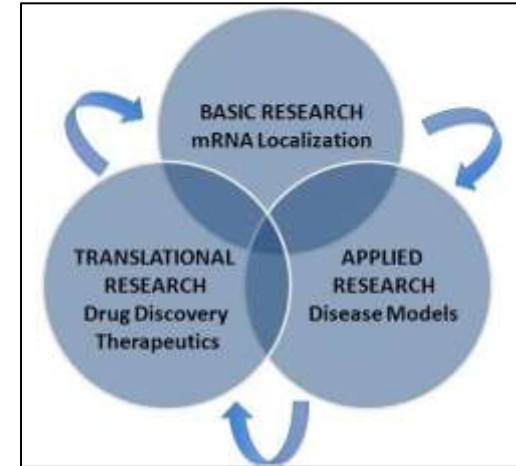
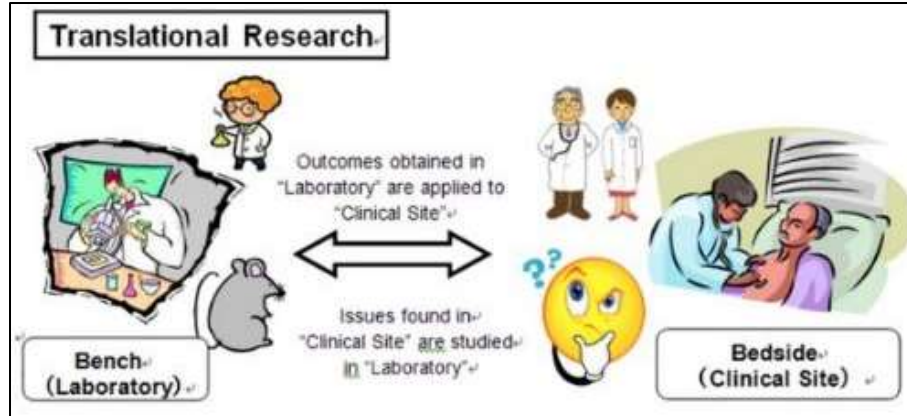


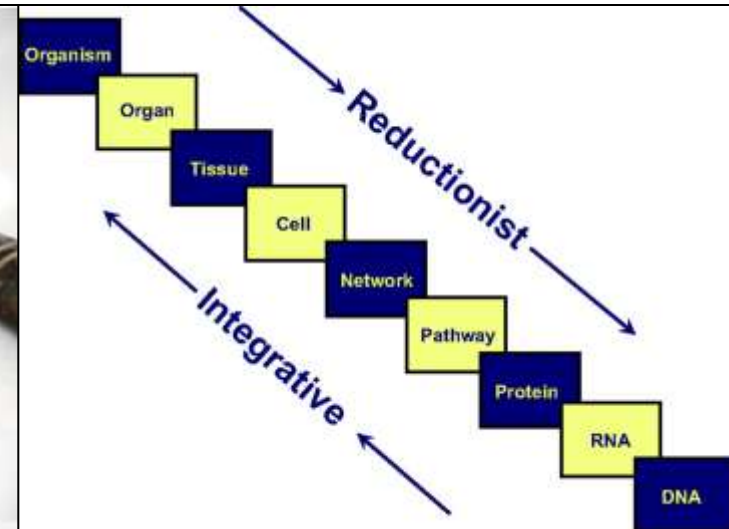
OBJECTIVE



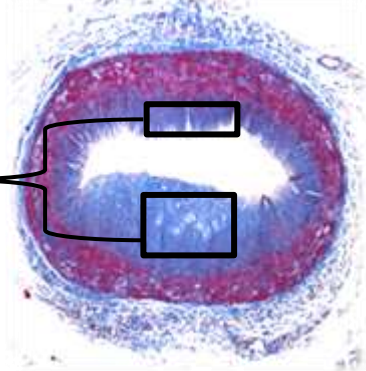
APPROACH



METHODOLOGY



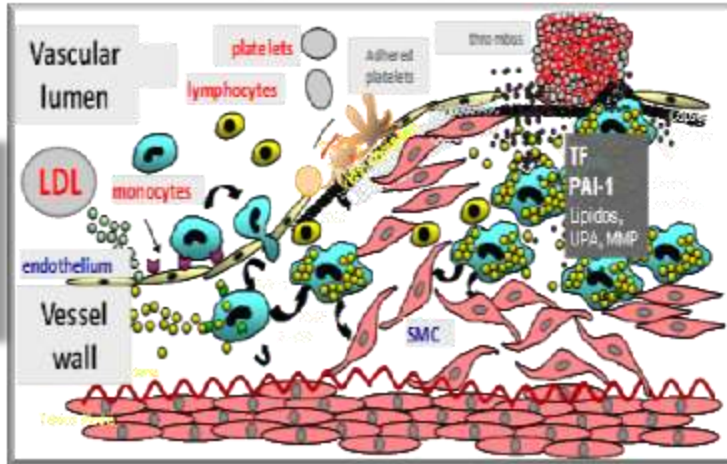
Human Coronary Arteries
Heart Explants



"OMIC Studies"

- ✓ Differential transcriptome
- ✓ MicroRNAs
- ✓ Protein targets

Validation Studies



Non Vascular Cells
Adipose Stem Cells
Platelets

Paracrine interactions

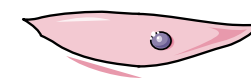
Lipoproteins (LDL)

- microvesicles
- microRNAs
- proteins

Endothelial cell

Smooth muscle cell

macrophages



Cell Phenotype

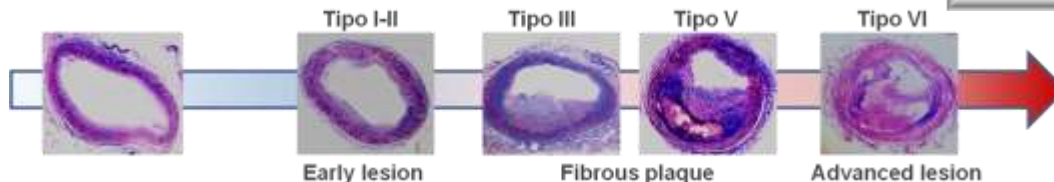
Cell Secretome

ECM- Cell Interactoma
Cell - Cell Interactoma

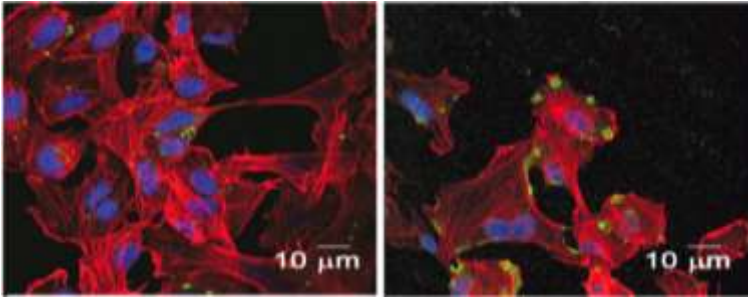
- Proof-of-Concept- Studies
Reverse Translation
Angiogenesis, Atherosclerosis

- Validation in human Cohorts
Familial Hypercholesterolaemia Cohort (SAFEHEART)
Genetic Diagnostic

Novel molecular targets



Acute Coronary Syndromes



CLASSICAL And NOVEL CVRF:
LIPIDS & HDL, OBESITY, BP,
DIABETES, DIET, INFLAMMATION,....

ATHEROSCLEROSIS

PRECLINICAL STUDIES

THROMBOSIS

EFFICACY OF ANTIPLATELET AGENTS

CARDIOPROTECTIVE STRATEGIES

REGENERATIVE STRATEGIES (STEM CELL APPROACHES & ANGIOGENIC INDUCERS)

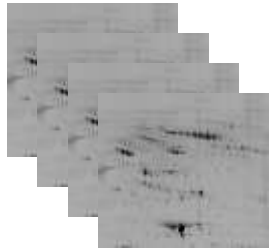


NON-INVASIVE STATE-OF-THE-ART IMAGING TOOLS FOR MONITORING:

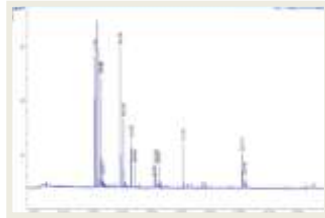
- Myocardial function and viability
- Myocardial damage
- Myocardial remodeling
- Atherosclerotic plaque burden
- Stem Cell tracking
- Myocardial vascularization

MOLECULAR / HISTOPATHOLOGICAL STUDIES

Proteomics

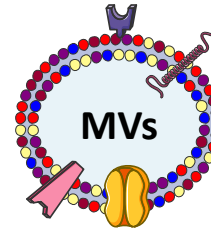


Gel-based methodologies

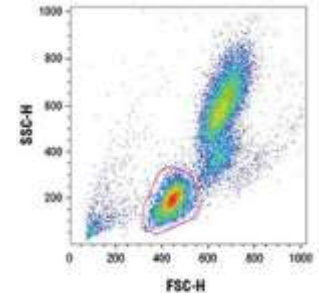


Gel-free methodologies

MVs characterization

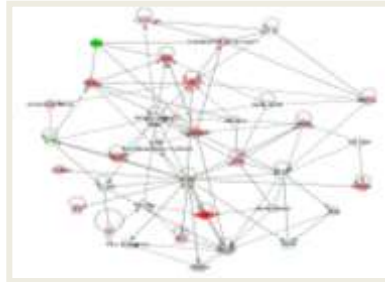


MVs isolation



Flow-cytometry analysis

In silico bioinformatic analysis

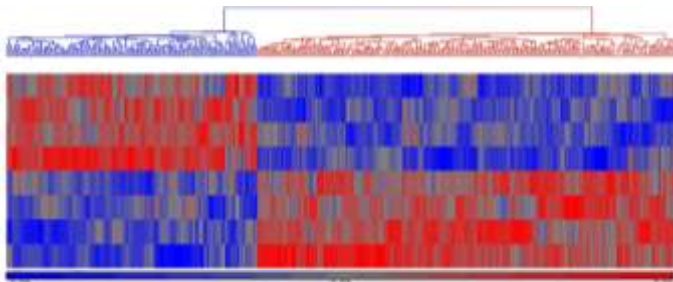


Inter-related pathways

HUMAN DATA

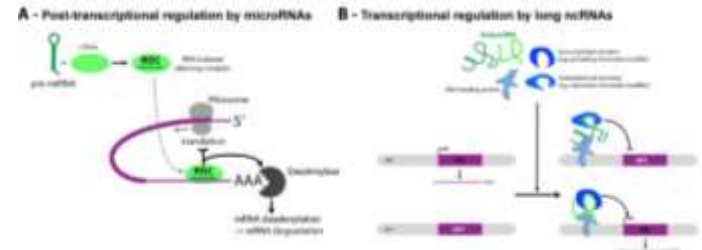
PATIENT DATA
CLINICAL TRIALS

Genomics and Transcriptomics



Microarrays and PCR validation

Non-coding RNAs



micro-RNAs and long-non-coding RNAs

ADVANCING THE FUTURE IN MEDICAL RESEARCH

TEAM +



+ IDEAS

