



INTERNSHIP OFFERS – MASTER 2 (or equivalent)

Academic year 2025-2026

Mentor: Dr. Valentina ANDREEVA

**EQUIPE DE RECHERCHE EN EPIDEMIOLOGIE NUTRITIONNELLE (EREN)
CENTRE DE RECHERCHE EN EPIDEMIOLOGIE ET STATISTIQUES (CRESS)
U1153 INSERM / U1125 INRAE / CNAM / USPN
PARIS, FRANCE**



SUMMARY

I.	GENERAL INTERNSHIP INFORMATION.....	3
II.	PRESENTATION OF THE RESEARCH LAB.....	4
III.	NUTRINET-SANTE COHORT.....	5
IV.	LIST OF AVAILABLE INTERNSHIP SUBJECTS.....	6
V.	COVER LETTER.....	7
VI.	INTERNSHIP SUBJECT #1.....	8
VII.	INTERNSHIP SUBJECT #2.....	9
VIII.	INTERNSHIP SUBJECT #3.....	10
IX.	INTERNSHIP SUBJECT #4.....	11
X.	INTERNSHIP SUBJECT #5.....	12
XI.	INTERNSHIP SUBJECT #6.....	13

I. GENERAL INTERNSHIP INFORMATION

- **Level:** Master 2 or equivalent
- **Research areas:** Epidemiology, mental health, public health
- **Duration:** 4 to 6 months, full-time
- **Start date:** Negotiable (between February 1 and April 30, 2026)
- **Location:** Sorbonne Paris Nord University, Equipe EREN, 74 rue Marcel Cachin, Bâtiment SMBH, 93017 Bobigny, France
- **Compensation:** According to current French regulations
- **Language skills:** Very good command of written English
- **Bibliographic skills:** Excellent knowledge of Pubmed/Medline; knowledge of any additional bibliographic databases is a plus
- **Statistical analysis skills:** Very good knowledge of R
- **Objective:** Preparation and submission of a scientific article for publication
- **Perspective:** Possibility to discuss opportunities for pursuing a 3-year doctoral dissertation (Ph.D.) at Ecole Doctorale Galilée (<https://ed-galilee.univ-paris13.fr/>)
- **How to apply:** Send a current CV with a Cover Letter (in English or French) as soon as possible to: v.andreeva@eren.smbh.univ-paris13.fr
- **Application limit:** Each candidate can choose up to 2 internship subjects (first and second choice to be clearly indicated in the Cover Letter)
- **Application deadline:** none (positions open until filled or closed)
- **Mentor:** Valentina A. Andreeva, Ph.D., Dr. Habil., Associate Professor of Epidemiology

For any additional information, please send an email to:

v.andreeva@eren.smbh.univ-paris13.fr

II. PRESENTATION OF THE RESEARCH LAB

- **Unit:** Nutritional Epidemiology Research Group (EREN), Center for Research in Epidemiology & Statistics (CRESS), Paris, France
- **Affiliations:** INSERM, INRAE, CNAM, Sorbonne Paris Nord University (USPN)
- **Website:** <https://cress-umr1153.fr/en/teams/eren-en/>
- **Staff:** ~ 100 (researchers, dietitians, technicians, doctoral and postdoctoral fellows, administrative staff, interns)
- **Director:** Dr. Mathilde Touvier
- **Main research domains:** nutrition and physical activity; nutritional epidemiology; chronic disease epidemiology; somatic morbidity (cancer, cardiovascular diseases, metabolic disorders, oral disease, etc.); mental morbidity (anxiety, depression, eating disorders, sleep disorders, etc.); multimorbidity; health behavior research; public health surveillance, interventions and policy

III. NUTRINET-SANTE COHORT

- <https://etude-nutrinet-sante.fr/>
- Launched by EREN in 2009
- Participation exclusively online
- Recruitment still ongoing in the general adult population
- >150,000 enrollees in 2025
- Repeated collection of sociodemographic, anthropometric, dietary (24-h dietary records), lifestyle, and health status data via self-report questionnaires
- >300 scientific publications on a wide range of topics
- Multiple subgroup analyses in progress
- Approval by the INSERM Institutional Review Board and by the CNIL
- Study protocol available at: <https://doi.org/10.1186/1471-2458-10-242>



IV. LIST OF AVAILABLE INTERNSHIP SUBJECTS

1. Sociodemographic and health status determinants of chronotype, with a focus on multimorbidity
2. Sociodemographic and mental health factors associated with “Life’s Essential 8” score among French adults without prevalent cardiovascular disease
3. Mental health profiles of adults with headache disorders
4. Investigating reasons for non-participation in cancer screening
5. A literature review of the association between social isolation and dietary intake/diet quality
6. Investigating the comorbidity of respiratory and mental health disorders

V. COVER LETTER

- A one-page Cover Letter written in English or French is required for the internship application
- Each candidate can apply for up to 2 internship subjects – the first and second choice must be clearly indicated in the Cover Letter
- The Cover Letter should address the candidate's language, bibliographic and statistical analysis experience and skills
- A description of the candidate's short- and long-term professional objectives is encouraged
- Each candidate should provide contact information for 2 or 3 references (name, institution, email and phone number)
- The use of artificial intelligence-based software (e.g., ChatGPT) in preparing the Cover Letter is discouraged

VI. INTERNSHIP SUBJECT #1

Sociodemographic and health status determinants of chronotype, with a focus on multimorbidity

Context: Since the 1970s, researchers have been interested in the concept of “chronotype” which underscores each individual’s behaviors in relation to their circadian rhythm. For example, “early birds” have a morning chronotype which means that these individuals typically wake up early and are most active in the first part of the day. The chronotype has been studied in relation to several somatic (obesity, type 2 diabetes) and mental (bipolar disorder, depression) disorders. However, its association with multimorbidity is not well known.

Objective: To assess the sociodemographic and health status determinants of chronotype in the NutriNet-Santé cohort, with a focus on multimorbidity.

Data availability: All data necessary for this analysis have already been collected via self-report questionnaires. Chronotype was measured with the MEQ scale administered in 2024-2025. Sociodemographic and health status data are collected on an ongoing basis.

Tasks: 1) preparation of an analysis plan; 2) establishment of eligibility criteria for this analysis; 3) selection of sociodemographic and health status variables based on theoretical and empirical evidence; 4) definition of multimorbidity for this analysis; 5) data extraction from the main database; 6) data cleaning and recoding; 7) calculation of MEQ scores based on established criteria; 8) selection of cohort participants with available data and preparation of a flowchart; 9) descriptive (bivariate) analyses; 10) main adjusted analysis; 11) literature review; 12) finalization of the results and tables; 13) preparation of the manuscript.

VII. INTERNSHIP SUBJECT #2

Sociodemographic and mental health factors associated with “Life’s Essential 8” score among French adults without prevalent cardiovascular disease

Context: *Life’s Essential 8* is a composite score defined in 2022 and reflecting key measures for improving and maintaining cardiovascular health, as defined by the American Heart Association (AHA). *Life’s Essential 8* comprises 2 major areas: health behaviors (diet, exercise, not smoking, sufficient sleep, weight management) and health status (cholesterol levels, glycemia levels, blood pressure). Cutoffs for each metric have been established by the AHA, allowing for the calculation of a composite LE8 score.

Objective: To assess the sociodemographic and mental health determinants of the LE8 score in a subsample of the NutriNet-Santé cohort without prevalent cardiovascular disease, participating in the NutriNet-Biobank.

Data availability: All data necessary for the execution of this project have already been collected via self-report questionnaires and clinical measurements.

Tasks: 1) preparation of the analysis plan; 2) establishment of eligibility criteria for this analysis; 3) selection of sociodemographic and mental health variables; 4) data extraction from the Biobank database; 5) data cleaning and recoding; 6) calculation of the LE8 score based on criteria established by the AHA; 7) selection of cohort participants with available data and preparation of a flowchart; 8) descriptive (bivariate) analyses; 9) main adjusted analyses based on linear and logistic regression models; 10) literature review on the topic; 11) finalization of the results and tables; 12) preparation of the manuscript.

VIII. INTERNSHIP SUBJECT #3

Mental health profiles of adults with headache disorders

Context: Headache disorders are among the most common disorders of the nervous system, yet are underestimated worldwide, despite substantial personal and societal burdens of disability, financial hardship, and reduced quality of life. Migraine, which is a primary headache disorder, is characterized by recurrent, usually unilateral attacks of moderate to severe pain intensity and, in many cases, concurrent photophobia, phonophobia, or nausea. The worldwide prevalence of migraine is estimated at ~12%. Whereas some risk factors of migraine (e.g., reproductive age, female sex) have been established, other correlates, including mental health status, are less well known.

Objective: To assess the mental health profiles of adults with headache disorders in the NutriNet-Santé cohort, with a focus on migraine and non-migraine headaches.

Data availability: All data necessary for the execution of this project have already been collected via self-report questionnaires. Specifically, comprehensive headache and mental health questionnaires were administered in 2020-2023. The mental health profile pertains to anxiety disorders (measured with the General Anxiety Disorder scale - GAD-7), depressive symptoms (measured with the Patient Health Questionnaire - PHQ-9), and their comorbidity.

Tasks: 1) preparation of an analysis plan; 2) establishment of eligibility criteria for this analysis; 3) selection of covariates based on theoretical and empirical evidence; 4) data extraction from the main database as regards the exposures, outcome and confounding variables; 5) data cleaning and recoding; 6) calculation of the PHQ-9 and GAD-7 scores based on established criteria; 7) selection of cohort participants with available data and preparation of a flowchart; 8) descriptive (bivariate) analyses; 9) main adjusted analysis; 10) literature review on the topic; 11) finalization of the results and tables; 12) preparation of the manuscript.

IX. INTERNSHIP SUBJECT #4

Investigating reasons for non-participation in cancer screening

Context: In Western societies, many individuals do not participate in the available cancer screening programs. The reasons for non-participation have been studied in relation to some individual cancer sites (e.g., breast), however, they have not been compared across sites. Yet such knowledge is essential for the development of well-targeted cancer prevention programs.

Objective: To compare the reasons for non-participation in cancer screening as reported by adults in the NutriNet-Santé cohort, with a focus on the following sites: colon and rectum, skin, breast, uterus, prostate, and testes.

Data availability: All data necessary for the execution of this project have already been collected via self-report questionnaires. Specifically, a comprehensive questionnaire regarding cancer screening practices and attitudes was administered in 2019.

Tasks: 1) preparation of an analysis plan; 2) overview and summary of screening eligibility criteria for each cancer site, as established by the French National Cancer Institute; 3) establishment of eligibility criteria for this analysis; 4) selection of sociodemographic covariables; 5) data extraction from the general database; 6) data cleaning and recoding; 7) selection of cohort participants with available data and preparation of a flowchart; 8) descriptive analyses; 9) main adjusted analysis; 10) literature review on the topic; 11) finalization of the results and tables; 12) preparation of the manuscript.

X. INTERNSHIP SUBJECT #5

A literature review of the association between social isolation and dietary intake/diet quality

Context: In Western societies, social isolation has been shown to impact adults at any age and can increase risk for mental and physical morbidity. Limited social contacts and little involvement in community activities might also have a negative impact on lifestyle behaviors such as dietary intake.

Objective: To perform a literature review of the epidemiological evidence for the association between different measures of social isolation and different dietary intake measures among adults in the general population.

Tasks: 1) preparation of the review and analysis plan; 2) establishment of eligibility criteria for the studies to be included in the review; 3) list of keywords for the main exposure and outcome variables; 4) list of databases to be searched; 5) literature review; 6) study selection and data extraction; 7) finalization of the results and tables; 8) preparation of the manuscript.

XI. INTERNSHIP SUBJECT #6

Investigating the comorbidity of respiratory and mental health disorders

Context: Both respiratory and mental health conditions display a high prevalence in Western societies. However, the prevalence of their comorbidity among adults is not well known. Likewise, knowledge about potential population subgroups at risk of such comorbidity is limited.

Objective: To investigate the comorbidity and the underlying socio-demographic determinants of concurrent respiratory and mental health disorders as reported by adults in the NutriNet-Santé cohort.

Data availability: All data necessary for the execution of this project have already been collected via self-report questionnaires. Specifically, a comprehensive health status questionnaire is administered annually since 2009. Eligible respiratory conditions include: asthma, chronic obstructive pulmonary disease (COPD), chronic bronchitis, acute bronchitis, emphysema, respiratory failure, bronchiectasis, sleep apnea, pneumothorax, pneumonia, lower respiratory tract infection, and allergic rhinitis. Eligible mental health conditions include: depression, bipolar disorder, anxiety disorders, sleep disorders, addiction, and eating disorders.

Tasks: 1) preparation of an analysis plan; 2) establishment of eligibility criteria for this analysis; 3) selection of sociodemographic covariables; 4) data extraction from the general database; 5) data cleaning and recoding; 6) selection of cohort participants with available data and preparation of a flowchart; 7) descriptive analyses; 8) main adjusted analysis; 9) literature review on the topic; 10) finalization of the results and tables; 11) preparation of the manuscript.