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ASCP Laboratory Workforce Report

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Overview

- ASCP 2016 Vacancy Survey
- ASCP 2017 Wage Survey
- Disparities in Rural Healthcare
- Bureau of Labor Statistics
- Job Satisfaction Survey for Pathologists, Lab Professionals, and Residents

2016 ASCP Vacancy Survey

- 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.

2016 ASCP Vacancy Survey

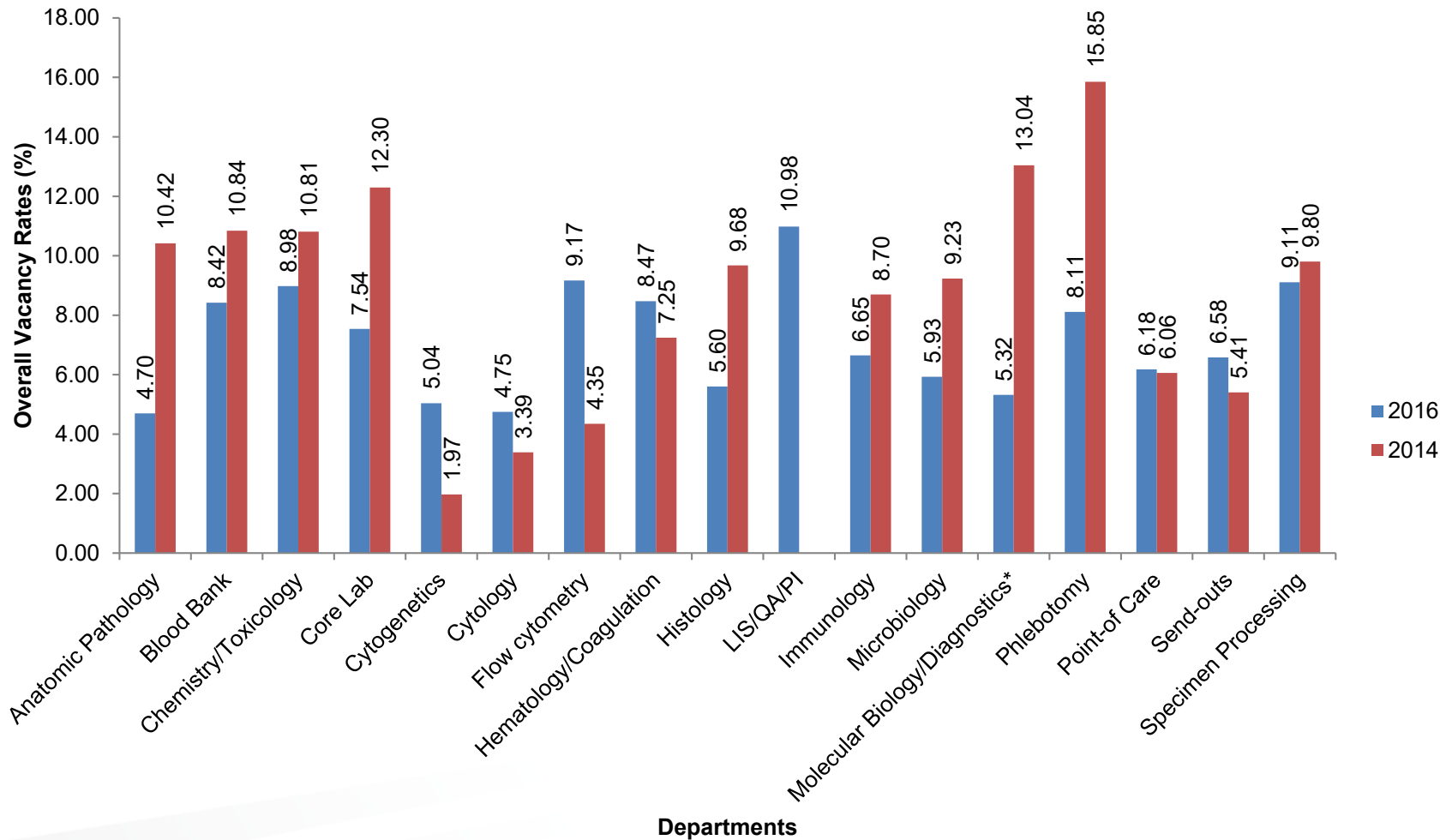
Summary of Findings

- 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 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 ASCP Overall Vacancy Rates



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.

^aData 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.

ASCP Vacancy 2016 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.

2017 ASCP Wage Survey

2017 ASCP Wage Survey

Objectives: To inform the pathology and laboratory field of the most recent national wage data. Historically, the results of this biennial survey have served as a basis for additional research on laboratory recruitment, retention, education, marketing, certification, and advocacy.

Methods: The 2017 Wage Survey was conducted through collaboration between ASCP's Institute of Science, Technology, & Policy in Washington, DC, and ASCP Board of Certification in Chicago, IL.

Results: Compared to 2015, results show an overall increase in salaries for most of the laboratory occupations surveyed except histotechnologists and pathologists' assistants. Geographically, laboratory professionals from urban areas earn more than their rural counterparts.

Conclusions: Survey results encourage laboratory professionals to be actively engaged in advocating for the profession both in the workforce and educational training programs. Awareness of the career opportunities and value of the profession is needed to strengthen the future of the field.

2017 ASCP Wage Survey

- The Wage Survey Working Group, whose members work in the field of pathology and laboratory medicine, reviewed the survey questions and critiqued the report.
- Survey conducted from March 2017 to April 2017
- 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.
- Published in the American Journal of Clinical Pathology (AJCP) in October 2018.

Clinical Laboratory Occupations Surveyed

- Clinical Laboratory Assistant (CLA)/ Medical Laboratory Assistant (MLA)
- Cytogenetic technologist (CG)
- Cytotechnologist (CT)
- Histotechnician (HT)
- Histotechnologist (HTL)
- Laboratory Information System (LIS) Personnel
- Medical laboratory technician/clinical laboratory technician (MLT/CLT)
- Medical laboratory scientist/medical technologist/ /clinical laboratory scientist (MLS/MT/CLS)
- Molecular biology technologist (MB)
- Pathologists' assistant (PA)
- Performance Improvement or Quality Assurance (PI/QA) Personnel
- Phlebotomist (PBT)
- **Point of Care Testing Personnel (POCT)**
- Specialist in blood banking (SBB)

2017 ASCP Wage Survey

- Participation: ~15,000 respondents
- Collected data on wages by clinical laboratory occupation included in the survey, facility, department, certification, state, total years of experience, and age
- New questions added involved asking the respondents the geographic areas their facilities are located, whether it is from an:
 - urban area (defined as 50,000 or more people);
 - urban cluster (defined as areas with at least 2500 and less than 50,000 people)
 - rural (defined as areas with 2,500 or less people)

2017 ASCP Wage Survey Demographics

Gender

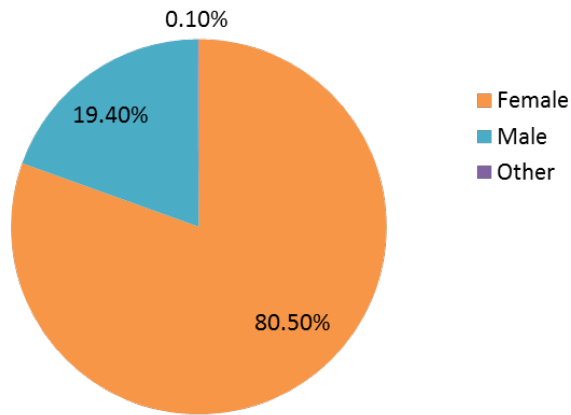


Figure 1. Percent distribution of all survey respondents by gender.

Ethnicity

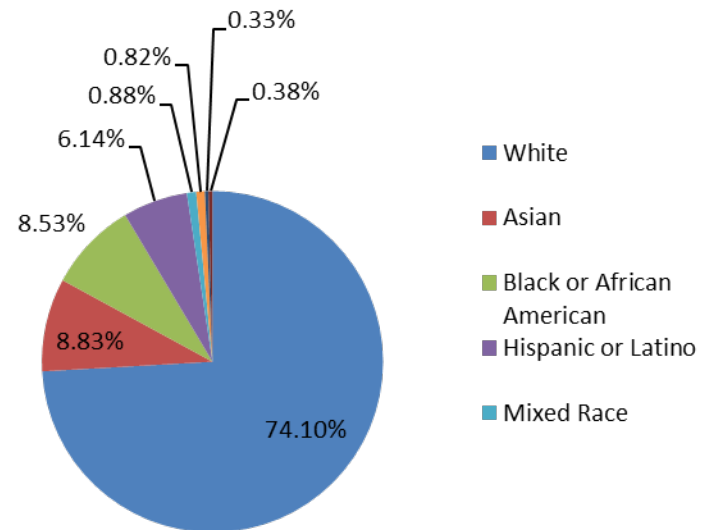
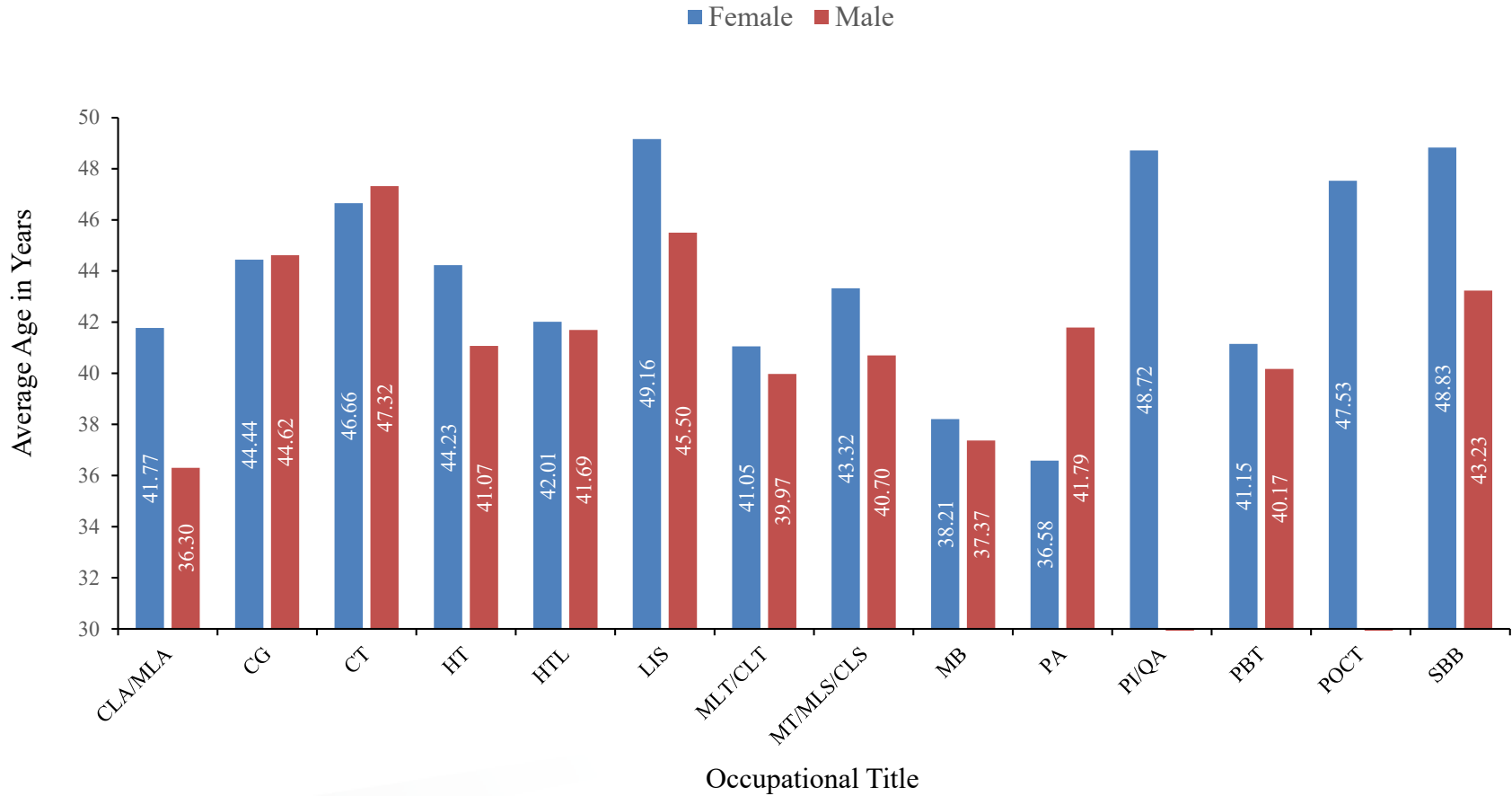


Figure 2. Percent distribution of all survey respondents by ethnicity.

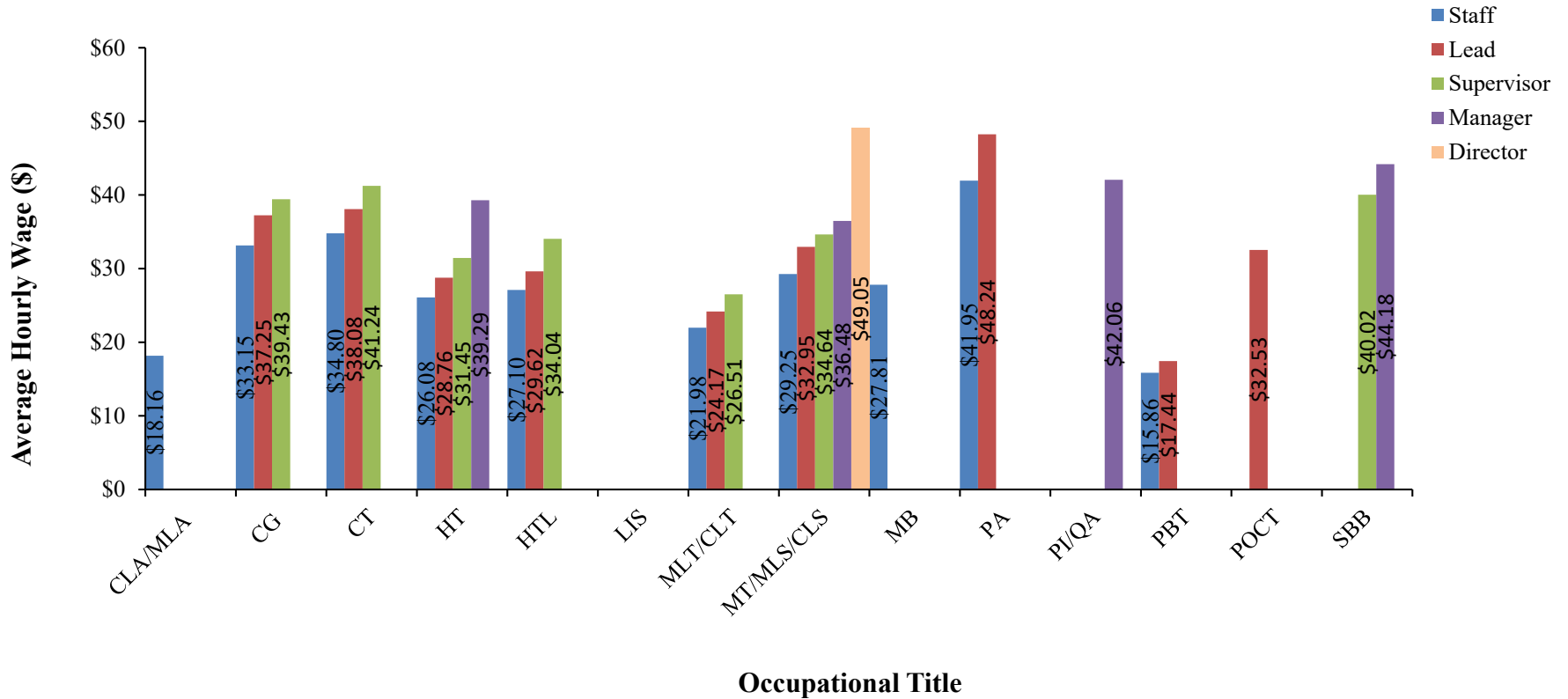
Key Findings

Age Group in Years	N	%
18-24	543	4.05%
25-34	3783	28.20%
35-44	3042	22.68%
45-54	2876	21.44%
55-64	2937	21.90%
65-74	226	1.68%
75+	6	0.04%

Key Findings



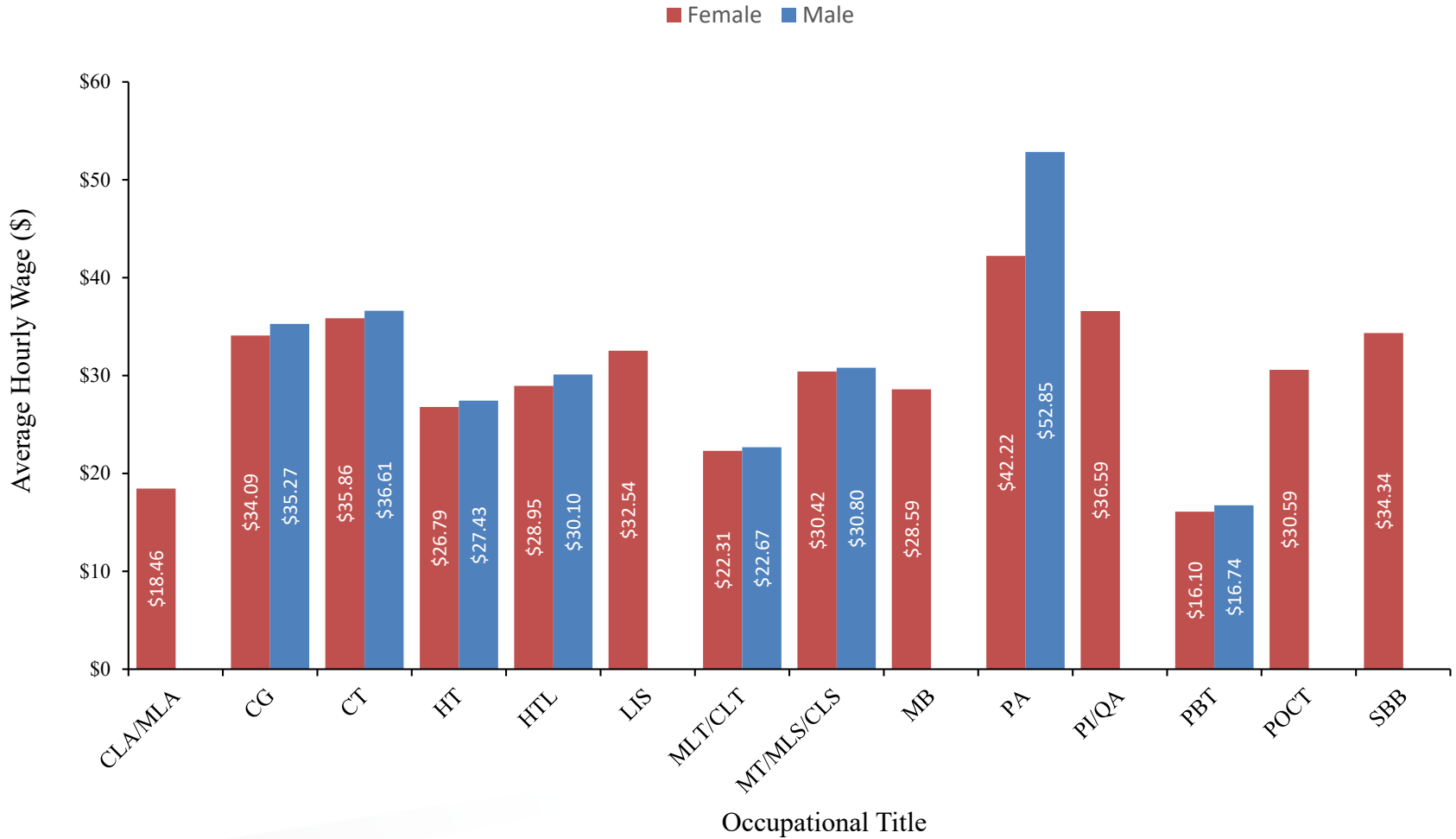
Key Findings



Key Findings

Occupational Title	Average Hourly Wage Overall	Average Hourly Wage Urban area (UAs)	Average Hourly Wage Urban cluster (UCs)	Average Hourly Wage Rural
CLA/MLA	\$18.49	\$18.97	\$17.43	N/A
CG	\$34.21	\$34.35	\$33.66	N/A
CT	\$36.10	\$36.33	\$36.00	N/A
HT	\$26.96	\$27.43	\$25.94	N/A
HTL	\$29.12	\$29.78	\$27.65	N/A
LIS Personnel	\$33.77	\$35.94	N/A	N/A
MLT/CLT	\$22.38	\$22.93	\$21.84	\$21.75
MT/MLS/CLS	\$30.49	\$31.09	\$29.35	\$28.77
MB	\$28.66	\$28.94	N/A	N/A
PA	\$43.57	\$42.82	\$45.52	N/A
PI/QA Personnel	\$36.80	\$39.20	N/A	N/A
PBT	\$16.17	\$16.73	\$15.70	\$14.98
POCT Personnel	\$31.11	\$32.15	N/A	N/A
SBB	\$34.89	\$35.55	N/A	N/A




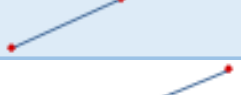




Key Findings



Percent Change in Overall Hourly Wage for Staff between 2015 and 2017

Staff	2013	2015	2017	% Change 2015 to 2017	Trend
Clinical Laboratory Assistant (CLA) / Medical Laboratory Assistant (MLA)	\$16.03	\$16.45	\$18.16	10.39%	
Cytotechnologist (CT)	\$31.45	\$32.39	\$34.80	7.43%	
Histotechnician (HT)	\$23.96	\$24.41	\$26.08	6.82%	
Cytogenetic Technologist (CG)	\$28.63	\$31.10	\$33.15	6.59%	
Phlebotomist (PBT)	\$15.60	\$14.97	\$15.86	5.93%	
Medical Laboratory Technician (MLT) or Clinical Laboratory Technician (CLT)	\$20.49	\$20.89	\$21.98	5.21%	
Medical Technologist (MT), Medical Laboratory Scientist (MLS) or Clinical Laboratory Scientist (CLS)	\$27.13	\$27.90	\$29.25	4.85%	
Molecular Biologist (MB)	\$26.96	\$27.45	\$27.81	1.30%	
Histotechnologist (HTL)	\$26.63	\$26.82	\$27.10	1.05%	
Pathologists' Assistant (PA)	\$46.32	\$43.30	\$41.95	-3.11%	

Percent Change in Overall Hourly Wage for Leads between 2015 and 2017

Lead	2013	2015	2017	% Change 2015 to 2017	Trend
Cytotechnologist (CT)	\$35.20	\$34.74	\$38.08	9.61%	
Cytogenetic Technologist (CG)	\$32.22	\$35.51	\$37.25	4.89%	
Medical Technologist (MT), Medical Laboratory Scientist (MLS) or Clinical Laboratory Scientist (CLS)	\$30.81	\$31.54	\$32.95	4.48%	
Phlebotomist (PBT)	\$16.71	\$16.96	\$17.44	2.84%	
Histotechnician (HT)	\$26.81	\$28.01	\$28.76	2.66%	
Medical Laboratory Technician (MLT) or Clinical Laboratory Technician (CLT)	\$22.38	\$23.55	\$24.17	2.63%	
Pathologists' Assistant (PA)	-	\$47.81	\$48.24	0.90%	
Histotechnologist (HTL)	\$28.76	\$30.51	\$29.62	-2.92%	

Percent Change in Overall Hourly Wage for Supervisors between 2015 and 2017

Supervisor	2013	2015	2017	% Change 2015 to 2017	Trend
Specialist in Blood Banking (SBB)	\$34.44	\$34.43	\$40.02	16.24%	
Cytotechnologist (CT)	\$37.09	\$36.95	\$41.24	11.61%	
Histotechnologist (HTL)	\$32.41	\$31.91	\$34.04	6.68%	
Medical Laboratory Technician (MLT) or Clinical Laboratory Technician (CLT)	\$22.60	\$25.33	\$26.51	4.67%	
Medical Technologist (MT), Medical Laboratory Scientist (MLS) or Clinical Laboratory Scientist (CLS)	\$32.82	\$33.43	\$34.64	3.63%	
Histotechnician (HT)	\$31.29	\$30.73	\$31.45	2.34%	
Cytogenetic Technologist (CG)	\$39.95	\$38.63	\$39.43	2.06%	

“I think medical technologists represent a very important part of patient care...I am proud of the work I do and the role I play in patient care and would like to see more fair wages across all the fields in medical technology as well as better opportunities for growth and education.”



“PLEASE continue to educate the public AND our young people that being a laboratory professional is a noble profession and is a necessary job in the coming years. We must have people educated in laboratory sciences - not just in the science field.”

Disparities in Rural Health Care: A Look at the Field of Laboratory Medicine

Disparities in Rural Health Care: A Look at the Field of Laboratory Medicine

- While much research exists on the maldistribution of physicians across the United States, there has been a lack of literature focusing on the challenges that impact the laboratory field in the same geographic areas.
- Recently published, *“Disparities in Rural Health Care: A Look at the Field of Laboratory Medicine”* in October issue of ASCP’s Critical Values aims to both address the challenges faced by rural laboratory professionals.
- Propose recommendations which directly address vacancy issues facing many laboratory facilities by improving education, recruitment, and retention across the United States, especially in rural areas

Findings

- Education and recruitment, retention, resource limitations, and service access are highlighted as the five main categories of challenges facing rural laboratory professionals.
- Understanding these challenges is an essential part of relieving the relative shortage and uneven distribution of qualified and certified laboratory professionals in rural areas.
- Rural healthcare is not a one-size-fits-all model.
- The paper emphasizes that community-specific healthcare plans, focused on partnership building and supportive of creative and sustainable alliances, will mitigate disparities between urban and rural areas.

Bureau of Labor Statistics

Aggregation of data for MLSs and MLTs

Bureau of Labor Statistics

- May 2017 Occupational Employment Statistics (OES) estimates showed occupational and industry aggregations.
 - OES program will replace 21 detailed occupations found within the 2010 Standard Occupational Classification (SOC) with 10 new aggregations of those occupations
 - **Clinical laboratory technologists and technicians (SOC broad occupation) replaces the detailed categories of Medical & clinical laboratory technologists (MLS) and Medical & clinical laboratory technicians (MLT)**

Bureau of Labor Statistics

- ASCP & BOC wrote Secretary R. Alexander Acosta, U.S. Department of Labor on 9/19/18.
- Asks:
 - Urge BLS to reverse its aggregation of data for MLSs and MLTs as soon as possible and to recalculate data for 2017.
 - Ask that the BLS expand its categories of lab personnel to more adequately reflect laboratory medicine employment patterns.
 - Request an opportunity to meet with BLS staff to discuss these issues.

Job Satisfaction Survey for Pathologists, Lab Professionals, and Residents

Job Satisfaction Survey for Pathologists, Lab Professionals, and Residents

- **What:** A study on job satisfaction, well-being, and burnout across the laboratory team (pathologists, laboratory professionals, and residents).
- **Why:** By looking across the lab, we will be able to identify both cross-cutting needs and needs that may be unique to all laboratory personnel.
- **Who:** The study is a collaborative effort between ASCP's Office of Scientific Engagement and Research (Washington, DC), Department of Evaluation Measurement, and Assessment (Chicago, IL), and Department of Marketing and Membership (Chicago, IL).
- **Where/how:** The study will utilize survey research, deployed online to a national sample of pathologists, laboratory professionals, and residents from ASCP's database
- **When:** Target publication will be fall 2019

QUESTIONS?

- Links to survey reports:
 - American Journal of Clinical Pathology (Volume 151, Issue 1)
2017 ASCP Wage Survey
<https://academic.oup.com/ajcp/article/151/1/29/5112880>
 - American Journal of Clinical Pathology (Volume 149, Issue 5)
2016-2017 ASCP Vacancy Survey
<https://academic.oup.com/ajcp/article/149/5/387/4924356>
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