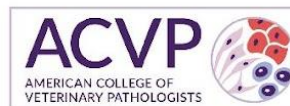


ACVP • ASVCP
2024
ANNUAL
MEETING

SEATTLE, WA
NOVEMBER 16-19, 2024



#ACVP2024





Transforming Veterinary Diagnostics: How Artificial Intelligence Enhances Clinical Decision-Making

Speaker

Arun Apte

Chief Executive Officer, CloudLIMS.com

Challenges in Veterinary Diagnostics



Increasing complexity of diagnostic data



Analyzing vast amounts of data manually for clinical decision-making



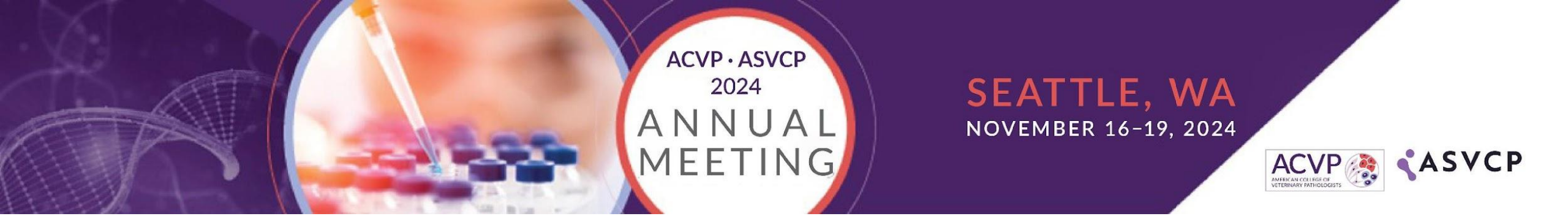
Using slow traditional methods for pathogen detection and epidemiological surveillance



Missing disease diagnoses and delaying treatments



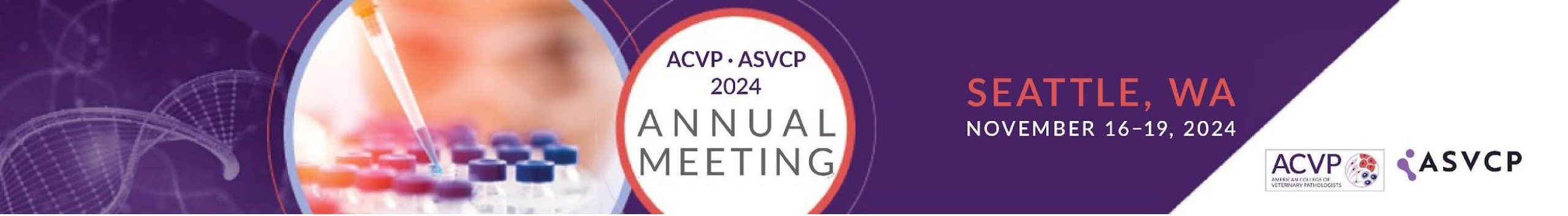
Managing fragmented information systems



Solution?

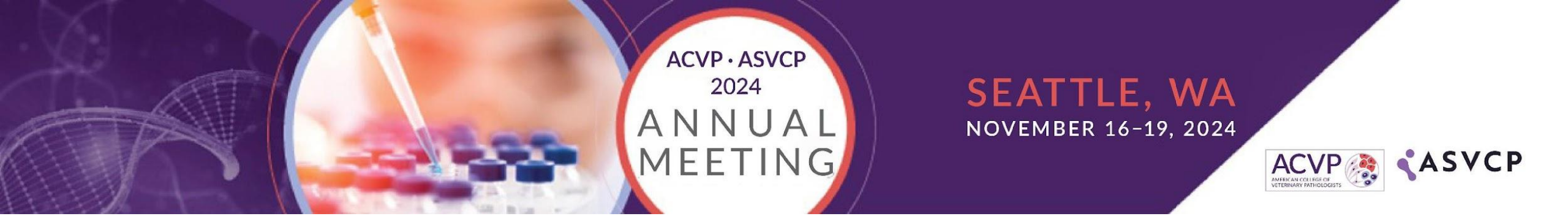
Artificial Intelligence (AI) - Creating New Paradigms in Veterinary Healthcare





How AI can Transform Veterinary Diagnostics

- ✓ AI-powered hematology analyzers can analyze multiple parameters from minimal blood samples.
- ✓ AI automates repetitive tasks, allowing veterinary pathologists to process samples and interpret results more quickly.
- ✓ AI-powered tools can process large, diverse datasets generated by diagnostic instruments.

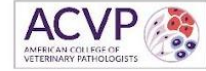


How AI can Transform Veterinary Diagnostics

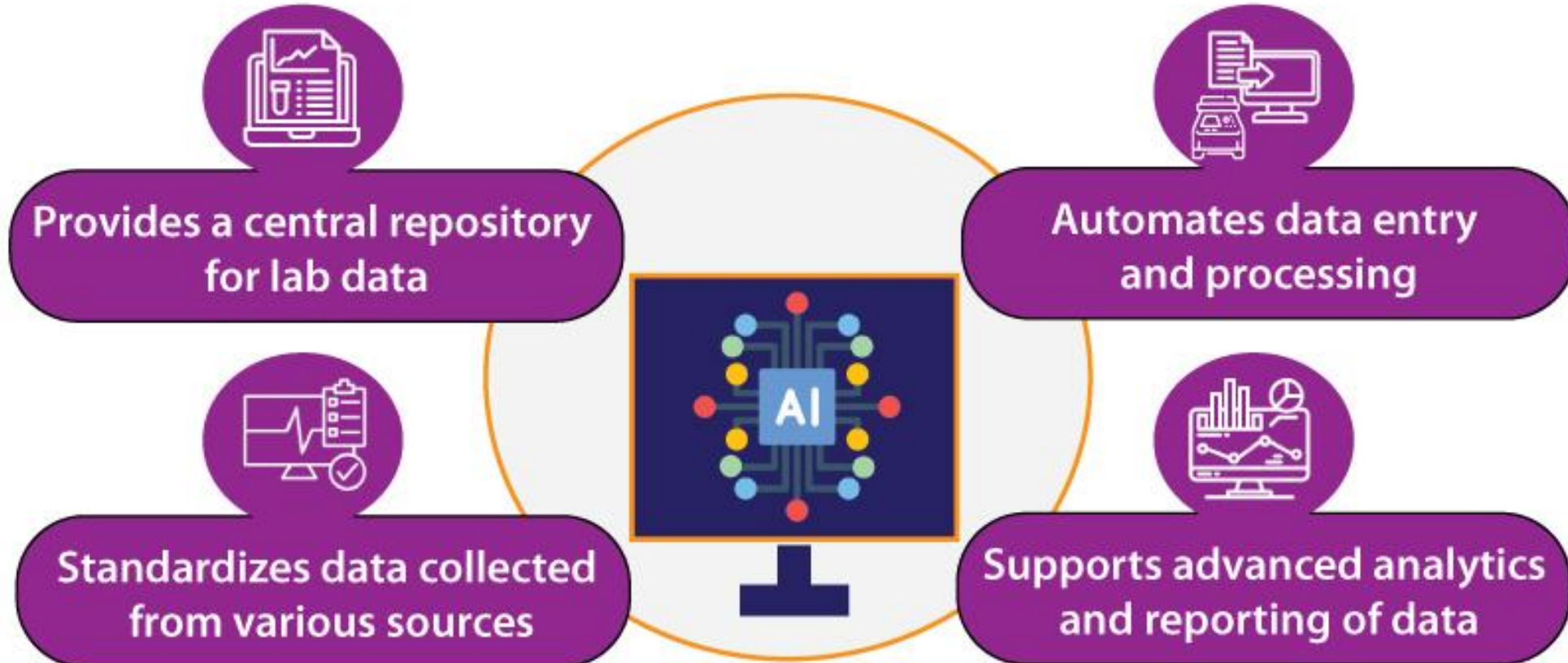
- ✓ AI-powered tools can detect abnormalities in radiological images.
- ✓ AI-enabled tools reduce analysis time and minimize noise.
- ✓ By leveraging machine learning models, AI can identify emerging disease patterns and predict potential outbreaks.

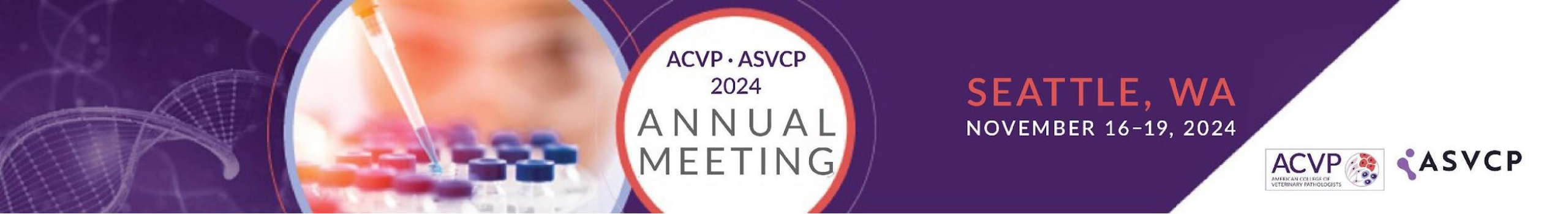
ACVP • ASVCP
2024
ANNUAL
MEETING

SEATTLE, WA
NOVEMBER 16-19, 2024



How Does a LIMS Support AI-Driven Diagnostics?





Easily Manage Diverse Veterinary Diagnostic Tests & Associated Data with a LIMS



Richard Doe
Last Login: Jun 09 2023 05:29:01 PM



Test



Test Group: ALL Test Code: ALL Filter: Select options

Test Group: ALL

Test Code: ALL

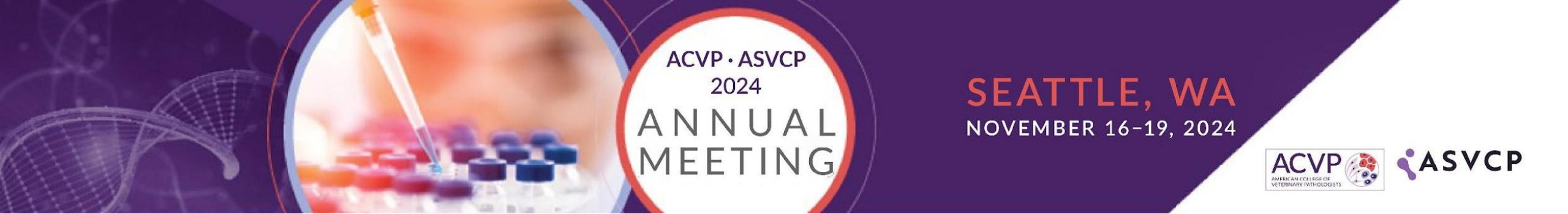
Filter: Select options

Show 50 entries

First Previous 1 Next Last

	Test ID	Sample ID	Sample ID [External]	Technician ID	Type	Test Category	Technician Name	Test Results Validation Status	Sample Testing Status	Reviewer ID	Associated Inventories	Associated Sample Count	Er
1	FIV_3	BLD_9	BD202227	USR_8	Feline Immunodeficiency Virus_FIV	Qualitative	Ava O Shea	Approval Pending	Under Testing	M_ADMIN	INVT_1	1	Jun
2	BChT_2	PLSMA_3	PL120002	M_ADMIN	Biochemical Test_BCT	Quantitative	Richard Doe	Approved	Completed	USR_4	Cons_1	1	Jun
3	MB_2	BLD_10	BD202228	USR_9	Microbiology_MBT	Quantitative	Brock Lucas	Results Locked	Under Testing	USR_6	MMS_1, MMS_3	3	Jun
4	MB_2	BLD_9	BD202227	USR_9	Microbiology_MBT	Quantitative	Brock Lucas	Review Pending	Under Testing	USR_6	MMS_1, MMS_3	3	Jun
5	MB_2	BLD_8	BD202226	USR_9	Microbiology_MBT	Quantitative	Brock Lucas	Approved	Completed	USR_6	MMS_1, MMS_3	3	Jun
6	FIV_2	SRM_2	SR200001	USR_5	Feline Immunodeficiency Virus_FIV	Qualitative	Mike Oslan	Approved	Completed	USR_6	Gas_2	1	Jun
7	UN_2	URN_1	UN100001	USR_5	Urinalysis_UN	Qualitative	Mike Oslan	Rejected	Under Testing	USR_8	Cons_2	1	Jun
8	BChT_1	BLD_9	BD202227	M_ADMIN	Biochemical Test_BCT	Quantitative	Richard Doe	Rejected	Under Testing	M_ADMIN	Cons_1	1	Jun
9	FIV_1	SRM_3	SR200003	USR_4	Feline Immunodeficiency Virus_FIV	Qualitative	Jack Hyde	Reopened	Under Testing	USR_5	CLSW_2	1	Jun
10	UN_1	URN_4	UN100004	USR_7	Urinalysis_UN	Qualitative	Felicity Oliver	Approved	Completed	USR_8	INVT_1	2	Jun
11	UN_1	URN_2	UN100002	USR_7	Urinalysis_UN	Qualitative	Felicity Oliver	Reopened	Under Testing	USR_8	INVT_1	2	Jun
12	MB_1	BLD_9	BD202227	M_ADMIN	Microbiology_MBT	Quantitative	Richard Doe	Approval Pending	Under Testing	M_ADMIN	MMS_2		Jun





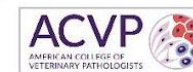
More Applications of LIMS

A LIMS can assist with the following:

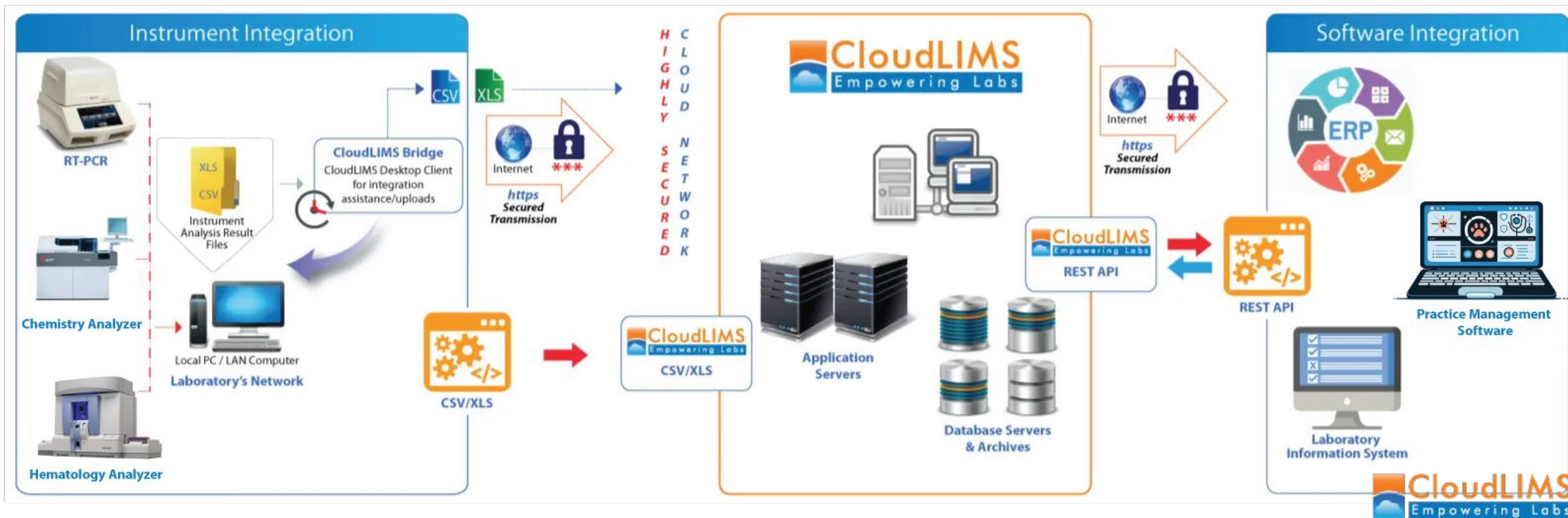
- Facilitating predictive maintenance of laboratory equipment
- Identifying bad reagents
- Automating ordering
- Identifying vendors that provide quality products
- Setting competitive pricing
- Comparing the relative performance of technicians

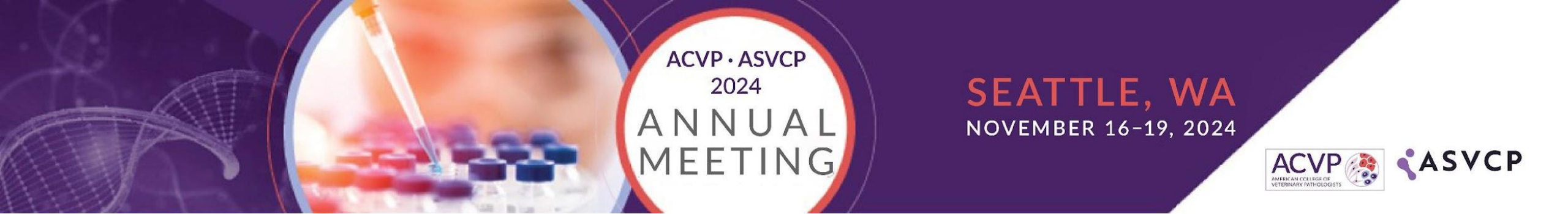
ACVP • ASVCP
2024
ANNUAL
MEETING

SEATTLE, WA
NOVEMBER 16-19, 2024



Integrate Diagnostic Instruments and Software with a LIMS for Automated Data Entry



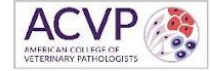


In Conclusion...

- Integrating AI into veterinary diagnostics and disease surveillance addresses critical inefficiencies and enhances diagnostic accuracy.
- AI-driven diagnostics enables veterinarians to make quicker, more informed decisions, ultimately improving animal health outcomes and disease management.
- With AI and LIMS integration, veterinary diagnostics can achieve a new standard of precision, efficiency, and proactive care.

ACVP • ASVCP
2024
ANNUAL
MEETING

SEATTLE, WA
NOVEMBER 16-19, 2024



Thank You For Your Attention!



www.cloudlims.com
+1-302-789-0447
support@cloudlims.com

