



Medical University of Gdańsk is seeking enthusiastic researchers willing to participate in the TEAM project: *"Integrated measurement of arterial function and sympathetic nervous system activity: development, validation and application of a new method"*

Positions available:

- 3 Ph.D. student positions for a medical doctor (M.D.) or researchers with a university degree in engineering, computer sciences or life sciences (Positions #1, #2 and #3);
- 1 postdoc position for a medical doctor (M.D.) (Position #4);
- 1 postdoc position for a medical doctor (M.D.) or a researcher with a university degree in life sciences, engineering or computer sciences (Position #5);
- 1 student position (for a student of medicine) (Position #6).

Duration of contract: 1 May 2009 – 28 February 2013

Aim of the project

We propose a series of studies (**Joint Programme of Research**) directed at understanding the mechanisms underlying the development and progression of cardiovascular disease. We intend to develop, validate and apply a novel method of integrated measurement of arterial function and sympathetic nervous system activity in humans. The **Joint Programme of Research (JPR)** will consist of two research packages:

JPR 1. Development and validation of a new method of integrated measurement of arterial function and sympathetic nervous system activity.

JPR 2. Application of this new method in studies assessing:

1. determinants of sympathetic neural traffic in normal humans and hypertensive patients;
2. baroreflex function in healthy humans and patients with hypertension, particularly those with resistant hypertension.
3. cardiovascular risk stratification in patients with history of transient ischaemic attack (TIA);
4. cardiovascular regulation in patients with obstructive sleep apnea.

How to apply?

Candidates fulfilling requirements (see below) and willing to participate in the TEAM research project should send required documents to Prof. Krzysztof Narkiewicz (e-mail address: knark@amg.gda.pl) before March 23rd 2009, writing "TEAM" as the message subject. Please specify the position of your interest (#1, #2, #3, #4, #5 or #6).

Candidates should put in their application a declaration of permission for personal data treatment required for recruitment procedure.

Applications received after the deadline will not be considered in the competition process.

Recruitment procedure

Recruitment for the project will be carried out in an open, two-step procedure. Candidates' merits will be judged both qualitatively as well as quantitatively. The first step of the recruitment will be based on the review of the submitted applications. The second step of the recruitment procedure - interview of the selected candidates - will be carried out on March 30, 2009. Successful candidates will be notified within 1 week after the interview. Results of the contest will be made public (www) on April 10, 2009. The decisions are final and appeals are not considered.

Position #1. A researcher with a university degree in engineering, computer sciences or life sciences without PhD.

a) Research tasks: development of methods and software for the analysis of vascular and autonomic signals, and the modelling of biological systems with an application to cardiovascular disease. Contribution to development of new platform assessing vascular and autonomic function in humans.

b) Requirements

Educational/knowledge

- *Essential:* university degree in engineering, computer sciences or life sciences without PhD.
- *Desirable:* research experience; previous publications; mobility experience.

Skills

- *Essential:* solid background in mechanics; programming and statistics knowledge; good English and interpersonal skills; ability to learn modern cardiovascular techniques under supervision.
- *Desirable:* previous experience in software and/or hardware development.

General

- *Essential:* Energetic, determined, motivated, flexible.

c) Required documents

- Covering letter
- Curriculum Vitae
- University degree (copy)
- Reference letter
- Description of previous scientific work including list of publications

Candidate's CV should be evidence-based, reflecting a representative array of achievements and qualifications appropriate to the position being sought.

Position #2. A researcher with a university degree in engineering, life sciences or computer sciences without PhD

a) Research tasks: We are seeking a highly motivated research scientist with interest in molecular biology, who would like to work in an interdisciplinary environment on the development and application of methods assessing vascular and autonomic function in humans.

b) Requirements

Educational/knowledge

- *Essential:* university degree in life sciences or computer sciences without PhD.; familiarity with molecular biology.
- *Desirable:* at least one year experience in biological/medical research, mobility experience.

Skills

- *Essential:* solid background in molecular biology and biochemistry techniques (such as gel electrophoresis, chromatography, PCR, etc.)
- *Desirable:* Statistics knowledge, familiarity with database management, ability to learn modern cardiovascular techniques under supervision

General

- *Essential:* Energetic, determined, motivated, flexible.

c) Required documents

- Covering letter
- Curriculum Vitae
- University degree (copy)
- Reference letter
- Description of previous scientific work including list of publications

Candidate's CV should be evidence-based, reflecting a representative array of achievements and qualifications appropriate to the position being sought.

Position #3. A medical doctor (M.D.) or a researcher with a university degree in life sciences, engineering or computer sciences without PhD.

a) Research tasks: We are seeking a highly motivated research scientist with interest in cardiovascular measurements, who would like to work in an interdisciplinary environment on the development and application of methods assessing vascular and autonomic function in humans.

b) Requirements

Educational/knowledge

- *Essential:* university degree in medicine, life sciences or computer sciences without PhD.; familiarity with cardiovascular research.
- *Desirable:* at least one year experience in biological/medical research; familiarity with database management.

Skills

- *Essential:* Familiarity with cardiovascular phenotyping including ambulatory blood pressure monitoring and pulse wave velocity measurements; ability to learn other modern cardiovascular techniques under supervision; English and computing skills; good interpersonal skills.
- *Desirable:* Previous experience in database management.

General

- *Essential:* Energetic, determined, motivated, flexible.

c) Required documents

- Covering letter
- Curriculum Vitae
- University degree (copy)
- Reference letter
- Description of previous scientific work including list of publications

Candidate's CV should be evidence-based, reflecting a representative array of achievements and qualifications appropriate to the position being sought.

Position #4. A medical doctor (M.D.) with PhD (post-doc).

a) Research tasks: cardiovascular measurements including ultrasound evaluation of the heart (echocardiography including strain) and carotid arteries (ultrasound) in control subjects and patients with hypertension, history of stroke and sleep apnea. Contribution to development of new platform assessing vascular and autonomic function in humans.

b) Requirements

Educational/knowledge

- *Essential:* Full medical qualification; PhD granted after May 1, 2005; at least four years of experience in cardiovascular research; previous publications; clinical experience in management of hypertensive and neurological patients.
- *Desirable:* familiarity with database management, mobility experience.

Skills

- *Essential:* Expertise in cardiovascular phenotyping including ultrasound evaluation of the heart (echocardiography) and carotid arteries (ultrasound); good English and computing skills; good interpersonal skills; ability to supervise work of younger co-workers.
- *Desirable:* Previous experience in software development.

General

- *Essential:* Energetic, determined, motivated, flexible.

c) Required documents

- Covering letter
- Curriculum Vitae
- MD certificate (copy)
- PhD certificate (copy)
- Reference letter
- Description of previous scientific work including list and copies of publications

Candidate's CV should be evidence-based, reflecting a representative array of achievements and qualifications appropriate to the position being sought.

Position #5. A medical doctor (MD) or a researcher with a university degree in life sciences, engineering or computer sciences with PhD (post-doc).

a) Research tasks: cardiovascular measurements including assessment of neurovascular control, in control subjects and patients with hypertension, history of stroke and sleep apnea; contribution to development of new platform assessing vascular and autonomic function in humans.

b) Requirements

Educational/knowledge

- *Essential:* PhD granted after May 1, 2005; at least three years of experience in cardiovascular research; previous publications.
- *Desirable:* familiarity with database management, mobility experience.

Skills

- *Essential:* Expertise in assessment of neurovascular control; good English and computing skills; good interpersonal skills.
- *Desirable:* previous experience in clinical trials.

General

- *Essential:* Energetic, determined, motivated, flexible.

c) Required documents

- Covering letter
- Curriculum Vitae
- University certificate (copy)
- PhD certificate (copy)
- Reference letter
- Description of previous scientific work including list and copies of publications

Candidate's CV should be evidence-based, reflecting a representative array of achievements and qualifications appropriate to the position being sought.

Position #6. A student of medicine

a) Research tasks: contribution to data collection in patients with hypertension, history of stroke and sleep apnea (under supervision of senior researcher).

b) Requirements

Educational/knowledge

- *Essential:* completed third year of the medical university education; interest in cardiovascular research.
- *Desirable:* familiarity with cardiovascular testing and experience in database management.

Skills

- *Essential:* good English and computing skills; good interpersonal skills.
- *Desirable:* previous experience in human research.

General

- *Essential:* Energetic, determined, motivated, flexible.

c) Required documents

- Covering letter
- Curriculum Vitae
- Supporting letter from the Dean's office
- Reference letter
- Description of previous scientific work