Institute of Cardiometabolism And Nutrition

Call for Applications 2014
Science program (MD-PhD & PhD)

PARIS FRANCE

وزارة الصحة
Ministry of Health

1 A LEADING INTERNATIONAL CENTER FOR MEDICAL CARE, RESEARCH AND EDUCATION IN CARDIOMETABOLIC DISEASE

ICAN: Institute of Cardiometabolism & Nutrition

The objective is to develop integrated strategies to improve prevention and promote a personalized medicine based on the identification of preclinical molecular events, predictors of response to treatment and innovative diagnostic tools and therapy. ICAN is an international leading Institute for research and medical care in cardiovascular and metabolic disorders (i.e. cardiometabolic diseases (CMD) based upon the scientific and the medical expertise of the research units and medical teams of the University Pierre & Marie Curie http://www.upmc.fr/en/index.html & Pitié-Salpêtrière Hospital)??.

The ICAN challenge is to enter the era of predictive medicine, that is, to manage CMD during the life cycle; from identification of individual susceptibility, prevention, early diagnosis to pre-emption of complications.

A unique clinical research platform

ICAN aims to close the gap between fundamental and clinical research to deliver results faster and on a more personalized level. The cornerstone of ICAN is a unique core facility in translational research with phenotyping capacities withdedicated biobanks upgraded from two existing roots: a Clinical Investigation Center and a Human Nutrition Research Center. Ongoing efforts involve multiple technology including cell biology, metabolomics and transcriptomics, bioinformatics, magnetic resonance spectroscopy, mass spectrometry, genetically-modified animal models, drug design and clinical studies.

Training

ICAN fosters collaboration in both research and training between academia and industry at both national and international levels. Our training program will attractively translate into significant opportunities for recruitment researchers of the highest caliber and doctoral students with emerging cutting-edge expertise. The Institute is be involved in the training of new medical skills based on new technology and tools.

2 MINISTRY OF HEALTH OF the Kingdom of Saudi Arabia ("MOH") & ICAN COLLABORATION

The impact of obesity, metabolic disorders and cardiovascular diseases on public health calls for an integrated approach spanning from basic to clinical research. The objective of this collaboration is to develop academic and research interchange in order to improve prevention and promote personalized medicine.

The MOH opens new horizons for medical and scientific training through scholarships. In accordance with the applied regulations in France, this scholarship in the medical and scientific specialties (which include, physicians, allied medical specialists, and scientists) will give the opportunity to acquire clinical and research experience through actual practice in their field of Cardiometabolic disease.

ICAN has developed the necessary expertise and capacity to provide such medical and scientific training to Saudi physicians and researchers.

3 MD-PHD, PHD RESEARCH PROGRAMS

The General Administration of Research and Study at the Ministry of Health, Riyadh, Kingdom of Saudi Arabia (MOH) and ICAN INSTITUTE, Paris, France (ICAN) , promote the Research program (MD-PhD and PhD)that aims to support young Saudi physicians and scientists in their research projects.

ICAN positions for PHD-Students are in following research programs:

***Program 1**: Find for new genes? Exome sequencing in rare obesity forms.*

***Program 2**: Deciphering the cellular origin of fibrosis in adipose tissue*

***Program 3**: Modulation of gut microbiota during dietary or surgical intervention: impact on metabolism (improvement of insulin sensitivity) and inflammation*

***Program 4**: Non invasive in vivo quantitative study of myocardial fibrosis in cardiometabolic disease*

***Program 5**: Non-invasive measures of liver and adipose fibrosis in cardiometabolic diseases: risk for cardiometabolic diseases?*

***Program 6**: Stratification of Cardiovascular risk in cardiometabolic patients based on Reverse transport, Fecal excretion, Absorption and synthesis of CholEsterol.*

***Program 7**: Probabilistic "Omics" Data integration and Predictive Analysis for Personalized Medicine.*

An abstract of each program is appendix to this call.

4 ELIGIBILITY AND CONDITIONS

- The duration of the grant is three years. Funding and accomodation will be directly provided by *ICAN* through a fixed-term employment contract.
- Applicants must be holdersof a Masters in Research.
- Before applying, candidates need to make sure they can provide all of the following documents to obtain a visa. The list of documents required is appendix to the call.
- The applicant must be employee at the ministry of health for :
    - Two years at least if the applicant is a Msc holders.
    - One year at least if the applicant is MD.

5 COMPENSATION

ICAN will offer a fixed-term employment contract for 3 years full-time.
Month compensation will be 2100€, insurance is included and will be covered by The French Health Insurance.

6 REVIWING PROCESS AND CALENDER

Candidates will be selected based on review of the application and an interview of each candidate by a Joint MOH-ICAN Selection Committee.

25 Des 2015: Lauch of the call for application

31 Jan 2015: Deadline for application

5th Feb 2014: Preselection

15 Feb 2015: Interviews (by skype)

1st Quarter 2015: Start of the program

7 GUIDLINES

Applications should be sent in PDF form as an email attachment by 12 PM (GMT) by the deadline date, to the following address:

phd@ican-institute.org

The application, in English, needs to include the following information:

- A candidate's CV detailing current status and eligibility (2 pages),
- A list of the candidate's work and publications (2 pages)
- A note explaining the choice of the thesis project (2 pages)

8 INFORMATION

For more information please feel free to contact:

M. Nouredine FARAH
Managing Director
sa.project@ican-institute.org

Appendix

ICAN - Institute of Cardiometabolism And Nutrition
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www.ican-institute.org

ICAN PhD program in Cardiometabolic diseases
Program 1

Target
Medical Doctor MD with expertise in genetics in the field of metabolic diseases aiming at an academic career.
Pediatricians are welcomed.

Title
Find for new genes? Exome sequencing in rare obesity forms.

Tutorship
Karine Clément MD, PhD (ICAN, INSERM, APHP), Christine Poitou MD, PhD (ICAN, INSERM) and David Tregouet (ICAN, INSERM, APHP)
Partnership with ICAN genetic teams and pediatrician colleagues.

Abstract
Obesity, defined as an excess fat mass, results from individual genetic and biological susceptibilities in response to the current weight-gain promoting environment. There is thus a synergistic relationship between genes and environment. Depending on the genes involved, different clinical situations are described: **a) Monogenic obesity** defined as rare and severe early-onset obesity associated with endocrine disorders and other anomalies. They are mainly due to autosomic recessive mutations in genes of the leptin-melanocortin axis. In some cases such as leptin deficiency, specific treatments are efficient, **b) Melanocortin 4 receptor-linked obesity** characterized by the variable severity of obesity and the absence of additional phenotypes. They are involved in 2-3% of cases and eventually may benefit from new developed drugs (MC4R agonists); **c) Syndromic obesity** where patients are clinically obese, and additionally distinguished by mental retardation, dysmorphic features, and organ-specific developmental abnormalities. No specific treatments are recommended except for hormonal substitution if necessary (growth hormone or gonadotrope deficiency). In this last context, exome sequencing provides the opportunity to discover new genes and mechanisms in these extreme cases of obesity. Thanks to a first exome sequencing screening, two ICAN teams have identified potential candidate genes that could be involved in syndromic forms of obesity. The candidate will work on these newly discovered genes by genetic and functional approaches to identify whether these genes explain the observed phenotypes.

Expected skills to be acquired
Clinical investigation
Severe obesities
Genetics and functional genomics

ICAN PhD program in Cardiometabolism
Program 2

Target
Medical Doctor MD with expertise in metabolic diseases, nutrition and aiming at an academic career.
Or biologist with expertise in metabolic diseases aiming at an academic carrier
Expertise in cell biology or animal models is welcomed

Title
Deciphering the cellular origin of fibrosis in adipose tissue

Tutorship
Genevieve Marcellin PhD and Karine Clément (MD, PhD),

Abstract
Obesity originates from an imbalance between caloric intake and energy expenditure, leading to metabolic dysfunctions that increase the risk to develop type 2-diabetes. The resulting nutrient excess is buffered by the adipose tissue that promotes lipid storage in adipocytes. Concomitantly, the white adipose tissue (WAT) undergoes a vascular remodeling associated with the infiltration of pro-inflammatory leucocytes. In addition, WAT from obese subjects exhibit overproduction of extracellular matrix (ECM) components, a condition known as fibrosis, which alters WAT functions and favors insulin-resistance. As a consequence, a better understanding of the cellular and molecular determinants leading to WAT fibrosis will allow the identification of new therapeutic targets.
Fibrosis occurs in various organs and the common underlying mechanism involves the generation and proliferation of myofibroblasts that secrete ECM proteins, leading to progressive scaring and loss of organ function. We identified PDGFRa⁺ stromal vascular cells that express myofibroblast markers in obese human WAT. These PDGFRa⁺ cells can undergo a robust pro-fibrotic activation in response to TGFb. Activation of PDGFRa signaling is a potent mitogen for myofibroblasts. As such, increased PDGF/PDGFRa signaling is observed in fibrotic tissues and its inhibition prevents fibrosis and the associated functional alterations. Together, our preliminary data suggest that PDGFR+ cells can acquire a pro-fibrotic phenotype upon TGF stimulation. Furthermore, we found that expression of PDGF-PDGFR signaling components was increased in the WAT of obese humans and mice. In addition to its potent mitogen potential, PDGFA is also known for its ability to induce chemokine expression, supporting the concept that it may control PDGFR+ cells proliferation and expansion as well as exert immunomodulatory functions in the AT. Thus, we hypothesize that PDGFR+ cells expansion coupled to a phenotypic switch may be involved in obesity-induced WAT fibrosis and the orchestration of adipose tissue inflammation. In this setting, we propose to study the function of PDGFR+ cells and the role of PDGFR signaling pathway in obesity induced AT fibrosis, inflammation and insulin-resistance.

Expected skill development
Cellular biology
Preclinical model of obesity and diabetes
Metabolism

ICAN PhD program in Cardiometabolism
Program 3

Target
Medical Doctor MD with expertise in metabolism, nutrition or endocrinology (especially diabetes) aiming at an academic career
Expertise in microbiology would be most welcomed.

Title
Modulation of gut microbiota during dietary or surgical intervention: impact on metabolism (improvement of insulin sensitivity) and inflammation

Tutorship
Fabrizio Andreelli (MD, PhD, ICAN, INSERM APHP), Judith Aron Wisnewsky (ICAN, INSERM, APHP) and Karine Clément (MD, PhD)

Abstract
Bariatric surgery induces weight loss and major improvement in insulin-resistance through many mechanisms some of which are weight-independent. Dietary interventions also improve metabolism. It is now well acknowledged that gut microbiota is involved in the development of obesity and its related metabolic diseases, at least in mice. However its causal role in human obesity progression remains to be demonstrated. Few studies now pointed at changes in microbiota composition after bariatric surgery, suggesting links between gut microbiota switch and metabolic improvement observed after surgery. As such new potential mechanisms of actions have been proposed. Some gut-derived products (i.e. metabolites) are also suggested as linking gut microbiota changes and improved cardiometabolic health.

In this PhD program of translational nature, the objective will be to study the changes of gut microbiota in different human conditions such as dietary interventions and bariatric surgery and their potential relationships with improved insulin resistance of various intensities. Combination with metabolomics studies will be made, as well as relationships will be made with modifications of food intake patterns. After a discovery approach, newly discovered hypotheses will also be tested in animal models since the team has the expertise in performing bariatric surgery in mice. In addition, we plan to perform some gut microbiota transfer both in animal models and humans.

Expected acquired skills during the PhD
Translational studies (from preclinical to clinical studies)
Metabolism.
Microbiology
Gut microbiota

ICAN PhD program in Cardiometabolic Imaging
Program 4

Target
Medical Doctor MD with expertise in radiology (or cardiology), basic experience in cardiac imaging and aiming at an academic career

Title
Non invasive in vivo quantitative study of myocardial fibrosis in cardiometabolic disease

Tutorship
Alban REDHEUIL MD, PhD (ICAN, INSERM, APHP), Nadjia KACHENOURA PhD (ICAN, INSERM)

Study
MOtIF (MyOcardIal Fibrosis in cardiometabolic diseases)

Abstract

This is the first study in the field of cardio-metabolic biomarkers to measure fibrosis noninvasively by MRI in patients with heart disease of increasing severity. In addition, it is also the first systematic study that will correlate myocardial fibrosis with other data from the host environment but also with a particular focus on the intestinal flora (assessed by metagenomics). A cardiac MRI will be performed in 450 of the 1,000 study subjects included at Pitié Salpêtrière Hospital within the European METACARDIS study, stratified on the degree of cardiometabolic disease.
The performance of risk stratification in cardiovascular metabolic based solely on the clinical criteria and laboratory findings seems now limited. The analytical integration of multiple phenotypic parameters (including modern non-invasive imaging) and genotypic and environmental factors on intestinal microbiota (metagenome) seems essential to generate new knowledge and pave the way to personalized medicine. Different cardiometabolic entities such as diabetes, obesity and atherosclerosis share common pathophysiological pathways such as systemic inflammation, senescence processes but also the development of fibrosis. As a result, interstitial myocardial fibrosis could be the link between phenotypic cardiovascular alterations and particularly structural and functional abnormalities induced by cardio-metabolic diseases. The intestinal microbiota by its action on the immune cells and inflammation may contribute to the development of the interstitial myocardial fibrosis. This study should evaluate the relationship between qualitative and quantitative alterations of the intestinal microbiota and the presence and degree of cardiovascular alterations in cardio-metabolic diseases. Magnetic resonance imaging (MRI) allows to detect and quantify noninvasively functional and structural cardiovascular abnormalities, but also myocardial composition and specifically myocardial interstitial fibrosis in early subclinical stages. We hope to demonstrate the importance of myocardial interstitial fibrosis as it can be detected and quantified in MRI and constitute a novel noninvasive biomarker of cardiac damage in cardiometabolic diseases. Monitoring obese subjetcs at 1 year may also show the potential reversibility of this phenotype and open the field to investigate new therapeutic targets. Ultimately, we believe that this parameter may be a new marker of cardiovascular risk in cardio-metabolic multiparametric prediction models.

ICAN PhD program in Cardiometabolic diseases
Program 5

Target
Medical Doctor MD with expertise in biology and biostatistics in the field of cardiometabolism or gastroenterology aiming at an academic career

Title
Non-invasive measures of liver and adipose fibrosis in cardiometabolic diseases: risk for cardiometabolic diseases?

Tutorship
Karine Clément MD, PhD (ICAN, INSERM, APHP), Judith Aron MD, PhD (ICAN, INSERM)
Partnership with a SME: Echosens compagny

Abstract
This study will evaluate liver and adipose fibrosis and stiffness and its risk with cardiometabolic traits, by non-invasive measures (i.e. Elastometry). Both liver and white adipose tissue (WAT) develop inflammation and fibrosis during diabetes and obesity development. Previous studies from the teams have shown that scWAT and liver stiffness was associated with tissue fibrosis, obesity, and diabetes-related traits. Noninvasive evaluation of liver and sWAT tissue stiffness might be useful in clinical practice. Different cardiometabolic entities such as diabetes, obesity and atherosclerosis share common pathophysiological pathways such as systemic inflammation, senescence processes but also the development of fibrosis. As a result, liver fibrosis could be a risk factor of the progression of cardiometabolic disease. As such recently it was shown that alteration of liver (i.e. NASH) leads to increased several cardiometabolic risk. We will here make the hypothesis that tissue stiffness (notably liver stiffness) associates with the stage of progression of cardio-metabolic diseases. We will capitalize on a European study (called Metacardis), and explore liver stiffness in patients at different stages of their cardiometabolic disease (patients with metabolic syndrome, obesity, diabetes, coronaropathy and heart failure). In this study we will then examine the relationships between liver stiffness measured in these patients and several clinical and biological phenotypes (such as systemic markers of fibrosis) as well as the intestinal flora profile (assessed by metagenomics) in 1000 subjects. The measures of liver stiffness will be performed by the device Adiposcan developed by Echosens company. The performance of risk stratification in cardiovascular metabolic based solely on the clinical criteria and laboratory findings seems now limited. The analytical integration of multiple phenotypic parameters (including modern non-invasive elastometry) and usual biomarkers seems essential to generate new knowledge and pave the way to personalized medicine. We hope to demonstrate the importance of liver fibrosis as noninvasive biomarker involved in the progression of cardiometabolic diseases. Monitoring obese subjects at 1 year after bariatric surgery may also show the potential reversibility of this phenotype and open the field to investigate new therapeutic targets.

Expected skills to be acquired
Clinical investigation and study of biomarkers
Use of non-invasive biomarkers and their development
Biostatistics

ICAN PhD program in Cardiometabolic Diseases
Program 6

Target
Medical Doctor MD with expertise in endocrinology, basic experience in biochemistry and aiming at an academic career.

Title
Stratification of Cardiovascular risk in cardiometabolic patients based on Reverse transport, Fecal excretion, Absorption and synthesis of CholEsterol.

Tutorship
Philippe LESNIK, PhD (ICAN, INSERM, UPMC), Maryse GUERIN PhD (ICAN, INSERM, UPMC)

Study
The CHASTE Score

Abstract
Challenge: Low-density lipoprotein cholesterol (LDL-C) is world widely recognized as a strong predictor of coronary heart disease. Reaching LDL-C therapeutic goal remains the primary focus for cardiovascular risk. However, a large body of evidence indicates that focus on LDL-C as the unique therapeutic target is not the optimal strategy for patient care.
Existing needs: Nowadays, inhibitors of HMGCoA-Reductase and endogenous cholesterol synthesis (Statins) represent the widely and most efficient cholesterol-lowering drugs used to reduce CV mortality. However, approximately 60% of patients under statin therapy remain at high CV risk. Interindividual variability of basal cholesterol metabolism modulates effectiveness of statins. Indeed, low responders display cholesterol synthesis and high intestinal cholesterol absorption rates; hence representing preferential candidates for alternative therapies targeting cholesterol absorption. In addition, patients with high residual CV risk are frequently characterised by a low HDL-C phenotype, therefore major metabolic pathways implicated in the determination of body cholesterol pool need to be considered. Blood cholesterol is the result of input from gut absorption and endogenous synthesis, relative to clearance through hepatic and extrahepatic tissue pathways. The cholesterol metabolism is equally closely linked to bile acids metabolism as bile acids represent end-products of cholesterol that are excreted into feces which represent an additional pathway for the elimination of excess cholesterol. Moreover we recently highlighted a relationship between intestinal microbiota and cholesterol metabolism of the host. A fraction of the human population harbours a gut microbiota converting cholesterol to coprostanol, a natural, non toxic and non-absorbable compound. As a consequence, this conversion influences bioavailability of cholesterol, resulting in the modulation of circulating cholesterol levels. Physiological or pharmacological induced changes in one of these latter parameters directly impact the others suggesting that therapeutic strategies for reducing residual cardiovascular risk needs a multi-level approach. Thus, an integrated therapeutic strategy is clearly needed to define the optimal therapy to be used, to further improve the treatment of atherogenic dyslipidemia in cardiometabolic patients by reducing residual CV risk. A rational for combination therapies based on knowledge of the physiological pathways is necessary for a personalized medical care. The analytical integration of multiple phenotypic parameters (including reverse transport, fecal excretion, absorption and synthesis of cholesterol) and genotypic and environmental factors on intestinal microbiota (metagenome) seems essential to generate new knowledge and pave the way to personalized medicine.

ICAN PhD program in Cardiometabolic Personalized Medicine
Program 7

Target
Master in Bioinformatics or Computer Science (Major Machine Learning)

Title
Statistical machine learning from gut flora analysis to personalized medicine

Doctoral School :
UPMC ED 130

Tutorship
Nataliya Sokolovska Assistant Prof. (ICAN, UPMC),
Jean-Daniel Zucker — Senior Researcher (IRD-UPMC, ICAN)

Study
Probabilistic "Omics" Data integration and Predictive Analysis for Personalized Medicine.

Abstract

High-throughput technologies such as whole-genome sequencing revolutionized biological research and transformed it from a relatively data-poor discipline into a domain that is rich in data. The data acquisition becomes cheaper, and the increasing amount of omics data provides with unprecedented broad views of living organisms and biological systems. Today the challenge is to process, analyze, and to interpret the available data, and to derive fundamental and practical biological knowledge. Statistical machine learning is a relatively young but actively developing field on the intersection of mathematics, computer science, and statistics. For already a couple of decades machine learning has been applied to a number of biological problems: predictive modeling (classification), descriptive modeling (clustering), and dimensionality reduction. Machine learning provides techniques for data processing, typical for biological applications: how to deal with tasks where the number of instances (number of patients) is too small but the dimensionality (number of genes to be analyzed) it too high. Statistical methods allow to model structured data, such as sequences, trees, graphs, and hypergraphs.

The cardiometabolic diseases (CMD) are progressive metabolic disorders leading to chronic stages of cardiovascular diseases and heart insufficiency. Recently, the NutriOmics team (Cotillard, A. et al., 2013) published a study of gene-environment interactions related to the development of obesity. It is reported that the gut microbial gene richness may influence the outcome of a dietary intervention. A quantitative metagenomic analysis stratified patients into two groups: group with low gene gut flora count (LGC) and high gene gut flora count (HGC) group. The LGC individuals have a higher insulin-resistance and low-grade inflammation, and therefore the gene richness is strongly associated with obesity-driven diseases. The individuals from a low gene count group seemed to have an increased risk to develop obesity-related cardiometabolic risk compared to the patients from the high gene count group. It was shown (Cotillard, A. et al., 2013) that a particular diet is able to increase the gene richness: an increase of genes was observed with the LGC patients after a 6-weeks energy-restricted diet. (Le Chatelier, E. and al., 2011) conducted a similar study with Dutch individuals, and made a similar conclusion: there is a hope that a diet can be used to induce a permanent change of gut flora, and that treatment should be phenotype-specific.

Therefore, there is a need to stratify patients in order to choose an efficient appropriate personalized medical treatment. For a long time the genetic diversity has been ignored and the same treatment has been applied to all patients with a similar diagnosis. However, it was not clear how individual patients respond to it. Advances in data processing from large epidemiological and genome-wide studies are expected to contribute to the resolution of the worldwide cardiometabolic epidemics. The identification of responders to therapies is crucial to provide the most appropriate treatment and avoid unnecessary medications.

The topic of the PhD proposal is at the interface of fundamental biology and statistical machine learning. The NutriOmics team successfully carries out research in these two domains. Machine learning possesses powerful frameworks to integrate a vast amount of data from heterogeneous sources, design new models, and test multiple hypotheses and therapeutic products. Probabilistic graphical models (PGM), such as Bayesian networks, are widely used to model structures.

Scientists doing pre-clinical research are often interested in finding groups of bacterial species associated with a particular phenomenon. Nowadays, in quantitative metagenomics, where we study the collective genome of the micro-organisims inhabiting human body, it is possible to measure the abundance of bacterial species. The challenge is to find subsets of features that perform equally, and that will provide the bioclinicians with some intuition to reveal functional classes of features. So, in (Chevaleyre Y., Koriche F. , Zucker J-D, 2013) the motivation is to associate groups of bacterial species with the development of obesity. The number of features can be very high but at the same time the features are structured in unobserved functional categories of comparable predictive performance. To cope with the problem, (Chevaleyre et al. 2013) considered rounding methods for linear discrete classification, an approach which was accepted for publication in International Conference on Machine Learning, a leading machine learning conference, and the research on similar approaches and on their applications to the gut flora data, goes on.

The current PhD project relies on knowledge and data of several consortia grouping international experts (FP-funded METAHIT consortium http://www.metahit.eu, FP7 funded METACARDIS consortium http://www.metacardis.eu, ANR-Funded MicroObes), and large clinical resources from European Clinical Centers of Excellence that provide us with immediate access to clinical samples and detailed clinical, medical, and environmental data.

References

Cotillard, A. et al., 2013. Dietary intervention impact on gut microbial gene richness. Nature, 500(7464), pp.585–588.

Le Chatelier, E. et al., 2014. Richness of human gut microbiome correlates with metabolic markers. Nature, 500(7464), pp.541–546.

Chevaleyre Y., Koriche F., Zucker J-D. Rounding Methods for Discrete Linear Classification. International Conference on Machine Learning, 2013

Hastie T., Tibshirani R., Friedman J. The Elements of Statistical Machine Learning. Springer, 2009

Troyanskaya O. et al. A Bayesian framework for combining heterogeneous data sources for gene function prediction. PNAS doi/10.1973/pnas.0832373100

Annex 2 : Embassy of France in KSA (Riyadh)
LONG STAY VISA APPLICATION
FOR STUDIES

LIST OF REQUIRED DOCUMENTS

(10/02/2014)

1.	**Two Visa application Form** correctly filled in English and signed by the applicant or by his legal guardian	☐
2.	**OFII Form** with top part completed by the applicant	☐
3.	**Two recent passport-size photographs with a white background, not stapled**. Full face ; no head or face cover that prevent full visibility of facial features	☐
4.	**Original passport** : - valid for at least further three months after the expiration date of the visa - containing at least two blank pages and issued within the previous 10 years	☐
5.	**One copy of the passport front page and all relevant pages containing previous Schengen, UK, US, Canada visas.** **For non Saudi : copy of Iqama**	☐ ☐
6.	**Documents related to the academic aspect**: - a letter of motivation (why have you chosen France ? What is the purpose of your study? What do intend to do afterwards) - a curriculum vitæ - copy of the last diploma - copy of the academic records - copy of the acceptance / admission letter from a French Academic Institution or copy of your enrolment in a French Language centre - proof of payment of the course fees - copy of the **scholarship letter** from the Ministry of Higher Education or the Saudi Cultural Bureau in Paris **NB : All these documents must be provided in triplicate**	☐☐☐☐ ☐☐ ☐
7.	**Financial guarantee**: - Original bank statements of the last 3 months - Working certificate mentioning your salary or sponsor's salary, stamped by the Chamber of Commerce and 2 copies - In case you don't have own resources, financial guarantee form completed and signed by your sponsor, who must prove that he/she has sufficient and regular resources (if applicable) + his passport front page copy and the page where passport's holder signature appears **Or** copy of the **scholarship letter** from the Ministry of Higher Education or the Saudi Cultural Bureau in Paris **NB : All these documents must be provided in duplicate**	☐
8.	**Accommodation :** document indicating the place and conditions of residency in France during the first 3 months	☐
9.	**Additionally for minors (under 18) only:** - Parental authorization - Guarantee from the hosting person in France to take care of the student	☐
10.	**All documents are translated in English by a certified translator**	☐
11.	**Comment :**	
12.	**Declaration :** I have been informed : • that my passport will be under custody of the Embassy of France in Riyadh during the process of my long stay visa application which can take up to 15 days. • **that an application without the complete set of documents according to the above mentioned checklist may result in a rejection of my visa application.** • that the Embassy of France reserves the right to ask for additional supporting documents if necessary and does not guarantee the issue of the Visa. In case of refusal, visa fees are not refundable.	
13.	**Date :** **Applicant /or his Representative Signature :**	

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