Lab Quality Confab

"Using Robust Software

in Tandem with

Process Improvement

to Lift Performance

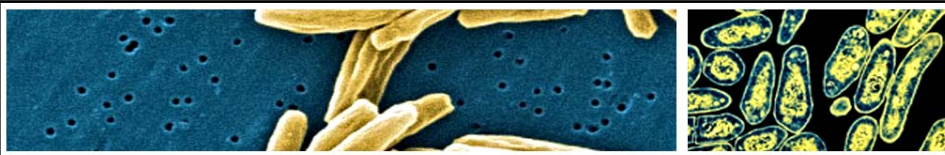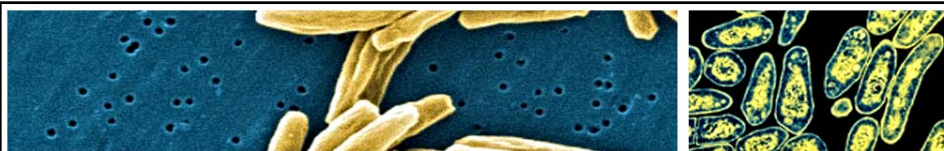## Across All Service Activities

in the Clinical Laboratory"

Session Topics

- Examining the traditional "automated" laboratory

- Creating process improvements utilizing operational automation technologies
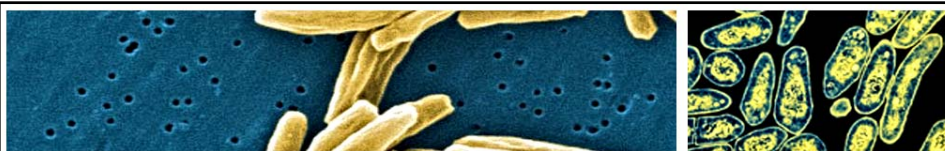
- Transitioning to operational automation
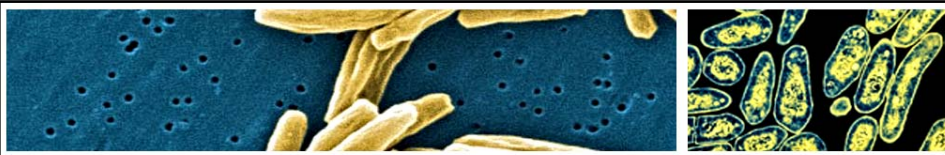
Clinical Operations: 1930

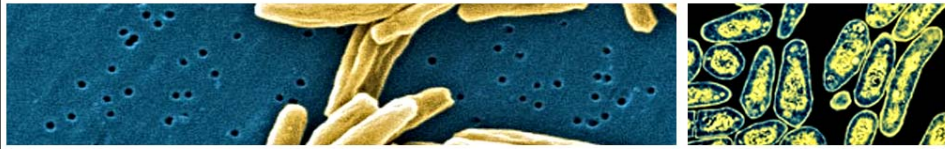# Clinical Operations: 2010

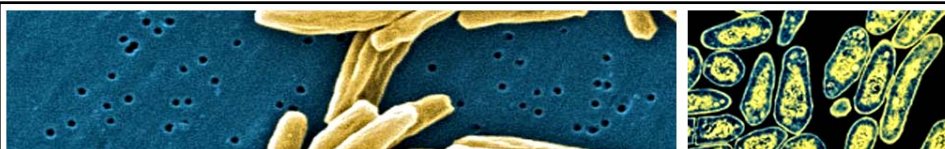# Staff Operations: 1930

**Staff Operations: 2010**

Examining

Today's Lab

Automation in Lab Testing Workflow

- Targeted automation initiatives in clinical laboratory operations have generated staff productivity increases of 30-60%.

- One of these various process improvement initiatives (Total Lab Automation, Lean, Six Sigma) in combination with automation may reduce med techs by 15-40 FTE's.

- Staff can be reassigned to higher value responsibilities

Automation for Staffing Operations Untapped

- Few process improvements
- Automation confined largely to a few HR functions
    - Policies and procedures
    - HR data management
    - Document control
- Rarely any dynamic, interactivity between supervisors, staff and the data
- Workflows not integrated
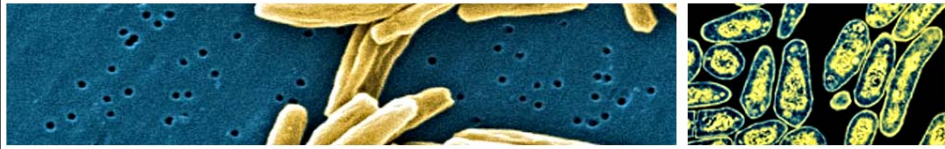- Digitized, manual process (ie: Excel) is **NOT** automation
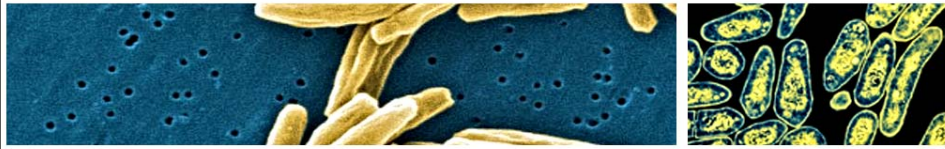
Probable Reasons

- Easier to keep doing it yourself or the "the old way"

- No knowledge of new technologies & software solutions

- Previous automation attempts failed

- Upgraded machinery = Cash Flow $$

- Safety and patient care = Higher priority

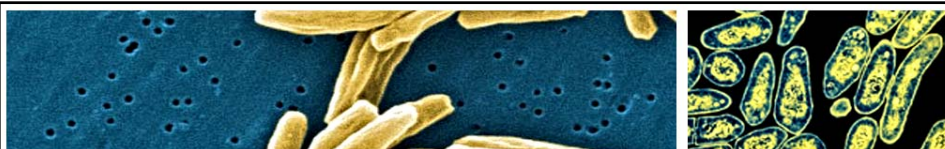- IT department involvement = Headaches

- Harder to quantify ROI

Operational

Process

Improvements

Cost of NOT automating

What you don't know could be inhibiting growth and profitability

- John Muir Case study- April 2010

    - Unable to fully maximize new lab space and operations at MuirLab in Outreach and PSC's

    - Unable to hire more staff to do scheduling

    - Unable to grow
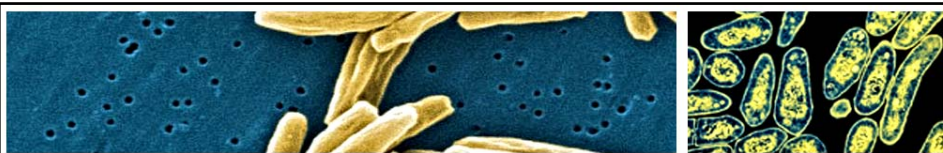
    - Automated and scaled their growth

MuirLab Comments:

BEFORE: "Supervisors couldn't do their jobs. The scheduling load was so time-consuming that would have had to double the number of supervisors or sacrifice other areas of supervisory duties. The supervisors said they wouldn't have enough time to visit their centers or manage their people."
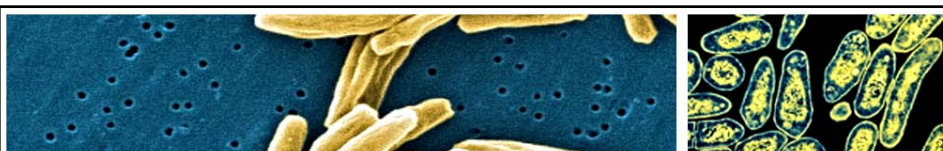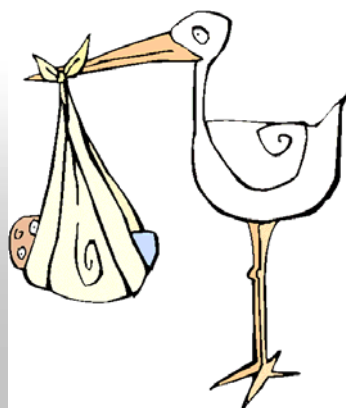
- **Josh Buessing, *Outreach Operations Manager***, MuirLab, John Muir Health

AFTER: "With ScheduleLabs, we don't even blink when we bring on new staff, we just add them. As we grow going forward, ScheduleLabs increases our efficiency and productivity."

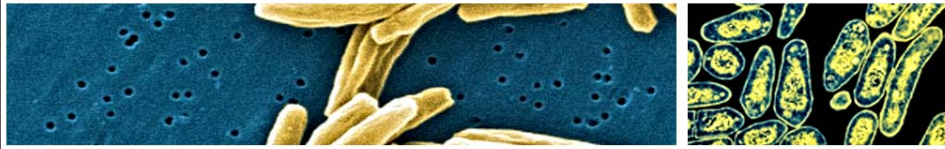- **Craig Ruhe, *Laboratory Supervisor***, MuirLab, John Muir Health
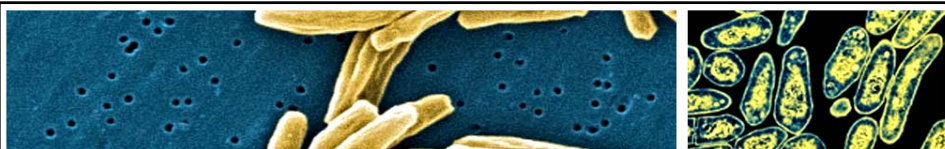
-

When NOT to pursue operational improvements

Time to Move from Pencil to Digital

- Is your lab using paper or Excel to create schedules?

- Is schedule information only available on paper or by calling or emailing a supervisor?

- Do staff only know a few weeks in advance what their schedule is?

- Is all communication between staff and administration handled by paper, phone, email or fax?

- Do you use a posted schedule for edits?

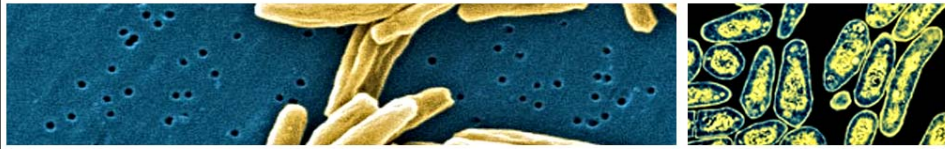- Do supervisors fill in emergency bench rotation vacancies?

Other Opportunities for Change

- Lack luster employer evaluations by employees

- Inspection issues

- Flat or negative growth

- Overtime overruns

- Hiring/retention issues

- Errors in scheduling

- PSC attendance issues/unhappy clients

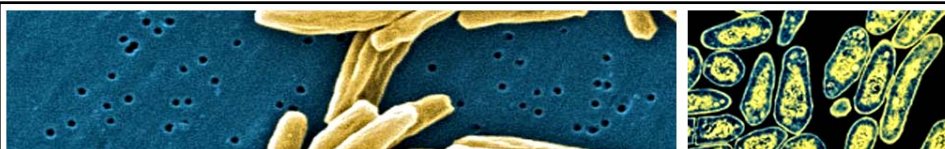- Limited in growth opportunities due to staffing issues

Opportunity for Growth

- LEAN/Six Sigma initiative already in place

- Growth, merger, expansion, hiring
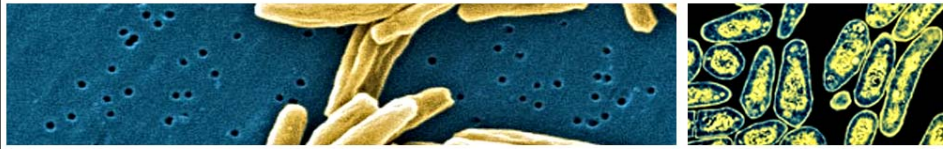
- New lab management

Extreme Lab Makeover

- Determine top 5 problems with scheduling from the perspective of administration, management and staff

- Determine top 5 "Wish List" items from same group regarding scheduling process improvements desired

- Identify how each item will be addressed and assign out tasks to champions

- Determine if automation will require a technological solution for improvement

Capturing scheduling metrics

- Create an ROI data collection tool or utilize one available

- Institute period of time when scheduling data on all tasks and processes is collected

- Analyze cost vs. benefit for any solutions

- Areas to look for savings:

  - Overtime, staff turnover, time spent scheduling, employee complaints, missed growth opportunities, missed shifts, errors, client complaints, time spent editing the schedule
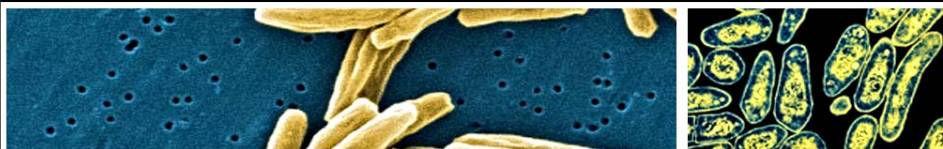
MuirLab ROI

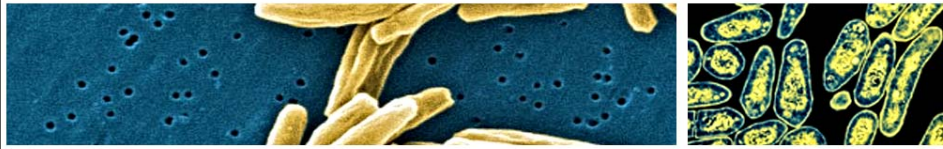|	
Emails:	100% reduction
Paper leave request processing:	100% reduction
In-office visits:	100% reduction
Phone calls:	95% reduction
Time spent scheduling:	75% reduction

Return-on-Investment

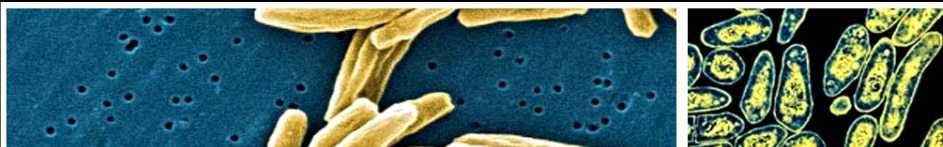|	
Estimated yearly scheduling costs:	$72,000.00
Yearly investment in ScheduleLabs:	$ 8,000.00
Estimated Savings to Date:	**$64,000.00**
ROI recognized:	**Within 2 months (out of a 12-month subscription)**

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10 Major Benefits to Automation

1. Staff satisfaction & employee morale
2. Reduction in time spent scheduling/staff reassigned
3. Fewer errors/dropped shifts
4. Business analytics
5. Better responses with clients, especially in outreach
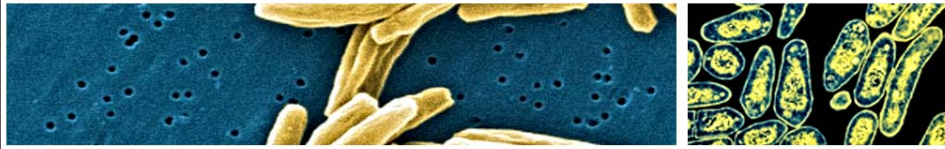
Additional Benefits

6. Centralized information reduces confusion

7. Centralized data creates scheduling history that can be mined for trending over time

8. Overtime management

9. Growth potential

10. Retention and recruiting

Automation Experiences

"Over three years ago, I handed one of the licenses to our toughest critic of new products. This manager has been using our automated scheduling tool daily since then and likes how it works for his own needs and for his whole department. He says the Employee Self Serve functionality actually increases employee morale."– Rosalee Allan, Senior Vice President/Chief Operations Officer; Pathology Associates Medical Laboratories (PAML)

Our lab has grown from 15 Lab Scientists to over 30 in the past four years, and continues to grow since our merger with another company. Once our automated scheduling tool was implemented, the process of creating a two week schedule for 30+ Lab Scientists that used to take 4 hours has been reduced to only 20 minutes. Overall, this solution has increased our productivity and efficiency, and created a whole new level of ease for handling all leave requests." - **Nick Sands, Lab Operational Supervisor, ViraCore Laboratories**
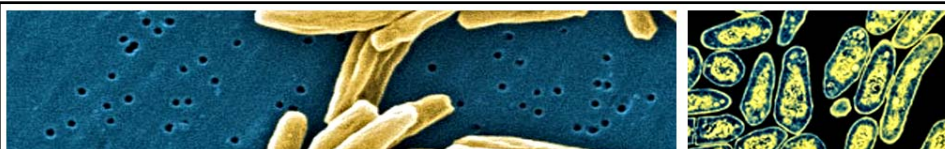
Supporting process change w/ automation

Solutions utilized for scheduling automation

-Desktop/Enterprise

- Kronos, OneStaff

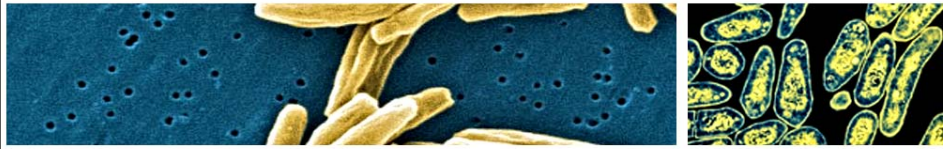- Centralized locally, maintained and supported locally, upfront fees

-SaaS (Software as a Service)

- ScheduleLabs, At Staff

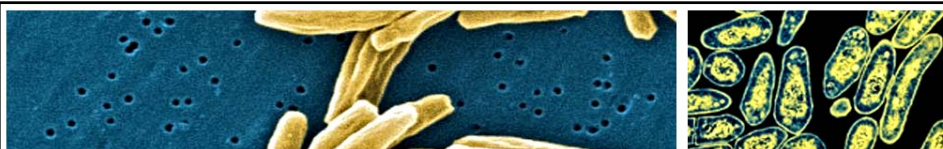- Internet access, supported/hosted by vendor, yearly fees

Top Tips on Software Selection

1. Determine ideal delivery model (garner staff input)

2. Laboratory- specific? Health care specific? Generic solution?

3. Manage all aspects of laboratory scheduling?

   1. Clinical staff, couriers, multi-site labs, outreach

4. Internet connectivity

5. Product upgrades: T's & C's/fine print

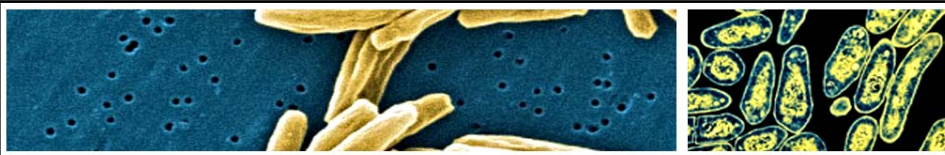6. Support and training: Upfront and on-going

More **Top Tips** …

7. IT department involvement: Installation or deployment model?

8. Product Features: skill sets, bench rotations, holiday cycles, leave request management

9. Scalability for growth

10. Integrations: Time and attendance, etc.

11. Reporting for business analysis

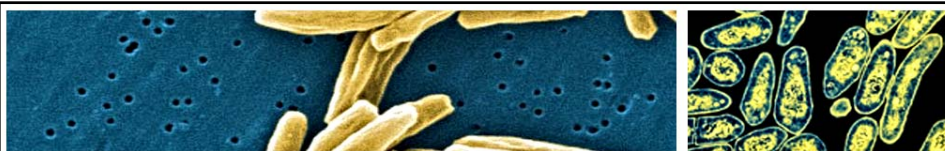12. Pricing model

13. Vendor references

Secrets of Successful Implementations

- Determine internal time-lines and document

- Critical to have staff buy-in

- Determine best staff to lead project

- Assign team leads and project managers

- Request weekly updates from vendors on any implementations part of process
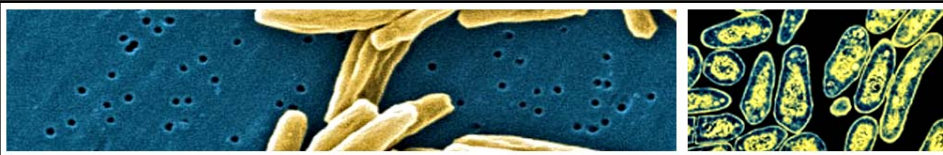
Don't's

- Spend significant $$'s on an automated system w/o out-clauses or performance metrics

- Digitize a broken process

- Use automation as the only solution

- Assign out project to project manager

Do

- Understand before undertaking operational automation what you want for an outcome

- Involve staff

- Capture before and after metrics

Additional Resources

- **CAP Today: October Issue:**

  - *Who goes where, when? Scheduling made easier"*

- **Medical Laboratory Observer (MLO): July issue**

  - *"Paperless scheduling and inspection solutions work for PAML."*

- **Case Studies: PAML & John Muir Health: MuirLab**

  - http://www.maplewoodsoftware.com
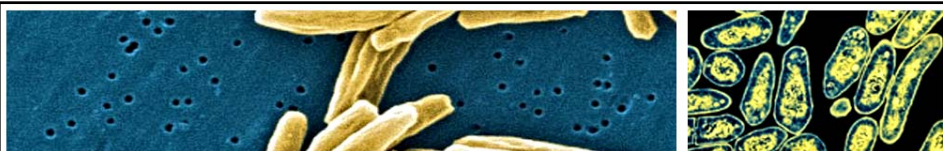
Thank you

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