborough*) provides contract toxicologic pathology and histology services.

www.wilresearch.com

Wilmington Pathology Associates (*Wilmington*) offers surgical pathology and cytopathology diagnostic services. The company is part of Solstas Lab Partners.

www.wilmingtonpathology.com

Wilmington Pharmaceuticals LLC (*Wilmington*) develops fast-dissolving dosage forms for established medicines.

www.wilmingtonpharma.com

Xenobiotic Detection Systems Inc. (*Durham*) offers patented bioassays to facilitate assessment of environmental and human health risks.

www.dioxins.com

X-in8 Biologicals Corp. (*Chapel Hill*) develops technologies to prevent and treat ischemia reperfusion injury in the context of organ transplant, myocardial infarction and stroke.

Yasoo Health Inc. (*Raleigh*) develops condition-specific nutraceutical products consisting of essential nutrients and natural compounds.

www.yasoo.com

Yukon Medical LLC (*Durham*) develops pharmaceutical drug preparation and delivery devices with a focus on drug reconstitution.

www.yukonmedical.com

Zenalux Biomedical Inc. (*Durham*) uses biophotonics to develop diagnostic tools, including an optical system for the clinical detection of cancer.

www.zenalux.com

Zen-Bio Inc. (*Research Triangle Park*) provides contract research services and human tissues and cells for drug discovery, especially in the area of human metabolic disease and dermatology.

www.zen-bio.com

Zinfandel Pharmaceuticals Inc. (*Durham*) uses pharmacogenetics to improve prediction of risk for Alzheimer's disease and facilitate the development of effective therapies.

ZOA Biologicals LLC (*Kannapolis*) researches and develops medical products useful to humans and animals.

Zoetis Inc. (*Durham*) develops and manufactures vaccines and medications for flock health. The company is a supplier of in ovo vaccination technology.

www.zoetis.com

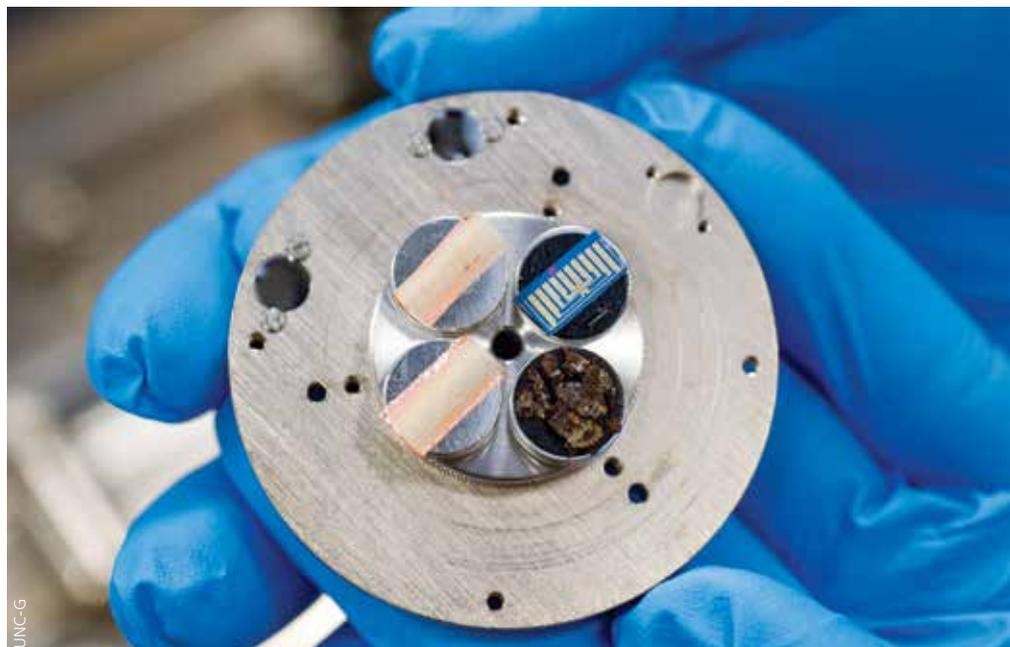
Zoion Pharma Inc. (*Research Triangle Park*) develops drugs for veterinary disorders. Zoion's lead product is an epithelial sodium channel blocker compound to treat canine keratoconjunctivitis sicca (KCS) or dry eye.

Zor Pharmaceuticals LLC (*Wilmington*) develops and commercializes therapies for the treatment of cancer, especially pancreatic cancer.

www.zorpharma.com

Zylera Pharmaceuticals LLC (*Research Triangle Park*) develops, acquires and commercializes prescription products and dietary supplements specifically for pediatric and women's health.

www.zylera.com



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ALSTON & BIRD LLP

The futures of the growing biotechnology community and the state's economy are intrinsically linked. The industry's expansion and development means more jobs, significant scientific advancements and an improved local quality of life. Alston & Bird harbors the expertise and drive to support biotechnology and its continued success in North Carolina.



North Carolina is known for its rich agricultural history, and Bayer CropScience is committed to cultivating the industry's future. Our role in the biotechnology sector focuses on improving agricultural crops such as cotton, canola, soybean and wheat. Partnerships with local universities and companies are what have made a North Carolina address so rewarding for Bayer CropScience.



BASF believes that plant biotechnology is key for the 21st century, and North Carolina is a hub for innovation. With our global plant science headquarters now in Research Triangle Park, we continue to grow as one of the world's leading providers of biotech solutions for agriculture. BASF Plant Science has developed a unique gene-discovery platform for yield and quality traits in crops such as corn, soybeans and rice. Projects include higher-yielding row crops and nutritionally enhanced corn for animal feed.



Carolinus HealthCare System Division of Therapeutic Research and Development

Carolinus HealthCare System is comprised of a diverse network of more than 791 care locations that see more than 10 million patient encounters annually. This fact, along with state-of-the-art research core facilities and physician-scientist research teams, afford CHS a unique advantage to conduct clinical translational research that comprehensively addresses patient needs and the discovery of preventative therapies and treatments for many illnesses.

GRIFOLS

Grifols is a global health-care company with a 70-year legacy of improving people's health and well-being through the development of life-saving plasma therapies, hospital pharmacy products and diagnostic technology for clinical use. The company, headquartered in Barcelona, Spain, has a major presence in Research Triangle Park, Raleigh and Clayton, where plasma-derived products are developed and produced to treat chronic and acute conditions in the therapeutic areas of immunology, pulmonology and hemostasis. www.grifols.com



Biotechnology research at North Carolina Agricultural and Technical State University applies our historic strengths in agriculture, engineering and technology with an interdisciplinary focus on today's great challenges in animal and plant science, environmental science and human health. Aggie researchers working in fields as varied as food science, bioengineering and biomedical research are creating new knowledge and developing a diverse new generation of scientists, engineers and researchers.



PPD is an industry-leading contract-research organization providing drug discovery, development and life-cycle management services. With nearly 3,000 employees in North Carolina, and our global headquarters in Wilmington, since 1986, the strength of the state's biotechnology industry has played a significant role in the continued growth and success of our business.

K&L GATES

K&L Gates is honored to serve the North Carolina life-sciences industry. Our life-sciences network of more than 115 lawyers — in the innovation hubs of Silicon Valley, Boston, Southern California and here in Research Triangle Park and Raleigh — assists on the complex legal and regulatory issues facing pharmaceutical, biotechnology, health-care and medical-device companies. We are proud to play an important role in helping local life-sciences ventures and companies further their business objectives and provide breakthrough solutions.



BRITE is the Biomanufacturing Research Institute and Technology Enterprise at North Carolina Central University. Completed in 2008, the center was launched with more than \$20 million in economic development funds provided by the Golden LEAF Foundation. BRITE scientists perform research in key areas of drug discovery and biomanufacturing. Working alongside them are BRITE students — in B.S., M.S. and Ph.D. programs — developing the research and laboratory skills that bioscience industries need. Our graduates are prepared from "Day One" to thrive in the workplace and research lab.



Wake Forest Innovations commercializes technology, products and services arising from the discoveries and scientific assets of Wake Forest Baptist Medical Center and Wake Forest University. The enterprise facilitates innovation and partners our proprietary technology, enables other organizations and companies to access our scientific assets and develops the Innovation Quarter as a locale for creative innovation in biomedicine and information technology.



North Carolina Biotechnology Center

North Carolina's strong science, thriving industry and low business costs offer biotechnology companies a unique opportunity for growth. NCBiotech's mission is to provide long-term economic and societal benefits to North Carolina through support of biotechnology research, business, education and strategic policy statewide.



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