

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT  
Pursuant to Section 13 OR 15(d) of the  
Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): November 19, 2025

QUANTUM-SI INCORPORATED

(Exact name of registrant as specified in its charter)

Delaware  
(State or other jurisdiction of incorporation)

001-39486  
(Commission File Number)

85-1388175  
(IRS Employer Identification No.)

29 Business Park Drive  
Branford, Connecticut  
(Address of principal executive offices)

06405  
(Zip Code)

Registrant's telephone number, including area code: (866) 688-7374

N/A  
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)  
 Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)  
 Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))  
 Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A common stock, par value \$0.0001 per share	QSI	The Nasdaq Stock Market LLC
Redeemable warrants, each whole warrant exercisable for one share of Class A common stock, each at an exercise price of \$11.50 per share	QSIW	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

**Item 7.01 Regulation FD Disclosure.**

From time to time, Quantum-Si Incorporated (the "Company") presents and/or distributes slides and presentations to the investment community to provide updates and summaries of its business. On November 19, 2025, the Company gave a presentation at its Investor & Analyst Day. The presentation slides and a replay of the webcast are available on the "Investors" section of the Company's website at <https://ir.quantum-si.com>. This presentation is also furnished as Exhibit 99.1 to this Current Report on Form 8-K.

*The information in this Item 7.01, including Exhibit 99.1, is being furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that Section, nor shall it be deemed incorporated by reference into any registration statement or other filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such filing. The furnishing of the information in this Item 7.01 and Exhibit 99.1 is not intended to, and does not, constitute a determination or admission by the Company that the information in this report is material or complete, or that investors should consider this information before making an investment decision with respect to any security of the Company or any of its affiliates.*

**Item 9.01 Financial Statements and Exhibits.**

**(d) Exhibits.**

<b>Exhibit No.</b>	<b>Description</b>
<a href="#">99.1</a>	Investor & Analyst Day Presentation of Quantum-Si Incorporated dated November 19, 2025
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

**QUANTUM-SI INCORPORATED**

By:           /s/ Jeffrey Keyes            
Name: Jeffrey Keyes  
Title: Chief Financial Officer

Date: November 20, 2025

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**Quantum Si**

**Investor & Analyst Day**

**November 19, 2025**



## Investor Day Agenda

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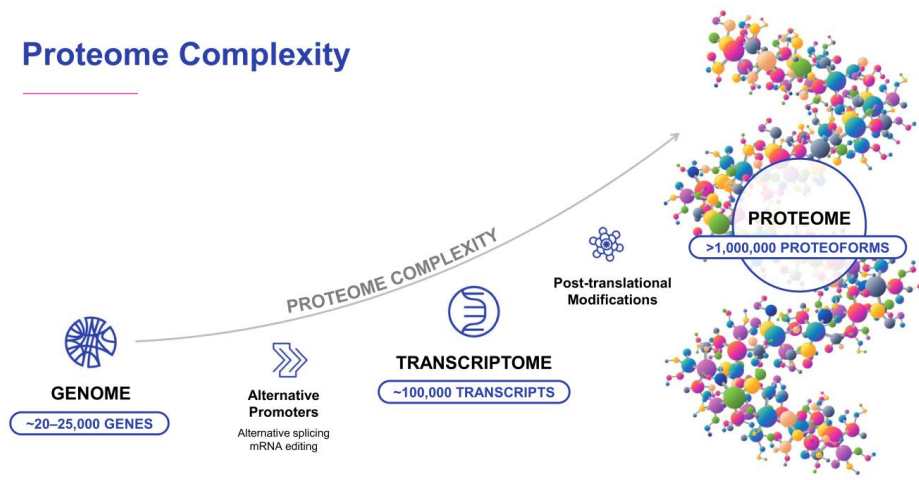
Jeff Hawkins, CEO	<b>Tackling the Complexity of the Proteome</b>	10:00–10:10 AM
Todd Rearick, CTO	<b>Proteus Program Update and Long-term Technology Roadmap</b>	10:10–10:40 AM
John Vieceli, CPO	<b>The Path to Detecting All 20 Amino Acids</b>	10:40–11:05 AM
Brian Reed, Head of Research	<b>Post-translational Modification Analysis Solutions</b>	11:05–11:25 AM
Jeff Hawkins, CEO	<b>The Road to Proteus Launch</b>	11:25–11:45 AM
Management	<b>Q&amp;A Session</b>	11:45 AM–Noon

## Proteins Are the Core of Biological Discoveries Across Many End Markets

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# Proteome Complexity



## The Study of Proteoforms Extends to Many Disease Areas and Thousands of Unique Proteins



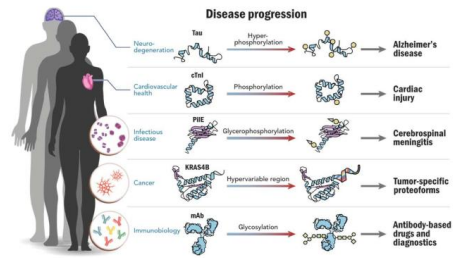
**Affinity-based methods** cannot scale to this complexity



**Complete coverage** of the proteome would require hundreds of thousands or more unique, site-specific affinity reagents

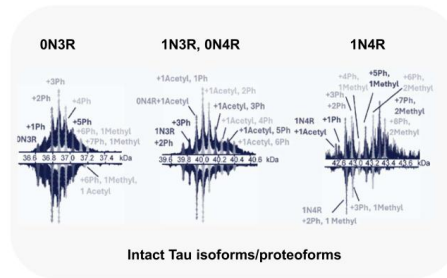
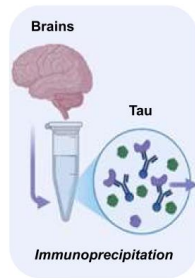


**Only single-molecule protein sequencing** can tackle this complexity

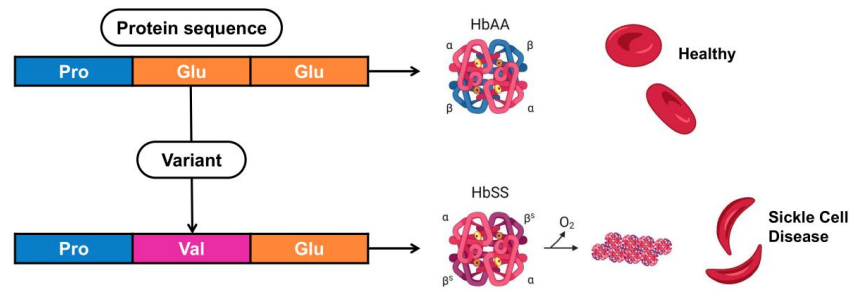


# Proteoforms Are Not Limited to a Single PTM Type

They are far more diverse, even within a single protein



## Proteoforms Also Include Single Amino Acid Variants, Which Can Be Critical to Understanding Disease



## Specialized Platforms With High Capital Costs Limit Adoption Outside of Core Labs in Proteomics

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**Many specialized platforms** needed to fully interrogate the proteome



**Technical tradeoffs** when selecting between the breadth of protein coverage and depth of insights



**High capital costs** with the top end instruments costs \$1M or more each



**Manual laboratory and data analysis workflows** limit the number of laboratories capable of performing proteomics



## Moving Beyond the Core Lab: Proteus Will Enable Deep Protein Analysis and Accelerate the Field of Proteomics

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**Single-molecule protein sequencing** will be the most versatile technology in proteomics — single AA variants, broad PTM coverage, and protein-agnostic



**Automation** simplifies laboratory workflow, increases throughput, and minimizes the need for specialized staff



**Affordable**, allowing any lab — anywhere — to be a proteomics core lab



## Themes of Today's Presentations

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Proteus performance data and long-term technology roadmap



The path to detecting all 20 amino acids



A diverse set of tools to enable generalizable PTM analysis



Road to Proteus launch and 2026 milestones

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**Proteus™  
Program Update**



## Proteus Next-generation Architecture

### Platinum® Pro + 2M Chip

- Integrated semiconductor consumable
- Benchtop instrument with manual workflow



### Proteus™ + KinetIQ™ Array

- Simple, passive consumable
- Benchtop instrument with imaging system
- Workflow automation



## KinetIQ™ Array

### Simple, passive consumable

- Low-cost fused silica die
- 80M wells per device
- Architecture scales to billions of wells

### Simple packaging

- Inexpensive plastic assembly
- Four flow cells, each with 20M wells
- Features to support automation



## Proteus Instrument



### Optical module

- High-performance custom optical design
- High resolution and large field of view
- Supports simple passive consumable



### Liquid handling

- Full workflow automation
- More advanced workflows, deeper insights

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## Proteus Program Status



Key technical risks retired or substantially reduced



Critical system components matured through several prototypes



Integrated system design complete — building first systems now

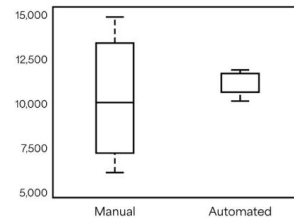
# Sequencing Workflow Automation is More Reproducible Than Current Manual Workflow

## Integrated System Liquid Handling



## Prototype Liquid Handling Subsystem Data

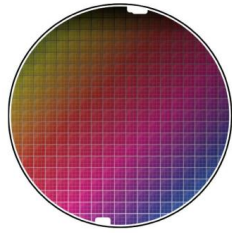
Automated vs manual workflow alignments



- Same architecture as integrated product design
- Entire sequencing workflow fully automated

## KinetIQ Array Fabrication and Post-processing Processes are Established

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Wafer fabrication process established



Well structure optimized



Product intent die size + geometry



Wafer-scale post-processing



Efficient packaging process

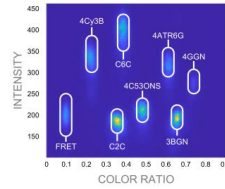
## Data from Prototype Imaging System and New Dyes Fully Validates Transition from Lifetime to Color Ratio

### Fully Functional Imaging System



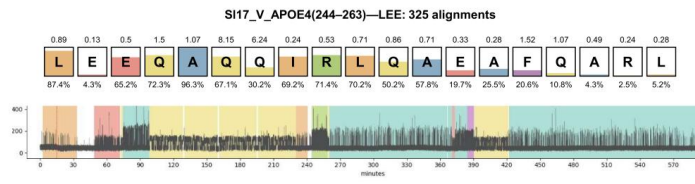
- Same architecture as product design
- Commercial off-the-shelf components
- Product-intent image sensors
- Reduced field of view

### Proven Color Channel Detection



- New color-space dye set
- Demonstrated up to 8 dyes
- Room for more if needed

## Successful Dynamic Sequencing Runs Completed in Q3

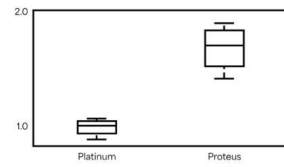


### Substantial de-risking new system elements

Consumable, dyes, optical system, software

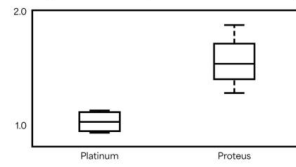
## Proteus Has Superior Sequencing Output Per Well Compared to Platinum

Alignments per well (normalized to Platinum)



Proteus routinely produces more alignments with the same number of wells

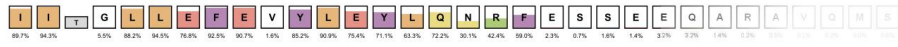
Long-read fraction (normalized to Platinum)



Proteus produces more long alignments compared to Platinum

# Proteus Consistently Sequences Deep into Peptides

SI19\_V\_IL6(87-120)—IT: 439 alignments



Unique capability for long-range structural information



Access to PTMs and variants deep into reads



Sequencing depth expected to continue to improve with increased coverage and further optimization

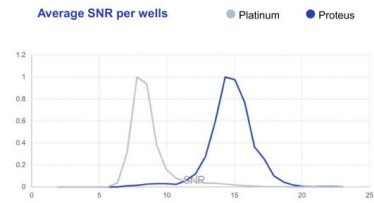
## Proteus Has Superior SNR and Short Pulse Detection Compared to Platinum

### Better SNR

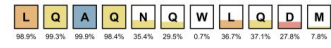
- More high-quality alignments
- Better accuracy
- More sensitive for PTMs and variants

### More sensitive short pulse detection

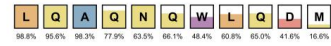
- Increased motif coverage with the same binders
- Software not optimized for improved data



#### Platinum



#### Proteus



## Proteus Sequencing Performance is on Track to Far Exceed Platinum at Launch

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**Proteus data is already superior to Platinum data**



**Data generated to date is without optimization**

Current algorithms | Current V4 binder set | Current cutters and chemistry



**Additional improvements expected before launch**

## Integrated System in Development

### First Integrated System Expected 1Q26

- Full integration of imaging and workflow automation
- Product-like consumables
- Full field of view supporting 20M wells



## Proteus Program Summary

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Transition to new architecture is proven —  
team is executing towards product launch for YE2026



Proteus architecture shows significant improvement  
over Platinum in the quantity and quality of sequencing output



Platform launch is aligned with improvements in biochemistry  
and library prep that will drive additional performance gains

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**Long-term  
Technology Roadmap**



## Proteus Architecture Supports Our Long-term Platform Roadmap Requirements



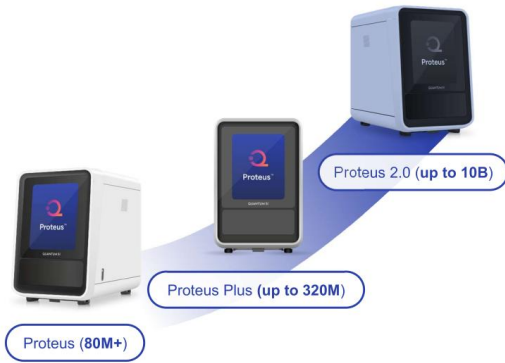
**Consumable architecture**  
scales to billions of wells



**10× scaling** from assay improvements alone



**Future instruments**  
capable of up to 10B reads

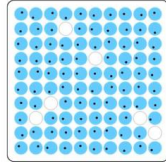


## Super Poisson Loading Increases Sequencing Output per Run by Approximately 3×



### Poisson Loading

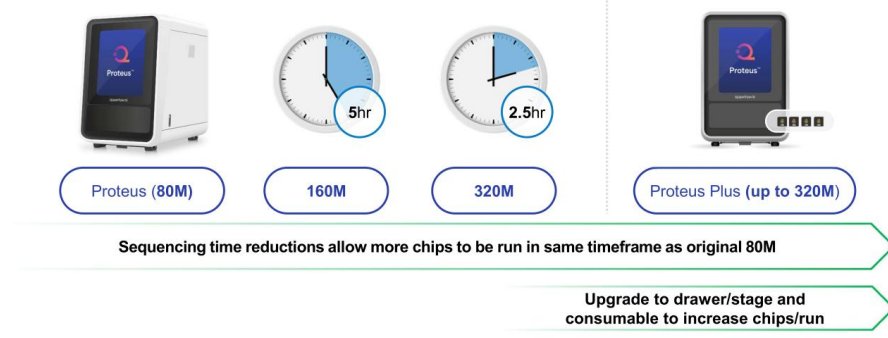
- Peptides randomly loaded into wells
- Maximum single-molecule loading ~36%
- 64% of wells are empty or multiply-loaded







### Super Poisson Loading

- Peptides are loaded in a way that prevents multiple loading
- Only one peptide can be loaded in most wells

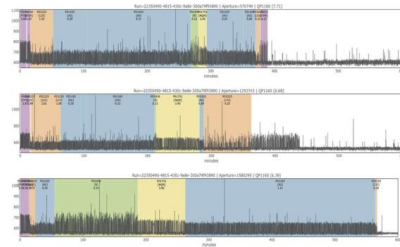
## Faster Sequencing Roadmap + Field Upgrades Could Drive Output Up to 320M and Increase Samples per Run







## The Path to Billions of Reads Requires Controlled Cutting

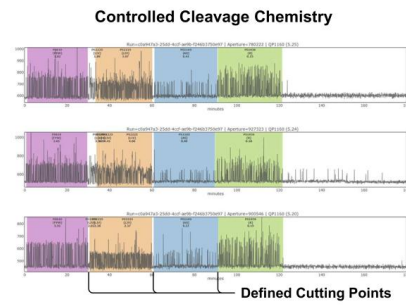
-  Cutting happens randomly
-  Residue duration is not uniform
-  Time/residue is slower on average
-  Controlled cutting would define the amino acid boundaries + enable a scanning system

Current Sequencing Chemistry



## We Have Successfully Demonstrated a Controlled Cleavage Version of Our Sequencing Chemistry

-  Enables scanning system
-  Amino acid boundaries are known
-  Residue duration is controlled and uniform
-  Time/residue is much faster on average



## Combining Controlled Cleavage with High-speed Scanning Scales the Architecture to Billions of Reads

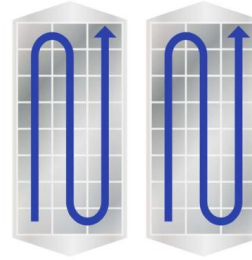
**Proteus 2.0** can incorporate high-speed scanning and microfluidic delivery system

**Scanning system** enables billions of reads

**Multiple imaging locations** within one flow cell

**Efficient usage** of device area

**Enabled by** controlled cleavage chemistry



Multiple imaging regions per flow cell

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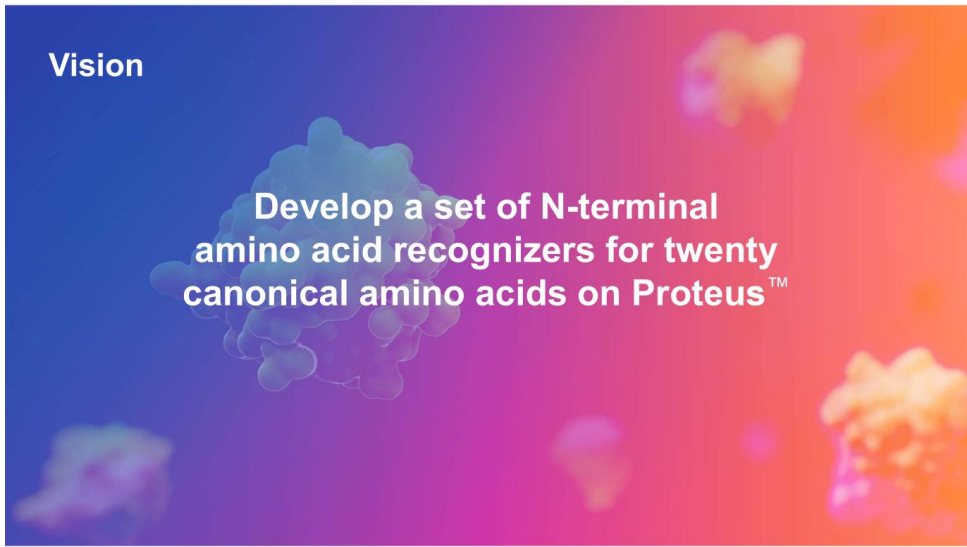
## The Path to Detecting all 20 Amino Acids

John Vieceli, Chief Product Officer  
November 19, 2025



## Vision

Develop a set of N-terminal  
amino acid recognizers for twenty  
canonical amino acids on Proteus™



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## Recognizer Roadmap

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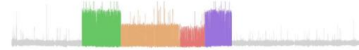
# Sequencing Technology Overview



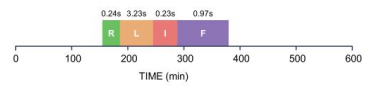
**Recognizers bind amino acids in sequence**



**Recognition events produce kinetic signatures**

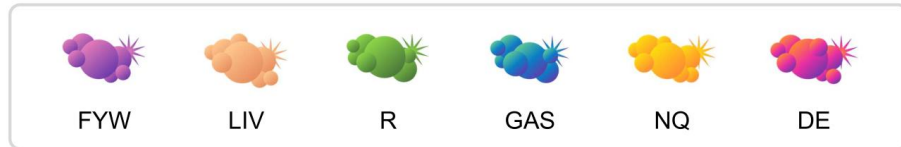


**Kinetic signature plot**



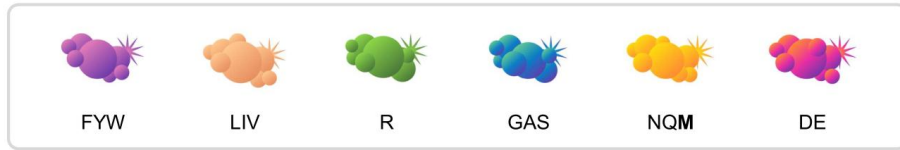
## Amino Acid Recognizers in Sequencing Kit V4

Recognition for 14 of 20 amino acids using 6 recognizers

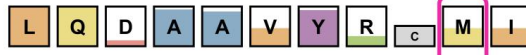


## Software Improvements Enable More Amino Acids

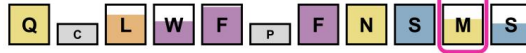
Q4 software release with Library Prep Kit V3 will increase to 15 amino acids



Peptide from  
**Programmed Death-Ligand 1**

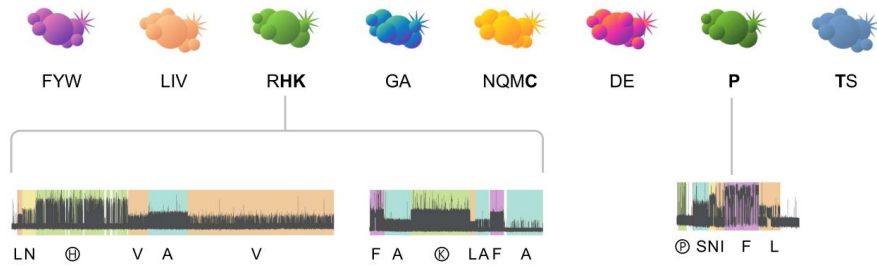


Peptide from  
**Hepatocyte Growth Factor**



## Path to 20 Amino Acids with 8 Recognizers

Detection of 18 amino acids demonstrated with campaigns for C and T underway



## Recognizer Roadmap Supported on Proteus

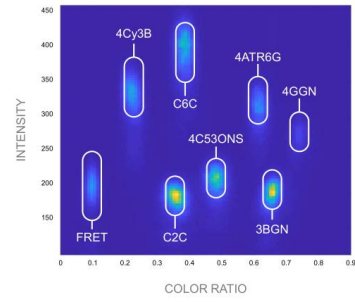
Intensity and color ratio space supports 8+ dyes



**Eight dyes** have been demonstrated on Proteus prototype system



**Additional dye space available** if necessary



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## Recognizer Development Pipeline

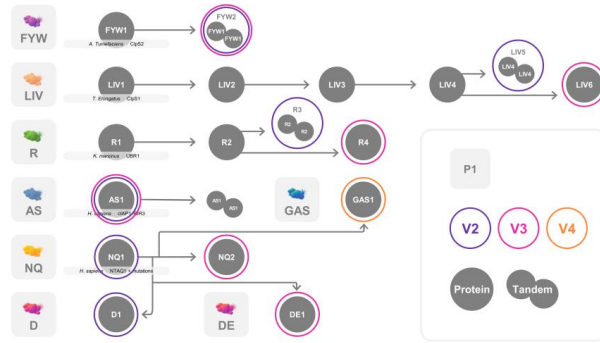
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# Recognizer Evolutionary Tree

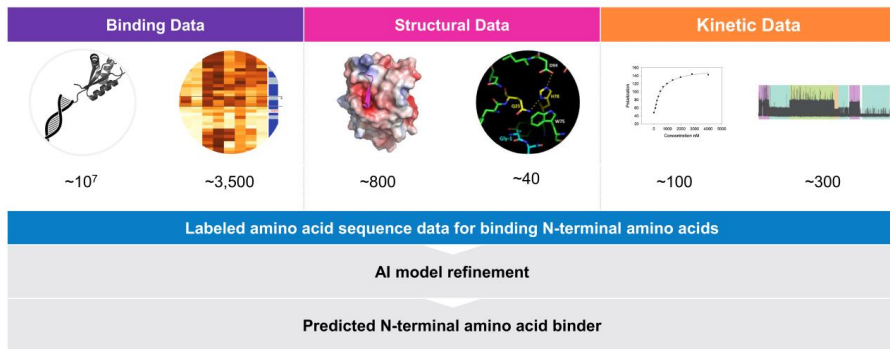
6 recognizers in Sequencing Kit V4 were derived from 4 starting proteins



**QSI recognizers**  
protected by 27 granted  
patents and applications

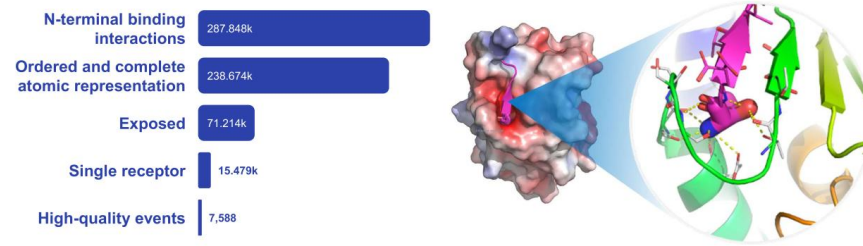


## Quantum-Si N-terminal Amino Acid Recognizer Data



## Protein Databank Mining for N-terminal Binders

Used for scaffold generation and model training



## AI Model Refinement Enabled By Academia and Industry

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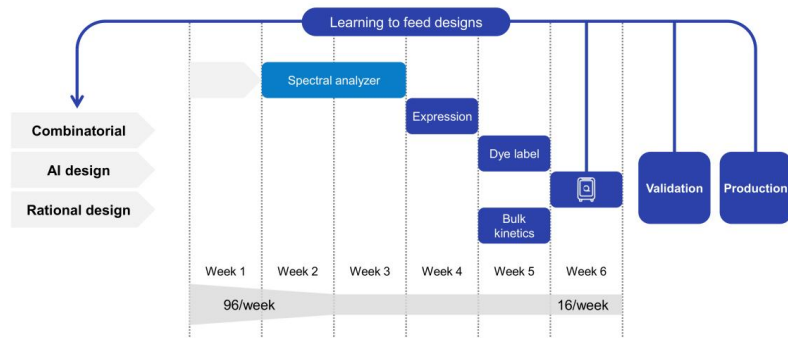
**Ligand message-passing neural network**

**Evolutionary scale modeling**

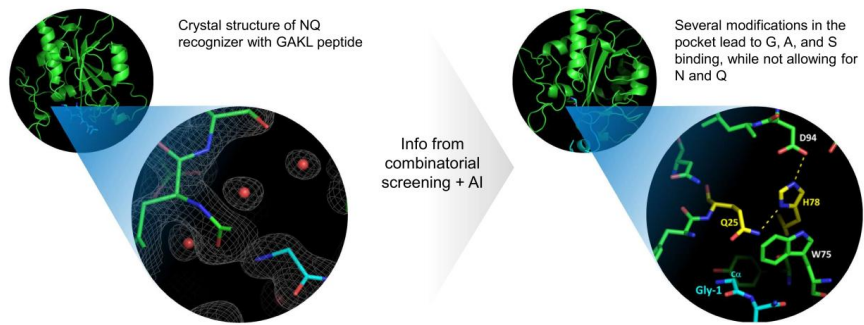
**GPU hardware acceleration**

## 4x Scale-up of Recognizer Development Pipeline

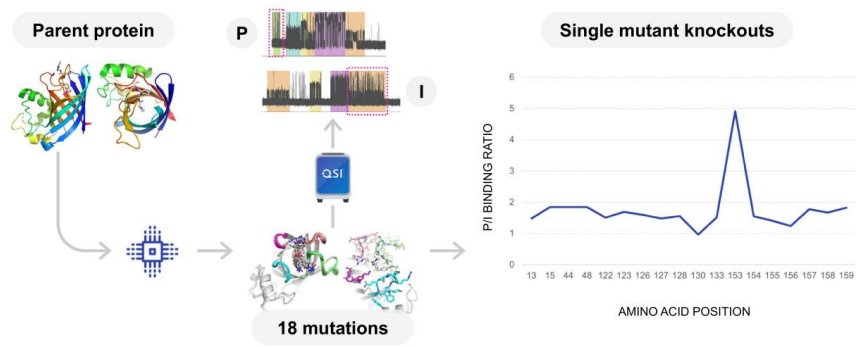
Utilize AI, rational, and combinatorial design approaches to generate candidates for screening pipeline



## X-ray Crystallography with Combinatorial and AI Strategies Yielded the GAS Recognizer



## Proline Recognizer from AI and Combinatorial Methods



## Summary of the Path to Twenty Amino Acids

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**Current recognizer pipeline** has candidates to go from 14 amino acids with Sequencing Kit V4 to **18 at Proteus launch in 2026**



**Recognizer development program** is being scaled **4x** to achieve detection of all canonical amino acids in 2026 and **release on Proteus in 2027**



**Efforts in artificial intelligence** utilize Quantum-Si screening data to refine deep learning and language models, in conjunction with rational and combinatorial design, to **accelerate the pace of recognizer development**

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## PTM Analysis Solutions

Brian Reed, PhD  
Head of Research



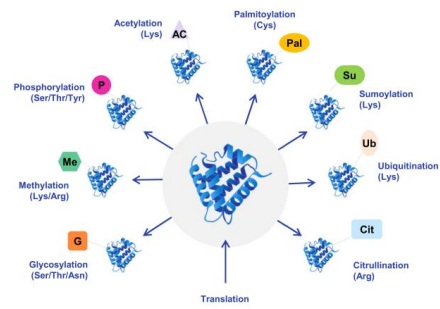
## Agenda

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### PTM Solutions on Proteus

- 1 Advantages of single-molecule detection for PTMs
- 2 Broad access to PTMs on Proteus
- 3 PTM applications on the path to Proteus launch

## PTMs and Proteoforms are the Next Frontier in Human Health



A **post-translational modification (PTM)** is a chemical change to an amino acid made *after* a protein has been expressed.

**There are hundreds of different types of PTMs.** A handful are of high interest in the proteomics due to their high abundance and roles in disease pathways. Examples: phosphorylation, glycosylation, ubiquitination.

**PTMs determine actual protein function** — making them essential for understanding disease mechanisms and therapeutic targets — but have been difficult to study with current proteomics technology.

## Challenge to Detecting PTMs With Existing Technologies

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### Mass spectrometry

- Quantification difficult
- Ambiguity in modification site assignment
- Multi-site combinations extremely challenging
- Workflow and analytical complexity (limits clinical adoption)



### Affinity-based platforms

- Detect proteins but provide no proteoform information

#### OR

- Need costly site-specific affinity reagents for every protein

## Advantages of Single-molecule Detection for PTMs

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- **Quantitation** straightforward due to direct counting of molecules
- **Direct PTM** site identification
- **Access to multi-site** PTM combinations
- **Simple workflows** for broad PTM proteome coverage; clinical compatibility
- **Universal PTM detection** reagents and assays for *all* proteins



## Single-molecule Detection Enables Broad PTM Coverage

NGPS unlocks broad and universal access to PTMs with three complimentary approaches | Can be used in combination to address the most challenging needs in PTM detection



### Kinetics

PTM detected via kinetic changes at upstream AAs



### Pre-recognition

PTM detected with a PTM binder prior to sequencing



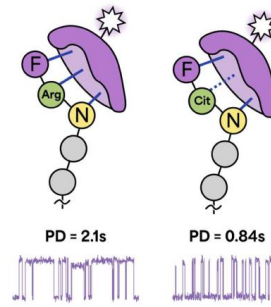
### Direct NAA detection

PTM detected with an N-terminal PTM binder during sequencing

**Complete AA** coverage and deep peptide sequencing will enable very high proteome-wide PTM coverage **on Proteus for all three methods**

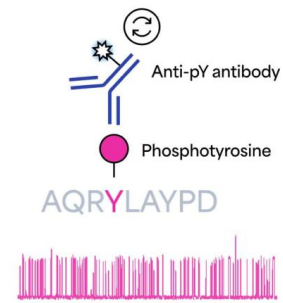
## Kinetic Detection of PTMs

- **Kinetic response to PTMs** is a universal feature of NAA recognizers—when the chemical makeup of the peptide changes, the kinetics change. No extra reagents or processing steps needed
- **Examples:** phospho-, methyl-, acetyl-, oxidation, citrullination
- **Customers are using** to dissect complex PTM arrangements that are ambiguous or inaccessible with MS



## Pre-recognition of PTMs

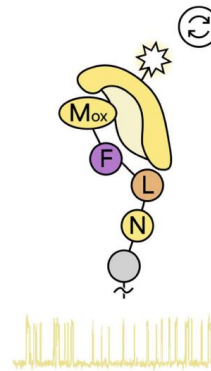
- **PTM detection at any position** regardless of peptide length
- **Parallel detection** of multiple PTMs
- **E.g., Pan-phospho kit:** Comprehensive detection of pS/pT/pY in one assay
- **Extreme sensitivity** to PTM stoichiometry due to the clear pulsing pattern from PTM recognition



## Direct N-terminal Detection of PTMs

### Direct NAA detection

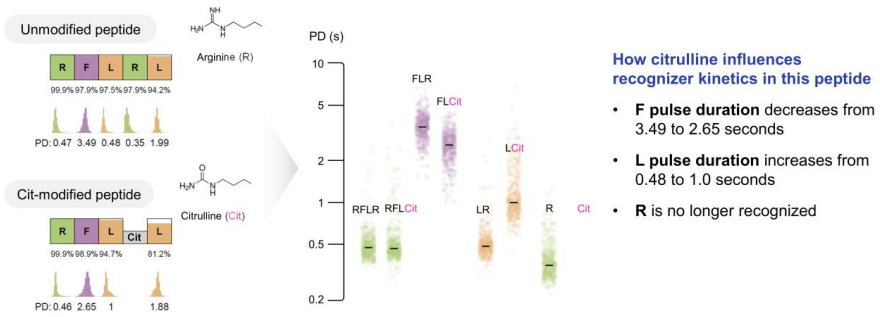
- **N-terminal PTM recognizer** included in sequencing assay
- **Can be standard** NAA recognizer or custom
- **Enables reference-free/*de novo*** PTM discovery
- **Suitable for very complex** sequence contexts and multisite PTM/variant arrangements



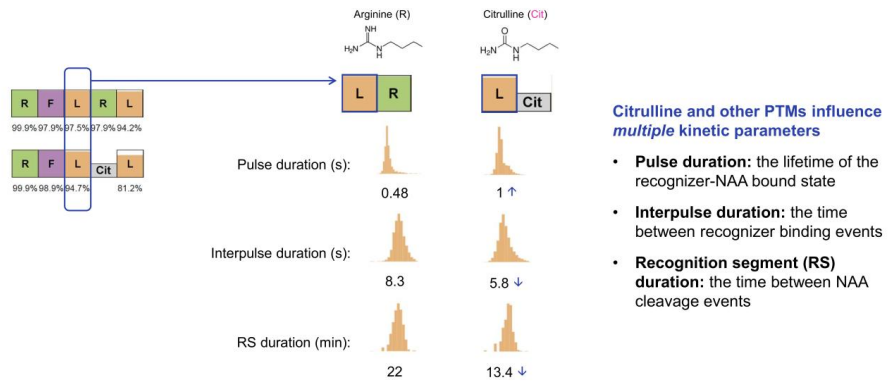


## Kinetics: Influence of Citrulline on NAA Recognizers

Arginine citrullination is challenging to detect by mass spec because of the negligible increase in mass (0.984 Da)



## Kinetics: Multiple Kinetic Parameters Inform PTM Detection

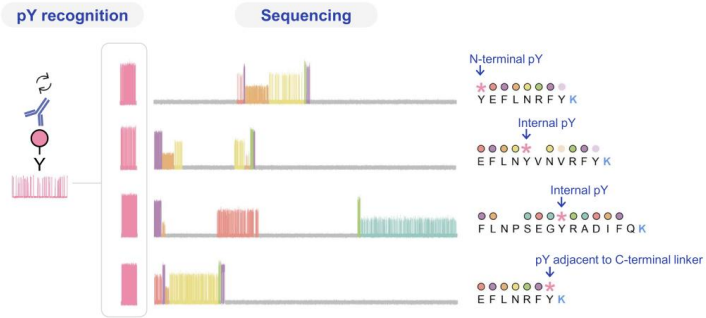


### Citrulline and other PTMs influence *multiple* kinetic parameters

- **Pulse duration:** the lifetime of the recognizer-NAA bound state
- **Interpulse duration:** the time between recognizer binding events
- **Recognition segment (RS) duration:** the time between NAA cleavage events

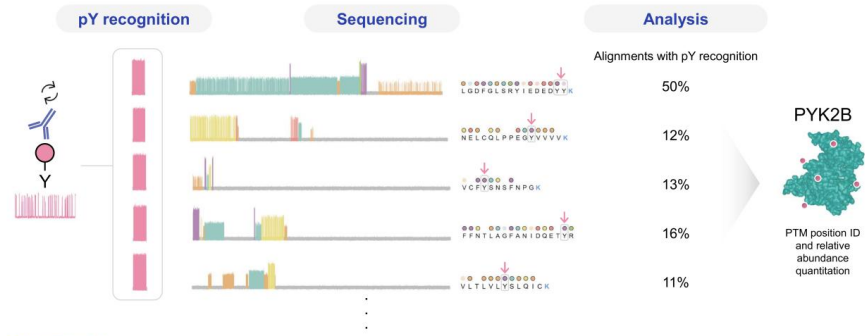
## Pre-recognition: pY Detection at Any Peptide Location

An anti-phosphotyrosine antibody detects phosphotyrosine at any peptide location — N-terminal, internal, and C-terminal linker adjacent — independent of sequence context



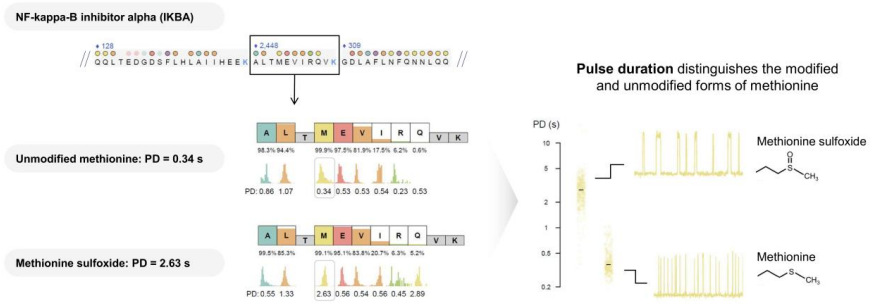
## Pre-recognition: Carna Biosciences Kinase Panel

Phosphorylation is a key determinant of activity for protein kinases used in drug discovery applications | Pre-recognition identifies phosphotyrosine in protein-tyrosine kinase 2-beta (PYK2B) and other important kinases



## Direct NAA Detection: Methionine Oxidation

The NQM recognizer directly detects N-terminal methionine sulfoxide at position Met91 in IKBA



## We Have a Clear Path to Broad PTM Coverage on Proteus

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### Recognizer development

Recognizers for all 20 amino acids will ensure maximum protein coverage and kinetic information available for PTM detection with all three methods



### Higher output on Proteus

Enables deeper and more sensitive PTM detection and multiplexed panel-based solutions



### Artificial intelligence

For data analysis to fully extract the massive volume of kinetic information in our NGS output for PTM and variant detection and quantitation



### PTM access with three methods

Three complimentary approaches that can be used in combination ensure access to the broadest range of PTMs anywhere in the proteome

QUANTUM SI

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**The Road to Proteus  
Launch**



## From Platinum to Proteus — Market Learnings Inform Proteus Requirements and Commercial Strategy



**General technology** first;  
**defined applications** second

**Sample prep-agnostic**

**Broad marketing** to all segments  
at launch



**Defined applications** first;  
**general technology** second

**Sample-to-report** workflows for  
high-value applications

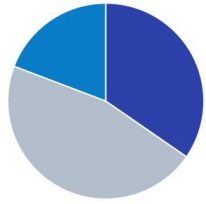
**Focused launch** — achieve  
application depth in target segment(s)



## The Customer Data is Clear

Researchers need a breadth of capabilities to answer their biological questions

Number of PTMs Required



■ One ■ Two ■ Three or more

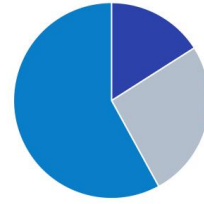


**More than 50** detailed study proposals submitted by prospective customers

**>50%** require three or more types of protein analysis applications

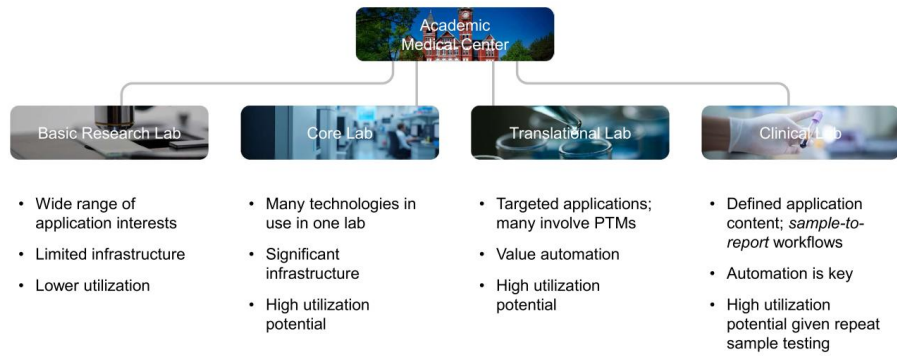
**Detection of two or more PTMs** is required in **>65%** of cases

Number of Unique Applications

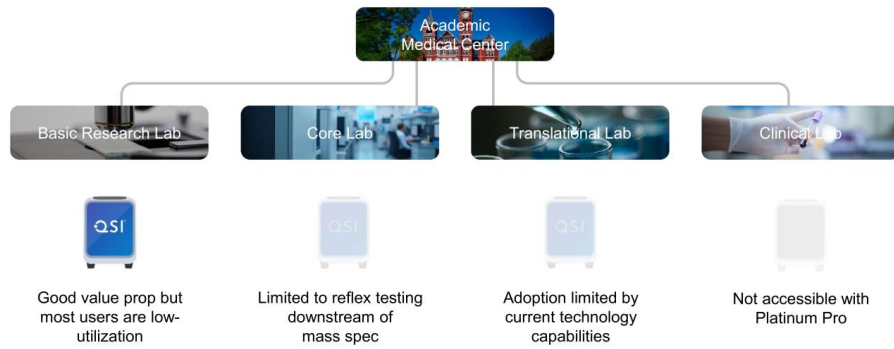


■ One ■ Two ■ Three or more

## A Look Inside an Academic Medical Center



## Platinum Case Study — The Academic Medical Center



## The Increased Sequencing Output and Lower Costs of the Nanowell Array is Broadly Enabling



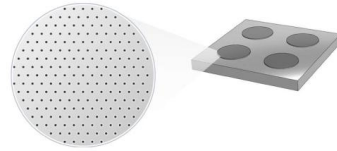
**More samples** per run with 40× the output per consumable compared to Platinum Pro



**Deep analysis** of a single sample to address complex mixtures or rare events like variants or PTMs



**Multiplexing** samples to achieve higher throughput and lower costs per sample for cost sensitive applications like protein ID



## Accelerating the Core Sequencing Technology and Analytics to Unlock the Highest-value Applications

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**Robust PTM detection**  
and multi-PTM profiling



**Sequencing of variable**  
regions of antibodies



**Single-amino acid**  
variant detection



**Biothreat detection**  
and surveillance

## Proteus Automation Greatly Simplifies the Sequencing Workflow and Makes New Lab Startup Even Easier



**Over 30** individual reagent tubes to handle to process four samples

**Over 100** pipetting steps per sample



**A single reagent module** per run — simply unbox and load

**Pipette your sample(s)** into the cartridge and hit *Run*

## Building a Partner Ecosystem to Accelerate Application Development + Deliver *Sample-to-report* Workflows



## New Industry Partnerships in PTMs and Ultra-low-abundance Protein Panels

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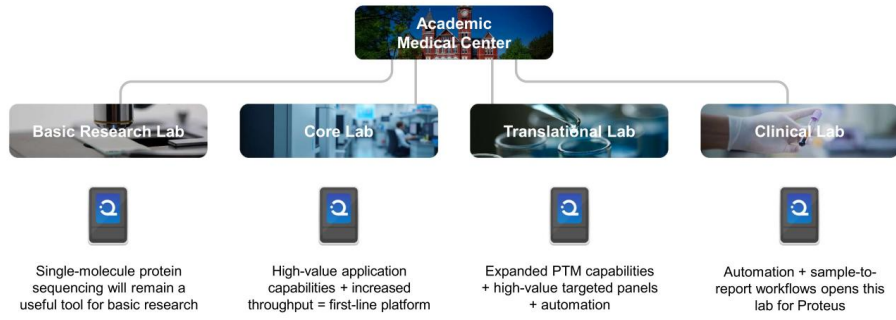


- Carna Biosciences is a leading provider of assay-grade kinase proteins to biopharma for drug discovery and profiling
- Carna Biosciences is evaluating the use of QSI technology to assess and validate phosphorylation profiles of kinases
- Collaboration presents the potential to leverage the complementary strengths and global reach of both organizations

## SIENA • QUANT™

- Siena Quant™ is a SISCAPA Holdings Company — experts in the field of sample enrichment for proteomics
- Siena Quant is enabling the quantitation of ultra-low-abundance biomarkers that have been historically unreliable to measure
- QSI and Siena Quant will collaborate to develop sample-to-report workflows for customers to accurately measure clinically relevant biomarker panels

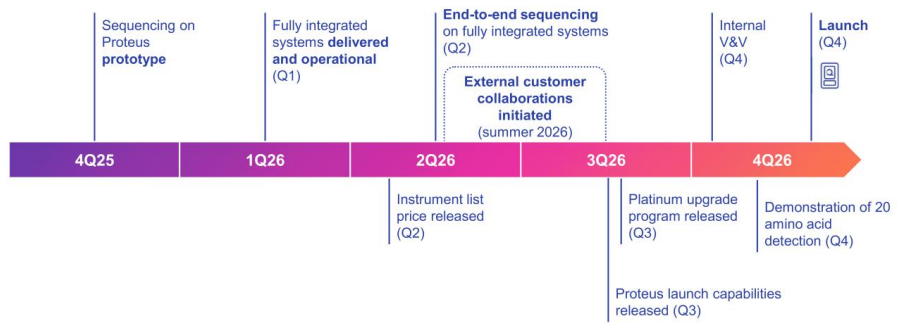
## Proteus Will Increase the Depth of Penetration in Academic Medical Centers Compared to Platinum



## Proteus Will Enable Single-molecule Protein Sequencing Across a Broad Range of End Markets



## Milestones on the Path to Proteus Launch in 2026



## QSI is Well-positioned to Build Upon Our First-to-market Advantage and Extend Our Leadership into the Future

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**Grow user base with**  
Platinum Pro and  
develop the market for  
Proteus launch



**Execute on**  
**development roadmap**  
to deliver a compelling  
Proteus launch



**Build a partner**  
**ecosystem** to  
accelerate application  
development + deliver  
*sample-to-report*  
workflows



**Extend our technology**  
**lead** through best-in-  
class R&D innovation  
+ execution

