



ABRF-PRG2011: "The Interaction Between Users and Suppliers of Proteomics Services/Facilities"

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ABRF Proteomics Research Group

Abstract

A survey of Proteomics Service Laboratories and Proteomics Service Users was created to ascertain three main insights into core facility function: 1) How labs interact with their clients, 2) The capacity of labs to meet the demands of their clients, and 3) The blend of experimental techniques offered to and requested by clients. Survey questions were designed to obtain information from both users of core facilities and the directors and personnel of core facilities. Questions covered topics such as the type and age of instrumentation used, the analysis and presentation of data to clients, sources of funding for facilities, and emerging proteomic trends. Results were compiled en masse and presented without regard to institution.

Results

Over 200 core facility personnel and users participated in the study. Some of the more interesting findings from the study revealed that individualized support and consultation between users and facilities was the most important factor to users of proteomic facilities, whereas user fees were considered the least important. Along similar lines, most users strongly agreed that having a local proteomic facility was very important. There was good complementarity between user needs and services offered. Surprisingly, the most common proteomic service performed by facilities was protein identification from gel bands/spots, rather than more complex proteomic analyses. However, users are interested in expanding their proteomic research to include quantitative and protein modification analyses. With respect to funding, the study found that user fees only provided a small proportion of proteomic facilities operating budgets, resulting in a heavy dependence on alternative funding sources to cover operating costs. And for the future from the core perspective, there is an avid interest in expanding services to include top-down, ion mobility, and MRM studies.

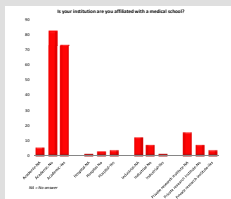
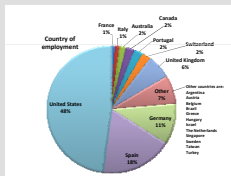
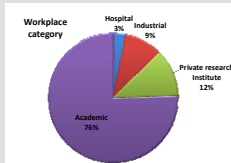
Objectives

- To probe how facilities and clients interact, assess key factors.
- Find trends in financial operations of facilities.
- Find trends in technologies available in facilities, and what users and facilities want.
- Probe how facilities and clients communicate.
- Assess interest in the ABRF and the PRG.

Methods

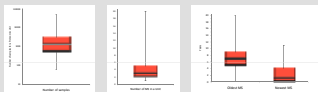
73 Survey Questions were created. The Survey was branched to allow three groups to answer on independent pathways:
•Facility Administrators
•Facility Workers
•Facility Users
242 scientists responded. Results were compiled by SurveyMonkey.

Survey Demographics



Service & Technology

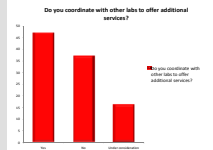
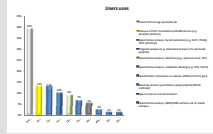
Instrumentation & Number of Samples



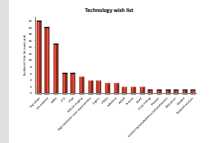
Software



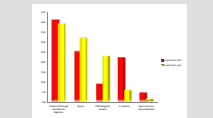
Breakdown of Services Provided



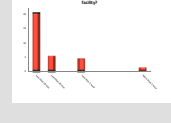
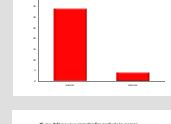
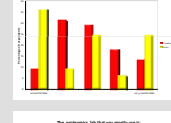
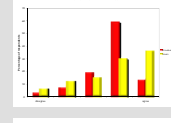
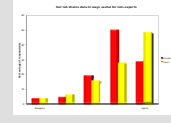
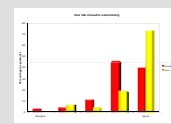
Breakdown of Services Desired



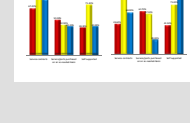
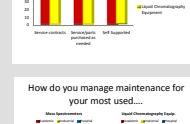
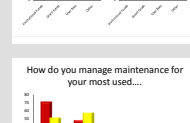
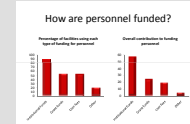
Provider vs. User Comparison



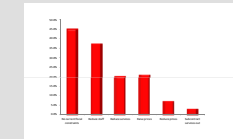
Communications & Proximity



Funding



In Tight Times



Academic vs. Industry Labs

- Industry labs are more likely to have funding come from one source (user fees or institute, not both).
- Industry labs had, on average, twice as many personnel (12 vs 6) as academic labs.
- Industry labs were more likely to lease instruments (14% vs 7%).
- Industry labs were more likely to have service contracts on some instruments (85% vs 63%) but also more likely to report a proportion of instrumentation was self-supported (71% vs 38%).
- Industry labs were more likely to coordinate operations with other cores to control costs (83% vs 23%).

Selected Results

The largest fraction of respondents were academics. The US, Spain, Germany and the UK accounted for about 74% of the responders. Although some labs have rather old instruments (~20 yrs!) the median oldest instrument age is 7 yrs, while most labs have bought a new instrument within the last 3 or 4 years. The primary service offered remains basic protein identification, but high on the wish-list for new services are top-down, ion-mobility and SRM. Mascot is the most-used search engine, but most labs employ more than one. Internal facilities are hugely preferred, and cost is low on the factors list, communication and local support are high.

Salaries and instrument purchases are mainly from institutional and/or grant funding, contributions from user fees are low. Most respondents have positive views of both the ABRF and the PRG and like participating in the studies.

ABRF & PRG

Question	Percentage
Have you attended an ABRF meeting?	42%
Are you aware of Research Groups?	72%
Does PRG make useful contributions?	71%
(from above, what IS the PRG???)	26%
PRG studies useful for benchmarking?	79%
Have you requested PRG samples?	57%
Have you completed a Study?	71%
Should xPRGs conduct joint studies?	46%*
(*) no opinion	44%

Conclusions

The 2011 PRG survey results presented a surprisingly upbeat assessment of the relationship between proteomics service laboratories and their users. By in large, users desire a reasonably staffed local lab that can provide extensive consultation and quality data throughout the life of a project and agree that their needs are being met. Fortunately, local service labs assess their own performance favorably and report being highly involved in consulting, training and outreach. Of particular interest, few service labs reported significant fiscal constraints and users consistently ranked the costs of working with a service lab as being much less important to their satisfaction than the ability to obtain essential data from a local lab. This indicates that the value proposition of a core lab lies in its ability to provide high quality data and personal attention to users. We feel that the results reflect favorably on the collegial relationships that have been established between users and providers and should be viewed as a strong, positive commentary on the value of proteomics research facilities.

Acknowledgements

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