





Click **here** to read our Disclosures & Copyright Statements

# **Product** Solutions

#### **Biomek i7 Hybrid NGS Workstation**







Biomek i7 Hybrid



Automated Thermal Cycler (Optional)



Multichannel Wash Station



Enclosures (Optional)



Biomek Software



Orbital Shaker



Automated Labware Positioners



Demonstrated Method Interface





Static Peltier

GO

Span-8 Active Wash















# **Biomek Software**

#### Validates methods in real time.

- powerful methods
- export data
- electronic signatures and audit trails



• User friendly "point-and-click" interface allows users to quickly create

• Biomek's 3D simulator demonstrates exactly how the method will execute • Enables integration with LIMS to import information and work orders and

• Supports 21 CFR 11 compliance with features including access control,

							- 0	Х
rol S	iteps: U	tilder						1
4 00	tas Aspirate	<b>B</b> ispanea	t Is Load Tips Select T	Unload Tips Ips	Ma Ma	t (A Advanced Load Tips	Advanced Unload Tips	~
nica	dthen v	when the tri depart 110%	nderia d	one.				
	Change	tips between	dectival:	u al preize	Sev	u /a		
			CL_12_9; 0 1 Auto-Sei	na Juliof est Du	Tip Cont	at P4	-	
	00 mm fram Svenides Ter	bottan chrique)	etrique ⊨@1,3	 (ĕ₿)	ۍ.		-	
k b	vere to ac	ld a desti	nation.		_	_		
1		P1 P6		16 P21	225		/	
		P5 P20	P14 F	10 P24	225	/		

![](_page_2_Figure_13.jpeg)

![](_page_3_Picture_0.jpeg)

# **Biomek i7 Hybrid**

### Designed to optimize dependability and walk-away time.

- Spacious, open-platform with 45 deck positions
- 4D integration capabilities

![](_page_3_Picture_5.jpeg)

![](_page_3_Picture_6.jpeg)

#### **Multichannel head**

60, 300 and 1200  $\bullet$ µL heads support selective tip pipetting for more flexible transfer options: Individual tip(s), column(s), row(s), patterns

#### Span-8 pod

- Equipped with  $\bullet$ conductive Liquid Level Sensing (LLS)
- Allows sample volume • tracking through Biomek software

![](_page_3_Picture_12.jpeg)

- Configurable for specific applications
- Optional HEPA filter integration

![](_page_3_Picture_16.jpeg)

#### "High-access" rotating gripper

- Optimizes access to  $\bullet$ high-density decks
- Allows for direct device integrations
- Two grippers on a dual  $\bullet$ arm Biomek i7

![](_page_3_Picture_21.jpeg)

![](_page_3_Picture_22.jpeg)

![](_page_4_Picture_0.jpeg)

# Automated Labware **Positioners (ALPs)**

platform to accommodate a wide range of applications.

• Static labware positioners in 1x1, 1x3 and 1x5 configurations

![](_page_4_Picture_4.jpeg)

### Workstation-integrated and interchangeable components that perform specific tasks. ALPs make it possible to configure the

![](_page_4_Picture_6.jpeg)

![](_page_5_Picture_0.jpeg)

# **Orbital Shaker**

#### This ALP provides mixing of samples and/or reagents with user-definable and reliable agitation of plates and general vortexing.

- splashing
- Timed orbital and pulse shaking  $\bullet$
- 1800 rpm
- Space saving

![](_page_5_Picture_8.jpeg)

• Smooth and continuous motion, enabling homogenization without

Ramped acceleration/deceleration: shaking speed ranges from 100 rpm to

• Easily integrated with Biomek i7 and i5 to increase experimental flexibility

![](_page_5_Picture_13.jpeg)

![](_page_6_Picture_0.jpeg)

# Static Peltier

#### This ALP provides temperature control between 4-100°C in 0.1°C increments.

- Space saving
- Accessible by Biomek gripper

![](_page_6_Picture_6.jpeg)

• 96 and 384 well plate adaptors available for efficient heat transfer

![](_page_6_Picture_8.jpeg)

![](_page_7_Picture_0.jpeg)

# Shaking Peltier

#### This ALP provides heating or cooling of labware for a software-controlled set point between 4°C and 70°C.

- Shaking speed range from 100 to 1400 rpm

- Space saving

![](_page_7_Picture_7.jpeg)

• Equipped with an automatic startup routine to avoid spillage of samples

• 96 and 384 well plate adaptors available for efficient heat transfer

![](_page_7_Picture_11.jpeg)

![](_page_8_Picture_0.jpeg)

# **Thermo Fisher Automated Thermal Cycler** (ATC)

#### **Optional integration on Biomek workstations to minimize** hands-on time by carrying out PCR on deck.

- Saves space on deck
- Easy-to-install software and stand-alone operation allows assay optimization before integration
- contact and minimizing evaporation

![](_page_8_Picture_6.jpeg)

Heated cover slides forward to cover the plate nest, enabling thermal

![](_page_8_Picture_9.jpeg)

![](_page_9_Picture_0.jpeg)

# **Multichannel Wash Station**

#### This ALP provides a constant flow of liquid to wash the interior and exterior of pipetting tips, conserving tip usage.

- Available in 96 and 384 formats
- Enable user to define the number of wash cycles and volumes
- Can be configured for different liquids or for specific pipettors

![](_page_9_Picture_10.jpeg)

![](_page_9_Picture_11.jpeg)

![](_page_10_Picture_0.jpeg)

# Span-8 Active Wash Station

### This ALP washes fixed tips on the probes of a Span-8 Pod.

- ALP from a source reservoir to a waste reservoir

![](_page_10_Picture_5.jpeg)

• Provides a flow of wash fluid from a source reservoir for tip washing • A peristaltic pump circulates fluid through the 8-Channel Active Wash

![](_page_10_Picture_7.jpeg)

![](_page_11_Picture_0.jpeg)

# Labware Feeder

An under-deck storage device used to stack away capacity to allow more plates to be processed in an automated run.

- Comes in two sizes:

  - High-capacity labware feeder holds ~80 lidded microplates
- Used with a variety of plate and tip types
- Can be used to store labware after use

# plates or tips to be delivered to the work surface for access by a Biomek gripper or a robotic arm. This increases walk-

- Standard-capacity labware feeder holds ~50 lidded microplates

![](_page_11_Picture_12.jpeg)

![](_page_11_Picture_13.jpeg)

![](_page_12_Picture_0.jpeg)

### **Demonstrated Method** Interface

method execution.

![](_page_12_Picture_3.jpeg)

**1. Biomek Method** Launcher (BML)

![](_page_12_Picture_5.jpeg)

BIOMEK METHOD LAUNCHER

![](_page_12_Picture_8.jpeg)

Illumina Cellular Genomics

![](_page_12_Picture_10.jpeg)

![](_page_12_Picture_11.jpeg)

![](_page_12_Picture_12.jpeg)

![](_page_12_Picture_13.jpeg)

#### Provides ease of use and flexibility in three simple steps for

**2. Method Options Selector (MOS)** 

![](_page_12_Picture_16.jpeg)

**3. Guided Labware** Setup (GLS)

![](_page_12_Picture_18.jpeg)

![](_page_13_Picture_0.jpeg)

# **Biomek Method Launcher** (BML)

#### A secure interface for selecting methods without affecting method integrity.

- Conduct system maintenance
- Enables remote monitoring

![](_page_13_Picture_5.jpeg)

BIOMEK METHOD LAUNCHER

#### SELECT A METHOD TO RUN

Illumina Cellular Genomics

![](_page_13_Picture_9.jpeg)

![](_page_13_Picture_10.jpeg)

![](_page_13_Picture_11.jpeg)

#### C A G osirisvenus:38837/biomek/#manualContro MANUAL CONTROL Instrument Control Home Instrument Manual Contro Multichannel Pod Control

![](_page_13_Picture_14.jpeg)

![](_page_13_Picture_15.jpeg)

![](_page_14_Picture_0.jpeg)

# **Method Options Selector** (MOS)

#### Enables selection of run-time options to maximize daily scheduling and method execution flexibility.

Optimized for Biomek iSeries	Automated by Beckman Coulter, Inc
Method Options	
Enter Number of Samples: 96 1-96 samples	
Use On-Deck Thermocycler? No 🔻	
Perform End Repair and Size Selection Procedure? 🗷	
Size Option: 350bp inserts 🔻	
Perform Atailing, Adaptor Ligation, and Post Ligation Cleanup Procee	dure? 🗹
Pause to Place Adaptor Labware on Deck?	
Adaptor Transfer Option: Illumina Index Tubes 🔻	
Adaptor Transfer Option: Automatic Adaptor Transfer 🔻	
Perform PCR Setup and Post PCR Cleanup? 🗹	
Start run	Abort

#### Beckman Coulter Optimized for Biomek iSeries Method Options Enter Number of Samples: 96 1-96 samples Use On-Deck Thermocycler? No 🔻 Perform End Repair and Size Selection Procedure? Size Option: 350bp inserts 🔻 Perform Atailing, Adaptor Ligation, and Post Ligation Cleanup Procedure? 🖉 Pause to Place Adaptor Labware on Deck? Adaptor Transfer Option: Illumina Index Tubes 🔻 Adaptor Transfer Option: Automatic Adaptor Transfer 🔻 Perform PCR Setup and Post PCR Cleanup? 🗹 Start run

- Modular design with vendor approved stop points allows user to run entire method or specific sections
- 2. Vary sample number per run
- 3. Choose on- or off-deck thermal cycling
- 4. Adapter transfer options
  - Start on-deck or pause to add
  - From tube or plates
  - Custom assignments from a file

![](_page_14_Picture_12.jpeg)

![](_page_14_Picture_13.jpeg)

![](_page_15_Picture_0.jpeg)

# **Guided Labware Setup** (GLS)

#### Generates method setup instructions, including reagent calculations, based on input from the Method Options Selector.

- Simplifies setup process reducing opportunity for errors
- placement
- Automatically calculates required reagent volumes

![](_page_15_Figure_6.jpeg)

Provides the user specific text and graphical setup instructions for labware

Labware groups

1. Base Labyard

CSP. - (A0,1127)

**Gent Schop End Repair** 

S. Atailing and Adaptor Ligation

IndexLabware 📕 (KUJI MRJedeaTalaes Deck Selver Abilians and Adaptor Lipplica

DH kowwie

DACK!

DeckSetup: Reagents

ing i deck setu

abware groups

2. End Repair

-

Receil al reare

CSP

\_\_\_\_\_ (A8 1127)

Deck Setup: End Repair

aboate

Mailing and Adaptor Ligation

Indext.abware (BCI\_LMN\_IndexTubes)

Deck Setup: Mailing and Adaptor Ligatio

2. End Repair

A PERLaboration

**G. Recgento** 

Lim

📣 Prepare labware 🚽 🛞 Place labware

2950 of all Each pair Mis 2

1250 citer/ insiling Mil

2 th steel legale as Mar.) 255 el of 155

Schup nations, In Make Feel Repair Mis-

In Make Claim g Nee

To Make Ugedon Mike

To Mate Step Mex. \$12 all of See Solution

![](_page_15_Picture_10.jpeg)

![](_page_15_Picture_11.jpeg)

![](_page_15_Picture_12.jpeg)

# **WORKFLOW** Solutions

#### Review our NGS Library Prep Solutions by WORKFLOW.

![](_page_16_Figure_2.jpeg)

![](_page_16_Picture_3.jpeg)

Whole Genome Sequencing

**Transcriptome Sequencing** 

**Target / Exome Capture** 

![](_page_16_Picture_8.jpeg)

# Whole Genome Sequencing

normalization and pooling options.

![](_page_17_Figure_2.jpeg)

- Modularity, ease of use and flexibility
- Ability to customize adaptor assignments in Biomek Software
- Information management
- Faster processing with multichannel selective tip pipetting
- <u>Advanced process control (e.g., temperature control, shaking)</u>

- <u>A portfolio of demonstrated methods available</u>

![](_page_17_Picture_12.jpeg)

#### Automation of entire workflows, from extraction to sequence-ready libraries, on-deck

Optional advanced on-deck thermocycling to increase walk-away time

<u>Reduce particle contamination via optional enclosures and HEPA filters</u> <u>Demonstrated Method Interface provides ease of use and flexibility</u>

![](_page_17_Picture_19.jpeg)

![](_page_17_Picture_20.jpeg)

### Modularity, Ease of Use and Flexibility

vendor recommendations, providing flexibility in scheduling.

![](_page_18_Figure_2.jpeg)

![](_page_18_Picture_4.jpeg)

![](_page_18_Picture_5.jpeg)

# Options of complete walk-away or logical Start and Stop points assigned based on

**Beckman Coulter** New England Biolabs<sup>®</sup>NEBNext DNA Ultra II Library Preparation Optimized for Biomek iSeries Automated by Beckman Coulter, Inc Method Options Enter Number of Samples: 96 1-96 samples Use On-Deck Thermocycler? No 🔻 Perform End Repair? Perform Adaptor Ligation? Select Adaptor Dilution Option: All Wells Use Same Adaptor Dilution Enabled Perform Post Ligation SizeSelection/Cleanup? Select Size Selection Option: All Samples 270bp final library size • **Modularity** Perform PCR Setup and Post PCR Cleanup? 🗹 Pause to Place Index Labware on Deck? Index Transfer Option: Automatic Index Transfer Index Labware Option: NEBNext Single Index Plate (with Universal Primer) . Abort Start run 

![](_page_18_Figure_8.jpeg)

### Ability to customize adaptor assignments in **Biomek Software**

- File-driven custom adaptor assignment options
- Dataset-driven primer ID capability logs which primer has been assigned to which sample

	0						2	
	1	2	3	4	5	6		
А	1	5	9	13	18	22		
В	2	6	10	14	19	23		
С	3	7	11	15	20	25		
D	4	8	12	16	21	27		
PCR Plate	27	6	0		17	22	7	
	1	2	3	4	5	6	7	8
А	1	9	18	1	9	18	1	9
В	2	10	19	2	10	19	2	10
С	3	11	20	3	11	20	3	11
D	4	12	21	4	12	21	4	12
E	5	13	22	5	13	22	5	13
F	6	14	23	6	14	23	6	14
G	7	15	25	7	15	25	7	15
Н	8	16	27	8	16	27	8	16

DNA Indices (Single Index Primer Kits)

![](_page_19_Picture_4.jpeg)

	А	В	С	D	E	F	G	Н	Ι	J	К
1	Sample	SampleW	AdtDilFactor	SizeOption	IndexWel	SelectPlate1ID	SelectPlate2ID	AdaptorDilPlateID	IndexLabwareID	SingleIndexVol	PCRPlateID
2	Sample1	A1	1	270bp	A5	SizeSelect1	SizeSelect2	AdaptorDilPlate	IndexLabware	10	PCR
3	Sample2	B1	10	320bp	B5	SizeSelect1	SizeSelect2	AdaptorDilPlate	IndexLabware	10	PCR
4	Sample3	C1	15	370bp	C5	SizeSelect1	SizeSelect2	AdaptorDilPlate	IndexLabware	10	PCR
5	Sample4	D1	20	480bp	D5	SizeSelect1	SizeSelect2	AdaptorDilPlate	IndexLabware	10	PCR
6	Sample5	E1	25	600bp	E5	SizeSelect1	SizeSelect2	AdaptorDilPlate	IndexLabware	10	PCR
7	Sample6	F1	30	750bp	F5	SizeSelect1	SizeSelect2	AdaptorDilPlate	IndexLabware	10	PCR
8	Sample7	G1	40	Cleanup	G5	SizeSelect1	SizeSelect2	AdaptorDilPlate	IndexLabware	10	PCR
9	Sample8	H1	50	270bp	H5	SizeSelect1	SizeSelect2	AdaptorDilPlate	IndexLabware	10	PCR
10	Sample9	A2	1	320bp	A6	SizeSelect1	SizeSelect2	AdaptorDilPlate	IndexLabware	10	PCR
11	Sample10	B2	10	370bp	B6	SizeSelect1	SizeSelect2	AdaptorDilPlate	IndexLabware	10	PCR
12	Sample11	C2	15	480bp	C6	SizeSelect1	SizeSelect2	AdaptorDilPlate	IndexLabware	10	PCR
13	Sample12	D2	20	600bp	D6	SizeSelect1	SizeSelect2	AdaptorDilPlate	IndexLabware	10	PCR
14	Sample13	E2	25	750bp	E6	SizeSelect1	SizeSelect2	AdaptorDilPlate	IndexLabware	10	PCR
15	Sample14	F2	30	Cleanup	F6	SizeSelect1	SizeSelect2	AdaptorDilPlate	IndexLabware	10	PCR
16	Sample15	G2	40	270bp	G6	SizeSelect1	SizeSelect2	AdaptorDilPlate	IndexLabware	10	PCR
17	Sample16	H2	50	320bp	H6	SizeSelect1	SizeSelect2	AdaptorDilPlate	IndexLabware	10	PCR
18	Sample17	A3	1	370bp	A7	SizeSelect1	SizeSelect2	AdaptorDilPlate	IndexLabware	10	PCR
19	Sample18	B3	10	480bp	B7	SizeSelect1	SizeSelect2	AdaptorDilPlate	IndexLabware	10	PCR
20	Sample19	C3	15	600bp	C7	SizeSelect1	SizeSelect2	AdaptorDilPlate	IndexLabware	10	PCR
21	Sample20	D3	20	750bp	D7	SizeSelect1	SizeSelect2	AdaptorDilPlate	IndexLabware	10	PCR
22	Sample21	E3	25	Cleanup	E7	SizeSelect1	SizeSelect2	AdaptorDilPlate	IndexLabware	10	PCR
23	Sample22	F3	30	270bp	F7	SizeSelect1	SizeSelect2	AdaptorDilPlate	IndexLabware	10	PCR
24	Sample23	G3	40	320bp	G7	SizeSelect1	SizeSelect2	AdaptorDilPlate	IndexLabware	10	PCR
25	Sample24	H3	50	370bp	H7	SizeSelect1	SizeSelect2	AdaptorDilPlate	IndexLabware	10	PCR

![](_page_19_Figure_7.jpeg)

9	10	11	12
18	1	9	18
19	2	10	19
20	3	11	20
21	4	12	21
22	5	13	22
23	6	14	23
25	7	15	25
27	8	16	27

![](_page_19_Picture_9.jpeg)

![](_page_20_Picture_0.jpeg)

# Data Acquisition **Report Tool (DART)**

# across multiple methods on multiple instruments.

- Create reports in Excel or LIMS
- LIMS compatible

![](_page_20_Figure_5.jpeg)

![](_page_20_Figure_6.jpeg)

Information management software to track sample and plate data

![](_page_20_Picture_8.jpeg)

![](_page_20_Figure_9.jpeg)

### **Faster Processing**

#### The Biomek i-Series multichannel heads support selective tip pipetting for more flexible transfer options.

• Full plates, individual tip(s), column(s), row(s), custom patterns

![](_page_21_Picture_3.jpeg)

![](_page_21_Picture_4.jpeg)

**Select Tip by Column** 

![](_page_21_Picture_6.jpeg)

**Select Tip by Row** 

![](_page_21_Picture_9.jpeg)

Select Tip, 6 Columns

![](_page_21_Picture_11.jpeg)

### **Advanced Process Control**

#### Advanced process control (e.g., temperature control, shaking).

![](_page_22_Picture_2.jpeg)

**Orbital Shaker** 

![](_page_22_Picture_5.jpeg)

![](_page_22_Picture_6.jpeg)

**Static Peltier** 

![](_page_22_Picture_8.jpeg)

**Shaking Peltier** 

![](_page_22_Picture_10.jpeg)

![](_page_23_Picture_0.jpeg)

# Enclosures

#### **Biomek i-Series are offered with** or without enclosure.

Enclosure includes:

- Vertical lift door that does not obstruct aisle-ways
- Top panel "dust cover" to protect samples from some particulates introduced by laboratory HVAC systems
- Standard side and back acrylic panels for safety
- Designed for HEPA filter integration for positive, clean air flow over the work surface to protect samples from some viable and non-viable particulates

![](_page_23_Picture_8.jpeg)

![](_page_23_Picture_11.jpeg)

![](_page_23_Picture_12.jpeg)

![](_page_23_Picture_14.jpeg)

# **Demonstrated Methods**

Our growing portfolio of Biomek-automated DNA sequencing sample prep methods are demonstrated to generate quality data using real-world samples, and includes a growing number of Illumina®-qualified NGS methods.

DEMONSTRATED METH	HOD

Illumina Nextera\* DNA Flex Library Prep Kit

Illumina Nextera\* XT

DNA

SEQUENCING

Illumina TruSeq\* DNA PCR-Free

Illumina TruSeq\* Nano DNA

Illumina TruSeq\* Custom Amplicon Low Input Kit

KAPA Hyper Prep Library Prep Kit for Illumina NGS

KAPA HyperPlus Library Prep Kit for Illumina NGS

NEB NEBNext<sup>®</sup> Ultra DNA for Illumina NGS (ChIP-seq and HLA)

NEB NEBNext<sup>®</sup> Ultra II DNA Kit for Illumina NGS

Rubicon Genomics ThruPLEX\* Plasma-seq Kit for Illumina NGS

Swift Biosciences Accel - NGS\* 2S Plus DNA Library Kit for Illum

![](_page_24_Picture_14.jpeg)

	BIOMEK i7 HYBRID	BIOMEK 17/15 MULTICHANNEL	BIOMEK IS SPAN-8	BIOMEK FX <sup>P</sup> HYBRID	BIOMEK FXP/NXP MULTICHANNEL	BIOMEK NX <sup>P</sup> SPAN-8	BIOMEK 4000
	•						
				•			
	-					-	
				•			
ina NGS				-			

![](_page_24_Picture_16.jpeg)

# **Transcriptome Sequencing**

normalization and pooling options.

![](_page_25_Figure_2.jpeg)

- Modularity, ease of use and flexibility  $\bullet$
- Ability to customize adaptor assignments in Biomek Software
- Information management
- Faster processing with multichannel selective tip pipetting
- <u>Advanced process control (e.g., temperature control, shaking)</u>
- <u>Reduce particle contamination via optional enclosures and HEPA filters</u>
- <u>Demonstrated Method Interface provides ease of use and flexibility</u>
- <u>A portfolio of demonstrated methods available</u>

![](_page_25_Picture_12.jpeg)

#### Automation of entire workflows, from extraction to sequence-ready libraries, on-deck

Optional advanced on-deck thermocycling to increase walk-away time

![](_page_25_Picture_18.jpeg)

# Modularity, Ease of Use and Flexibility

vendor recommendations, providing flexibility in scheduling.

![](_page_26_Figure_2.jpeg)

![](_page_26_Picture_3.jpeg)

![](_page_26_Picture_4.jpeg)

# Options of complete walk-away or logical Start and Stop points assigned based on

eckman Coulter	
Illumina®TruSeq Stranded mRN/	A Library Preparation
ptimized for Biomek iSeries	Automated by Beckman Coulter, Inc
Method Options	
Enter Number of Samples: 96 1-96 samples	
Use On-Deck Thermocycler? No 🔹	
Perform mRNA Purification? 🗹	
Perform cDNA Synthesis? 🗹	Enablad
Perform Atailing, Adaptor Ligation, and Post Ligation Cleanup Procedure? 🕑	
Pause to Place Adaptor Labware on Deck? 🗹	Modularity
Adaptor Transfer Option: Illumina RAP Plate	
Adaptor Transfer Option: Automatic Adaptor Transfer 🔻	
Perform PCR Setup and Post PCR Cleanup? 🗹	
Start run	Abort

![](_page_26_Figure_8.jpeg)

# **Demonstrated Methods**

Our growing portfolio of Biomek-automated RNA sequencing sample prep methods are demonstrated to generate quality data using real-world samples, and includes a growing number of Illumina®-qualified NGS methods.

# DEMONSTRATED METHOD Illumina TruSeq\* RNA v2 Illumina TruSeq\* RNA Access Illumina TruSeq\* Stranded mRNA Illumina TruSeq\* Stranded mRNA Illumina TruSeq\* Stranded Total RNA NEB NEBNext\* Small RNA Kit for Illumina NGS NEB NEBNext\* Ultra Directional RNA Library Kit for Illumina

![](_page_27_Picture_3.jpeg)

	BIOMEK I7 HYBRID	BIOMEK 17/15 MULTICHANNEL	BIOMEK IS SPAN-8	BIOMEK FX <sup>P</sup> HYBRID	BIOMEK FXP/NXP MULTICHANNEL	BIOMEK NX <sup>P</sup> SPAN-8	BIOMEK 4000	
				•				
				•				
nina NGS								

![](_page_27_Picture_5.jpeg)

# **Target Capture Protocols**

normalization and pooling options.

![](_page_28_Figure_2.jpeg)

- Modularity, ease of use and flexibility  $\bullet$
- Ability to customize adaptor assignments in Biomek Software
- Information management
- Faster processing with multichannel selective tip pipetting
- <u>Advanced process control (e.g., temperature control, shaking)</u>

- <u>A portfolio of demonstrated methods available</u>

![](_page_28_Picture_12.jpeg)

#### Automation of entire workflows, from extraction to sequence-ready libraries, on-deck

Optional advanced on-deck thermocycling to increase walk-away time

<u>Reduce particle contamination via optional enclosures and HEPA filters</u> <u>Demonstrated Method Interface provides ease of use and flexibility</u>

![](_page_28_Picture_18.jpeg)

### Modularity, Ease of Use and Flexibility

flexibility in scheduling.

![](_page_29_Figure_2.jpeg)

![](_page_29_Picture_3.jpeg)

![](_page_29_Picture_4.jpeg)

#### Logical Start and Stop points assigned based on vendor recommendations, providing

Beckman Coulter	
Illumina®TruSeq RNA Ac	cess Library Preparation
Optimized for Biomek iSeries	Automated by Beckman Coulter, In
Method Options	
Select a method to run Hybridization Capture 🔻	
Use On-Deck Thermocycler? No 🔻	
Enter Number of 4-plex pools: 24 1-24 4-plex pools	
Perform Library Pooling Procedure? 🗆	
Perform First Hybridization/Capture Procedure?	Enabled
Perform Second Hybridization/Capture Procedure?	Modularity
Perform Enrichment PCR Setup Procedure?	
Perform Enrichment PCR Cleanup Procedure?	
Start run	Abort
Otart Turr	
	BECKMA

Illumina<sup>®</sup> TruSeq RNA Access library preparation kit workflow on Biomek i7

![](_page_29_Picture_8.jpeg)

![](_page_29_Picture_9.jpeg)

![](_page_29_Picture_10.jpeg)

# **Demonstrated Methods**

Our growing portfolio of Biomek-automated target/exome capture sample prep methods are demonstrated to generate quality data using real-world samples, and includes a growing number of Illumina<sup>®</sup>-qualified NGS methods.

	DEMONSTRATED METHOD	BIOMEK i7 HYBRID	BIOMEK 17/15 MULTICHANNEL	BIOMEK I5 SPAN-8	BIOMEK FX <sup>P</sup> HYBRID	BIOMEK FXP/NXP MULTICHANNEL	BIOMEK NX <sup>P</sup> SPAN-8	BIOMEK 4000
	Agilent HaloPlex <sup>™</sup> Target Enrichment - Ion Torrent						-	•
	Agilent SureSelect XT*							
	Epicentre ScriptSeq* Complete Gold Low Input				•			
TARGET/EXOME CAPTURE	Illumina Nextera* Rapid Capture				•			•
	Illumina TruSeq* Exome							
	Illumina TruSeq* Rapid Exome							
	Roche Nimblegen SeqCap EZ* for Illumina NGS							

![](_page_30_Picture_3.jpeg)

![](_page_30_Picture_4.jpeg)

![](_page_31_Picture_0.jpeg)

# **Disclosures & Copyright Statements**

Biomek Automated Workstations are not intended or validated for use in the diagnosis of disease or other conditions. Beckman Coulter Life Sciences genomic reagent kits are for research use only.

©2018 Beckman Coulter, Inc. All rights reserved. Beckman Coulter, the stylized logo, and the Beckman Coulter product and service marks mentioned herein are the trademarks or registered trademarks of Beckman Coulter, Inc. in the United States and other countries.

All other trademarks are the property of the their respective owners.

![](_page_31_Picture_5.jpeg)

![](_page_31_Figure_6.jpeg)

![](_page_31_Picture_7.jpeg)