

### Sri Lakshmi Narayana Institute of Medical Sciences

#### Annexure 1

Date 28/12/2018

From
Prof.D.Baba, MS
Professor and Head.
Ophthalmology,
Sri Lakshmi Narayana Institute Of Medical Sciences
Bharath Institute of Higher Education and Research,
Chennai.

To
The Dean,
Sri Lakshmi Narayana Institute Of Medical Sciences
Bharath Institute of Higher Education and Research,
Chennai.

Sub: Permission to conduct value-added course: RETINOPATHY OF PREMATURITY

Dear Sir,

With reference to the subject mentioned above, the department proposes to conduct a value-added course titled: <u>RETINOPATHY OF PREMATURITY</u> on JAN-2019 – APR -2019. We solicit your kind permission for the same.

Kind Regards

PROF.D.BABA, MS HOD, OPHTHALMOLOGY

#### FOR THE USE OF DEANS OFFICE

Names of Committee members for evaluating the course:

The Dean:Prof.K.Balagurunadhan M.S,

The HOD:Prof.D.Baba M.S,

The Expert:Dr.Shobana - DNB

The committee has discussed about the course and is approved.

Subject Expert

PROFESSOR & FIGO DEPARTMENT OF THALMOLOGY, SRIUMSEMEMENT OF THE MODERA SCHINGS

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### Sri Lakshmi Narapana Institute of Medical Sciences

OSUDU, AGARAM VILLAGE, VILLIANUR COMMUNE, KUDAPAKKAM POST, PUDUCHERRY - 605 502.

[Recognised by Medical Council of India, Ministry of Health letter No. U/12012/249/2005-ME ( P -II ) dt, 11/07/2011 ]
[Affliated to Bharath University, Chennai - TN ]

Ref. No. SLIMS/Dean Off/VAC / OPH11

Date: 28.12.2018

From

The Dean Sri Lakshmi Narayana Institute of Medical sciences, Pondicherry – 605502

To

The Registrar, Bharath Institute of Higher Education and Research, Chennai - 600073.

Respected Sir

Sub: Request for permission and approval of Syllabus for certificate course (Value

Added course) for the academic year 2018-2019 - Reg

Ref: Requesting letter received from Departments

\*\*\*\*

With reference to the above, herewith forwarding the proposed list of Value-added courses for necessary permission and approval of syllabus to conduct the same.

- 1. RETINOPATHY OF PREMATURITY
- 2. SLIT LAMP BIOMICROSCOPY

This is for your kind information and needful action.

Thanking you

Yours faithfully

[DEAN]

#### Encl's:

- 1. Requesting letter received from department
- 2. Syllabus of the course
- 3. Details of faculty handling course

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# Sri Lakshmi Narayana Institute of Medical Sciences, Puducherry

#### VALUE ADDED COURSE -

- 3. RETINOPATHY OF PREMATURITY
- 4. SLIT LAMP BIOMICROSCOPY

#### COURSE CO-ORDINATOR DETAILS

Faculty Name: Prof.D.Baba, MS

Email ID: ophthalmologyprof@gmail.com

Mobile number: 8585485988



Ref. No. BHIER/VAC/OPH07

Date: 30.12.2018

From

The Registrar, Bharath Institute of Higher Education and Research, Chennai - 600073.

To

The Dean Sri Lakshmi Narayana Institute of Medical sciences, Pondicherry – 605502

Sir / Madam,

Sub: Approval of Syllabus to conduct certificate course (Value Added course) for the

academic year 2018-2019 - Reg.

Ref: Ref. No. SLIMS/Dean Off/VAC /OPH07 Dated: 28.12.2018

\*\*\*\*

With reference to the above, it is to inform that the proposal submitted to conduct Value Added Course has been accepted and approved by B1HER, council meeting. List of the VAC are mentioned below for the academic year 2018–2019. The abstract of the VAC course completion detail should be submitted to the Registrar office.

- 1. RETINOPATHY OF PREMATURITY
- 2. SLIT LAMP BIOMICROSCOPY

Thanking you

Yours faithfully

RECISTRAD



# Sri Lakshmi Marayana Institute of Medical Sciences

OSUDU, AGARAM VILLAGE, VILLIANUR COMMUNE, KUDAPAKKAM POST, PUDUCHERRY - 605 502.

[ Recognised by Medical Council of India, Ministry of Health letter No. U/12012/249/2005-ME ( P -II ) dt. 11/07/2011 ]

[ Affliated to Bharath University, Chennai - TN ]

#### Circular

31.12.2018

Sub: Organising Value-added Course: RETINOPATHY OF PREMATURITY

With reference to the above mentioned subject, it is to bring to your notice that Sri Lakshmi Narayana Institute of Medical Sciences, Bharath Institute of Higher Education and Research is organizing "RETINOPATHY OF PREMATURITY". The course content and registration form is enclosed below."

The application must reach the institution along with all the necessary documents as mentioned. The hard copy of the application should be sent to the institution by registered/ speed post only so as to reach on or before 02<sup>ND</sup> JAN 2019. Applications received after the mentioned date shall not be entertained under any circumstances.

Dean

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Encl: Copy of Course content

#### **VALUE ADDED COURSE**

#### 1. Name of the programme & Code

Retinopathy of prematurity

2. Duration & Period

30 hrs & Jan -2019 - Apr-2019

3. Information Brochure and Course Content of Value Added Courses

Enclosed as Annexure- I

4. List of students enrolled

Enclosed as Annexure- II

5. Assessment procedures:

Multiple choice questions- Enclosed as Annexure- III

6. Certificate model

Enclosed as Annexure- IV

7. No. of times offered during the same year:

Jan -2019 – Apr -2019 (1)

- 8. Year of discontinuation: 2019
- 9. Summary report of each program year-wise

Value Added Course- Jan -2018 - Apr -2018						
SI, No	Course Code	Course Name	Resource Persons	Target Students	Strength & Year	
1	ОРН11	Retinopathy Of Prematurity	Dr.Shobana, DNB,	30	2019	

#### 10. Course Feed Back

Enclosed as Annexure- V

Dr.Shobana, DNB

RESOURCE PERSON

Prof. D. Baba, M.S,

COORDINATOR PROFESSOR & HOD

DEPARTMENT OF OPHTHALMOLOGY, SRI LAKSHMI NARAYARA HISTIUTI OF MEDICAL SCIENCE PUDUCHERRY-005-502.

#### Annexure 2 - Course Proposal

#### Course Title: RETINOPATHY OF PREMATURITY

#### Course Objective:

- 1. Etiopathogenesis
- 2. Clinical features
- 3. Stages of ROP
- 4. Zones of ROP
- 5. Screening protocols
- 6. Management of ROP

Course Outcome:

After undergoing this course students will be able to

understand the following.

Course Audience: MBBS UNDERGRADUATES

Course Coordinator: PROF.D.BABA, MS,

#### Course Faculties with Qualification and Designation:

1. Prof.D.Baba, MS, - HOD Ophthalmology

2.

#### Course Curriculum/Topics with schedule (Min of 30 hours)

SINo	Date	Topic	Time	Hours
1.	10/7/2018	Etiopathogenesis	4-6PM	2
2.	15/7/2018	Etiopathogenesis	4-7PM	3
3.	22/7/2018	Clinical features	4-6PM	3
4.	25/7/2018	Clinical features	4-6PM	2
5.	29/7/2018	Stages of ROP	4-7PM	3
6.	09/8/2018	Stages of ROP	4-7PM	3
7.	10/8/2018	Zones of ROP	4-7PM	3
8.	15/8/2018	Zones of ROP	4-6PM	2
9.	18/8/2018	Screening protocols	4-6PM	2
10.	20/8/2018	Screening protocols	4-7PM	3
11.	25/8/2018	Management of ROP	4-6PM	2
12.	29/8/2018	Management of ROP	4-6PM	2
			TOTAL	30
L			HOURS	

#### **REFERENCE BOOKS: (Minimum 2)**

- 1. JACK J KANSKI clinical ophthalmology a systemic approach-6<sup>th</sup> edition.
- 2. PARSON'S Diseases of the eye 19th edition

### RETINOPATHY OF PREMATURITY

Retinopathy of prematurity (ROP) is a bilateral proliferative retinopathy, occurring in premature infants with low birth weight who often have been exposed to high concentration of oxygen Earlier this was known as retrolental fibroplasia.

#### Etiopathogenesis

Low birth weight and decreased gestational age are now considered the primary causative factors.

Supplemental oxygen administration which was for a long time considered as the important causative factor is now considered only a risk factor.

Based on the above facts, two important hypothesis are postulated to describe pathogenesis of disease:

- 1. Classical theory postulates that owing to exposure to high concentration of oxygen, there occurs obliteration of premature retinal vessels. This is followed by neovascularisation and fibrous tissue proliferation which ultimately forms a retrolental mass.
- 2. Spindle cell theory proposed recently postulates the induction of retinal and vitreal neovascularization by spindle cell insult in a premature retina.

#### Clinical features

The condition has been divided into active ROP and cicatricial ROP. Clinically the evolution of the active ROP has been divided into five stages

- \_Stage 1. It is characterised by formation of a demarcation line seen at the edge of vessels, dividing the vascular from the avascular retina.
- \_Stage 2. The line structure of stage 1 acquires a volume to form a *ridge* with height and width.
- Stage 3. It is characterised by a ridge with extraretinal fibrovascular proliferation into the vitreous. This stage is further subdivided into mild, moderate and severe, depending on the amount of fibrovascular proliferation.
- \_Stage 4a. It includes subtotal retinal detachment not involving the macula. It occurs as a result of exudation from incompetent blood vessels or traction from the fibrous (cicatricial) tissue. \_Stage 4b. It includes subtotal retinal detachment involving the macula.

\_Stage 5. It is marked by total retinal detachment which is always funnel-shaped.

#### Retinal area (zones) of involvement in ROP

The retina is divided into 3 zones.

The centre of the retinal map for ROP is the optic disc not the macula as in other retinal charts.

Zone 1. A circle drawn on the posterior pole, with the optic disc as the centre and twice the disc macula distance as the radius, constitutes zone 1. Any ROP in this zone is usually very severe because of a large peripheral area of avascular retina.

**Zone 11.** A circle is drawn with the optic disc as the centre and disc to nasal ora serrata as the radius. The area between zone I and this boundary constitutes zone II.

**Zone 111.** The temporal arc of retina left beyond the radius of zone II is zone III.

Extent of involvement is denoted by the clock hours of refinal involvement in the particular zone

*Plus disease* refers to presence of tortuous dilated vessels at posterior pole with any stage of ROP.

Associated with it is the engorgment and dilatation of iris vessels, which result in poor pharmacological dilatation of pupil Plus diseases signifies a tendency to progression.

#### Pre threshold disease is defined as ROP in:

Zone I, any stage, or Zone II, stage 2 with plus component, or Zone II or III, stage 3 with plus component but not reaching threshold clock hours.

Pre threshold ROP needs very close observation as it can rapidly progress to threshold, which needs prompt treatment.

Threshold disease refers to stage 3 plus disease involving 5 continuous or 8 discontinuous clock hours. This stage needs laser or cryotherapy in less than 72 hours.

#### Differential diagnosis

Advanced retrolental fibroplasia needs to be differentiated from other causes of leukocoria

#### Screening and management

Treatment of well-established disease is unsatisfactory. *Prophylaxis* is thus very important.

To prevent ROP, the premature newborns should not be placed in incubator with an O2 concentration of more than 30 percent and efforts should be made to avoid infection and attacks of apnoea

Further, a regular screening is very important.

All premature babies born at less than or equal to 32 weeks of gestational age and those weighing 1500g or less should be screened for ROP.

The first examination by indirect ophthalmosocpy should be done between 6 and 7 weeks post-natal age or 34 weeks post-conceptual age (whichever is earlier).

The further line of action will depend upon the overall status of the eye as below:

- I. *Mature retina* is labelled when the vessels have reached within one disc diameter of both nasal and temporal ora-serrate. Infants with mature retina does not require further follow-up.
- II. Immature retina is labelled when the vessels are short of one disc diameter of the nasal or temporal ora but ROP is not developed yet. Such infants require further follow-up weekly.

#### III. Retinopathy of prematurity

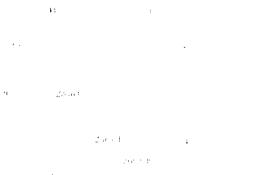
When ROP is detected following measures should be taken: Stage 1 and 2. Since spontaneous regression of disease occurs in 80 to 90% of cases, so only a weekly examination is recommended.

Stage 3, threshold disease should be treated by cryo or laser to prevent progression and to achieve regression.

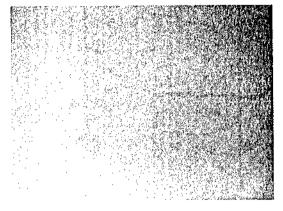
Stage 4a. Scleral buckling is recommended in addition to cryo or laser therapy.

Stage 4b and 5. Vitrectomy needs to be carried out in this stage.

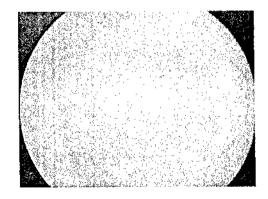
Prognosis is poor in stage 4b and 5.



gerick Proposition



(A) Stage 1 – demarcation line;



(B) stage 2 - ridge;

## VALUE ADDED COURSE

#### RETINOPATHY OF PREMATURITY

## 4. List of Students Enrolled JAN - 2019 - APR -2019

SL.NO	University Reg.No.	NAME OF THE STUDENTS	SIGNATURE
1	U18MB251	AASHLESHA DHARKAR	Mach Cilladi Kasan
2	U18MB252	ABINAYAVARTHINI N	Museyanasthan-
3	U18MB253	ADARSH KUMAR	Markenas.
4	U18MB254	AISWARYA PREMRAJ	Alsher alya.
5	U18MB255	AKSHAYA .R	Askage P.
6	U18MB256	ALOK PANDA	Molyanda.
7	U18MB257	AMULYA N GOWDA	Annely a vacuda.
8	U18MB258	ANINDA CHAKRABORTY	Aninde chahreber
9	U18MB259	ANJALI SADHWANI	of the sacrate
10	U18MB260	ANKU KUMAR	Annie Wally Antony Police
11	U18MB261	ANNIE WELLY	- Munio wally
12	U18MB262	ANTONY ROHAN	Latory Polia
13	U18MB263	ANUPAMA	Autoria
14	U18MB264	AQSA QURESHI	das auseli.
15	U18MB265	ARSHAD AMIN	Ashadamin.
16	U18MB266	ASHIQUE RIFANA M	Aliquesifers -
17	U18MB267	ASHWIN R	Alwink.
18	U18MB268	ASHWINI.N	Muser
19	U18MB269	ASMIT KESHAV	Avial yegi.
20	U18MB270	AVIRAL TYAGI	Avial yegi.

21	U18MB271	AYUSH JAISWAL	familhamsensonic
22	U18MB272	BANDHAM SANKEERTHANA	Frend Campenter 10 or
23	U18MB273	BORIS NAMBAM	Be Respectations
24	U18MB274	BUCHHAMMAGARI SOURABH REDDY	Buchlamagnersacish
25	U18MB275	CHARAN VARMA C.A	Coramana CA
26	U18MB276	CHARU SAI	Chrise
27	U18MB277	CHINKA SARAN SAI	Augustian Sol
28	U18MB278	CUTPIECEWALA ALIASGAR MOHAMMED	Chlipse concludes con
29	U18MB279	DATTATREYA BHATTACHARJEE	Dalled Luga Inter A. 900.
30	U18MB280	DEBOPRIYA DEY	Detropring dent.

Dr.R.Shobana, DNB, (SR - OPHTHAL) RESOURCE PERSON

Prof.D.Baba, M.S,
(PROF & HOD)
COORDINATOR

COORDINATOR
PROFESSOR CASCACOA
DEPARTMENTAL ACTUAL DEPARTMENT DE COMPANY DE C



# SRI LAKSHMI NARAYANA INSTITUE OF HIGHER EDUCATON AND RESEARCH

Annexure - IV

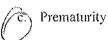
#### RETINOPATHY OF PREMATURITY

#### MULTIPLE CHOICE QUESTIONS

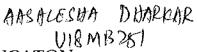
Course Code: OPH11

#### 1. ANSWER ALL THE QUESTIONS

- 1. Which disease occurs in premature babies?
  - a. Retinal detachments
  - (b.) Retinopathy of prematurity
    - c. Macular hole
    - d. Macular degeneration
- 2. Which among the following in risk factor ROP except:
  - a. Low exposure to corbon dioxide
  - b. Overnight



- d. Smoking
- 3. Which babies are to be screened for ROP
  - a. 40wks
  - (b.) Before 31 wks
    - c. 33 wks
    - d. Birth with > 3kgs
- 4. Number of bone in grading in ROP
  - a. 5 b. 3 c. 6
    - d, 1





# SRI LAKSHMI NARAYANA INSTITUE OF HIGHER EDUCATON AND RESEARCH

5.	Zone I	cossesponds to radius	distance from disc to macula.
	a.	Twice	
	b.	Thrice	
		Once	
	d.	Four times	
6.	Zone II	Il indicates	,
	$\left( \widehat{a} \right)$	Temporal crescent	
	b.	Nasal crescent	
7.	Extra r	etinal fibrovascular tissue everpon	os to
	(a)	Stage I	
	b.	Stage II	
	c.	Stage III	
	d.	Stage IV	
8.	VLBW	infants treated for ROP can daily	
	(/a.)	) Myopia	
	b.	Hypermetropia	
	c.	Astigmatism	
	d.	Presbyopia	
9,	Screen	ing of ROP is done with	
	a.	+90D	
	b.	Direct ophthalmoscope	
	c.	Slit lamp	all the state of t
	(d.	Indirect ophthalmoscope	



# SRI LAKSHMI NARAYANA INSTITUE OF HIGHER EDUCATON AND RESEARCH

#### 10. ROP is treated using

- a. Cryo/laser photocopier
- b. Antibiotic
- c. Analgesics
- d.) Lubricant



# 🕵 Sri Lakshmi Narayana Institute of Medical Sciences



#### GULL THE STREET HAR STURY

This is to certify that AASHLESHA DHARKAR (U18MB251) has actively participated in the Value Added Course on RETINOPATHY OF PREMATURITY held during JAN 2019 TO APR 2019 Organized by Sri Lakshmi Narayana Institute of Medical Sciences, Pondicherry-605 502, India.

Dr.R.Shobana Senior Resident - Ophthal RESOURCE PERSON

Prof.D.Baba, MS, Prof & HOD - Ophthal COORDINATOR



# Sri Lakshmi Narayana Institute of Medical Sciences



# ·全部工业制度开展的。

This is to certify that ABINAYAVARTHINI N (U18MB252) has actively participated in the Value Added Course on RETINOPATHY OF PREMATURITY held during JUNE 2019 TO OCT 2019 Organized by Sri Lakshmi Narayana Institute of Medical Sciences, Pondicherry-605 502, India.

Dr.R.Shobana Senior Resident - Ophthal RESOURCE PERSON Prof.D.Baba, M.S. Prof & HOO - Ophthal COORDINATOR

### Student Feedback Form

t Code: <b>OPH11</b>						
Name of Student:			Ro	Roli No.:		
Particulars	1	2	3	4	5	
Objective of the course is clear						
Course contents met with your expectations						
Lecturer sequence was well planned						
Lectures were clear and easy to understand						
Teaching aids were effective						
Instructors encourage interaction and were helpful				·		
The level of the course		-				
Overall rating of the course	1	. 2	3	4	5	
g: 5 – Outstanding; 4 - Excellent; 3 – Good; 2-	- Satisfact	ory; 1-i	Not-Satisf	actory		
	We are constantly looking to improve outions, comments and suggestions will hele  Particulars  Objective of the course is clear  Course contents met with your expectations  Lecturer sequence was well planned  Lectures were clear and easy to understand  Teaching aids were effective  Instructors encourage interaction and were helpful  The level of the course  Overall rating of the course  g: 5 - Outstanding; 4 - Excellent; 3 - Good; 2-	We are constantly looking to improve our class stions, comments and suggestions will help us to in the course and suggestions will help us to in the course of the course is clear.  Course contents met with your expectations.  Lecturer sequence was well planned.  Lectures were clear and easy to understand.  Teaching aids were effective.  Instructors encourage interaction and were helpful.  The level of the course.  Overall rating of the course.  Overall rating of the course.  1  g: 5 - Outstanding; 4 - Excellent; 3 - Good; 2 - Satisfactors.	We are constantly looking to improve our classes and stions, comments and suggestions will help us to improve  Particulars  Objective of the course is clear  Course contents met with your expectations  Lecturer sequence was well planned  Lectures were clear and easy to understand  Teaching aids were effective  Instructors encourage interaction and were helpful  The level of the course  Overall rating of the course  1 2  g: 5 - Outstanding; 4 - Excellent; 3 - Good; 2 - Satisfactory; 1 - I	We are constantly looking to improve our classes and deliver to itions, comments and suggestions will help us to improve our perfections, comments and suggestions will help us to improve our perfections, comments and suggestions will help us to improve our perfective of the course is clear  Course contents met with your expectations  Lecturer sequence was well planned  Lecturers were clear and easy to understand  Teaching aids were effective  Instructors encourage interaction and were helpful  The level of the course  Overall rating of the course  1 2 3  g: 5 - Outstanding; 4 - Excellent; 3 - Good; 2 - Satisfactory; 1 - Not-Satisfactory; 1 - Not-Satisf	of Student:	

Date:

#### Annexure 5

Date: 30/4/2019

From
Prof.D.Baba, MS,
Professor and Head,
Ophthalmology,
Sri Lakshmi Narayana Institute Of Medical Sciences
Bharath Institute of Higher Education and Research,
Chennai.

Through Proper Channel

To The Dean, Sri Lakshmi Narayana Institute Of Medical Sciences Bharath Institute of Higher Education and Research, Chennai.

Sub: Completion of value-added course: RETINOPATHY OF PREMATURITY

Dear Sir,

With reference to the subject mentioned above, the department has conducted the value-added course titled: **RETINOPAHY OF PREMATURITY** for 30students in JAN-APR 2019. We solicit your kind action to send certificates for the participants, that is attached with this letter. Also, I am attaching the photographs captured during the conduct of the course.

Kind Regards

Prof.D.Baba, MS HOD ,Ophthalmology

Encl: Certificates

**Photographs** 

