



Overview:
Our Services and
Expertise

Genovative Solutions Services

- **Strategic Marketing**
 - Market Research
 - Develop Value Proposition and Key Messaging for Product, Service or Technology
 - Identification of Key Differentiators and Target Markets
 - Define or Refine Value Propositions and “Messaging” to get the word out most effectively
- **Tactical Marketing**
 - Create Optimal and Effective Sales Collateral for Delivery of Key Messages
 - Web Site Development/Enhancement and SEO
 - Promotional Activities to Generate Visibility and Create Leads
- **Sales**
 - Penetration: Strategy Development and Execution
 - Sales Force Development: Design, Hire and Train
- Please see: <http://genovative-solutions.com/sales-process/> for an overview of our approach to creating commercial success

Why Choose Genovative Solutions?

- **Combining Commercial Experience with Scientific Acumen**
 - We are Scientists and Understand Your Technology: We are not a “Marketing Company”, we are a Life Science Commercial Consulting Organization with decades of Life Science Experience
 - >25 Years of Sales Experience: We Understand Your Customers, Their Needs and How to Market and Sell to Them Effectively
 - Our objective is to grow your sales via methods that combine our Sales and Marketing Expertise
 - Expert in a Range of Life Science Products/Services and Technologies with Advanced Expertise in Genomics and Translational Research
- **Unique: Sales and Marketing Insight, Decades of Success**
 - Ability to Make Complex Science Easily Understood and Highly Compelling
 - “Real-World” Experience and Success Working with Small to Mid-Sized Scientific Technology Companies Helping to Design and Implement Programs to Enhance their Sales Success
 - Track Record of Helping Companies Achieve their Objectives: INCREASED SALES
 - Proven Ability to Implement and DELIVER: Dozens of Successful Clients

Genovative Solutions: Projects Performed

- **Commercial Strategy Planning**
- **Value Proposition Development**
 - Messaging, Benefits
 - Key Advantages and Vital Differentiators
- **Target Market Development**
 - Target Market ID and Message
 - Penetration and Development Programs
 - Awareness Building and Lead Generation
- **Corporate Branding**
 - Positioning: Value Proposition, Messaging
 - HOW, WHY and WHAT of company
 - Visual Branding: Logo, colors, etc.
- **Sales Collateral**
 - Determining Needs and Focus of Pieces
 - Writing: Content, Messaging, Design, etc.
- **Web Site Update/Upgrade/Refresh**
 - New Site Creation or Update of Existing
 - Content, Messaging, Design
 - Content Determination, Creation
 - Key Features, Benefits, Positioning, etc.
 - “Call-Outs”, Layout, Appearance
 - Search Engine Optimization
- **Sales Team Implementation**
 - Design Team to Meet Corporate Objectives
 - Job Descriptions/Skill Set Determination
 - Hiring: Recruiting , Screening, Interviewing
 - Training and Development
- **Commercial Implementation**
 - Sales Programs
 - Marketing Communications
 - Lead Generation

Partial List of Clients



Gene Codes Corporation



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Objective: Sales - Overview of The Process

Selling is the End-Point of the Process

To Make Selling more efficient Much “Upstream” Work Needs to be Done

MARKETING STRATEGY:

- I.D. Target Market(s)
- Gain Feedback from Market to Determine Market’s Needs and how company addresses those needs
- Develop Value Proposition for Target Market based on Input
 - Key Differentiators from Market Competitors
 - Vital Advantages of Products and/or Services
 - Benefits to be gained by using Product/Service
- Message Development: Focus on Customer Needs and Wants to develop the message
 - Positioning of Offerings for Target Audience
 - Value Proposition Refinement
 - Develop the “HOW”, “WHAT” and “WHY” of Product/Service
 - **What** is different or better about this?
 - **How** does this help the prospect succeed?
 - **Why** should the prospect choose your company’s product or service?

TACTICAL MARKETING:

- Communication: How, What, Why Focused; Value Prop is woven into each communication
 - Web Site: Customer Focused CONTENT
 - Sales Documents CONTENT
 - Company or Product Brochures
 - Product/Service Description including benefits
 - Case Studies/Testimonials
 - White Papers
- Lead Generation
 - Email/Direct Mail CONTENT and Execution
 - Trade Shows and Networking
 - Advertising CONTENT and Implementation

SELLING:

- Target Market Development
- Lead Creation, Lead Follow Up
- One-on-One Value Proposition Communication (Sales)
- Need Creation, Pipeline Development
- Need Fulfillment
 - Evidence/Examples of Success
 - Documentation/Testimonials
 - Proof-of-Concept
- Close Sale
- Feedback to Tactical Marketing for MESSAGE and CONTENT Refinement

Messaging and Proposition Development

- PerSeptive BioSystems*
- Rainin Instruments*
- PyroSequencing, Inc.*
- Genvault*
- Sequenom *
- Enzymatics
- Helicos
- Trianja
- Nexcelom (final stages)
- Esco Global
- TessArae
- ACGT
- caprotec
- Covaris
- Affymetrix, Inc.
- BGI Americas
- BGI Health/A BGI Subsidiary
- Percorso Life Sciences
- Bio-Options
- Microlytic

*Work Done While Corporate Employee(s)

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Process for Value Proposition Development

- Interview Internal Stakeholders
 - Senior Persons in Company such as Founders
 - Persons with Customer-Facing Responsibilities
 - Determine what they communicate about the company and what they feel works and does not work to help sell the company and its products
- Interview Repeat Customers
 - Why do they keep coming back to the company for products/services?
 - How does the company help them?
 - What makes the company better to work with than others?
- Compile Feedback
 - Look for common threads
 - Understand the value from all perspectives
- Create Value Proposition
 - The **Why**, **How** and **What** of the Company
 - Key Differentiators and Vital Advantages
 - Elevator Speech summarizing Company and its Attributes

Case Study-Enzymatics

- **Background**
 - Early Stage Enzyme Production Company: DNA and RNA Modifying Enzymes
 - OEM'ing Enzymes to Manufacturers of Kits for DNA Analysis
 - Outstanding Products Lacking Value Proposition, Differentiation, Key Attributes and Clear Message in a Market Dominated by Few Very Large Competitors
- **Branding/Messaging**
 - Positioning: Gave the Company and its products a Differentiated Identity
 - Developed Value Proposition and Message, Highlighting Technology's Value and Differentiators
 - Created a Series of Marketing and Sales Tools including Web Site and Messaging
 - Implemented Plans to Build Awareness, Communicate Attributes
 - Designed, Developed, Created International Sales Organization
- **Outcome:**
 - 4X revenue increase in 2.5 years
 - More web site visits, longer visits, more pages visited, more requests for contact and more orders

“Jeff is one of the most persistent, results oriented consultants with whom I've ever had the pleasure of working. His attention to detail is very high, he consistently beats deadlines, and his output has been on target and quite insightful. To top it off, his warm and friendly personality make working together feel natural from day one. I would recommend Jeff without reservation as a business consultant in sales and marketing.”

Christopher Benoit, President; Enzymatics, Inc.



Positioning and Re-Branding of Enzymatics

Original Home Page

- Message Needed
 - Who the company is
 - What they do
 - Why visitors should care
 - How they are different, better
 - How Enzymatics can help make the visitor more successful
- Value Proposition:
 - Benefits need to be clearly communicated
 - Differentiators versus other Manufacturers needs prominence
- Slogan Needed: To Project Company as a leader, innovator
- Site's Image: Must portray "staying power" to Satisfy their OEM Target Market

The screenshot shows the Enzymatics website home page. At the top, the Enzymatics logo is on the left, and a "Customer Sign In" link with a "GO" button is on the right. Below the logo is a navigation menu with links for "capabilities", "support", "about us", "careers", "products", and "custom solutions". The main content area features a large banner with two images: a laboratory instrument on the left and a scientist in a white coat on the right. To the right of the scientist is a blue box with the text "Molecular Biology Reagents for Genomic Technologies". Below the banner is a section titled "Fueling the Next Generation" with a sub-heading "Quality, Value, Partnership." and a paragraph of text. To the left of this text is a small image of a vial. Below this is a "new products" section with a list of enzymes and a "ORDER ONLINE TODAY!" button. To the right of the "new products" section is a "enzymatics in the news" section with two news items and a "TUV ISO 13485" certification logo.

Customer Sign In: [GO](#)

capabilities support about us careers products custom solutions

Molecular Biology Reagents for Genomic Technologies

Fueling the Next Generation

Quality, Value, Partnership.

Driven by our focus on the intersection of these three elements, Enzymatics is truly Fueling the Next Generation of science. If you have yet to experience the Enzymatics difference, now is the time to start expecting higher purity, consistency, and performance from your enzymes. For less, [more about us](#) »

new products

Enzymatics is pleased to announce the release of the following NEW products (click for more information)

- [T4 RNA Ligase 1](#)
- [Taq DNA Ligase](#)
- [Terminal deoxy Transferase](#)
- [Taq DSC 2.0 DNA Polymerase](#)

- [T7 DNA Polymerase](#)
- [10X Uracil Cleavage System](#)
- [RNase H](#)
- [RNase Inhibitor](#)

ORDER ONLINE TODAY!

enzymatics in the news

- [Enzymatics attends AGBT meeting February 24 - 27, 2010](#)
- [Performance Benefits of Enzymatics cited in Nature Methods](#)

TUV ISO 13485

ISO Certifications
ISO 13485:2003
ISO 9001:2000
[Read News in Detail](#)

- [Enzymatics Gets ISO Certifications](#)
- [Enzymatics Implements ISO 13485:2003, Increases Emphasis on Molecular Diagnostics](#)

Re-branding of Enzymatics

New Home Page



Fueling the Next Generation



Quality, Value, Partnership.

Enzymatics has revolutionized reagent supply by delivering ISO 13485 enzymes of unrivaled purity, consistency, and value to molecular biology applications manufacturers in the research and diagnostic markets. The company is achieving this by drastically lowering and continually analyzing its production costs, applying QC metrics that are industry-leading and applying a consultative, partnership business model. We operate as a manufacturing division of our business partners. [more about us](#) »

custom solutions

We collaborate with our partners to provide custom solutions to their needs backed by the best possible support and service. Our **services** include:

- Cloning and Protein Expression
- Custom Concentrations and Sizes
- Kit Development
- Purification and Process Development
- Custom Function/QC Assay Development and QC Testing

enzymatics spotlight

New Products!

E. coli DNA Ligase Omni KlenTaq®
Poly(A) Polymerase RecA

Inhibitor Resistant PCR with Omni KlenTaq®

Latest News

Enzymatics Honored with Award
Enzymatics Reports Latest Growth Figures



ISO Compliance



Enzymatics has built adherence to regulatory requirements into its work environment. Our manufacturing infrastructure is ISO 13485:2003 and 9001:2008 certified. [Click here for more information on our ISO Compliance and to see our ISO Certificate.](#)

Enzymatics

Unparalleled Quality,
Uncompromised Consistency

the new standard in enzyme production™



NEW: Quality Page

- Quality is a Company Cornerstone; Quality with Consistency is “Must-Have” for Their Target Market
 - Created page to add depth, give added weight to its importance
 - Brings Focus to a Key Differentiating Competency
- Content:
 - ISO 13485 Compliance Focus
 - Results demonstrating superior product quality
 - Added Case-Study sub-page to show how superior quality solved customer problem

quality

Our Quality Management System Fulfills all the Requirements for IVD Assays and Kits



Our regulatory-compliant facilities accommodate a wide range of services and our laboratory is fully equipped with apparatus that is regularly maintained and calibrated in accordance with stringent quality assurance and regulatory requirements. We provide you with products or components produced under ISO 9001:2008 and ISO 13485:2003 guidelines to comply with medical device

regulations. Accurate lot documentation and traceability are standard in our processes, and we work with you to define the ideal manufacturing specifications and tolerances to meet your needs.

Superior Enzyme OEM Solutions

Enzymatics' manufacturing team has decades of combined experience in enzyme design and production. The company has a proven track record of successes with business-to-business solutions for life science reagent and molecular diagnostics companies. Made to order products, standard-setting quality systems, technical expertise, and dedicated OEM customer service, enable us to provide the highest quality enzymes for your products and services.

Products Manufactured Under the Highest-Quality Standards for Molecular Diagnostic Assays

Enzymatics manufacturing facilities achieve the highest standards. Our proprietary production process ensures that you receive products that exceed the quality of similar products produced by other suppliers. We have a growing and global list of satisfied partners in the fields of molecular diagnostics, life science research products and biotechnology that have already benefited from our high standards and quality as well as our lower prices. Our OEM partners' competitive advantage is enhanced by our commitment to supreme quality at paradigm shifting prices.

Superior Product Quality

Superior Quality starts with enhanced production and purification methods and finishes with unparalleled QC testing. Enzymatics has developed and applied industry-leading approaches to understanding enzyme quality that far surpass previous standards. We employ state of the art purification methods and conduct much more vigorous purification processes than are standard in the industry. We also apply highly sensitive and proprietary testing to our enzymes prior to release of materials to our customers.



Our Quality Management System Provides:

- ISO 13485:2003 and ISO 9001:2008 certification
- Validated proprietary production process
- Comprehensive documentation of all steps in R&D and production
- Validated filling and packing equipment
- Dedicated quarantine and development facilities
- Lot sequestering
- Redundant storage

We welcome our partners to audit our manufacturing facilities

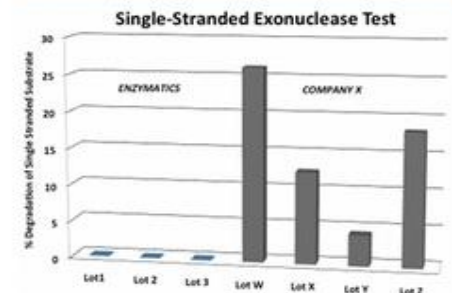


Figure 1: Results of nuclease contamination test using a proprietary single-stranded exonuclease test. None of these lots of the enzyme would have met Enzymatics' release criteria for nuclease contamination while all three lots of Enzymatics' enzyme showed negligible to no contamination.

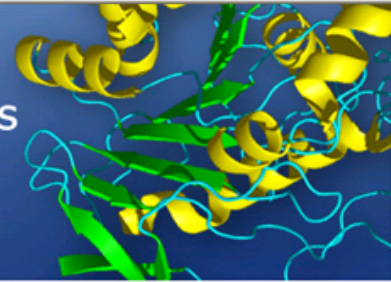
Re-Branding of Enzymatics

New: Custom Services

- Enhanced Content:
 - OEM Focused Messaging
 - Focus on Key Differentiator and Key Advantage : ISO Compliance
- Clear Message:
 - Directed at OEM Customer
 - Page Content Focuses on Specifically on Target Client
- Case Study:
 - Shows Custom Services Prowess
 - Is a Proof Statement of Benefits

An Expert Partner with the Agility
to Meet Your Demanding Timelines

the new standard in enzyme production™



custom services

Technology Development / Process Development and Custom Manufacturing

At Enzymatics we work closely with our partners at the R&D and production levels to provide value-added customized solutions backed by the best possible support and service. Customer driven projects begin with a thorough needs analysis by our business development team. This assessment produces the inputs required to generate a comprehensive statement of work to be performed with a clear timeline and cost structure. Senior level scientists guide each project from initiation through completion.

Superior OEM Solutions Experience

- Our manufacturing team has decades of combined experience in enzyme design and production with a world leader in the industry
- We have a proven track record of successes with business-to-business solutions for life science reagent and molecular diagnostics companies
- We offer made-to-order products, standard-setting quality systems, senior-level-scientist technical expertise and dedicated OEM customer service
- You get performance enhancing quality at extraordinarily cost-effective prices
- We LIVE enzymes, so you don't have to

Enhanced Custom OEM Services...

- Offering standard or custom enzymes in bulk or custom sizes
- Develop special enzyme formulations and mixtures
- Custom Products and Custom Kit Manufacturing and Packaging
- Unmatched lot-to lot consistency (see Quality Metrics)
- Teams of flexible, dedicated and responsive in-house and field based support

...With ISO 13485 Compliant Manufacturing

- Our Quality Management System Fulfills all the Requirements for IVD Assays and Kits



Case Study: BGI-Americas

- **Background:**
 - Former Research Organization (Beijing Genomics) Re-Defining itself as a Fee-for-Service Provider
 - Strong Capabilities but “Non-Differentiated” Positioning In a Highly Competitive Market with Major US Competitors
 - Contracted by BGI-Americas to Help Define Positioning, Messaging and Value Proposition
 - Goal: Re-Write Web Site to Contain Clearer Messaging and Increase Success in North America
- **Project:**
 - Conducted Internal Interviews and KOL’s, Customers and Non-Customers
 - Identified Key Attributes of Company and Developed Key Differentiators
 - Created Value Proposition, Positioning and Messaging and Developed Web Site to promote these
- **Outcome:** BGI-Americas has been a highly successful franchise of BGI
 - Greater number of “click-throughs” from whatever page the site visitor enters from
 - Average number of pages and Percent of visitors asking for information or contact has increased.

“Jeff has been a primary contributor for two BGI web sites (BGI Americas and our worldwide MDx business). His focus was on the content of those sites and he did an excellent job in refining the value proposition, crafting the messaging to support the value proposition and creating the content to convey the message. He is very skilled at composing high quality content that captures the essence of what needs to be communicated and does so in a powerful and credible manner. I have found Jeff to be highly dependable, he meets his commitments and delivers on time as promised. He is a very good writer who combines his sales background and marketing skills to create very cogent and convincing communications. I would highly recommend Jeff for messaging, marketing and web site development work.”

Joyce Peng, Marketing Director, Americas & Europe



BGI-Branding/Identity Plus Web Site Re-Write

Original Site/Message

BGI AMERICAS
PREMIER SCIENTIFIC PARTNER

Organization

Initiatives

Knowledge Platform

Sequencing Services

My BGI

华大基因
BGI Premier Scientific Partner

Unlocking the Power of CHO Cell Lines
by Sequencing
With Early Access to the Sequence of CHO-K1

KEY CAPABILITIES

- Genomics Solutions**
Breadth and Depth - We enable our customers to realize their objectives by offering the widest range of sequencing services.
- Bioinformatics**
Knowledge Partner - Our suite of proprietary software ensures the most accurate and personalized results.
- Cloud Computing**
Peace of Mind - State-of-the-art hardware provides our customers with customized security and quick data access.

Overseas Branches
华大基因
BGI Premier Scientific Partner

Follow Us on....

MAJOR INITIATIVES

1000 Plants and Animals: sequence the genomes of at least one thousand plants and animals

RNA-Seq: analyze gene expression of biological systems under different conditions

Disease Genomics: identify the full range of somatic mutations, including point mutations on a genome-wide basis

MESSAGE FROM THE CHAIRMAN - DR. YANG

"Science can never be done alone. We all recognize that genomics is in its beginning. International collaboration is more important than ever before."

CUSTOMER TESTIMONIALS

- Peter S. Kim, EVP & President, Merck Research Laboratories
- Sino-Danish collaboration
- Marcelo Menossi

NEWS & EVENTS

- International Plant Pathogenomics Conference Successfully Conducted January 25th, 2011
- Signing Ceremony of the Asparagus Genome International Cooperation Project between BGI and Jiangxi Academy of Agricultural Sciences held January 10th, 2011
- BGI and GT Life Sciences, Inc. Announce Complete Sequencing of CHO Genome January 7th, 2011
- BGI Selected as One of the *Nature's* "Features of the year" January 4th, 2011
- BGI's cooperative research findings were cited as references in "Breakthrough of the year" by *Science* January 4th, 2011

ORIGINAL HOME PAGE

Genovative
SOLUTIONS

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BGI Branding

New Home Page

- CRO/Fee-For-Service: Business Model is Prominent
- Value Proposition is Clear
 - Excellence
 - Experience
 - Customer Focus
 - One vendor for every analysis type needed
 - Each Slide brings Focus to one of the Value Proposition Pillars
- Branding:
 - Visitors now know: Who, Why & How of BGI Services
 - Applications and Capabilities are clearly communicated
- New Corporate Slogan reinforces The Message

BGI AMERICAS
PREMIER SCIENTIFIC PARTNER

Sequencing Expertise. Service Excellence. Search

SERVICE SOLUTIONS DATA & ANALYSIS APPLICATIONS WHY BGI SUPPORT SCIENTIFIC EXPERTISE NEWS & EVENTS ABOUT US

Published, Proven, Responsive

Full Range of Services
To Meet Your Research Needs

LEARN MORE

APPLICATION AREAS

- Human
- Drug R & D
- Animals & Plants
- Microbial

ABOUT US

BGI, the largest genomics center in the world, provides comprehensive sequencing and bioinformatics services for medical, agricultural and environmental applications. We help our customers achieve their research goals by delivering rapid, high-quality results using a broad array of cost-effective, cutting-edge technologies. Our customers also benefit from our scientific expertise and research experience that have generated over 170 publications in top-tier journals such as *Nature* and *Science*. BGI is recognized globally as an innovator for conducting international collaborative projects with leading research institutions to better mankind and our world.

SPOTLIGHT

Whole Human Genome Resequencing Promotion
Significantly reduced prices now through 10/31
Rapid turnaround; Comprehensive analysis

Human Exome Sequencing Starting at \$999
Learn more...

NEWS

UC Davis and BGI Announce Partnership to Establish State-Of-The-Art Genome Center In Sacramento
October 25, 2011

Autism Speaks and BGI Collaboration to Generate World's Largest Library of Sequenced Genomes of Individuals With Autism Spectrum Disorders
October 13, 2011

EVENTS

Merck and BGI Establish Strategic Collaboration focused on Biomarkers

Online - C

BGI Website Re-Write

NEW: Applications and Service Focus

- Previously No Applications Elucidated
- Broader Appeal: Content speaks to visitors; applications will draw them in
- Relevant images, vibrant colors, easier to read
 - Messages stand out more
 - Readily communicated and understood

The screenshot shows the BGI Americas website homepage. At the top right, there are links for 'CONTACT US' and 'HOME', and a search bar with the text 'Sequencing Expertise. Service Excellence.' and a search icon. Below the navigation bar, there are links for 'SERVICE SOLUTIONS', 'DATA & ANALYSIS', 'APPLICATIONS', 'WHY BGI', 'SUPPORT', 'SCIENTIFIC EXPERTISE', 'NEWS & EVENTS', and 'ABOUT US'. The main header features a large image of a scientist in a lab coat and glasses, with a panda and colorful balloons overlaid. Below the header, there is a section titled 'We Offer More' with the subtext 'Delivering Results on Applications From Microbes to Man'. The 'APPLICATIONS' section is divided into four categories: Human, Drug R&D, Animal / Plant, and Microbial. Each category has a small image and a brief description of the services offered.

BGI AMERICAS
PREMIER SCIENTIFIC PARTNER

CONTACT US HOME

Sequencing Expertise. Service Excellence. Search

SERVICE SOLUTIONS DATA & ANALYSIS APPLICATIONS WHY BGI SUPPORT SCIENTIFIC EXPERTISE NEWS & EVENTS ABOUT US

We Offer More

Delivering Results on Applications From Microbes to Man

APPLICATIONS

Human
Disease Research
Cancer
Population Genetics

Drug R&D
Biomarker Discovery Solution
Biomarker Validation Solution
Drug Array
FFPE Sequencing
RNA-Seq (100 ng)
Single Cell Sequencing
ALLiONE
DEL Sequencing
De novo Sequencing of Cell Line
Mouse Exome Sequencing
Monkey Exome Sequencing
Drug Response Solution
P450 Solution
MHC

Animal / Plant

Microbial

APPLICATIONS

Human
BGI enables next-generation human disease research using technology-leading platforms for “multi-omic” analysis. Our breadth of services makes it possible to study human health and disease in Cancer, Mendelian and Complex diseases, genetic and epigenetic analysis, pathway research and more.

Drug R&D
Next-gen sequencing and related technologies are fueling research to discover and bring to market effective, low-toxicity therapies. BGI provides our customers access to these technologies and the rich data sets they provide, helping them to accelerate the process of drug discovery and development.

Animal / Plant
BGI has sequenced the genome of many plants and animals helping to identify markers and genes that contribute to the study of molecular breeding, agricultural production, and conservation. Our services enable you to study evolution, diversity, molecular breeding and advance agricultural science.

Microbial
The field of microorganism genomics has progressed rapidly. With more than 150 whole genome sequencers and more than 1,000 bioinformaticians, BGI can help you rapidly advance your research to explore food testing, human health, environmental testing and

BGI Re-Branding

Why BGI Page:

- Page Entirely Focused on Value Proposition “Pillars”
- Insight: Visitor will get greater insight into the **How, Why and What** of BGI
 - How BGI will help them succeed
 - What is different/better about BGI
 - Why visitor should choose BGI
- Message: Page Headline Gives two Value Prop Pillars; Efficiency and Expertise

Expertise and Innovation

Increasing Research Efficiency With Services You Can Trust

WHY BGI

EXPERIENCE AND EXPERTISE

BGI (formerly Beijing Genomics Institute), is now the largest genomics organization in the world and recognized as a technological leader in the field of DNA, RNA and protein analysis. Established as a **top-tier research institute** and with active, ongoing research projects we have been featured in over 250 journal articles and have analyzed more than 50,000 samples including tens of thousands of whole human genomes and exomes. Our background as an organization deeply involved in DNA and RNA research served as the basis for the development of our high level of expertise which we now share with the scientific community. In the years since our founding we have greatly expanded our capabilities to include genomics, epigenetics, transcriptomics, proteomics, and more. We offer a **wide range of services** on a broad range of sample types (including FFPE preserved samples) of diverse origin (human, plant, animal, microbial) and the expertise to help you meet your research needs.

TURN-AROUND TIME, QUALITY AND PRICE

With an unmatched assembly of industry leading next gen sequencers and a staff of thousands, no project is too big for us to tackle, as attested to by Jack Gilbert of Argonne National labs. Our depth also means that we can address your needs with the most appropriate technology, accurately forecast turn-around times and rapidly complete projects with uncompromised quality*. Finally, the scale at which we operate enables us to achieve all of this and exceed your project pricing expectations**.

CONTINUOUS INNOVATION

We continuously innovate to meet our customers' needs as demonstrated by the development of our bioinformatics software SOAP (Short Oligonucleotide Alignment Program). With over 1,000 bioinformaticians and the experience that we have gained through sequencing thousands of human, plant, animal and microbe genomes we engineered a software program to enhance our clients' science. We have made this algorithm available to the scientific public and it now has tens of thousands of users worldwide.

RELIABILITY, SECURITY

All of our expertise and services come with the security you need to feel comfortable entrusting us with your precious samples and research. We QC your sample and our work, ensure ongoing Quality Improvement, offer an extremely robust data security system and are ISO 9001:2008 certified, CSpro certified and Agilent Sure-Select certified.

BGI and Enzymatics Website Refresh

- Sites Written with Target Markets in Mind: CONTENT
- Clear Focus on Offerings and Value of Each Company's Products and Services
- Value Propositions Clearly, Professionally Communicated
- Overall Appearance and Set Up have been Improved
- Visitors are staying longer and visiting more pages
- Greater percentage of visitors are asking to be contacted and/or downloading information such as PDF's
- Enzymatics' Revenue Grew 4X in 2.5 Years
- BGI-Americas is the most successful of the BGI Franchises

Percorso

Original Home Page

- No Messaging
- Value Proposition is Hidden and Diluted
- Wordy: Paragraphs that Require Reading
- Even After Reading, Most Did Not Understand
 - What They Do
 - How They Can Help
 - Why to use them



Percorso Life Sciences, LLC

Percorso Life Sciences, LLC is an organization that specializes in providing solutions to the challenges of life science organizations seeking entrance into the North American market space; this is accomplished with a strong foundation of experience and commercial skills in marketing, operations, business development and sales in the life science market. The company mission is to partner with its clients, develop innovative business plans and turn these concepts into well directed actions.

We are active partners; "rolling up our sleeves" and participating in the process of growing your business into a success.

Percorso Life Sciences unique service offering is based on proven experience growing a business, with a combined 60 years experience in the life science market place and an understanding of the market requirements. We possess strong technical and commercial experience in this market and qualifications in launching new products specifically developed for the proteomics and genomics field. This unique market niche and partnership with innovative products provides fertile ground for success. We have well defined relationships with Key Opinion leaders and the ability to communicate and share information which allows smoother transition into the market. Strong international contacts and excellent business reputations sets the management of PLS apart from competitors in the consulting business. Divesting into business development and training as well as product development will assure a strong funnel for continuing opportunities.

Quotes:

"If you want to succeed you should strike out on new paths, rather than travel the worn paths of accepted success."

John D. Rockefeller

Percorso

NEW Home Page

- Value Proposition Pillars Determined, Communicated
- Short, Succinct and Powerful
- Message is Clear, Easy to Find, Easy to Understand
- Each Slide Contains a Value Prop Pillar for Visitor
- Customer Quote Reinforces Messaging
- The How, Why and What are easy to find and understand

Control Your Brand in the U.S. Market

Percorso integrates seamlessly and transparently with your company. This enables you to maintain control of your "brand" and your business.



Welcome to Percorso Life Sciences

Percorso is a fully incorporated business partner for its clients enabling them to establish a presence in the world's largest market. We establish and operate a US entity which embodies our clients' worldwide business efforts and permits them to maintain control of their brand. We integrate seamlessly, cost-effectively and transparently into our clients' business, minimizing their risk while maximizing their growth opportunity.

"Entering the U.S. market was simple, efficient and cost-effective thanks to our partnership with Percorso."

*-Rik van Heiningen
Managing Director, Myculti Biotech B.V.*

Why Percorso?

We create a true partnership with our clients and offer a unique business relationship that has proven highly effective in helping Life Science companies enter the world's largest market.

- Establish your company in North America
- Maintain control of your business and brand
- Expert partners to manage your U.S. entity

[Read More](#)

Range of Services

We engage expert partners across a wide range of disciplines to meet our clients' needs. We operate with a flexible business model to provide the best solution for your company. We offer:

- Finance, Accounting and Legal Assistance
- Logistics: inventory management, shipping
- Strategy development and implementation

[Read More](#)

Case Studies

We have strong working relationships with our clients that have resulted in the creation of successful operations in North America. Let us help you to realize similar success in this market.

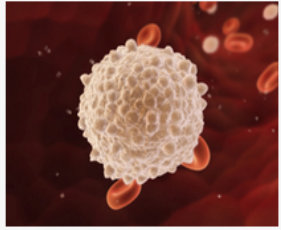
- Establish and Manage Myculti's US Entity
- Create, Enact Articzymes' Revenue Growth Plan
- Develop a Start-up's Commercial Strategy

[Read More](#)

Percorso Case Studies: *To Establish Credibility*

Hycult Biotech®

Home → Case Studies → Hycult Biotech®



Case Study One: Hycult Biotech

Hycult® Biotech is an established Dutch company which has been in business for 18 years. The Company has experienced steady growth but was interested in taking their business to the "next level". Percorso Life Sciences worked with the Founder and the Managing Director to co-develop and implement a plan to maximize valuation while minimizing Hycult's financial investment and market risk to the existing business.

The path selected for the Americas included:

- Establishment of a wholly-owned Subsidiary in the United States
- Dissolution of a long-standing distribution agreement to eliminate end user confusion and gain control of their products, customers and brand
- Implementation of a set of transparent business systems to enable The Company to maintain control and gain a full understanding of the business
- Percorso Life Science executed a strategic and tactical plan to create success in this market

Percorso enabled the organization to:

- Implement its brand strategy in the US, consistent with its global strategy and business plan
- Transition all customers in the Americas from indirect relationships through distributors to a direct relationship with the US entity being operated by Percorso
- Implement a tactical marketing and commercial plan
- Leverage the functional services provided by Percorso, including accountancy, legal, bank, governance, AR and AP, and financial reporting
- Provide technical sales, support, and customer service, and logistics
- Provide payroll, benefits, and human resource support

The Outcome of this program and Percorso's professional execution surpassed the parent company's expectations in a short period of time and under budget. The partnership provided quantitative results.

- Effective management of transfer price and gross margin
- Successful transition of end users to the parent company
- Capture of end user revenue
- A 50% increase in sales TTM
- A CRM with greater than 4000 unique end users (an increase of 350% in one-year)
- Intangibles include: a fully transparent system, bi-monthly and quarterly metrics, Board participation, and a trusted strategic partner that have increased the overall value of the parent organization

As with many of its clients, Percorso maintains a strong and intimate relationship with Hycult and continues to run the North American business entity in full alignment with The Company's overall strategic and business

"Hycult Biotech's global strategy required it to move away from an exclusive distributor in North America, gain direct customer access and re-gain control of our brand. However, the financial barrier to entry was quite high. We engaged Percorso and they exceeded our expectations. They executed a go-to-market commercial strategy and program with excellence. We quickly increased revenues, had better tech support and customer service and reliable logistics. This was accomplished within one year. With Percorso as our partner we were able to establish our brand, align our resources and execute in the world's largest scientific market."

-Rik van Heijningen, Managing Director, Hycult Biotech B.V

ArcticZymes

Home → Case Studies → ArcticZymes



Case Study Two: ArcticZymes

ArcticZymes AS is an established international provider of unique heat-labile enzymes with a rich history dating back to the late 1980's. In the mid-1990's we became part of Biotec Marine Biochemical AS a 100% wholly owned Subsidiary of Biotec Pharmacon ASA. In 2011, Marine Biochemical AS changed its name to ArcticZymes AS. The company's strategy in the US and around the world was to promote its enzymes for OEM use by its client companies. The CEO of Biotec Pharmacon ASA and the Managing Director of ArcticZymes AS enlisted Percorso Life Sciences to develop a strategy to increase its market presence and revenues in North America.

To create an enhanced presence in this market ArcticZymes AS chose to pursue the following path through Percorso:

- Create and Establish a US entity for The Company that aligns strategically with its parent in Norway
- Establish and manage the US entity to establish a fully functional North American shipping and logistics center to support commercial activities directed from Norway
- Establish a Business Development presence to service North America and increase The Company's visibility, create and develop new business and enhance demand for its products
- Implementation of a set of transparent financial systems to enable The Company to maintain control and gain a full understanding of the US business opportunity
- Percorso Life Science executed a strategic and tactical plan to create success in this market

Percorso performed a series of commercial and functional services for ArcticZymes AS:

- Established the legal entity ArcticZymes Inc
- Performed the accounting (reporting and filing), legal, and banking services
- Executes on the import, warehouse, and shipment of products to end users in North America
- Recruited and hired a Business Development Manager to execute on its sales strategy in the US
- Facilitated the adoption of SuperOffice, a CRM for The Company, giving it full visibility into its prospects and customers
- Provides full slate of back office support to future employees that includes: payroll, benefits, and human resource activity

The Outcome of this plan is that ArcticZymes now has the full capability to execute its global strategy in North America, allowing The Company to execute on its global commercialization plan. Percorso's management of its US entity allows The Company to participate in the opportunity presented in the largest market for its products. Percorso performs the import, warehouse, and shipping function for ArcticZymes North American customers, enabling the senior company managers to focus on demand generation. The program has had positive results for ArcticZymes business in North America.

- Home
- Benefits
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 - Hycult Biotech®
 - ArcticZymes
- About Us
- Contact

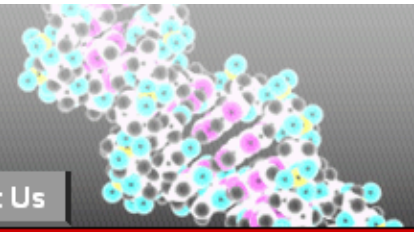
"Percorso Life Sciences provided the guidance to facilitate our incorporation and was able to establish a logistics hub and our warehouse function within two-weeks of establishing the organization. ArcticZymes has already shown a return on the initial investment in real cost savings, and by further integrating our product into our customers value chain. We are also pleased that additional functionality is being added to enhance ArcticZymes global presence."

-Jan Buch Andersen, Managing Director, ArcticZymes

BioOptions

[Original Home Page](#): Virtually No Positioning, No Value Proposition, No Differentiators and No Compelling Reasons for Visitor to Want to Learn More about BioOptions

BIO | OPTIONS
bio materials for discoverySM



[About Us](#)

[Biorepository & Services](#)

[Info For Physicians & Hospitals](#)

[Collaborations](#)

[Contact Us](#)

BIO | OPTIONS

Providing researchers with bio materials for medical research and discovery

AACR 2011

[Come check us out at the 2011 AACR meeting.](#)

About Us

BIO | OPTIONS provides human tissues and biological materials to researchers and scientists for molecular and genomic research. These high quality, well characterized biological specimens are available for drug and biomarker discovery, validation of drug targets and development of diagnostic tests and devices.

BIO | OPTIONS specializes in providing fresh tumor tissue, blood and other biological fluids delivered the same day or overnight for your studies. We collect specimens from virtually all disease states through our extensive network of physicians, hospitals, and clinical laboratories. All of our specimens are collected at facilities located in the United States in compliance with all applicable federal and state laws and regulations and ethical guidelines. Collection facilities are located on the East and West coasts and Midwest.

The officers of BIO | OPTIONS consist of licensed physicians with extensive medical training and experience. This enables us to work directly with physicians and support staff to insure that collection protocols provide the high quality specimens needed for research without compromising patient care. Protocols are designed to work within the workflow of physician offices and hospital operating rooms so that specimens are timely processed and preserved and well characterized.

[Original Home Page](#)



Biorepository & Services

BIO | OPTIONS provides high quality, well characterized human tissues and biological materials for molecular and genomic research, drug development and diagnostic testing. We offer fresh, frozen and formalin fixed paraffin embedded tissue specimens. **BIO | OPTIONS** specializes in providing fresh tumor tissue, blood and other biological fluids delivered the same day or overnight for your studies.

Through our extensive network of physicians, hospitals and clinical laboratories, we provide specimens from virtually all disease states, including solid tumors and autoimmune, cardiovascular, hematological, inflammatory bowel, and neurological diseases. We collect surgical tissue, bone marrow, cord blood, placenta, urine, pleural effusion and synovial fluid. Other biological fluids, including whole blood, serum and plasma are available for biomarker, circulating tumor cells and cancer stem cells studies.

Specimens are annotated with surgical pathology reports, clinical data and laboratory reports. Outcome data and detailed clinical information can also be obtained for a number of specimens.

The officers of **BIO | OPTIONS** consist of licensed physicians with extensive medical training and experience, including surgeons, pathologists, and general practice. By working directly with physicians and their support staff, our procurement protocols are designed to ensure the integrity of cellular components such as RNA, DNA, proteins, carbohydrates and lipids, along with the capture of relevant clinical data. We work with researchers to develop protocols that physicians and hospitals can actually implement to achieve your research needs.

All of our specimens are procured at facilities located in the United States in compliance with all applicable federal and state laws and regulations and ethical guidelines for use for research and commercial purposes. Collection facilities are located on the East and West coasts and Midwest.

BIO | OPTIONS' biorepository consists of both frozen and paraffin embedded human tissues representing the major diseases with a focus on the common tumors (e.g., breast, colon, kidney, lung, lymphoma, ovary, pancreas and prostate) and common diseases (e.g., diabetes, arthritis, autoimmune disease and infectious disease).

Frozen Biological Materials

Our frozen tissue inventory contains both snap frozen and OCT frozen specimens. Specimens are qualified for RNA integrity by gel electrophoresis. For many specimens, we have both the diseased tissue and a matched normal specimen. Frozen serum and/or plasma specimens and paraffin blocks matched to the frozen tissue specimens are also available for a select number of cases. **BIO | OPTIONS'** frozen specimens are stored in LN2 vapor phase freezers.

BIO | OPTIONS

Providing researchers with bio materials for medical research and discovery

AACR 2011

Come check us out at the 2011 ACR meeting.

ORIGINAL Services and Offerings:

- Nothing that Compels the Visitor to want to learn more
- No Apparent Advantages or Differentiators
- Long Paragraphs, likely to lose readers' attention
- No Value Proposition, Brand or Messaging that positions the company

Knowledgeable. Collaborative. Responsive.

Physician Owned and Operated: Experts to Guide Your
Sample Collection

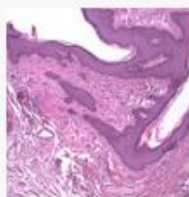
Read More

Next Slide

"I wish that more companies were like BIO|OPTIONS. The consultation piece, based on their unique skill-set, really sets them apart. They are not just a supplier of samples, they are a partner in ensuring that they do the right things for the patient, the samples and for our company."

-Director of Sample Procurement, Biotechnology Company

PROCUREMENT NETWORK AND SAMPLE QUALITY



Delivering biospecimens of the highest quality to enhance the success of your research is the mission of BIO|OPTIONS. Our broad and diverse US-based procurement network enables us to obtain preeminent samples in a timely manner. We have a comprehensive biorepository of frozen and FFPE tissue and frozen blood for your immediate research needs. Our partners include fourteen community based hospitals giving us an unsurpassed ability to meet your needs by providing you with:

- High Sample Quality, Procured and Stored Expertly
- Extensively Annotated: The Right Samples and Diagnosis
- Excellent Turn-Around Time for Biospecimen Procurement
- Capability to Acquire a Broad Array of Sample Types
- Varied Patient Demographics

EXPERTISE, EXPERIENCE, SERVICE, PARTNERSHIP



BIO|OPTIONS is physician owned and operated. We understand the needs of research scientists and how to procure the best biospecimens to ensure experimental success. We possess extensive experience in sample collection ensuring that proper protocols are followed, correct consents obtained and samples comprehensively annotated. This knowledge and direct involvement of experts in guiding you and overseeing your collection enables us to deliver unparalleled customer service:

- Highly Consultative, Highly Involved to Ensure Success
- We Understand Research Needs and Advise/Consult for Optimal Project Outcome
- Oversight by Pathologists, Surgeons, Regulatory Specialists
- Your Partner in the Process: Knowledgeable, Responsive, Expert

BioOptions

NEW HOME PAGE:

- 4 Value Proposition Pillars Identified, Touched Upon
 - Extensive Collection Network
 - Unmatched Sample Quality
 - Scientific Expertise
 - Collaborate with Their Clients
- Four Slides, Each Focused on a Single Value Proposition
- Customer Quote Reinforcing Key Value Pillars
- Succinct and Powerful Messaging to Drive the Visitor Inside the Web Site

BIOOPTIONS delivers the best in biospecimen procurement and premier consultation and support of our clients to ensure the best possible results of your study. Our team of experts understands the needs of research scientists, the importance of high-quality samples to your research success and the optimal process for collecting samples to meet your needs. We specialize in prospective collections of tissue and blood samples in all major disease categories.

Biospecimen Procurement Network

BIOOPTIONS uses a broad and diverse US-based procurement network that includes seventeen (17) community based hospitals with several more on the near-term horizon. We also have an extended national network of physician groups and clinics representing all medical specialties. The reach of this network enables us to secure samples for prospective studies in a timely manner; the diversity of this network empowers us to obtain samples of the highest possible quality. Our strong relationship with these sites allows us to obtain all the necessary documentation to support rapid implementation of new projects.

- Excellent Turn-Around Time for Biospecimen Procurement
- Capability to Acquire a Broad Array of Sample Types of Varied Patient Demographics
- Strong Relationships and Existing Agreements with Broad Network of Procurement Sites

Consultative, Capable, Expert

[Our team](#) understands the needs of research scientists and how to procure the right biospecimens to optimize experimental success. We have professional and detailed oversight of the collection process with a team consisting of an MD/JD, a pathologist and others. Due to our extensive experience and deep understanding of our clients' needs, we offer a highly consultative approach to sample collection. In addition to guiding you through the best process up-front, we ensure that proper protocols are followed, consents gained and samples are expertly annotated. We are partners in your process.

- Direct Involvement of Experts in Guiding You Through Your Sample Collection Needs
- Highly Consultative to Ensure Success
- Professional Oversight by an Experienced Team of Experts

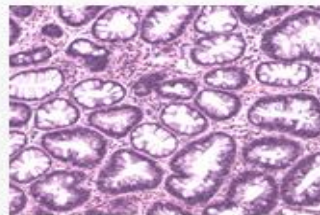
Sample Quality

The combination of our sizable network of procurement sites and our medical/scientific backgrounds makes BIOOPTIONS a unique partner for your research needs. We are able to select the optimal collection sites to work with for obtaining the best samples for your project. We then employ our extensive experience and know-how to deliver samples to you of unsurpassed quality. Collections are performed under CAP (College of American Pathologists) guidelines with appropriate consents and extensive patient and sample information gathered.

- Well-Annotated and Characterized Human Biological Samples
- Tissue Specimens Reviewed by Board Certified Pathologists to Confirm the Correct Diagnosis
- The Correct Samples, Collected and Preserved the Correct Way

Extensive Biorepository

We have a large in-house [biorepository](#) of frozen tissue and blood samples and a vast inventory



Biospecimen Procurement Experts

BIOOPTIONS provides well-characterized human biological specimens through our extensive and diverse US-based procurement network for use in:

- Drug and Biomarker Discovery
- Validation of Drug Targets
- Development of Diagnostic Tests & Devices

Our expert staff works to ensure that the right samples are procured to enhance the power of your research.

[Contact Us](#)

BioOptions

Benefits Page: Branding

- Now Visitors Understand Value
- Value Prop Pillars Elucidated Upon for Greater Impact
 - Greater Insight and Depth
 - More Information on Benefits
- Key Differentiators and Vital Advantages Laid out Clearly
- Visitors Know More About Why to Use Them, How They Can Help
- Combination of Bullet Points and Paragraphs Drive Home and Expand on the Message

Sales Collateral Creation: Case Studies, Brochures, etc.

Case Study

Covaris
the leader in DNA shearing

APPLICATION
Genomics

CATEGORY
Nucleic Acid Shearing

ORGANIZATION
Centre for the Analysis of Genome Evolution and Function, University of Toronto, Toronto, Canada

CHALLENGE
Global performance of the re-sequencing did not meet expectations and involved DNA "shear".

INTRODUCTION
The Centre for the Analysis of Genome Evolution and Function (CAGE) at the University of Toronto. His laboratory uses whole genome sequencing and a range of genomic approaches to study the evolution of gene specificity and vitamin synthesis in yeast pathogenic bacteria.

FRAGMENTATION BIAS
During the early stages of Next Generation Sequencing, fragmentation was the standard and accepted approach for DNA shearing. According to the leading CAGE Laboratory Facility Manager, their group initially employed fragmentation to fragment the Arabidopsis thaliana plant genome for sequencing. Over time, they began to suspect there was bias in genome coverage using this approach, largely because of their inability to establish other samples.

ANALYSIS
There are several factors which can affect sequencing depth and rate of coverage such as PCR amplification, GC content, copy number, and shearing efficiency.

PCR Amplification
PCR amplification efficiency can be impacted by GC content and repeats which tend not to amplify as well as other parts of the genome. While the GATK

“The failure to get efficient shearing and coverage through the cost of production was becoming prohibitively expensive”

“The DNA shearing technique used was not precise, but resulted in uneven coverage, including a “shear” effect.”

“Weakened active shearing and coverage through the use of sonication but was prohibitively expensive for the laboratory.”

“After acquiring a Covaris S2 System with Adaptive Focused Acoustics™ (AFA) DNA shearing, immediate improvements in coverage of fragmented size and production of intact fragments were observed.”

“Our “shear” of large to small fragments of DNA has been eliminated and sequence loss has been eliminated.”

“Larger bias has been removed using the previous methods was determined, resulting in additional 20% of the Arabidopsis genome that had been previously missed to be evenly sequenced.”

www.covaris.com

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www.covaris.com

Brochure

enzymatics
the new standard in enzyme production

Breakthrough Protein Production Services

Partnering to Advance Your Success

Enzymatics, the world leader in Quality Enzyme Production for OEM use, collaborates with clients to develop products to specifications that enhance the performance of their clients' products. The Company was built to function as our clients' protein production partner, providing material for their research and diagnostic products. Each custom manufacturing run is done with the customer's specific purity and performance criteria in mind. Our relentless pursuit of Quality, continuous Process Improvement, Innovation and thorough understanding of our clients' needs makes Enzymatics the ideal partner for custom protein production at a wide range of scales for our customers' commercial products.

Custom Solutions

- Cloning
- Protein Expression
- Process Development
- Protein Purification
- QC Development
- Achieve Customer CTOs
- Unrivaled Speed, Precision
- ISO 13485-Compliant Manufacturing

State-of-the-Art, Custom Protein Manufacture

We partner with makers of products for DNA and RNA analysis via a consultative approach to ensure successful development and commercialization of their product. Custom manufacture of client proteins requires a range of advanced and tightly integrated capabilities. We detail our customers' requirements and design a process to meet those requirements leveraging our ISO 13485 quality system. Each project is executed by teams of experts that possess protein engineering, manufacturing and Quality Control expertise. We provide our clients with ongoing comprehensive updates to ensure project success. The final protein product is provided with a QA-approved Certificate of Analysis that documents the defined specifications and individual lot results.

Needs Analysis

- Comprehensive Statement of Work
- Project Management
- Continuous Feedback/Interface Loop
- Product Plus QA-Approved C of A

Page 1

Process Expertise and Efficiency: A New Paradigm

Enzymatics possesses unrivaled process expertise, flexibility and efficiency that enables us to offer our customers the ultimate in protein quality and performance at paradigm shifting prices and with unrivaled project turn-around times for incorporation into their products. These gains in efficiency enable our customers to outsource protein production to Enzymatics and realize cost and time savings plus enhanced quality over what they could achieve producing internally.

Combining decades of experience creating highly effective development platforms with flexibility in manufacturing methodology, our team tailors processes to meet our customers' projects needs. This enables us to execute rapidly to deliver supplies of exceptional quality and performance times that enable over-expression (often >10x) at unprecedented price points. While other suppliers and in-house production groups use processes that originated in R&D or have been re-engineered over decades, Enzymatics built its cutting-edge manufacturing using advances in manufacturing methodology, our team tailors processes that yield tremendous gains in efficiency. We design processes that range from mg to production scale levels (potential kg) using proprietary expression systems that enable over-expression (often >10x) of a soluble target protein, a large library of chromotopical selectivity and proprietary testing to ensure optimal performance.

Process Expertise

- Cloning
- Protein Expression
- Process Development
- Protein Purification
- QC Development
- Achieve Customer CTOs
- Unrivaled Speed, Precision
- ISO 13485-Compliant Manufacturing

Figure 1: Silver stained gel showing the Custom Enzyme produced by the customer (center) and the same enzyme produced by Enzymatics in a 3-week project.

Page 2

Process Efficiency Case Study: Meeting a Quality and Time-Sensitive Customer Need

A manufacturer of DNA analysis kits needed a custom enzyme to enhance the kit's performance. The customer had manufactured the enzyme internally with sub-optimal quality and cost results. Production of this enzyme required a turn-around time of <3 months to meet the customer's release timeline of their kit. Several manufacturers required 6-12 months to deliver an enzyme that would meet the quality specifications but exceed the needed cost structure. This put the customer's product launch in jeopardy.

Meeting the Customer's Needs:

Enzymatics was able to exceed the client's needs in turn-around time, protein yield and cost by employing their own proprietary expression system, operational excellence and process expertise. Starting with the client's DNA, Enzymatics' scientists ran culture medium tests to find ideal conditions that resulted in over-expression of >10x when compared with the client's conditions. The team's purification experts implemented a multi-step process which resulted in an ultra-high purity product. After functional and QC testing, Enzymatics was able to deliver enough material to meet the client's commercial scale needs in just 3 weeks. The client has since worked with Enzymatics on several other custom protein projects with similar results.

Figure 2: Silver stained gel showing the Custom Enzyme produced by the customer (center) and the same enzyme produced by Enzymatics in a 3-week project.

Page 3

ISO 13485 Quality Systems:

From its founding as a protein manufacturing company, Enzymatics has focused on quality systems and built manufacturing facilities, processes and capabilities geared at ISO compliance. All proteins are produced using methods that conform to ISO 13485 and good practice standards. This absolute commitment to Quality Systems results in performance, quality, reproducibility and supply chain security that customers count on to ensure their products' success.

- Validated proprietary production processes, filling and packaging equipment
- Comprehensive development of all steps in R&D and production
- Dedicated quarantine and documentation facilities
- Lot Sequestering and Redundant storage

enzymatics
the new standard in enzyme production

For more information please contact us:

Enzymatics Inc.
100 Cummings Center
Suite 407J
Beverly Hills, MA 01915
Phone (888) 927-7027
Fax (978) 527-7127
www.enzymatics.com
sales@enzymatics.com

Quality
Price
Service

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Rev. A

Sales Collateral Examples




Introducing The TessArray® RDM Assay: A Better Approach to Genetic Targeted Resequencing

- Rapid
- Easy
- Proven
- Economical.

Genetic Sequencing of Multiple Genes in Less Than 24 hours at a Substantially Lower Cost Than Standard Methods

The TessArray® RDM Assay provides utmost speed and performance for DNA resequencing in a simple array format. Proprietary analysis software makes it easy to get your results fast allowing you to resequence your genetic targets in days instead of months. Whether you are validating the results of genome-wide studies, or translating discoveries into clinical applications, TessArae gives you the power you need to perform complex disease testing that is faster, easier and less expensive than with Sanger Sequencing and Next Gen Sequencing.



Genetic Resequencing Using

TessArae® is a next generation diagnostics company developing microarray-based tools and services for the simultaneous resequencing of dozens of genes for clinical diagnostics as well as the detection and definitive identification of hundreds of natural and emergent viral and bacterial pathogens for medical and scientific research. The company's breakthrough technology is based on using custom designed microarrays to perform targeted DNA resequencing. TessArae has developed expertise and proprietary algorithms to optimize the design and sequence analysis of microarrays to outperform Sanger Sequencing which is currently the "Gold Standard" for genetic testing in the field of molecular diagnostics.

TECHNOLOGY OVERVIEW
Microarray-based resequencing can rapidly generate very high quality data enabling fast, accurate, and cost effective genetic testing. TessArae uses Affymetrix chips as the basis of their technology but has added new approaches for chip design and a vastly improved analysis algorithm to dramatically enhance results.

DESIGN: In the first step, TessArae scientists design the layout of the custom microchip needed based on the customer's request. TessArae scientists use proprietary software algorithms and years of experience creating custom microarrays to complete the design rapidly, cost effectively and with optimal use of space on the chip. The probes for the genes to be sequenced are arrayed on the TessArray® RDM (Resequencing DNA Microarray) using a "tiled approach". It is QC'd then sent to the customer for use on an Affymetrix instrument.




Figure 1: The Targeted Re-Sequencing by Hybridization Process

Technology Review



GeneDx Resequencing, Redefined

GeneDx is a premier genetic testing company that specializes in rare hereditary disorders. In 2008 the scientific team determined that they needed to update their testing method for Noonan Syndrome to enhance their competitive position in the market, and engaged in discussions with TessArae to explore an alternative targeted resequencing technology to their Sanger-based sequencing approach.

GeneDx's Challenge
In 2008 GeneDx was facing a shifting competitive landscape in which new companies were introducing tests for Noonan Syndrome that pushed price and turn-around-time boundaries. GeneDx wanted to maintain its leadership position in this market, so it evaluated new technologies to replace the existing test, which analyzed 105 amplicons by Sanger-based sequencing. Sanger Sequencing had several shortcomings:

- Expensive to analyze 105 amplicons or more
- Long time from Sample to Results
- Required very clean amplicons
- 10% of amplicons failed to produce useful data

GeneDx's Need
To maintain its market leadership position in Noonan Syndrome testing, GeneDx needed to improve efficiency and performance. Specifically they wanted:

- Faster time-to-results
- Expanded coverage of more genes and their associated mutations
- Less follow-up on putative positive results
- Ability to verify, validate, and rapidly implement the new testing technology

Traditional Approach: Sanger Sequencing
GeneDx's test for Noonan Syndrome was based on Sanger sequencing using a capillary electrophoresis system. In an attempt to decrease turnaround time and reduce cost, they employed a tiered process depending on their customer's need for faster results vs. cost savings:

TIER 1: Test Most Likely Culprit: This analyzed mutations in two exons of one gene, which were common in 25-50% of the affected patients. At a cost of \$500 per patient, it was an inexpensive but useful screening tool. A negative result required proceeding to Tier 2 and/or beyond.

TIER 2: Full Gene Analyzed: Cost to patient was \$1,100 and detected mutations in an additional 15-20% of those affected.

TIER 3: Included several more amplicons, cost \$1,800, and detected another 10-15%.

Case Study

Brochure

CONFIDENTIAL



Banner Ads, Emails-Lead Generation

TRI-SLIDES™ MICROARRAYS

Improve Your Microarray Results with Added Dimension

• Highest Sensitivity • Wide Dynamic Range • Superior Data Quality • Rapid Assay Turn-Around



TRI-FLOW™ MICROFLUIDICS

Micro Fluidics Made Easy

• Custom Designed • Decades of Experience • Superior Materials • Consultative Experts



- Two part rotating banner Ad for their Two major Target Markets
 - Slogan for each application area
 - Focus on facets of value propositions for each
- Landing Pages created for each “click-through” to drive people deeper into the web site with goal of creating leads/sales opportunities
- Also executed email campaigns for several companies including:
 - Determining email content and message/writing email
 - Working with client to select a list to send to
 - Creating a landing page with the value proposition and messaging to drive message home to visitors and create leads for sales follow up

Genovative Solutions

- **Combining Commercial Expertise with Scientific Acumen and Knowledge**
- **Sales and Marketing Insight in Life Science Market**
- **Decades of Commercial Success in Scientific Products and Services**
- **Extensive SALES Experience: We Understand Your Customers, Their Needs AND How to Sell to Them**