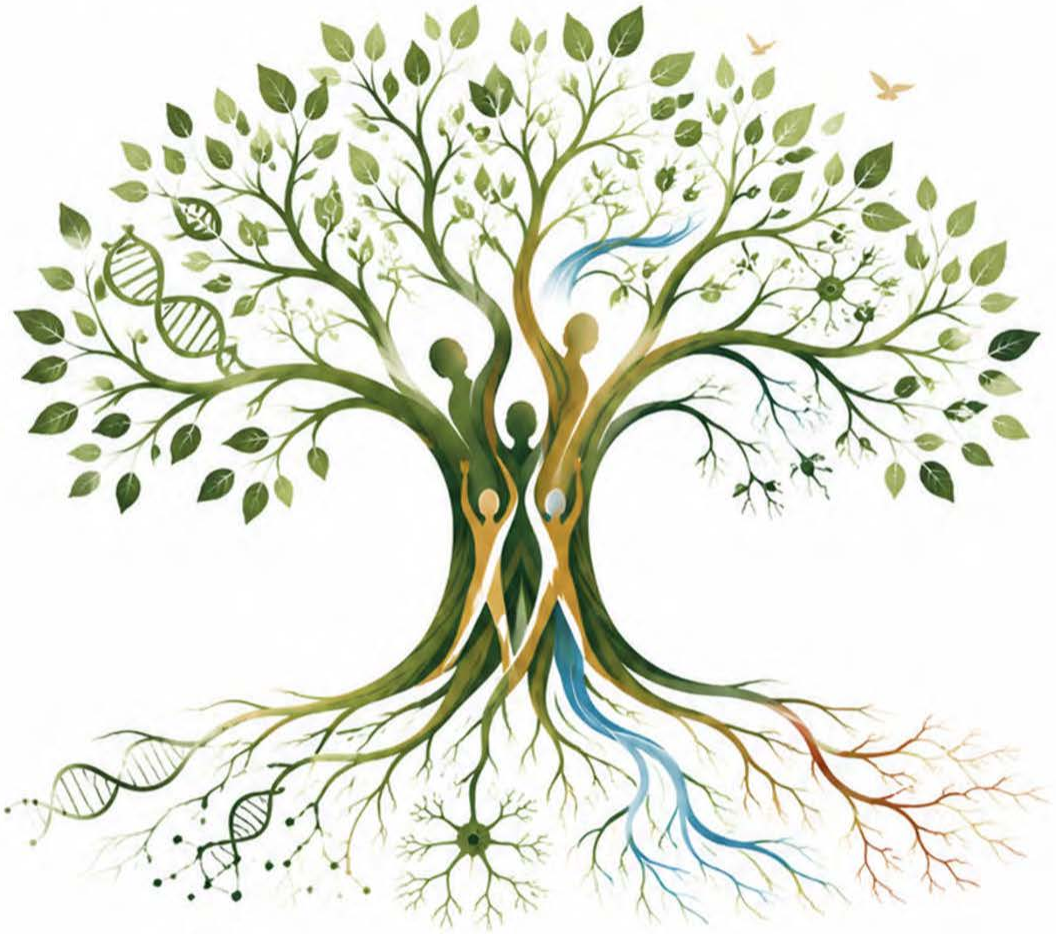
Healthy People. Healthy Communities. Healthy Planet.

A VISION FOR A SUSTAINABLE AND EQUITABLE FUTURE



SCHOOL OF SCIENCE

NAVRACHANA UNIVERSITY

ADVANCING HEALTH THROUGH SCIENCE,
INNOVATION AND COMMUNITY ACTION

Centre for Public Health

The Centre for
PUBLIC HEALTH

A HEALTHIER FUTURE BEGINS WITH KNOWLEDGE, COMPASSION AND COLLECTIVE ACTION

Advancing Health Equity through Research, Education, Innovation and Action

Health is far more than the absence of disease.
It is the foundation of human dignity, social justice, economic prosperity and sustainable development.
In an increasingly interconnected world, the health of individuals is inseparable from the health of families, communities, animals, ecosystems and the planet itself.

Climate change, emerging infectious diseases, antimicrobial resistance, food insecurity, environmental degradation, mental health challenges and widening health inequalities demand a new generation of interdisciplinary solutions.

The **Centre for Public Health at Navrachana University** has been established as a catalyst for those solutions—bringing together science, technology, policy, education and community engagement to improve the health and well-being of

Guided by evidence, driven by innovation and committed to equity, the Centre seeks to transform knowledge into action and research into measurable societal impact.

Together, we envision healthier people, healthier communities and a healthier planet.

ADVISORY BOARD

INTERNATIONAL

- **Dr. Saurabh Mehta**
  Janet and Gordon Lankton
  Professor - Division of Nutritional Sciences,
  Cornell University,
  Program Director - NIH-supported training program on artificial intelligence and precision nutrition, Cornell University

- **Dr. Renuka Jayatissa**
  Vice Chancellor,
  International Institute of Health Sciences,
  Sri Lanka

- **Dr. Parul Christian**
  Professor, International Health,
  Director of Program in Human Nutrition,
  Johns Hopkins University

- **Prof. Mohan Tanniru**
  Adjunct Professor in the Division of Public Health Practice and Translational Research in the Mel and Enid Zuckerman College of Public Health, University of Arizona

- **Dr. Shukanto Das**
  Centre for Global Health, Usher Institute,
  University of Edinburgh, UK
  Member, Trainee Advisory Committee, Consortium of Universities for Global Health, USA
  Strategy Advisor, Lifeline Foundation, India

- **Prof. Chin-Kun Wang**
  School of Nutrition,
  Chung Shan Medical University, Taichung,
  Taiwan

NATIONAL

- **Dr. Amarjeet Singh**
  Former Principal Secretary Family Welfare & Commissioner of Health, Gujarat, Director, Public Health, MoH & FW, GOI and Union Secretary, Jal Shakti Ministry, Gandhinagar, Gujarat

- **Dr. Dileep Mavlankar**
  Former Director, IIPH Gandhinagar

- **Dr. Dhananjay Bhat**
  Public Health expert, Gov of Gujarat for 30 years, UN Specialist and Consultant for Vector Borne Disease Control, Disease Surveillance, School Health Programme, Reproductive and Child Health in India, East Africa, Somalia and Sri Lanka

- **Dr. Kiran Bains**
  Dean, College of Community Science,
  Punjab Agricultural University, Ludhiana, India.

- **Dr. C. S. Buch**
  Practicing Doctor, Director at WHEELS Global Foundation India, VP Int Soc 4 Precision Health, Advisor Orthogate, Vadodara

- **Dr. Sunita Narain**
  Director General of the Centre for Science and Environment, New Delhi

- **Dr. Jai Pawar**
  Director, Deepak Foundation,
  Vadodara, Gujarat

- **Dr. Mona Duggal**
  Director, National Institute for Research in Digital Health and Data Science (NIRDHDS),
  New Delhi

- **Prof. Debarati Mukherjee**
  Lead and Professor-in-Charge,
  PHFI-Centre for Developmental and Life course Research; Professor, Indian Institute of Public Health-Bengaluru, Public Health Foundation of India

COLLABORATORS

- **Dr. Neerja Hajela**
  Microbiologist and Head of Science Yakult Danone (India) Private Ltd., India

INTERNATIONAL COLLABORATORS

- **Dr. Kerry Griffin**
  Dean, Center for Research and Discovery,
  Professor of Public Health,
  Massachusets College of Pharmacy and Health Sciences
- **Prof. Prabhu Pingali**
  Dyson Chair, University of Cornell,
  USA
- **Dr. Megan Deitchler**
  Department of Nutrition,
  Tufts University

INDUSTRY COLLABORATORS

- **FERMENTA BIOTECH**
- **PHS LIFE SCIENCES**
- **ENVISION BIOTECH PVT LTD.**
- **DANONE – INDIA**
- **KELLOGG**
- **MARICO INDUSTRY**
- **VEEGEN DIET CARE PVT LTD**
- **ENVISION BIOTECH PVT LTD**

ACADEMY- INDUSTRY INTERFACE COLLABORATORS

- **NIFTEM – K, KUNDLI, HARYANA**
- **NIFTEM – T, THANJAVUR, TAMIL NADU**
- **IIT DELHI**
- **IIT KHARAGPUR**
- **CFTRI, MYSURU**
- **CSIR-INDIAN INSTITUTE OF TOXICOLOGY RESEARCH (CSIR-IITR), LUCKNOW**
- **AIIMS, NEW DELHI**
- **DR. RAGINI SINGH AIIMS, RAJKOT**
- **DR .SOMESH CHANDRA, K. D. HOSPITAL, AHMEDABAD**

LEADERSHIP

- **Prof. Pratyush Shankar**
  Provost & Dean,
  School of Environmental Design and Architecture (SEDA),
  Navrachana University
- **Prof. Sandeep Vasant**
  Registrar & Professor (Computer Science & Engineering),
  Navrachana University
- **Prof. A. V. Ramachandran**
  EMRITUS Professor & Mentor,
  School of Science,
  Navrachana University
- **Prof. Sirimavo Nair**
  Head - Centre for Public Health,
  School of Science,
  Navrachana University
- **Dr. Darshee Baxi**
  Associate Dean & Program Chair,
  School of Science,
  Navrachana University
- **Dr. Parth Pandya**
  Associate Professor,
  School of Science,
  Navrachana University
- **Dr. Tejal Gajaria**
  Assistant Professor & Program Chair,
  School of Science,
  Navrachana University

The Centre for
PUBLIC HEALTH

WHY THE CENTRE?

The Centre for Public Health at Navrachana University has been established as an interdisciplinary platform dedicated to advancing health through research, education, innovation, partnerships and community engagement.

We believe that the health challenges of the twenty-first century cannot be solved by medicine alone. They require collaboration across biological sciences, environmental sciences, nutrition, digital technologies, behavioural sciences, policy, industry and communities.

By integrating scientific excellence with social responsibility, the Centre aims to generate evidence, develop innovative solutions, strengthen public health capacity and translate knowledge into measurable improvements in health and well-being.

OUR FOCUS AREAS



POPULATION HEALTH
Improving health across all stages of life



ENVIRONMENT & PLANETARY HEALTH
Protecting ecosystems and promoting a sustainable planet.



NUTRITION & LIFESTYLE
Promoting healthy diets and active lifestyles.



MENTAL & SOCIAL WELL-BEING
Addressing mental health and social determinants.



INFECTIOUS DISEASES & HEALTH SECURITY
Strengthening surveillance, preparedness and response.



DATA, DIGITAL & PRECISION HEALTH
Harnessing data and technology for informed decisions.

The Centre for

PUBLIC HEALTH



VISION

To establish the Centre for Public Health as a transformative, interdisciplinary platform advancing population health, health equity and sustainable development through research, education, innovation, collaboration and community engagement.

MISSION

- Promote interdisciplinary and evidence-based public-health research.
- Develop skilled professionals to address emerging health challenges.
- Implement community-centred preventive and health-promotion initiatives.
- Translate research evidence into policy, programmes and practice.
- Build partnerships with government, academia, healthcare, industry, civil society and international organisations.
- Advance health equity, public awareness and climate-resilient health solutions.

OUR PROMISE

To transform scientific knowledge into healthier lives through interdisciplinary research, innovation, education and

The Centre for PUBLIC HEALTH

LIFE COURSE APPROACH

PREGNANCY
Maternal nutrition, antenatal care, healthy behaviours.



BIRTH
Safe delivery, newborn care, breastfeeding.



CHILDHOOD
Nutrition and growth, immunisation, healthy habits.



ADOLESCENCE
Physical and mental health, life skills, risk prevention.



ADULTHOOD
Healthy lifestyles, chronic-disease prevention, work and family health.



HEALTHY AGEING
Active ageing, chronic-disease management, quality of life.



ONE HEALTH FRAMEWORK

The Centre adopts an expanded One Health perspective: the health of people is inseparable from the health of animals, ecosystems, food systems and the climate.



HUMAN HEALTH
Population health, prevention, NCDs, infections, reproductive and mental health.



ANIMAL HEALTH
Zoo-noses, antimicrobial resistance and shared environments.



ENVIRONMENTAL HEALTH
Air, water, sanitation, pollution, vectors and ecosystems.



FOOD SYSTEMS
Nutrition, food safety, agriculture and food security.



CLIMATE & HEALTH
Heat, extreme events, vector ecology and resilience.

The Centre for

PUBLIC HEALTH

PRECISION PUBLIC HEALTH

Precision Public Health combines population-health principles with better data, digital technologies, risk stratification and targeted intervention. It complements—not replaces—conventional epidemiology.

GENOMICS

Integrate epidemiology, nutrition, behaviour, environmental exposure and social determinants.

GIS & GEOSPATIAL MAPPING

Use secure digital data systems, GIS and dashboards for surveillance.

AI & MACHINE LEARNING

Apply statistics and validated AI/ML methods where appropriate.

BIG DATA ANALYTICS

Target preventive action to populations most likely to benefit

MOBILE HEALTH & WEARABLES

Re-measure outcomes to determine whether interventions work.

The Centre for

PUBLIC HEALTH



OUR RESEARCH ECOSYSTEM

IDENTIFY NEED
Understand priority health challenges

GENERATE IDEAS
Generate ideas and co-create research questions.

CONDUCT RESEARCH
Generate robust evidence through rigorous methods

ANALYSE & INTERPRET
Synthesize data and knowledge across disciplines.

TRANSLATE TO PRACTICE
Convert evidence into solutions, policies and tools03:54 PM

IMPLEMENT & ENGAGE
Improve health, strengthen systems and inform policy.

MEASURE & IMPROVE
Evaluate, learn and scale for long-term impact

The intended endpoint is actionable evidence—evidence that can improve programmes, practice, policy and community health.

The Centre for
PUBLIC HEALTH

OUR PROGRAMMES & INITIATIVES

LIFE COURSE APPROACH

ACADEMIC PROGRAMMES
UG, PG and PhD learning, interdisciplinary and One Health curricula, experiential learning.

TRAINING & CAPACITY BUILDING
Certificates, fellowships, professional/community-worker training and leadership.

RESEARCH & INNOVATION
Thematic clusters, seed grants, translational and implementation research.

COMMUNITY ENGAGEMENT
Outreach, health promotion, participatory research and co-creation.

POLICY & SYSTEMS
Evidence briefs, policy advisory and health-systems research.

INCUBATION & ENTREPRENEURSHIP
Innovation, technology translation, scaling and social enterprise.

COMMUNITY ENGAGEMENT & OUTREACH

Communities are partners—not merely recipients of services or sources of data.

- Community health assessment and needs identification.
- Health and nutrition surveillance using standardised, ethical methods.
- Health-promotion initiatives based on identified needs.
- Targeted interventions followed by re-assessment.
- School, university, workplace, urban, peri-urban and rural initiatives.
- Return findings to communities in clear and useful formats.

Operating principle:
Measure → Understand → Act → Re-measure.

The Centre for

PUBLIC HEALTH

HEALTHY NUV & STUDENT ENGAGEMENT

- Healthy NUV 360°: voluntary student-faculty-staff health and lifestyle surveillance.
- NUV Public Health Group / Fellows: trained interdisciplinary student teams.
- Core domains: anthropometry, blood pressure, nutrition, activity, sleep/circadian health, lifestyle and selected illness indicators.
- Computer Science collaboration: secure data capture, quality control, dashboards, GIS and later predictive analytics.
- Interventions selected after baseline data identify priority risks.

NUTRITION, LIFESTYLE & METABOLIC HEALTH

- Under-nutrition, micro-nutrient inadequacy and anemia risk.
- Overweight, obesity, central adiposity and cardio metabolic risk.
- Dietary diversity, ultra-processed foods, sugary beverages and food environments.
- Physical activity, sedentary behaviour and built environment.
- Sleep, circadian health, screen exposure, meal timing and chrononutrition.
- Community-appropriate behaviour-change strategies.

REPRODUCTIVE, MATERNAL, CHILD & ADOLESCENT HEALTH

- Preconception and maternal health, antenatal well-being and nutrition.
- Safe birth, breastfeeding, newborn and early-childhood health.
- Growth, immunisation, nutrition and healthy development.
- Adolescent physical, mental, menstrual and reproductive health.
- HPV awareness and cervical-cancer prevention.
- Life-course research linking early exposures with later health.

ENVIRONMENTAL, OCCUPATIONAL & CLIMATE HEALTH

- Air, water, sanitation, waste and environmental contamination.
- Occupational exposures and workplace health.
- Heat stress, extreme weather and climate-sensitive risks.
- Vector ecology and environmental determinants of infection.
- Heavy metals, endocrine-disrupting exposures and other toxicants.
- Community resilience and climate-adaptive public-health action.

DIGITAL HEALTH, DATA SCIENCE & AI

- Electronic data capture and secure public-health databases.
- Health dashboards and surveillance visualisation.
- GIS mapping of aggregate risk and service access.
- Statistical modelling and responsible machine-learning approaches.
- Digital health communication and community engagement.
- Data governance, privacy, bias, ethics and human oversight.
- AI should be introduced progressively: first for data quality, visualisation and pattern exploration; predictive models only after adequate longitudinal data and validation.

The Centre for
PUBLIC HEALTH

PARTNERSHIPS & COLLABORATION



EVIDENCE TO POLICY & PRACTICE

- Generate robust and locally relevant evidence.
- Prepare concise evidence briefs and recommendations.
- Support programme design and implementation research.
- Evaluate whether interventions achieve intended outcomes.
- Engage decision-makers, practitioners and communities early.
- Communicate science clearly and responsibly.

The Centre for

PUBLIC HEALTH

SUSTAINABLE DEVELOPMENT GOALS



GOVERNANCE, ETHICS & QUALITY

- Scientific rigor and transparent methods.
- Institutional ethics review and informed consent where applicable.
- Privacy, confidentiality and secure health-data governance.
- Standard operating procedures and competency-based training.
- Referral pathways before screening programmes begin.
- Quality assurance, calibration, audit and reproducibility.
- Responsible communication: no over claiming, stigma or misuse of individual data.

OUR FUTURE DIRECTION

- Strengthen interdisciplinary research clusters and high-quality publications.
- Develop future public-health leaders through education, training and fellowships.
- Deepen national and international partnerships.
- Strengthen evidence-to-policy and implementation pathways.
- Expand community engagement and digital outreach.
- Advance One Health, Life Course and Precision Public Health approaches.
- Build a recognised Centre of Excellence with measurable societal impact.

The Centre for
PUBLIC HEALTH

BUILDING A HEALTHIER FUTURE TOGETHER

The Centre for Public Health is committed to scientific rigor, social responsibility and a shared vision of a healthier, more equitable and sustainable future.

OUR FUTURE DIRECTION

- LIFE COURSE
- ONE HEALTH
- PRECISION PUBLIC HEALTH
- EDUCATE
- RESEARCH
- INNOVATE
- ENGAGE
- IMPACT

Together, we can turn knowledge into action and action into lasting public-health impact.

Inauguration of
Center for Public Health



Chief Guest

Dr. Meenesh Shah,
Chairman
National Dairy
Development Board
(NDDB)



Guest of Honour

Dr. Bhavesh Modi,
Director and Scientist G
ICMR-National Institute of
Occupational Health,
Ahmedabad



Prof. Sirimao Nair
Head,
Centre for Public Health
Navrachana University



Prof. A.V.
Ramachandran
Emeritus Professor &
Mentor,
School of Science
Navrachana University





Centre for Public Health

SCHOOL OF SCIENCE

NAVRACHANA UNIVERSITY

Accredited with Grade A+ by NAAC

Vasna - Bhayli Road, Vadodara - 391410, Gujarat, India

+91 265 2617109 | +91 9327843239

www.nuv.ac.in admission@nuv.ac.in