

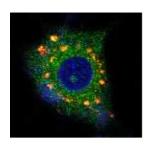
SHYAMAL K GOSWAMI, PROFESSOR SCHOOL OF LIFE SCIENCES JAWAHARLAL NEHRU UNIVERSITY



AREA OF SPECIALIZATION CELL SIGNALING AND GENE EXPRESSION

BROAD RESEARCH INTEREST
CARDIAC MYOCYTES HYPERTROPHY AND APOPTOSIS
(HEART FAILURE)

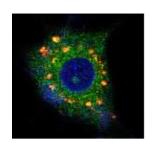
SPECIFIC AREA OF RESEARCH
DIFFERENTIAL REDOX SIGNALING AND GENE EXPRESSION BY
CATECHOLAMINES



HIGHLIGHTS AND CONNECTIVITY



- 1. BASIC CARDIOVASCULAR BIOLOGY IS A FAST EVOLVING SUBJECT.
- 2. IN EUROPE AND USA, IT IS A HIGH PRIROTY AREA. IN INDIA IS STILL UNDER FUNDED ALTHOUGH ITS IMPORTANCE IS RECOGNIZED.
- 1. THE CONCEPT OF REDOX BIOLOGY HAS UNDERGONE A PARADIGM SHIFT IN LAST TEN YEARS.
- 2. "REDOX SIGNALING" RATHER THAN "OXIDATIVE STRESS" IS NOW ATTRIBUTED TO VARIOUS DEGENERATIVE DISEASES.
- 1. ANTIOXIDANT THERAPY HAS LARGELY FAILED DUE TO INADEQUATE UNDERSTANDING THE REDOX BIOLOGY OF DISESASES.
- 2. COLLABORATIVE RESEARCH ON REDOX PROTEMICS IS LIKELY TO HELP US DEVELOP CHEAPER PLANT BASED THERAPEUTICS.



PROPOSED RESEARCH ORGANIZATION



REDOX BIOLOGY OF DEGERATIVE DISEASES AND PHYTOREMEDIES

- 1. BIOCHEMISTRY
- 2. MOLECULAR BIOLOGY
- 3. PHYSICAL CHEMISTRY
- 4. PHYTOCHEMISTRY



- 1. BIOCHEMISTRY
- 2. MOLECULAR BIOLOGY
- 3. ADVANCE PROTEOMICS
- 4. SPECIALISTS IN CARDIOVASCULAR AND NEURODEGENERATIVE DISEASES

INDIA

<u>EU</u>