9 Annexures

ANNEXURE 1: Patient interview

Good Morning Ladies,

My name is Madelein, and this is my colleague, Isabella. We are from the University of Pretoria and we are working together with staff here at the hospital in a study. Our goal is to build a public facility, called an umbilical cord blood stem cell bank, and we are here today to see what you think about this idea and if you would support a public umbilical cord blood stem cell bank.

We would like to give you some information about the stem cell bank, what it is and how it will work and then go through a questionnaire with you. This is voluntary and you do not have to fill in the questionnaire if you don't want to.

First of all, you might wonder what is an umbilical cord blood stem cell bank?

It is not like a bank where you go to save or withdraw your money. It will work almost in the same way that the South African National Blood Bank works. The blood bank collects donated blood and stores it and when someone needs blood – like when they were in an accident and has lost a lot of blood - the blood bank is able to give them the blood that they need.

In a similar way, the umbilical cord blood bank will be a facility that will collect and store umbilical cord blood that has been donated to the bank by pregnant mothers. But before we can open the new facility we would first like to know if pregnant women would like to make use of such a facility.

What is umbilical cord blood?
It is the blood that is left in the placenta (also known as the "gobo or inghubo" – the "blanket") and the umbilical cord, which can be collected after a baby is born.

So why would we like to store umbilical cord blood?

Because the blood that is left in the umbilical cord and placenta after the baby has been born, contains special cells – called stem cells. These stem cells can be used to treat people with certain types of cancers for example leukaemia (blood cancers) and certain genetic diseases. These are very rare diseases and the chance of your baby getting one of these diseases is very small. So these stem cells will not be used to treat a sick child with a cold, the flu or a stomach bug, it is for vary rare/ uncommon genetic diseases or certain cancers.

That is why we would like to ask mothers if they think that they would be willing to donate their umbilical cord blood when the baby is born and to store those cells in the bank, if such a facility were available.

This way, if a mother comes to us with a sick child with one of these rare diseases, we can find a match for the child in the bank and give the cells to a doctor that can treat the patient.

How and where will the blood be collected?
To answer this, we need to show you where the placenta comes from and when is it needed by your baby:
You fall pregnant when one of your egg cells are fertilised by a sperm from your husband. This fertilised egg then implants in the uterus and where it implants, the placenta starts to develop. The role of the placenta/ gobo is to transfer nutrients and oxygen from your body to your baby, so that your baby can grow and develop. The placenta is only important to the baby, while the baby is still in the womb, growing. After the baby is born, the placenta also comes out and the doctors usually throw it away/ send it off to be burned. The placenta has to come out, otherwise the mom can get very sick.

If you have a normal birth, your baby will be born, and the doctor will clamp the umbilical cord on two places and cut it in between the two clamps. The doctor will then give your baby either to you or to a nurse. At this stage your placenta will move away from your uterine wall, because the placenta must come out/ be delivered as well. While this is happening the doctors will draw the blood from the placenta through the umbilical vein. The doctor puts a syringe into the loose end of the umbilical cord and draws the blood. This is a quick and painless procedure and will not harm you or your baby. If the placenta does not come out, the doctor normally needs to remove it and then it gets thrown away/burnt.

The blood gets collected while the placenta is still in the mom, because there is not a lot of blood in the placenta and umbilical cord. It is usually about 60-80 ml (a quarter of a cup). If the placenta gets delivered, a lot of that blood is spilled and we cannot use it any more.

For the bank, we would like to collect the blood that has the special stem cells from the placenta, before the doctor throws the placenta away. We will then create a bank where we can store these special stem cells.

This is not a new procedure. All over the world they have public and private stem cells banks and in South Africa we already have private stem cell banks, but not a public bank. If a mother wants to store her umbilical cord blood in a private bank, she usually has to pay a large sum of money to keep the cells there, for a limited time (usually 10-15 years). If we can build a public umbilical cord blood bank, all the mothers in South Africa can donate their umbilical cord blood to be stored in this bank and they wouldn't have to pay money to store the cells, because it is a donation and anybody that needs it, would be able to get the blood.

HIV positive blood cannot be stored in the bank, because we cannot use it to treat certain diseases. This blood could however be used for medical research purposes to see how HIV affects the cells in the blood.

Before I go through the questionnaire with you, there are just a few points I would like to make you aware of

This is just a survey – meaning, we just want your opinion, if you think this bank is a good idea or not.
You don't have to answer this questionnaire - it is voluntary (nobody can make you answer these questions).
Whether or not you choose to answer the questions will have no effect on the way the doctors and nurses will treat you or your baby now or in the future.
The results of this questionnaire will be anonymous.
This survey is only to see if people will be willing to donate their placenta (afterbirth) to medical research. If you answer yes to all the questions it does not mean that you will be donating your placenta to medical research. This questionnaire is only to find out what you would be willing to do if you were given the choice.

Are there any other questions?
Can I please go through the questionnaire with you?

ANNEXURE 2: Patient Questionnaire

DEPARTMENT IMMUNOLOGY

FACULTY OF HEALTH SCIENCES

Prinshof Campus

P.O. Box 2034

Pretoria 0001

SOUTH AFRICA

Tel: 012-319-2621

Fax: 012-323-0732

Donation of Placenta (Afterbirth) survey

The University of Pretoria is doing a survey to see if pregnant mothers would be willing to donate their placenta (afterbirth) to medical research and we would like to invite you to take part in the survey by answering the following questions.

Please note:

- This is just a survey – meaning, we just want your opinion, if you think this bank is a good idea or not.
- You don't have to answer this questionnaire - it is voluntary (nobody can make you answer these questions).
- Whether or not you choose to answer the questions will have no effect on the way the doctors and nurses will treat you or your baby now or in the future.
- The results of this questionnaire will be anonymous.
- This survey is only to see if people will be willing to donate their placenta (afterbirth) to medical research. If you answer yes to all the questions it does not mean that you will be donating your placenta to medical research. This questionnaire is only to find out what you would be willing to do if you were given the choice.

Participant information:

Language group:

English	☐	Afrikaans	☐
Xhosa	☐	Ndebele	☐
Zulu	☐	Tswana	☐
Sotho	☐	Swazi	☐
Pedi	☐	Venda	☐
Northern Sotho	☐	Other	☐

Age range:

18-20	☐	21-25	☐
26-30	☐	31-35	☐
36-40	☐	41-45	☐
45-49	☐	50+	☐

Number of biological children

0	☐	6	☐
1	☐	7	☐
2	☐	8	☐
3	☐	9	☐
4	☐	10	☐
5	☐		

Marital status:

Married	☐
Widow	☐
Divorced	☐
Unmarried	☐

Employment status

Unemployed	☐
Employed	☐
*Please specify	_____

Comments and/or Questions:

_____

Question 1

If there is a public cord blood bank facility, would you be willing to donate your PLACENTA (afterbirth) for medical research?

YES	NO

If you answered NO:

Please indicate the reason:

Against religious belief ☐

Against your culture ☐

Don't think this bank is a good idea ☐

Afraid of the collection process ☐

Don't understand what the bank is for ☐

Other ☐

Please specify_____

Question 2

If you answered NO in question 1, would you be willing to donate the BLOOD from your placenta?

YES	NO

//

Question 3

If you are willing to donate your placenta OR just the blood from the placenta and umbilical cord, would you be willing to allow your doctor to do an additional HIV test?

Before you have your baby your doctor will do an HIV test to find out about your HIV status. Your test results will remain confidential. If you are HIV positive, your doctor will not ask you to join this study. If you are HIV negative, your doctor will ask you if you are willing to do another

test either seven days before or seven days after the birth of your baby to confirm that you are HIV negative.

YES	NO

Question 4:

Have you heard of stem cells before today?

YES	NO

Question 5:

Do you think stem cells can help to treat you, your child or somebody else in the future?

YES	NO

Question 6:

Do you think that a public umbilical cord blood stem cell bank is a good idea?

YES	NO

ANNEXURE 3: Different applications of UCB units collected

Table 21: An overview of the use of all UCB units collected during the course of the study

No	UCB unit ID	Method of UCB application	Comment
1	20101202 P1	Frozen UCB units	No viable CD34+ isolated
2	20110118 P1	Frozen UCB units	No viable CD34+ isolated
3	20110215 P1	Frozen UCB units	No viable CD34+ isolated
4	20110217 P1	Frozen UCB units	No viable CD34+ isolated
5	20110305 P1	Different protocol (Magnetic isolation)	Cannot compare results to final protocol
6	20110608 P1	Different protocol (Magnetic isolation)	Cannot compare results to final protocol
7	20110608 P2	Different protocol (Magnetic isolation)	Cannot compare results to final protocol
8	20110610 P1	Different protocol (Magnetic isolation)	Cannot compare results to final protocol
9	20110610 P2	Different protocol (Magnetic isolation)	Cannot compare results to final protocol
10	20110610 P3	Different protocol (Magnetic isolation)	Cannot compare results to final protocol
11	20110629 P1	Different protocol (Magnetic isolation)	Cannot compare results to final protocol
12	20110727 P1	Results incorporated	
13	20110727 P2	Results incorporated	
14	20110727 P3	No results	No colonies formed
15	20110906 P1	Results incorporated	
16	20110906 P2	Results incorporated	
17	20110922 P1	Results incorporated	
18	20111011 P1	Results incorporated	
19	20111012 P1	Results incorporated	
20	20111018 P1	Results incorporated	
21	20111018 P2	Results incorporated	
22	20111101 P1	No results	No colonies formed
23	20111122 P1	Frozen w/o CFU-assay	No CFU-assay performed
24	20111122 P2	Frozen w/o CFU-assay	No CFU-assay performed
25	20111212 P1	Frozen w/o CFU-assay	No CFU-assay performed

No	UCB unit ID	Method of UCB application	Comment
26	20111212 P2	Frozen w/o CFU-assay	No CFU-assay performed
27	20111212 P3	Frozen w/o CFU-assay	No CFU-assay performed
28	20120201 P1	Results incorporated	
29	20120201 P2	Results incorporated	
30	20120206 P1	Results incorporated	
31	20120209 P1	Results incorporated	
32	20120214 P1	Results incorporated	
33	20120219 P1	Different protocol (HIV)	Cannot compare results to final protocol
34	20120223 P1	No results	Blood volumes too low for isolation
35	20120229 P1	Different protocol (HIV)	Cannot compare results to final protocol
36	20120305 P1	Results incorporated	
37	20120312 P1	Results incorporated	
38	20120312 P2	Results incorporated	
39	20120312 P3	No results	Blood volumes too low for isolation
40	20120326 P1	No results	No colonies formed
41	20120402 P1	Results incorporated	
42	20120417 P1	Results incorporated	
43	20120417 P2	Results incorporated	
44	20120419 P1	Results incorporated	
45	20120704 P1	Results incorporated	
46	20120710 P1	Results incorporated	
47	20120710 P2	Results incorporated	
48	20120724 P1	Results incorporated	
49	20120724 P2	Results incorporated	
50	20120725 P1	Results incorporated	
51	20120725 P2	Results incorporated	
52	20120726 P1	Results incorporated	
53	20120727 P1	Results incorporated	

No	UCB unit ID	Method of UCB application	Comment
54	20120727 P2	No results	Blood volumes too low for isolation
55	20120727 P3	Results incorporated	
56	20120727 P4	Results incorporated	
57	20120727 P5	Results incorporated	
58	20120803 P1	Results incorporated	
59	20120803 P2	Results incorporated	
60	20120803 P3	Results incorporated	
61	20120803 P4	Results incorporated	
62	20120803 P5	Results incorporated	
63	20120803 P6	Results incorporated	
64	20120806 P1	Results incorporated	
65	20120806 P2	Results incorporated	
66	20120806 P3	No results	No colonies formed
67	20120806 P4	No results	No colonies formed
68	20120806 P5	No results	Blood volumes too low for isolation
69	20120807 P1	Results incorporated	
70	20120807 P2	Results incorporated	
71	20120813 P1	No results	No colonies formed
72	20120813 P2	No results	No colonies formed
73	20120813 P3	No results	No colonies formed
74	20120813 P4	No consent for Ultrio screening	
75	20120813 P5	Partial results	Cannot compare results to final protocol: HIV colonies perished
76	20120813 P6	Partial results	Cannot compare results to final protocol: HIV colonies perished
77	20120813 P7	Partial results	Cannot compare results to final protocol: HIV colonies perished
78	20120813 P8	Partial results	Cannot compare results to final protocol: HIV colonies perished
79	20120813 P9	Partial results	Cannot compare results to final protocol: HIV colonies perished
80	20120813 P10	Partial results	Cannot compare results to final protocol: HIV colonies perished

ANNEXURE 4: Complete flow cytometry data for the 30 UCB units

Table 22: Flow cytometry data for the 30 UCB units that were also subjected to Ultrio-Plus® screening

		Flow cytometry data for the CD34+ Pool Kit					Flow cytometry data for Stem Kit protocol					
No.	Unit ID	Average of %Gated CD34	Average of cells/µL CD34	Total isolated CD 45 BRIGHT	Constitution of CD34+ cells: CD45+ Dim	CD45+ Bright	Average of %Gated CD34	Average of cells/µL CD34	Total isolated CD 45 BRIGHT	Constitution of CD34+ cells: CD45+ Dim	CD45+ Bright	Viable
1	20120229 P1	90.10	24.21	13.07	85.05	14.95	65.73	17.75	10.82	91.16	8.84	79.16
2	20120306 P1	74.90	65.95	19.52	95.83	4.17	75.74	66.74	22.85	60.10	39.90	93.16
3	20120312 P1	80.90	184.04	74.87	15.36	84.64	86.55	162.15	2.96	79.43	20.57	88.64
4	20120312 P2*	29.89	81.00	2.07	95.40	4.60	49.55	10.76	4.50	59.27	40.73	67.93
5	20120312 P3	97.29	109.22	3.70	96.41	3.59	84.88	10.76	7.63	94.94	5.06	83.90
6	20120402 P1**	32.56	47.80	7.26	91.20	8.80	49.89	66.62	4.07	81.35	18.65	7.00
7	20120417 P1	98.28	1203.32	3.69	96.21	3.79	67.16	795.78	3.85	93.05	6.95	87.98
8	20120417 P2	97.34	1032.49	13.82	85.88	14.12	26.60	307.62	1.17	46.99	53.01	80.65
9	20120419 P1	89.24	1029.97	7.39	97.75	2.25	91.32	278.87	7.95	93.84	6.16	95.93
10	20120704 P1**	57.17	140.39	0.57	98.72	1.28	67.91	No beads	1.90	22.09	77.91	31.52
11	20120710 P1	93.69	649.86	1.50	98.43	1.57	95.97	669.20	4.02	96.24	3.76	96.53
12	20120724 P1	67.43	157.07	0.26	99.58	0.42	97.33	245.29	2.15	96.95	3.05	93.80
13	20120724 P2	52.70	137.77	0.55	98.95	1.05	95.34	215.13	2.44	88.71	11.29	89.70
14	20120725 P1*	70.32	89.25	1.55	97.79	2.21	2.27	2.70	4.35	44.44	55.56	42.11
15	20120725 P2	27.86	63.73	2.58	90.74	9.26	84.88	195.36	7.63	94.94	5.06	83.90
16	20120726 P1	99.66	94.60	4.41	95.58	4.42	71.17	72.02	4.23	97.06	2.94	88.48
17	20120727 P1	99.82	170.91	3.98	95.68	4.32	93.22	133.44	3.68	97.21	2.79	95.88
18	20120727 P3*	99.28	88.96	9.83	91.11	8.89	11.02	6.01	4.05	60.54	39.46	79.46
19	20120727 P4	99.17	42.96	6.26	94.22	5.78	21.11	6.20	5.69	36.84	63.16	64.17
20	20120727 P5	98.61	250.43	3.57	96.62	3.38	12.75	16.63	8.97	57.53	42.47	63.80
21	20120803 P1*	5.62	73.56	3.39	63.40	36.60	12.65	177.94	0.42	13.01	86.99	50.87

		Flow cytometry data for the CD34+ Pool Kit						Flow cytometry data for Stem Kit protocol					
No.	Unit ID	Average of %Gated CD34	Average of cells/µL CD34	Total isolated CD 45 BRIGHT	Constitution of CD34+ cells: CD45+ Dim	CD45+ Bright		Average of %Gated CD34	Average of cells/µL CD34	Total isolated CD 45 BRIGHT	Constitution of CD34+ cells: CD45+ Dim	CD45+ Bright	Viable
22	20120803 P2	6.82	221.64	7.43	50.74	49.26		23.03	66.44	0.29	3.32	96.68	52.16
23	20120803 P3	6.94	15.20	2.86	74.61	25.39		30.80	60.91	0.65	14.59	85.41	52.53
24	20120803 P5	15.89	32.07	3.95	87.65	12.35		23.40	50.24	2.81	18.11	81.89	50.62
25	20120803 P4	38.30	157.34	35.96	20.57	79.43		72.06	146.93	5.47	82.95	17.05	32.83
26	20120803 P6*	44.40	19.74	45.91	28.64	71.36		10.00	59.67	7.36	38.69	61.31	67.12
27	20120806 P1	8.34	96.86	1.16	94.73	5.27		7.34	93	0.64	82.07	17.93	63.72
28	20120806 P2*	11.59	0.83	7.93	42.11	57.89		21.94	2	9.7	48.08	51.92	61.18
29	20120807 P1**	49.09	21.69	51.92	12.45	87.55		27.19	64.48	6.75	69.57	30.43	45.44
30	20120807 P2**	41.87	22.58	34.95	17.42	82.58		52.96	30.37	2.21	59.69	40.31	17.68
Average		**60**	**210.85**	**12.53**	**76.96**	**23.04**		**51**	**139.01**	**5.04**	**64.09**	**35.91**	**66.93**
Standard deviation (SD)		34.8	321.7	18.0	29.9	29.9		32.5	186.9	4.4	29.7	29.7	24.5

*= Patients with final blood volumes below 15 ml

** = UCB units collected after 72 hours (removed from patient cohort)

ANNEXURE 5: Ethics approval forms from the Main Research Ethics Committee, University of Pretoria

The Research Ethics Committee, Faculty Health Sciences, University of Pretoria complies with ICH-GCP guidelines and has US Federal wide Assurance.

* **FWA** 00002567, Approved dd 22 May 2002 and Expires 13 Jan 2012.
* **IRB** 0000 2235 IORG0001762 Approved dd Jan 2006 and Expires 13 Aug 2011.

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Health Sciences Research Ethics Committee
Fakulteit Gesondheidswetenskappe Navorsingsetiekkomitee

DATE: 11/10/2010

PROTOCOL NO.	**89/2010**
PROTOCOL TITLE	Rendering the Immune System Resistant to HIV
INVESTIGATOR	**Principal Investigator:** Prof. Michael S. Pepper
SUBINVESTIGATOR	None
SUPERVISOR	None
DEPARTMENT	**Dept:** Immunology **Phone:** 012-420-5317 **Mobile:** 072-209-6324 **E-Mail:** michael.pepper@up.ac.za
STUDY DEGREE	Grant
SPONSOR	None
MEETING DATE	26/05/2010

The Protocol and Informed Consent Document were approved on 29/09/2010 by a properly constituted meeting of the Ethics Committee subject to the following conditions:

1. The approval is valid until the end of December 2012, and
2. The approval is conditional on the receipt of 6 monthly written Progress Reports, and
3. The approval is conditional on the research being conducted as stipulated by the details of the documents submitted to and approved by the Committee. In the event that a need arises to change who the investigators are, the methods or any other aspect, such changes must be submitted as an Amendment for approval by the Committee.

The Research Ethics Committee, Faculty Health Sciences, University of Pretoria complies with ICH-GCP guidelines and has US Federal wide Assurance.

* **FWA** 00002567, Approved dd 22 May 2002 and Expires 13 Jan 2012.
* **IRB** 0000 2235 IORG0001762 Approved dd Jan 2006 and Expires 13 Aug 2011.

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Faculty of Health Sciences Research Ethics Committee
Fakulteit Gesondheidswetenskappe Navorsingsetiekkomitee

DATE: 1/10/2010

PROTOCOL NO.	**131/2010**
PROTOCOL TITLE	Feasibility study for a public cord blood stem cell bank in South Africa.
INVESTIGATOR	**Principal Investigator:** Michael S. Pepper
SUBINVESTIGATOR	Ms W M Young **E-Mail:** wendyyoung@mtnloaded.co.za Ms F Barmania **E-Mail:** barmaniaf@gmail.com
SUPERVISOR	Michael S. Pepper **E-mail:** michael.pepper@up.ac.za
DEPARTMENT	**Dept:** Immunology, University of Pretoria. **Tel:** +27(0)124203845 (Secretary) **Tel:** +27 (0)12 420 5317 (Direct) **Fax:** +27 (0)12 420 3953 **Mobile:** +27 (0)72 209 6324
STUDY DEGREE	MSc in Immunology
SPONSOR	None
MEETING DATE	**28/07/2010**

The Protocol and Informed Consent Document were approved on 29/09/2010 by a properly constituted meeting of the Ethics Committee subject to the following conditions:

1. The approval is valid until the end of December 2014, and
2. The approval is conditional on the receipt of 6 monthly written Progress Reports, and
3. The approval is conditional on the research being conducted as stipulated by the details of the documents submitted to and approved by the Committee. In the event that a need arises to change who the investigators are, the methods or any other aspect, such changes must be submitted as an Amendment for approval by the Committee.

Ethics approval for submission of this Thesis from the Main Research Ethics Committee, University of Pretoria

The Research Ethics Committee, Faculty Health Sciences, University of Pretoria complies with ICH-GCP guidelines and has US Federal wide Assurance.

* **FWA** 00002567, Approved dd 22 May 2002 and Expires 20 Oct 2016.
* **IRB** 0000 2235 IORG0001762 Approved dd 13/04/2011 and Expires 13/04/2014.

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Faculty of Health Sciences Research Ethics Committee
Fakulteit Gesondheidswetenskappe Navorsingsetiekkomitee

DATE: 30/07/2012

NUMBER	**124/2012**
OLD TITLE	~~Umbilical cord blood stem cells: a public bank social feasibility study and investigation of the effect of HIV-1 on the colony forming ability of CD34+ cells~~
NEW TITLE	The effect of HIV on the formation of colony forming units in vitro & public willingness to donate to a public cord blood bank
PRINCIPAL INVESTIGATOR	Mrs. Madelein Meissner-Roloff **Dept:** Immunology, Faculty of Health Sciences, University of Pretoria. **Cell:** 082 553 6005 **E-Mail:** mmroloff@gmail.com
SUB INVESTIGATOR	Not Applicable
STUDY COORDINATOR	Not Applicable
SUPERVISOR	Prof Michael S. Pepper **E-Mail:** michael.pepper@up.ac.za
STUDY DEGREE	PhD
SPONSOR COMPANY	Not Applicable
MEETING DATE	25/07/2012

The Protocol and Informed Consent Document were approved on 25/07/2012 by a properly constituted meeting of the Ethics Committee subject to the following conditions:

1. The approval is valid for 3 years period [till the end of December 2015], and
2. The approval is conditional on the receipt of 6 monthly written Progress Reports, and
3. The approval is conditional on the research being conducted as stipulated by the details of the documents submitted to and approved by the Committee. In the event that a need arises to change who the investigators are, the methods or any other aspect, such changes must be submitted as an Amendment for approval by the Committee.

Members of the Research Ethics Committee:

Prof M J Bester	(female)BSc (Chemistry and Biochemistry); BSc (Hons)(Biochemistry); MSc(Biochemistry); PhD (Medical Biochemistry)
Prof R Delport	(female)BA et Scien, B Curationis (Hons) (Intensive care Nursing), M Sc (Physiology), PhD (Medicine), M Ed Computer Assisted Education
Dr NK Likibi	MBB HM – Representing Gauteng Department of Health) MPH
Dr MP Mathebula	(female)Deputy CEO: Steve Biko Academic Hospital; MBCHB, PDM, HM
Prof A Nienaber	(female) BA(Hons)(Wits); LLB; LLM; LLD(UP); PhD; Dipl.Datametrics(UNISA) – Legal advisor
Mrs MC Nzeku	(female) BSc(NUL); MSc(Biochem)(UCL, UK) – Community representative
Prof L M Ntlhe	MbChB (Natal) FCS (SA)
Snr Sr J Phatoli	(female) BCur(Eet.A); BTec(Oncology Nursing Science) – Nursing representative
Dr R Reynders	MBChB (Prét), FCPaed (CMSA) MRCPCH (Lon) Cert Med. Onc (CMSA)
Dr T Rossouw	(female) MBChB (cum laude); M.Phil (Applied Ethics) (cum laude), MPH (Biostatistics and Epidemiology (cum laude), D.Phil

2012/08/03MS: dd 2012/08/03: C:\Documents and Settings\user\My Documents\Protokolle\Grade briewe\Letters 2012\124.2012.doc