LEAP Success Stories

# 26 Glen Cook	Summary
Customer: Pfizer (Ann Arbor and Kalamazoo)	Pfizer in Ann Arbor and Kalamazoo had historically only purchased HTS PALs from LEAP. They had also historically been buying pumps from Shimadzu and mass specs from ABI. When Shimadzu started undercutting LEAP's price on the HTS PAL and an order was lost at the insistence of purchasing, Werner and I met with the end users and purchasing. The end users told us that Pfizer specifies the PAL but not the vendor, and if LEAP gave them some unique features, then they could spec the PALs from LEAP. This helped accelerate the SMART PAL program. In the interim, we convinced the end users to switch from the HTS PAL to the HTC PAL since Shimadzu does not offer the HTC. Purchasing told the end users that they could obtain an HTS PAL from Shimadzu at the same price LEAP offered the HTC PAL. The end users insisted to purchasing they needed the smaller HTC footprint and thus far no further PAL orders have been lost to Shimadzu in Ann Arbor or Kalamazoo.
Product: HTC PAL	
Also Involved: Werner Martin Lenny Kubiak	

# 27 Scott Johnson	Summary
Press Release	LEAP distributed a press release to the scientific community regarding our development partnership with Protein Discovery, Inc. This partnership is to develop and commercialize a MALDI matrix sprayer for tissue imaging mass spectrometry. The intellectual property, software and hardware were part of LEAP's acquisition of Lab Connections in 1Q06. This is another example of LEAP's long term dedication to the proteomics and mass spec sample preparation market. Specifically, tissue imaging mass spectrometry allows for direct spectrometric analysis of tissues. Data from these analyses may form prognostic or diagnostic markers of disease, or reveal potential therapeutic and toxic effects of drug compounds prior to clinical testing. The technology can also help pharmaceutical researchers determine the metabolic processing of new drug compounds and whether the compounds are successfully reaching targeted tissues. Chuck Witkowski, president and CEO of Protein Discovery, said, "We believe that the MALDI matrix sprayer under development by LEAP Technologies represents a significant step forward for tissue imaging mass spectrometry. In contrast to existing MALDI matrix deposition techniques that deposit a series of small droplets, the sprayer has the potential to deliver a marked increase in resultant pixel resolution, throughput, and reproducibility. This is the only automated system available for MALDI matrix spray coating and we are pleased to assist in its development and optimization.
Products: MALDI Matrix Sprayer 	

# 28 Lenny Kubiak	Summary
Customers: GSK (KOP), GSK (Collegeville), National Medical Services, Quest Pharma, Wyeth Pharma and Merck	During the last week of March, Scott and I traveled to E.PA to meet as many of Rich's ex-customers as possible. At both GSKs we found that the ADME/DMPK groups couldn't wait to try out the new LEAP Shell software. They were also happy to learn about the Clean LC Cycles and the special price on the 3x Ti pumps. Scott established himself as an important resource when he quickly repaired a VSW pump at GSK, an injection head at Wyeth, a CombiPAL at NMS, plus trouble-shooting a carryover issue at Quest without having to give away any free parts. The outcome of those visits and calls was - 5 PALs being ordered by Merck. - NMS's commitment to replace their remaining 5 Tekmars with Combi PALs. - Ray Bakhtiar at Wyeth promising to buy more PALs when he moves over to Merck. - Quest's continued commitment to buy more PALs this year to add to the 36 they've purchased over the past two years. In addition to the above, everyone in E.PA, MD and DE had been sent a letter introducing Scott (and Jim Caverly) the week before our trip, thus ensuring "a smooth transition and no disruption in service" in this very important territory.
Products: 3x Ti and PALs	
Also Involved: Scott Donenfeld	

#29 Susie Martin	Summary
New Booth Premier -- at Pittcon	LEAP's new booth premiered at Pittcon in Orlando. The new booth featured new logos (same as used on web), a fresh look and color. We now have "pedestals" with storage and changeable graphic panels for the instruments and leads. The slippery tablecloths have become pajamas. For large booths, there is a tower with lights. We have four jiffy screens, which can be used for large or small shows, are easily shipped and set up. Thanks to all for making this a success.
Also Involved: Werner, Josh, Erik M, Eric W	
	

#30 Glen Cook	Summary
Customer: Allylix	Allylix is a startup biotech company renting space at the University of Kentucky. They wanted to be able to do liquid injections immediately with the possibility of doing multi-step derivitization reaction in the future. Funding was scarce so rental/lease was requested. Gerstel and Varian were in the competitive mix. Lenny let me know a demo Combi PAL was available and we converted it into a DI PAL with a demo price offered to Allylix. I brought in Quantum to provide the rental price with option to buy. Allylix decided to buy from Leap/Quantum even though we were several thousand dollars higher in price because we offered the DI PAL which is upgradeable in the future to the Twin GC PAL and because LEAP demonstrated a better knowledge of potential upgrade paths. Gerstel and Varian apparently only offered the lower priced GC PAL and did not explain potential upgrade limitations.
Products: demo DI PAL	
Also Involved: Quantum Analytics Lenny Kubiak	

# 31 Wes Moyers	Summary
Customer: Vertex	*Note: This special project was documented in a follow-up interview by Gray Hall. This interview process itself was a previous success story, and the interview is included below in its entirety.*
Product: HTS PAL for custom multi-valve application	

Project Name: Vertex multi-valve application for two separate LC/MSD systems.	
Company Vertex	**Project Code** H1100
Contact: Ali Shokri/Brian Grot	**Project Manager** Gray Hall
Ph: 858-404-6645	**Date Started** Dec 6th 2005
Sales Rep: Wes Moyers	**PO #** 512604
PAL SN 112937 **Firmware** 2.4.0 **Cycle Composer Ver** 1.5.3 **Syringe** 5ml	

Interview Summary

Ali Shokri is extremely satisfied with his LEAP project. Specifically, his throughput has increased from 130 samples per overnight run to 260 samples per overnight run. He described LEAP's performance during this project as professional and responsive. He had no new ideas for automating manual processes in his lab. But he stressed he may develop new ideas when and if he develops a better understanding of the PAL's capabilities. He seemed highly interested in more extensive training. Ali rated LEAP's performance on this project as 9.5 out of 10. He said he has already recommended LEAP to peers and colleagues. He mentioned the possibility of applying the same process to PALs being used by Vertex's PK group.

General Description

The customer wants to use a HTS PAL with dual injection valves to feed two completely separate HPLC and detector systems. The customer is currently using an Agilent 1100 autosampler to feed one DA/MSD detector system.

This is a formulation laboratory. A study will consist of one DW-MTP of controls and two of high dilution samples. Plate 1 of high-dilution samples will go to HPLC/UV system 1 and Plate 2 will go to HPLC/UV system 2. Control samples from a control plate will be shared between both HPLC/UV systems. A fourth, low dilution plate, may be required under special circumstances. The diluted samples are dissolved in mixtures of water and MeOH/EtOH.

The customer wants to alternate samples and control injections for HPLC/UV 1 and HPLC/UV 2 so that each HPLC/UV is being used with maximum efficiency. The PAL will be controlled by a customer generated sample list in Cruise Control. The sample list will drive the PAL to alternately inject samples to HPLC/UV1 and HPLC/UV2. Separate macros, one for LC-Valve 1 and another for LC-Valve 2 will be used.

HPLC/UV1 and HPLC/UV2 will be controlled by separate instances of Chemstation B.01.03 on separate PCs. Cruise Control will be resident on one of the two PCs and the customer knows the PC must have an available serial port for PAL control.

Control of the system will be performed through contact closure and TTL signals. We will use separate signals to provide ready and start signals for HPLC/UV1 and HPLC/UV2.

This will ensure that an injection is only made to the correct HPLC/UV system after it has signaled that it is ready to acquire an injection.

Currently, methods run on existing HPLC/UV system with Agilent 1100 autosampler. These methods run for 5 minutes, including 3 minutes of needle washing.

Q&A

(1) How would you describe the installation of this LEAPProject? Were the LEAP reps professional and responsive? Overall, were you pleased or disappointed in his/her performance? What, if anything, could have been done better?

"It went very well. Michael Horton was very responsive to our questions and he did an excellent job of training us. We are very satisfied with his work on this project."

(2) What exactly did you expect to gain from the implementation of this project? To what extent did LEAP meet that expectation?

"We expected this project to significantly increase our throughput. And at this point we have seen an increase from 130 samples processed during an overnight run to 260 samples processed during an overnight run. So, or goal was met. We are very happy with that result."

(3) In your professional opinion, what manual processes of yours are the most cumbersome and, consequently, may need to be automated?

"Nothing comes to mind."

(4) How would you describe your experience in dealing with the LEAP Sales rep? Do you think he/she dedicated enough time to clearly specifying the requirements for your process? If applicable, to what degree did the Project Specification document help define the requirements for your process?

"Wes was very helpful and professional as we worked to define the needs of this project. We were extremely satisfied with how he helped us meet our goals."

(5) Since the implementation of this project, have you thought of further modifications/enhancements to your process?

"No. Not at this time. But we would be interested in more extensive training on the PAL. That may lead to us taking our use of the PAL in a different direction once we develop an understanding of all of its capabilities."

(6) Do you have peers in your company or field who use procedures similar to this one?

"Yes. The PK Metabolism Group has several LEAP instruments and they may be interested in increasing their throughput. Additionally, I am sure that there are several HPLC projects in other companies who could have the same process applied in order to improve throughput."

(7) In light of this project, would you recommend LEAP to peers or colleagues? If not, why not?

"Yes….without a doubt.I have already done so as a matter of fact."

(8) Would you allow LEAP to fully document your process in a generic way so we could use it for marketing purposes? Will you be publishing your results in a public journal?

"Not applicable. We will not be publishing our results except for in internal documents."

(9) On a scale of 1 to 10…..how would you rank LEAP's performance throughout this project?

"9.5"

Interview performed by Gray Hall 3-21-06