

Date: August 4

Subject: Welcome

From: Perry City, CEO

To: Aldo Duncan

Hi, Aldo! Welcome aboard!

It is great to have a qualified lab assistant join our team here at Perry City Partners (PP) labs. I hope your lab bench suits your needs. If you are missing a piece of equipment, ask Leslie, the lab manager and I'm sure she will fix you right up.

Perry City, CEO

MEMO

Pericity Partners Lab

Date: August 4

To: Leslie Liddy
From: Aldo Duncan
Subject: Welcome

Leslie:

I just received an email from Mr. City. He says if I need anything, I'm to ask you. I will need some gas spectrometer tubes as I am all out at my station. And could you please make sure I have access to the blood gas analyzer and urinalysis equipment in the main lab area?

Thanks, Aldo

Date: August 5

Subject: Re: Welcome
From: Leslie Liddy
To: Aldo Duncan

Aldo:

No problem, I'll make sure you have everything you need.

I hate to break you in this way, but there seems to have been a mix-up with records from the hospital lab and everyone here is too busy to spend time sorting it out. Since you're new, this will be a good opportunity for you to show what you can do.

Here is the problem. In transport from the lab, a file folder containing information about four blood samples slid off the rack as our driver swerved to miss a cat on the road. A container of alcohol spilled and obliterated much of the identification that went with the blood samples. It's a real mess, and the hospital staff will be upset if they have to resample these patients. Can you use a bit of detective work to sort out which sample is which?

I will send you the records and the blood samples. You can test the blood to determine which sample goes with which record. Let me know if you have difficulty. This has happened before, and I am afraid the driver (who is also my husband) may lose his job if this gets out. Please submit your report to me and be sure it has my name on it. It's important that we keep a low profile on this one.

Owe you one already.

Les

Patient [REDACTED]

Profile: Male, aged 32. Recently returned from the Himalayan mountains, where he successfully climbed K-2. Patient has very low heart rate and respiratory rate. Patient complained about low urine output, strongly coloured urine, but otherwise seems healthy.

Patient [REDACTED]

Profile: Female, aged 93. Patient weak, beyond what could be expected from her advanced age. Complains of frequent urination and thirst.

Patient [REDACTED]

Profile: Male, aged 54. High blood pressure, obese, office worker.

Patient [REDACTED]

Profile: Female, aged 27. Olympic athlete. Complaining of unexplained nausea. Seems otherwise to be in good health.

REQUISITION

Date: August 6

From: Aldo D.

To: Blood Analyst

Please provide an analysis for these four blood samples. Please note there are two samples for each patient, one from the renal artery and one from the renal vein.

Please provide the following information:

% dissolved oxygen

glucose

urea

renin

ADH

aldosterone

Please identify the patient blood analysis by patient numbers 1 to 4. Can I have these by tomorrow morning?

BLOOD ANALYSIS LAB REPORT

Date: August 8

Aldo:

Here are the blood analyses as requested. Sorry I couldn't get to it sooner, but we are stacked up here. Blood everywhere. Ha, ha, old lab joke!

Get back to me if the results are not what you need. I numbered the samples as you requested and have also put normal blood levels into the table for your reference.

Frank N. Stein, Junior Analyst

	% O₂	Glucose	Urea	Renin	ADH	Aldosterone
Renal Artery (RA)(Normal)	10 %	6 g/L	20 ppm	2 pg/ml	.4 pg/ml	8 pg/ml
Renal Vein (RV)(Normal)	5 %	5 g/L	2 ppm	2.5 pg/ml	.3 pg/ml	7 pg/ml
RA 1	8 %	46 g/L	33 ppm	1 pg/ml	5 pg/ml	8 pg/ml
RV 1	6 %	42 g/L	5 ppm	1.2 pg/ml	4.8 pg/ml	7 pg/ml
RA 2	12 %	6 g/L	20 ppm	2 pg/ml	.4 pg/ml	8 pg/ml
RV 2	6 %	5 g/L	1.8 ppm	2.5 pg/ml	.3 pg/ml	7 pg/ml
RA 3	8 %	10 g/L	20 ppm	0.2 pg/ml	.4 pg/ml	1 pg/ml
RV 3	4 %	6 g/L	1 ppm	0.2 pg/ml	.3 pg/ml	.8 pg/ml
RA 4	25%	6 g/L	32 ppm	4 pg/ml	6 pg/ml	12 pg/ml
RV 4	22%	5 g/L	30 ppm	2.5 pg/ml	1 pg/ml	7 pg/ml

Date: August 9

Subject: Blood Analysis Lab Report, August 8

From: Aldo Duncan

To: Frank Stein

Thanks, Frank.

That's just what I needed. Could you do one more test for me, just to confirm something I am a bit unsure of? Please test patient 4 for elevated levels of erythropoietin.

Aldo

Date: August 9

Subject: Re: Blood Analysis Lab Report, August 8

From: Frank Stein

To: Aldo Duncan

Aldo:

Patient 4's circulating erythropoietin is four times lower than normal. Hope this helps.

Frank