

# SDG 3: GOOD HEALTH AND WELL-BEING

## ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES

The Indian Institute of Technology, Gandhinagar (IITGN) prioritises the health and well-being of the community members and has introduced several measures for the same. The institute has been considerably successful in managing the Covid-19 infection on campus. Activities and initiatives taken by the institute in the health and well-being sector include a medical centre on campus, sports facilities, counselling centre, etc. NYASA, which started in 2011, primarily supports and educates the children of migrant construction workers in and around the campus and also conducts women's health awareness workshops on various occasions, including Sanjeevani. Women are made aware of practices they should follow to maintain menstrual health and hygiene and prevent anaemia.

## Research

Research is ongoing on several topics in the area of health including human motor learning, autism, Covid-19 outbreak, cancer research, MRI scans, drug delivery, environmental drug exposure, stem cell research,

respiratory exercises, speech and language delay among children, health risk due to groundwater contamination, etc. More than 100 researchers work on areas related to good health and well-being across at least 10 disciplines and interdisciplinary centres. About 100 research publications consisting of articles, book chapters, conference papers, etc. were published during the years 2019 and 2020. Examples of a few research projects along with the names of the funding agencies are as follows:

- An engineering approach towards novel materials development for combinatorial therapy in biomedical application; Science and Engineering Research Board (SERB)
- Antibacterial polymers to combat drug-resistant bacteria; Ministry of Human Resource Development (MHRD)
- Bimodal intraoperative probe for brain tumor delineation; Department of Science and Technology (DST)
- Brain functional connectivity in health and disease under India-Trento Programme for Advanced Research; DST
- Continuous production of scaffolds for drug delivery and tissue regeneration applications using microbubbles in Ionic liquid-biopolymer matrix; SERB
- Development of a reusable plasmonic platform for specific detection of Covid-19 RNA at ultralow concentrations; Board of Research in Nuclear Sciences (BRNS)
- Emotional face recognition: Understanding the underlying neural connectivity in high functioning adolescents with autism; DST
- Gold nano heater mediated targeting of powering in cancer for next generation chemo photo thermal therapy; Gujarat Council of Science and Technology (GUJCOST)
- Impact of air pollution on COVID-related secondary exacerbations; Google
- Implementation and control of cable actuation for gait assistance; Defence Research and Development Organisation (DRDO)
- Mechanism of kinesin-3 base cargo transport, regulation and their implication in neurodegenerative diseases; Department of Biotechnology
- Multi-omic analysis to identify biomarkers to demarcate oral cancer and healthy tissue for margin clearance; Gujarat State BioTechnology Mission (GSBTM)
- Reusable and field-deployable nano bio-catalysts for detection of pesticides and herbicides, IMPRINT project, MHRD
- Screening of natural flavonoids as the potential autophagy modulators in the regulation of diabetesassociated AD; SERB

- Small molecule-mediated targeting of powerhouse in cancer for next-generation Chemo-Photo-Therapy;
   SERB
- SmartWear for monitoring and treatment of gait disorders in parkinsonism; DST
- Study the effects of small molecule mediated
  G-Quadruplex stabilisation on induction of autophagy
  in cell culture model of breast cancer; SERB
- Studying polymorphism in drug intermediates and their applications; DRDO
- To study the effects of autophagy modulators in alleviation of breast cancer metastasis; Department of Bio Technology - Research Associateship
- Viruses in evolution and disease; CISCO

IITGN has been doing its part in the wake of the Covid-19 pandemic with several teams of faculty and students working together on related projects. A few of those included Covid-19 Dashboard, COVID Explorer, low-cost ventilator, and COSHOP (Further details may be accessed here: https://iitgn.ac.in/covid19\_innovation)

The Humanities and Social Sciences discipline of the institute conducts research to assess social determinants of health and explore the social factors influencing sexual, reproductive, and psychological health in India. Several mixed methods research projects are being supervised including studies on menstrual health among adolescents in Maharashtra, digital literacy among Kerala's community health workers, etc.

Report on Swasth Bharat Preraks: Catalyzing POSHAN

Abhiyaan through Innovative Young Minds: A formative study to capture key learnings was prepared by a research group of Humanities and Social Sciences discipline. The objectives of the study were to understand the implementation of the Swasth Bharat Prerak (SBP) programme, to identify the ways the SBP programme has influenced the implementation of the POSHAN Abhiyaan, to understand the channels of change with respect to the impact of SBP and to document the impact of the SBP on the Preraks. (Source: <a href="http://malavikasubramanyam.com/projects">http://malavikasubramanyam.com/projects</a>)

A report has also been prepared on the 'Take Home Ration service' of the integrated child services scheme by a research group. The report elucidates a comprehensive picture of the type of Take Home Ration (THR) distributed in several districts of India by documenting the current status of THR in select states of India. The authors mention that the report should be treated as a first attempt to document the contents of Take Home Ration, the fortification process of THR, supply, delivery, and distribution mechanism of THR at the district level. (Source: http://malavikasubramanyam.com/projects)

Another study involving nutrition promotion among Indian children and youth revealed that while the mother was majorly involved in carrying out child-feeding and child-care responsibilities, the hierarchical familial structure offered constrained capacity for navigating barriers imposed by the socio-cultural context in exercising her choices. The study identified certain intervention design features, including the central role of the family in



facilitating the mother's participation as well as initiation and sustenance of recommended behaviour change.

Little research has explored the influence of social context on the health of Indian adolescents. One of the research groups in the Humanities and Social Sciences discipline conceptualised community-level women's education (a proxy for the value placed on women's wellbeing) as exerting contextual influence on adolescent haemoglobin level and body mass index (BMI).

Health literacy skills help people make informed health decisions. Health education efforts with a health literacy focus are at the initial stage in India. A thesis by one of the postgraduate students designed a contextually relevant, theory-informed non-communicable diseases (NCD) nutrition and health literacy curriculum, and investigated its effect on NCD nutrition and health literacy among non-medical, non-nursing college students in the State of Gujarat, India. A curriculum tailored to undergraduate college students was designed, which emphasised skills building and critical thinking; encompassing functional, interactive, and critical health literacy domains. The findings showed that a theory-driven curriculum may be a tool for enhancing NCD health literacy in Indian youth from diverse academic and socio-economic backgrounds.

A research group in the Chemistry discipline is undertaking a research project, the successful completion of which may provide us with valuable insights on the molecular and cellular functions of Human Tousled-like kinases (TLKs) which could be beneficial for the in-depth understanding of these as molecular targets. During this collaborative project, we shall develop expertise in the molecular and cell biology of Human TLKs and, we plan to share this knowledge and technology with other scientists working in similar research areas. This work not only would answer the underlying mechanism of TLK but also would be highly transnational in terms of target-oriented drug discovery.

The institute collaborates with local, national, and global institutions to improve health and well-being outcomes. Examples of such institutes include the Ministry of Human Resource Development, Department of Science and Technology and Department of Biotechnology under Government of India, The Drugs for Neglected Diseases initiative, Biotechnology Industry Research Assistance Council among others.

About 10 researchers at the institute have their research focus on food security and hunger. Nine articles were published in reputed journals covering topics related to drought and famine, integrated child development services, etc. in the years 2019 and 2020.

The Centre for Biomedical Engineering at IITGN is focused on carrying out cutting-edge research in various areas of biomedical engineering. The Centre has an explicit mission to produce research that is of social relevance to India, and by extension, across the world.

The main objectives of this Centre are:

- Research and development in biomedical engineering and healthcare technologies
- Developing low-cost technologies related to healthcare to help people in rural areas
- Collaborating with foreign universities and prominent national and international institutes to conduct research in three major focus areas

Products/ techniques developed by the Centre include:

- OneTouchDoctor: Non-invasive near infra-red spectroscopy based physiology parameter (Pulse Rate, Systolic and Diastolic Blood Pressure, Hemoglobin, Saturation of Peripheral Oxygen, Perfusion Index) monitoring
- Instrole: Instrumented shoes for quantifying one's gait in terms of gait-related indices, such as Stride Time, Step Time, Cadence, Symmetry Index, Gait Stability Ratio, %Stance, %Swing, etc.
- 3. MindEye: Gaze-based quantification of one's cognitive impairment
- PTreadX: Physiology-sensitive treadmill-assisted virtual reality based adaptive gait exercise platform.
   This offers progressive gait exercise adapted to one's energy expenditure.
- SWASti: Smart Walking Aid Stick for Parkinson's patients. It can predict one's possibility of freezing of gait and offers external cues (adapted to one's walking speed) to help overcome freezing of gait.
- 6. Tunable laser diode spectroscopy based technique for prediction of H-Pylori bacteria (responsible for ulcer)
- 7. Colorimetric and strip-based detection of pesticides and herbicides
- 8. Adaptive noise cancellation headphones

Design and Innovation Centre (DIC) at the institute collaborated with Prof Uttama Lahiri, Associate Professor, Electrical Engineering for the design and development of wearable biomedical devices. They have designed and developed 'Instrole', a wearable biomedical device that aims to provide aid to stroke patients.

## **Operations**

#### **Blood donation camp**

The Health Committee at IITGN along with Ganeshotsav 2019 students' team organized a blood donation camp on 5 September, 2019. A total of 95 units of blood were donated by students, faculty, staff, and their family members.



#### Different groups formed for Covid-19

IITGN took several measures to deal with the Covid-19 crisis and to ensure the safety and wellbeing of its entire community. The institute formed a Crisis Management Group on 13 March, 2020, consisting of faculty and staff members to continuously monitor the evolving situation and respond effectively to deal with the probable impacts of Covid-19 on the IITGN community and ensure minimum disruption for the academic activities. The IITGN community members have been taking adequate safety measures and most of the offices are functioning normally. Systems for testing, distancing, quarantining, etc. have been established.

An entirely student-run 24x7 Control Room was set up on 17 March, 2020, at the institute's hostel premises to facilitate smooth communication between the student body and institute authorities regarding all matters that are concerned with this crisis. A Special Volunteer Force was formed with the enthusiastic participation of community members to provide anticipated and unanticipated services, for instance, aiding security, coordinating the delivery of essential items, providing food delivery support, etc. Further, the institute established a Covid Medical Response Team on 24 June, 2020, to provide overall leadership and coordination with respect to the medical response of the institute.

#### **Medical Centre**

The institute has an in-house Medical Centre and qualified medical practitioners along with one physiotherapist are available to provide medical care and advice to students, staff, and faculty. It also has basic physiotherapy equipment and a trained assistant. Trained male nurses are available full-time to provide emergency first-aid and for routine medical services. They also assist in maintaining medical supplies and keeping medical

records. Medical kits for minor injuries are available at Sports fields, Gymnasium, and with security guards of each hostel. The institute has an agreement with the nine known hospitals of Gandhinagar/Ahmedabad that admit IITGN students without any advance deposit. Hospitalisation expenses of all staff and students, up to a certain limit, are covered under a medical insurance policy (as per the terms of the policy). An ambulance is also available on campus 24x7 basis for medical emergencies.

#### **Counselling Centre**

The institute has a dedicated Counselling Centre, consisting of faculty in charge of counselling services, counsellors, and student guides. The counselling service of IITGN provides a variety of services to students which are aimed at fostering independent thinking and responsibility. The institute counsellor along with student volunteers and faculty counsellors offers assistance to students to address academic, personal, or interpersonal issues. We aim to provide students with a genuine and empathetic environment for their overall growth and well-being. The counselling service is available to all the students throughout the year. Students are encouraged to meet the institute counsellor for any assistance on emotional, interpersonal, and personal problems. Sometimes, the counsellor identifies any student in need of help and approaches him/her. In some cases, the faculty or student guide refers students to the counsellor.

During the pandemic, Counselling Centre provided its services to the family members of the community who tested positive during the pandemic for addressing their anxiety, fear, etc., and ensuring the good mental health of the IITGN community.

#### Smoke-free policy

Smoking in the public areas of the institute and hostel

area, including the hostel buildings and hostel rooms, is prohibited. If a student faces any inconvenience due to other students indulging in smoking in hostel premises, they can report the issue to the Welfare/General Secretary and/or the Warden.

## Sexual and reproductive health care services for students

Various events are held from time to time, without any cost, to raise awareness about sexual and reproductive health-related issues among the student community. The institute has a medical centre that is visited by a gynaecologist regularly and the medical services are provided free of cost to students and staff.

#### **Barrier-free campus**

The institute is designed to be inclusive and has developed a campus that is disabled and elderly-friendly, including the availability of ramps, lifts, toilets, etc. for their use.

#### **Pedestrianised campus**

The campus promotes active modes of transport such as walking and cycling. The master plan envisioned a campus on the Sabarmati river, that is planned as a green campus with pedestrianized movement, largely free of vehicular traffic. Modal shift from motorised vehicles to non-motorized vehicles like bicycles or walking is encouraged. Segregated cycle tracks are provided along pedestrian paths and vehicular roads. Ample shaded cycle parking facilities are provided throughout the campus to encourage cycling. All these measures contribute to the better health and well-being of the community members.

#### **Indoor and outdoor sports facility**

At IITGN, we have a vibrant culture of sports. We believe that a person's sense of integrity, dedication, and perseverance is tested on the sports field, more than anywhere else. IITGN has always been supportive of sports and fitness as it helps in maintaining a healthy mind and body. Students must be allowed to choose the sport of their liking and capability and must be given an equal chance to excel in it. Keeping this in mind, ample facilities have been provided to the students for practising and attaining professionalism in their respective games.

With a special emphasis on fitness and a healthy lifestyle, IITGN is well-equipped with a Gymnasium, remodeled with a good selection of free weights and machines for a full and complete body workout. It is open to all the students, staff, faculty, and their family members. The gym has equipment that is suitable for cardio as well as strength training. Other than this, IITGN has also installed some outdoor gym equipment in the sports field to encourage the IITGN community for physical exercise.

Considering the benefits of reducing stress, improving sleep quality, maintaining fitness level, etc. that the yoga asanas provide, the institute organised online yoga and meditation sessions during the pandemic, when the outdoor sports facilities had to be closed.

Facilities for different sports activities such as badminton, basketball, cricket, football, table tennis, volleyball, etc. are also available.

#### **Achievement in Sports Awards**

The Board of Governors of the institute in its 28th meeting held on 20 January, 2020 approved to create awards for achievements in the Inter IIT Sport/Aquatic Meet. The Award will be known as "Achievement in Sports Awards". Any faculty/ staff/ student who wins first, second and third prize/ medal in the Inter IIT Sport/ Aquatic Meet will be eligible for this award. This can be a huge morale booster for our internal stakeholders and help build image for the institute within the IIT system.

### **Education**

With an aim to encourage physical activities and sports among all the students for its multiple benefits for overall well-being and personality development, the senate of IITGN has decided to revise the Physical Education (PE) requirements for all BTech and post-graduate students. As per the modified PE requirements, instead of two compulsory PE courses only during the first two semesters of the BTech programme, now the students will be required to take a total of six PE courses during the first six semesters as part of their graduation requirements. Likewise, the institute senate has decided to introduce PE requirements to post-graduate courses as well, which will further enhance interaction between UG and PG students. Now all post-graduate students (including MA, MSc, MTech, PGDIIT and PhD) will be required to complete two PE courses (one each in their first two semesters) as part of their graduation requirements. The institute will provide several sporting and other physical activity sessions to cater to the diverse interests of the students.

The following courses are offered at the institute in the domain of health and well-being:

BE 101: Introduction to Life Sciences: Fundamentals of Life

BE 303: Bionanotechnology - Principles and Applications BE 304: Introduction to Biomedical Engineering

BE 403: Stem Cells Science and Applications

BE 404: Human Physiology

BE 601: Applied Biological Engineering

BE 605: Cellular Signaling

BE 606: Neurophysiological Basis of Movement

BE 607: Molecular and Cellular Biotechnology

BE 608: Molecular Basis Of Neurodegenerative Diseases

BE 610: Molecular Oncology

BE 613: Biochemistry

BE 614: Biostatistics

BE 691-II: Special Topics in Biological Engineering: Human Physiology

CG 501: Computation and Cognition

CG 503: Fundamentals of Cognitive Psychology

CG 505: Fundamental Neuroscience

CG 506: Experimental Techniques in Cognitive Science

CG 507: Evolutionary Neuropsychology

CG 513: Behavioral Economics

CG 601: Motor Learning and Memory

CG 602: Classics in Brain Science

CG 603: Perception and Attention

CG 605: Learning and Memory

CG 607: Emotion and Cognition

CG 608: Neuroscience of Decision making

CG 609: Neuroscience and Cognitive Neuroscience

CH 517: Bioinorganic Chemistry

CH 521: Advanced Chemistry Laboratory

CH 616: Applied Chemical Biology

CH 627: Metabolism and Biosynthesis

CH 629: Medicinal Chemistry for Life

CL 625: Chemical Microscopy

CL 627: Particulate solids - Processing & surface engineering

ES 623: Biomolecular Materials Science

ES 655: Medical Imaging Systems

IN 331: Building Biotechnology : Science, Ethics, Law &

**Business** 

MS 410: Medical Products Industry: Quality and Regulations

MSE 605: Biomaterials for Tissue regeneration MSE 633: Transmission Electron Microscopy

Short courses were offered as follows:

- Meditation and the Mind by Dr Srinivas Reddy, Guest Professor of Humanities, IITGN, on 6-10 January, 2020.
- Immunology for Disease Pathogenesis and Drug Development by Dr Narendra Chirmule, CEO, SymphonyTech Biologics, on 14-16 February, 2020.

Following were the invited lectures organised by the institute related to SDG 3.

- Spinal Cord Injury: Using Combinational Therapies to Finding Cure by Dr Anita Singh, Widener University Chester, PA, USA on 9 July, 2019
- Disruptive Diagnostic Technology-Enabled Improved Public Health for the Developing World by Prof Suman Chakraborty, IIT Kharagpur, on 14 August, 2019
- Mental Health Awareness and Suicide Prevention by Dr Meenakshi Gupta, Psychotherapist, on12 September, 2019
- Neuroscience, Ethics and Morality by Mauktik Kulkarni,
  Neuroscientist, author, entrepreneur, on 1 November,

2019

- The Psychic Need for Death Drive by Dr Jhuma Basak,
  Indian Psychoanalytical Society, on 8 November, 2019
- Hybrid Inorganic/Organic Materials for MRI Contrast by Prof Dan Talham, University of Florida USA, on 20 November, 2019
- A Novel Quantitative Approach for Understanding Strain Level Microbiota Dynamics after Fecal Transplantation for Several Diseases by Dr Varun Aggarwala and Dr Ankita Bansal, Mt Sinai School of Medicine, on 25 November, 2019
- Portable Neuroimaging of the Recovery of Consciousness after Acute Brain Injury by Dr Anirban Dutta, University at Buffalo SUNY, USA, on 17 January, 2020
- MANAV- The Human Atlas Initiative: Training and Project Awareness Session by Dr Dhara Lakhkar, IISER, Pune, on 23 January, 2020
- Stress and the Hippocampus: a Neurophysiological Perspective by Dr Anupratap (Pratap) Tomar, University of Bristol, on 23 January, 2020
- Neuronal Diabetes and Alzheimer's disease: Side by Side? by Prof Chinmoy Sankar Dey, IIT Delhi, on 5 February, 2020
- Pathobiology of Myo-inositol Oxygenase in Diabetic Kidney Disease by Dr Isha Sharma, Northwestern University, USA, on 13 February, 2020
- Neural Basis of Memory by Dr Niranjan Kambi,
  University of Wisconsin, Madison, on 19 February, 2020
- Technoscience and Transhumanism: an Existential Paradigm-shift by Prof Bijoy H Boruah, IIT Ropar, on 25 February, 2020

## **Community outreach**

Our community receives services and support from many workers employed by individuals (such as maids, cooks, car cleaners, others) and employed by other agencies (such as courier delivery persons, food delivery persons, others). A system was developed to enable medical support for such individuals by the institute. It was encouraged to channelise this support to the needy workers, who can directly go to the Out Patient Department (at the institute's medical centre) for consultation and seeking medical help. Various events related to health were organised by the institute, including topics such as sports events, inculcating the habit of running among students, fitness, mental health, etc.

#### Lecture on eye care

As part of the IITGN Decennial Lecture Series, the institute organised the third decennial lecture on 23 August, 2019. The topic was Infinite Vision: Story of Greatest Business Case for Compassion. Dr Aravind Srinivasan, Director, Aravind Eye Care Systems, Tamil Nadu, gave an inspiring



lecture on how a few dedicated and committed individuals created the "Aravind Model" of high volume, high quality and cost-effective eye care. Narrating the birth of an impossible new dream, Dr Srinivasan described Aravind's vision by its founder Dr Govindappa Venkataswamy, which was to eliminate needless/curable blindness by providing compassionate and affordable quality eye care. Founded in 1976 in Madurai, Aravind Eye Care System is possibly the world's largest eye care organisation today. Aravind Eye Care System examines about 13,000 patients and performs approximately 1,500 surgeries every day.

#### Disha Cup

IITGN organised the fifth edition of the Disha Cup, the annual cricket tournament for the institute's outsourced manpower, from 26 November to 1 December, 2019. A total of 160 support staff of the institute, including security guards, maintenance staff, mess workers, office boys, housekeeping staff, and drivers, among others, actively took part in the tournament.

#### Health outreach programmes

On 19 January, 2020, NYASA, in collaboration with Desai Foundation; Indian Institute of Public Health Gandhinagar (IIPHG); and M S University, Baroda, organised the fifth edition of Sanjeevani - a health and awareness camp for the villagers residing in its surrounding areas of IITGN. More than 1,000 people turned up for different health check-ups during the camp. A no-cost medical check-up was conducted along with the free distribution of medicines. Apart from this, several stalls were arranged to spread awareness on important issues like first-aid, personal hygiene, nutrition, eye care, safe drinking water, cancer, sexual and reproductive health, and waste disposal. NYASA also conducts women's health awareness

workshops on various occasions, including Sanjeevani. Women are made aware of practices they should follow to maintain menstrual health and hygiene and prevent anaemia.

#### GDFA tournament

IITGN hosted the Gandhinagar District Football Association (GDFA) tournament's opening ceremony on 25 January, 2020. Host team IITGN A defeated Insane Rovers Football Club's team IRFC B and won the first league match by a huge margin.

#### Fitness and football coaching

The institute started with fitness and football coaching for students of age group 10-13 years of a government school in a neighbouring village, Palaj last in January - February 2020. It had, however, been discontinued due to Covid-19.

#### Beat the Dean Challenge

To inculcate the habit of running amongst students, IITGN's Physical Education Section organised a 5 Km and 2.5 Km run for community members on Republic Day, combining it with an exciting 'Beat the Dean' challenge by Prof Harish P M, Dean, Student Affairs. Nearly 30 out of 74 participants completed the challenge.

#### MatheGon 2020

The discipline of Mathematics organised its annual outreach event, MatheGon on 1 February, 2020. The event, coordinated by Prof Indranath Sengupta, engaged school children in various facets of Mathematics through day-long events, talks, and activities.

#### Cognitalks 2020

The Centre for Cognitive and Brain Sciences at IITGN

organised the 3rd edition of CogniTalks on 7 February, 2020. The event coordinated by Prof Leslee Lazar had an ecologist, neuropsychologist, musician, and a cartoonist, discussing cognition from different perspectives.

#### Participation in Justice League

IITGN secured a bronze medal in the discus throw event at Gujarat National Law University's Annual Sports Fest, Justice League held on 20 - 23, February, 2020.

#### Bronze medals in Petro Cup

IITGN team won bronze medals in the following events of Petro Cup, the Annual Sports Fest of PDPU held on 13-18 February, 2020: Discus Throw - Gautam Vashishtha, 200m Sprint - Deependra Kumar, and 4\*100 m relay - Deependra Kumar, Neeraj Kumar, Abhishek, and Ajay Karwasara.

#### Fit IITGN Campaign

IITGN's Sports Council had initiated the 'Fit IITGN' campaign from 4 April, 2020, with an aim to help the community stay fit while staying indoors amid the lockdown. Virtual fitness sessions were held every day from 6-7 PM, including warm-up, basic/core exercises, a combination of exercises as per planned schedule, tabata training, cool down exercises along with yoga and meditation. The council had also arranged weekly guest lectures by renowned sports personalities and fitness instructors from across the country, including Mr Virdhawal Khade (Arjuna Awardee Indian Olympian swimmer), Mr Anshul Kothari (Asian and Commonwealth Games swimmer), Mr Harmeet Desai (Arjuna Awardee Table Tennis player), Mr Devendra Jhajharia (Indian Paralympic javelin thrower), Mr Aaron Tyler (a UEFA (B) licensed coach), Mr Gulab Chauhan (ex-FIFA referee), Mrs Amanat Kagzi (a nutritionist), and Dr Harish Padinjarethil (a senior sports officer at IIT Bombay).

#### Covid-19

We are proud of the collective response and support for the most vulnerable members of our community and neighboring villages. The Shramik Kalyan Samiti, established on 1 April, 2020, collaborated with CPWD to ensure the health, safety, and well-being of construction workers during the pandemic. The Padosi Gaam Sahayog Samiti, set up on 7 May, 2020, strengthened our relationship with the neighbouring villages by organising the distribution of rations and safety-related supplies. The institute also organised sessions to promote sanitation and proper hygiene during the pandemic.

#### **Emotional Resilience**

A workshop on Emotional Resilience was conducted by Ms Rashmi Datt, an organisation development consultant on 27 May, 2020. This online session of self-exploration, conducted through dialogue and self-reflection exercises, aided in identifying our triggers, finding ways to constructively defuse the emotions building up inside, and communicating effectively in times of impatience and frustration. The session also helped to develop insight and wisdom from tackling and overcoming problems and being creative to address various issues faced by students.

#### Vikram Sarabhai Cup

IITGN Cricket team defeated Indus University to win the Vikram Sarabhai Space Cup, hosted by Space Application Centre (ISRO), Ahmedabad.

#### Intra Mural

IITGN witnessed zealous participation in the Intra Mural sports tournaments of football (LFP), basketball (IBL), volleyball (SML), and cricket (CCL), along with newly introduced games like badminton, table tennis, and athletics.

#### **Webinar on National Sports Day**

On the occasion of National Sports Day, the IITGN Sports Council organised a webinar by Mr Ashok Dhyanchand, former Indian professional field hockey player and son of well-known Indian hockey player Dhyan Chand. The session focused on the importance of sports and physical activities in our daily life. More than 100 participants joined the webinar including faculty members, staff, and students.

#### Online fitness challenge

With the start of an overall competition among various branches with 'IITGN-RISE', the Sports Council brought in the first online challenge of RISE, featuring exercises like push-ups, squats, leg raises, and mountain climbing, among others. The participants were given points depending on the number of workouts they do, either as a team or individually. There were also prizes based on performance in different categories such as the most improved, the most regular etc.

#### Weekly cycle rides

With an aim to inculcate the habit of fitness, IITGN's Sports Council is organising cycle rides for the community members every Sunday. So far, two rides of about 15 and 25 km have been organised and around 15 people have joined in each trip.

#### Free medical support for labourers

IITGN is providing free medical support and consultation to construction workers in its medical centre. A free screening test of all workers was done in the workers' housing colony. Institute also provides ambulance services to workers needing medical examination or treatment. The

institute volunteer groups regularly sensitise the workers and create awareness about preventive measures against Covid-19, such as frequent hand washing and social distancing. Breathing techniques have been explained to the labourers. All the workers' colonies are equipped with a first aid box.

#### WinIndia campaign

In the wake of the Covid-19 Pandemic, all the 23 IITs across India, under the mentorship of Mr Sunil Shetty, a renowned Bollywood actor, had taken a joint initiative to promote fitness and mental health. IITGN also participated in the campaign. The sports secretaries from all IITs had planned an online fitness/health campaign for their institute's community. Online challenges were floated regularly and people had to record and share their videos on social media to get points.

#### Online chess tournament

Amid the Covid-19 crisis and lockdown situation, IITGN's The Knight Players brought an online chess tournament for the institute community. The first round of the online tournament saw more than 55 participants and announced exciting prizes for the top performers.

### Webinar series on Translational Research in Neuroengineering and Neurorehabilitation

In association with the University at Buffalo (SUNY), USA, IITGN is organising a webinar series on Translational Research in Neuroengineering and Neurorehabilitation. During this quarter, the series has hosted ten webinars delivered by eminent speakers from the USA, the UK, France, and India. The webinar series concentrates on emerging applications of Neuroengineering with a focus on rehabilitation. Experts on cerebrovascular and neurological disease and neurological disability from different countries disseminated their research during these webinars.

