From: <u>Duesterwald, Meghan HLTH:EX</u>
To: <u>Crickmore, Jane HLTH:EX</u>

Cc: Watson, James HLTH:EX; Christians, Angela

Subject: RE: media heads up - CFAX - microbiology lab automation project

**Date:** Tuesday, April 22, 2014 3:05:11 PM

Attachments: <u>image001.png</u>

#### Thank you Jane, GCPE has checked with Capital and they are also aware.

From: Crickmore, Jane HLTH:EX Sent: Tuesday, April 22, 2014 2:01 PM To: Duesterwald, Meghan HLTH:EX

Cc: Watson, James HLTH:EX; Christians, Angela HLTH:EX

Subject: RE: media heads up - CFAX - microbiology lab automation project

I was aware that they were centralising microbiology, but not the deployment of this level of automation. The process /intent makes sense. I do not know, however, if this is a new capital ask that will be coming forward to the ministry.

---

Jane Crickmore Executive Director

Laboratory, Diagnostic and Blood Services Branch Health Services Policy and Quality Assurance Division

Ministry of Health

6th Floor, 1483 Douglas Street

Victoria, BC V8W 3K4

Tel: (250) 356-1713 Fax: (250) 356-1679

Email: jane.crickmore@gov.bc.ca

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From: Duesterwald, Meghan HLTH:EX

**Sent:** April 22, 2014 1:20 PM **To:** Crickmore, Jane HLTH:EX

Cc: Watson, James HLTH:EX; Christians, Angela HLTH:EX

Subject: FW: media heads up - CFAX - microbiology lab automation project

Good afternoon Jane,

Are you aware of this Lab change at Island Health? If so, any comments or concerns?

Thanks, Meghan

\_\_\_\_\_

From: Anderson, Kristy GCPE:EX

Sent: Tuesday, April 22, 2014 1:04:23 PM

To: Perri, Maria A HLTH:EX; HLTH HAD Issues HLTH:EX; Watson, James HLTH:EX

Cc: Jabs, Ryan GCPE:EX

Subject: FW: media heads up - CFAX - microbiology lab automation project

Auto forwarded by a Rule

Hi - just wanted to flag this for you and see if you had heard of the project.

Cheers.

**Kristy Anderson** 

Manager, Media Relations - Ministry of Health

Government Communications and Public Engagement

(250) 952-3387

(cell) s.17

Kristy.Anderson@gov.bc.ca

From: Plank, Sarah [mailto:Sarah.Plank@viha.ca]

Sent: April-22-14 12:30 PM

To: Jabs, Ryan GCPE:EX; Anderson, Kristy GCPE:EX

Subject: media heads up - CFAX - microbiology lab automation project

FYI (some info on the project is attached)

From: Plank, Sarah

**Sent:** Tuesday, April 22, 2014 12:28 PM **To:** Gano, Catriona; Hoag, Gordon (Dr) **Cc:** Gelpke, Alice; Weinerman, Brian (Dr)

Subject: MEDIA REQUEST - CFAX - microbiology lab automation project

Hi Catriona and Gordon,

CFAX is looking for someone to come the show hosted by Frank Stanford to talk about the RJH micro lab automation project – why we're doing this, how it would work, what kind of work is done in the lab and what kind of advances make this possible to automate the work.

Would one of you be a suitable expert to talk about the microbiology lab automation project? They are looking for someone for 30 minutes at either 09:00 or 09:30 am some day this week. The actual on-air interview time in a half-hour segment ends up being less than 20 minutes, what with commercials and news breaks and such.

Thanks.

Sarah.

Sarah Plank | Island Health Media Relations Manager

office 250-727-4275 | mobile s.17

email sarah.plank@viha.ca | media pager 250-389-7317



#### www.viha.ca

Excellent care - for everyone, everywhere, every time.

From: <u>Duesterwald, Meghan HLTH:EX</u>
To: <u>Crickmore, Jane HLTH:EX</u>

Cc: Watson, James HLTH:EX; Christians, Angela

Subject: FW: media heads up - CFAX - microbiology lab automation project

**Date:** Tuesday, April 22, 2014 1:20:19 PM

Attachments: <u>image001.png</u>

CRHD Letter Feb 14, 2014 - TLA Project Submission.pdf

#### Good afternoon Jane,

Are you aware of this Lab change at Island Health? If so, any comments or concerns?

Thanks, Meghan

-----

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Government Communications and Public Engagement

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Kristy.Anderson@gov.bc.ca

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Sarah.

Sarah Plank | Island Health Media Relations Manager

office 250-727-4275 | mobile s.17 email sarah.plank@viha.ca | media pager 250-389-7317



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Excellent care – for everyone, everywhere, every time.



Excellent care, for everyone, everywhere, every time.

February 14, 2014

Mr. Maurice Rachwalski Senior Manager Health & Capital Planning Strategies Division Capital Regional District 625 Fisgard Street Victoria, BC V8W 1R7

Dear Mr. Rachwalski:

### Re: Royal Jubilee Hospital Total Lab Automation

I am writing to request Capital Regional Hospital District (CRHD) cost-sharing on the Total Lab Automation (TLA) project which includes renovation of the current microbiology space to make room for the new TLA system.

The TLA system allows patient swabs to be managed by a robotic system that streamlines the process for continuous flow ensuring samples are handled in a consistent manner for optimal growth. Digital image capture of bacterial growth on culture plates from inside the smart-incubator supports an archival image repository and allows for remote viewing; suspect bacterial colonies can be identified for further analysis and immediate workup. Under the current system, this process is done manually.

The benefits of this project can be summarized as follows:

Patient and/or Workforce	Improved working conditions for staff by optimizing specimen flow,			
Safety	removing unnecessary walls and maximizing the use of the limited lab			
	footprint.			
Access to Service	Turnaround time for identification of bacteria improves from "days" to			
	"hours" through the use of digital image analysis which allows rapid screening of specimens. Consolidating tests at RJH allows greater input for			
	the medical microbiologist to put the right information in the hands of the			
	right caregiver throughout Island Health.			
Clinical Outcomes	Positive impact to patient care by reducing specimen processing error and enhancing specimen tracking (using real time dashboard displays). In addition, the shorter turnaround time will ensure patients are more quickly			
	put on the appropriate antibiotic regime or removed from one that is			
	unnecessary.			
Staff Shortages	As the volume of tests rise, there will be a forecast shortage of microbiology			
	technologists. This new technology will standardize repetitive functions and			
	optimize the work of the microbiology technologists.			
Cost Avoidance	Cost containment as the volume of tests rise.			

The estimated total project cost is \$4,300,000. Island Health is requesting CRHD cost-sharing of 40% (\$1,720,000). Island Health recognizes that CRHD has implemented a 30% cost-share formula for major projects. However, 40 percent is the traditional cost-sharing formula used by other Regional Hospital Districts. To ensure fairness with other health authorities in the distribution of scarce capital, it is unlikely Island Health would receive Provincial funding greater than 60% for a major capital project.

To accommodate this project in the CRHD capital plan, Island Health proposes a revised cash flow estimate for major capital projects that substitutes the TLA project with capital expenditure room reserved for the planned RJH Eric Martin Pavilion Asbestos Abatement project. The Asbestos Abatement project would not be impacted as it has been proceeding in phases as minor capital projects.

I would like to thank the CRHD for considering this request which will significantly improve Island Health microbiology services.

Yours truly,

Chris Sullivan

Director, Capital Planning

Chins Sullivan

cc: Carol Botrakoff, Manager, Capital Finance and Treasury

From: Crickmore, Jane HLTH:EX

To: Deering, Angela HLTH:EX

Subject: FW: UPDATED: FOR APPROVAL - Royal Jubilee Microbiology Lab

 Date:
 Thursday, November 20, 2014 9:00:00 AM

 Attachments:
 NR microbiology lab Nov2014 DRAFT.docx

 QA microbiology lab 24November2014.docx

Angela – I am fine with this (of note, the Qs and As reference MALDI and there is not a fee code in place for that testing method).

-----

Jane Crickmore

**Executive Director** 

Laboratory, Diagnostic and Blood Services Branch Health Services Policy and Quality Assurance Division Ministry of Health, 6th Floor, 1483 Douglas Street, Victoria, BC

Tel: (250) 356-1713; Email: jane.crickmore@gov.bc.ca

**Mailing Address:** 

PO Box 9633 Stn Prov Govt, Victoria, BC V8W 9P1

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From: Deering, Angela HLTH:EX

Sent: Wednesday, November 19, 2014 4:37 PM

To: Crickmore, Jane HLTH:EX

Subject: FW: UPDATED: FOR APPROVAL - Royal Jubilee Microbiology Lab

Jane – I have reviewed and do not have any concerns.

Let me know if you are ok as well.

Thanks, Angela

From: Chu, Mary HLTH:EX

Sent: Wednesday, November 19, 2014 4:06 PM

To: Deering, Angela HLTH:EX

Cc: Stewart, Sharon A HLTH:EX; Fraser, Christine HLTH:EX

Subject: FW: UPDATED: FOR APPROVAL - Royal Jubilee Microbiology Lab

Hi Angela,

An additional message on this one from GCPE: "Hi again! Apparently Chicago is mid-December so they will be first. Have adjusted wording. Thanks again."

Thanks, Mary

Mary Chu

Risk & Issues Analyst | Issues & Risk Management Branch

Health Services Policy & Quality Assurance Division | Ministry of Health

Telephone | 250 952-1977 | BB s.17

Email | Mary.Chu@gov.bc.ca

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From: Fraser, Christine HLTH:EX

Sent: Wednesday, November 19, 2014 3:33 PM

To: Deering, Angela HLTH:EX

Cc: Stewart, Sharon A HLTH:EX; Chu, Mary HLTH:EX

**Subject:** FW: UPDATED: FOR APPROVAL - Royal Jubilee Microbiology Lab Hi Angela, please see below − the result of our telephone conversation <sup>©</sup>

From: Thistle-Walker, Carlene GCPE:EX

Sent: Wednesday, November 19, 2014 3:19 PM

To: HLTH HAD Issues HLTH: EX; Fraser, Christine HLTH: EX

Cc: Lindstein, Sarah GCPE:EX

Subject: UPDATED: FOR APPROVAL - Royal Jubilee Microbiology Lab

Hi Christine,

Following up on our chat earlier. Here's an update on the microbiology release. I got the below from VIHA and added in a question to the QA document on this. I have also suggested that they should say Canadian Public Hospital at least until they confirm – apparently they are waiting to hear back from Chicago.

There are 2 private installations (which do hospital sample testing) in Canada (Edmonton & Toronto) and we are neck and neck with a hospital in Chicago so for sure (100%) we are the first Canadian Public hospital. There are other automation systems for microbiology labs – but not TOTAL automation. This is the first one to automate fully and have a 2-way track.

Let me know if any further questions,

#### Carlene

#### **Carlene Thistle-Walker** | Communications Manager

Government Communications & Public Engagement B.C. Ministry of Health

Tel: 250.952.1644 | Mobile s.17 | email: carlene.thistle-walker@gov.bc.ca

From: Thistle-Walker, Carlene GCPE:EX

Sent: Wednesday, November 19, 2014 10:19 AM

To: HLTH HAD Issues HLTH:EX; Wolsey, Ashley HLTH:EX

Cc: Lindstein, Sarah GCPE:EX

Subject: FOR APPROVAL - Royal Jubilee Microbiology Lab

Hi there,

News release and QA for the official opening of the microbiology lab at Royal Jubilee. MTL is unable to attend, but would like a quote.

I have made a couple of tracked changes in the attached. If you can let us know if there are any concerns or if there is anyone else that needs to review this, that would be great.

If you could let us know by tomorrow if any concerns, that would be great.

Thank you,

Carlene

#### **Carlene Thistle-Walker** | Communications Manager

Government Communications & Public Engagement B.C. Ministry of Health

Tel: 250.952.1644 | Mobile: s.17 | email: carlene.thistle-walker@gov.bc.ca

# news release



FOR IMMEDIATE RELEASE November 24, 2014

# Faster lab results mean better patient care

VICTORIA – The first totally automated microbiology laboratory in a North American Canadian public hospital will begin testing patients next week at Royal Jubilee Hospital.

"B.C. is proud to be a front-runner with this laboratory automation system, which will provide faster, more efficient test results to help patients get the treatment they need quickly," said Health Minister Terry Lake. "This is a perfect example of the work that is ongoing throughout B.C. to introduce innovations that make a big difference in the front-line patient care."

Able to run twenty-four hours a day, seven days a week, the laboratory will produce faster results on the cause of patients' infections, helping the care team provide the best treatment sooner.

"This new innovative technology shortens the time to get vital clinical information that helps providers make decisions about a patient's care. The equipment's standardized processes will eliminate errors and give us more reliable results," said Dr. Brendan Carr, CEO of Island Health. "These improvements mean patients can get better faster and get home to their loved ones sooner."

The microbiology laboratory at Royal Jubilee tests samples including urine, blood, stool, fluid from inside the body cavity and tissue. Specimens are used to grow bacterial colonies to identify the cause of a patient's infection and determine if the bacteria are resistant to any antibiotics.

"Microbiology is the last area of laboratory medicine to automate as it has always been a very manual process," said Dr. Pamela Kibsey, medical lead of the microbiology laboratory at Royal Jubilee Hospital and medical director of infection control with Island Health. "We are very excited that our patients will get to be the first in B.C. to benefit from the first real automation of microbiology."

Once the lab identifies an organism and any antibiotic resistance, a patient can be put on the best type of antibiotic to cure the infection – or to-taken off an unneeded antibiotic. Appropriate antibiotic use reduces the chances of bacteria developing antibiotic resistance. Identifying the cause of infection also allows staff to apply the most appropriate infection precautions to prevent a patient from transmitting it to others patients.

"The quicker we can make a diagnosis, the better it is for the individual patient," said Dr. John Galbraith, medical microbiologist. "And the sooner that appropriate precautions are in place, the better for other patients."



The \$4.3 million laboratory system, manufactured by BD Kiestra, was cost-shared with the Capital Regional Hospital District.

"We are pleased to partner with Island Health to ensure Victoria has the most advanced facilities and equipment for the benefit of our residents," said Denise Blackwell, Capital Regional District chair.

The microbiology laboratory at Royal Jubilee Hospital tests about 500 specimens a day from all across Island Health, with demand increasing every year. The lab automation will allow more tests to be done faster, without increasing staff, which helps address a looming shortage of laboratory technologists being faced across Canada.

The new laboratory equipment from the Netherlands was delivered and installed in late August, and staff training and testing has been taking place since September.

For more information, go to <URL TO VIDEO>

-30-

Backgrounder follows.

# **Media Inquiries**

Sarah Plank Media Relations Manager Phone: 250.727.4275

Email: <a href="mailto:sarah.plank@viha.ca">sarah.plank@viha.ca</a>

#### **BACKGROUNDER**

Comparison of manual and automated microbiology laboratory processes:

In the old system, staff manually plant specimens onto plates (or petri dishes), put them into a machine that spreads the specimen out in a specific pattern and then walk batches of plates to the incubator. After the bacteria have had a chance to grow for 18 to 24 hours, technologists examine each plate by hand.

With the new system, specimens are planted automatically and spread by specially designed magnetic beads across the plate, which is then sent along a conveyor belt into the incubator. When enough time has passed for the bacterial colony to grow, the machine takes digital photos, to be viewed on a monitor at any laboratory technologist's workstation. The images can be enlarged as much as necessary to identify the bacteria.



- **Q.** What are we announcing today?
- A. The new automated microbiology laboratory system at Royal Jubilee Hospital will go into operation on December 8<sup>th</sup>. The new system is expected to turn around more lab test results faster, with greater reliability.
- Q. How much did this cost?
- A. The laboratory system, manufactured by BD Kiestra, was purchased by Island Health at a cost of \$3.0 million plus another \$1.3 million was spent to renovate the current lab space to accommodate the equipment. The Capital Regional Hospital District contributed 30 percent of the funding.
- Q. Is this really a first of its kind?
- A. While there are other automations systems for microbiology labs, this system is the first of its kind in a Canadian public hospital and one of the first in North America.

  Two private installations are located in Edmonton and Toronto. A Chicago hospital will open a similar system in December.
- Q. Will this automation result in staff layoffs?
- A. No. We have many vacancies in our laboratory services program due to shortages of laboratory technologists across the country.

The system will have to be up and running for several months before we can finalize our staffing needs and scheduling for the microbiology lab, but I can reassure you that there will be no job losses as a result of this new system.

- Q. Will the lab be running 24/7?
- A. <u>The instrument will run 24/7 but w</u>We will not be able to finalize our staffing needs and scheduling for the microbiology lab for a few months as we determine the full impact of the new system.
- **Q.** Will this affect laboratory testing up-island? Is this part of a move to try to close the lab in Campbell River?
- A. The new laboratory system will allow us to test samples from all across the island and provide faster results. However laboratory services will continue to be provided in our up-island lab in Campbell River.



Δ....

#### **GENERAL BOARD MEETING**

# **QUESTIONS & ANSWERS**



Α.-

# Messages for lab staff re: staffing impact:

The implementation of this system will allow Island Health to support our capacity, improve result turnaround times, standardize processes, provide digitalized databases, enhance data retrieval and provide opportunities for optimal patient outcomes. Most importantly we can -help patients get better faster and get home to their families

Identifying the cause of infections quickly is critical to make sure patients receive the best treatment and to prevent the spread of infections to others. With this new equipment and the introduction of the MALDI lab staff will be able identify the bacteria much sooner so patients can be put on the right medication or taken off one they don't need

Our staff are our most precious resource – this instrument is not being purchased to replace staff but rather to automate the repetitive manual processes so staff can focus on the important critical thinking tasks in microbiology

Although this instrument will change the way work is done in microbiology and this includes changes to staffing levels we don't expect there to be any job loss. Laboratory medicine similarly to other areas of healthcare is facing a future were recruitment of qualified staff will be very difficult. With the number of staff retiring and the few new staff we have coming in we need to look at automation so we can meet the needs of Island Health residents

Any staffing changing will be managed through attrition, vacancies within all laboratory areas in Victoria and temporary postings. In the end everyone will have the opportunity to continue working in laboratory medicine.

## Mah, Brandon HLTH:EX

From:

Wolsey, Ashley HLTH:EX

Sent:

Monday, November 24, 2014 10:37 AM

To:

Lindstein, Sarah GCPE:EX

Cc:

Thistle-Walker, Carlene GCPE:EX; Moen, Shelley L HLTH:EX; Postans, James HLTH:EX

Subject:

FW: FOR APPROVAL - Royal Jubilee Microbiology Lab

**Attachments:** 

QA\_microbiology lab\_24November2014\_CSB Edits.docx; NR\_microbiology lab\_Nov2014

\_DRAFT\_CSB edits.docx

Approved with changes from FCS.

Thanks to both Shelley and James!

From: Moen, Shelley L HLTH:EX

**Sent:** Monday, November 24, 2014 10:35 AM

To: Wolsey, Ashley HLTH:EX

Cc: Lindstein, Sarah GCPE:EX; Postans, James HLTH:EX

Subject: FW: FOR APPROVAL - Royal Jubilee Microbiology Lab

Please see comments from James below and edits on the attached documents.

Thx. Shelley

From: Postans, James HLTH:EX

Sent: Monday, November 24, 2014 9:43 AM

To: Moen, Shelley L HLTH:EX

Subject: FW: FOR APPROVAL - Royal Jubilee Microbiology Lab

Hi Shelley,

Brandon was able to contact Chris and there was some debate around the exact numbers for the lab so I've changed the project cost to \$4.3 million total.

It should now state:

#### Q. How much did this cost?

The total cost of the laboratory system, manufactured by BD Kiestra, was \$4.3 million.

Also corrected in the NR slightly to be more clear on the Total Project Cost.

Hope this helps,

James

From: Wolsey, Ashley HLTH:EX

Sent: Friday, November 21, 2014 2:10 PM

To: Postans, James HLTH:EX Cc: Moen, Shelley L HLTH:EX

Subject: RE: FOR APPROVAL - Royal Jubilee Microbiology Lab

Following up on this - eta?

#### Thanks!

From: Wolsey, Ashley HLTH:EX

Sent: Thursday, November 20, 2014 3:48 PM

To: Postans, James HLTH:EX Cc: Moen, Shelley L HLTH:EX

Subject: FW: FOR APPROVAL - Royal Jubilee Microbiology Lab

Sorry – was trying to save you sometime today. I reviewed and most of the documents match the EP you did last week. However, this jumped out at me. Can you verify?

#### Thanks!

#### Q. How much did this cost?

A. The laboratory system, manufactured by BD Kiestra, was purchased by Island Health at a cost of \$3.0 million. Another \$1.3 million was spent to renovate the current lab space to accommodate the equipment.

From: Thistle-Walker, Carlene GCPE:EX Sent: Thursday, November 20, 2014 2:47 PM

To: Wolsey, Ashley HLTH:EX Cc: Lindstein, Sarah GCPE:EX

Subject: RE: FOR APPROVAL - Royal Jubilee Microbiology Lab

Hiya Ashley,

Were you okay with these? Latest attached.

Carlene Thistle-Walker | Communications Manager Government Communications & Public Engagement B.C. Ministry of Health

Tel: 250.952.1644 | Mobile: s.17 | email: carlene.thistle-walker@gov.bc.ca

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Thank you, Carlene Carlene Thistle-Walker | Communications Manager Government Communications & Public Engagement B.C. Ministry of Health

Tel: 250.952.1644 | Mobile LUS email: carlene.thistle-walker@gov.bc.ca

# news release



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-30-

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Sarah Plank Media Relations Manager Phone: 250.727.4275 Email: sarah.plank@viha.ca

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# RJH MICROBIOLOGY LAB MEDIA EVENT Monday, November 24, 2014

# **QUESTIONS & ANSWERS**

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- Q. Will the lab be running 24/7?
- A. The instrument will run 24/7 but staffing will not be 24/7 until sometime in the New Year.
- **Q.** Will this affect laboratory testing up-island? Is this part of a move to try to close the lab in Campbell River?
- A. Laboratory services will continue to be provided in our up-island lab in Campbell River.



#### GENERAL BOARD MEETING

# **QUESTIONS & ANSWERS**

## Messages for lab staff re: staffing impact:

The implementation of this system will allow Island Health to support our capacity, improve result turnaround times, standardize processes, provide digitalized databases, enhance data retrieval and provide opportunities for optimal patient outcomes. Most importantly we can elp patients get better faster and get home to their families

Identifying the cause of infections quickly is critical to make sure patients receive the best treatment and to prevent the spread of infections to others. With this new equipment and the introduction of the MALDI lab staff will be able identify the bacteria much sooner so patients can be put on the right medication or taken off one they don't need

Our staff are our most precious resource – this instrument is not being purchased to replace staff but rather to automate the repetitive manual processes so staff can focus on the important critical thinking tasks in microbiology

Although this instrument will change the way work is done in microbiology and this includes changes to staffing levels we don't expect there to be any job loss. Laboratory medicine similarly to other areas of healthcare is facing a future were recruitment of qualified staff will be very difficult. With the number of staff retiring and the few new staff we have coming in we need to look at automation so we can meet the needs of Island Health residents

Any staffing changing will be managed through attrition, vacancies within all laboratory areas in Victoria and temporary postings. In the end everyone will have the opportunity to continue working in laboratory medicine.

# Mah, Brandon HLTH:EX

From:

Moen, Shelley L HLTH:EX

Sent:

Tuesday, December 30, 2014 1:41 PM

To:

Moen, Shelley L HLTH:EX

Subject:

FOI response: FW: FOR APPROVAL - Royal Jubilee Microbiology Lab

Attachments:

QA\_microbiology lab\_24November2014\_CSB Edits.docx; NR\_microbiology lab\_Nov2014

\_DRAFT\_CSB edits.docx

From: Postans, James HLTH:EX

Sent: Monday, November 24, 2014 9:43 AM

To: Moen, Shelley L HLTH:EX

Subject: FW: FOR APPROVAL - Royal Jubilee Microbiology Lab

Hi Shelley,

Brandon was able to contact Chris and there was some debate around the exact numbers for the lab so I've changed the project cost to \$4.3 million total.

It should now state:

#### Q. How much did this cost?

The total cost of the laboratory system, manufactured by BD Kiestra, was \$4.3 million.

Also corrected in the NR slightly to be more clear on the Total Project Cost.

Hope this helps,

James

From: Wolsey, Ashley HLTH:EX

Sent: Friday, November 21, 2014 2:10 PM

**To:** Postans, James HLTH:EX **Cc:** Moen, Shelley L HLTH:EX

Subject: RE: FOR APPROVAL - Royal Jubilee Microbiology Lab

Following up on this - eta?

Thanks

From: Wolsey, Ashley HLTH:EX

Sent: Thursday, November 20, 2014 3:48 PM

To: Postans, James HLTH:EX Cc: Moen, Shelley L HLTH:EX

Subject: FW: FOR APPROVAL - Royal Jubilee Microbiology Lab

Sorry – was trying to save you sometime today. I reviewed and most of the documents match the EP you did last week. However, this jumped out at me. Can you verify?

#### Thanks!

#### Q. How much did this cost?

A. The laboratory system, manufactured by BD Kiestra, was purchased by Island Health at a cost of \$3.0 million. Another \$1.3 million was spent to renovate the current lab space to accommodate the equipment.

From: Thistle-Walker, Carlene GCPE:EX Sent: Thursday, November 20, 2014 2:47 PM

**To:** Wolsey, Ashley HLTH:EX **Cc:** Lindstein, Sarah GCPE:EX

Subject: RE: FOR APPROVAL - Royal Jubilee Microbiology Lab

Hiya Ashley,

Were you okay with these? Latest attached.

Carlene Thistle-Walker | Communications Manager Government Communications & Public Engagement B.C. Ministry of Health

Tel: 250.952.1644 | Mobile: s.17 email: <a href="mailto:carlene.thistle-walker@gov.bc.ca">carlene.thistle-walker@gov.bc.ca</a>

From: Thistle-Walker, Carlene GCPE:EX

Sent: Wednesday, November 19, 2014 10:19 AM

To: HLTH HAD Issues HLTH:EX; Wolsey, Ashley HLTH:EX

Cc: Lindstein, Sarah GCPE:EX

Subject: FOR APPROVAL - Royal Jubilee Microbiology Lab

Hi there,

News release and QA for the official opening of the microbiology lab at Royal Jubilee. MTL is unable to attend, but would like a quote.

I have made a couple of tracked changes in the attached. If you can let us know if there are any concerns or if there is anyone else that needs to review this, that would be great.

If you could let us know by tomorrow if any concerns, that would be great.

Thank you, Carlene

Carlene Thistle-Walker | Communications Manager Government Communications & Public Engagement B.C. Ministry of Health

Tel: 250.952.1644 | Mobile s.17 | email: carlene.thistle-walker@gov.bc.ca

## Mah, Brandon HLTH:EX

From:

Mah, Brandon HLTH:EX

Sent:

Friday, November 21, 2014 12:25 PM

To:

'Kevin Daniel (Kevin.Daniel@viha.ca)'

Subject:

FW: RJH - Automated Microbiology Lab Production Line System

Importance:

High

Fyi - is this right?

From: Mah, Brandon HLTH:EX

Sent: Thursday, November 20, 2014 4:05 PM

To: XT:Sullivan, Chris HLTH:IN

Cc: Marie. Machek (Marie.Machek@viha.ca)

Subject: RJH - Automated Microbiology Lab Production Line System

Importance: High

Hi chris,

There is a pending NR that I have to review regarding the RJH – Automated Microbiology Lab Production Line System.

Is the below correct?

Q. How much did this cost?

A. The laboratory system, manufactured by BD Kiestra, was purchased by Island Health at a cost of \$3.0 million. Another \$1.3 million was spent to renovate the current lab space to accommodate the equipment.

thx Brandon Mah Capital Analyst, Interior and Vancouver Island Capital Services Ministry of Health 250-952-2645

# Mah, Brandon HLTH:EX

From:

Mah, Brandon HLTH:EX

Sent:

Friday, October 24, 2014 9:28 AM

To:

Postans, James HLTH:EX

Subject:

RE: For review: EP on microbiology lab from VIHA

Attachments:

EP\_RJH microbiology lab\_ Oct 21\_133pm-csb edits.docx

Please see the revised edits.

brandon

From: Postans, James HLTH:EX

Sent: Wednesday, October 22, 2014 4:09 PM

To: Mah, Brandon HLTH:EX

Subject: FW: For review: EP on microbiology lab from VIHA

Please and thank you.

James

From: Moen, Shelley L HLTH:EX

Sent: Wednesday, October 22, 2014 4:05 PM

To: Postans, James HLTH:EX

Subject: FW: For review: EP on microbiology lab from VIHA

Please review the EP and advise.

Response is not required until next week ©

Shelley

From: Lindstein, Sarah GCPE:EX

Sent: Wednesday, October 22, 2014 3:50 PM

**To:** Wolsey, Ashley HLTH:EX **Cc:** Moen, Shelley L HLTH:EX

Subject: For review: EP on microbiology lab from VIHA

Hi Ashley as Carlene mentioned- EP for the microbiology lab from VIHA- no rush on this one, next week is fine.

Thanks!

Sarah Lindstein | Public Affairs Officer

Government Communications & Public Engagement

B.C. Ministry of Health Sarah.Lindstein@gov.bc.ca

Please note new number: 250-952-2462

# Event Proposal – For PREM Consideration MINISTRY OF HEALTH

#### Event Title: Opening of new microbiology laboratory at Royal Jubilee Hospital

<b>Date:</b> November 24, 2014 <b>Time:</b> 9:30 am – 11:00am	Media Market: Regional
Location: Royal Jubilee Hospital 1952 Bay Street, Victoria BC	English Media Spokesperson: Health Minister Terry Lake
	Multicultural Media Spokesperson:
	Health Minister Terry Lake

# THE EVENT

#### INVITIATION

• Island Health celebrates the opening of the new automated microbiology laboratory at Royal Jubilee Hospital, the first automated lab of its kind in a publicly-funded hospital in North America.

#### **EVENT**

• Official opening celebration and tour of the new automated microbiology lab. This is a rare opportunity to get a behind-the-scenes view of the new, automated laboratory before the go-live date: December 8.

## **GOVERNMENT OF BRITISH COLUMBIA FUNDING / PARTNER FUNDING:**

- Total cost: \$4.3 million
- \$3.04 Province through Island Health (70%)
- \$1.329 million Capital Regional Hospital District (30%)

#### WHO'S ORGANIZING?

GCPE with Island Health.

#### STRATEGIC CONSIDERATIONS

- The go-live date for the new microbiology laboratory is scheduled for the week of December 8.
- Presently, the lab is still considered a "clean space" and is accessible for staff training and tours. After December 8, it will be in full use for patient care-related laboratory services.
- The Capital Regional District has confirmed that Denise Blackwell, chair Capital Regional Hospital District is available to attend on November 24.
- Laboratory staff are currently training on the new equipment throughout October and November 2014.
- Key stakeholders at Island Health are unavailable throughout the majority of November, with board commitments and
  physician schedules that cannot be rescheduled. This date has proven to be one of few suitable times during which all
  stakeholders are available.
- Today's announcement ties into the Ministry of Health's strategic direction of providing timely access to quality
  diagnostics through complete laboratory reform and improved evidence-based access to imaging services through the
  newest technology and seeking innovative approaches.

#### **VENUE DESCRIPTION**

The opening speeches will be held in the Patient Care Centre room S150, followed by guided tours of the new space.

### **EVENT PARTICIPANTS (SPEAKERS)**

- Health Minister Terry Lake
- Dr. Brendan Carr, President and CEO, Island Health
- Dr. Pamela Kibsey, Division Director of medical microbiology, Island Health

#### **KEY VALIDATORS & STAKEHOLDERS**

- Capital Regional Hospital District Chair, Denise Blackwell (Councillor, Langford)
- Mayor and Council City of Victoria
- Mayor and Council Municipality of Oak Bay
- Physicians and patients
- Laboratory staff and health professionals at Royal Jubilee Hospital

#### TARGET AUDIENCE

Audience to consist of media, laboratory staff and health professionals, members of the public.

# **VISUAL MESSAGE(S)**

#### **DESIRED PICTURE (STILL)**

 Minister and/or MLA interacting with lab professionals as they demonstrate the new equipment and view monitors with magnified images.

(Lab cultures are automatically transported via conveyors from a temperature-controlled hood to a lab technologist's station in the same room. Once the culture arrives, the technologist is able to view magnified images of each specimen, magnify and highlight the appropriate section of the sample on his or her computer monitor and notify the ordering physician/unit of the results.)

#### **DESIRED PICTURE (VIDEO)**

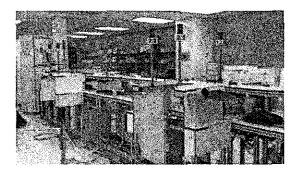
 Minister and/or MLA interacting with lab professionals as they demonstrate the new equipment and view monitors with magnified images.

(Lab cultures are automatically transported via conveyors from a temperature-controlled hood to a lab technologist's station in the same room. Once the culture arrives, the technologist is able to view magnified images of each specimen, magnify and highlight the appropriate section of the sample on his or her computer monitor and notify the ordering physician/unit of the results).

#### **ACTUAL SPEAKING BACKDROP**

• Speeches will take place in the Patient Care Centre (room S150, capacity 100) with a podium and pop-up banners. Large TV screens behind the podium may be used to view a video of the new laboratory system. Following the speaking portion. Island Health will host guided tours through the automated laboratory (early photos of the lab





attached below).

# **WRITTEN MESSAGE(S)**

#### DESIRED SOUNDBITE / KEY NEWS RELEASE SOUNDBITE

• Island Health's automated microbiology lab - a first of its kind in a publicly-funded hospital in North America - at Royal Jubilee Hospital will help ensure Vancouver Island families receive the best care with the newest technology, which provides health professionals with accurate, precisely timed information about their patients' treatment needs.

#### **KEY MESSAGES**

- Royal Jubilee Hospital is the first publicly-funded hospital in North America to implement this automated laboratory system.
- We are committed to the highest quality of patient care, and are using the newest technology and innovations to do so. The new \$4.3 million automated lab allows the hospital to do more tests, with improved efficiency and faster results with improved accuracy.
- The new automated laboratory, which will be integrated with the new electronic medical record when it comes online, will begin serving acute, residential and public health patients from across Island Health in December 2014.

## Mah, Brandon HLTH:EX

From:

Postans, James HLTH:EX

Sent:

Wednesday, October 22, 2014 4:09 PM

To:

Mah, Brandon HLTH:EX

Subject:

FW: For review: EP on microbiology lab from VIHA

**Attachments:** 

EP\_RJH microbiology lab\_ Oct 21\_133pm.docx

Please and thank you.

James

From: Moen, Shelley L HLTH:EX

Sent: Wednesday, October 22, 2014 4:05 PM

To: Postans, James HLTH:EX

Subject: FW: For review: EP on microbiology lab from VIHA

Please review the EP and advise.

Response is not required until next week @

Shelley

From: Lindstein, Sarah GCPE:EX

Sent: Wednesday, October 22, 2014 3:50 PM

To: Wolsey, Ashley HLTH:EX
Cc: Moen, Shelley L HLTH:EX

Subject: For review: EP on microbiology lab from VIHA

Hi Ashley as Carlene mentioned- EP for the microbiology lab from VIHA— no rush on this one, next week is fine.

Thanks!

### Sarah Lindstein | Public Affairs Officer

Government Communications & Public Engagement B.C. Ministry of Health <a href="mailto:Sarah.Lindstein@gov.bc.ca">Sarah.Lindstein@gov.bc.ca</a>

Please note new number: 250-952-2462

## Mah, Brandon HLTH:EX

From:

Machek, Marie < Marie. Machek@viha.ca>

Sent: To: Tuesday, May 13, 2014 5:08 PM XT:Hilborn, Francesca HLTH:IN

Cc:

Mah, Brandon HLTH:EX; Rundell, Christine HLTH:EX; XT:HLTH Botrakoff, Carol

Subject: Attachments: FW: 2014-05-14-CRHD2014projects 2014-05-14-CRHD2014projects.docx

Importance:

High

Hi Francesca,

As I am in Vancouver on Wednesday, if you receive any further confirmation on the CRHD funding for this news release please forward this information on to Brandon and Christine (emails above).

Thanks, Marie

From: Rundell, Christine HLTH:EX [mailto:Christine.Rundell@gov.bc.ca]

Sent: Tuesday, May 13, 2014 1:39 PM

To: Machek, Marie

Subject: 2014-05-14-CRHD2014projects

Importance: High

Hi Marie,

I have been asked to confirm the project amount identified within the attached document. In the document, it shows a \$4.3M project for *microbiology laboratory automation* project at the Royal Jubilee Hospital. The funding sources identified within this project comes from IHA and the RHD (70/30).

When I look at a WebCAPS extract, I see a \$4,446,000 project for automated micro-biology lab production line system. The funding sources identified within WebCAPS for this project is IHA Internal sources only.

Are you able to confirm if these are the same project and if not, can you please help identify the project that is being referred to in this Media Release.

Thank you,

# Ohristine Rundell

Capital Analyst Major Projects | Capital Services Branch | Ministry of Health

Ph: 250-952-1923 Fax: 250-952-2873





## Media Release

For Immediate Release May 14, 2014

# Patients get better care with newly approved capital funding

Victoria, BC - Patients across the Capital Region will benefit after the Capital Regional Hospital District (CRHD) Board approved funding of \$5 million today to support capital projects that improve and upgrade the region's health care facilities.

The 2014/15 funding from the CRHD includes \$3.75 million for minor capital projects for replacements and upgrades in the region's hospitals and residential care facilities, including energy efficiency measures. The CRHD also approved \$1.29 million in capital funding to support a microbiology laboratory automation project at the Royal Jubilee Hospital.

The \$4.3 million lab automation project, cost shared 70 percent by Island Health and 30 percent by CRHD, will enhance patient safety and care and help patients get home sooner.

"Through our strategic investments in healthcare capital projects, we will be able to continue to ensure top notch care and service is provided to patients within our region," said CRHD Board Chair, Denise Blackwell. "We are pleased to partner with Island Health to help our residents stay healthy and maintain the best quality of life possible."

The new automated system in the microbiology lab will reduce errors by standardizing the process of growing cultures that identify the cause of a patient's infection. The machine also takes digital photos as cultures grow, so lab staff can view them much sooner than with the current manual process. As a result, the virus or bacteria can be identified more quickly and the patient put on the right type of antibiotic or other medication, or taken off a medication they don't need to be on.

"By automating this process in our microbiology lab, we can do more tests every day and significantly shorten the turnaround times for lab results – but most importantly, we can help patients get better faster and get home to their families," said Island Health CEO Dr. Brendan Carr. "We also are very pleased that the more reliable, quicker results will improve our use of antibiotics so we can do our part to reduce the emergence of new strains of antibiotic resistant organisms."

Identifying the cause of infections quickly is critical to make sure patients receive the best treatment and to prevent the spread of infections to others. The lab grows a culture from a swab or other sample in a petri dish, which is then examined under a microscope to determine what bacteria or virus is causing the infection. Common infections include urinary tract, wound, skin and respiratory tract infections.

Working with Island Health, the CRHD supports a healthy region by investing in healthcare service and capital strategic priorities.

The CRHD is committed to improving and sustaining the Region's health infrastructure through its funding partnership with Island Health. Maintaining the quality of healthcare facilities in the Capital Region supports the health needs of residents, and ensures healthcare professionals have the best available facilities and equipment to provide optimum care.

The CRD is a local government that delivers 200+ regional, sub-regional and local services for residents of the region which includes 13 municipalities and three electoral areas within 2370 square kilometres on southern Vancouver Island and the Gulf Islands. Governed by a 24 member Board of Directors, the CRD is working to serve the public, and build a vibrant, livable and sustainable region.

Island Health provides health care services to residents across Vancouver Island and the Gulf Islands, including acute hospital care, residential care, home care and public health services.

-30-

## For media inquiries, please contact:

Andy Orr, Senior Manager CRD Corporate Communications Tel: 250.360.3229

Cell:

s.17

Sarah Plank, Media Relations Manager Island Health

Tel: 250.727.4275 Cell: s.17

## Mah, Brandon HLTH:EX

From: Sullivan, Chris < Chris.Sullivan@viha.ca>

Sent: Wednesday, April 23, 2014 12:26 PM

To: Postans, James HLTH:EX; Mah, Brandon HLTH:EX

**Subject:** RJH Lab project business case

Attachments: RJH Total Lab Automation - April 22 2014 Update.pdf

As requested ... please let me know if you have any questions.

Chris Sullivan | Director, Capital Planning

phone: 250.370.8912 | email: <u>chris.sullivan@viha.ca</u> web: <u>viha.ca</u>| <u>Facebook</u> | <u>Twitter</u> | <u>Flickr</u> | <u>Vimeo</u>



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# Royal Jubilee Hospital Total Lab Automation Business Case

April 22, 2014 Update



# Contents

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### Need for the Investment

- Island Health's microbiology laboratory services faces many challenges including addressing workforce safety issues, improving access to microbiology services, responding to new testing techniques to improve clinical outcomes, staff shortages and increasing volumes while containing cost pressures
- One trend to address these challenges is consolidation and increased automation of laboratories.

#### Consolidation

- A consolidation of microbiology laboratory services across VIHA was proposed in 2010.
   However, concerns of quality and turnaround time were expressed at several regional sites.
- An external review was undertaken in February 2011 to evaluate the plan and provide recommendations. One of the recommendations implemented was a pilot to assess transportation and geographical challenges by re-routing samples from Tofino and Port Alberni to Royal Jubilee Hospital (RJH), rather than processing the samples at the Nanaimo Regional General Hospital.
- Positive feedback from physicians in the piloted communities was received due to: an
  improved turnaround time, especially for blood cultures; and the patient management and
  antibiotic stewardship support provided to local physicians by the medical microbiologists at
  RJH.

#### Automation

- The laboratory department undertook an intensive workflow assessment focused on improving quality and efficiency using microbiology automation.
- Traditionally, culture plates are manually removed from the incubator to a workbench for the technologist to review plate-by-plate in a batch method.
- In contrast, patient swabs can be managed by a robotic system that streamlines the process for continuous flow ensuring samples are handled in a consistent manner for optimal growth. Digital image capture of bacterial growth on culture plates from inside the smart-incubator supports an archival image repository and allows for remote viewing; suspect bacterial colonies can be identified for further analysis and immediate workup.

#### Summary of Benefits

 The benefits of consolidation and automation of the microbiology project can be summarized as follows:

Patient and/or	Improved working conditions for staff by optimizing specimen flow,	
Workforce Safety	removing unnecessary walls and maximizing the use of the limited lab footprint.	
Access to Service	Turnaround time for identification of bacteria improves from "days" to	



	"hours" through the use of digital image analysis which allows rapid screening of specimens. Consolidating tests at RJH allows greater input for the medical microbiologist to put the right information in the hands of the right caregiver throughout Island Health.	
Clinical Outcomes	Positive impact to patient care by reducing specimen processing error and enhancing specimen tracking (using real time dashboard displays). In addition, the shorter turnaround time will ensure patients are more quickly put on the appropriate antibiotic regime or removed from one that is unnecessary.	
Staff Shortages	As the volume of tests rise, there will be a forecast shortage of microbiology technologists. This new technology will standardize repetitive functions and optimize the work of the microbiology technologists.	
Cost Avoidance	Cost containment as the volume of tests rise.	

# **Options to Address the Need**

- Various options to consolidate and automate microbiology services have been considered including:
  - Option 1: Compress existing operations and install new equipment within existing department footprint.
  - Option 2: Decant portion of existing laboratory to facilitate installation of new equipment and return necessary microbiology functions to existing footprint.
  - Option 3: Install new equipment in adjacent Pharmacy footprint and relocate Pharmacy to alternate location.
  - Option 4: Install new equipment in Area C adjacent to microbiology department and replace Area C elsewhere.
  - Option 5: Install new equipment in Emergency Department space adjacent to microbiology department.
- Option 2 was chosen as the preferred option as:
  - Microbiology department is not materially impacted during installation of new equipment as decant space is available in Royal Block, 1<sup>st</sup> floor.
  - Permanent space is not available to relocate Pharmacy, Area C or portion of Emergency Department.
  - Considered lowest cost and shortest delivery time considering space available.



# Scope of the Solution (the project)

- The project scope is limited to development of decant space in Royal Block, 1<sup>st</sup> floor, renovation of the existing microbiology laboratory to accommodate new equipment and the purchase of the new equipment.
- The equipment to be purchased is from BD Kiestra. The estimated annual operating cost savings from installing this equipment is \$400,000.
- Additional annual savings of \$48,000 are expected from the previously purchased Matrix-Assisted Laser Desorption/Ionization-Time Of Flight (MALDI-TOF) mass spectroscopy (MS). This equipment uses the unique protein signature of the bacteria rather than the traditional biochemical tests to identify bacteria. Turnaround time for identification of bacteria improves from 'days' to 'hours' leading to more timely patient intervention and better outcomes.
- As seen with business partners such as Cerner Corporation, opportunity exists for an innovative alliance with BD Kiestra. Island Health was an early adopter of chemistry automation in 2004 and continues to be seen as a leader in British Columbia in regard to innovative thinking. BD Kiestra has signaled interest in show-casing Island Health as an early adopter of automation for demonstrating how the integrated approach of antimicrobial stewardship, infection prevention/control strategies and rapid laboratory testing will lead to improved patient outcomes. The geographical boundaries of Island Health including a patient population of both acute and community setting are ideal to study health strategies and patient outcome data.

# Funding Analysis & Implementation Plan

#### **Funding Analysis**

#### Capital:

- The estimated total project cost is \$4,300,000 and broken down as follows:
  - Project cost \$1,200,000; and
  - Equipment cost \$3,100,000.
- Funding sources are Working Capital and Capital Regional Hospital District (CRHD). Island Health requested CRHD cost-sharing of 40% (\$1,720,000). CRHD has implemented a 30% cost-share formula for major projects and may only approve \$1,290,000.

#### Operating:

 As identified above, it is anticipated this project will decrease annual operating costs approximately \$400,000.



### Implementation Plan

#### Procurement:

- Design consultants for the project were retained through a competitive Request for Proposal (RFP). Construction will be managed in-house with tendered sub-trades.
- The equipment was purchased after a RFP was issued and with negotiations completed by Health Shared Services BC.

#### Governance:

 Standard Island Health governance procedures will be used for this project. This includes capital project management by Facilities Operations and equipment procurement by Health Shared Services BC.

#### Schedule:

The schedule for this project is anticipated to be as follows:

	Schedule
Planning (Pre-design)	Complete
Microbiology Decant	Complete
Construction	August 2014
Equipment Installation/Testing	September 2014
Opening	October 2014

# Risk Management

- The risks associated with this project generally relate to project scope and functionality, schedule and cost risk. These risks have been mitigated through the following measures:
  - · ongoing consultation with user groups throughout the design phase; and
  - contractual documentation based on industry-accepted templates.