

Instituto Nacional de Salud Pública

Centro de Investigación en Salud Poblacional



ESMaestras

**Investigación para mejorar
la salud de la mujer**

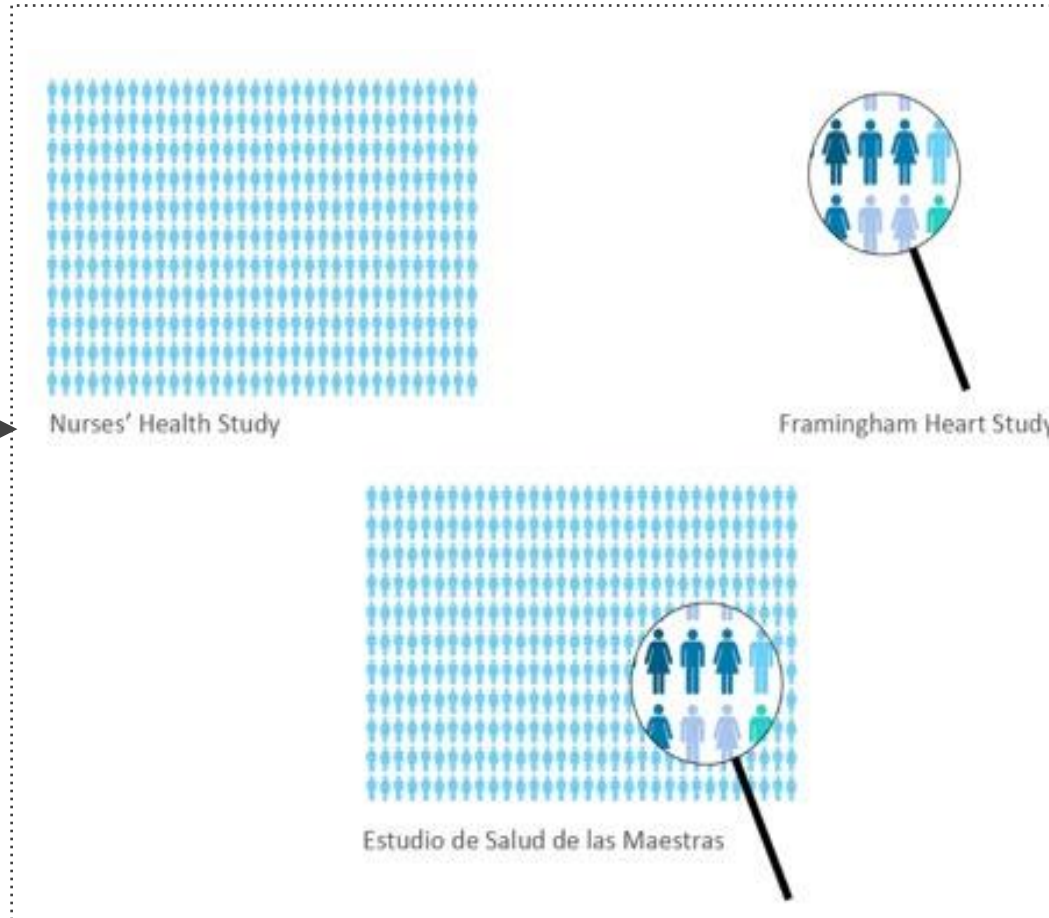
Mesa2: Mediciones y Biobanco

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Available data at baseline and/or FU

Full Cohort (n=115,315)

Socioeconomic status,
reproductive history,
physical activity, adult
and adolescent diet,
sleep quality, depressive
symptoms, migraine,
stress and **medical
conditions**
(self reported outcomes)



Clinical sub-cohort (n=6,812)

Full anthropometry, blood
pressure, heart rate,
mammographic density (~4,000),
bone mineral density and lung
functions tests (~2,000),
carotid ultrasound (IMT), ABI,
ECG & PWV (~2,500) and
additional self-reported
(interviewed based) data

Biorepository

Biospecimen

	N
Buffy coat	10,058
Erythrocytes	2,752
Whole blood	6,794
Serum	35,784
Serum Postprandial	1,120
Plasma	41,842
Urine	5,106
Hair	1792

Size: >100K aliquots based on 6,812 participants from the clinical sub cohort (15 /person).

Serum (1ml): 4, Postprandial Serum (1ml): 1, Plasma (1 ml): 4
Whole Blood (1ml): 1, Buffy coat (1ml): 2, Urine (1.5ml): 3

Biobank: Aliquots are housed in 5 ultra freezers at -70°C managed at INSP (~ 8,000 at IARC) the majority of aliquots have never been thawed.

Large aliquots and sub-aliquoting after 1st thaw

Home made LIM system linked to Study data bases (server)

Migrating to LIMs from Thermo Fisher

Biomarkers: glucose and plasma lipid levels, C-peptide, leptin, adiponectin, C-reactive protein, IGF-1, IGFBP-3, estrone-1, erythrocyte fatty acids and IGF-pathway-related single nucleotide polymorphisms (SNPs), hair cortisol

Cancer Tissue repository from Paraffin blocks: planning phase

Tissue microarrays for histochemical and molecular subtypes.

Biorepositories: Barriers and recommendations

Insufficient infrastructure for large repositories (1 million aliquots)

Human resources and equipment

Sub-Utilization of biorepositories (especially for tissue repositories)

Limited ancillary studies with local funds.

Recommendations:

Works towards central facilities (outsource): Ideally regional facilities.

Consortia collaborations and identifications of potential clients in private industry

More work on legal and ethical barriers.

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