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ASCP Laboratory Workforce Report

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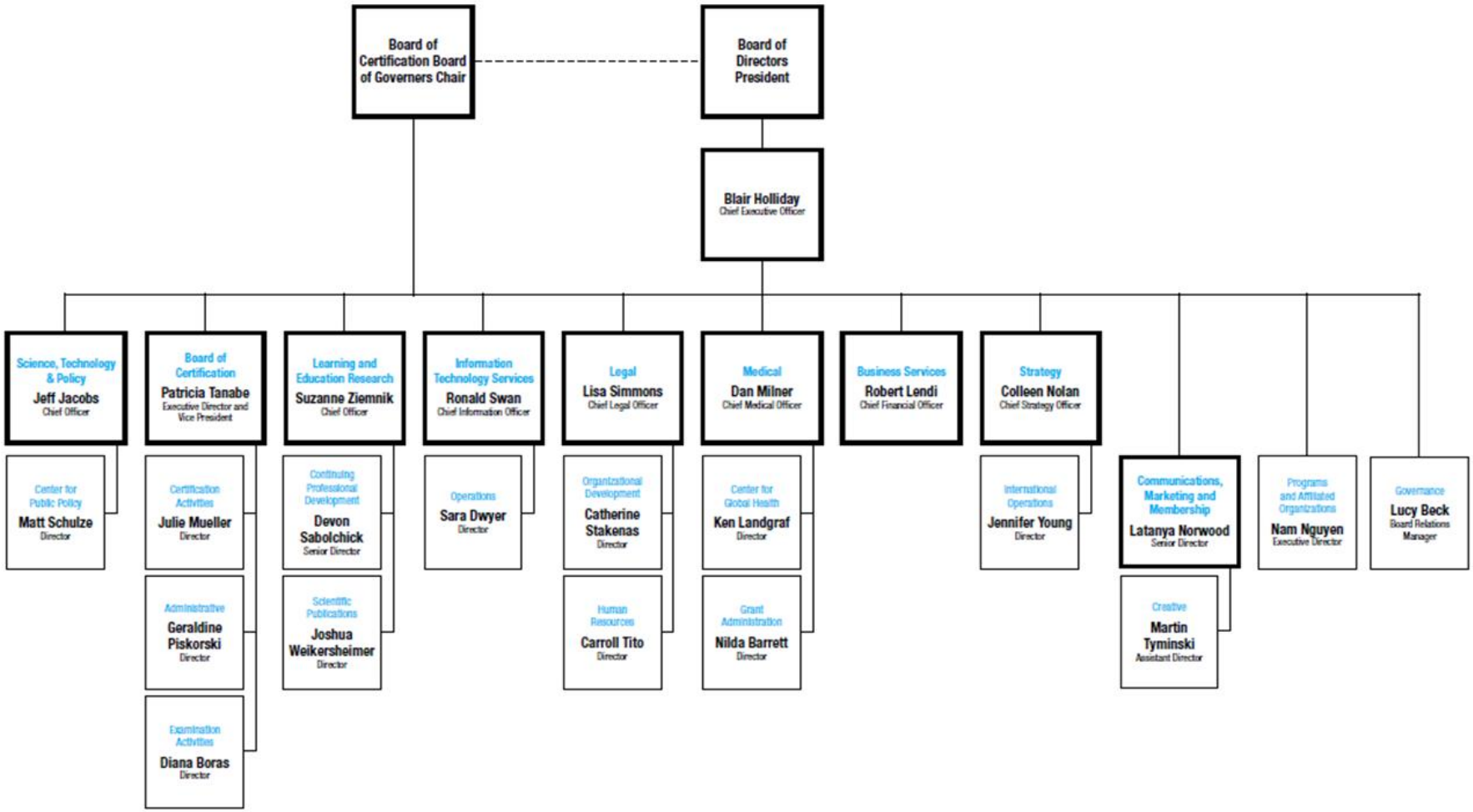
Overview

- Introduction
- US Bureau of Labor Statistics Data
- ASCP 2015 Wage Survey
- ASCP 2016 Vacancy Survey

ASCP Organizational Leadership



The ASCP Wage and Vacancy Surveys

- Biennial survey for the past 30 years demonstrates commitment to workforce issues

- Survey results:
  - Inform the government, academic institutions and other organizations about labor trends in the laboratory professional workforce
  - Inform the general laboratory community to prepare for various needs for qualified laboratory professionals
  - Useful as a vehicle to influence policy makers and also decision makers within institutions
  - Promote solutions to ensure highly qualified laboratory professionals enter and are maintained in the workforce
  - Aid workforce planning in the changing health care environment and rapid evolution of technology
  - Provide insight that workforce solutions are and will continue to be multi-factorial

Data
Knowledge
Information

Data → Action

GET YOUR DATA HERE!

ASCP Workforce Data
Retaining staff
Recruitment strategies
Support higher wages
Address higher vacancies

U.S. Department of Bureau and Labor Statistics

- Occupational Employment Outlook (2014-2024):
  - As of January 2018, overall unemployment rate = 4.1%
  - Overall employment projected to grow at approximately 7.0%
  - Median annual wage for all workers = $35, 540

- Health Occupations Outlook (2014-2024):
  - Projected to grow 19.0% = 2.3 million new jobs
  - Median annual wage = $61, 710

U.S. Department of Bureau and Labor Statistics

Medical and Clinical Laboratory Technologists and Technicians:

- Number of jobs, 2014 = 328,200
- Job outlook = 16% (much faster than average)
- Employment Change, 2014-24 = 52,100

Phlebotomists

- Number of jobs, 2014 = 112,700
- Job outlook = 25% (much faster than average)
- Employment Change, 2014-24 = 28,100

ASCP Workforce Data

Occupational Titles

- Cytogenetic Technologist (CG)
- Cytotechnologist (CT)
- Histotechnician (HT)
- Histotechnologist (HTL)
- Laboratory Assistant (LA)
- LIS/PI/QA
- Medical Laboratory Technician (MLT)/Clinical Laboratory Technician (CLT)
- Medical Technologist (MT)/Medical Laboratory Scientist (MLS)/Clinical Laboratory Scientist (CLS)
- Molecular Biologist (MB)
- Pathologists' Assistant (PA)
- Performance Improvement/QA
- Phlebotomist (PBT)
- Specialist in Blood Banking (SBB)
- 39 certifications (including specialists and technologists)

Departments

- Anatomic Pathology (including non-MD professionals)
- Blood Bank (Immunohematology)
- Chemistry/Toxicology
- Core Lab
- Cytogenetics
- Cytology
- Flow cytometry
- Hematology/Coagulation
- Histology
- Immunology
- Laboratory Information System/Quality Assurance/Performance Improvement (LIS/QA/PI)
- Microbiology/Virology/Infectious Disease
- Molecular Biology/Molecular Diagnostics
- Molecular Pathology
- Phlebotomy
- Point-of-Care
- Send outs
- Specimen Processing
- Multiple departments/All departments

2015 ASCP Wage Survey

- Conducted through collaboration between the ASCP's Institute of Science, Technology, and Policy in Washington, DC, and Board of Certification (ASCP BOC) in Chicago, Illinois

- The Wage Survey Working Group - members work in the field of pathology and laboratory medicine, reviewed the survey questions and critiqued the report.

- Partner organizations were also invited to participate in completing the survey to get a larger scope of the current issues faced by the laboratory workforce.

- Asked individuals disqualified from this year's wage survey of their current status (i.e. clinical laboratory educator, retired, unemployed, working in laboratory-related industry, working in a non-laboratory-related industry, working in a research laboratory) for future research studies.

Partner Organizations

- AABB (formerly the American Association of Blood Banks)
- American Association for Clinical Chemistry (AACC)
- American Medical Technologists (AMT)
- American Society for Clinical Laboratory Science (ASCLS)
- American Society of Cytopathology (ASC)
- American Society for Cytotechnology (ASCT)
- American Society for Microbiology (ASM)
- Clinical Laboratory Management Association (CLMA)
- National Society for Histotechnology (NSH)
- Philippine Association of Medical Technologists–USA (PAMET)

2015 ASCP Wage Survey
Summary of Findings

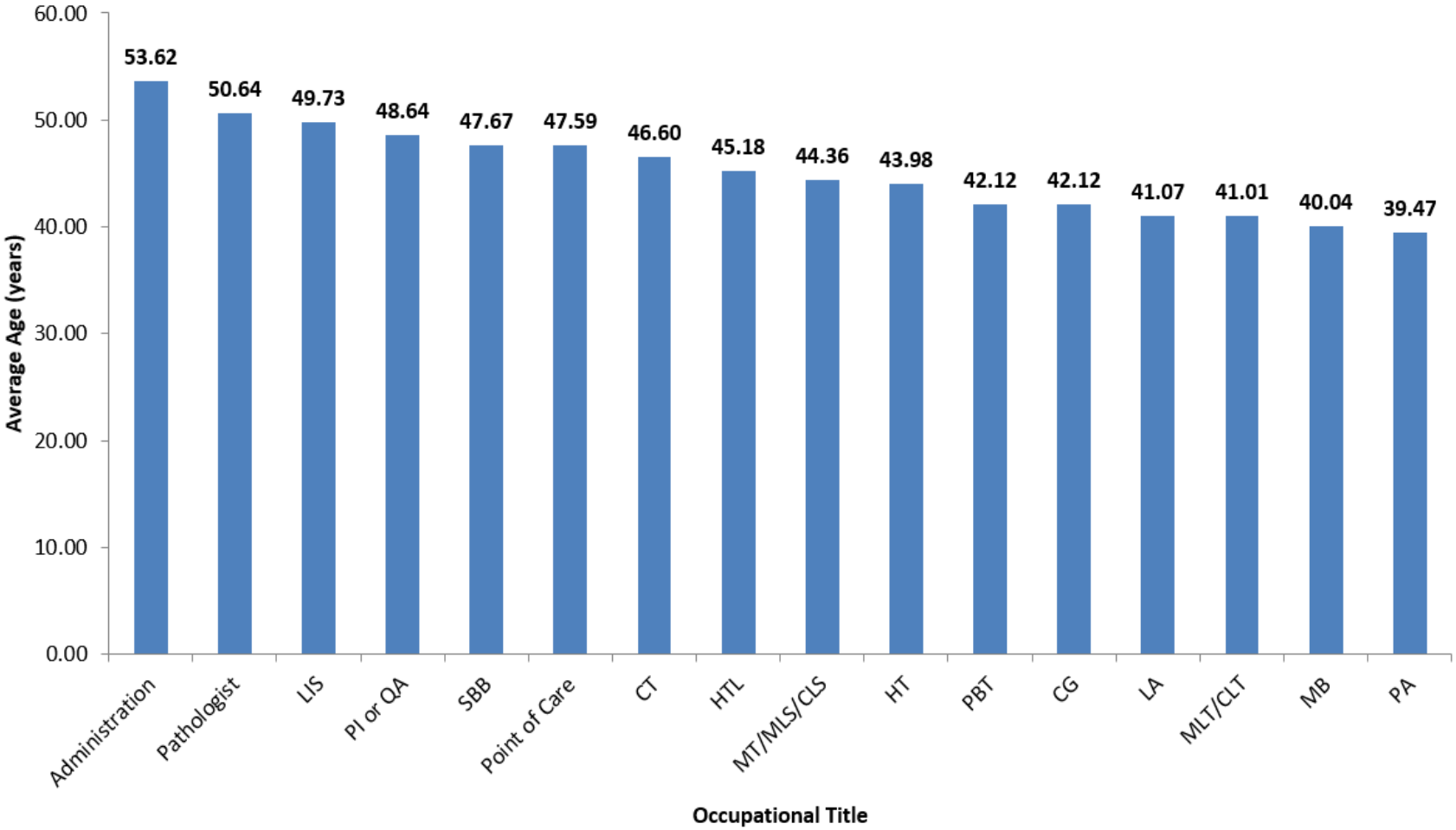
- Participation:
  - 16,661 respondents representing a 27.1% increase in participation compared to the 2013 wage survey

- Demographic data collected indicate that 80.96% of the respondents are female and 19.04% are male.

- The average age of laboratory personnel who responded to the survey is **43.95** years compared with **44.32** years in 2013.

- Of all the respondents, 21.60% are licensed by the state in which they currently work as a laboratory professional.

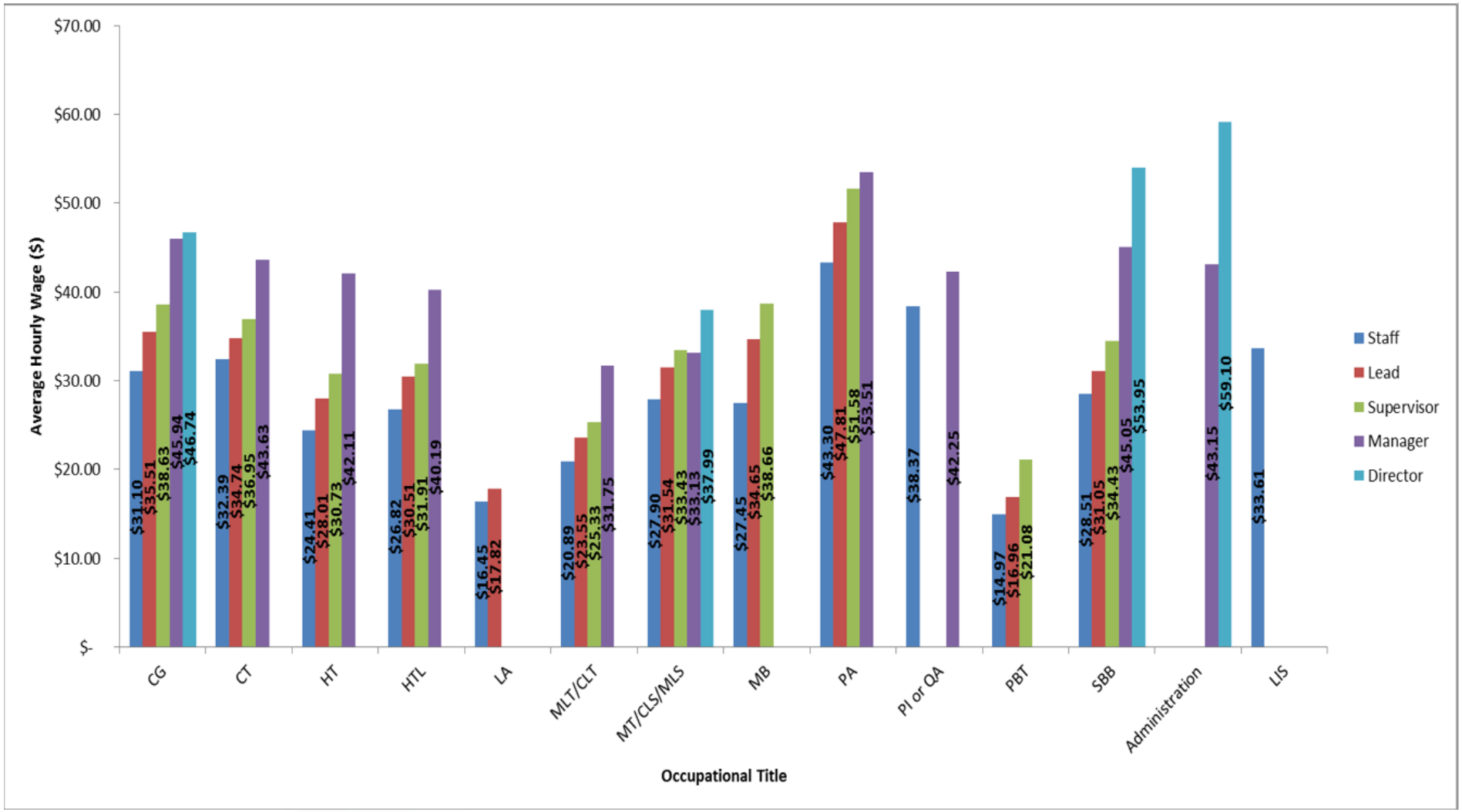
Mean & Median Ages of Laboratory Professionals Surveyed*



Average age of all respondents by occupational title.

*Data by occupational level and state are available.

ASCP 2015 Wage Survey Results



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ASCP 2013 vs 2015 Wage Survey Results

Staff	2015	2013	% Change
CG	$ 31.10	$ 28.63	8.6%
CT	$ 32.39	$ 31.45	3.0%
MT/CLS/MLS	$ 27.90	$ 27.13	2.8%
LA	$ 16.45	$ 16.03	2.6%
MLT/CLT	$ 20.89	$ 20.49	2.0%
HT	$ 24.41	$ 23.96	1.9%
MB	$ 27.45	$ 26.96	1.8%
SBB	$ 28.51	$ 28.07	1.5%
HTL	$ 26.82	$ 26.63	0.7%
PBT	$ 14.97	$ 15.60	-4.0%
PA	$ 43.30	$ 46.32	-6.5%
PI or QA	$ 38.37	N/A	N/A
LIS	$ 33.61	N/A	N/A

ASCP 2013 vs 2015 Wage Survey Results

Lead	2015	2013	% Change
CG	$ 35.51	$ 32.22	10.22%
HTL	$ 30.51	$ 28.76	6.07%
MLT/CLT	$ 23.55	$ 22.38	5.22%
HT	$ 28.01	$ 26.81	4.48%
MT/CLS/MLS	$ 31.54	$ 30.81	2.36%
PBT	$ 16.96	$ 16.71	1.49%
CT	$ 34.74	$ 35.20	-1.30%
SBB	$ 31.05	$ 32.11	-3.31%
LA	$ 17.82	N/A	N/A
MB	$ 34.65	N/A	N/A
PA	$ 47.81	N/A	N/A

ASCP 2013 vs 2015 Wage Survey Results

Supervisor	2015	2013	% Change
MLT/CLT	$ 25.33	$ 22.60	12.10%
PA	$ 51.58	$ 48.74	5.83%
MT/CLS/MLS	$ 33.43	$ 32.82	1.87%
SBB	$ 34.43	$ 34.44	-0.04%
CT	$ 36.95	$ 37.09	-0.38%
HTL	$ 31.91	$ 32.41	-1.55%
HT	$ 30.73	$ 31.29	-1.80%
CG	$ 38.63	$ 39.95	-3.32%
MB	$ 38.66	N/A	N/A
PBT	$ 21.08	N/A	N/A

Wage Survey Comment Analysis

Top 5 Categories
1. Underpaid/Underappreciated
2. Need for increased Wages/Raises
3. Advocacy
4. Suggestions for Future Surveys
5. Benefits
Total number of comments received: 2,230

ASCP Wage 2015 Report Summary

- The average wage of laboratory professionals based on age shows that salaries continue to increase considerably for every age range except LA and PBT.

- There is a need for recruiting younger laboratory professionals.

- Employee development such as training, continuing education and mentoring can prove beneficial in retaining staff.

- Strategic focus on **RECRUITMENT AND RETENTION** needed!

- Wage Survey 2017 – publication date Fall 2018 in AJCP

2016-17 ASCP Vacancy Survey Summary of Findings

- Participation:
  - 1,353 respondents (individuals who have hiring responsibilities) representing 51,586 employees

- Conducted through collaboration between ASCP's Institute of Science, Technology, & Policy in Washington, DC, the Evaluation, Measurement, and Assessment division and Board of Certification in Chicago, IL.

- Vacancy Survey Working Group, whose members work in the field of laboratory medicine, reviewed the survey questions and critiqued the report.

- Published in the American Journal of Clinical Pathology (AJCP) in March 2018.

Partner Organizations

- AABB (formerly the American Association of Blood Banks)
- American Association for Clinical Chemistry
- American Society of Cytopathology
- American Society for Clinical Laboratory Science
- American Society for Microbiology
- Clinical Laboratory Management Association
- National Society for Histotechnology
- Philippine Association of Medical Technologists–USA
- St. Louis University

Laboratory Areas Surveyed

- Anatomic pathology (including non-MD professionals)
- Blood bank (immunohematology)
- Chemistry/toxicology
- Core laboratory
- Cytogenetics
- Cytology
- Flow cytometry
- Hematology/coagulation
- Histology
- Immunology
- LIS/QA/PI (new laboratory
- area surveyed)
- Microbiology/virology/infectious disease
- Molecular biology/ diagnostics/molecular pathology
- Phlebotomy
- Point-of-care
- Send-outs
- Specimen processing

2016-17 ASCP Vacancy Survey Summary of Findings

- Across the nation, the overall vacancy rate was highest for LIS/QA/PI department (10.98%) and lowest for anatomic pathology department (4.70%).

- LIS/QA/PI (11.68%) has the highest staff vacancy rate in the nation while anatomic pathology (5.00%) has the lowest staff vacancy rate.

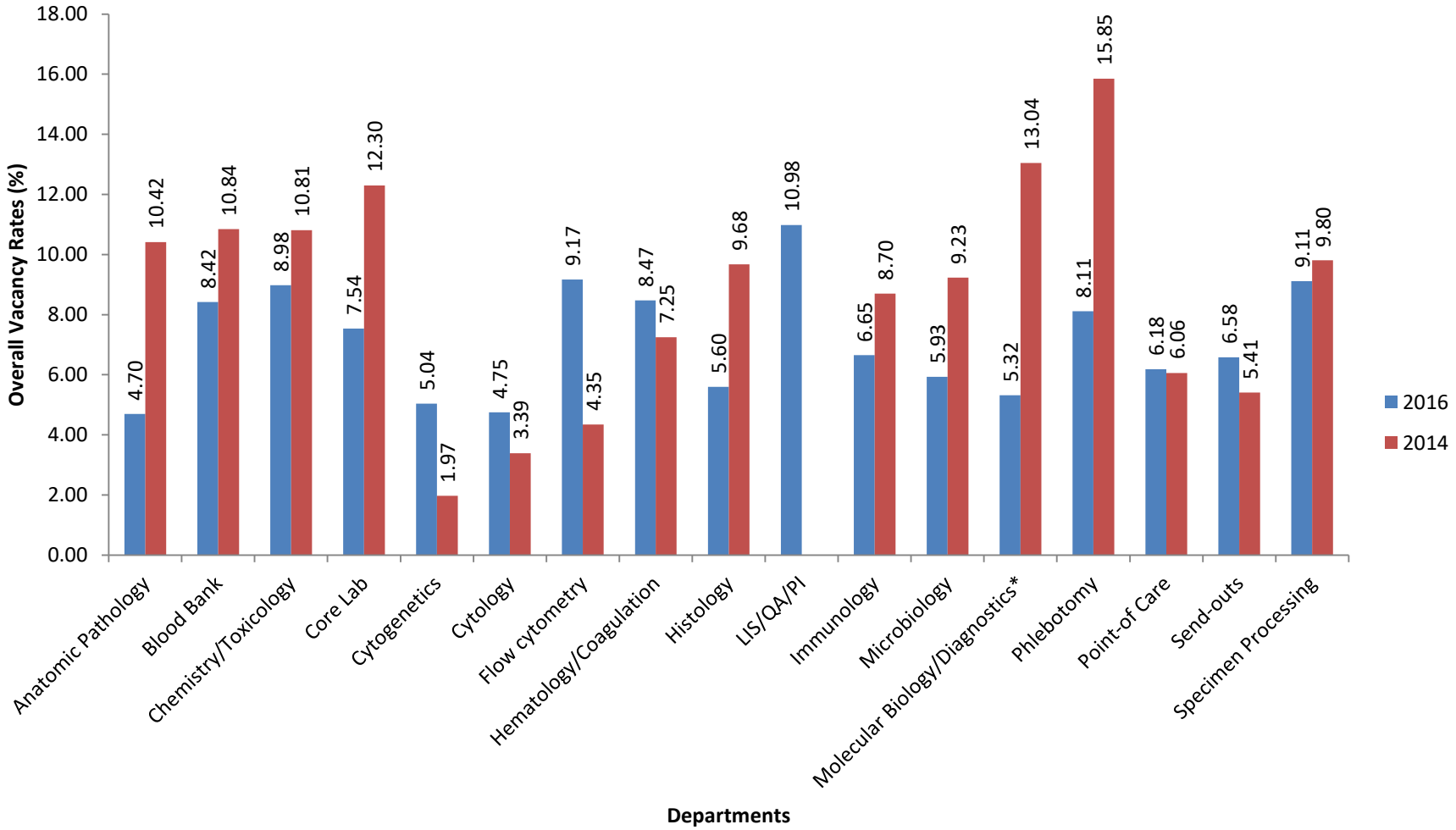
- The highest supervisor vacancy rate occurred in the immunology department (10.39%), and the lowest supervisor vacancy rate occurred in the send-outs department (1.65%).

- LIS/QA/PI department has the highest overall percentage (28.30%) of employees anticipated to retire in the next 5 years.

2016-17 ASCP Vacancy Survey Summary of Findings

- Overall, survey results show that it takes less than 3 to 6 months to fill positions in the departments surveyed.
- On average, hiring staff for most departments takes 3 to 6 months, while hiring supervisors takes 3 months to a year.
- The Northeast region reported the highest overall vacancy rate compared with other regions (9.44%); the South-Central Atlantic had the lowest vacancy rate (6.31%).

2014 vs 2016-17 ASCP Overall Vacancy Rates



Overall vacancy rates (2014 vs. 2016).
*Molecular Biology/Diagnostics/Molecular Pathology

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Vacancy Survey Overall Retirement Rates

Overall Retirement Rates by Department Since 2012[a]

Department	Overall Retirement, %		
	2016	2014	2012
Hematology/coagulation	23.78	19.51	7.00
Chemistry/toxicology	22.89	23.6	10.00
Immunology	22.13	21.05	10.00
Blood bank	20.97	19.19	7.00
Core laboratory	20.72	16.90	9.00
Microbiology	20.14	19.48	9.00
Cytogenetics	19.86	6.06	4.00
Send-outs	18.23	15.56	—
Cytology	17.65	14.49	8.00
Flow cytometry	17.39	18.00	—
Histology	17.02	18.84	6.00
Anatomic pathology	15.83	13.76	8.00
Specimen processing	14.69	11.29	5.00
Molecular biology/ diagnostics/molecular pathology	14.68	17.65	5.00
Phlebotomy	10.76	11.54	4.00
Point-of-care	24.72	17.5	—
LIS/QA/PI	28.3	—	—

LIS/QA/PI, laboratory information system/quality assurance/performance improvement.

[a]Data from 2012 and 2014 gathered from past ASCP Vacancy Surveys.

Certification Requirement by Department

2016 vs 2014 Rate of Respondents Who Indicated That Certification Is Required When Hiring Laboratory Personnel in Their Department

Departments	2016, %	2014, %	Δ, %
Molecular biology/diagnostics/ molecular pathology	63.30	38.21	25.09
Point-of-care	63.20	50.22	12.98
Immunology	73.70	67.39	6.31
Flow cytometry	67.70	61.91	5.79
Send-outs	35.40	29.85	5.55
Anatomic pathology (including non-MD professionals)	57.60	54.55	3.05
Blood bank (immunohematology)	74.30	71.28	3.02
Cytogenetics	47.50	45.16	2.34
Chemistry/toxicology	69.90	69.67	0.23
Core laboratory	76.10	76.25	–0.15
Cytology	86.10	86.26	–0.16
Hematology/coagulation	74.50	74.79	–0.29
Microbiology/virology/infectious disease	74.90	75.27	–0.37
Specimen processing	24.20	26.17	–1.97
Histology	44.60	48.85	–4.25
Phlebotomy	29.60	35.71	–6.11
LIS/QA/PI	56.70	NEW	—

LIS/QA/PI, laboratory information system/quality assurance/performance improvement.

Shifts/Lay-offs

- Current data show that hard to fill shifts in 2014 shifts, along with evening shifts, are now once again difficult to fill.

- Data show that 95.70% (92.56% in 2014) of supervisors have not laid off any lab professionals in the departments they supervise within the past 6 months of participating in this survey.

- 88.23% (81.79% in 2014) do not anticipate laying off any laboratory professionals in the department they supervise in the next 6 months.

New Technologies

- The % of participants who indicated that new technologies have caused changes to their staffing needs has remained steady (40.25% in 2014 vs 39.2% in 2016).

- Types of technologies causing the greatest changes to staffing needs:
  - Automation (55.10%)
  - Molecular testing (54.92%)
  - LIS (36.31%)
  - Point-of-care (25.94%)
  - Electronic medical records (19.14%)\

- According to the respondents, automation has increased the need for lower level staff to perform routine testing, leaving the technologists to focus on verifying and running tests.

Hiring, Recruiting, and Retaining Laboratory Personnel

HIRING	RECRUITING	RETAINING
Better pay and/or benefits at other laboratories (48.31%)	Better pay and/or benefits at other area laboratories (47.15%)	Better pay and/or benefits at other area laboratories (39.36%)
Increasing competition for well-trained personnel (41.74%)	Increasing competition for well-trained personnel (41.90%)	Workload/stress (39.25%)
Applicants do not possess necessary certification, education, and/or skills to perform the work (38.36%)	Applicants do not possess necessary education and skills to perform the work (37.26%)	Limited potential for advancement and additional compensation (37.42%)

ASCP Vacancy 2016-17 Report Summary

- Data from this survey strongly suggest the crucial need in the supply of **qualified and certified laboratory personnel**.

- Results from the qualitative analyses suggest that vacancies are being filled at a faster rate due to the increasing workload in the lab.
  - Shortage in personnel trained in accredited lab program force hiring managers to hire individuals with limited training to perform low- and at times, high complexity tests.
  - Respondents also voiced concerns about competing with nurses for an open position.

•Strategic recruitment of the next generation laboratory professionals must take place in order to fulfill future demands. Targeting the STEM (science, technology, engineering and mathematics) pipeline and providing support to non-traditional students and prospective students from rural areas.

Sources

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