

## ANNUAL REPORT 2018-19

### 1.1 About the Institute

All India Institute of Physical Medicine and Rehabilitation, established in 1955 as a Pilot Project with technical expertise and manpower support from United Nations Organization, came under the administrative control of the Ministry of Health and Family Welfare, Government of India in 1959.

This apex Institute of Ministry of Health and Family Welfare in the field of Physical Medicine and Rehabilitation is well recognized for its commitment to provide comprehensive rehabilitation services to persons with severe and permanent locomotor disabilities. Along with this the Institute runs training courses, most of them Post Graduate level, in Physical Medicine & Rehabilitation and allied rehabilitation fields.

The Institute is actively involved in disability rehabilitation related research work and is recognized by Department of Science and Technology (DST), Govt. of India as a research institute.

### VISION

To actualize the potential of every person with Locomotor Disability to ensure for him/her equal opportunities, protection of rights and full participation in the society.

### FACILITIES

- The Institute is one of the best equipped Rehabilitation Centre in India. It provides comprehensive rehabilitation services to Persons with Disability (PWDs) with departments that include: Physical Medicine & Rehabilitation, Radiology, Pathology, Anaesthesiology, Physiotherapy, Occupational therapy, Prosthetic & Orthotic, Speech Therapy, Medical Social Work, Vocational Guidance, Academic section with E-library, Vocational Training, Administrative and Hindi department.

### 1.2 ANNUAL STATISTICS (January 18- March, 2019)

1	No. of PWD (Assessed & Intervened)	OPD	P. Th.	O. Th.	Radiology	Pathology	Speech
		44289	224 48	14881	No. of patients X-rayed - 6764 Total No. X-rays- 7441 No. of US done- 1700	Average No. of investigation per day-84 No. of investigation done- 28292	2300
2	No. of Certificates issued	Disability Certificates		Driving Certificates		Railway Cert.	Other Cert.
		521		889		1062	158
3	Surgeries performed (Major & Minor)	Major		Minor		Minor OT Procedures	
		687		3023		1488	
4	No. of Aids & Appliances delivered	Orthoses		Prostheses		Hand Splints	
		3168		832		600	
5	Clinics	P & O Clinic	CP Clinic	Diabetic Foot Clinic		Case Conference	Obesity clinic
		695	436	38		35	75
6	VTW deptt.	No. of PWDs assisted for training & employment			Fabrication of Mobility aids and seating devices		
		28			63		
7	MSW deptt.	No. of PWDs given financial assistance and ambulatory aids			Peer counselling and other training activities conducted		
		170			1627		

### 1.3 AUGMENTATION OF CAPACITY

#### I. Administration

##### E-governance activities as per Government mandate

- Installation of Information Health Portal Kiosks.
- Partial Implementation of e-office.

#### II. Department of Physical Medicine and Rehabilitation

New equipment and introduction of corresponding Services/Clinic.

- Radiofrequency Ablation Machine.
- C-Arm Compatible Table.
- Body Composition Analyzer
- Ward Expansion adding 7 more beds.

#### III. Physiotherapy Department

- New services launched in the department :
  - Physical rehabilitation of persons with stroke using Functional Electrical Stimulation.
  - Semi-recumbent Elliptical Cycle for Geriatric Rehabilitation.
  - Installation of Advance Combination Therapy with EMG Bio-feedback Unit.

#### IV. Prosthetic & Orthotic Department –

Patient care services and fabrication of appliances were improved by the addition of following equipment :

- Procurement of Heads and accessories for socket router machines.
- Trans-Tibial Prosthesis Kit with coupling type socket adapter, torsion and telescopic pylon and articulated foot with integrated pyramid.
- Trans-Radial Myoelectric Prosthesis.

#### V. Occupational Therapy Department

- Improvement in driving assessment using driving simulator. Driving Simulator has advantages over road test. It is to assess disabled drivers who are referred by Road transport authority.
- Pressure Mapping System - this system enables patients in understanding the pressure areas as there is a visual feedback given by the system.
- Standing Wheelchair improve skin health, to promote bladder emptying, reduce spasticity, joint contractures and improves bone mineral density. It facilitates environmental access and improve ADL function such as use of public toilet, promotes access to food preparation including grocery shopping, cooking, reaching items in kitchen and refrigerator.

#### VI. Speech Therapy Department

- Installation of Computerised System for Clinical Assessment of Voice Alongwith EGG

### 1.4 In-service Training

As a part of capacity building activities staff of Institute were sent to various administrative and academic training programmes.

In-service Training for Medical and Paramedical	Hindi Training	Administrative Training
01	01	08

### 1.5 Research and Development -

#### ➤ Occupational Therapy Department

- A descriptive and comparative study analyzing the performance of typically developing Indian children on motor free visual perceptual test - 4
- A study to compare handwriting components and to identify the common errors noticed in children from different medicines of school.
- Effectiveness of home based Occupational Therapy on shoulder functioning and pain in long term manual wheelchair users.
- Comparison of handwriting performance in children with developmental disability with typically developing children on Evaluation Tool of children's Handwriting (ECTH).
- To compare the effect of Visual Perceptual training using Transfer of Training Approach vs. functional Approach in school going Cerebral Palsy children.
- To find the effectiveness of Occupational Therapy intervention in managing childhood obesity in Indian Children aged 5-12 years.
- A comparative study to determine the efficacy of hand arm by manual intensive therapy (HABIT) and conventional Occupational Therapy in children with Cerebral Palsy.



## al Medicine & Rehabilitation

Completed	Ongoing
Effect of Lateral Single Bar Knee Orthoses in Correction of Genu Varum in Nutritional Rickets.	Evaluation of Sexual Dysfunction in Spinal Cord Injured Men.
A comparative Study of effect of intra-articular steroid vs. USG Guided Saphenous Nerve Block on pain & functional improvement in Osteoarthritis of Knee.	Efficacy and Safety of USG Guided Saphenous Nerve Block in patients with OA Knee.
Study of Median Nerve compression in independent manual wheel chair users with spinal cord injury using ultrasonography.	Distribution of trigger points in Impingement syndrome.
	Effect of stroke rehabilitation on caregivers in terms of care giving burdened & quality of life.
	Comparative study of lung function using spirometry in children with and without cerebral palsy.
	A prospective study of effect of common lower extremity surgeries followed by splintage and exercised on spasticity in patients with spastic diplegic cerebral palsy.
	A study of prevalence of hip subluxation in spastic cerebral palsy non ambulatory patients and its correlation with spasticity in hip flexor and adductor group of muscles.

16	Comparative Analysis Between Rotationplasty Prosthesis Made with Foot in Full Plantar Flexion And Foot In 10 Degrees Short Of Full Plantar Flexion.
17	Design of Appropriate Prosthesis for Patient with Elbow Disarticulation Amputation
18	Comparative Study of Gait in Trans-Femoral Amputees using Single Axis Weight Activated Prosthetic Knee Joint vs Single Axis Prosthetic Knee Joint with Swing Phase Control
19	Weight Relieving AFO
20	Kyphotic Brace with Height and Pressure Adjustment
21	*Orthotic Management of AGMC: A Case Study
22	Dynamic Brace with Extension Control for Spine
23	Dual Axis Hip Joint
24	Outside Locking & Unlocking Elbow Joint
25	Adjustable Cranial Protection Helmet
26	Low Cost Paediatric Prosthetic Knee Joint
27	Low Cost Energy Return Trans-Tibial Prosthesis with Interchangeable Pylon for Running and Walking
28	Volume Adjustable Trans-Tibial Prosthesis
29	New Reverse Knuckle Bender Splint
30	Lightweight Prosthetic Elbow Joint with Lock
31	Weight Activated Hydraulic Prosthetic Hip Joint
32	Lyon Scoliosis Brace for Idiopathic Scoliosis
33	Development of a Prosthetic Shoulder Joint
34	Modified Syme's Prosthesis
35	Casting Frame for Compression Release and Stabilized (CRS) Socket
36	Sports Prosthesis for Patient Suffering from Tibial Hemimelia
37	Waterproof Trans-Tibial Prosthesis
38	A study on the Efficacy of Custom Moulded Insoles in Reducing Peak Plantar Pressure and Improving the Gait Parameters in Diabetic Patients

### Physiotherapy Department

S. No.	Areas of Research	No. of Studies
1	Observational and interventional studies in adults and elderly	2 studies
2	Observational studies of autonomic function, electrophysiological assessment, trunk muscle strength, proprioception and trunk balance, Balance Performance and Gait, activity limitation and participation restriction in Type II Diabetic Mellitus	6 studies
3	Observational and interventional studies in children with cerebral palsy	7 studies
4	Observational and interventional studies in Musculoskeletal conditions	6 studies
5	Observational and interventional studies Stroke Rehabilitation	10 studies
6	Observational and interventional studies in Rehabilitation of persons with spinal cord injury.	2 studies

### Prosthetic & Orthotic Department

Sr. No.	Name of Project
1	Multi-Functional Knee Orthosis
2	Double Action Spring Loaded Ankle Joint
3	Sports Prosthesis for Patients Having Undergone Rotation-Plasty Surgery
4	Trans-Radial Audio Control Prosthesis
5	Forearm Rotation Orthosis with Supination Pronation Assist
6	Juvenile Adjustable Knee Orthosis
7	Modified Patellar Tendon Bearing (PTB) Orthosis
8	Dynamic Pylon Foot Assembly
9	Syme's Ortho-Prosthesis with Gait Assistance
10	Crawling Brace for Child with CTEV
11	Compression Release and Stabilized Socket and Casting Apparatus for the Same
12	Total Contact Modified Sitting Orthosis for Children
13	Off Loading CROW Orthosis for Diabetic Foot Ulcer
14	Flexible Scoliosis Brace
15	Height Adjustable KAFO

### 1.6 Scientific Research, Publications & Presentations

Sr. No.	Department	Staff Guided Research				
		Papers Present ed	Papers Publish ed	Disserta tion Complet ed	Invited Lectur ers	Conference / Workshop / Seminars / Attended
1	Medical a) PMR b) Radiology	08 01	03 01	01	-- --	Conf.- 11 W/s -01
2	Physiotherap y Department	09	02	06	02	Conf.- 05 W/s-08
3	Occupational Therapy	--	01	03	--	Conf.- 01 W/s - 01
4	Prosthetic & Orthotic	10	--	38	--	Conf.- 04 W/s - 02

### 1.7 Conferences, CRE Workshops held at this Institute.

Sr. No	Activities	Duration
(i)	CRE on Fabrication and Fitment of Myoelectric Trans-Radial Prostheses	3 <sup>rd</sup> - 4 <sup>th</sup> February, 2018
(ii)	Advancement in Orthotic Management of Diabetic Foot	17 <sup>th</sup> - 18 <sup>th</sup> March, 2018
(iii)	Surgical Workshop in Rehabilitation	12 <sup>th</sup> -17 <sup>th</sup> November, 2018
(iv)	Workshop on Driver Rehabilitation	10 <sup>th</sup> March, 2018 & 29 <sup>th</sup> September, 2018
(v)	Workshop on Neuro Developmental kinesiology	14 <sup>th</sup> October, 2018
(vi)	Corrective Suregeries in rehabilitation and Urodynamic Study	17 <sup>th</sup> January, 2019

### 1.8 Implementation of Right to Information Act. (RTI)

Institute is responding to information sought by the applicants. Nominated Central Public Information Officer (CPIO) duly assisted by the committee members provides such information.

RTI applications received - 23  
RTI applications replied - 21  
RTI applications rejected - 01  
RTI applications pending - 01

**Data of Person with disabilities in the Institute**

<b><u>Staff Strength</u></b>	<b><u>No. of PWD's employed</u></b>	<b><u>% of PWDs</u></b>
Group 'A' - 50	02	4%
Group 'B' - 59	00	0%
Group 'C' - 166	08	4.82%
<b>Total</b>	<b>10</b>	<b>3.64%</b>

No PWDs have been appointed during 2018-19

**1.10 ATN's in respect of the audit observations**

Action taken note is enclosed.

**1.11 Gender issues**

Female members are included in selection committee for recruitment and academic courses. All the special facilities admissible to lady employees are provided by the Institute. A sexual harassment committee is constituted with a senior lady officer as chairperson.

**1.12 Visitors**

- (i) Dr. B. D. Athani, DGHS, New Delhi visited on 24.02.2018.
- (ii) Shri Ashwini Kumar Choubey, Hon'ble Minister of Staff for Health & Family Welfare on 05.07.2018.
- (iii) Dr. S.Venkatesh, DGHS, New Delhi on 06.07.2018.

**1.13 Academic Activities**

Details of the courses conducted by this Institute is enclosed herewith

**1.14 Other activities of staff and students**

**a. Hindi Department**

- Hindi Pakhawada celebration by staff and students in September, 2018
- "SAMARTHYA" Institute's 7<sup>th</sup> in House Publication in Hindi was released on 1<sup>st</sup> November, 2018.
- Under Hindi Teaching Scheme, batch of 20 students passed different examinations.

**1.15 Other activities**

Swacchata Pakhawada, International Yoga day, Vigilance awareness week, Communal Harmony week, Unity Day, Constitution Day, World Physiotherapy Day, World Occupational Therapy Day, World Autism Day and International day of Persons with disabilities were celebrated by staff & students.



**DIRECTOR**



**Academic Activities in Regular Training Programme**

**Details of Students for the year 2018-19**

Sr. No	Name of Course	Recognized by/Course affiliated to	Eligibility	Commencement	Duration	Intake Capacity(A/Y) April 18-March 19	Student on Roll (April 18 – March 19)		Passed out students
1	MD (Physical Medicine & Rehabilitation) MD (PMR)	MUHS, Nashik	As per MUHS/MCI guide lines	May	3 years	02	1 <sup>st</sup> year	02	01
							2 <sup>nd</sup> year	02	
							3 <sup>rd</sup> year	02	
2	Master of Physiotherapy (MPTh)	MUHS, Nashik	Bachelor degree in Physiotherapy Therapy with six month internship	August	2 years	06	1 <sup>st</sup> year	06	05
							2 <sup>nd</sup> year	06	
3	Master of Occupational Therapy (MOTH)	MUHS, Nashik	Bachelor degree in Occupational Therapy with six month internship	August	3 years	04	1 <sup>st</sup> year	02	03
							2 <sup>nd</sup> year	00	
							3 <sup>rd</sup> year	02	
4	Master of Prosthetics & Orthotics (MPO)	MUHS, Nashik/RCI	Bachelor of Prosthetics & Orthotics with six month internship	August	2 years	04	1 <sup>st</sup> year	04	02
							2 <sup>nd</sup> year	01	
* 5	Bachelor of Prosthetics & Orthotics (BPO)	MUHS, Nashik/RCI	10+2, or HSC, with PCB/PCM	August	4 years	30	1 <sup>st</sup> year	30	26
							2 <sup>nd</sup> Year	20	
							3 <sup>rd</sup> year	28	
							4 <sup>th</sup> year	14	
							Internee	18	
6	FCR PT	MUHS, Nashik	Bachelor degree in Physiotherapy Therapy with six month internship	September	1 year	15	1 <sup>st</sup>	02	01
7	FCR OT	MUHS, Nashik	Bachelor degree in Occupational Therapy with six month internship	September	1 year	15	1 <sup>st</sup>	00	NA
8	Diploma in Hearing Language and Speech (DHLS)	Ali Yavar Jung National Institute for the Hearing Handicapped (AYJNIHH) RCI	XII Science and as per guidelines of AIISH Mysore/ RCI	September	1 year	25	1 <sup>st</sup>	04	04

# FORMAT OF ATN FOR THE USE OF CONCERNED MIISTRIES/DEPTTS

## APPENDIX III

(Vide para 53)

### Format of Action Taken Note (On Paragraphs of C&AG Reports)

- I. (a) Ministry/Department. : Ministry of Health and Family Welfare.  
(b) Subject/title of the Review/Paragraph. : वर्ष 01.09.2016 से 31.12.2017 के लिए  
अ.भा.भौ.चि.पु.सं, मुंबई का निरीक्षण रिपोर्ट।  
(c) Paragraph No. : Para No. 1 - Inability of the AIIPMR to conduct research owing to severe staff crunch.  
Para No. 2 - Irregular payment of electricity duty to BEST to the tune of Rs. 4,76,106.25/-  
Para No. 3 - Irregular engagement of contractual staff from out-sources.  
Para No. 4 - Non Disposal of unserviceable items amounting to Rs. 1,20,365/-  
Para No. 5 - Acute shortage of staff deployment in AIIPMR, Mumbai  
(d) Report No. and year. : पत्र सं-डी.जी.ए.(सी)/सी अण्ड ए.बी/ चार्ज / v/  
AIIPMR/1670 दिनांकित 16.02.2018  
वर्ष 01.09.2016 से 31.12.2017 के लिए।
- II. (a) Date of receipt of the Draft. : 16.02.2018  
Paragraph/Review in the Ministry. : Not Applicable  
(b) Date of Ministry's reply. : Not Applicable
- III. Gist of Paragraph/Review. : -
- IV.(a) Do the Ministry agree with the facts and figures included in the Paragraph? : Not Applicable  
(b) If not, please indicate the areas of Disagreement and also attach Documents in support. : Not Applicable


V. (a) Main Audit conclusions : Nil

1. Deficiency in the existing system  
Including system of internal control. :
2. Failure to follow the systems and procedure. :
3. Failure of individuals. :
4. Amount of loss/short assessment/short levy. :

(b) Do the Ministry agree with the Audit :  
Conclusions? If not, please indicate  
Specific areas of disagreement, reasons for  
disagreement and also Attach copies of relevant  
documents, Where necessary.

VI. Remedial actions taken

- |       |  |   |   |
|-------|--|---|---|
| (i)   | Improvement in system and Procedures including internal controls.  | : | Suggestions of Local Audit are being implemented. |
| (ii)  | Recovery of overpayment pointed out 1819<br>By Audit.  | : | Not applicable                                    |
| (iii) | Recovery of under assessment, short Levy or other dues;  | : | Not applicable                                    |
| (iv)  | Write off of amount of losses/ waste Expenditure/irrecoverable amount;   | : | Not applicable                                    |
| (v)   | Modification in the scheme; and Including financing pattern  | : | Not applicable                                    |
| (vi)  | Review of similar cases/complete Scheme/project in the light of findings Of sample check by Audit.<br>Observation/Recommendation | : | Review is being done (under progress)             |

  
9.4.19  
Accountant

**Government of India**  
**ALL INDIA INSTITUTE OF PHYSICAL MEDICINE AND REHABILITATION**  
Haji Ali, K. Khadye Marg, Mahalaxmi, Mumbai – 400 034.

**CHECK LIST (Annual Report 2018-19)**

Name of programme/Division : **All India Institute of Physical Medicine and Rehabilitation, Mumbai.**

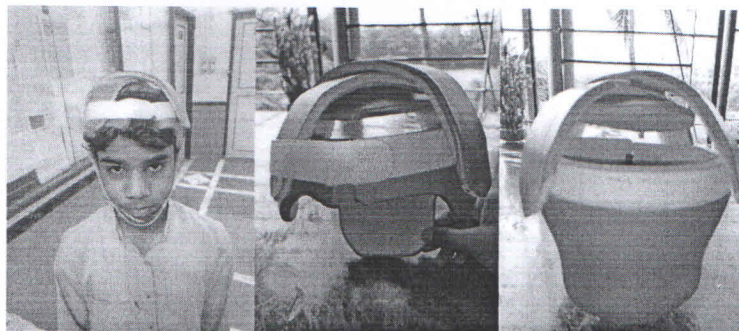
(i)	Whether the material has been approved by the JS/AS concerned	N.A.
(ii)	Whether the material is in MS WORD format [.doc file; font size:12 ; Font type:Times New Roman]  Whether the soft copy of material has been sent through e-mail (at healthcdn1@gmail.com) / CD along-with hard copy.	Yes / <del>No</del>
(iii)	Whether material for the introduction to be given by secretary (H&FW) has been enclosed.	<del>Yes</del> / No
(iv)	Whether photographs (in high resolution) with caption enclosed.	Yes / <del>No</del>
(v)	Whether the material in respect of North-Eastern States enclosed.	<del>Yes</del> / No
(vi)	Whether the material in respect Gender Issue enclosed.	<del>Yes</del> / No
(vii)	Whether ATNs in respect of the audit observations have been enclosed in the prescribed format.	Yes / <del>No</del>
(viii)	Whether Annexures enclosed.	<del>Yes</del> / No



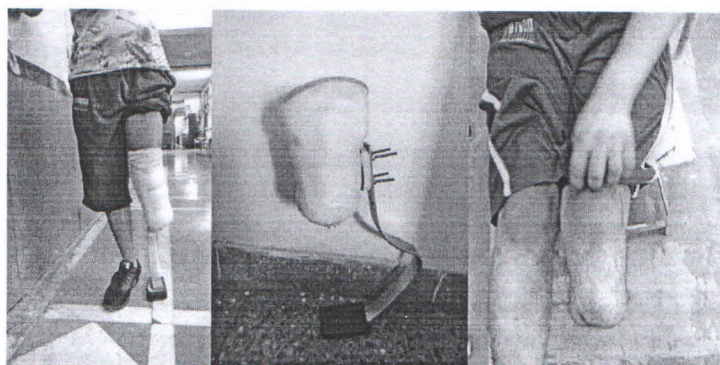
(Dr. A. K. Gaur)  
Director



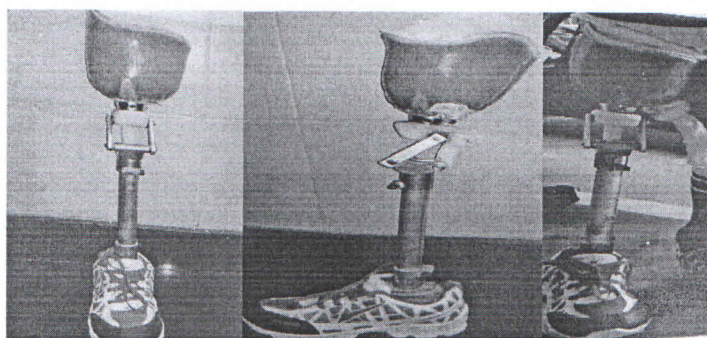
**Prosthetic & Orthotic Department**



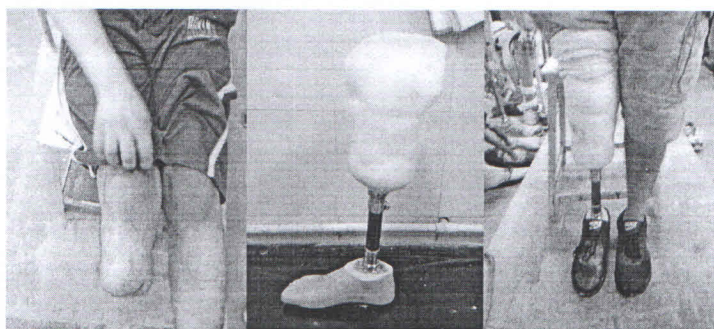
**Panorama Helmet**



**Panorama Sports Prosthesis**



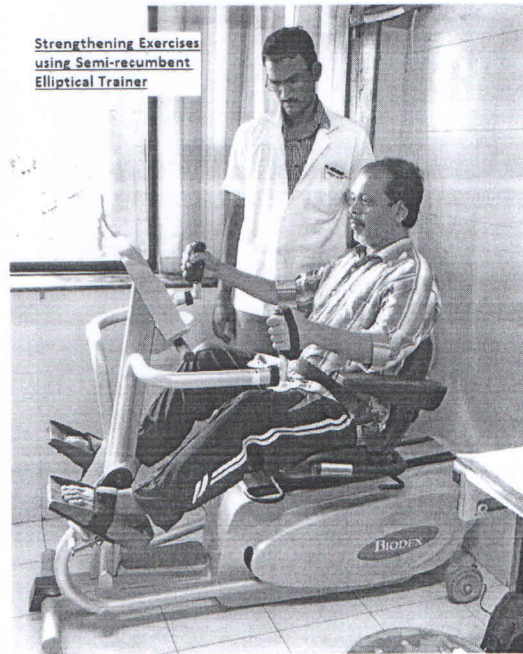
**Panorama Paediatric Knee joint**



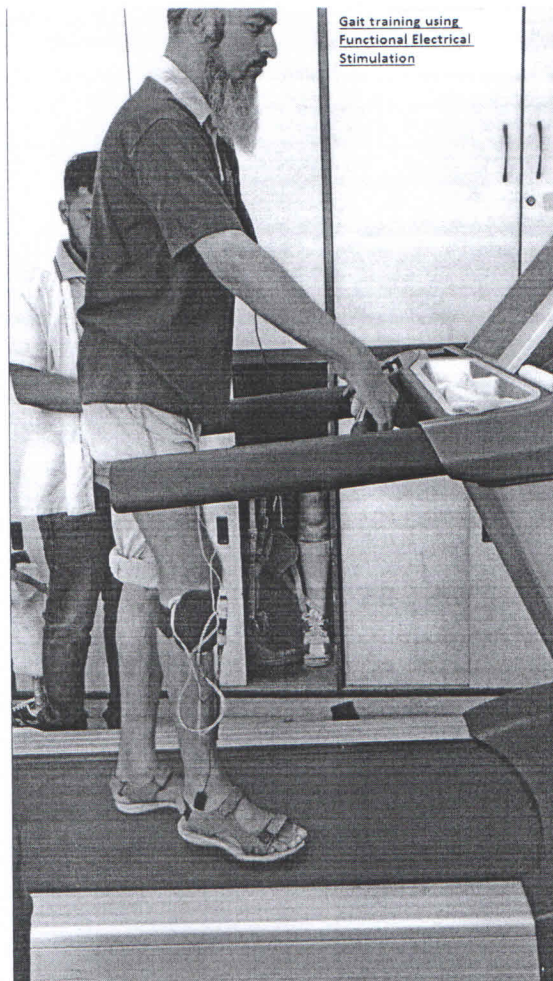
**Panorama Sports Prosthesis**



## Physiotherapy Department



Semi-recumbent elliptical cycle



Functional Electrical Stimulation