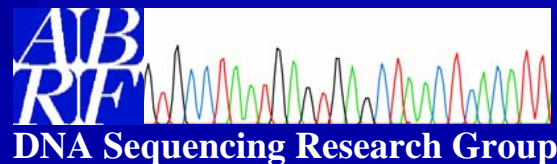


# DNA Sequencing Research Group

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## 2006 General Survey of DNA Sequencing Facilities

Debbie Adam, David Needleman, Michelle  
Detwiler, Helaman Escobar, Jan Kieleczawa,  
Rashmi Pershad, Peter Schweitzer, Glenis Wiebe,  
and Susan Hardin



# Goal of Survey

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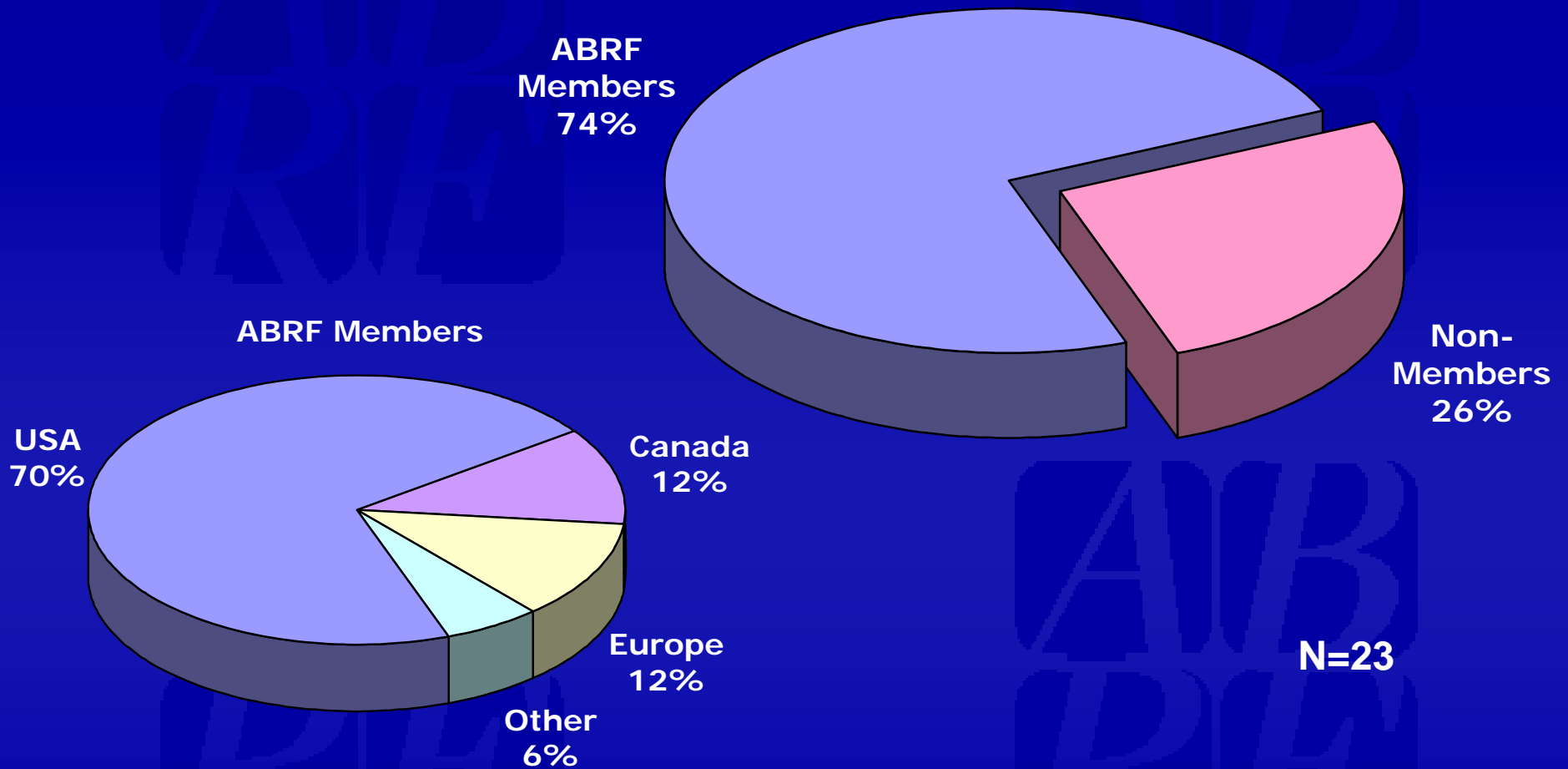
- **Facility**
- **Services**
- **Instrumentation**
- **Pricing**

# Survey Participation

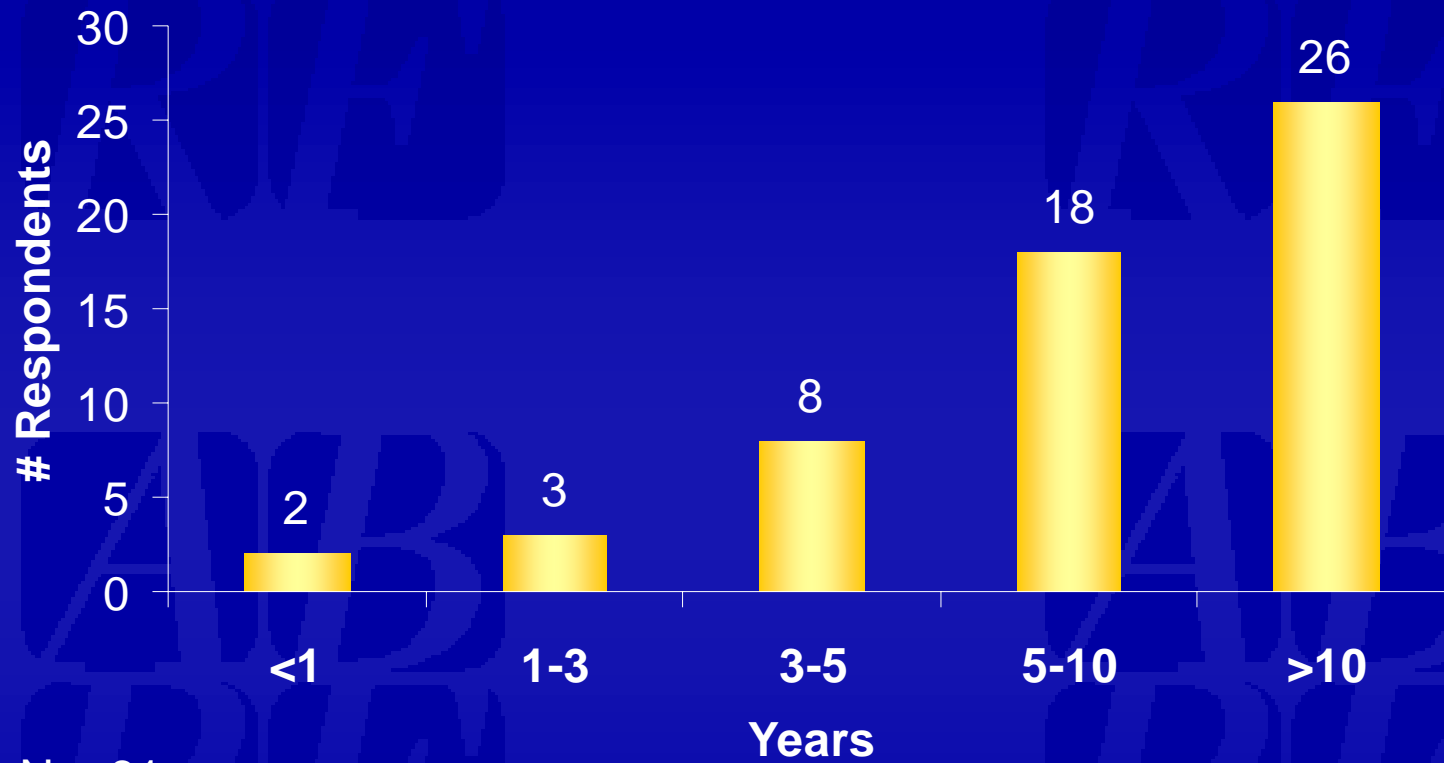
Location:	USA	Canada	Europe	Other
# Respondents:	38	10	8	5



# Mini Survey – Participant Information

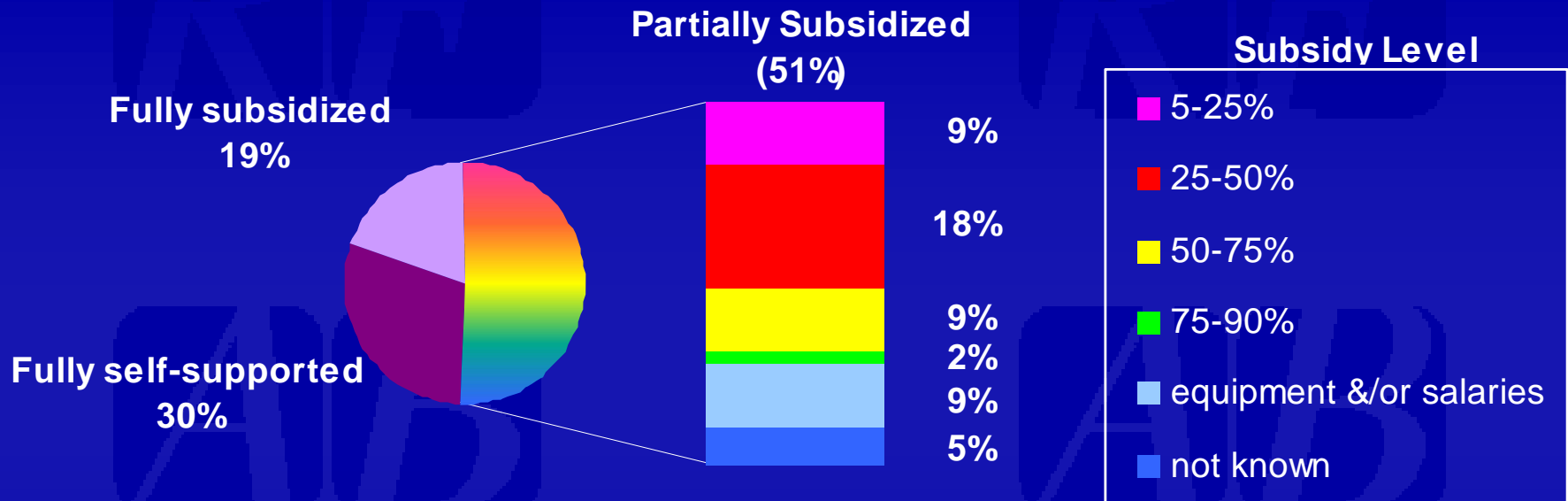


# Age of Facility



N = 61

# Funding

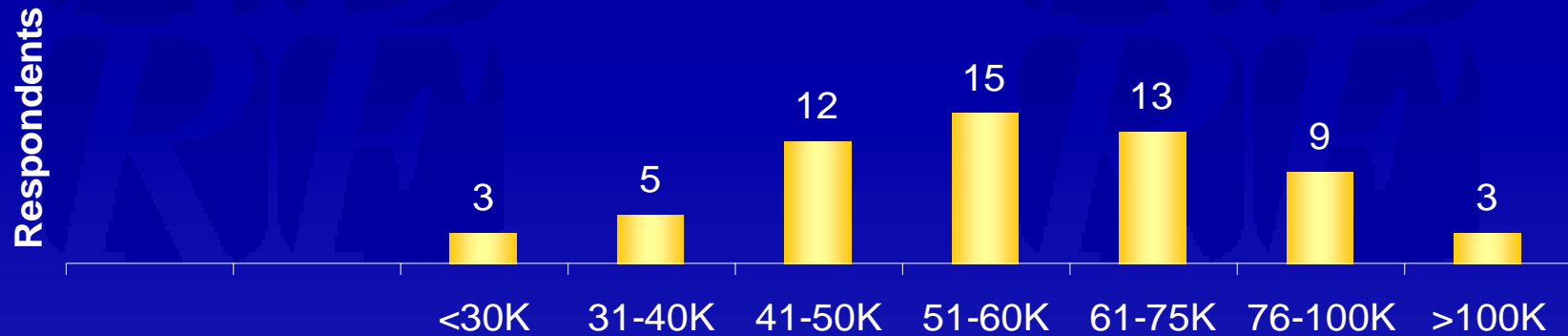


N = 61

Partial Subsidy  
Range: 5% - 85%  
Median: 34%

# Salary Comparisons

## Directors/Managers



## Technicians

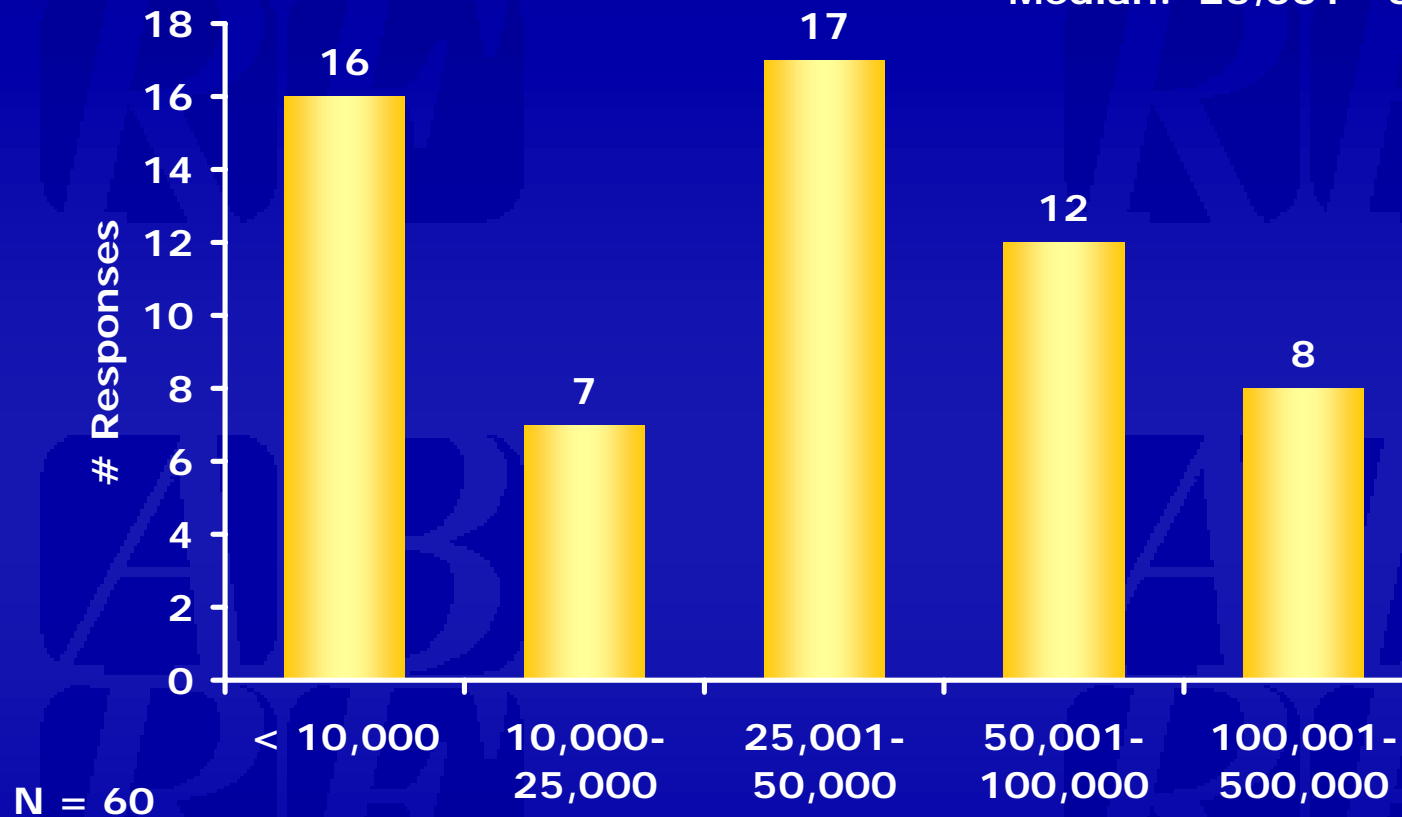


N = 60

# Number of Sequencing Reactions

Range: <10,000 - 500,000

Median: 25,001 - 50,000

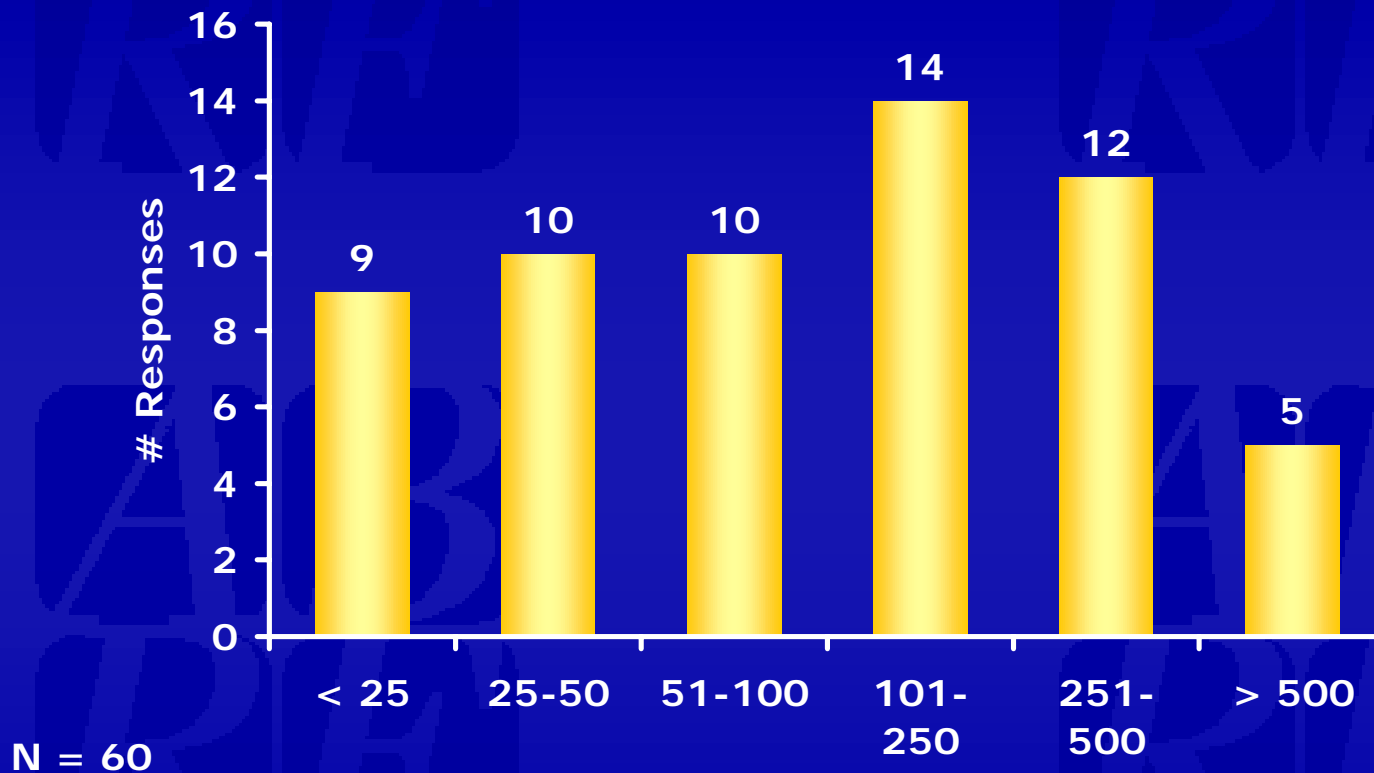




# Number of Requestors

Range: <25 to >500

Median: 101 - 250



# Additional Services

<b>Service</b>	<b>Responses</b>
<b>Fragment Analysis</b>	<b>45</b>
<b>DNA Preparation</b>	<b>23</b>
<b>SNP Confirmation/Discovery</b>	<b>19</b>
<b>Microarray</b>	<b>5</b>
<b>RT PCR</b>	<b>5</b>

**N=61**

# Request Submission

Method	Responses
Electronically - LIMS	26
Paper Format	24
Electronically - Spreadsheets	15
Email	13
Paper Format - Staff Entry into LIMS	4

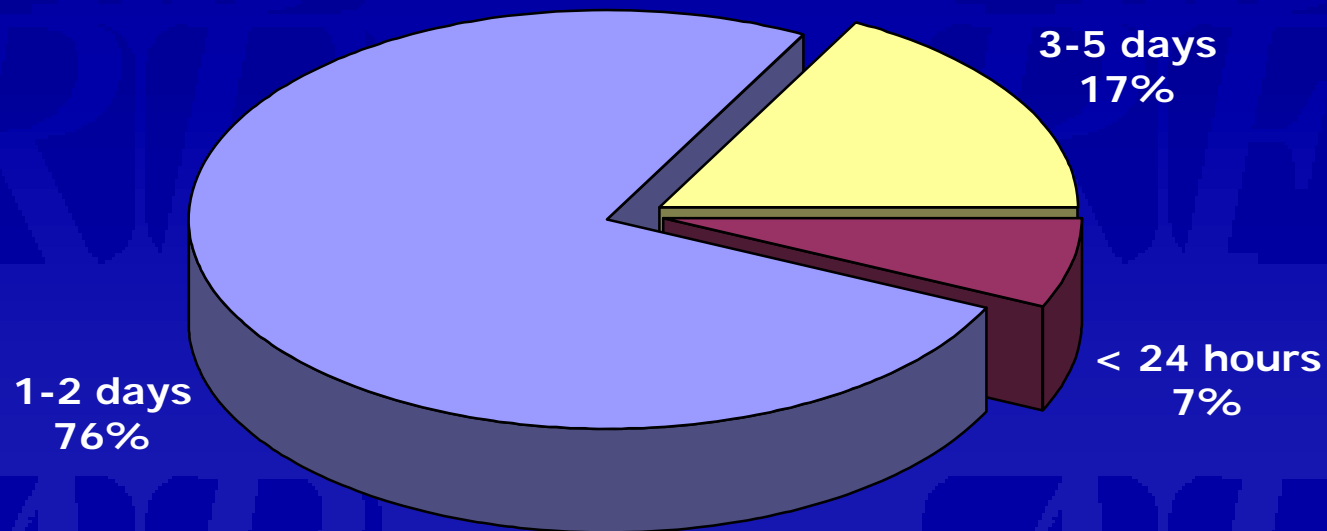
**N=60**

# Request Processing

Method	Responses
In-house LIMS	20
Spreadsheets	14
Commercial LIMS	12
Paper Format	9

**N=57**

# Average Turn-Around Time Unedited Sequence



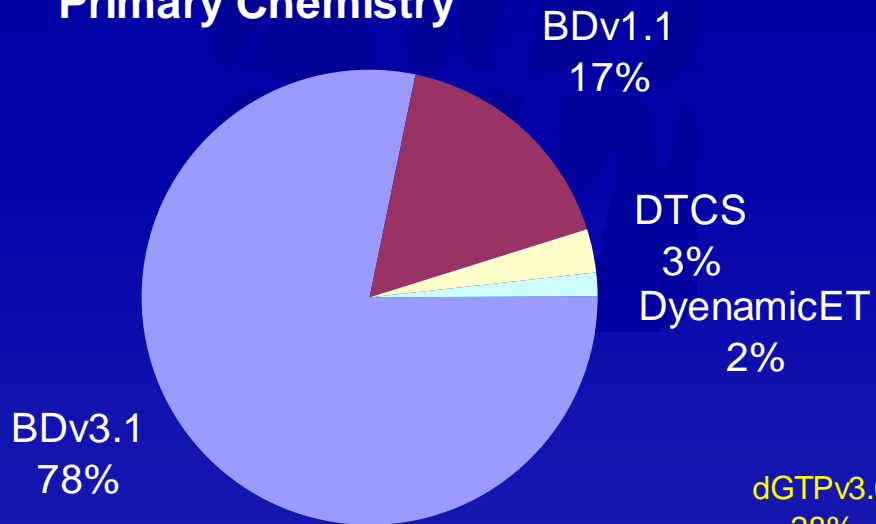
N = 58

Range: 4 hours - 5 days

Median: 1 - 2 days

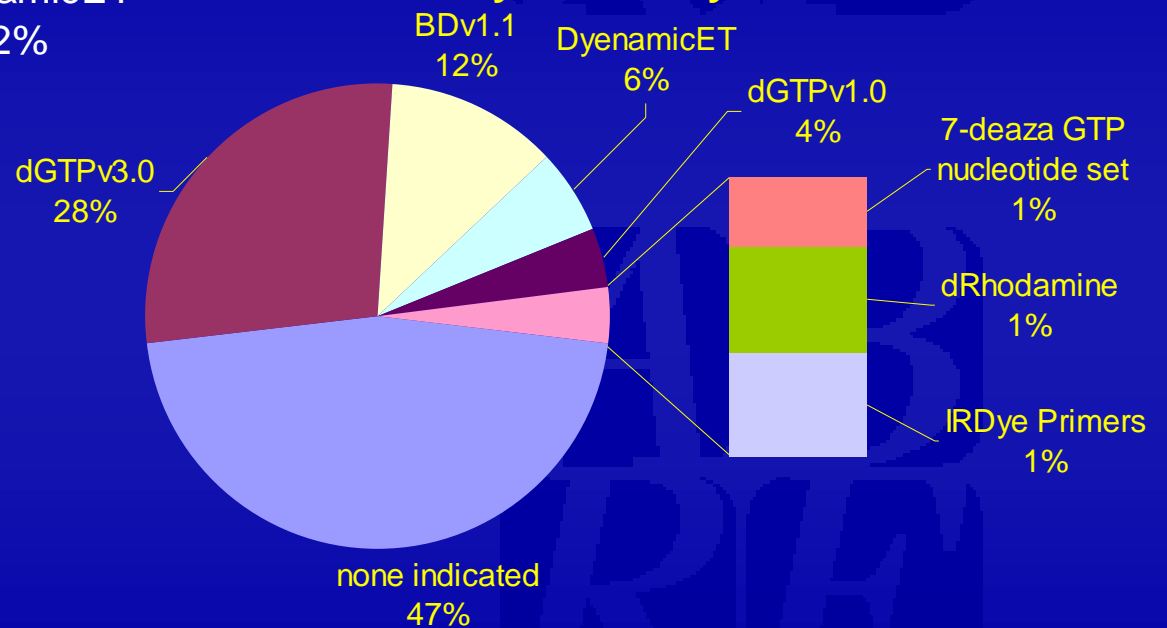
# Chemistry

## Primary Chemistry



**N=61**

## Secondary Chemistry



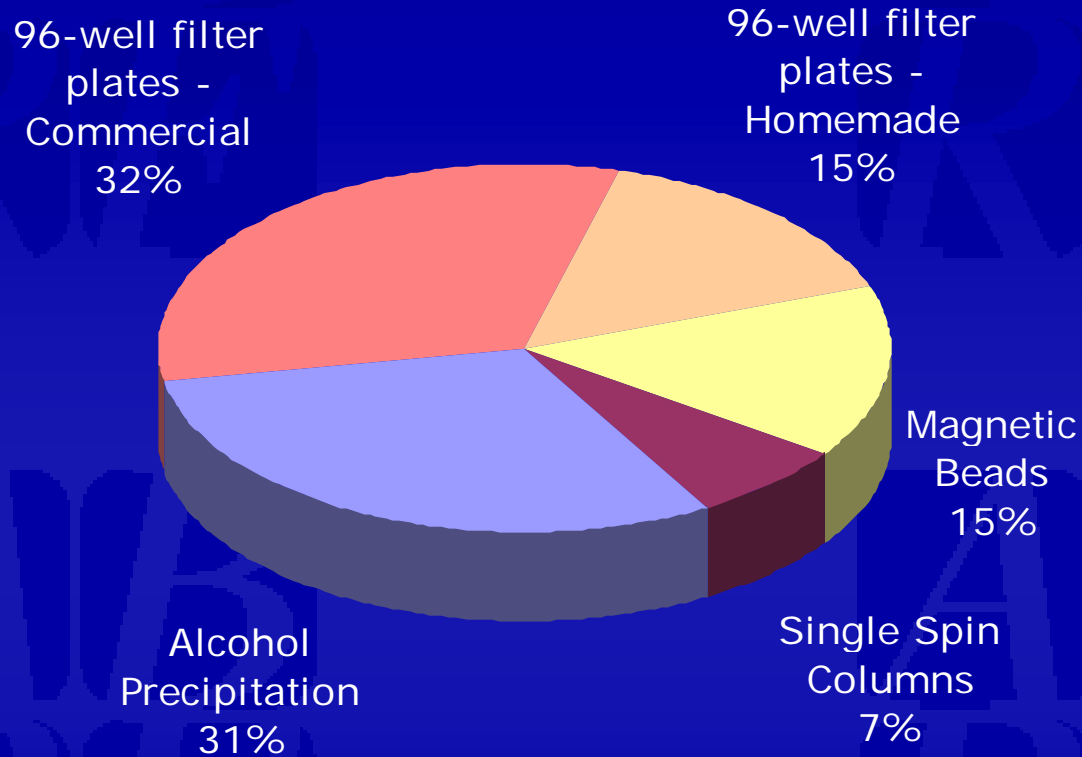
**N=61**

# Reaction Vessels

<b>Format</b>	<b>Responses</b>
<b>96-well Plates</b>	<b>52</b>
<b>8x12 Strip Tubes</b>	<b>23</b>
<b>Single Tubes</b>	<b>17</b>
<b>384-well Plates</b>	<b>3</b>

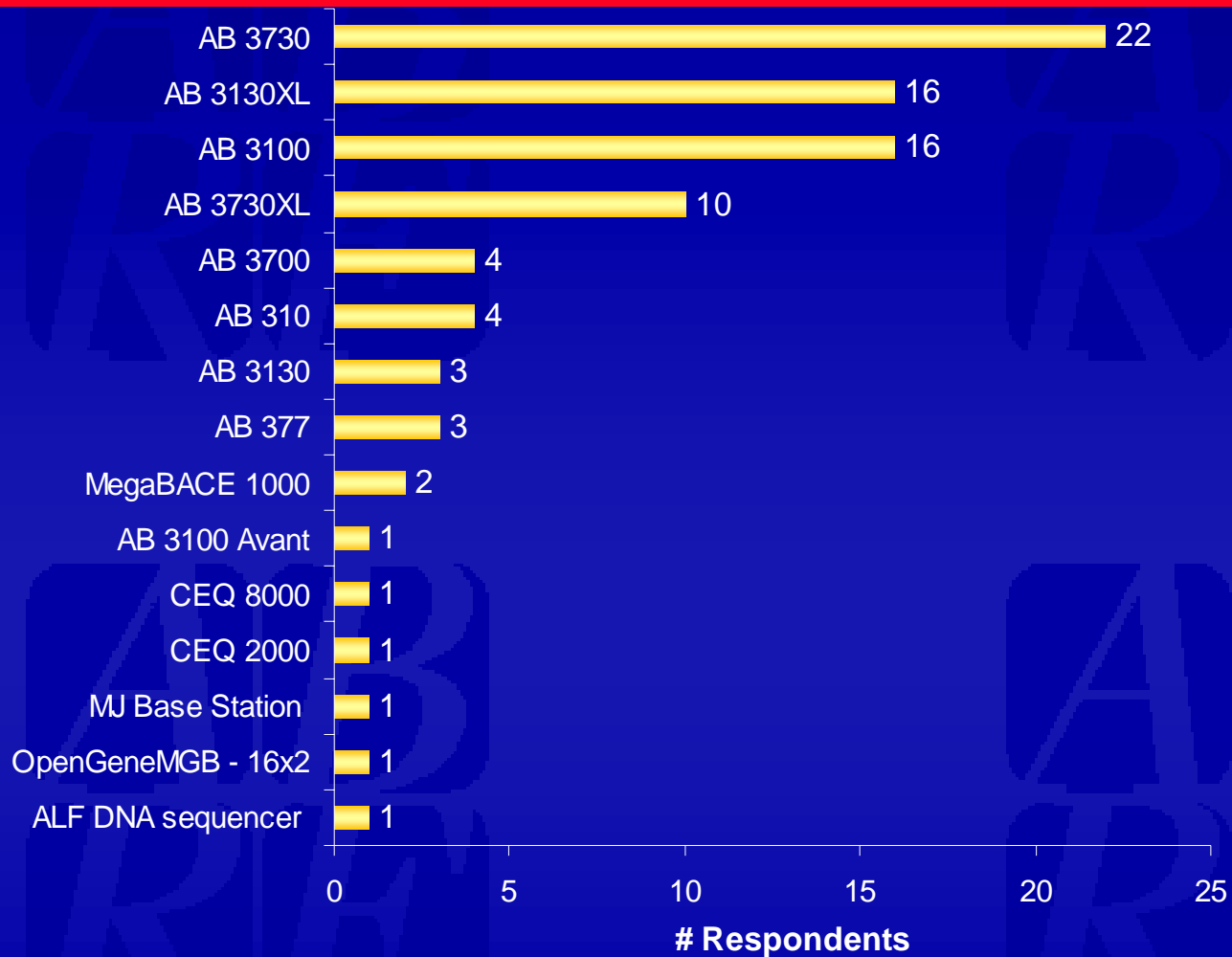
**N=61**

# Post-Reaction Clean Up





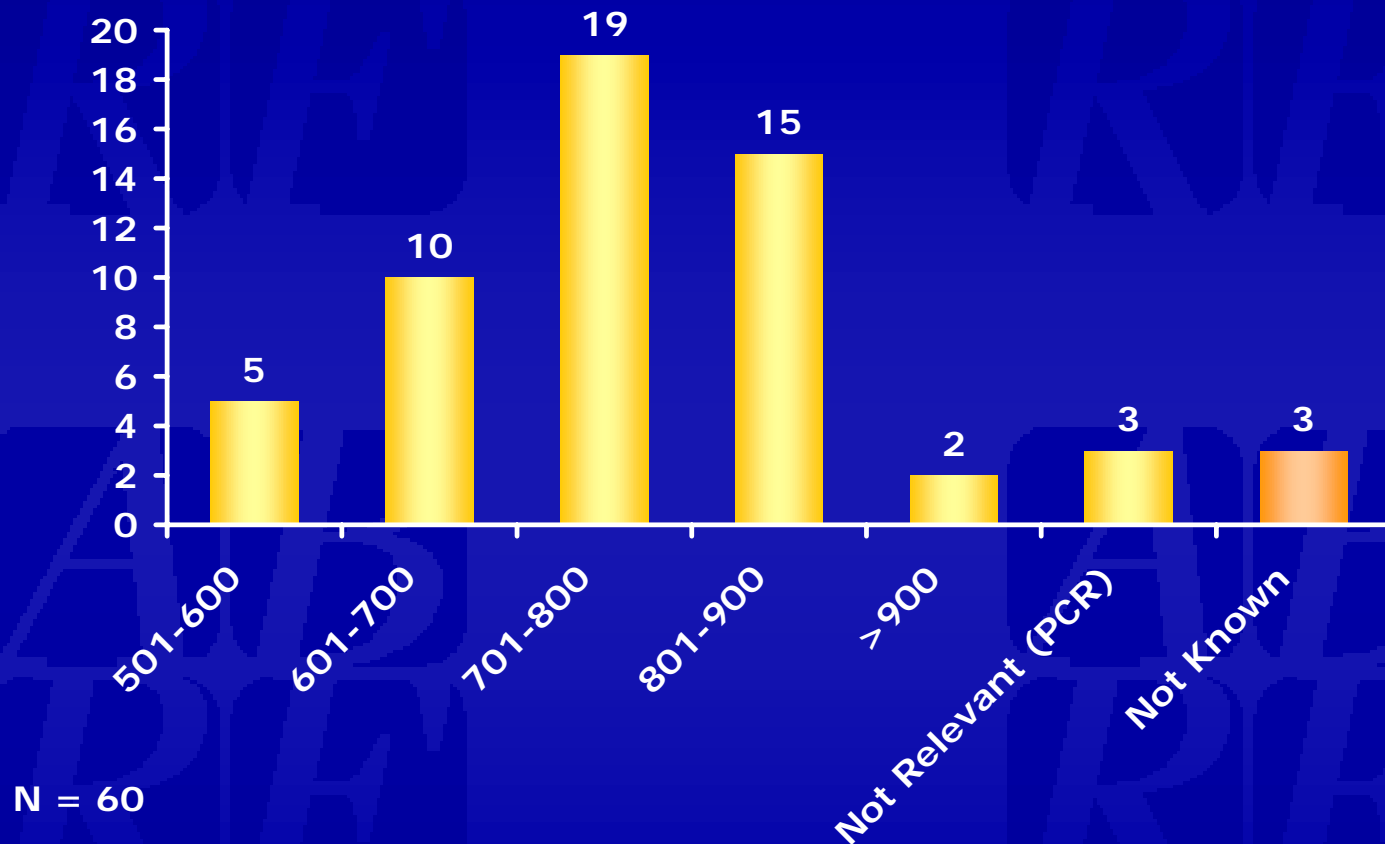
# Instrumentation - Sequencers



# Q/KB>20 Read Length

Range: 501 to >900 bases

Median: 701 - 800 bases



# Prices - Low Throughput (Internal)

Service	Entire Survey	USA	Canada	Europe	Other
Count	45	29	7	5	4
Range	\$1.35 - \$30.00	\$1.35 - \$15.00	\$5.27 - \$21.95	\$4.00 - \$8.61	\$12.00 - \$30.00
Median	\$8.78	\$9.00	\$8.78	\$6.07	\$15.09
Mode	\$10.00	\$10.00	\$8.78	N/A	N/A

**N=49**

# Prices

- **Billing for Repeats (n=58)**
  - Always at Full Price - 16%
  - Sometimes - 60%
  - Never - 24%

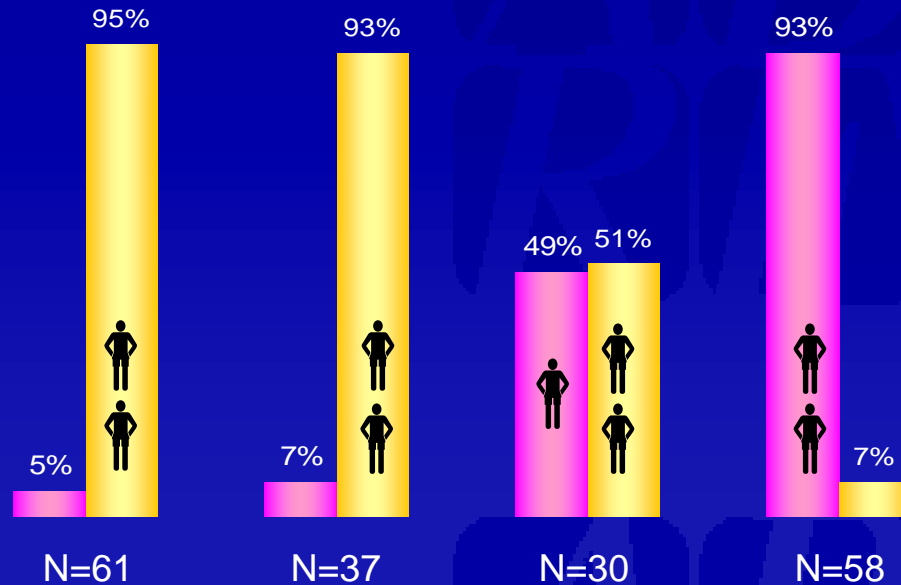
“Depends on whether the user has pissed me off...”

- **User Response to Prices (n=56)**
  - Favourable - 86%
  - Unfavourable - 9%
  - Mixed - 5%

# Survey Comparisons

## Sequencing Technology

■ capillary  
■ slab gel



In-House Sequencing  
(Rxn & Run)

Range  
Median

**1998**

Max \$37

\$15

**2000**

\$5 - \$25

\$13

**2003**

\$6 - \$23

\$13

**2005**

\$1 - \$30

\$7.01

Turnaround Time

Range  
Median

3-168hrs

51hrs

20-96hrs

53hrs

14-96hrs

36hrs

# Acknowledgements

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- All of the labs who participated in the survey

THANKS!

- Chris Walls (University of Utah) for survey design

check out our poster (P081), and watch for full survey results in JBT later this year!

[www.abrf.org/DSRG](http://www.abrf.org/DSRG)

