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EPPKA2-KA



ERASMUS + - Knowledge Alliance

Nephrology Partnership for Advancing Technology in Healthcare

Ref. N. 621385-EPP-1-2020-1-IT-EPPKA2-KA

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Università degli Studi di Bari Aldo Moro

In partnership with

European Renal Association-European Dialysis and Transplant Association

Amsterdam UMC

General University Hospital in Prague

Academic Hospital Maastricht

University of Patras

Parc Taulí Hospital Universitari

Eureka s.r.l.

Università degli Studi di Milano

EMAC s.r.l.

University Medical Centre Ljubljana

Vascular Access Society



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ANNOUNCEMENT OF SELECTION of N. 40 Medical Residents

1. Introduction

In the framework of the Erasmus+ project “Nephrology Partnership for Advancing Technology in Healthcare (hereafter referred as N-PATH), coordinated by the Università degli Studi di Bari Aldo Moro (hereafter referred as Coordinator), it is announced the selection for n. 40 medical residents for the admission to the European advanced training course in diagnostics and interventional nephrology “N-PATH - Nephrology Partnership for Advancing Technology in Healthcare”

2. Partnership

The N-PATH consortium is composed of the following organizations, as specified below:

1) Università degli Studi di Bari (Coordinator)

Address: Piazza Umberto I n. 1

Town: Bari

Country: ITALY

Acronym: **UNIBA**

Contact Person: Prof. Loreto Gesualdo

2) European Renal Association-European Dialysis and Transplant Association

Address: c/o PKF Littlejohn, 15 Westferry Circus, Canary Wharf

Town: London

Country: United Kingdom

Acronym: **ERA-EDTA**

Contact Person: Monica Fontana

3) Amsterdam UMC

Address: Meibergdreef 9

Town: Amsterdam

Country: The Netherlands

Acronym: **AUMC**

Contact Person: Prof. Sandrine Florquin

4) General University Hospital in Prague

Address: U Nemocnice 499/2

Town: Prague

Country: Czech Republic

Acronym: **VFN**

Contact Person: Prof. Vladimír Tesar

5) Academic Hospital Maastricht

Address: P. Debyelaan 25

Town: Maastricht

Country: The Netherlands

Acronym: **MUMC**

Contact Person: Dr. Maarten Snoeijs



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6) University of Patras

Town: Rio Patras
Country: GREECE
Acronym: **UPAT**
Contact Person: Prof. Dimitrios Goumenos

7) Parc Tauli Hospital Universitari

Address: Parc Taulí, 1
Town: Sabadell - Barcelona
Country: SPAIN
Acronym: **TAULI**
Contact Person: Prof. Jose Ibeas

8) Eureka s.r.l.

Address: Viale Regina Margherita 121
Town: Lucca
Country: Italy
Acronym: **EUREKA**
Contact Person: Luca De Grandis

9) Università degli Studi di Milano

Address: Via Festa del Perdono, 7
Town: Milano
Country: ITALY
Acronym: **UNIMI**
Contact Person: Prof. Maurizio Gallieni

10) Elettronica Medica e Attrezzature Chimico cliniche s.r.l.

Address: Via Larga, 23
Town: Milano
Country: ITALY
Acronym: **EMAC**
Contact Person: Mario Camia

11) University Medical Centre Ljubljana

Address: Zaloška Cesta
Town: Ljubljana
Country: SLOVENIA
Acronym: **UMCL**
Contact Person: Dr. Jadranka Buturovic-Ponikvar

12) Vascular Access Society

Address: Avenue Ceramique 222
Town: Maastricht
Country: THE NETHERLANDS
Acronym: **VAS**
Contact Person: Dr. David Shemesh



3. Purpose of the initiative and learning outcomes

N-PATH aims at training 40 young nephrologists in the first official European Advanced Training Course in Diagnostic and Interventional Nephrology funded by the European Union.

N-PATH will contribute to enhance employability, improving the professional skills of young nephrologists and to facilitate the cross-fertilization between the scientific and industrial partners involved contributing to stimulate interactions among the health care system, R&D actions and as EU policies on education and training. Specific objectives of the project are:

1. developing innovative and multidisciplinary educational path with a patient-centered approach focusing on diagnostic and interventional nephrology;
2. fostering the knowledge transfer from research to clinical practice in order to tackle risk management in health care;
3. strengthening the cooperation among Universities and clinical centers in order to boost innovation and exchange of best practices;
4. promoting the positive aspects of nephrology careers at European level;

The N-PATH approach will respond to the unmet need to develop a policy framework for the provision of high-quality services within European health system by:

1. improving the training capacity by creating new and contemporary educational courses;
2. strengthening the cooperation among HEI and clinical centers in order to boost innovation and exchange of best practices;
3. facilitating the acquisition of specific skills by the learners on the use state of the new techniques in healthcare.
4. consolidating the role of the HE as a generator of human resources of high profile by creating a path that will facilitate the entry of learners in the competitive labor market.

4. Course Program

N-PATH will develop an innovative and multidisciplinary educational path characterized by a unique patient-centered approach in order to design a comprehensive model capable to support new educational best practices. The language of instruction is English. The main outputs of the advanced training course are 4 independent curricula delivered in blended learning:

1. Renal Expert in Molecular Pathology (REMAP)
2. Renal Expert in Vascular Access (REVAC)
3. Renal Expert in Medical Ultrasound (REMUS)
4. Renal Expert in Peritoneal Dialysis (REPED)

N-PATH is a two-year university course (from July 2021 to June 2023). The selected learners will have access to a dedicated eLearning platform through their unique username and



password. The program has a workload of 29 ECTS¹ and it is organized into e-learning sessions (55 hours = 18 ECTS) and hands-on training sessions (144 hours = 9 ECTS) which will take place in rotation amongst the partner organizations. Learners have to present a final project work (2 ECTS).

Renal Expert in Molecular Pathology (REMAP) module

Duration: 6 months (15 hours of classes + 42 hours of hands-on training + intermediate verification test)

Nephrologists need to be actively engaged in developing intensive research to unravel the risk factors and pathophysiologic underpinnings of AKI and CKD. Renal Expert in Molecular Pathology (REMAP) is designed to enhance the approach to renal biopsy by leveraging the latest advancements in histopathology and molecular pathology. The lectures will be released on-line (1 lecture per week) from July 2021 to December 2021:

WEB LECTURES
Nephrology Community and Renal Epidemiology
Physiopathology of AKI and CKD
Primary and secondary causes of renal diseases
GN guidelines KDIGO
Basic ultrasound in the evaluation of liquid and solid renal masses
Renal biopsy techniques
Ultrasound-guided biopsy
Digital Renal Pathology
Artificial Intelligence applied to digital pathology
Genome sequencing
Gene expression and microRNAs
Novel tissue imaging
Renal Imaging
Systems biology and online tools

During the REMAP module, the learners will attend the following hands-on trainings:

RENAL BIOPSY	4 days (24 hours)
University Hospital Polyclinic of Bari	10 learners
General University Hospital in Prague	10 learners
Hospital Luigi Sacco in Milan	10 learners
University Medical Centre Ljubljana	10 learners

DIGITAL PATHOLOGY	3 days (18 hours)
Amsterdam UMC	40 learners

¹ European Credit Transfer and Accumulation System (ECTS) is a standard means for comparing academic credits, i.e., the "volume of learning based on the defined learning outcomes and their associated workload" for higher education across the European Union and other collaborating European countries (source: ECTS users' guide, Publications Office of the European Union, 2015)



Renal Expert in Vascular Access (REVAC) module:

Duration: 6 months (14 hours of classes + 42 hours of hands-on training + intermediate verification test)

Vascular access complications account for approximately 20% to 30% of hospital admissions for patients on HD and incur substantial health care costs. The intention of this vascular access education program is to provide a thorough understanding (i) the various vascular access types, (ii) the detailed patient evaluation required to assist with decision making, (iii) the management and maintenance of a well- functioning vascular access, (iv) potential access-related complications and strategies for intervention. The lectures will be released on-line (1 lecture per week) from January 2022 to June 2022:

WEB LECTURES
Epidemiology of vascular access
Vascular access planning and decision-making process
Vascular access types and surgical techniques
Central venous catheter placement
The infectious and non-infectious complications in CVC
Ultrasound in vascular access management
Vascular access complications: part I
Vascular access complications: part II
AV Graft
Patient safety in vascular access
Monitoring and surveillance of vascular access
Endovascular AVF
Preoperative mapping and surgical strategies
AVF construction

During the REVAC module, learners will attend the following hands-on training:

VASCULAR ACCESS I LEVEL	3 days (18 hours)
General University Hospital of Patras	10 learners
Hospital Luigi Sacco in Milan	10 learners
Academic Hospital Maastricht	10 learners
University Hospital Polyclinic of Bari	10 learners

VASCULAR ACCESS II LEVEL	4 days (24 hours)
Parc Taulí Hospital de Sabadell	10 learners
Hospital Luigi Sacco	10 learners
Academic Hospital Maastricht	10 learners
University Hospital Polyclinic of Bari	10 learners

Renal Expert in Medical Ultrasound (REMUS) module:

Duration: 6 months (13 hours of classes + 36 hours of hands-on training + intermediate verification test)

Ultrasound in the hands of the nephrologist represents an extraordinarily effective tool by



intervening significantly in most diagnostic pathways and interventional procedures in the nephrology field. REMUS program supports the learning of main ultrasound and colour-doppler concepts and aims at analyzing all aspects concerning their applications in diagnostic paths and interventional procedures in the nephrology field. The lectures will be released on-line (1 lecture per week) from July 2022 to December 2022:

WEB LECTURES
Physical principles of ultrasound and device setting
Ultrasound artifacts, instruments, transducers and terminology
Principles of Color-Doppler
Ultrasound anatomy of kidney and urinary tract
Pelvis-ureteric dilatation and nephrolithiasis
Ultrasound in acute and chronic kidney failure
CEUS in the characterization of cystic and solid renal lesions
Ultrasonographic features of kidney transplants and their complications
Thoracic ultrasound and assessment of hydration in uremic patient
Eco-Color-Doppler of supra-aortic trunks and lower extremity arteries
Eco-Color-Doppler of abdominal aorta and renal vessels
Eco-Color-Doppler in peritoneal dialysis
Ultrasound of parathyroid glands in CKD with secondary hyperparathyroidism

During the REMUS module, the learners will attend the following hands-on trainings:

BASIC US	3 days (18 hours)
General University Hospital in Prague	10 learners
University Medical Center Ljubljana	10 learners
Parc Taulí Hospital de Sabadell	10 learners
University Hospital Polyclinic of Bari	10 learners

ADVANCED US	3 days (18 hours)
General University Hospital in Prague	10 learners
University Medical Center Ljubljana	10 learners
Parc Taulí Hospital de Sabadell	10 learners
University Hospital Polyclinic of Bari	10 learners

Renal Expert in Peritoneal Dialysis (REPED) module:

Duration: 6 months (13 hours of classes + 24 hours of hands-on training + intermediate verification test)

The key for a successful chronic peritoneal dialysis (PD) program is to have a number important element at disposal such as well-trained physicians, clinical management of PD and availability of permanent and safe access to the peritoneal cavity: catheter related problems are a cause of permanent transfer to hemodialysis in up to 20% of all patients. The goal of the REPED program is to provide skills in PD patients' management and in surgical technique for a correct catheter placement. Several placement techniques are described and practiced:



surgical placement by dissection, laparoscopy, blind placement using a guidewire and so on.
The lectures will be released on-line (1 lecture per week) from January 2023 to June 2023:

WEB LECTURES
Anatomy and physiology of peritoneal membrane
Selection of PD patient
PD treatment and prescription
Automated Peritoneal Dialysis and teledialysis
Evaluation of adequacy
Surgical technique of PD catheter insertion
Infections complications in PD
Postoperative complications of catheter placement
Long time complications in PD
Case 1 (recorded in operating room)
Case 2 (recorded in operating room)
Case 3 (recorded in operating room)
Case 4 (recorded in operating room)

At the end of the REPED module, the learners will attend the following hands-on trainings as follows:

PERITONEAL DIALYSIS	4 DAYS 24 HOURS
General University Hospital Patras	10 learners
Hospital Luigi Sacco in Milan	10 learners
Academic Hospital Maastricht	10 learners
University Hospital Polyclinic of Bari	10 learners

5. Admission Criteria

The admission to the course is subordinated to the evaluation of the Internal Examining Board established in each partner organization according to their regulations.

To be eligible for admission to N-PATH training course, residents must meet the following requirements:

- ✓ to hold a master degree awarded in medicine
- ✓ to be enrolled in the first or second year of nephrology training according to the candidate's country residency program regulation
- ✓ to prove to have an adequate level of English proficiency (at least Level B2 of the Common European Framework of Reference for Languages - CEFR) by certificate. If the candidate does not have a certificate, he/she must fill the self-evaluation English proficiency test online. Each Internal Examining Board reserves the right to use discretion in determining language proficiency, arranging a video conference interview to assess the trueness of self-evaluation.

Any statements or false documents provided by applicants will be prosecuted under Article 76 of Presidential Decree 445/2000 of the Italian law.



6. Application procedures

All candidates are required to apply electronically from May 26th 2021 to June 20th 2021, according to the following procedure:

- ✓ Log in to <http://www.studenti.ict.uniba.it/esse3/Home.do> (new applicants have to create a Login ID through the first-time user account creation)²
- ✓ Once logged in, click on CONCORSI/ TEST DI AMMISSIONE to fill in your application;
- ✓ Select N PATH
- ✓ Select the referring organization:
 1. Università degli Studi di Bari Aldo Moro - UNIBA
 2. Amsterdam UMC – AUMC
 3. General University Hospital in Prague - VFN
 4. University of Patras – UPAT
 5. Academic Hospital Maastricht - MUMC
 6. Parc Tauli Hospital Universitari - TAULI
 7. Università degli Studi di Milano - UNIMI
 8. University Medical Centre Ljubljana – UMCL
- ✓ Send a copy of English resume in European format along with the identity document, declaration form (annex 2 to this announcement) with date and signature and a copy of one of the documents below to the following email address: alta.formazione@uniba.it, with the reference: "Application for N-PATH"
 - 1) Qualification with legalization or authentic copy, comparable in terms of level, nature, content and academic rights (access to further courses), to the Italian academic qualification required for access to the chosen course, accompanied by the Declaration of Value issued by Italian Embassy or Consulate in the country to which the institution that issued the qualification belongs;
- As an alternative to Legalization and / or Declaration of value, the University of Bari Aldo Moro accepts respectively the Verification Certificate and the Comparability Certificate issued by the Italian ENIC NARIC Center (CIMEA): <https://cimea.diplome.eu/uniba/#/auth/login>;
 - 2) Certificate issued by the competent Academic Authority certifying the exams passed.
 - 3) Only for academic qualifications issued by Institutes of countries belonging to the European Higher Education Area (Bologna Process), the Declaration of Value or the Certificate of Comparability can be replaced by the Diploma Supplement drawn up according to the model of the European Commission and if legalized, it replaces the certificate certifying the exams passed;

All the required study documentation must be translated under penalty of forfeiture, except for the Diploma Supplement, and provided with legalization where required.

Non-EU candidates residing abroad, interested in enrolling in the Master, have to access the UNIVERSITALY portal (<https://www.universitaly.it/index.php/registration/firststep>) and complete the related "pre-enrollment application" electronically, promptly arranging for a visa application for study reasons at the relevant representative offices.

² A short guide is available online (<https://www.uniba.it/didattica/corsi-universitari-di-formazione-finalizzata/corsi-e-progetti-di-alta-formazione/2020-2021/NEPHROPATH>)



7. Selection

The selection of eligible candidates will be carried out by the Internal Examining Boards above-mentioned based on the following criteria:

- ✓ to hold a master degree in medicine awarded in one of the consortium countries (15 points)
- ✓ to hold a certificate of English proficiency at C1 level (15 points) or C2 level (30 points)

After the selection by criteria, the candidates will have an interview with the Internal Examining Board who will assign up to 55 points.

The Internal Examining Boards will determine the final ranking list of merit by the sum of scores achieved by applicants up to 100 points. In case of equal score, priority will be given to the younger applicant.

8. List of admitted candidates

The candidates ranked in the first five (5) places of each hosting organization will be considered winners and eligible to participate in the N-PATH Training Course. The hosting organizations will provide the results of the selection to the coordinating University (UNIBA) which will inform of the outcome of the appeal with the publication of the final rankings on the UNIBA website to the following address: <https://www.uniba.it/didattica/corsi-universitari-di-formazione-finalizzata/corsi-e-progetti-di-alta-formazione/2020-2021/NEPHROPATH>

9. Enrolment

Students admitted to the Course must, under penalty of exclusion, enroll through the appropriate online procedure within the terms that will be announced together with the publication of the ranking list, by accessing the reserved area of the Esse3 Secretariat with the same credentials used to complete the application for admission, and choosing the functions in order: 1. Enrollment> Courses with restricted access; 2. Payments³ (Euro 16.00 - virtual stamp duty + Euro 4.13 - insurance policy contribution). Those who have not regularized their enrollment by the scheduled date (by completing the online enrollment application and paying the contributions) will be considered as withdrawing. In the event that, at the end of the enrollment, places become available due to the renunciation of those entitled, we will proceed, in the presence of any suitable candidates, to scroll the ranking.

Those who are in good standing with enrollment will be provided with access credentials to the platform dedicated to the Course to follow the lessons, fill in the evaluation questionnaires and participate in the scheduled training activities.

The other candidates will enter a reserve list. They will receive a user name and a password that will be useful for:

- 1) Follow the lessons as GUESTS⁴
- 2) Became part of the N-PATH community

³Tuition fee is due annually.

⁴ Guests are able to access the online lectures upon the completion of each didactic module. They will not be able to attend the hands training nor to obtain any certificate.



10. Reimbursement of the eligible costs

N-PATH will recognize the reimbursement of expenses incurred for travel, board and lodging during the internships planned at each module up to a maximum of:

- Euro 275,00 for travel between 100 and 1.999 Km;
- Euro 360,00 for travel over 1.999 Km.

Distance will be calculated between the city of departure and the city in which the hands-on training will take place.

- Euro 55,00 (per day) for board and lodging during each hands-on training

The reimbursement will be paid at the completion of each hands-on training upon the presentation of all the receipts (i.e. train and flight tickets, hotel accommodation, meals) that must clearly contain the name of the student and the description of the activity.

According to the European normative in force and the Erasmus+ financial conditions of reimbursement:

- the reimbursement is presented as an allowance commensurate with the hours of actual presence of the participants and therefore not payable in the event of absence due to illness, accident or other;
- the payment of that reimbursement is correlated to regular attendance of the hands-on training;
- it is planned right of revocation of the reimbursement in the event of absences or behavior incompatible with the objectives of the training plan.

11. Payments

Pursuant to current legislation on electronic payments to public administrations, the payments of taxes and contributions can be paid through the PagoPA system, promoted by the Italian Prime Minister's Office and managed by AgID. The University of Bari Aldo Moro has made a PagoPA guide available at the following address: <https://www.uniba.it/notizieuniba/2021/pago-pa-modalita-di-pagamento-delle-tasse-universitarie>. Payments can be made also online by credit/debit card. The Offices of the Post Graduate Section will not send to the students the invoices which will be available on the Esse3 personal page under the heading Payments.

12. Frequency, withdrawal and intermediate/final verification

Frequency: To obtain the qualification, the learner must have fulfilled at least 80% of the whole course (55 hours of classes and 144 hours of hands-on training). Passing the intermediate verification test at the end of each module is a necessary condition for accessing the next module.

Withdrawal: the student may submit at any time an instance of withdrawal. This is irrevocable and it must be manifested by a written instrument addressed to the Coordinator of the project. The student who presents termination of studies is suspended from the attendance at the courses and he will be entitled to reimbursement of expenses incurred up to the last day of attendance. In the event that the waiver takes place after finishing the hands-on training of a module, the student will receive a certificate of attendance related only to fully



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followed and completed form. In case of withdrawal of one more student, their place will be assigned to one of the eligible candidates placed in order of merit according to the criteria defined by the art. 7.

Intermediate/final verification: At the end of each module, learners will have access to a verification questionnaire on the topics covered in the module. The test will consist of 30 multiple-choice questions. Candidates may take the test for a maximum of three times and the vote will be expressed out of thirty. In the case in which the vote is less than 18/30 at the third attempt, the intermediate test results were not exceeded.

If the learners will withdraw the training course before its natural completion, it will be released one or more certificates for single frequented modules.

Otherwise, at the end of the course, learners will have access to the N-PATH final project work, which will consist of an individual or team project concerning one or more topics of the training courses attended. The final vote will be reported on the certificate (29 ECTS).

13. Privacy

The Coordinator guarantees the processing of personal data of the learners, acquired with the registration and enrollment or through any other specific changes to the collection, for the performance of its institutional activities, within the limits established by the Italian law.