



Le CRNH-IdF

*Centre de Recherches en
Nutrition Humaine
d'Ile de France*

Alain GRYNBERG

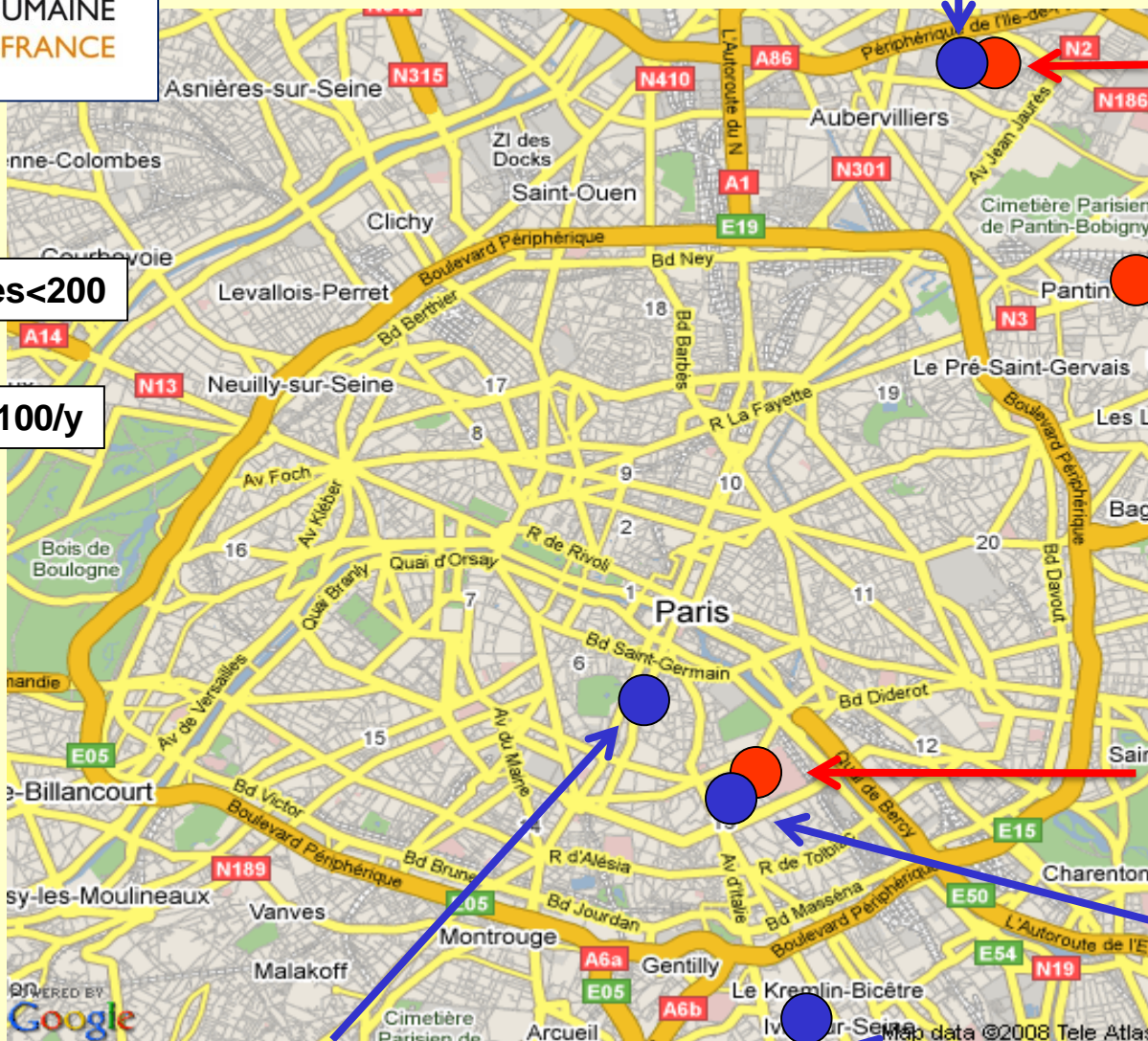
CRNH

CENTRE DE RECHERCHE
EN NUTRITION HUMAINE
ÎLE-DE-FRANCE

Clinical investigation

Basic science

Epidemiology
(INRA-INSERM-Paris13)



150<employees<200

Publications>100/y

Gut, satiety
digestion
CRV
(Avicennes)

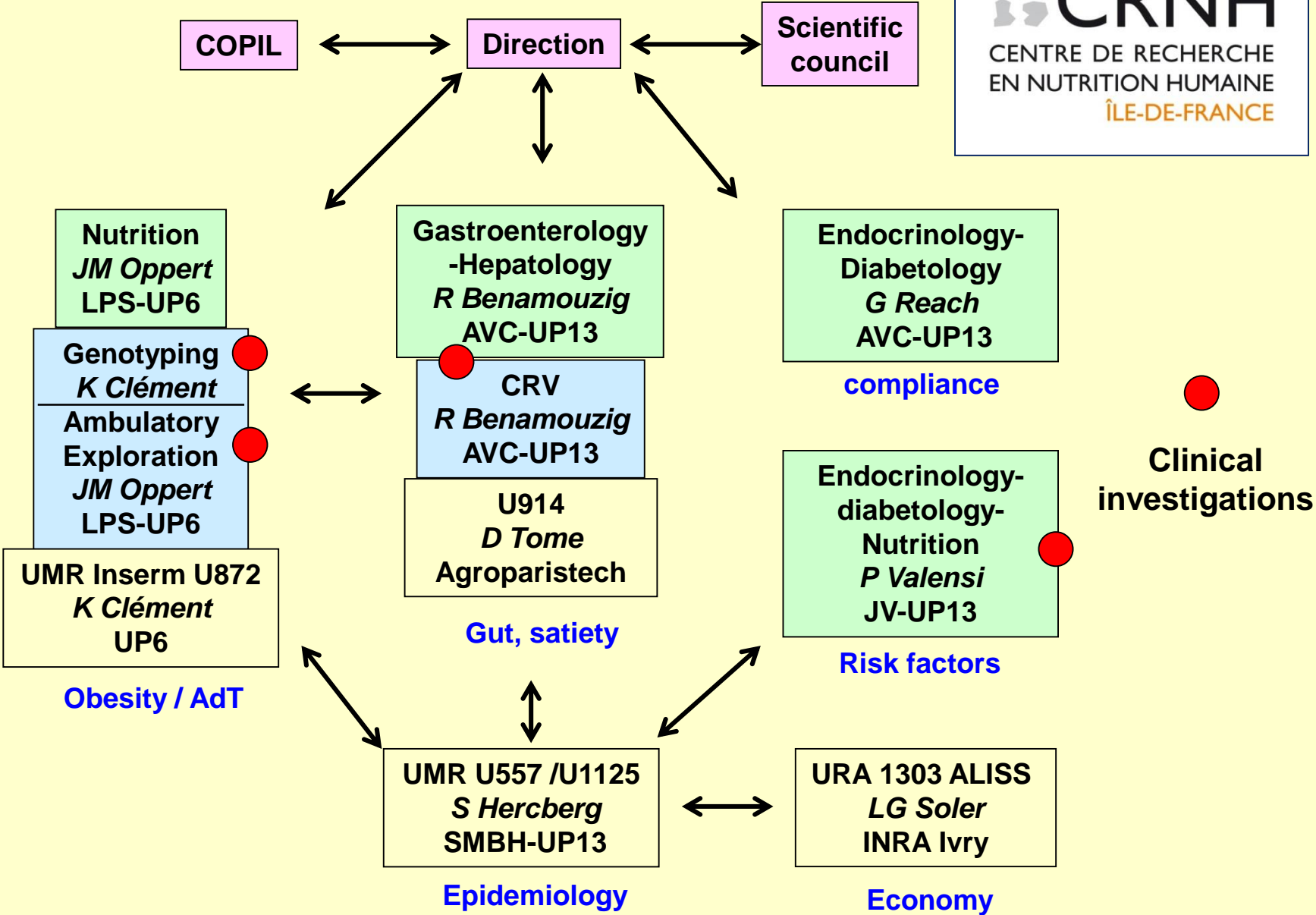
CV risk
diabetes
(Jean Verdier)

Obesity center
genotyping
(La Pitié)

Adipose
tissue
(INSERM, Paris 6)

Protein, satiety digestion
(INRA, AgroParisTech)

Food economy (INRA)



Scientific Activity 1

Dietary behaviour & food consumption



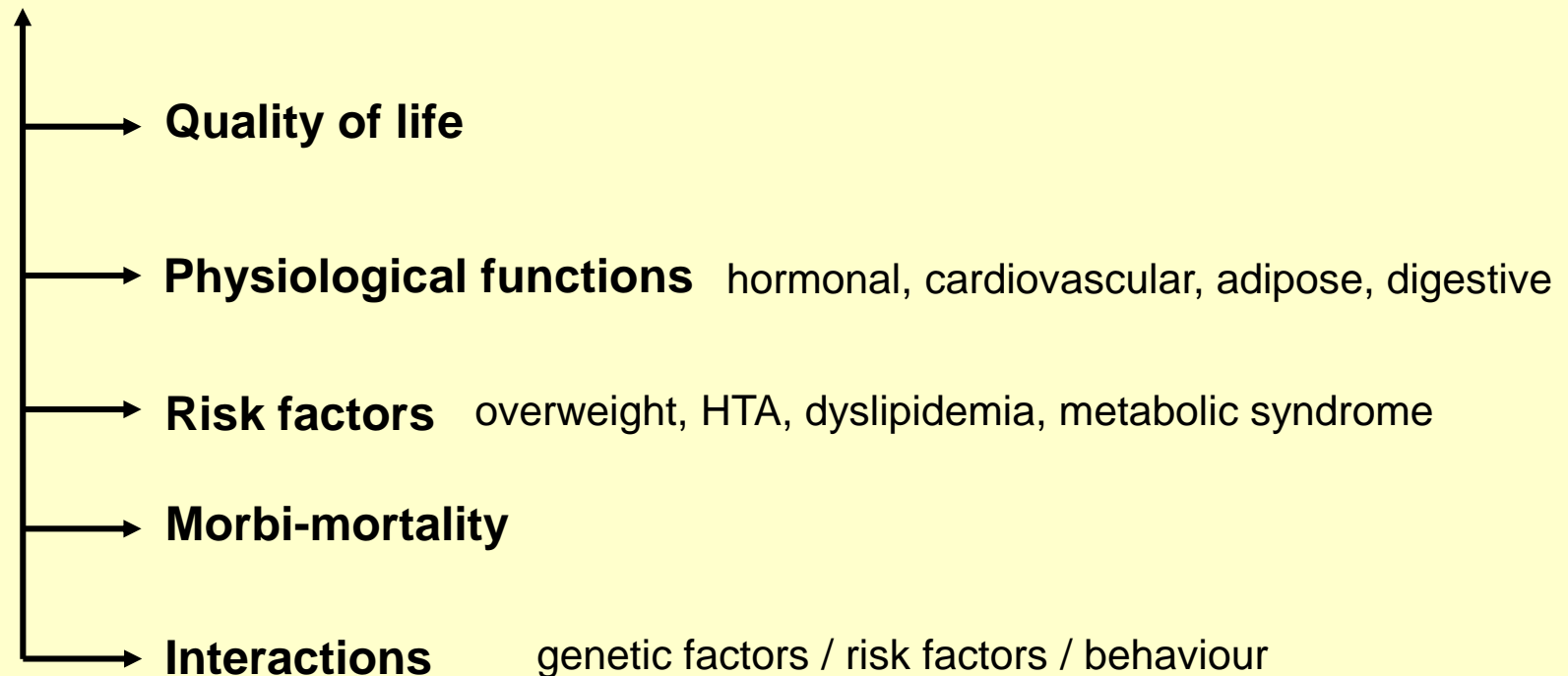
Scientific Activity 2

Determinant factors of behaviour on food consumption & nutritional status



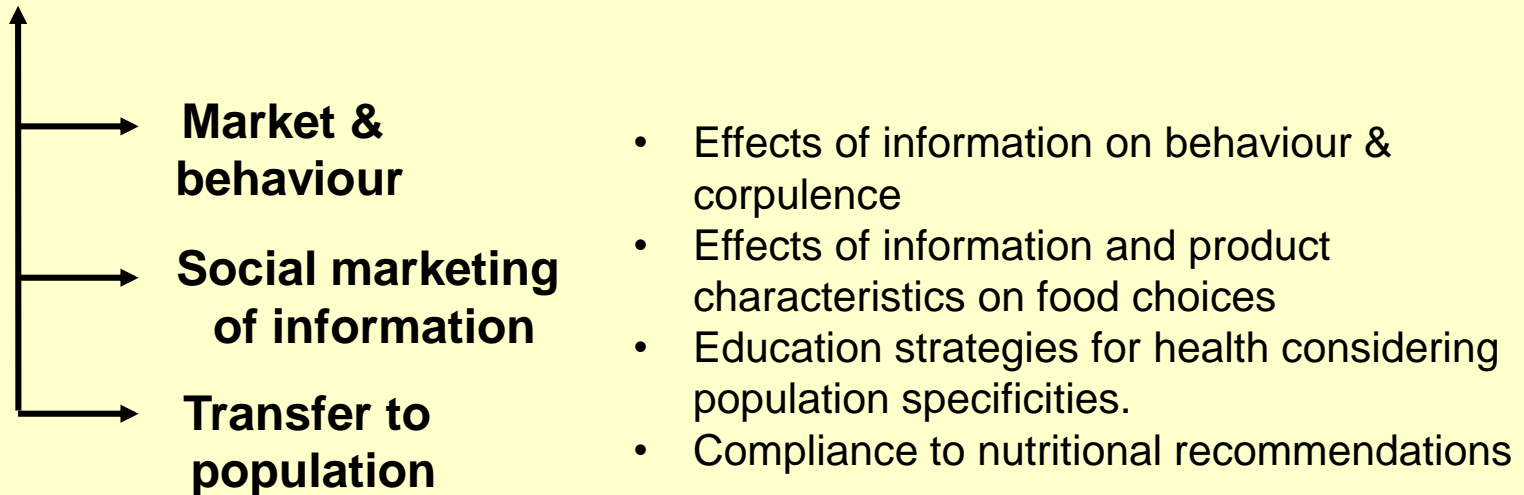
Scientific Activity 3

Dietary behaviour & health



Scientific Activity 4

Prevention strategies



Main clinical explorations available in Paris-13 sites



Indirect
calorimetry



biphotonic
absorptiometry



stable isotope
tracers

Avicenne

Pr R Benamouzig, Dr G Airinei
Gastro-entero-hepatology

- 300 m2 heavy clinical exploration
- Body composition
- Ambulatory and resting energy expenditure
- Qualitative and quantitative analysis of dietary behaviour
- Metabolic & hormonal profile
- Behaviour study boxes
- Intestinal perfusion coupled to stable isotope tracers
- Gut motility and gastric emptying (stable isotopes-echography)
- Digestive tract biopsies, faecal and colonic flora

Main clinical explorations available in Paris-13 sites



Arterial compliance
endothelial function



Body
composition



Microcirculation
by laser doppler

Jean Verdier Hospital
Pr Paul Valensi, Pr Emmanuel Cosson
Endocrinology, CV risk factors

- Body composition
- Ambulatory and resting energy expenditure
- Qualitative and quantitative analysis of dietary behaviour
- Metabolic & hormonal profile
- Insulin-resistance coupled to calorimetry
- Insulin secretion and sensibility to insulin
- Peripheral endothelial function, artery compliance and CV autonomic activity
- CV activity & echocardiography
- Non invasive AGE measurement
- Continuous glycaemic profile (G-Holter)

Main clinical explorations available in Paris 6 site



La Pitié Salpêtrière *Pr JM Oppert, Pr K. Clément* *Obesity, adipose tissue*

- Unit of ambulatory exploration in obesity
- Ambulatory and resting energy expenditure
- Body composition
- Qualitative and quantitative analysis of dietary behaviour
- Metabolic & hormonal profile
- Exercise training for obese patients
- Adipose tissue phenotyping
- Functional genomic
- Genetic epidemiology, mutations & polymorphisms

The Project : Phenotyping Harmonization

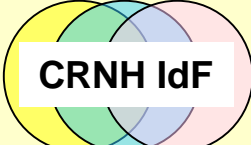
technical
protocols
& equipment
harmonization

- Body composition
- Hormonal & metabolic profile
- endothelial function
- glycaemic profile
- Free living investigations

AVC

LPS

JV



AVC

LPS

JV



The Projet : Scientific Development

Diabetes, CVD

- Subclinical cardio-vascular changes in the alterations of vago-sympathetic balance in prediabetes
- Postprandial changes in the vago-sympathetic balance across the glycemic continuum from normoglycemia to prediabetes and diabetes
- Geographic origin, psycho-social deprivation and diet as predictive factors for gestational diabetes mellitus

Digestion, Satiety

- Microbiota
- Quality of the source of proteins

Obesity

- Microbiota