#11. Gordon Nye	Summary
Customer: NC State (Wolfpack) FT-ICR Mass Spectrometry Facility, David Muddiman, Adam Hawkridge	Initial discussions between LEAP and this customer began over six months ago. We have steadily worked to build up this local collaboration. Several discussions, visits and postponements due to delivery delays on their MS system prior to install lead to this long awaited milestone. A collaborative effor with this new customer is set to begin now with the completed installation of an integrated Chorus 220 NanoLC and HTS nanoPAL including MALDI Spotting option.
Products: Chorus 220 NanoLC, MALDI Spotter, HTS PAL, Cool2 Drawer, LEAP Shell, TM iD	
Also Involved:	We also received word recently that the NC Biotech Center Collaborative Funding Grant
Peter Smith,	has been awarded to this group. This will serve to further enhance the working relationship and resources for our continued success. LEAP will be working closely with this local account to fully integrate and automate the front-end separation system for FT-ICR MS. In the future this effort will likely grow to include LEAP Shell integration of multiple system components, as well as investigation into Tissue MALDI and the TM iD.
Werner Martin	
Scott Johnson	
Lenny Kubiak	

LEAP Success Stories

#12. Peter Smith	Summary
Customer:	This PAL application involves dissolution
Surmodics	testing of slow-release devices. These are for example small, polymer coated springs or
Products:	coils which are implanted inside the body and release their drugs over a period of
HTS PAL workstation with LEAP Shell	many months or even years. When developing new devices, or testing existing ones, Surmodics has to test this carefully controlled release rate in the lab. The testing is time-
Also Involved:	critical, and very tedious to perform manually. There were no existing options to auto-
Eric Wethington	mate this testing.
Gray Hall	Surmodics wanted to remove this serious
Mike Sloan	bottleneck in their development process – the manual testing of hundreds of vials at very carefully measured time intervals over a period of days. We worked out an application
Additional Info:	in the LEAP Shell, which automated this process using the PAL and a customized in-
Future application note	cubation platform. It was installed a few weeks ago.
	Feedback from the customer is that they are delighted with the results and will soon be ready to launch into full automation of this process, hopefully resulting in more PAL sales.

# 13. Scott Harrison	Summary
Customer: Confidential Products:	This project was started by Virgil, with also involved were Jamie and Brian. The desire was to extract plant material and analyze the resulting solution. My role in this was minor and thanks lies mainly with Jamie.
Twin PAL with SPE Drawer Also Involved: Jamie Hunnicutt Brian Peat	The initial system was a GC based system, the process was to take a weighed vial of plant material, add solvent, agitate, filter then analyze. The filtration was the interesting piece of this prep, the solvent possible containing small pieces of plant material is injected onto a 96 well filter plate with a head-space syringe on a Combi PAL, the needle guide is locked and gas is turned on. This forces the solvent through the plate into the receiving vials. The second head then makes the injection. The technique has been extended to LC-MS and Brian is currently installing 3 more systems. This system allowed the client to achieve the throughput they required also to achieve the level of data accuracy they needed

LEAP Success Stories

# 14. Erik Martin	Summary
Customer: ADM Also Involved: Bill Lindley	A customer was trying to download the manual for the Combi PAL from the website. He experienced a file error, so he used the contact form to let us know he was having problems. Bill and I checked the file and download link and couldn't find anything wrong, so I emailed the file to the customer.
	I'm not sure what was causing the problem on his end, but the emailed file worked, and he quickly emailed back: "Thank you so much refreshing to have a company with humans on the other side to help their customers." The whole event took a few minutes.

# 15. Eric Wethington	Summary
Customer: Distek.	Distek can now sell OPT-DISS WE/MECs. Since Distek became our US Distributor it has been very difficult to determine who should sell OPT-DISS WE/MECs. Within the
Products: OPT-DISS WE/MEC's	last calendar year Distek sold close to 30 OPT-DISS units. The warranties for those units are expiring. With that said, there are lots of opportunities for Distek to sell Warranty Extensions to the expanding customer base. Since we are the manufacturer we are liable for any warranty extensions. Distek and LEAP have agreed to sell OPT-DISS WE/MECs to help cover any warranty issue for our customers. Distek will be solely responsible for all labor associated with the PMs and LEAP will be responsible for failed parts during the extended coverage.

# 16. Author Jim Caverly	Summary
Customer: Merck and Co. West Point Pa.	I was asked by the customer to come on site because the PAL was stopping during runs and the autosampler icon in Analyst was tuning red. The PAL was in desperate need
Products: HTS PAL Sciex API 3000 and Analyst software version 1.4	of a PM (which was performed) and the error was being caused by the needle penetration into the valve being set too deep.
	Now for the good stuff, the customer had replaced the PC a few days before I came on site and Analyst would not allow the user to save any methods. A bunch of error messages popped up on the screen the last being "Error writing acquisition method to the file. Invalid CTC PAL method." I explained to the user that there was nothing wrong with the PAL and that the error messages led me to believe that the problem was in Analyst. While doing the PM I thought of a few things
	to look at and in the end it turned out that the PC was set up by their on site IT folks not Sciex. I checked to make sure everything was installed properly and it was not. The service notes for Analyst were not installed, and once I copied them from another system and loaded them onto this PC the system began working fine. The customer was more than pleased that I was able to fix a problem that had nothing to do with our end of the system.

16. Lenny Kubiak

Summary

Customer:

Batelle PNNL (Richland, WA)

Products:

HTS and HTC PAL

Also Involved:

Ian Hilton



Batelle's proteomics group has been buying HTS and HTC PALs without valve drives and valves from LEAP for the past 5 years. They recently inquired about trading in their HTC's for HTS's, in order to mount more of their custom-made valve drives on the crossrail. The valves come from Valco and are rated at 20,000 psi. The PALs are part of a constant pressure, high resolution HPLC/FTMS system where protein samples are injected on 1000mm long x 150 micron i.d. columns. The systems are laptop PC controlled and the pumps are from ISCO.

According to lan, they are only interested in the good qualitative data afforded by separating all the compounds in their whole protein lysates using these long columns. The high, constant pressure is required to speed up the chromatography. Companies like Agilent and Waters are eager to sell Batelle their high pressure systems, since these systems are Constant Flow and not Constant Pressure. This would give Batelle better retention time reproducibility and more quantitative data, but Batelle is not interested in quantitative data, and the reproducibility they are presently experiencing is satisfactory. Batelle prefers the PALs because of their open architecture that allows them to make simple modifications.

# 17. Shantel	Summary
Customer: LEAP and its employees	If I didn't post a note on the front door a few weeks back telling everyone that the server upgrade was complete would anyone have
Products: IT infrastructure (Server Migration)	noticed that there was a change? If the answer was no, then I consider this a great success! Given the difficulty of any migration and the fact that, well, it has to do with computers which we all know may or may not
Also Involved: Gray Hall	puters which we all know may or may not cooperate with you, this migration went without a hitch.
	We needed a new server because we were running out of hard drive space constantly on the old one, it was slow and our backup situation was critically not adequately covered by what we had in place.
	Unlike most "success stories" where there is usually a very noticeable change that occurred to attribute to that success, IT people work in the background trying to keep things running smoothly with very little downtime. If you can change the "brain" of that infrastructure without causing downtime to your users, or even having them notice that something changed – then you have a good success story.
	I planned the migration to take place in three phases over three weekends to reduce downtime to the network users. Gray and I had the most trouble with what was supposed to be the easiest part of the migration – the anti-virus software upgrade, but we were able to get this figured out fairly quickly and resolved.

LEAP Success Stories

#18. Werner Martin	Summary
BCBS and HSA for employees	There are 6 employees that list their \$40 exercise program allowance on their expense report every month. It's not a coincidence that the same have
Products: Healthy people	some of the lowest health costs and there- fore increase their Health Savings Account to a very nice additional "nest egg".
Additional Information and Incentives:	Exercise, exercise, and exercise is mentioned in a wealth of studies as the only thing
http://www.bcbsnc.com/members/index.cfm?lob=hsa1	that can keep us at a good weight and free of headaches, stress, high blood pressure and lower risks all around. I wish all of us a health success story. What else matters if we can't have that discipline? LEAP officially bribes you to exercise — with a \$40/month refund for the membership in a exercise class, yoga, swimming, etc.

# 19. Author Richard Eddy	Summary
Customer: Merck WP	Merck purchased two LC2s with year-end money (Dec05) to replace Varian (Spark Holland Endurance) auto-samplers that suffered from poor 'uptime'. After installation, trial runs showed carry-over with the PAL at ~100% of their LLOQ when using the Analyst LC-Inj cycle that come standard with ANA-LYST 1.4.
Products: LC2 and HTC PAL, CLEAN LC Cycle	
Also Involved:	A Clean LC™ Cycle met their criteria of non-detectable carry-over (which they had always achieved with the Varians). Two more units were soon purchased (1 x LC2, 1 x HTC w/CStk). The HTC was swapped in for a new Shimadzu SIL-HTc because the SIL was producing carry-over at ~200% of their LLOQ for a sticky carboxylic acid compound. The PAL with a Clean_LC™ cycle produced non-detectable carry-over on a Sciex API5000 after running 2uL of a 25,000ng/ml high standard. I expect a PO any day now for 2 more units. LEAP is the low carry-over leader.