

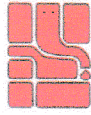
Shri Ganapati Netralaya

Deulgaonraja - Mantha Road, Jalna - 431203



**Vitro-Retina Fellowship
(VR F)
Course Curriculum
2025**



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Shri Ganapati Netralaya
Vitro-Retina Fellowship (VR F) Course Curriculum



**Vitro-Retina Fellowship (VR F)
Course Curriculum**

| | |
|----------------------------|--|
| Version | 4.0 |
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| Prepared By | Designation : Academic Incharge |
| | Name : Dr. Abhishek Desai |
| | Signature :  |
| Responsibility of Updating | Designation : Academic Incharge |
| | Name : Dr. Abhishek Desai |
| | Signature :  |

| Designation | Name | Signature | Date |
|------------------|--------------------------|--|-------------|
| Medical Director | Dr. Rushikesh Naigaonkar |  | 29 Jan 2025 |



Amendment Sheet

| Section | Present Clause | New amendment Clause | Approval authority Signature |
|---------|----------------|----------------------|------------------------------------|
| | | | |

Quality Coordinator is responsible for amendment of this document. The amendment sheet is to be updated as and when amendments are received and approved by the authority. Review and amendment can also happen as corrective action to the non-conformities raised during the self-assessment or assessment audits by NABH.



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01 - Introduction:

- Padmabhushan Dr. B. R. Barwale, the chairman of MAHYCO, was the visionary behind Shri Ganapati Netralaya. He is known as 'Father of Indian seed industry' a title conferred upon him by the Crop Science Society of America in 1999. He is also the recipient of the 12th World Food prize (1998) awarded by The World Food Prize Foundation, Des Moines, IOWA, USA. Dr. Barwale, being one of the pioneers of the green revolution and the new agriculture biotechnology in the country, had remarkable awareness and interest in technology. It was his personal experience of laser treatment of glaucoma that motivated him to set up an eye hospital



Our Founder Chairman
- Late Dr. B.R. Barwale

- Shri Ganapati Netralaya has come a long way from its humble beginnings on 31 December 1992 at Jalna located in central Maharashtra, India Founded by Chairman Padmabhushan Mr. B. R. Barwale (1931-2017) fructified under Mahyco Research Foundation Trust.
- Shri Ganapati Netralaya is a Stat-of-The - Art tertiary Eye care center for Education, treatment, research.

Hospital Vision:-

To be a global centre of excellence for quality of eye care services provided development and use of breakthrough technologies, patient satisfaction and delivery of ethical, equitable eye care to everyone.

Hospital Mission:-

To provide affordable eye care services with precision, compassion and dedication. To ensure comprehensive knowledge, technology and research up gradation on continuous platform to eye care professionals.

- Charitable Trust Eye Hospital Registered under the Maharashtra Public Trust Act
- Shri Ganapatoei Netralaya is register under section 5 of the Bombay Nursing Homes Registration Act, 1949.(Registration Number- 48 CHJ 2007)
- Shri Ganapati Netralaya is accredited by the National Accreditation Board for Hospitals and Healthcare Providers (NABH) which is recognized for quality control in healthcare. (Certificate No. [ECO-2019-0087](#))



Shri Ganapati Netralaya

Vitro-Retina Fellowship (VR F) Course Curriculum



- 101 Bed Eye Specialty Care Hospital with Four specialty departments, 14 Ophthalmology Consultants, 2 Anesthesia Consultants, Advanced modular equipped 10 operation theaters more than 200+ other staff.
- All patient records are stored electronically so easy to access round clock and save paper as possible to protect the environment.

Eductaion

| Sr. No | Course | Affiliated | Sets | Affiliation/Registration Number |
|--------|-------------------------------|--|------|---|
| 1 | Diplomat National Board (DNB) | National Board of Examination (NBE) | 4 | NBE/ACCR/Granted/3119926151/278-R/2015/4397 |
| 2 | BSc Optometry | Maharashtra University Of Health Sciences (MUHS),. | 30 | 104111 |

Fellowship

| Sr. No | Course | Term | Sets |
|--------|--|-----------|------|
| 1 | Cornea and Refractive surgery's | 18 months | 2 |
| 2 | Vitro-Retina, in Comprehensive Ophthalmology | 24 months | 2 |
| 3 | Vitro-Retina, in Comprehensive Ophthalmology | 12 months | 1 |
| 4 | Small Incisional Cataract Surgery (SICS) | 18 months | 2 |
| 5 | Phacoemulsification Surgery | 1 month | 2 |

Treatment

The society is continuously treated by hospitals, There have been **234215** operations since the hospital opened, and there were **11024** in the most recent year (2024), **4870** of which were conducted by the retina department.

Research

The hospital has a Shri Ganapati Netralaya Ethics Committee that is registered with the Central Drugs Standard Control Organization (CDSCO) under the Directorate General of Health Services of the Ministry of Health & Family Welfare of India. (Registration Number - ECR/1862/Inst/MH/2023)



Shri Ganapati Netralaya

Vitro-Retina Fellowship (VR F) Course Curriculum



Our Team

1. Trustees (Management)



Mr. Rajendra B. Barwale
Chairman, MAHYCO and MRFT



Mr. Ramkishan V. Mundada

Executive Director,
Mahodaya Hybrid Seeds Pvt. Ltd



Dr. Usha Barwale Zehr
Chief Technology Officer and
Director, MAHYCO



Dr. Pramod S. Bhende
Director, Vitreo Retina Services,
Sankara Nethralaya



Dr. Deepak Garg
Director, Eye Solutions, Mumbai



Dr. Bhaskaran
Head Physician, Sankara
Nethralaya

2. Retina Department

| S.No | Name of the Doctor | Education | Years of Experience |
|------|-------------------------|--|---------------------|
| 1 | Dr. Rushkesh Naigaonkar | MBBS, DNB, MNAMS, FVRS | 15 Years |
| 2 | Dr. Abhshek Desai | MBBS, MS, FRCS (Glasgow), MRCS (Edinburgh), FICO (UK), ICO retina fellow, NYEE (New York USA), FVRS. | 12 Years |
| 3 | Dr. Sweety Pohane | MBBS, MS, DNB, FICO, FVRS | 7 Years |
| 4 | Dr. Sujay Herekar | MBBS, MS, DNB, FICO, FVRS | 3 Years |
| 5 | Dr. Sukarma Singh | MBBS, MS, FVRS | 3 Years |



02 - Goals of Vitreoretinal Fellowship

Our VR Fellowship program aims at teaching various aspects of medical/ surgical retina and uvea to the prospective Vitreoretinal surgeons who in turn will help patient care in their respective areas.

3.1. Medical Retina and Uvea Training

The fellows go through a wide variety of medical retina and uvea cases in OPD during their fellowship period and should be able to diagnose and manage the common ones. They should have a sound knowledge and understanding of the various diagnostic modalities such as FFA/ICG, USG, ERG, EOG, VEP and OCT.

Objectives of training

1. To be able to evaluate and diagnose the patient by
 - a. Detailed and relevant history
 - b. Systematic evaluation by various examination techniques and investigations
 - c. Clinical application of knowledge gained from observing the consultants,
 - d. Attending classes and reading
2. To be able to treat the patient by
 - a. Various treatment modalities which the fellow would initially observe and
 - b. subsequently perform under appropriate guidance of the consultants.

3.2. Surgical Retina Training

The fellows should have examined and diagnosed good number of surgical retina disorders in OPD. They should be well versed with the indications and principles governing the various retinal surgeries: both scleral buckling and vitrectomy. They should have a good understanding of the indications and techniques of retinal laser photocoagulation.

Objectives of training

1. To be able to evaluate and diagnose the patient by
 - a. detailed and relevant history
 - b. systematic evaluation by various examination techniques and investigations
 - c. surgical planning by application of knowledge gained from observing the
 - d. consultants, attending classes and reading
2. To be able to treat the patient by
 - a. Various treatment modalities which the fellow would initially observe and
 - b. subsequently perform under appropriate guidance of the consultants.

Surgical retina training begins in OPD itself with fellow examining the patient and discussing the pre-op plan with the consultant. The fellow undergoes operative training by assisting the surgeon initially followed by performing steps of surgeries under guidance and subsequently doing common VR surgeries individually and also learns nuances of post-operative patient care.



The fellow is required to learn all indications and techniques of various laser treatment modalities and is needed to be well versed with examination of the patient with Indirect Ophthalmoscopy and slit lamp biomicroscopy. Observations will be made about the fellow's knowledge and proficiency of laser and subsequently allowed to do laser. Surgical endolaser technique would be taught under the guidance of consultant

*The fellows are encouraged to discuss with consultants during clinics, theatre or in class

Shri Ganapati Netralaya



03 - Vitreoretinal Fellowship Format

3.1 Duration and division of fellowship

The entire period of two years Clinical Vitreoretinal Fellowship is sub-divided into 4 parts.

3.1.a. Fellowship training part 1

During this period the fellow is taught about various examination techniques, fundus drawing, learning , performing and interpreting various diagnostic modalities (FFA, ICG, OCT and USG), observation of laser procedures as a part of medical retina training. Surgical training in this period deals with assistance and observation of all cases done by Consultants and performing various steps of surgeries (sclera buckling and vitreoretinal surgeries including lensectomies etc) under guidance. The fellow is also required to learn the nuances of traumatic repairs and endophthalmitis management and subsequently perform them in this period under supervision.

3.1.b. Fellowship training part 2 (peripheral posting) (not for international candidates)

During this period the fellow is posted in one of the subcentres of this hospital. The fellow is expected to know the working system of the hospital and should be able to provide quality care to the patient individually and provisional referral to the main centre in case of conditions not amenable to treatment in the subcentres.

3.1.c. Fellowship training part 3

During this period the fellow is to diagnose medical retina patients, advise and interpret the results of necessary investigations, decide and discuss the plan of management with the consultant. He/ She should to be able to perform simple cases of laser treatment selected by consultants. Surgical training in this period deals with assistance and observation of all cases done by Consultants and performing parts of surgeries independently (sclera buckling and vitreoretinal surgeries including lensectomies, vitrectomies, endophthalmitis management, trauma repair, SFIOL, primary wound repairs etc).

3.1.d. Fellowship training part 4

This period is the fellow is now termed as a senior resident. The fellow is allowed to do the following things

1. Independent Out-patient Department
2. Independent Diagnostics and Lasers
3. Independent Surgical cases (camp patients)

However, the fellow would still have the luxury to take help of the consultant, if any doubt occurs in diagnosing and managing the patient



3.2 Independent VR Procedures by the Fellows

The following is a list of various procedures and approximate numbers, any Fellow is expected to have done under supervision of a senior consultant

| No. | Procedure | Quantity (approx) | |
|----------|--|-------------------|-----------|
| | | 12 months | 24 months |
| 1 | Laser Photocoagulation | | |
| 1.a | Single sitting of Pan retinal Photocoagulation | 35 | 75 |
| 1.b | Prophylactic Laser Photocoagulation for Peripheral retinal lesions | 50 | 100 |
| 1.c | Cryopexy | 7 | 15 |
| 2 | Intravitreal injections | 150 | 300 |
| 3 | Steps of Scleral Buckling | | |
| 3.a | Conjunctival opening and muscle tagging | 30 | 60 |
| 3.b | Localizing retinal breaks and treating them | 20 | 40 |
| 3.c | Making # 240 band tunnels | 30 | 60 |
| 3.d | Passing Buckle | 30 | 60 |
| 3.e | Taking explant sutures | 15 | 30 |
| 3.f | Subretinal fluid drainage | 5 | 10 |
| 3.g | Conjunctival closure | 30 | 60 |
| 4 | Steps of Vitreoretinal surgery | | |
| 4.a | Conjunctival opening and muscle tagging | 50 | 100 |
| 4.b | Making # 240 band tunnels | 50 | 100 |
| 4.c | Passing encirclage | 50 | 100 |
| 4.d | Lensectomy | 12 | 25 |
| 4.e | Membranectomy | 7 | 15 |
| 4.f | Intraocular lens removal | 7 | 15 |
| 4.g | Induction of PVD | 25 | 50 |
| 4.h | Fluid-gas exchange | 25 | 50 |
| 4.i | Endolaser | 20 | 40 |
| 4.j | Injecting gas/silicon oil | 10 each | 20 each |
| 4.k | Membrane peeling | 02 | 05 |
| 4.l | Relaxing retinotomy | 02 | 05 |
| 4.m | Silicon oil removal | 25 | 50 |
| 4.n | Injecting LPFC | 7 | 15 |
| 4.o | LPFC-Silicone oil or LPFC-Air exchange | 02 | 05 |
| 4.p | Endophthalmitis Vitrectomy | 20 | 40 |
| 5 | SFIOL | 25 | 50 |
| 6 | Open globe injury Management (Primary wound repair) | 20 | 40 |



3.3. Academics

1. Speciality classes are held on every Tuesdays and Fridays of the week and Vitreoretinal classes are held twice a month.
2. Fellows are required to present various formats of classes including
 - a) Interesting cases
 - b) Journal presentation
 - c) Seminar on a particular topic
 - d) Debate
3. The class schedule will also include lecture by one of the Vitreoretinal Consultants.
4. Besides, the Fellows are also expected to attend the Postgraduate
5. Seminars conducted and also help in teaching postgraduates
6. At the end of fellowship each fellow is expected to handover at least two research work for publication (at least one in each year) and to make a power point presentation of the same in the class.

3.4 Library facilities

We have a well-equipped library containing wide range of books and journals. There are computers available with round –the –clock Internet facility.

3.5. Leave of absence

1. Total number of days of leave, which can be availed by the Fellow, is 30 days per year.
2. Leave must be pre-authorized: In routine cases at least a month in advance whereas in case of emergency/sickness, absence must be intimated immediately.
3. If total leave exceeds 30 days in a year, (The excess leave will be granted only in exceptional circumstances by the director in-charge of training.) the excess of leave provided during your fellowship will be extended beyond the last day of fellowship in order to complete the loss of tenure.
4. Only 1 fellow or at-most 3 students (including PGs and Fellows) can avail leave at any given time. Any exceptions will be allowed with approval from the respective HOD.
5. All 30 days can also be availed at one stretch (for going out of town).
6. Sundays or general holidays during the leave period will not be counted as leave.

3.6 Extension Of The Fellowship

No request for extension of the fellowship tenure will be allowed. The candidate will complete the fellowship as per the tenure.

3.7 Conference Attendance

Attending one national level conference in the entire tenure of fellowship is allowed. Travel and stay shall be sponsored by the Institute in case the fellow has a presentation to make.



04 - Log Book

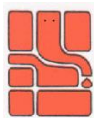
1. During their training the Fellows are expected to keep a detailed record of the various cases examined and the various minor procedures performed by them in the outpatient department, as well as the various surgeries assisted by them and performed by them under supervision.
2. The format of maintaining records of various procedures assisted and performed is given at the end of this manual.
3. The fellows are encouraged to fill their logbooks with their observations (surgical pearls)

05 - Assessment

1. At the end of their rotation with every consultant, the respective consultant prepares a confidential report about the performance of the concerned Fellow.
2. At the end of a Semester (6 months) there is a Theory and Viva Exam.
3. The participation of fellows in VR class, ongoing research projects, reports of the various consultants as well as the performance of the Fellows in the above mentioned exams will go on to form a comprehensive report of the Fellow's overall performance during the tenure of his entire Fellowship.

06 - How to Apply for Vitreoretinal Fellowship

1. Interviews for admission to Vitreoretinal Fellowships are held twice a year in March and September or as per institute's requirement. Candidates are chosen on basis of Merit.
2. The applicant must have a post-graduate degree (MS/DNB/DO) in ophthalmology with good clinical exposure from recognized university or institute and must have a medical council (state or India) registration and International ophthalmologists with a degree in Ophthalmology from a recognized university (preferably from an institute).
3. **NMC Information:** It is mandatory for all the international candidates to get a temporary registration certificate from the National Medical Council of India. This process will be done through the organization only. The selection is confirmed on receipt of the NMCI approval which usually takes 2-3 months time.



Annexure 1



Shri Ganapati Netralaya

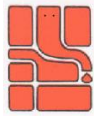
Deolgaon Raja- Mantha Road,
Jalna (Maharashtra)– 43120

Fellowship Logbook

Vitreo-Retinal Fellowship (Medical, Surgical)

Dr

(12 months/ 24 months)



Shri Ganapati Netralaya

**Deolgaon Raja- Mantha Road,
Jalna (Maharashtra)– 43120**

Name of the candidate :

Date of birth :

Sex :

Qualification :

Residential address :

Mobile No. :

E-mail :

Period of training :



1. VITREORETINAL/SCLERAL BUCKLING SURGERY

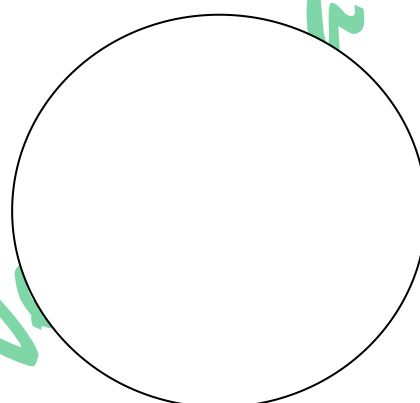
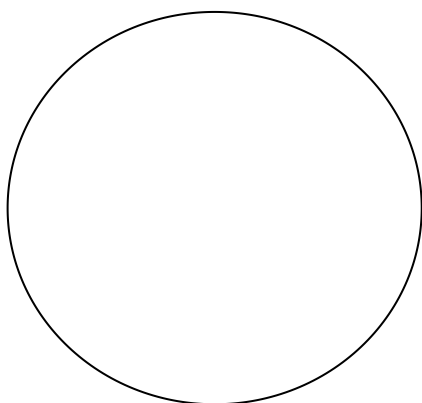
Case No. Name: Age/Sex: MRD No.:

Diagnosis:

Pre-operative Fundus:

OD (VA:)

OS (VA:)



U/S Findings: OD/OS:

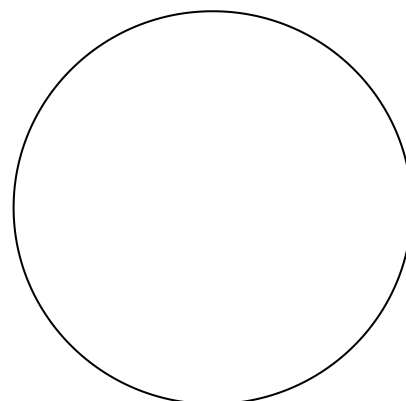
Date of Surgery:

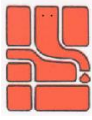
Surgeon:

OT Notes(Surgery done):

Salient intraoperative events:

OD/OS:

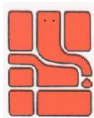




Steps Done:

Lessons learnt:

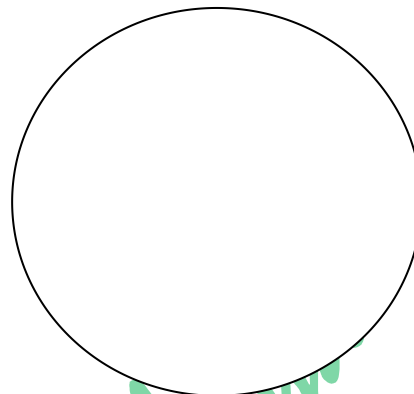
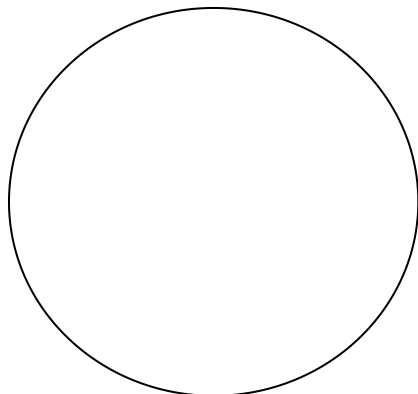
Shri Ganapati Netralaya



Glass Appointment:

OD (VA:)

OS (VA:)



Future Course (Repeat surgery if any and its details):

Shri Ganapati Netralaya



Surgical Log Book for Fellows
Department of Vitreo-retina

Educational and Research activities

| S.NO | Date | Presentation type | Topics |
|------|------|--------------------|--------|
| 1 | | Meetings attended | |
| 2 | | Journal club | |
| 3 | | Video presentation | |
| 4 | | Project | |
| 5 | | PG teaching class | |
| 6 | | Grand rounds | |



Surgical Log Book for Fellows
Department of VR

**Papers/Book Chapters/Web Pages Contributed/
Presented/Published**

| S. NO | Topic | Date | Place | Conference |
|-------|-------|------|-------|------------|
| | | | | |
| | | | | |
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