bio-techne®

WHERE SCIENCE INTERSECTS INNOVATIONTM

Bio-Techne Investor Day 2021 September 10, 2021



SAFE HARBOR - CAUTIONARY STATEMENTS

This presentation contains "forward-looking statements" within the meaning of the federal securities laws. Except for historical information contained herein, the statements in this presentation are forward-looking and made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements made herein relate to, among other things, future sales, earnings, return on equity, cost savings, process improvements, free cash flow, share repurchases, capital expenditures, acquisitions, benefits of investments and partnerships, business strategies, the potential impact of COVID-19 on our operations or financial results and other matters. Such statements can be identified by words such as: "expected," "expects," "expect," "forecast," "would," "estimate," "will," or similar references to future periods.

Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based only on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, projections, anticipated events and trends, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict and many of which are outside of our control. Actual results could differ materially from those stated or implied in the forward-looking statements. For a list of factors, risks and uncertainties which could make our actual results differ from expected results, please see our latest Annual Report on Form 10-K. We undertake no obligation to publicly update any forward-looking statement, whether written or oral, as a result of new information, future developments or otherwise.

This presentation also contains non-GAAP financial information. Management uses this information in its internal analysis of results and believes this information may be informative to investors in gauging the quality of our financial performance, identifying trends in our results and providing meaningful period-to-period comparisons. For definitions of applicable non-GAAP financial measures and reconciliations of non-GAAP financial information to GAAP financial information, see the Reconciliations of GAAP to Non-GAAP Financial Measures included in the Company's financial reports on Forms 10-Q and 10-K and related press releases.

AGENDA

Registration & Breakfast	8:30 AM - 9:00 AM
Welcome & Overview Chuck Kummeth, President & Chief Executive Officer	9:00 AM - 9:45 AM
Protein Sciences Dave Eansor, President, Protein Sciences	9:45 AM – 10:30 AM
Break	10:30 AM - 10:45 AM
Diagnostics & Genomics Kim Kelderman, President, Diagnostics & Genomics	10:45 AM – 11:30 AM
Financial Update Jim Hippel, Chief Financial Officer	11:30 AM – 12:00 PM
Q&A	12:00 PM - 12:30 PM

WELCOME AND OVERVIEW



CHUCK KUMMETH
President and Chief Executive Officer

CORPORATE LEADERSHIP TEAM (CLT)





m Hippel CFO



Dave Eansor
President
Protein Sciences



Kim Kelderman President Dx & Genomics



Brenda Furlow General Counsel



Qi Cheng VP Corporate Quality & Regulatory Affairs



Bob Gavin VP Corporate Development



Struan Robertson VP Human Resources



Kevin Smyth SVP Chief Digital Officer



Steve Crouse VP Analytical Solutions



Michael Deines SVP Reagent Solutions



Matt McManus SVP Molecular Diagnostics



Steve Silverman VP Diagnostic Reagents



Kamni Vijay VP Spatial Biology

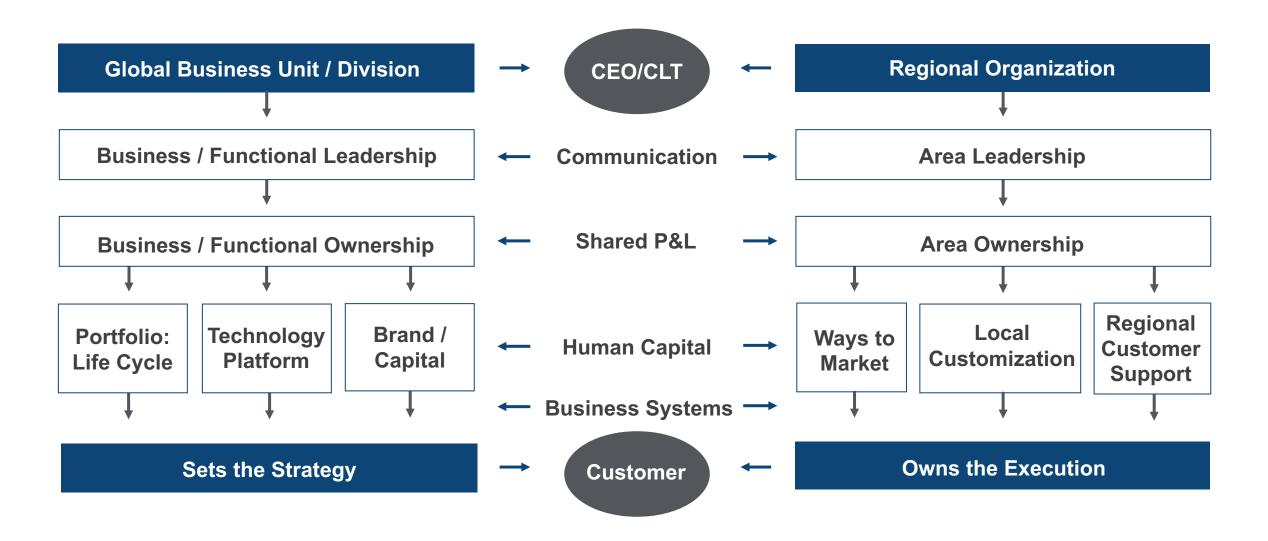


Peter Breloer VP APAC



Gary Stapleton VP EMEA

OPERATING MODEL



OUR SEGMENT STRUCTURE AND BRANDS

PROTEIN SCIENCES

PROTEOMIC RESEARCH REAGENTS

Develop and manufactures biological reagents used in all aspects of life science research.

ROSYSTEMS

TOCRIS



PROTEOMIC ANALYTICAL TOOLS

Manual and automated protein analysis solutions that improve the efficiency of process work streams & quantitate secreted proteins.





DIAGNOSTICS & GENOMICS

DIAGNOSTIC REAGENTS

Develops and manufactures controls, calibrators and diagnostic assays for the regulated diagnostic market.







MOLECULAR PRODUCTS

Develops and manufactures genetic and oncology diagnostic kits for research and clinical applications & molecular diagnostic controls.



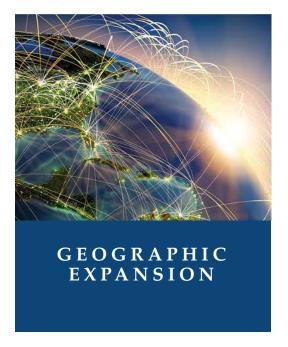


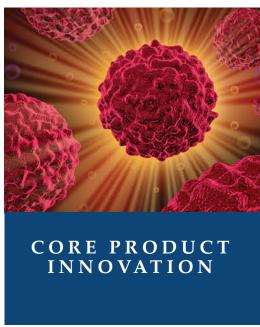
SPATIAL BIOLOGY

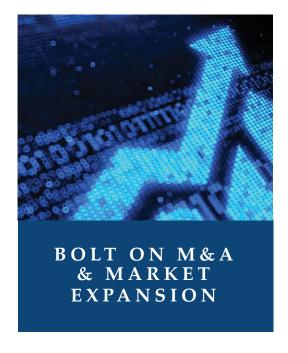
Advanced, tissue morphology friendly RNA *in situ* hybridization (ISH) assay for transcriptome analysis & prostate cancer molecular diagnostic.

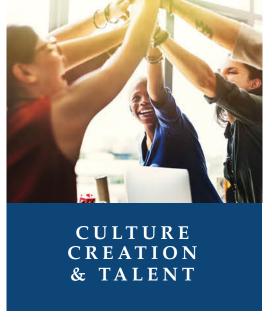


FOUR KEY STRATEGIES





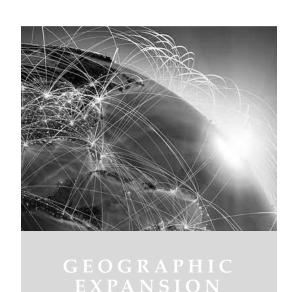


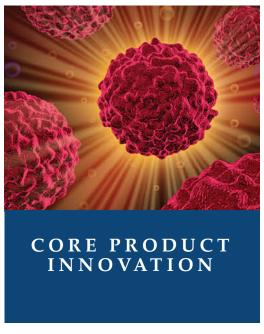


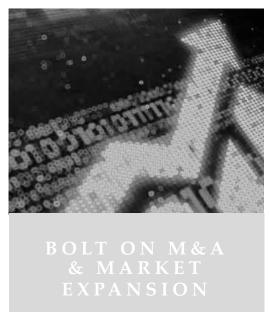
EXPANDING GLOBAL FOOTPRINT



FOUR KEY STRATEGIES



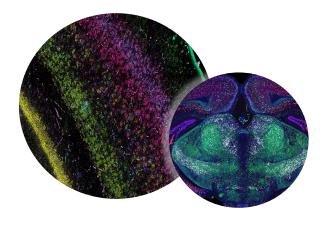




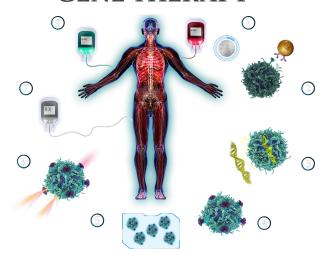


PORTFOLIO SYNERGY

SPATIAL BIOLOGY



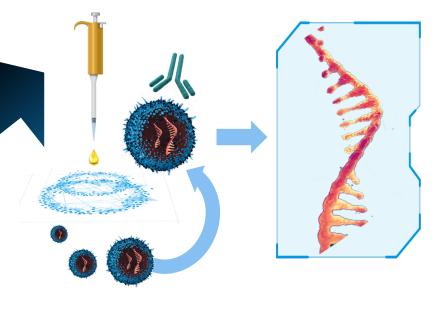
CELL CULTURE & GENE THERAPY



CORE PRODUCTS

- Antibodies
- Proteins
- Immunoassay
- Calibrators & Controls
- Small Molecules

LIQUID BIOPSY



INSTRUMENTS – PROTEIN ANALYSIS



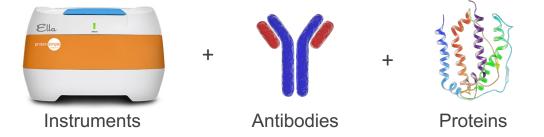


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PORTFOLIO SYNERGY EXAMPLES

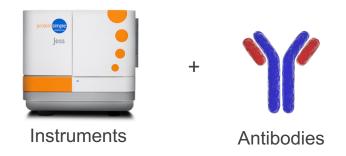
IMMUNOASSAY PLATFORMS

- Antibody selection/characterization for assay performance
- Protein standards
- Conjugation and signal amplification



WESTERN BLOTTING

- Strengthen presence in WB application
- Expand ancillary reagents
- Improved antibody characterization



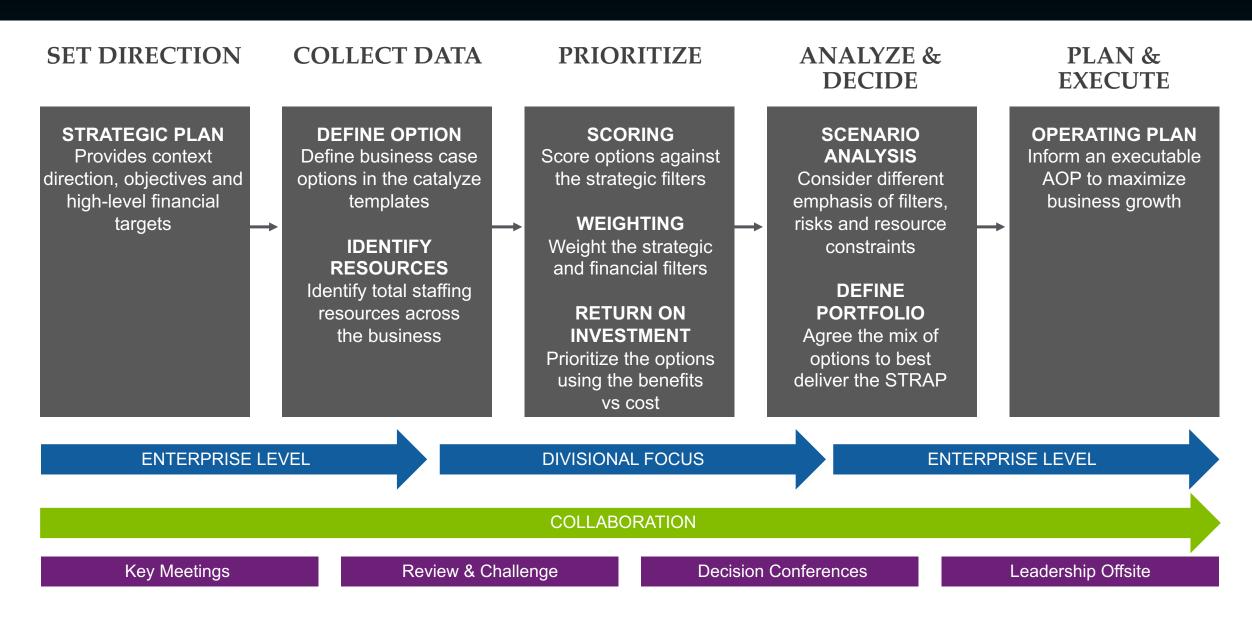
MULTI-OMICS SPATIAL PROFILING

- ISH-IHC codetection
- Fluorescent and signal amplification
- Simultaneously examine gene expression and cellular sources of secreted proteins

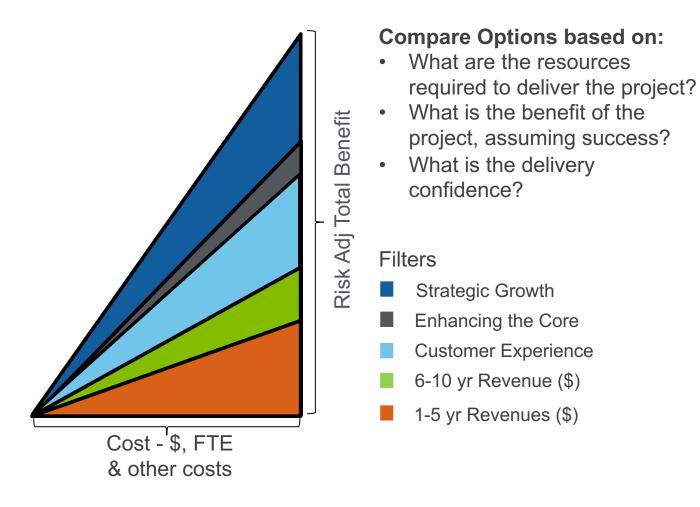


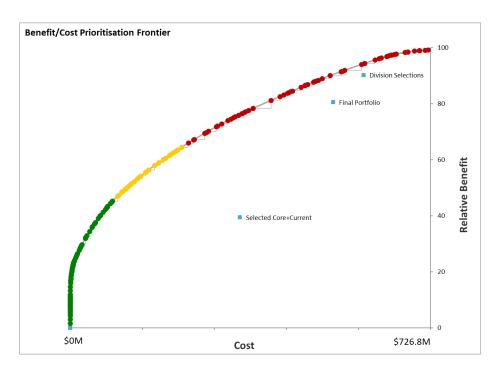
Leverage technology to drive cross divisional growth

BIO-TECHNE BUSINESS PROCESS



PRIORITIZATION PROCESS





Each dot represents an option. Options are ordered by benefit/cost ratio starting with the highest priority option in the bottom left corner. The triangles indicate the cost and benefit of each option.

The area below the frontier is the trade space once all Core options have been funded.

The blue squares represent different options combined portfolios.

Prioritization provides clear direction for investment decisions across the whole business

MARKETING FOCUS

bio-techne[®]

ONE Bio-Techne Focus

Align & Improve Customer Experience Across Brands (Web, Email, Ordering, etc.)

Bio-Techne Strategic
Initiative: Cell & Gene Therapy

Drive Leverage & Alignment Across Regions



Expansion of Digital Solutions
Throughout Bio-Techne

Enhancement of the Digital Marketing Program including SEO & SEM

Success of Agile Marketing & Continued Expansion



Build Marketing Strength

Automation & Web First Strategy

Cross-Sell / Upsell

Improved Marketing Analytics to Drive Insights & Actions

Career Path & Training Focus

Continued focus on differentiated marketing

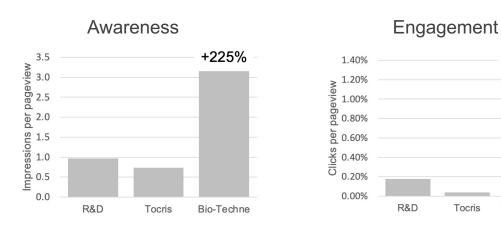
FOCUS ON OUR WEB PRESENCE



Consolidation of Web Properties to drive:

- Improved customer experience
- Leverage of traffic
- Cross-Sell & Upsell opportunities
- Reduced support needs

Improved Recommendation Engine Increasing # Product Page Views

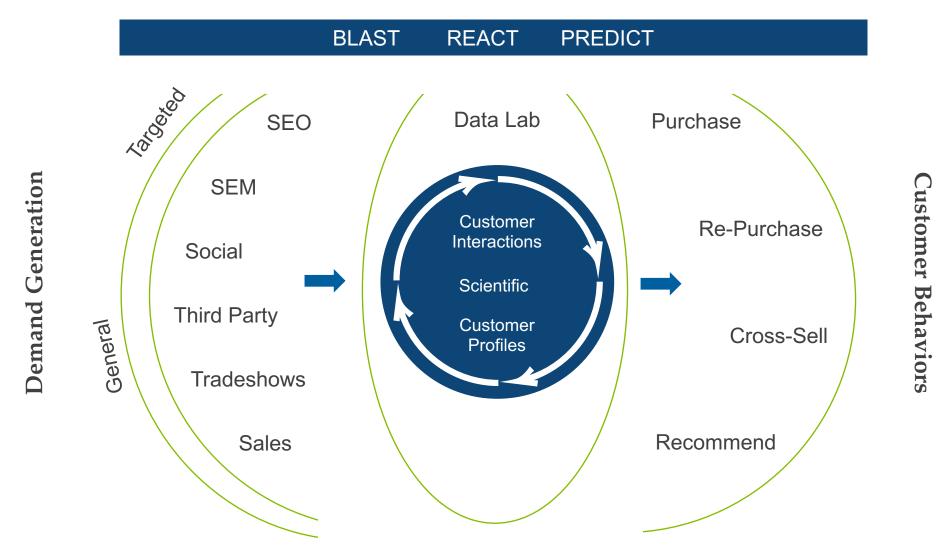


Improve customer experience & drive growth in core with focused digital execution

+617%

Bio-Techne

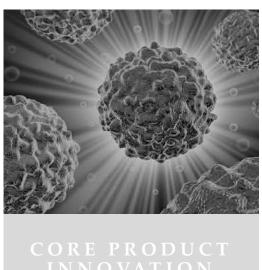
PRACTICAL APPLICATION OF MACHINE LEARNING



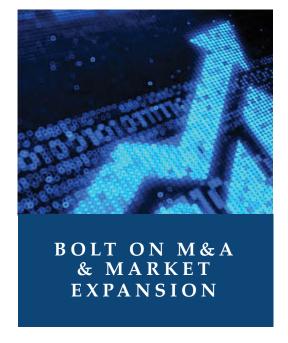
Al Driven Messaging: Right message, at the right time, to the right person

FOUR KEY STRATEGIES





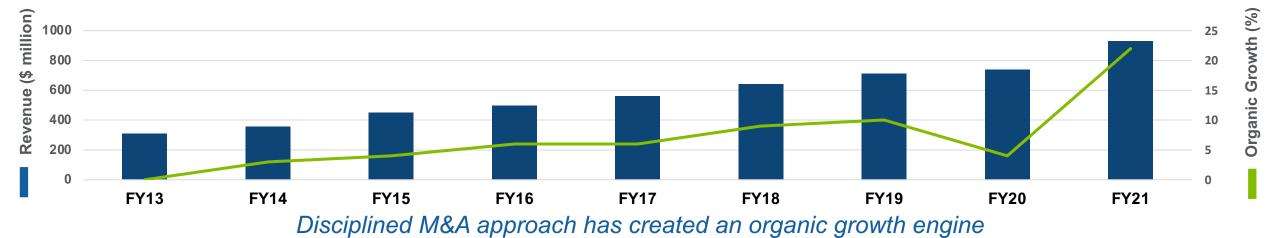






AN ACTIVE HISTORY OF M&A

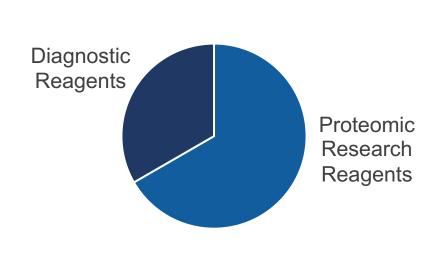




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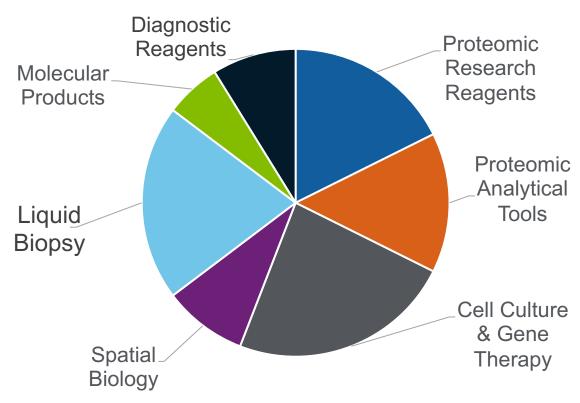
GROWING TAM





TAM: ~\$3B

FY2021



TAM: \$14B-\$20B

M&A + organic investment leverage our core and has dramatically increased our TAM

LARGE ADDRESSABLE END MARKETS

END MARKETS	MARKET SIZE	MARKET GROWTH RATE	BIO-TECHNE GROWTH RATE	BIO-TECHNE MARKET PENETRATION
Proteomic Research Reagents	~ \$3B	Mid-Single Digit	9%-11%	~10%
Proteomic Analytical Tools	\$2B - \$3B	Mid-Single Digit	~15%	~10%
Cell Culture & Gene Therapy	\$3B - \$5B	>20%	>50%	~1%
Spatial Biology	\$1B - \$2B	Mid-Single Digit	20%-30%	~5%
Liquid Biopsy	\$3B - \$4B	>20%	>50%	~1%
Molecular Products (Genetic / Oncology)	~ \$1B	Low-Double Digit	>20%	<5%
Diagnostic Reagents	\$1B - \$2B	Mid-Single Digit	4%-6%	~10%

Total end markets ~\$14B-\$20B

FOUR KEY STRATEGIES





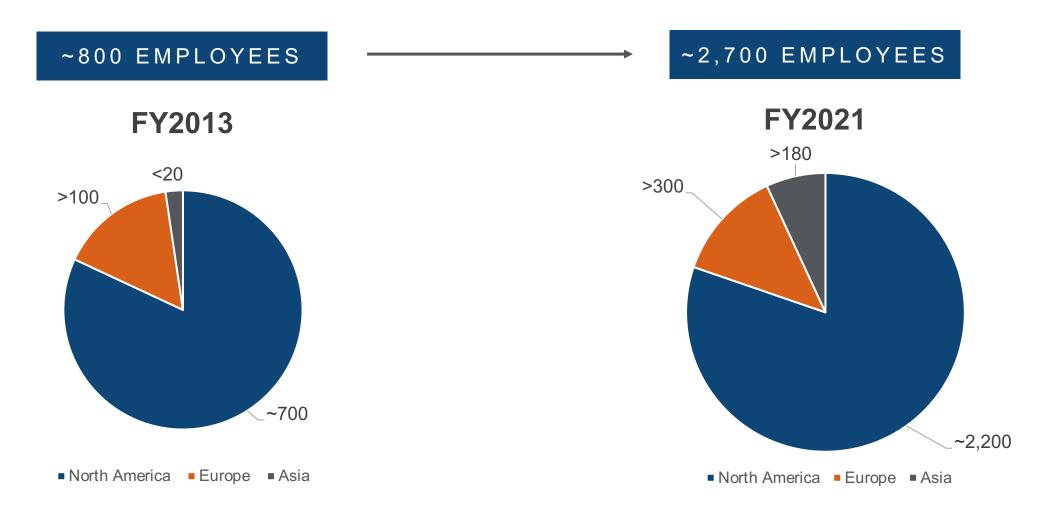
CORE PRODUCT INNOVATION



BOLT ON M&A & MARKET EXPANSION



EXPANDING GLOBAL TEAM



Rapid employee growth requires strong culture to execute on strategies

OUR MISSION: EPIC TOOLS FOR EPIC SCIENCE









EMPOWERMENT

Develop People Release Potential Provide the Right Tools

PASSION

Give It Everything
Make Work Enjoyable
Know Why Your Work Is Important

INNOVATION

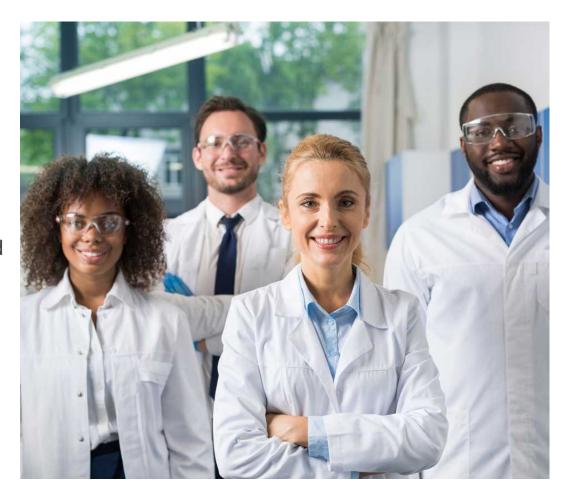
Take Risks Worth Taking Make Something Brilliant Imagine The Possibilities

COLLABORATION

Share To Win
Build Positive Relationships
Connect Across Boundaries

SOCIAL FOCUS

- EPIC values as cornerstone for integrating acquisitions
- Diverse and inclusive workplace:
- 50% of global workforce are female
- 52% of scientists are female
- At least 30% of U.S. workforce are non-white
- Leadership team committed to no COVID-19 related layoffs or furloughs
- Expanded equity-based incentive participation to attract and retain all levels of management
- Expanded annual cash bonus to all professional employees
- Active support of multiple employee resource groups open to employees with shared experiences and their allies
- All employees receive paid time off to use for volunteering and charitable work in their communities
- Partner and sponsor of the Science Museum of Minnesota



Focused on our employees and the communities we serve

ENVIRONMENTAL UPDATE

- Consistently improving level of corporate disclosure, with first <u>Corporate Sustainability Report</u> published in fall 2020
- Continual progress toward sustainability at largest global manufacturing site (Minneapolis):
 - ISO 14001 Certification
 - Energy management:
 - Completed LED lighting retrofit, motion detector installation
 - Water management:
 - Filtered water systems change reduced the amount of wastewater by 4M gallons/yr
 - Waste management:
 - Eliminated usage of radioactive materials
- Recent ISO 14001 Certification for EMEA region
- In the coming year -- initiative to assess, benchmark and prioritize our ESG and sustainably practices, including a greenhouse gas emissions inventory.



Building towards a sustainable future

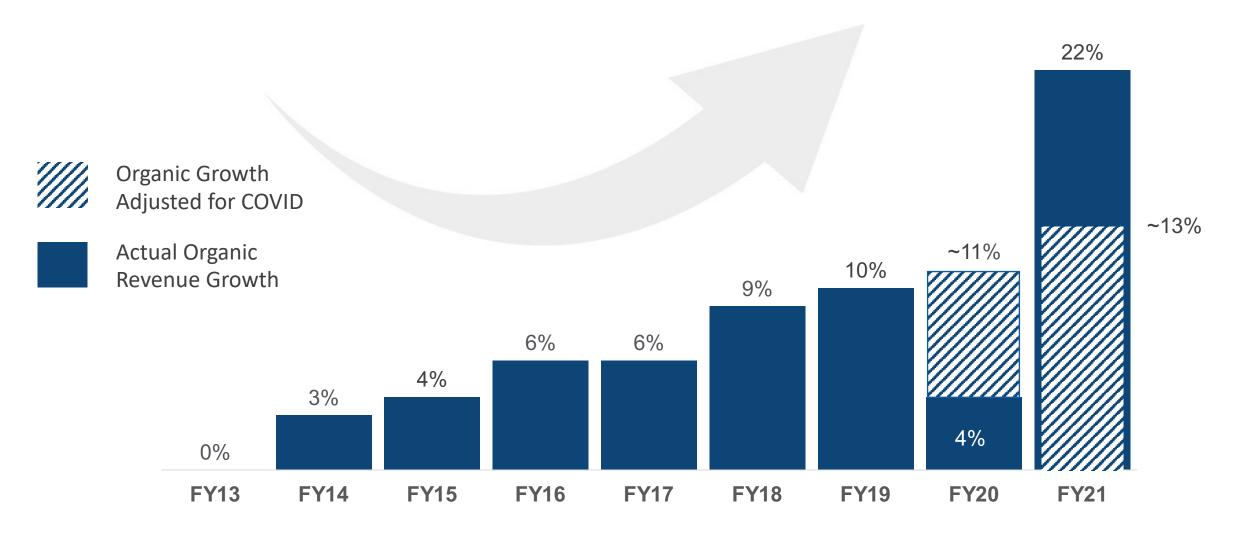
GOVERNANCE UPDATE

- Board membership includes a diverse group of leaders with deep scientific expertise, relevant life sciences business experience and tenure
- Led by independent Chair; 8 of 9 directors independent
- All four committees only include independent directors
- Board actively involved in strategy and M&A decisions
- Board has oversight of key risks and initiatives including climate change, cyber security and enterprise risk
- Director retirement policy (age 75) implemented in 2013;
 four new directors (out of 9) added in last four years
 - Two of the latest Board additions have been women and/or racially diverse



Board actively involved in strategy

ORGANIC REVENUE GROWTH FY2013-2021



Results of executing to our strategic pillars

SUMMARY

- Well positioned in growing and underpenetrated markets.
- Culture and processes focused on driving growth, synergies, and maximizing profitability.
- Poised to benefit from favorable macro environment.
- Laying the groundwork for a sustainable future.
- Great M&A track record with more to come.
- Benefitting from durable Covid-19 research tailwinds.
- Solidly positioned for the CGT tsunami.
- FY21 was a record year with a diversified life science portfolio of stand-alone unicorns.

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PROTEIN SCIENCES SEGMENT



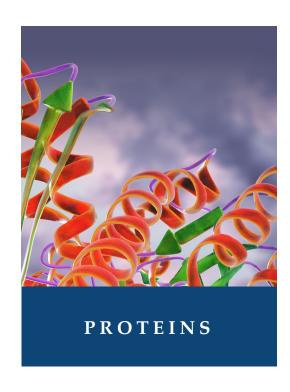
DAVE EANSOR
President, Protein Sciences Segment

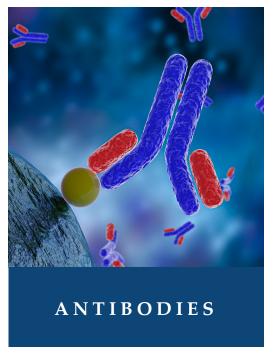
PROTEIN SCIENCES SEGMENT & ADDRESSABLE MARKET

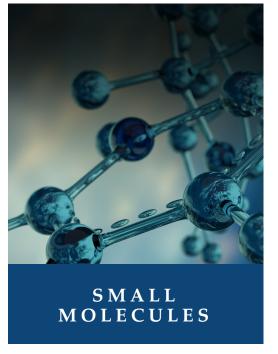


~ \$705M FY21 Revenue ~ \$8B-\$11B TAM











PROTEIN SCIENCES SEGMENT



ANTIBODIES, PROTEINS & SMALL MOLECULES

TAM: ~\$3B

Market Growth: Mid-Single Digit: Bio-Techne Market Share: ~10% Bio-Techne Growth: 9%-11%



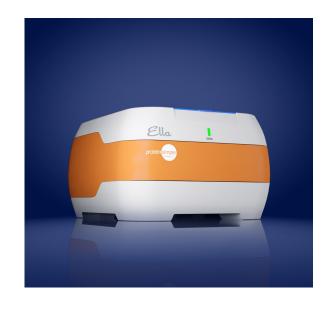
CELL CULTURE & GENE THERAPY

TAM: ~\$3B-\$5B

Market Growth: >20%

Bio-Techne Market Share: ~ 1%

Bio-Techne Growth: >50%



PROTEOMIC ANALYTICAL TOOLS

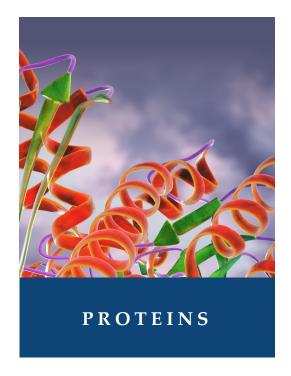
TAM: \$2B-\$3B

Market Growth: Mid-Single Digit: Bio-Techne Market Share: ~10%

Bio-Techne Growth: ~15%

Underpenetrated in large and growing markets

PROTEIN SCIENCES SEGMENT



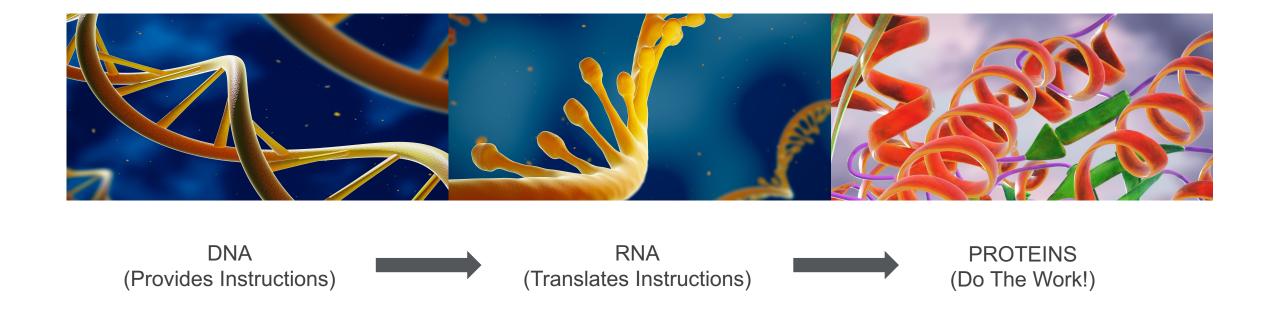






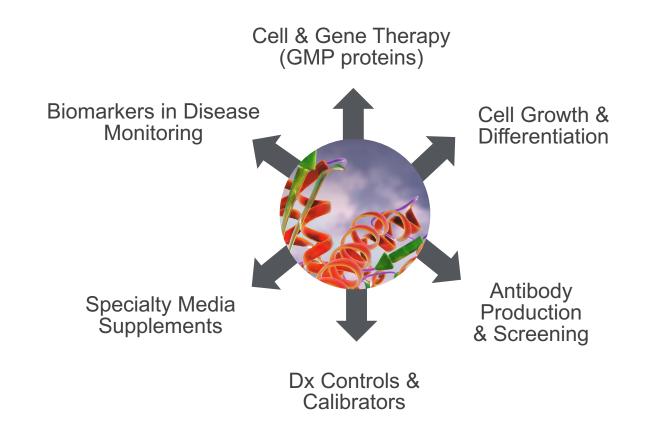


WHY ARE PROTEINS IMPORTANT?



Proteins do most of the work in cells and are required for: Structure, Function, and Regulation of the body's tissues and organs

KEY PROTEOMIC RESEARCH APPLICATIONS



Proteins known for high purity, optimal bioactivity and "lot to lot" consistency

WORLD LEADER IN RUO PROTEINS

- Largest Range of RUO & GMP Proteins
- Most Publications
- Best Bioassays and Reproducibility
- SARS-CoV-2 Protein
- Custom Protein Development Services
- Avi-tag™ Proteins
- Regenerative Medicine Products
- Immune Checkpoint Proteins
- World Class Website & SEO

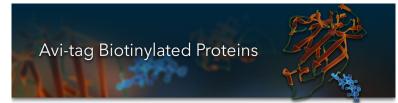










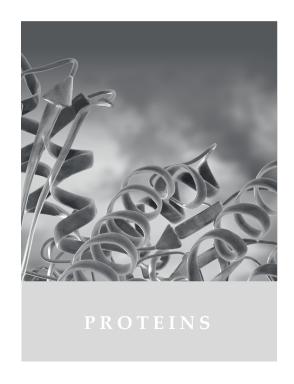


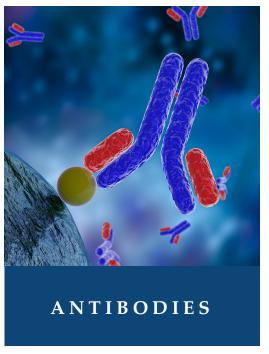


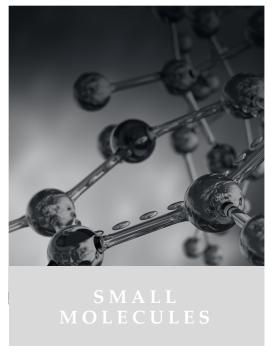


World leading content, highest quality products and development expertise, world-class website

PROTEIN SCIENCES SEGMENT







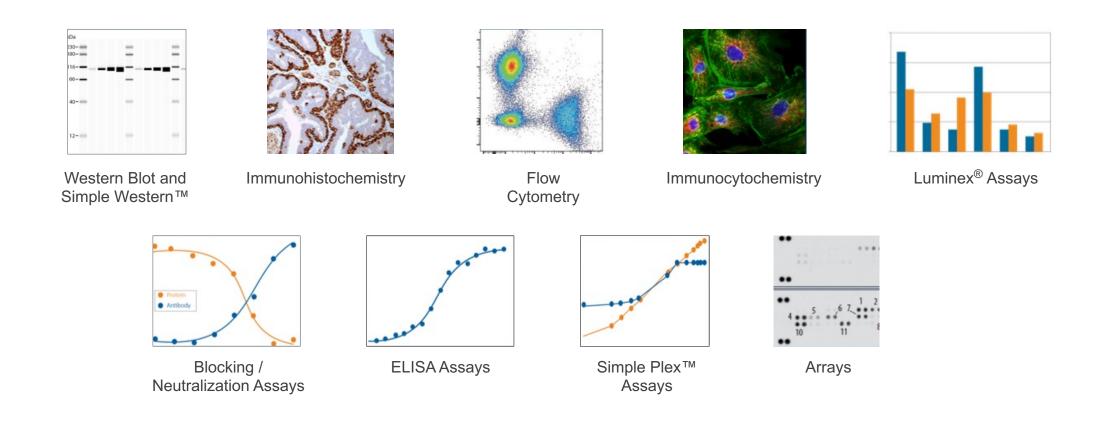


WHY ARE ANTIBODIES IMPORTANT?



- Specialized proteins with specific reactivity
- Biproduct of the immune system
- One of the most common tools in research to identify or quantify other structures
- Can be engineered for specific purposes
- Have been successfully developed as therapeutics

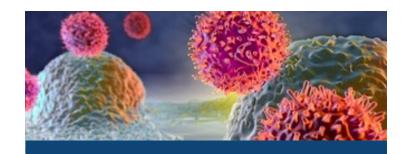
HIGH QUALITY ANTIBODIES DRIVE VERSATILITY IN APPLICATIONS



Large collection of thoroughly validated antibodies provides flexibility in use.

Antibody ownership drives licensing opportunities.

ANTIBODIES SERVE A VARIETY OF KEY RESEARCH AREAS



IMMUNO-ONCOLOGY

- Bi-specific antibodies
- Antibodies for tumor biomarkers used in companion diagnostics
- Cell identification
- Multiplex IHC



NEUROSCIENCE

- Traumatic brain injury (TBI) markers
- Antibodies for neurodegenerative disease research & diagnostics
- Bi-specific antibodies

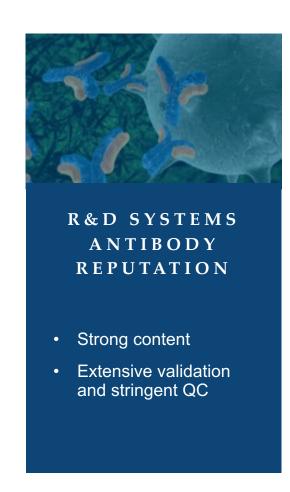


CELL & GENE THERAPY

- Custom sequences for CAR constructs
- Antibodies for T cell activation (Cloudz[™])
- Labeled proteins for flow QC

Critical research tools for important areas of research and therapies

BIO-TECHNE ANTIBODY INNOVATION





LICENSED CLONES

- Licenses for research, diagnostic and therapeutic use
- Example: Xencor



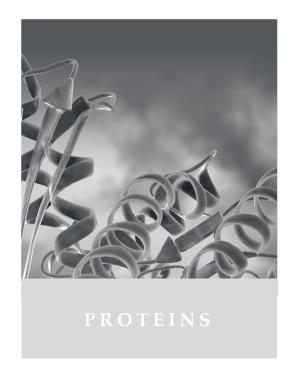
VAST MONOCLONAL ANTIBODY COLLECTION

- Multiple clones to the same targets
- Enables different applications

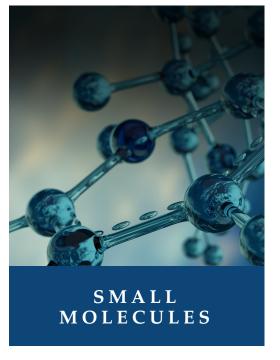


Large 425k+ antibody library licensable for research, diagnostic, and therapeutic purposes

PROTEIN SCIENCES SEGMENT



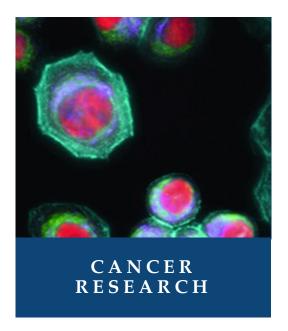


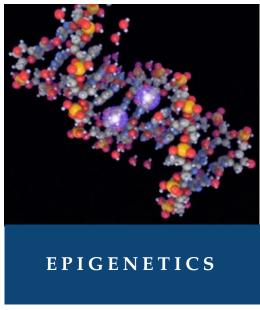


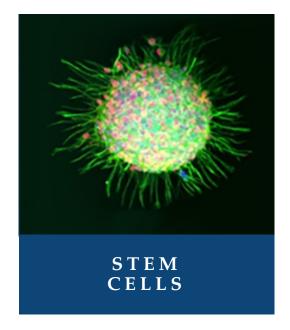


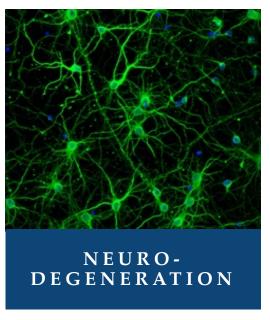
SMALL MOLECULES APPLICATIONS

RESEARCH AREA EMPHASIS









Expansive menu for core research application areas

TARGETED PROTEIN DEGRADATION



Target Exploration and Validation

- TAG Degradation Platform
- Protein Degraders (incl. PROTAC®)

PROTAC* is a registered trademark of Arvinas Operations, Inc., and is used under license.



Degrader Design and Synthesis

- PROTAC® Panel Builder
- **Degrader Building Blocks**
- **Custom Degrader Services**



Assays for Targeted Protein Degradation

- Simple Western
- *In vitro* ubiquitylation
- **TUBEs**
- Probes for FP and FRET assays

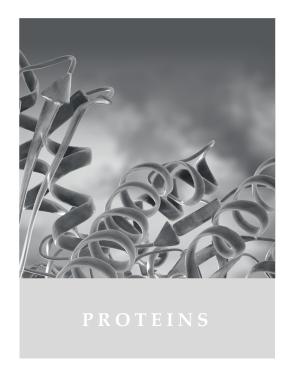


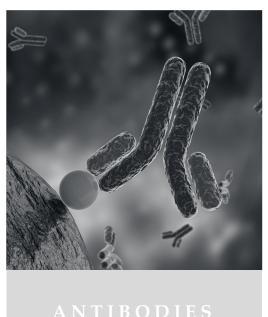
E3 Ligase and Ubiquitin **Proteasome System Biology**

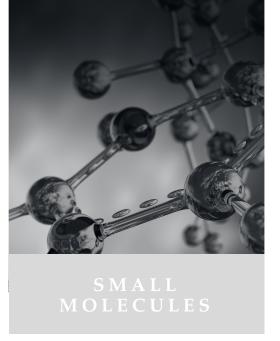
- UPS proteins incl. E3 ligases
- Custom proteins

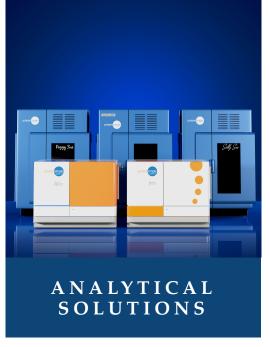
Emerging new small molecule applications area

PROTEIN SCIENCES SEGMENT









ANALYTICAL SOLUTIONS OFFERINGS



BIOLOGICS

iCE™



MFI



Consumables



IMMUNOASSAY

SIMPLE PLEX

Simple Plex



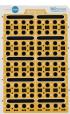
Consumables











ELISA

Quantikine™



DuoSet™



Luminex™



4

ANALYTICAL TOOLS MARKET ADOPTION

- Prove that our products work in their applications
- Build loyalty

- Show value through promotion
- Maintain loyalty



Track record of successfully crossing the chasm

SIMPLE WESTERN POSITIONING

<15% of western blotting TAM today





TIME TO RESULT

- Fully automated Westerns
- Fully analyzed results in 3 hours

QUANTITATION

- · Built in analysis software
- Absolute and relative protein quantitation

THROUGHPUT AND FLEXIBILITY

- Up to 96 samples per run
- Multiplex by chemiluminescence and/or fluorescence

REPRODUCIBILITY

Low inter- and intra-assay CVs

LOW SAMPLE VOLUME

 Start from as little as 0.3 ug or 3ul per well to get pg-level sensitivity

Critical mass, tipping point, ~90% sold w/o demo

SIMPLE WESTERN OFFERING

ABBY: DESIGNED FOR ACADEMIA

- Complete automation of the western blot
- Reduced sample cost and higher plexing with RePlex™
- Fast time to results
- Improved data analysis and protein quantitation



JESS: DESIGNED FOR BIOPHARMA

- Everything Abby does plus:
 - High sensitivity fluorescent detection
 - Enabling greater multiplex capabilities
 - Higher capital cost



Expanding portfolio of options to meet customer needs

BIOLOGICS: PURITY, IDENTITY & HETEROGENEITY ANALYSIS





CURRENT MARKET

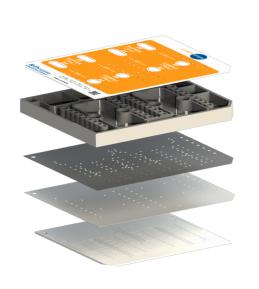
- Proprietary imaged capillary isoelectric focusing (iclEF™)
- High-resolution of charged protein isoforms
- Size (CE-SDS) based protein resolution
- Automated, fast and convenient
- Waters EmpowerTM software compatible
- Regulatory compliant data management and storage

LARGE GROWTH OPPORTUNITIES FOR MAURICE

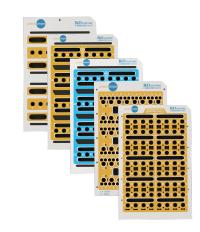
- CE-SDS (Faster cartridges)
- Ion Exchange Market (Pre-fractionation of MS samples)
- Liquid Chromatography Market (Charge-based fractionation)
- Applications expansion e.g. empty vs. full viral capsid and capsid stability (Gene Therapy)

Versatile, High-Resolution Protein Characterization

SIMPLE PLEX AUTOMATED ELISA





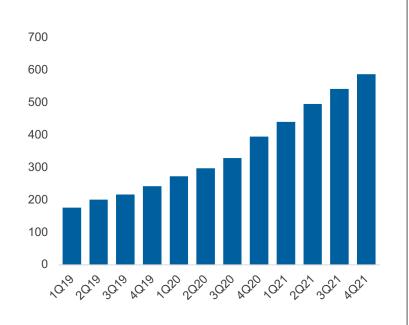


- Quickly becoming a favorite tool for immune monitoring and biomarker research
- "Crossing the Chasm"
 - Expanding library
 - Expanding plex
 - Expanding application areas especially Cell
 & Gene Therapy, Development, Process
 Monitoring and Quality Control
 - Emerging opportunities for Ella as a Dx tool

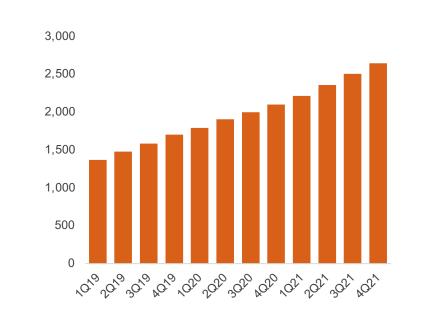
Ultra-precise, easy-to-use, sensitive, cost effective, multi-analyte immunoassay platform

ACCELERATING ADOPTION ACROSS INSTRUMENT PLATFORMS

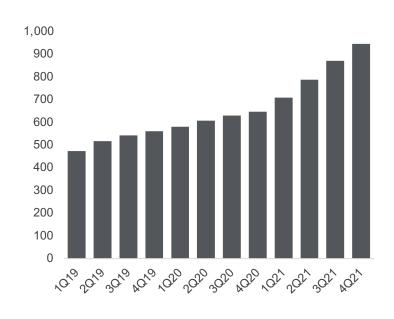
SIMPLE PLEX INSTALLED BASE



SIMPLE WESTERN INSTALLED BASE



BIOLOGICS INSTALLED BASE



Reaching critical market adoption tipping point across instrument portfolio.

Drives consumable revenue stream.

CONVENTIONAL IMMUNOASSAY CAPABILITIES

Quantikine



DuoSet® ELISA

Luminex



- Clear leader in Plate-based ELISA
 - Largest library

the Life Sciences market

- Highest quality assays
- Favorite of therapeutics developers and CROs

• R&D Systems is THE premium immunoassay brand in

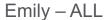
Leading provider of customized Luminex assays

DuoSet

Large, profitable and growing conventional immunoassay segment

CELL & GENE THERAPY







Scott – ALL



Augustin – SCID



Evelyn – SMA1



Tanis - NHL



Paulina – ALL



Chuck - NHL



Layla – ALL

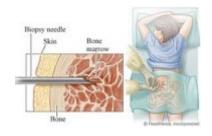


Brenden – XCGD

We deliver innovative solutions that enable cell and gene therapies to reach more patients

SOLUTIONS FOR THREE THERAPEUTIC MODALITIES

CELL THERAPY



iPSCs, stem cells, etc.

biotechne

GENE-MODIFIED CELL THERAPY



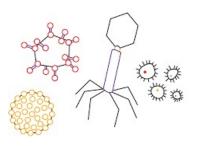


CAR-T & NK for Oncology, etc.

bio-techne®



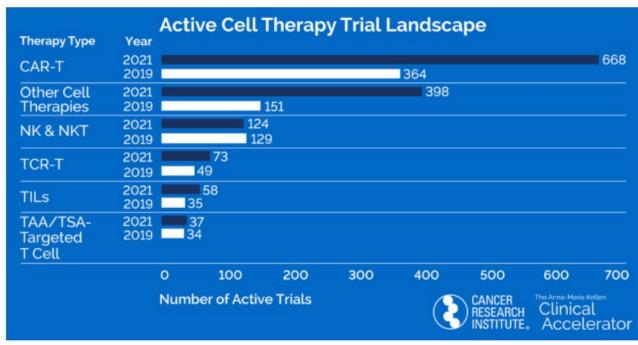
GENE THERAPY



In vivo gene correction

bio-techne[®]

SUPPORTING THE CONTINUED GROWTH OF CGT



https://www.cancerresearch.org/en-us/blog/june-2021/io-cell-therapy-development-in-2020-pandemic

- Global cellular therapy pipeline added 2,073 active agents (572 or 38% more) vs the 2020 update
- There are 1,358 active cell therapy trials, an increase of 78% compared to the 762 active in 2019
- CAR-T cell therapies continue to dominate the landscape, comprising 49% (668) of all cell therapy trials active in 2021

"The global cell and gene therapy market reached a value of nearly \$4.39 billion in 2020, having increased at a compound annual growth rate (CAGR) of 25.5% since 2015. The market is expected to grow from \$4.39 billion in 2020 to \$15.48 billion in 2025 at a rate of 28.7%. The market is then expected to grow at a CAGR of 17.3% from 2025 and reach \$34.31 billion in 2030."

-The Business Research Company

Market Estimates continue to support strong growth of Cell and Gene Therapies



OUR ScaleReady COMMERCIAL CONSORTIUM IS NOW FULLY FUNCTIONAL

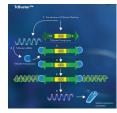


Cell Separation and Cell Washing



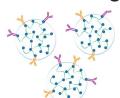
GMP Proteins





Non-viral Gene Editing Tools

Cell Separation & Activation Reagents





Specialty Media



Cell Culture

bio-techne[®]



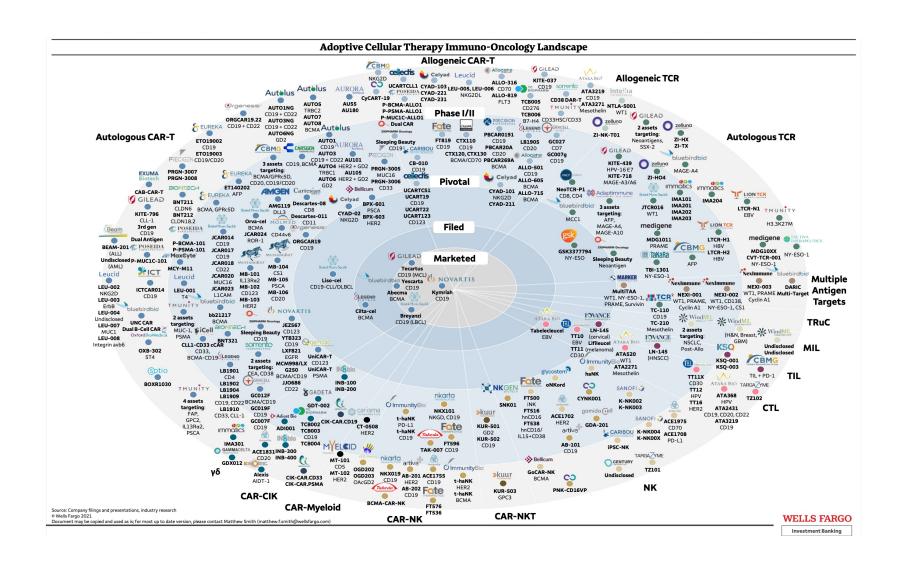
Equipment

Reagent Content

Culture Vessel

Our combined offerings provide the industry's most scalable end to end solution

CELL THERAPY LANDSCAPE & APPROVED PRODUCTS



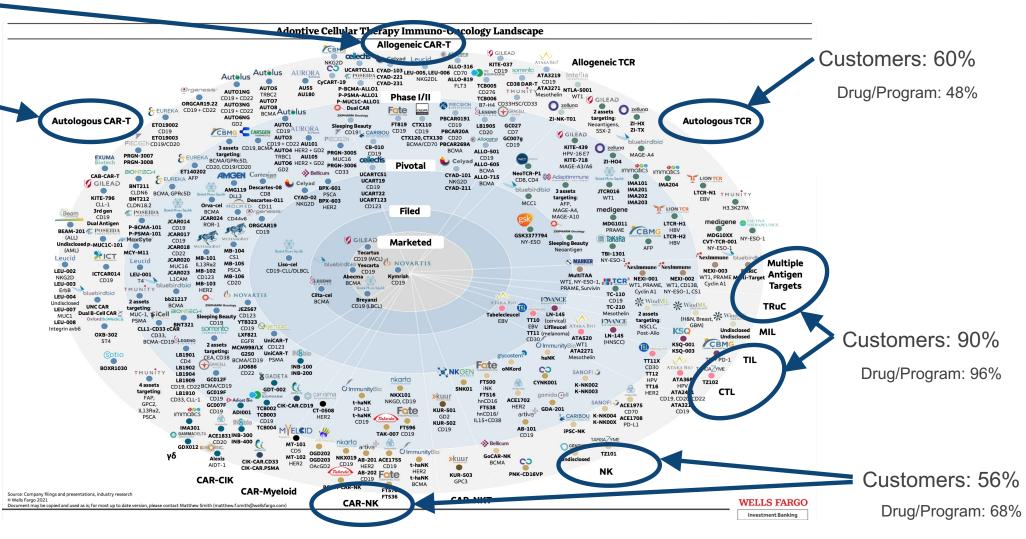
CELL THERAPY LANDSCAPE & APPROVED PRODUCTS

Customers: 84%

Drug/Program: 76%

Customers: 72%

Drug/Program: 48%



Poised to leverage ScaleReady for significant market participation

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CELL THERAPY LANDSCAPE & APPROVED PRODUCTS

Overall Market Participation:

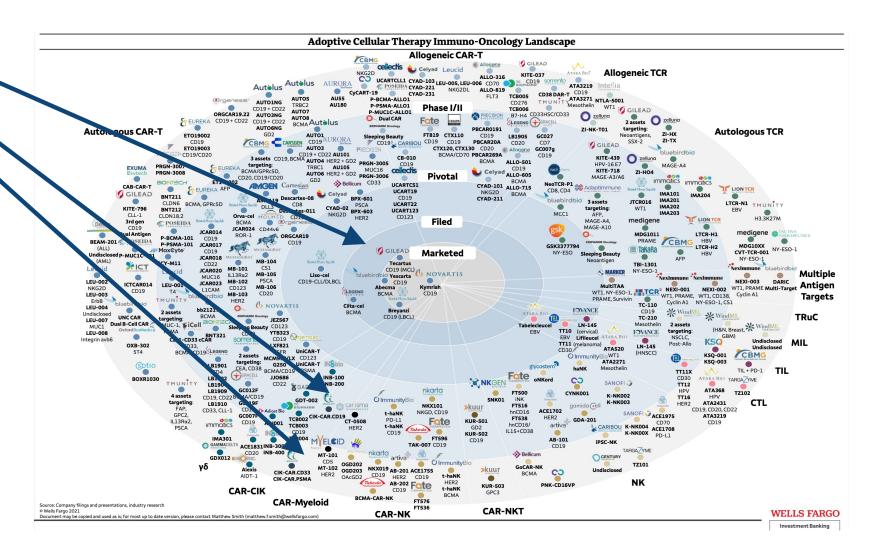
48% of Companies in the Bullseye

68% of Companies in Phase I/II ➤

48% of Companies in Pre-clinical

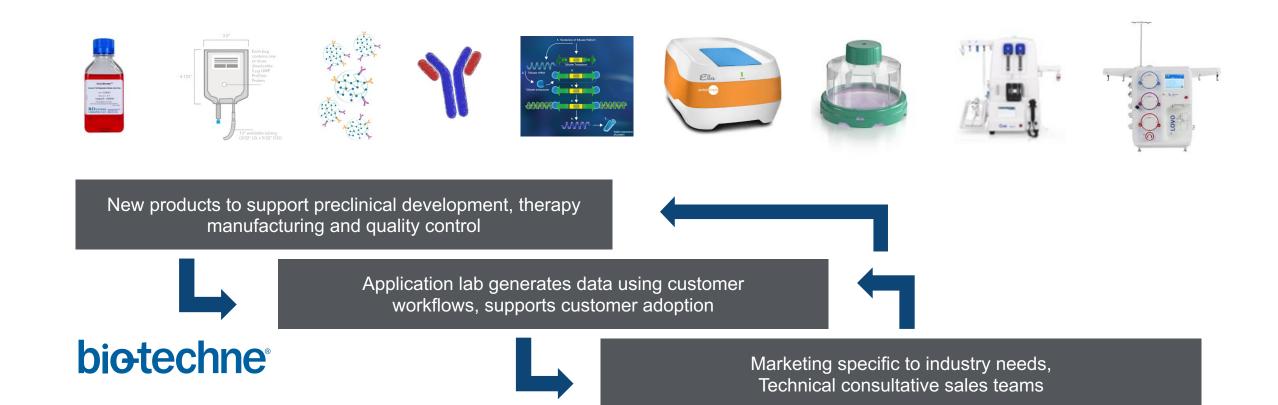
At Present, ScaleReady has:

- 668 Customers
 - 510 in Pre-Clinical/Research
 - 150 in Phase I/II
 - 6 in Phase III
 - 2 at BLA/Commercial



Poised to leverage ScaleReady for significant market participation

C> MARKET REQUIRES APPLICATION EXPERTISE



Integrating Bio-Techne technologies into Cell & Gene Therapy Workflows

ScaleReady...

C> MARKET REQUIRES DEDICATED GMP FACILITIES

GMP PROTEIN FACILITY

- Q1 FY2021 Grand opening
- 61,000 Sq. Foot state-of-the-art facility
- Qualification process underway
- Commercial GMP production runs inprogress
- Differentiated products to meet cell & gene therapy customer needs
- Clinical intended use applications
- Initial capacity \$140M-\$200M



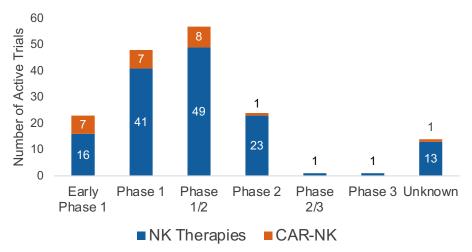






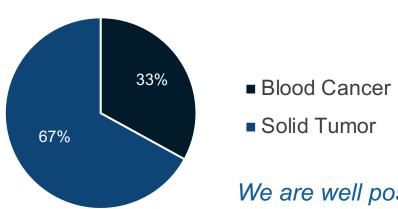
NK MARKET IS EXPANDING RAPIDLY

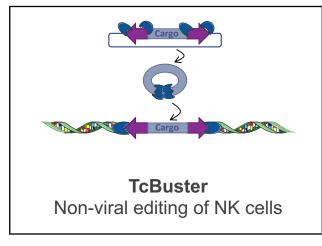
STATUS FOR NK TRIALS

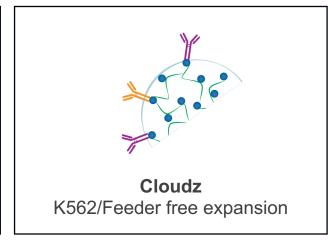


Source: Adoptive Cell Beacon Targeted Therapies. Adoptive Cell Digest. Natural Killer Cell Therapies. February 2021

DISEASE DISTRIBUTION











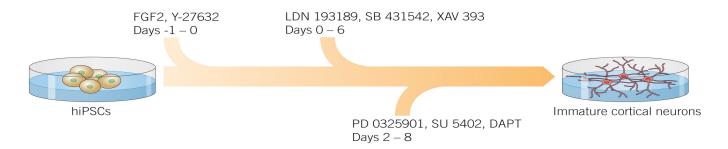
We are well positioned to win in the NK (Natural Killer) space

GMP GRADE SMALL MOLECULES FOR EX VIVO CELL PROCESSING

KEY POINTS

- Bristol manufacturing site is ISO 9001:2015 certified
- A range of products are manufactured either to Ancillary Material or cGMP grade
- All products are manufactured via processes that are completely animal free
- Manufacturing is readily scalable and there is little batch to batch to variability
- Enhanced QC on products including bioburden and endotoxin testing
- Current product range includes small molecules used for key activities of stem cell reprogramming, differentiation, expansion and self renewal

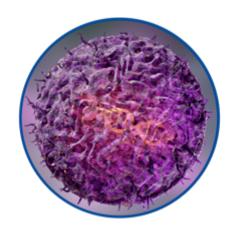
Example workflow: human iPSC derived cortical neurons (Qi et al. (2017) Nat. Biotechnol. 35, 154.)





Bio-Techne offers the most stringent quality standards available in off-the-shelf small molecules

GENOME ENGINEERING SERVICES



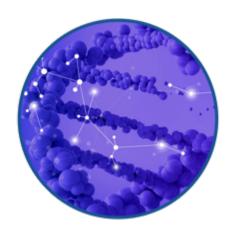
TcBUSTER AND DEVELOPMENT SERVICES

- Next-generation, non-viral gene delivery system
- Enables stable transfer of a gene of interest into any cell type



GMP CELL MANUFACTURING AND PROCESS DEVELOPMENT

- Quality manufacturing system
- Required for products with therapeutic design



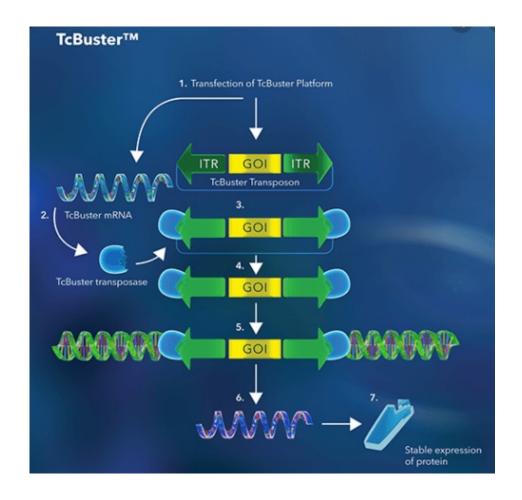
CELL AND GENOME ENGINEERING SERVICES

- Gene editing services
 - Deletion
 - Insertion
 - Over-expression

TcBUSTER: NON-VIRAL GENE EDITING FOR DEMOCRATIZING CELL THERAPY

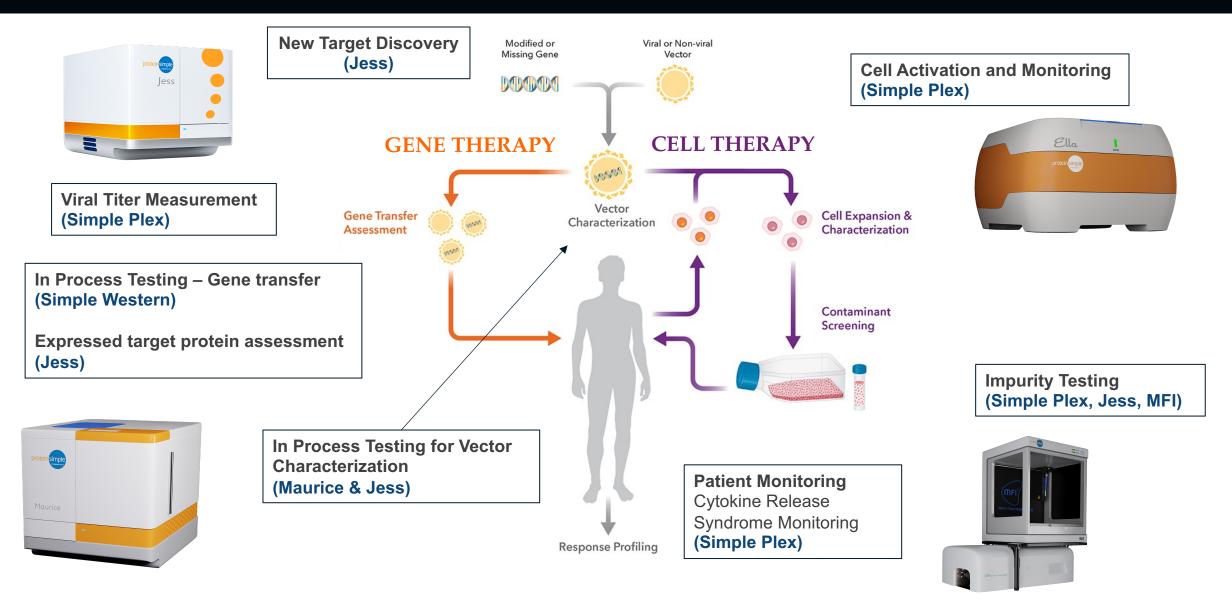
Transposon Plasmid Transposase mRNA **Coding region** **Coding region** **Coding region** **Coding region** **Transposase mRNA **Transposa

- Higher cargo capacity
- Targeted insertion
- No virus handling
- Shorter lead time
- Lower cost per patient

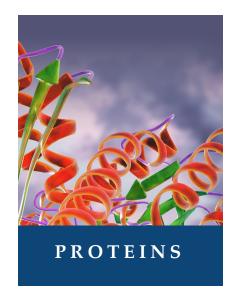


Next generation gene therapy vector

CELL & GENE THERAPY IS DRIVING INSTRUMENT & CONSUMABLES GROWTH AS WELL!



PROTEIN SCIENCES IS MAKING HUGE PROGRESS!



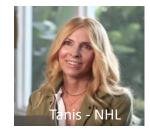
We deliver innovative solutions

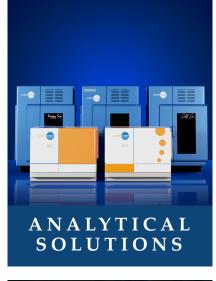


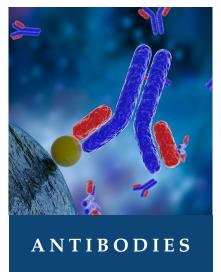






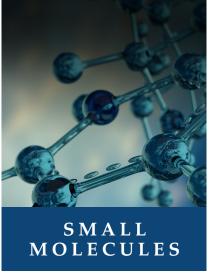








that ultimately save lives



DIAGNOSTICS AND GENOMICS SEGMENT



KIM KELDERMAN
President, Diagnostics & Genomics

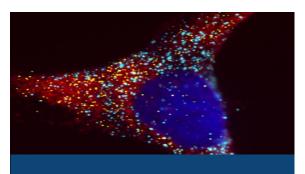
DIAGNOSTICS AND GENOMICS SEGMENT





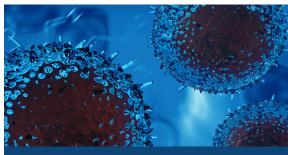
~ \$6B-\$9B TAM

SPATIAL BIOLOGY



- A C D
- RNAscopeTM, 1,2,4,12..HiPlexTM
- miRNAscopeTM
- BaseScopeTM
- DNAscopeTM

LIQUID BIOPSY



- EXOSOMEDX
- ExoDxTM Prostate Test
- ExoTRUTM Kidney Rejection
- CDx Companion Diagnostics

MOLECULAR PRODUCTS



- ASURAGEN
- AmplideXTM Genetic Screening
- QuantideXTM Oncology
- MolecularDX Controls

DIAGNOSTICS REAGENTS



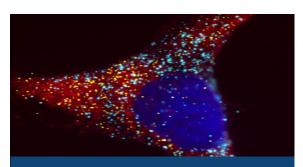
DIAGNOSTIC REAGENTS

- Bulk antibodies
- Diagnostic reagents
- Calibrators & Controls
- Assay Development

Growing portfolio of products

DIAGNOSTICS AND GENOMICS SEGMENT

SPATIAL BIOLOGY



ACD

- RNAscope, 1,2,4,12..HiPlex
- miRNAscope
- BaseScope
- DNAscope

LIQUID BIOPSY



EXOSOMEDX

- ExoDx Prostate Test
- ExoTRU Kidney Rejection
- CDx Companion Diagnostics

MOLECULAR PRODUCTS



ASURAGEN

- AmplideX Genetic Screening
- QuantideX Oncology
- MolecularDX Controls

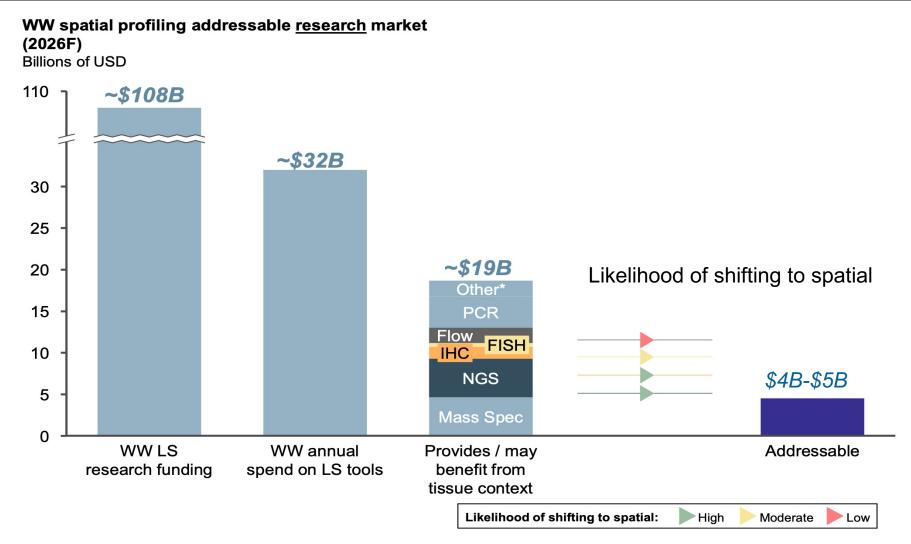
DIAGNOSTICS REAGENTS



DIAGNOSTIC REAGENTS

- Bulk antibodies
- Diagnostic reagents
- Calibrators & Controls
- Assay Development

SPATIAL BIOLOGY TAM ESTIMATED AT \$4B-\$5B IN 2026

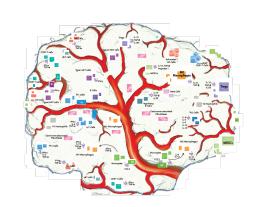


Over the coming five-year period our reagent TAM is poised to triple vs. current \$1B-\$2B

SPATIAL BIOLOGY

COMPLEX TISSUE PROFILING

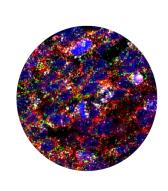
- Tissues are comprised of multiple cell types
- · Dynamic interactions in spatial organization
- ACD products show bright dots for selected genes
- To uncover critical pathways in disease pathology



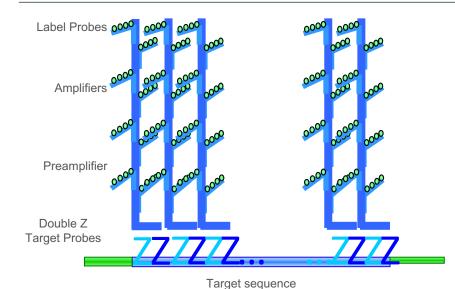
Heterogenous Tissue



Select Target Genes Based on Research Interest



Spatial Mapping of Targets

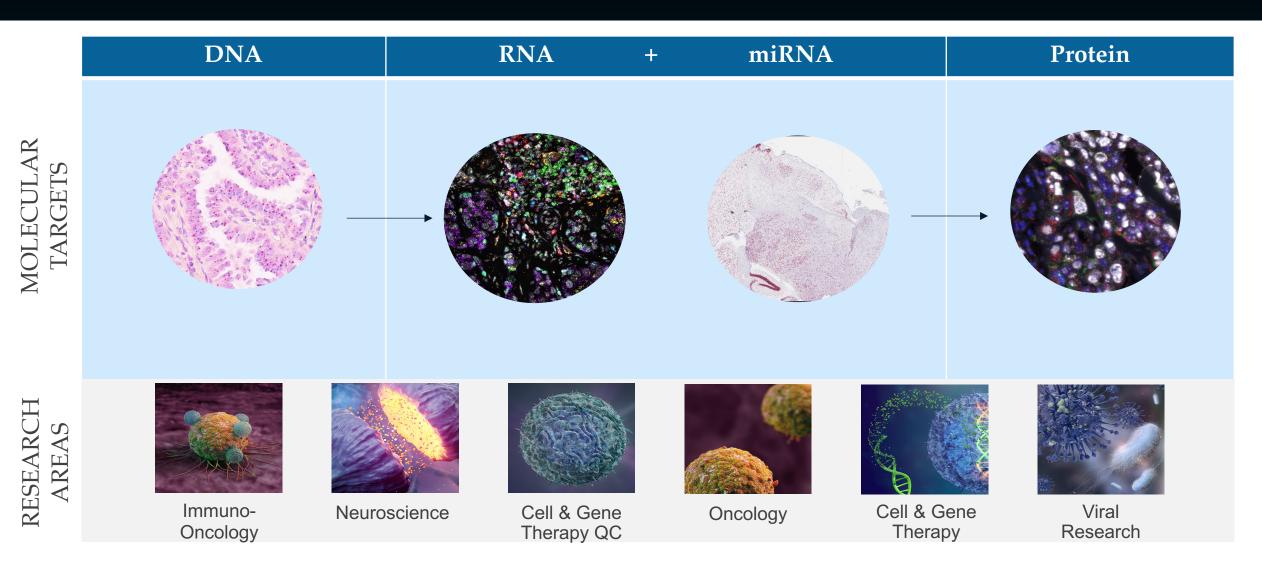


>100 Granted & Pending Applications

- Single Molecule resolution
- Single Cell resolution
- Any target: DNA, RNA, Proteins
- Multiplexing capabilities: 1, 2, 4, 12 ... 48
- Any length of target
- Any tissue
- Chromogenic or fluorescent detection
- With preserved Spatial context

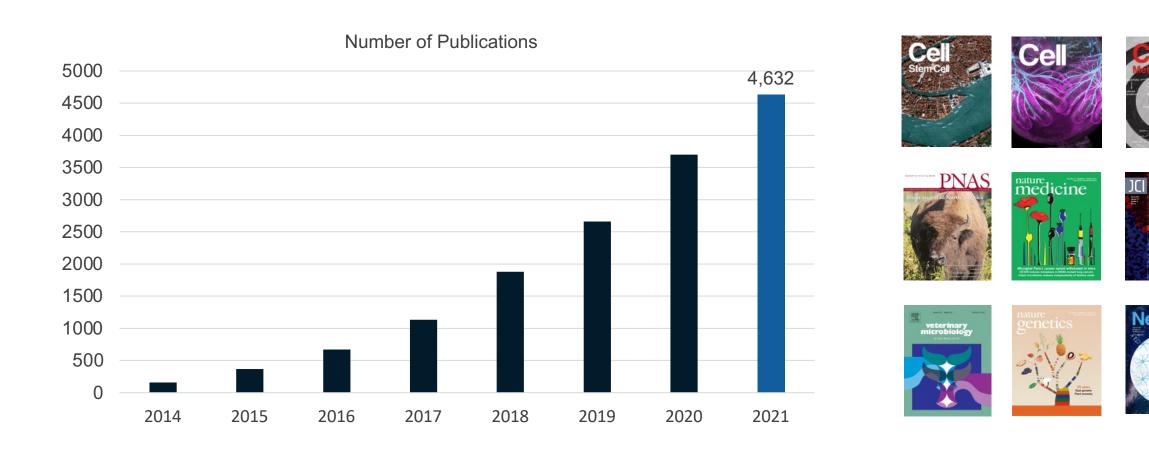
ACD products have truly differentiating spatial capabilities

LEADING THE SPATIAL MULTI-OMICS TOOL SET



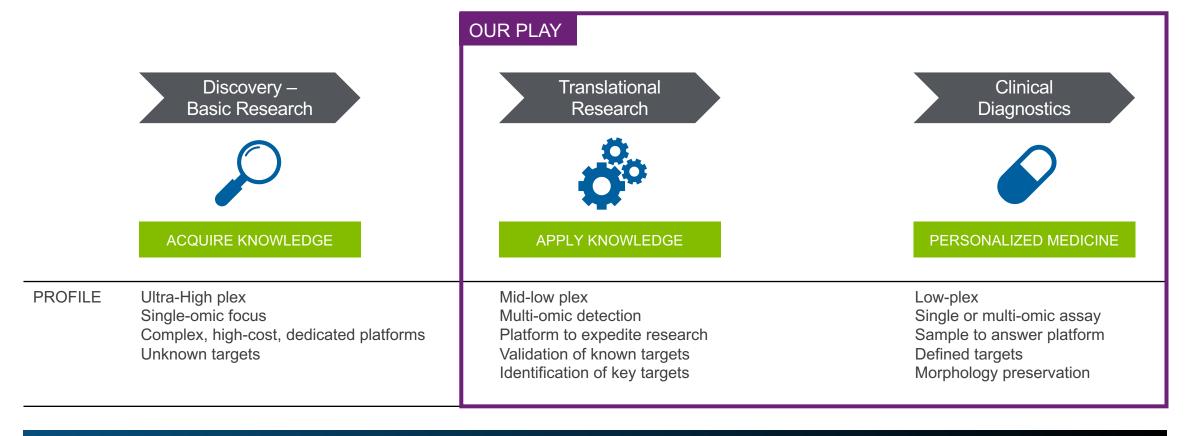
Large portfolio to address multiple sample types and research areas

PUBLICATIONS



Strong global market adoption and growing number of publications in spatial biology

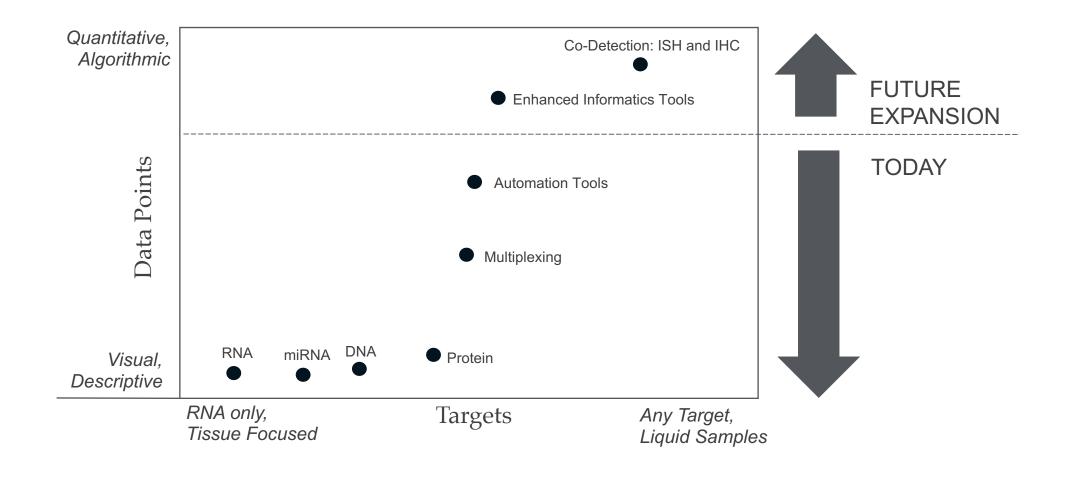
EVOLUTION OF A DIAGNOSTIC ASSAY



ULTRA-HIGH PLEX
LOW PLEX

Potential to further expand into clinical applications

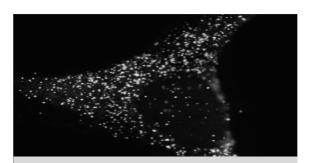
SPATIAL BIOLOGY



Range of solutions to meet varying customer needs

DIAGNOSTICS AND GENOMICS SEGMENT

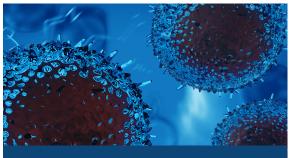
SPATIAL BIOLOGY



A C D

- RNAscope, 1,2,4,12..HiPlex
- miRNAscope
- BaseScope
- DNAscope

LIQUID BIOPSY



EXOSOMEDX

- ExoDx Prostate Test
- ExoTRU Kidney Rejection
- CDx Companion Diagnostics

MOLECULAR PRODUCTS



ASURAGEN

- AmplideX Genetic Screening
- QuantideX Oncology
- MolecularDX Controls

DIAGNOSTICS REAGENTS



DIAGNOSTIC REAGENTS

- Bulk antibodies
- Diagnostic reagents
- Calibrators & Controls
- Assay Development

LIQUID BIOPSIES: CTC, cfDNA & EXOSOMES

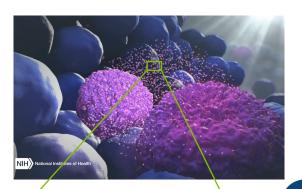
KEY PROPERTIES	СТС	c f D N A	EXOSOMES
Prevalence	Infrequent in early stages of disease	Difficult to find within "noise" of contaminating DNA	Abundant ✓
Early Abundance	No	No	Yes 🗸
Ability to Enrich or Select	Yes 🗸	No	Yes 🗸
Quality of Isolated Nucleic Acids	Good	Poor due to enzyme exposure	High-quality Shielded ✓

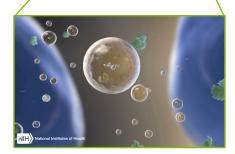
Exosomes are a superior source for biological information

EXOSOME BASED LIQUID BIOPSY WORKFLOW

EXOSOME RELEASE

Active process from living cells, for intercellular communication





Exosomes carry the entire genomic information and biomarkers from the originating cell

BIOFLUID

Urine, plasma, saliva, CSF







EXOSOME ISOLATION

Clinical grade (ExoLution)



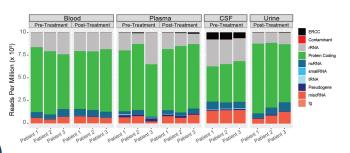
RNAseq Whole Transcriptome Sequencing



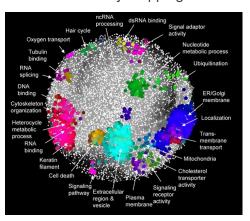
BIOMARKER PATHWAY ANALYSIS

Exosome RNA analysis enables real-time longitudinal monitoring of cellular processes

Biofluid Content



Pathway Mapping



Ideal for biomarker discovery and diagnostic applications

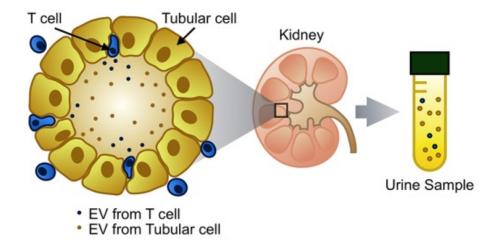
EXOSOME PLATFORM PIPELINE

	ON MARKET	IN PROCESS 2021	2022 & BEYOND		
DIAGNOSTICS	 ExoDx Prostate Cancer Test ExosomeDx CE EPI Prostate Cancer Test 	ExosomeDx ExoTRU Kidney Transplant Rejection	 ExosomeDx Multi-Analyte Platform for early detection in oncology ✓ Transcriptome + Splice variants ✓ Mutations ✓ Fusions ✓ Methylation 2nd Generation Prostate Cancer test (rule-in) 		
	EXAMPLES OF CDx ONGOING PROJECTS				
CDx	Neurodegenerative DiseaseImmunotherapyNASH		Cardiovascular diseaseBladder cancer		

Strong R&D and CDx Pipeline

ExoTRU - KIDNEY TRANSLANT REJECTION

- There are 22,000 kidney transplants per year in the US
- 230,000 living kidney transplant patients
- 91,000 patients awaiting transplantation (~3.6 years)
- 40% of patients have signs of rejection in year one



Tubular cells, as well as immune cells shed exosomes into urine

CLINICAL RESEARCH www.jasn.org Discovery and Validation of a Urinary Exosome mRNA Signature for the Diagnosis of Human Kidney **Transplant Rejection** OpenArray real time PCR Analysis

Analysis of exosomes from an easy to collect urine sample, give superior information on kidney rejection

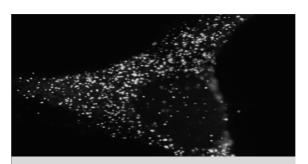
Initial Test Performance: 85% Sensitivity 93% NPV 94% Specificity 86% PPV

Above data from publication: Long Term Survival after Kidney Transplantation New England Journal of Medicine, 2021

High performing non-invasive urine test

DIAGNOSTICS AND GENOMICS SEGMENT

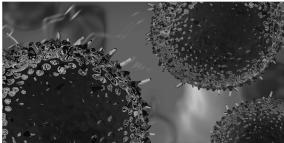
SPATIAL BIOLOGY



A C D

- RNAscope, 1,2,4,12..HiPlex
- miRNAscope
- BaseScope
- DNAscope

LIQUID BIOPSY



EXOSOMEDX

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- ExoTRU Kidney Rejection
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MOLECULAR PRODUCTS



ASURAGEN

- AmplideX Genetic Screening
- QuantideX Oncology
- MolecularDX Controls

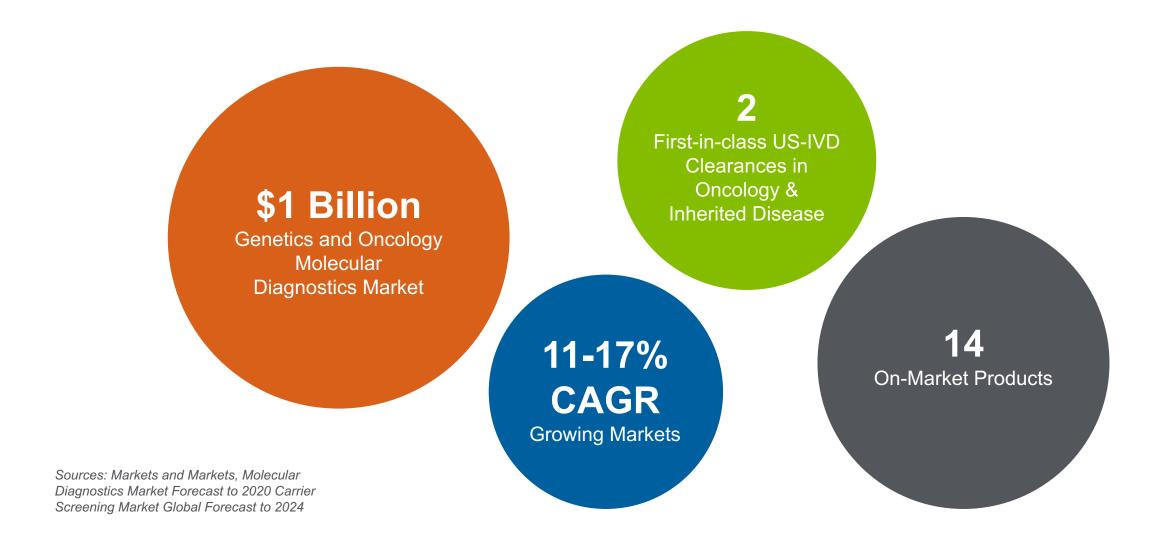
DIAGNOSTICS REAGENTS



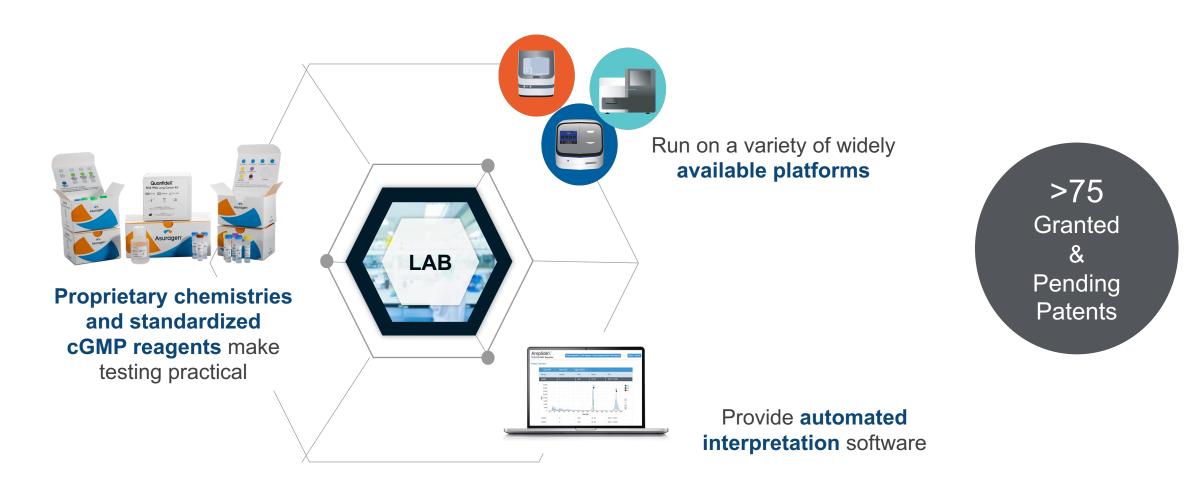
DIAGNOSTIC REAGENTS

- Bulk antibodies
- Diagnostic reagents
- Calibrators & Controls
- Assay Development

ASURAGEN OVERVIEW



ASURAGEN SOLUTION



Proprietary chemistries and software to analyze "hard to read" genomic sequences

ASURAGEN MOLECULAR PRODUCTS

Fragile X Dx & Carrier Screen Kit¹ (Fragile X Syndrome)

PCR/CE FMR1 Reagents² (Fragile X Syndrome)

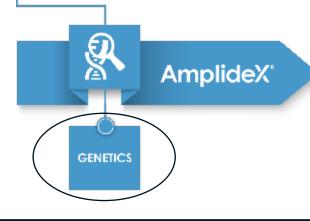
PCR/CE SMN1/2 Plus Kit² (Spinal Muscular Atrophy)

PCR/CE CFTR Kit³ (Cystic Fibrosis)

PCR/CE C9orf72 Kit² (ALS/FTD)

PCR/CE DMPK Kit² (Myotonic Dystrophy Type I)

PCR/CE HTT Kit² (Huntington's Disease)



Fragile X, SMA, CF, ALS, Huntington's

Leukemia, Solid Tumors, NSCLC



qPCR BCR-ABL IS Kit¹ (Chronic Myeloid Leukemia)

qPCR BCR-ABL minor Kit² (Chronic Myeloid Leukemia)

NGS DNA Hotspot 21 Kit² (Multiple Indications)

NGS RNA Lung Cancer Kit² (Non-small Cell Lung Cancer)

Armored RNA Quant® SARS-CoV-2 Panel² (N, E, RdRp, ORF, RNase P Region)

Armored RNA Quant® SARS-CoV-22

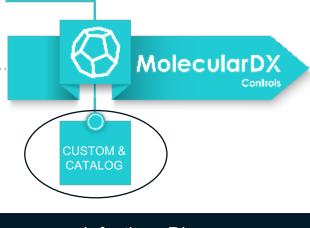
Armored RNA Quant® RNase P2

Armored RNA Quant® EPA-16152

Armored RNA Quant® Internal Process Control²

Armored RNA Quant® Enterovirus²

Armored RNA Quant® Pentavalent Control²



Infectious Disease

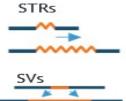
Wide variety of products addressing the genetic screening and oncology markets

¹ For *in vitro* diagnostic use.

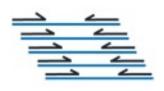
² For research use only. Not for use in diagnostic procedures.

ASURAGEN PLATFORM PIPELINE

PRODUCT	"Hard-to-Do" Carrier Screening panel for specialty labs	Expanded Carrier Screening (ECS) kit for any lab	Potential to kit ExosomeDx content
CLINICAL SEGMENT	Reproduc	Organ Transplant / Oncology / Neurology	
END MARKET & SIZE	Diagnosti \$:	Liquid Biopsy \$3B-\$4B	
VALUE PROPOSITION	 Detect more carriers 1 non-NGS workflow vs. 5-10 Scalable to other non-NGS genes 	 Decentralize ECS using an easy-to-run, all-in-one kit Disruptive technology to ID at-risk couples 	 Expand access to breakthrough tests Global IVD reach Standardized Dx kits Examples: Prostrate, Kidney Rejection, Neurodegenerative diseases
		Now high classifications	







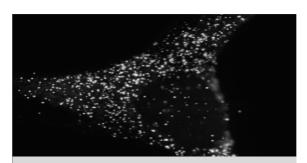




Healthy MDx Product pipeline

DIAGNOSTICS AND GENOMICS SEGMENT

SPATIAL BIOLOGY



A C D

- RNAscope, 1,2,4,12..HiPlex
- miRNAscope
- BaseScope
- DNAscope

LIQUID BIOPSY



EXOSOMEDX

- ExoDx Prostate Test
- ExoTRU Kidney Rejection
- CDx Companion Diagnostics

MOLECULAR PRODUCTS



ASURAGEN

- AmplideX Genetic Screening
- QuantideX Oncology
- MolecularDX Controls

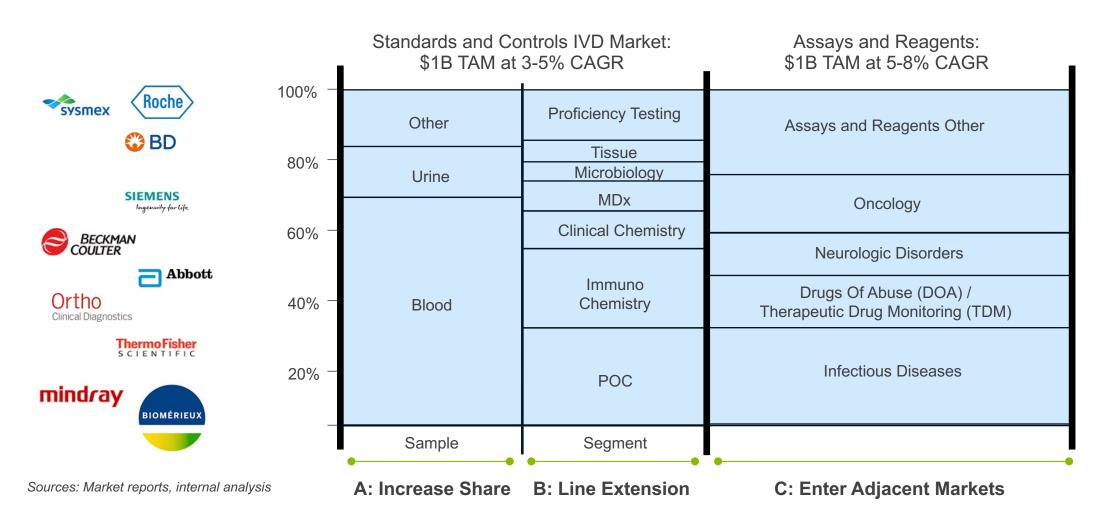
DIAGNOSTICS REAGENTS



DIAGNOSTIC REAGENTS

- Bulk antibodies
- Diagnostic reagents
- Calibrators & Controls
- Assay Development

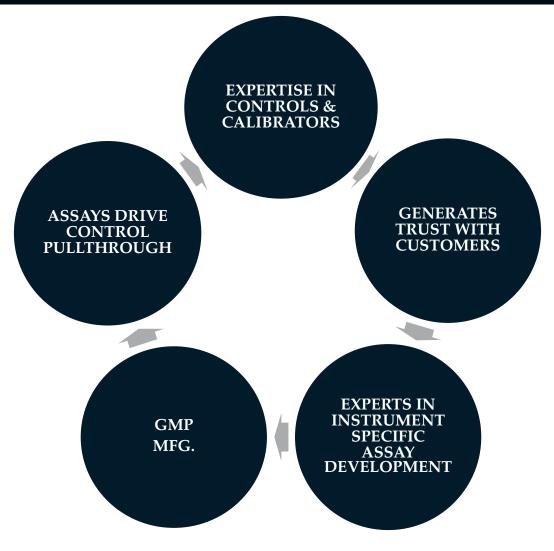
DIAGNOSTIC REAGENTS MARKET OVERVIEW



Entering adjacent markets will increase our TAM to \$2B

STRATEGIC DIRECTION OF ENTERING ADJACENCIES

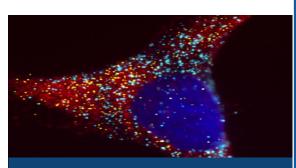
- Established relationships with large IVD providers
 - Deliver highest quality of Standards and Controls
 - Deep understanding of the actual assays / tests
 - Trusted partner
- OEM requests Bio-Techne to design their Assay
 - Utilize know-how and quality controls, calibrators, reagents & antibodies from across the organization
- Transfer the assay to a partner
- Partner orders our reagents, calibrators and controls
- Repeat



Designing assays for partners increases the sticky and less lumpy reagents business

CURRENT DIAGNOSTICS & GENOMICS SEGMENT

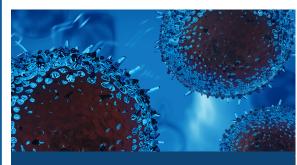
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LIQUID BIOPSY



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MOLECULAR PRODUCTS



ASURAGEN

- AmplideX Genetic Screening
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- MolecularDX Controls

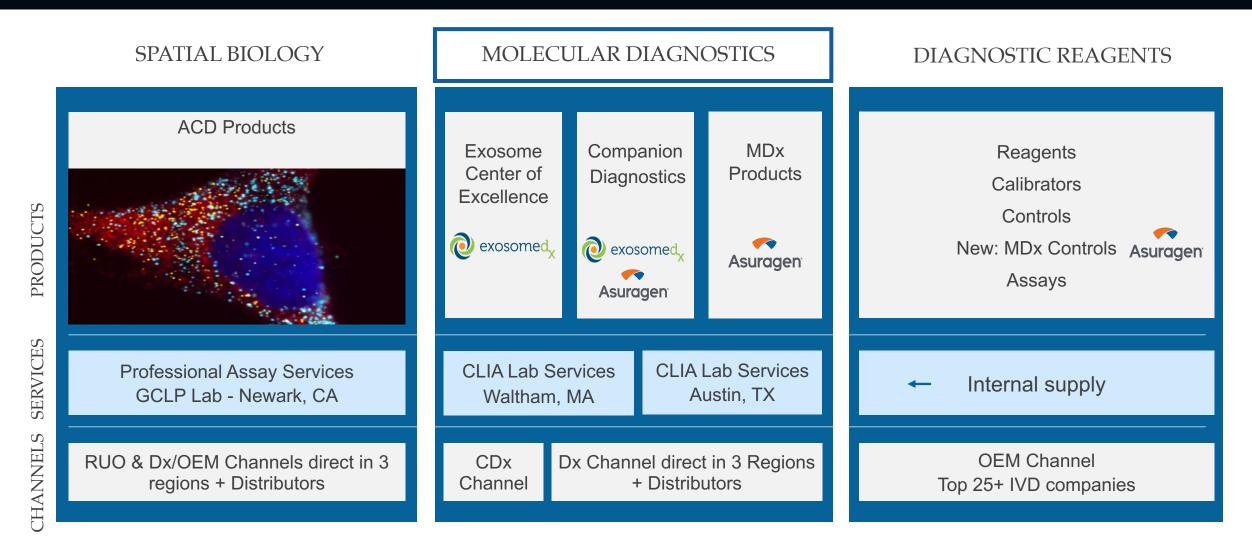
DIAGNOSTICS REAGENTS



DIAGNOSTIC REAGENTS

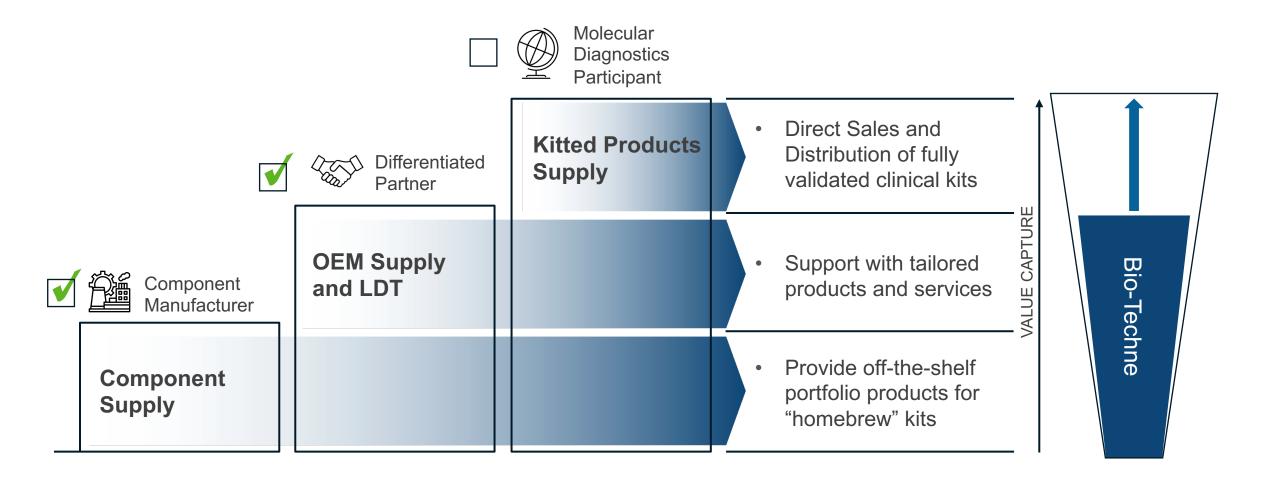
- Bulk antibodies
- Diagnostic reagents
- Calibrators & Controls
- Assay Development

NEW MOLECULAR DIAGNOSTICS DIVISION



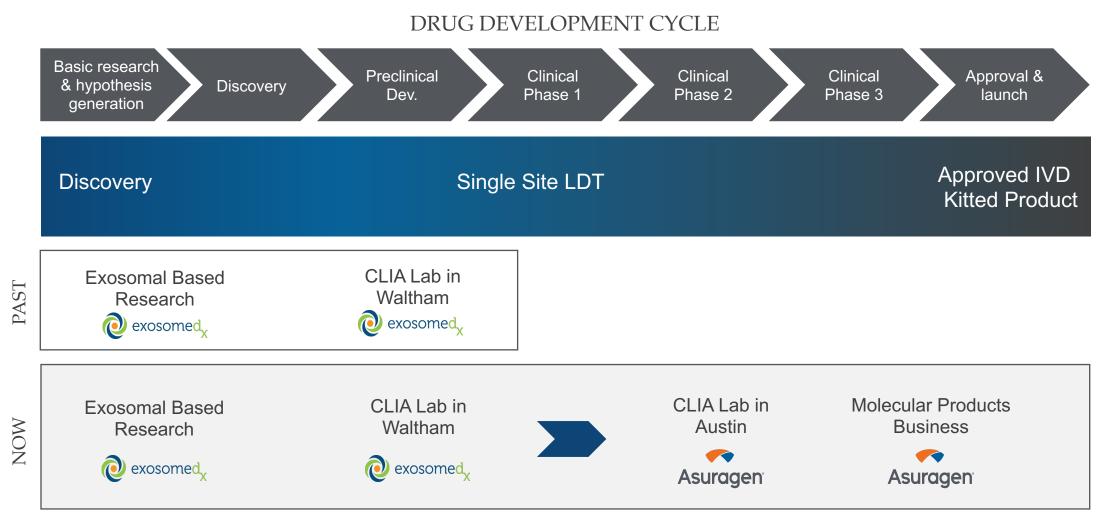
Unlocking synergies between ExosomeDx and Asuragen products

BIO-TECHNE AS A PARTICIPANT IN MOLECULAR SPACE



Asuragen enables sustained growth and relevant CDx participation

BIO-TECHNE COMPANION DIAGNOSTICS



The combination creates a single partner from discovery to kitted product

WE PROVIDE SOLUTIONS FOR LIFE



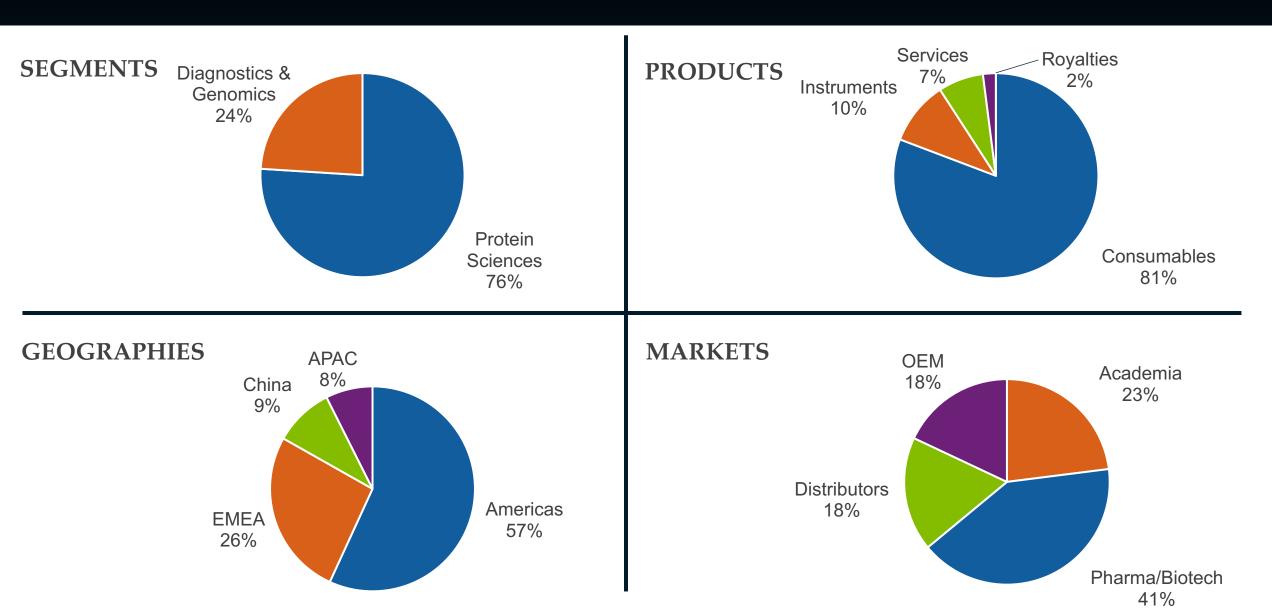
The Diagnostics & Genomics segment covers every phase in a patient's journey

FINANCIAL UPDATE

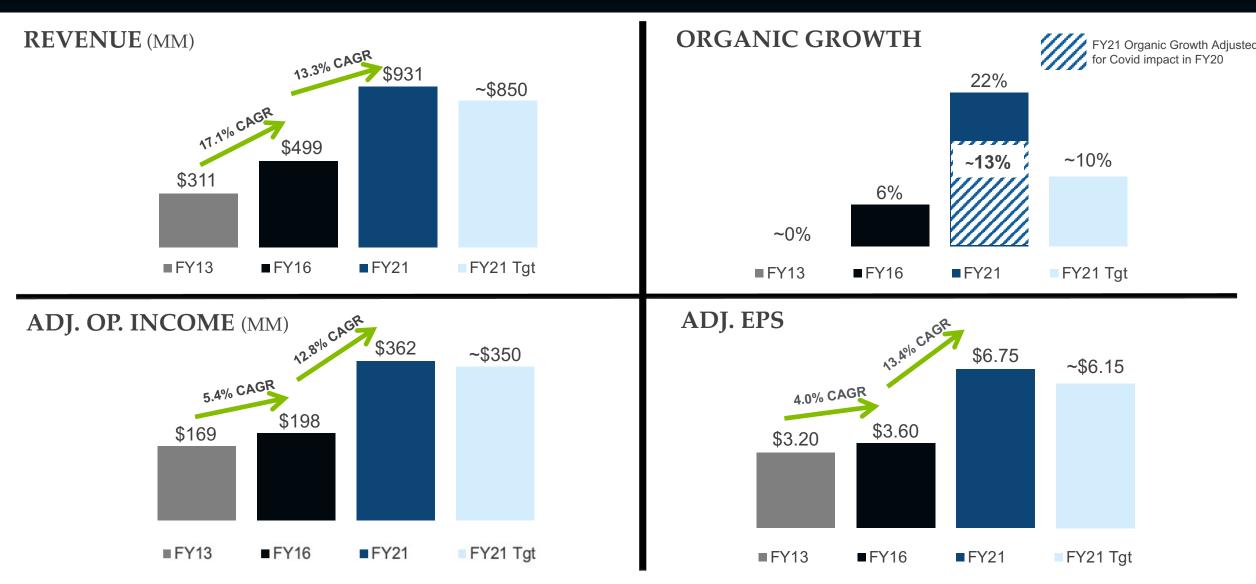


JIM HIPPEL CFO

FY21 BUSINESS MIX (\$931MM)



FLASHBACK TO 2016 INVESTOR DAY TARGETS



Tracking ahead of targets provided during 2016 Investor Day

DEPLOYING CAPITAL TO MAXIMIZE SHAREHOLDER VALUE



>\$2.4B capital deployed since FY13



~\$18B market cap increase since FY13

~\$1.7B in acquisitions to expand portfolio & end-markets

• \$266mm Strengthened core research reagents (Novus / Prime Gene) & Dx controls portfolios (Bionostics/Cliniqa)

• \$395mm Entry into instrumentation business (CyVek / ProteinSimple)

• \$575mm Entry into Tissue & Spatial Genomics (ACD), Liquid Biopsy diagnostics (ExosomeDx)

• \$188mm Cell & Gene Therapy workflow solutions (Trevigen / Atlanta Biologicals / Quad / B-MoGen)

• \$215mm Carrier Screening & Oncology diagnostic kits, Molecular Controls (Asuragen)

>\$490mm directly to Shareholders

- ~\$48mm per year in dividends
- ~\$110mm in share buybacks

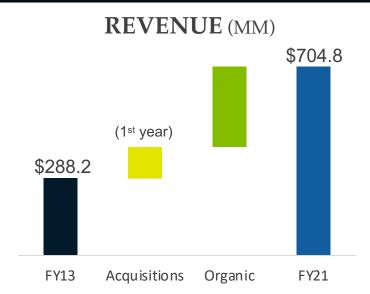
>\$205mm CAPEX to support organic growth

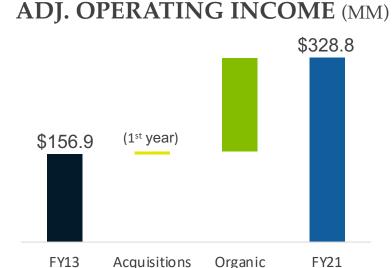
- Expansion of existing facilities
- Equipment to support new production
- ~\$50mm GMP protein manufacturing facility

DRIVING RESULTS ACROSS SEGMENTS

PROTEIN SCIENCES SEGMENT

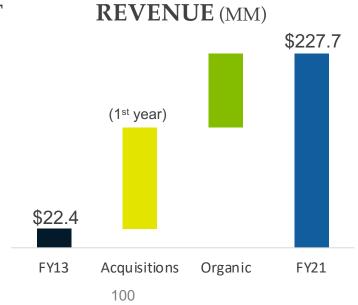
- ProteinSimple, CyVek, and Novus were acquisitions which expanded our portfolio.
- Synergies from instruments that leverage our reagent and assay excellence is a key driver for accelerated organic growth.
- Portfolio now well positioned to capitalize on emerging cell and gene therapy opportunity.



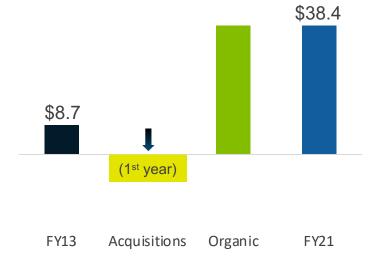


DIAGNOSTICS & GENOMICS SEGMENT

- Bionostics, Cliniqa, ACD, and ExosomeDx were acquisitions which bolstered our core Dx Controls business and expanded our portfolio into Genomics.
- ACD's advanced technology in spatial biology is propelling organic growth for the segment.
- ExosomeDx is still early but scaling in prostate cancer and preparing to launch kidney transplant rejection.



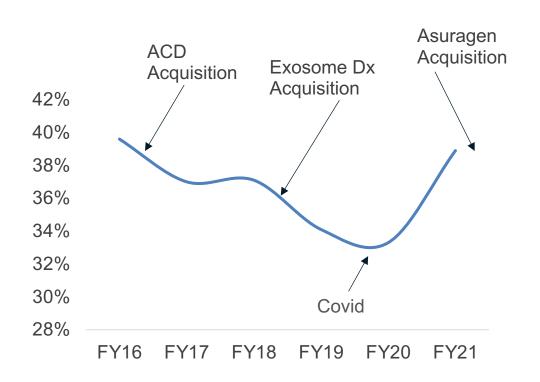
ADJ. OPERATING INCOME (MM)



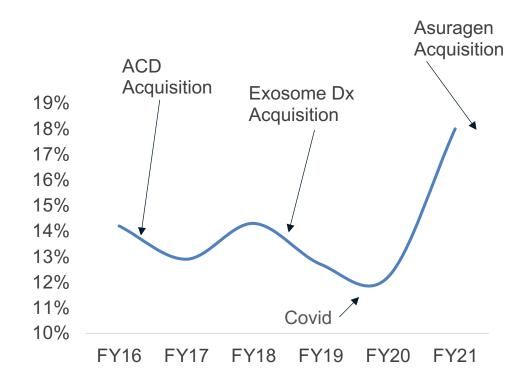
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IMPACT TO MARGIN AND ROIC FROM RECENT M&A

ADJUSTED OPERATING MARGIN

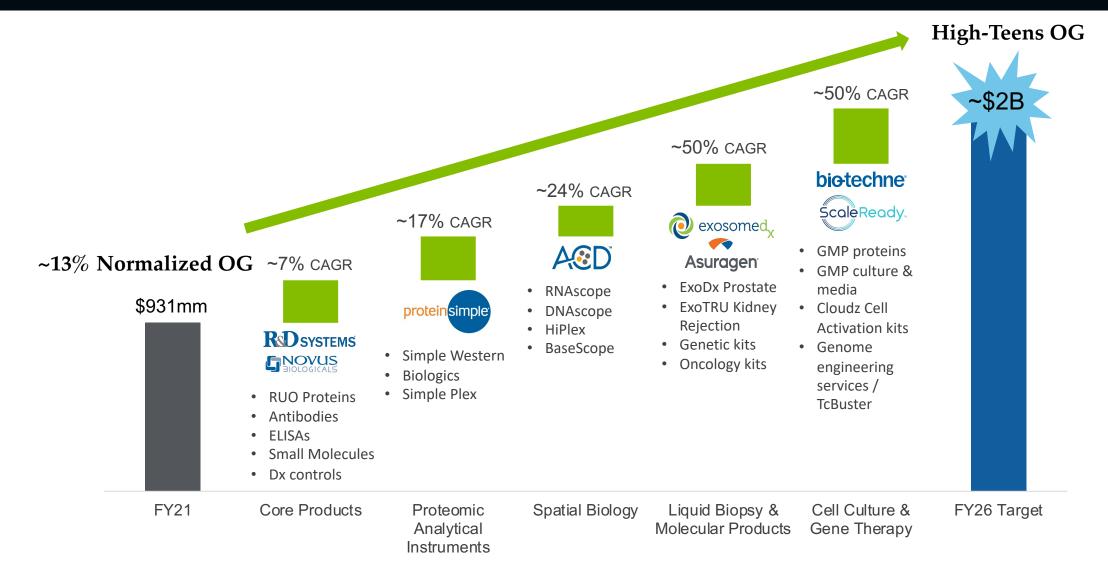


RETURN ON INVESTED CAPITAL (ROIC)



As predicted, adjusted operating margin and ROIC temporarily declined following ACD and ExoDx acquisitions, but strengthen as our acquired businesses continue to scale

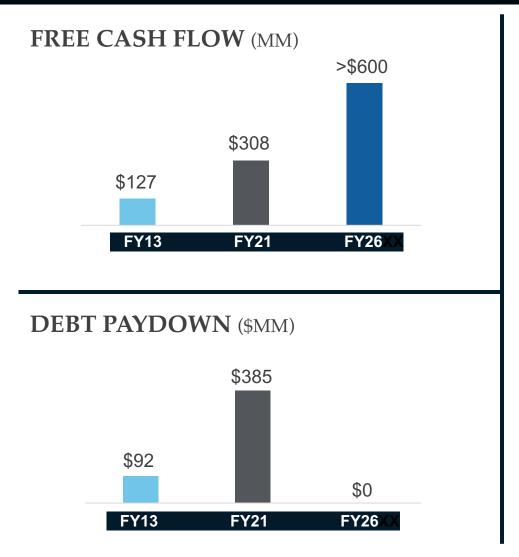
THE PATH TO \$2B...

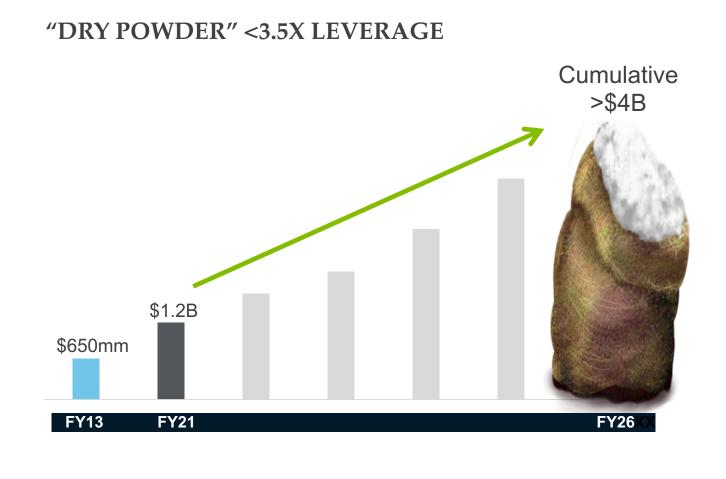


Ride "stable of unicorns" from \$931M in FY21 to ~\$2B in FY26

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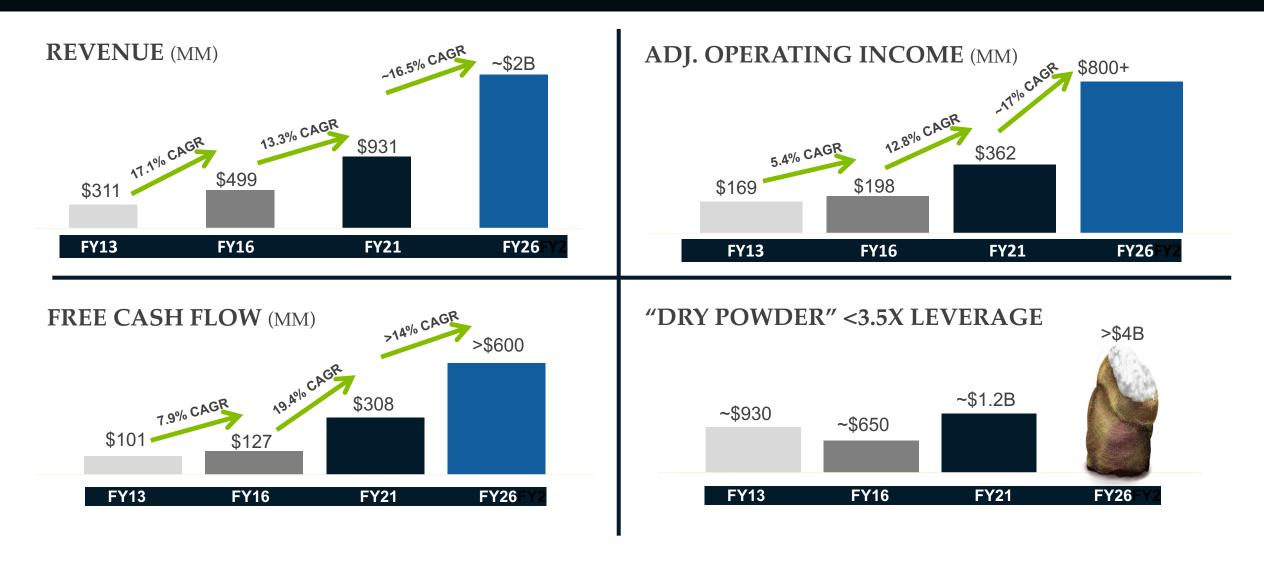
BALANCE SHEET CREATES CAPITAL DEPLOYMENT FLEXIBILITY





M&A, followed by stock repurchases and dividend remain capital deployment priorities

POSITIONED FOR STRONG FINANCIAL PERFORMANCE



Bio-Techne has the people, processes, and science for enduring growth and profitability



DAVID CLAIR
Senior Director, Investor Relations

THANK YOU

bio-techne[®]

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