

# LABORATORY ECONOMICS

*Competitive Market Analysis For Laboratory Management Decision Makers*

## Insourcing Trend Hot At Gastroenterology Groups

After a slowdown during the heights of the pandemic, more specialty groups are once again seeking to build their own in-office histology labs to boost practice revenue, according to Rod Glose, Chief Executive/Owner of Pathology Lab Solutions (Conshohocken, PA). His consulting firm is currently in the process of setting up histology labs at five different gastroenterology groups in the Northeast.

*Full details on page 5.*

## Fulgent Genetics Buys InformDX For \$170 Million

Fulgent Genetics (Temple City, CA) acquired Inform Diagnostics (Irving, TX) for \$170 million in cash on April 26. The transaction resulted in a return of roughly 3x for Avista Capital Partners (New York City) which acquired a majority stake (81%) in InformDX (formerly named Miraca Life Sciences) for \$55 million in 2017. With 550 employees, including some 45 pathologists, InformDx had been one of the largest non-publicly-traded pathology labs in the country.

*Continued on page 7.*

## Labcorp Acquires AtlantiCare's Lab Outreach Business

Labcorp has acquired select assets from AtlantiCare's clinical lab Outreach business, which serves the AtlantiCare Physician Group and Affiliated Physicians (Egg Harbor Township, NJ).

*Continued on page 6.*

## MT Salaries Skyrocket

### As Labs Struggle To Find MTs

Today, laboratories are offering salaries and sign-on bonuses to medical technologists (MTs) that have never been seen before. In the San Francisco Bay Area and San Diego, lab clients are paying salaries as high as \$150,000 and \$180,000 to attract staff MTs with sign-on bonuses of more than \$25,000, according to Ed Dooling, Chief Executive of Vanguard Healthcare Staffing (Sparta, NJ). He says MT salaries offered by independent labs in some markets have roughly doubled since the start of the pandemic.

*Continued on page 2.*

## CONTENTS

### BREAKING NEWS

GTCR Buys PathGroup;  
Dave King Becomes Chairman ..... 8

### HEADLINE NEWS

Insourcing Trend Hot at Gastroenterology Groups..... 1, 5  
Fulgent Genetics Buys InformDX for \$170 Million..... 1, 7  
Labcorp Acquires AtlantiCare's Lab Outreach Business..... 1, 6  
MT Salaries Skyrocket ..... 1-2

### SPOTLIGHT INTERVIEWS

Mayo Clinic Labs' William Morice, MD, PhD .....3-4

### MERGERS & ACQUISITIONS

EmeritusDX Acquires Freedom Pathology Partners .....4  
New CLIA Lab Formations Continue to Boom.....8

### ANATOMIC PATHOLOGY

Cigna To Cap PCCP Reimbursement At \$5 .....9  
Pathologist Compensation Up 6% .....9  
Pathology Lab Volume Rebounds to Pre-Pandemic Levels .....9

### COMPENSATION TRENDS

Public Lab CEOs Paid Average \$7 Million In 2021 ..... 10  
Median Lab Employee Paid \$74K .... 10  
Public Lab CEO Compensation Table ..... 11

### FINANCIAL

Versant Diagnostics Raises \$100 Million .....4  
Lab Stocks Plunge 45% YTD..... 12

## MT Salaries Skyrocket As Labs Struggle To Find MTs *(cont'd from page 1)*

PCR analyzers and Covid-19 test reagents were the bottleneck in the early months of the pandemic, but staffing shortages have proven to be a bigger and more persistent challenge. The pipeline of new MTs was disrupted as many labs temporarily shut down their clinical training rotations during the pandemic. In addition, older MTs retired to avoid exposure or got burned out due to extraordinary overtime demands. A huge increase in the number of new lab formations resulted in an intense competition for MTs, according to Dooling.

For example, independent labs in Toledo, Ohio are offering MT sign-on bonuses of \$20,000 to \$30,000 with salaries in the range of \$80,000 to \$90,000, according to Mason Shaw, Scientific Talent Recruiter at Vanguard. He notes that pre-pandemic salaries had ranged between \$50,000 and \$75,000 in this market.

Shaw notes that the length of time a new MT hire must stay before a sign-on bonus is paid varies by the lab company. “I have heard of a full year, 6 months, or 3 months, it depends on the offer and the negotiation.”

In addition, Shaw says that traveling MTs filling 3- to 12-month temporary positions are now being paid as much as \$90 per hour. Pre-pandemic rates had averaged roughly \$50-65 per hour for traveling MTs.

“Lab employees had always been treated like the red-headed stepchildren of healthcare. But the pandemic has raised their recognition and pay,” says Shaw.

Separately, Kevin Hunter, President of Colaborate (Tampa, FL), says his consulting firm helped set up 83 new Covid-19 PCR testing labs during the past two years. “We have seen \$35,000 sign-on bonuses, significant relocation packages and starting salaries in the \$125,000 range.”

For example, Hunter says that an independent lab in Dallas recently offered a salary of \$125,000 plus a \$25,000 sign-on bonus and six week’s paid vacation to hire an MT. “While some of this can be attributed to the retirement wave, the pandemic has put a tremendous burden on an overworked staff, and with 50,000 new CLIA labs started since the beginning of Covid, there just aren’t enough workers to go around.”

Finally, Vanguard’s Dooling says that lab staff overtime hours have recently begun to decline as Covid test volumes have fallen. Nonetheless, he does not see the heightened MT salaries reverting to pre-pandemic levels. “It looks like this is the new normal.”

### Anecdotal Examples of Staff Medical Technologist Pay

Location	Base Annual Salary	Sign-On Bonus
Dallas, TX	\$135,000	\$25,000
Omaha, NE	\$125,000	\$35,000
San Diego, CA	\$150,000-\$180,000	\$30,000
San Francisco, CA	\$150,000-\$180,000	\$27,500
Seattle, WA	\$110,000-\$140,000	\$25,000
South Florida	\$95,000-\$110,000	\$10,000
Toledo, OH	\$80,000-\$90,000	\$20,000-\$30,000

Source: *Laboratory Economics* from Vanguard Healthcare Staffing and Colaborate

## Spotlight Interview with Mayo Clinic Labs' William Morice, MD, PhD

**M**ayo Clinic Laboratories (Rochester, MN), which has 4,500 employees, performed about 27 million tests and generated approximately \$1 billion of revenue in 2021. *Laboratory Economics* recently spoke with Chair and President William Morice, MD, PhD, for an update on Covid-19 testing and other topics.



*William Morice,  
MD, PhD*

### **What's the status of Covid-19 PCR testing at Mayo?**

Last year Mayo performed 2.4 million Covid-19 PCR tests, down from 3.1 million tests in 2020. We peaked at approximately 14,000 tests per day earlier this year at the height of the omicron wave in January. Demand has since dropped dramatically to about 1,500 tests per day, although it has increased a bit recently as infections in our region are on the rise again. Over the longer term, I expect Covid-19 PCR testing will be mostly performed as part of a respiratory test panel.

### **What have you done with your spare capacity since demand for Covid-19 PCR testing has subsided?**

We've used up to seven different testing platforms for Covid-19 PCR testing. We're currently using Roche cobas 8800's for Covid and have redirected other systems to infectious disease testing. Some platforms have been sunset. During the acute phases of the pandemic, we had redirected lab staff into Covid testing. Our non-Covid test volumes are now back to pre-pandemic levels and our staff has been reallocated back to their original lab departments.

### **What are you seeing in terms of Covid-19 serology testing?**

The demand for serology testing never materialized as many expected. On average, for every ten Covid-19 PCR tests, we're doing only one serology test. As we move out of the acute phase of the pandemic, I think there will be a need to perform more serology and T-cell testing to determine who needs additional vaccine boosters. Understanding vaccine response and finding out who has developed durable immunity is important. I'm surprised there hasn't been a greater emphasis on this.

### **Are you having difficulty finding lab employees?**

Yes. Phlebotomy and histology positions are the toughest to fill.

### **How about for test reagents and lab supplies?**

We're starting to see some very heavy inflationary pressure for lab supplies—phlebotomy consumables, including tubes and butterfly needles for blood draws have become particularly scarce. I'm really concerned that pandemic lockdowns in Shanghai and Suzhou, China, will lead to further supply chain disruptions. These cities are home to some of the world's largest chemical reagent and lab consumables manufacturers.

### **Tell us about Mayo's lab expansion.**

To accommodate growth, Mayo Clinic is investing \$49 million to expand our clinical lab space in Rochester by roughly 40,000 square feet. Construction for the project has started and will continue through 2025. The lab expansion will be achieved by converting space from Mayo Clinic Lab's existing customer service, sales and marketing and IT support center on Superior Drive in Rochester. Most of this support staff is now working from home, which has freed up space to relocate five clinical lab departments from Mayo's downtown campus. It will also include new space for Mayo Clinic Biopharma Diagnostics, which supports product development for pharmaceutical, biotech, and IVD companies.

### **Where is Mayo in terms of digital pathology and AI?**

Mayo has made major investments in digital pathology. All of the histology cases in our own health system hospital in Eau Claire, Wisconsin, and 50% or more of our cases from our other hospitals in Min-

nesota, Florida and Arizona, are now being digitized and read by computer monitor. Adoption by our outside hospital clients has been much slower.

In terms of artificial intelligence, last year we hired Jason Hipp, MD, PhD, as Chair of the new Division of Clinical Informatics in Mayo Clinic's Department of Laboratory Medicine and Pathology. Previously, he led the Pathology Data Science & Innovation group at AstraZeneca.

We've started looking at developing and deploying AI algorithms for digital pathology—by both internal development and with outside vendors. Key questions before applying AI in clinical practice include: 1) how will this fit into pathologist workflows, in terms of efficiency gains and maintaining and validating new algorithms? And 2) will AI algorithms be regulated as laboratory-developed tests, or will they require FDA review?

### **Finally, what are your views on telehealth and lab testing?**

The use of telehealth visits, which pose challenges to lab specimen collection, rose during the pandemic. However, recently reported financial losses and reduced revenue expectations at the telehealth giant Teladoc are indicative of uncertainty about how much patients and payers will want to stick with this delivery model as the pandemic wanes.

## **EmeritusDX Acquires Freedom Pathology Partners**

**E**meritusDX (Irvine, CA) has acquired Freedom Pathology Partners (Conshohocken, PA) from its owner Rodney Glose. Freedom Pathology is a small CAP-accredited pathology lab located just outside of Philadelphia.

Glose now plans to focus on his other business, Pathology Lab Solutions (Conshohocken, PA), a consulting company that helps urology, gastroenterology and dermatology groups set up in-office pathology labs (see page 5).

Freedom Pathology's Joshua Cantor, MD, will remain as Laboratory Director for EmeritusDX.

EmeritusDX was started in early 2021 by long-time pathology lab executives, Robert Embree and Jason Allchin (see *LE*, June 2021). EmeritusDX is focused on surgical pathology and FISH testing, and recently began marketing a proprietary PCR-based urinary tract infection test panel under the brand name UTIDX.

Chief Executive Embree says that EmeritusDX has added more than 30 clients over the past 18 months. The company has grown to 40 employees, including four pathologists and nine sales reps. Recent hires include Jacki Rodriguez, Laboratory Manager for FISH and molecular testing, and Caleb Constable, Laboratory Manager for anatomic pathology services. Both were formerly with Pathnostics.

## **Versant Diagnostics Raises \$100 Million**

**V**ersant Diagnostics (Oak Brook, IL) says that it raised a total of \$100 million late last year to fund its acquisition strategy and expand its staff. The \$100 million included a combination of equity from Iron Path Capital (Nashville, TN) and debt from Principal Alternative Credit (Des Moines, IA).

Versant acquired two hospital-based pathology groups in the Chicago area last year—Alliance Pathology Consultants and Addison Central Pathology (see *LE*, November 2021). Chief Executive Jim Billington says more acquisitions are in the pipeline.

In addition, Versant recently announced several key executive hires. Rob Albert has become Chief Development Officer after serving for 20+ years as Vice President and General Manager of the Northwest Region for Labcorp. In addition, John Horton has been hired as Vice President of Sales and Marketing after nearly eight years as the Senior Area Director for the western region of the U.S. for Progenity Inc.

**Insourcing Trend Hot At Gastroenterology Groups** (*cont'd from page 1*)

Rod Glose founded Pathology Lab Solutions (PLS) in 2008. Over the past 14 years, PLS has helped set up more than 75 in-office histology labs, including at approximately 65 gastroenterology, five urology, four dermatology and one podiatry practice. Below we summarize his experience and views on in-office histology labs.



Rod Glose

**How did you get started?**

I began my career in the Army as a lab technician in 1986. I then worked as a cytotech at Reading Hospital and then as an Anatomic Pathology Lab Manager at New York Methodist Hospital. I joined the pod lab operator Uropath in 2007 as a lab administrator for their pod lab center in Philadelphia. After CMS effectively outlawed pod labs in 2008, I started PLS.

PLS helped set up its first two in-office histology labs in Pennsylvania in mid-2008 at Urologic Associates of Lancaster, now part of Keystone Urology Specialists, and at Pennsylvania Gastroenterology. Both of these groups still operate their own histology labs today.

**Why is in-office histology so popular at gastroenterology groups?**

Some older gastroenterologists near retirement are building their own histology labs to boost their practice revenue prior to a sale. I've seen other gastroenterology groups build their own labs as a means to attract new gastroenterologists, which are hard to find, into their practice.

**What about at urology and dermatology groups?**

The introduction of the bundled test code (G0416) for prostate biopsies, effective in 2014, reduced pathology lab reimbursement for the traditional 12-core prostate biopsy exam by roughly 50%. This significantly reduced the profitability of in-office histology labs at urology groups and halted activity.

However, I am beginning to see more urology groups add inhouse PCR urine testing for urinary tract infections (UTIs). These panel tests don't require a pathologist interpretation and bring \$500 to \$600 or higher of revenue per patient, depending on the number of pathogens tested.

Some larger dermatology groups have inhouse pathology labs and others get TC-only services so they can read their own slides. However, most dermatologists tend to focus on Mohs surgery which is simple enough to start and becomes their main source of ancillary income. Derm groups also tend to be smaller.

**Are any other specialties insourcing pathology services?**

A handful of very large Ob/Gyn and oncology practices have built their own labs. But the slide volumes are not high enough at most groups to make a lab feasible.

**Can you describe the economics of opening an in-office histology lab?**

After signing a one-year service agreement, we can build, CLIA certify and open a full-service histology lab at a practice within six months. The floor space required is about 500-700 square feet, including the lab, pathologist's office and storage.

Using a combination of refurbished and new equipment, equipping a new lab typically costs between \$110,000 and \$150,000, including a fume-hooded grossing station, tissue processor, microtome, IHC stainer, etc. The total cost to open an in-office histology lab, including consulting and architect fees, construction/remodeling, furniture and lab equipment and initial supplies ranges between \$320,000 and \$370,000.

Lab staffing for a seven-doctor gastroenterology group would include one histotechnologist and one lab assistant. A contracted pathologist will generally visit the practice 2-3 times per week to perform professional interpretations at a fee equivalent to 50% of Medicare PC rates, although this varies and is sometimes set at a percentage of collections.

A seven-doctor gastroenterology group can be expected to generate roughly 11,000 billable CPT 88305s per year plus 3,000 billable IHC and special stains (CPT 88341, 88342, 88312 and 88313). This equates to approximately \$1 million of annual revenue. Pretax margins average between 30% and 40% depending on payer mix, pathologist compensation and staff salaries.

**Do these financial incentives lead to overutilization?**

In the past, I did see upticks in utilization at some urology groups, but I've never seen it in gastroenterology.

**Did the pandemic slow the opening of new office-based pathology labs?**

A little bit, but we were still able to open full global histology labs in West Hartford, Connecticut, Birmingham and Tuscaloosa, Alabama, and Long Island, New York over the past two years. During the height of pandemic lockdowns, the biggest delays were related to building zoning permit approvals.

**What's your advice for local pathology groups dealing with client insourcing?**

Some pathology groups have embraced it. Proactive pathologists that have worked with their specialty group clients have often been able to negotiate PC contracts giving them full professional reimbursement.

I've also seen hospital administrators stubbornly dismiss in-office histology labs under the erroneous belief that hospital-based technical labs are money losers. Unfortunately, this can also lead to lost PC volume for hospital-based pathologists.

Some hospital-based pathology groups have very talented pathologists, but that message is never marketed to local practices. If a fellowship-trained GI pathologist were to reach out to local practices regarding possible business opportunities, it could be a win-win.

**Why did you sell your independent lab Freedom Pathology Partners?**

I formed Freedom Pathology in early 2014 as an independent pathology lab with a focus on providing technical slide prep services to PC-only groups (see page 4). But it never really took off, so I decided to focus on PLS.

**Labcorp Acquires AtlantiCare's Lab Outreach Business** *(cont'd from page 1)*

AtlantiCare operates two hospitals, AtlantiCare Regional Medical Center (Atlantic City, NJ) and AtlantiCare Regional Medical Center, Mainland Campus (Pomona, NJ), with a combined 593 beds.

AtlantiCare's clinical lab outreach business provides testing services to AtlantiCare Physician Group and Affiliated Physicians, which include 1,000 physicians at 100 locations in southern New Jersey. This testing will be shifted to Labcorp's regional laboratory in Raritan, NJ.

As part of the deal, many of AtlantiCare's physician office phlebotomy sites and outpatient collection services will now be operated by Labcorp. The agreement does not involve anatomic pathology services.

## **Fulgent Genetics Buys InformDX For \$170 Million** (*cont'd from page 1*)

Over the past four years, Avista installed a new management team at InformDx and shut down underperforming lab divisions, including Lakewood Pathology in New Jersey and Plus Diagnostics in California. InformDx also expanded its capabilities with the acquisition of Therapath, a leading neuropathology laboratory based in New York, and expanded its dermatopathology lab operations (formerly known as Cohen Dermatopathology) in Massachusetts.

InformDx currently provides pathology services to about 1,300 clients, including 600 gastroenterology clients, representing a total of more than 2,700 physicians. It has labs at its Irving, Texas headquarters, as well as in Needham, Massachusetts, New York City and Phoenix. Annual revenue at InformDx is estimated to be more than \$100 million, excluding Covid-19 testing.

Fulgent has seen its revenue boom from Covid-19 PCR testing. Fulgent reported net income of \$507 million in 2021 versus \$214 million in 2020; revenue increased by 135% to \$993 million, including \$900 million from Covid-19 testing and \$93 million from cancer testing. As of March 31, 2022, Fulgent's balance sheet showed \$1.1 billion of cash and investments.

Fulgent says that InformDx's gastroenterology clients will be a focal point for marketing its new multi-analyte blood test for early liver cancer detection (aka HelioLiver).

The InformDx deal follows Fulgent's \$60 million acquisition of Cytometry Specialists Inc. (CSI Labs-Alpharetta, GA) in August 2021 (see *LE*, August 2021).

Fulgent has named Chris Wicker as Vice President and General Manager of CSI Labs and InformDx. Wicker was formerly the Chief Executive and Chief Financial Officer at CSI.

Wicker is also expected to oversee Fulgent's brand new 25,000-square-foot pathology lab in El Monte, California, which will market immunohistochemistry, flow cytometry, cytogenetics, FISH and single gene testing to hematologists and oncologists.

## **Abbreviated History of Inform Diagnostics**

1996	Founded as Pathology Partners Inc. with initial focus on gastrointestinal pathology.
May 2005	Sold to an investment group led by David Halbert. Renamed Caris Diagnostics.
June 2007	Expands into dermatopathology through \$80 million acquisition of Cohen Dermatopathology in Massachusetts.
January 2008	Buys Molecular Profiling Institute in Phoenix for \$40 million.
November 2011	Sells anatomic pathology business to Japanese IVD company Miraca Holdings for \$725 million. Renamed Miraca Life Sciences. Halbert keeps control of the molecular profiling business under the name Caris Life Sciences.
October 2013	Buys Plus Diagnostics adding labs in Union, NJ, Irvine, CA and Houston, TX.
November 2017	New York City private equity firm Avista Capital Partners buys 81% of Miraca Life Sciences for \$55 million; Miraca Holdings keeps 19%. MLS is renamed Inform Diagnostics.
April 2018	Inform Diagnostics expands into neuropathology through acquisition of Therapath in New York City.
January 2019	Agreed to pay \$63.5 million to resolve DOJ allegations that it violated the Anti-Kickback Statute and the Stark Law by providing referring physicians with subsidies for EHR systems. The alleged illegal activity took place while under ownership by Miraca Holdings, which paid the settlement amount.
April 2022	Sold to Fulgent Genetics for \$170 million in cash.

Source: *Laboratory Economics*

## GTCR Buys PathGroup; Dave King Becomes Chairman

Private equity firm GTCR (Chicago) has made a majority investment in PathGroup Holdings (Brentwood, TN) in partnership with Founder and CEO Ben Davis, MD and the PathGroup management team, who have made a substantial reinvestment in the company. Existing PathGroup investors Pritzker Private Capital and Vesey Street Capital Partners will retain a minority ownership stake in the company.

As part of the deal, Dave King, age 65, the former Chairman and CEO of Labcorp, will become Chairman of PathGroup. King retired as Labcorp's CEO in October 2019 and resigned from the company's Board in May 2020. He became an Operating Partner at Pritzker Private Capital in August 2020.

PathGroup, which has 2,750 employees, including 235 pathologists, is one of the largest independent lab companies in the United States. Annual revenue at PathGroup is estimated to be more than \$500 million.

## New CLIA Lab Formations Continue To Boom

The extraordinary demand for Covid-19 testing led to a record number of new CLIA-certified lab formations last year, according to the latest CMS data analyzed by *Laboratory Economics*. More than 33,000 new CLIA lab certificates were issued in 2021. This broke the previous record of 28,600 new CLIA labs in 2020. The boom has created a huge demand for lab workers that had already been in short supply before the pandemic (see pages 1-2).

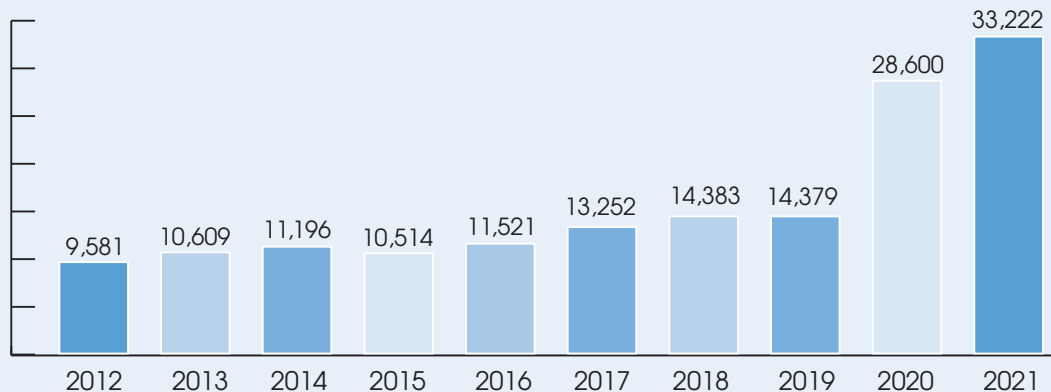
Among the 61,822 new CLIA labs created in 2020 and 2021 were:

- 56,981 new labs were issued a **Certificate of Waiver** to perform only waived tests. As defined by CLIA, waived tests are categorized as “simple laboratory examinations and procedures that have an insignificant risk of an erroneous result.” Examples include dipstick urinalysis, urine pregnancy tests, blood glucose tests and Covid-19 point-of-care antigen tests.
- 1,609 new labs were issued certificates for **Provider-Performed Microscopy (PPM)** procedures, which include certain moderate-complexity microscopy tests commonly performed by physicians during patient office visits.
- 3,232 new labs were issued CLIA certificates to perform **Nonwaived** (moderate- or high-complexity) testing.

In terms of lab type, there were 15,351 new physician office-based labs certified over the past two years, 2,442 new independent labs and 349 new hospital-based labs. In addition, 10,055 new pharmacy-based labs were opened as well as 6,625 new labs at nursing homes and assisted-living facilities.

There was a grand total of 310,888 CLIA-certified labs in operation as of December 31, 2021.

### Annual New CLIA Lab Formations



Source: *Laboratory Economics* from CMS/CLIA Files



## Cigna To Cap PC Clinical Lab Test Reimbursement At \$5

Cigna says it will cap professional component reimbursement to pathologists who oversee clinical lab tests at \$5 per test effective July 1, 2022. The announcement was made by Cigna in a letter to providers dated April 1, 2022. Cigna said that reimbursement will be capped for CPT codes billed with a 26 modifier, when the professional/technical component (PC/TC) payment indicator is 3 or 9. This applies to all clinical laboratory CPT codes. This policy follows Cigna's previous attempts to cease payment for pathologist PC pay for clinical lab tests (see *LE*, October 2021).

## Pathologist Compensation Up 6% In 2021

Pathologist compensation, including salary and bonus, averaged \$334,000 in 2021, up 5.6% from \$316,000 in 2020, according to the latest Medscape Physician Compensation Report 2022. Among other findings, 60% of pathologists said they felt fairly compensated and 86% of pathologists said they would choose the same specialty again. The latest Medscape survey was compiled from more than 13,064 physician responses, including approximately 260 pathologists, from an online survey conducted in October 2021 to January 2022.

### Annual Physician Compensation by Specialty (\$000)

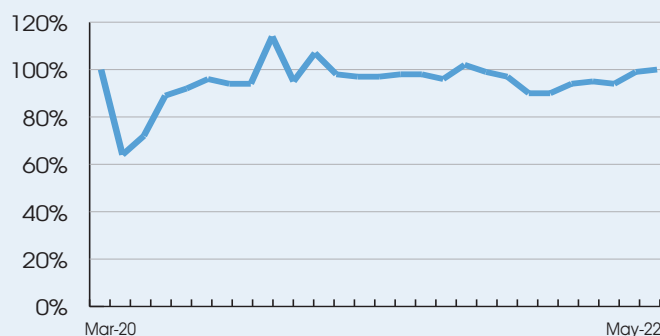
	2021	2020	2019	2018	2017	2016	5-Year CAGR
Plastic Surgery	\$576	\$526	\$479	\$471	\$501	\$440	5.5%
Orthopedics	557	511	511	482	497	489	2.6%
Urology	461	427	417	408	373	400	2.9%
Gastroenterology	453	406	419	417	408	391	3.0%
Dermatology	438	394	411	419	392	386	2.6%
Oncology	411	403	377	359	363	330	4.5%
Ob/Gyn	336	312	308	303	300	286	3.3%
Pathology	334	316	318	308	286	293	2.7%
Family Medicine	255	236	234	231	219	209	4.1%
Pediatrics	244	221	232	225	212	202	3.9%

Source: Medscape Physician Compensation Reports 2017-2022

## Pathology Lab Volume Rebounds To Pre-Pandemic Levels

Pathology lab test volumes, excluding Covid-19 testing, have recovered to pre-pandemic levels following a dip in November-December 2021 due to the Omicron surge, according to data collected by XIFIN Inc. (San Diego, CA). The latest reading from XIFIN's Laboratory Volume Index shows that non-Covid volumes at pathology labs and groups were at 100% of pre-pandemic levels as of mid-May. Volumes had dipped to as low as 90% in November and December. The XIFIN index is based on lab test billing claims it processes and includes data from four out of five top integrated delivery networks (IDNs) and 10 of the top 12 public labs nationwide.

### Pathology Lab Testing Volume as % of Pre-Pandemic Baseline



Source: XIFIN Inc.

## Public Lab CEOs Paid Average \$7 Million In 2021

The top 27 executives at 23 publicly traded lab companies were paid an average of \$6.7 million each last year, according to an analysis of shareholder proxy statements by *Laboratory Economics*. Altogether, the 27 CEOs earned a total of \$181 million, including a massive \$142 million from stock and option awards.

The highest paid lab executive was **Steve Chapman**, 43, President and CEO of **Natera Inc.** (Austin, TX), which is focused on non-invasive prenatal testing (NIPT) and carrier screening. Chapman received total compensation of \$23.3 million, including salary of \$525,732, stock and option awards of \$22.4 million, a bonus of \$391,153 and other compensation of \$8,700. Natera recorded a net loss of \$472 million in 2021 versus a net loss of \$230 million for the previous year; revenue increased by 60% to \$625 million.

The next highest paid CEO was **Adam Schechter**, 57, Chairman & CEO of **Labcorp** (Burlington, NC), who earned total compensation of \$20.6 million. Schechter received a salary of \$1.2 million, stock and option awards of \$15 million, bonus of \$3.8 million and other compensation of \$432,007. Labcorp recorded net income of \$2.4 billion in 2021 versus \$1.6 billion for the previous year; revenue increased by 15% to \$16.1 billion.

**Quest Diagnostics' Stephen Ruskowski**, 64, Chairman & CEO, earned total compensation of \$14.6 million. Ruskowski received a salary of \$1.3 million, stock and option awards of \$10 million, bonus of \$2.7 million and other compensation of \$367,810. Quest recorded net income of \$2 billion in 2021 versus \$1.4 billion for the previous year; revenue increased by 14% to \$10.8 billion.

The co-Chief Executives at **Guardant Health** (Redwood City, CA) were the lowest paid lab executives. **Helmy Eltoukhy, PhD**, 43, and **AmirAli Talasaz, PhD**, 42, were each paid only \$1 in salary plus roughly \$13,000 in other compensation in 2021. However, this followed the sky-high compensation of \$114 million the pair each received in 2020 (see *LE*, June 2021). Guardant recorded a net loss of \$385 million in 2021 versus a net loss of \$246 million in 2020; revenue increased by 30% to \$374 million.

### \$74K Median Lab Employee Compensation

Separately, data from six of the largest publicly traded lab companies shows they paid their combined 136,778 employees a median average of \$73,936 each in 2021. Median compensation at these six companies increased by an average of 4.4% per year between 2017 and 2021. The fastest increases were at Quest Diagnostics (8.7% per year) and Labcorp (8.5% per year). Exact Sciences had the highest median employee compensation of \$128,893, followed by Myriad Genetics at \$74,021 and NeoGenomics at \$74,000.

### Median Employee Compensation at Six Big Labs

Company	Employees (FTEs)*	2021	2020	2019	2018	2017	4-Yr CAGR
Labcorp (Diagnostics & Drug Development)	75,500	\$57,614	\$41,670	\$41,834	\$43,230	\$41,609	8.5%
Quest Diagnostics	45,000	67,206	71,645	53,492	46,749	48,194	8.7%
Exact Sciences	6,500	128,893	110,616	113,869	98,783	98,724	6.9%
Opko Health (Diagnostics & Drug Development)	5,500	41,879	42,848	41,445	38,661	38,661	2.0%
Myriad Genetics	2,278	74,021	89,031	77,814	77,814	77,000	-1.0%
NeoGenomics	2,000	74,000	76,844	74,903	70,258	69,825	1.5%
Totals & Weighted Median Average	136,778	\$73,936	\$72,109	\$67,226	\$62,583	\$62,336	4.4%

\*Part-time employees were counted as ½ FTE.

Source: *Laboratory Economics* from company proxy statements

## 2021 Public Laboratory CEO Compensation

Company/Executive	Salary	Value of Stock & Option Awards	Bonus & Incentives	Other Comp*	Total Compensation
<b>Aspira Women's Health</b>					
Valerie Palmieri, 60, President & CEO	\$439,231	\$2,117,250	\$135,000	\$682	\$2,692,163
<b>Biocept</b>					
Michael Nall, 59, President & CEO	513,000	645,517	15,000	11,974	1,185,491
<b>Biodesix</b>					
Scott Hutton, 50, President & CEO	490,285	4,068,265	95,911	102	4,654,563
<b>CareDx Inc.</b>					
Reginald Seeto, 50, President & CEO	540,000	5,576,681	972,000	1,440	7,090,121
<b>Castle Biosciences</b>					
Derek J. Maetzold, 60, President & CEO	625,000	5,156,957	722,500	17,400	6,521,857
<b>DermTech Inc.</b>					
John Dobak, MD, 56, Chief Executive Officer	580,000	2,598,765	203,000	413	3,382,178
<b>Enzo BioChem</b>					
Elazar Rabbani, PhD, 78, Chairman & CEO	611,000	0	0	219,901	830,901
<b>Exact Sciences</b>					
Kevin Conroy, 56, Chairman & CEO	962,668	12,266,752	1,266,871	135,949	14,632,240
<b>Exagen</b>					
Fortunato Ron Rocca, 60, President & CEO	594,707	1,298,596	537,625	8,700	2,439,628
<b>Fulgent Genetics</b>					
Ming Hsieh, 66, Chairman & CEO	664,303	0	5,000,000	0	5,664,303
<b>Guardant Health</b>					
Helmy Eltoukhy, PhD, 43, Chairman & Co-CEO	1	0	0	13,664	13,665
AmirAli Talasaz, PhD, 42, Co-Chief Executive	1	0	0	13,270	13,271
<b>Interpace Biosciences</b>					
Thomas W Burnell, 60, President & CEO	425,000	0	160,000	3,352	588,352
<b>Invitae</b>					
Sean George, PhD, 48, President & CEO	500,000	8,328,101	0	153	8,828,254
<b>Labcorp</b>					
Adam Schechter, 57, Chairman & CEO	1,277,381	15,040,149	3,802,068	432,007	20,551,605
Mark Schroeder, 61, Exec. VP, Pres. Lab Operations	521,532	2,398,369	1,034,877	35,851	3,990,629
<b>Myriad Genetics</b>					
Paul Diaz, 60, President & CEO	1,000,000	9,869,920	1,779,000	138,749	12,787,669
<b>Natera Inc.</b>					
Steve Chapman, 43, President & CEO	525,732	22,417,562	391,153	8,700	23,343,147
<b>NeoGenomics</b>					
Douglas VanOort, 66, Chairman & CEO (former)	649,327	6,577,675	0	0	7,227,002
Mark Mallon, 59, Chief Executive	487,981	10,500,000	407,900	83,974	11,479,855
<b>Opko Health Inc.</b>					
Phillip Frost, MD, 85, Chairman & CEO	960,000	1,132,000	0	11,600	2,103,600
Jon Cohen, MD, 68, Exec. Chmn., BioReference Labs	575,000	1,698,000	1,150,000	11,600	3,434,600
<b>ProPhase Labs</b>					
Ted Karkus, 62, Chairman & CEO	590,000	0	325,000	26,400	941,400
<b>Psychemedics</b>					
Raymond Kubacki, Jr., 77, Chairman & CEO	430,702	150,650	42,500	0	623,852
<b>Quest Diagnostics</b>					
Stephen Rusckowski, 64, Chairman & CEO	1,238,462	10,256,035	2,695,511	367,810	14,557,818
<b>Sema4 Holdings</b>					
Eric Schadt, PhD, 57, CEO & Director	650,000	14,566,303	513,000	41,533	15,770,836
<b>Veracyte Inc.</b>					
Marc Stapley, 52, Chief Executive	350,000	5,091,440	297,500	3,000	5,741,940
<b>Totals, 27 executives</b>	<b>\$16,201,313</b>	<b>\$141,754,987</b>	<b>\$21,546,416</b>	<b>\$1,588,224</b>	<b>\$181,090,940</b>
<b>Averages, 27 executives</b>	<b>\$600,049</b>	<b>\$5,250,185</b>	<b>\$798,015</b>	<b>\$58,823</b>	<b>\$6,707,072</b>

\*Other compensation includes reimbursement for financial planning services, car allowance, personal liability insurance premiums, executive physical exams, home security systems, country club memberships, personal use of company jets and other perks.

Source: *Laboratory Economics* from company proxy statements

## Lab Stocks Down 45% Year To Date

Twenty-four lab stocks have dropped by an unweighted average of 45% year to date through May 13. In comparison, the S&P 500 Index has fallen by 16% so far this year. The top-performing lab stocks thus far in 2022 have been ProPhase Labs, down 2%; Psychomedics, down 8%; and Myriad Genetics, down 19%. Labcorp is down 22% and Quest Diagnostics is off 21%.

Company (ticker)	Stock Price 5/13/22	Stock Price 12/31/21	2022 Price Change	Enterprise Value (\$ millions)	Enterprise Value/Revenue	Enterprise Value/EBITDA
ProPhase Labs (PRPH)	\$7.03	\$7.17	-2%	\$111	2.9	NA
Psychomedics (PMD)	6.44	\$7.02	-8%	\$44	1.9	17.4
Myriad Genetics (MYGN)	22.37	27.60	-19%	1,860	2.6	NA
Quest Diagnostics (DGX)	136.39	173.01	-21%	19,775	1.9	7.3
Labcorp (LH)	244.62	314.21	-22%	32,074	1.9	6.9
Sonic Healthcare (SHL.AX)*	36.05	46.63	-23%	19,395	2.1	8.1
Enzo Biochem (ENZ)	2.35	3.21	-27%	140	1.2	132.8
Exact Sciences (EXAS)	52.29	77.83	-33%	11,269	6.1	NA
Opko Health (OPK)	3.03	4.81	-37%	2,205	1.2	31.3
CareDx (CDNA)	26.24	45.48	-42%	1,287	4.3	NA
Fulgent Genetics (FLGT)	54.45	100.59	-46%	1,282	1.3	1.9
DermTech Inc. (DMTK)	7.84	15.80	-50%	154	14.2	NA
Interpace Biosciences (IDYG)	3.55	\$7.47	-52%	89	2.2	NA
Castle Biosciences (CSTL)	19.71	42.87	-54%	246	2.6	NA
Sema4 Holdings (SMFR)	2.05	4.46	-54%	474	2.2	NA
Veracyte (VCT)	18.16	41.20	-56%	1,978	10.6	NA
Biocept (BIOC)	1.54	3.62	-57%	10	0.2	NA
Exagen (XGN)	4.83	11.63	-58%	100	2.1	NA
Natera (NTRA)	34.2	93.39	-63%	7,690	13.6	NA
Guardant Health (GH)	35.91	100.02	-64%	6,726	18.0	NA
Biodesix (BDSX)	1.82	5.29	-66%	28	0.5	NA
NeoGenomics (NEO)	9.74	34.12	-71%	4,105	8.5	NA
Invitae (NVTA)	4.32	15.27	-72%	3,726	8.6	NA
Aspira Women's Hlth (AWH)	0.45	1.77	-75%	38	5.6	NA
Unweighted Averages			-45%	\$114,807	4.8	29.4

\*Sonic Healthcare's figures are in Australian dollars

Source: *Laboratory Economics* from YFinance

### Subscribe to Laboratory Economics

YES! Please enter my subscription to *Laboratory Economics* at \$395 for one year. Subscription includes 12 monthly issues sent electronically plus access to all back issues at [www.laboratoryeconomics.com/archive](http://www.laboratoryeconomics.com/archive).

Check enclosed (payable to *Laboratory Economics*)

Charge my: MC Amex Visa (circle one)

Card # \_\_\_\_\_

Name \_\_\_\_\_

Exp. Date \_\_\_\_\_ Security Code: \_\_\_\_\_

Title \_\_\_\_\_

Cardholder's name \_\_\_\_\_

Company \_\_\_\_\_

Signature \_\_\_\_\_

Mailing Address \_\_\_\_\_

Billing address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Phone \_\_\_\_\_

Fax \_\_\_\_\_

e-mail address \_\_\_\_\_

**Mail To:** Laboratory Economics, 195 Kingwood Park, Poughkeepsie, NY 12601;  
Fax order to 845-463-0470; or call 845-463-0080 to order via credit card.

CC2022

**100% Satisfaction Guaranteed!** If at anytime you become dissatisfied with your subscription to *Laboratory Economics* drop me an e-mail and I'll send you a refund for all unmailed issues of your subscription, no questions asked.  
Jondavid Klipp, [labreporter@aol.com](mailto:labreporter@aol.com)