

Technology Transition Workshop

Ibis T5000[™] Hardware and Maintenance Overview

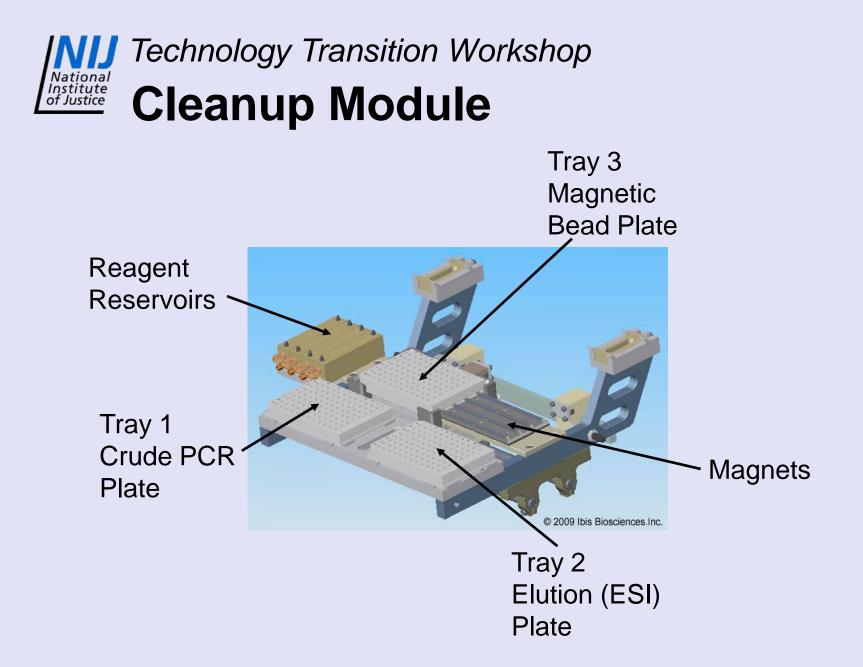
Kristin S. Lowery, Ph.D. Ibis Biosciences, Inc.

NI Technology Transition Workshop National Institute Justice Ibis T5000[™] Components

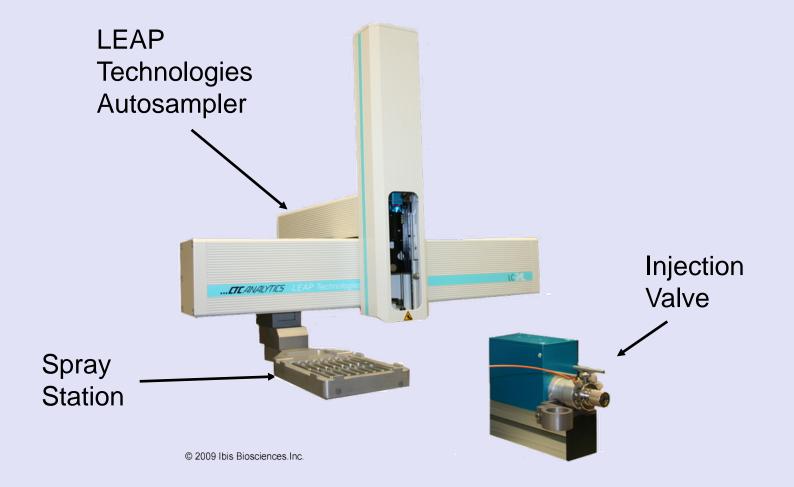


- Bruker Daltonics micrOTOF[™]
- Automated heat sealer
- Cleanup model
- Thermo Electron robotic arm
- LEAP Technologies autosampler

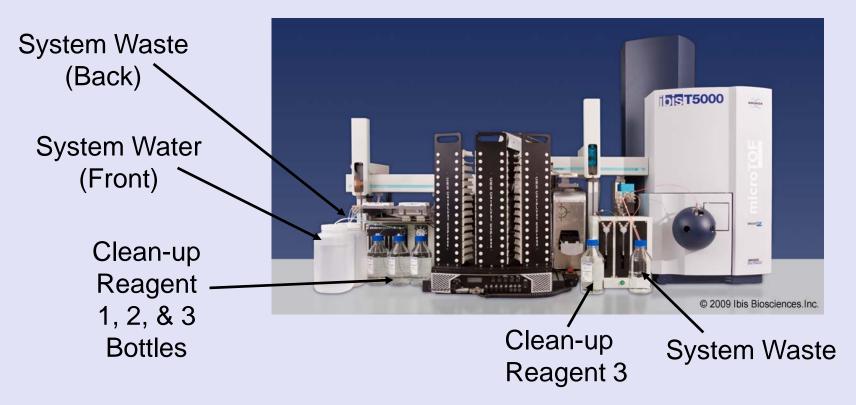
- Ibis T5000[™] software
- Ibis T5000[™] processor
- Processing computer
- Data acquisition computer
- JUN-AIR compressor (optional)



NI Technology Transition Workshop National Institute of Justice Ibis T5000[™] Autosampler



Technology Transition Workshop Ibis T5000[™] Reagents



- Reagent Consumption ~ 50 ml per plate
- System Liquid ~ 150 ml per plate
- System Waste ~ 300 ml per plate (25-30% MeOH)

NIJ Technology Transition Workshop National Maintenance of Fluidic Components

- On a daily basis:
 - Ensure autosampler syringes are not bent
 - Check Cavro[®] syringes for leaks
- On a monthly basis:
 - Perform flush of system fluidics
 - Replace reagents and water
- As needed:

- Clean syringes and surfaces with 70% isopropanol



• On a daily basis, ensure plate sealer roll has sufficient seals for run



- Yearly
 - PM visit including calibration of TOF
 - Run SRM 2392-I with positive controls
 - Demonstrate that instrument is calibrated in a NIST traceable way

Technology Transition Workshop Ibis T5000[™] Software Errors

• Watch the splash screen for errors

CRS Arm	ERROR	
Database	Warning! Unable to establish database connection	
Plate Validation	Ready	
Plate Validation Test	Initializing Creating method references	
Email	Ready	
LeapTof Controller	Initializing Loading Bruker acquisition software	
Cleanup CavrosB	ERROR	
Cleanup Leap	ERROR	
MicroScanner	ERROR	
Mtdna Processor	Initializing Retrieving proces	sor properties
Mtdna Test Processor	Initializing Retrieving processor properties	
Sealer	ERROR	

IMAGE COURTESY OF KRISTIN S. LOWERY, PH.D.



• Watch the splash screen for errors

1000		
RS Arm	ERROR	
)atabase	Warning! Unable to establis	h database connection
DeckB Error		
	Unable to initialize MAG_LE LEAPTOF, MICROSCAN, MTI MAG_CAVROSB, SEALER do	DNA_TEST1,
	Exit	
ntona Processor Atdna Test Processor	Initializing Retrieving proc Initializing Retrieving proc	
Sealer	ERROR	cosor propentes
	Please wait. Initializing dev	ices
	Copyright (c) 2003-2006 Ibis	Biosciences

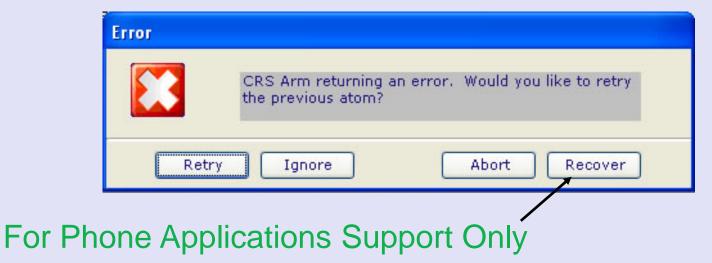
IMAGE COURTESY OF KRISTIN S. LOWERY, PH.D.



- Check instrument power switches
- Check serial cable connections
- Check ethernet cable connections
- Contact Ibis service group

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- Retry will retry the arm command
 - Use if a plate was missing, e.g if you indicated a run of 5 plates but only loaded 3
- Ignore will skip the command
 - Use if a plate was dropped



National National Institute of Justice **Other Common Errors**

Error	Recovery Method
Barcode Read Failure	Manually enter the barcode
PCR plate status is "Kit"	Register the plates
Previously Registered MagBead/Elution plates	Get new plates
Z-Axis Crash on Leaps	Correct the problem if possible and hit Retry or Abort
Sealer Foil Error	Reload the foil or replace roll
Air in the tubing or syringes	Check the system liquid level and make sure tubing is in the liquid
Pumpbox syringe(s) leaking	Replace. Contact Ibis for a replacement syringe
Reservoirs overflowing	Check the system waste



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