

Hematoloogide ettevalmistus Euroopas ja Eestis

Edward Laane

30.10.2014

Euroopa Hematoloogide Assotsiatsioon (EHA)

Regionaalhaigla



EHA asutati 1992.a Brüsselis, Belgias

Mission:

*The European Hematology Association (EHA)
promotes excellence in patient care,
research and
education in hematology."*

EHA liikmed

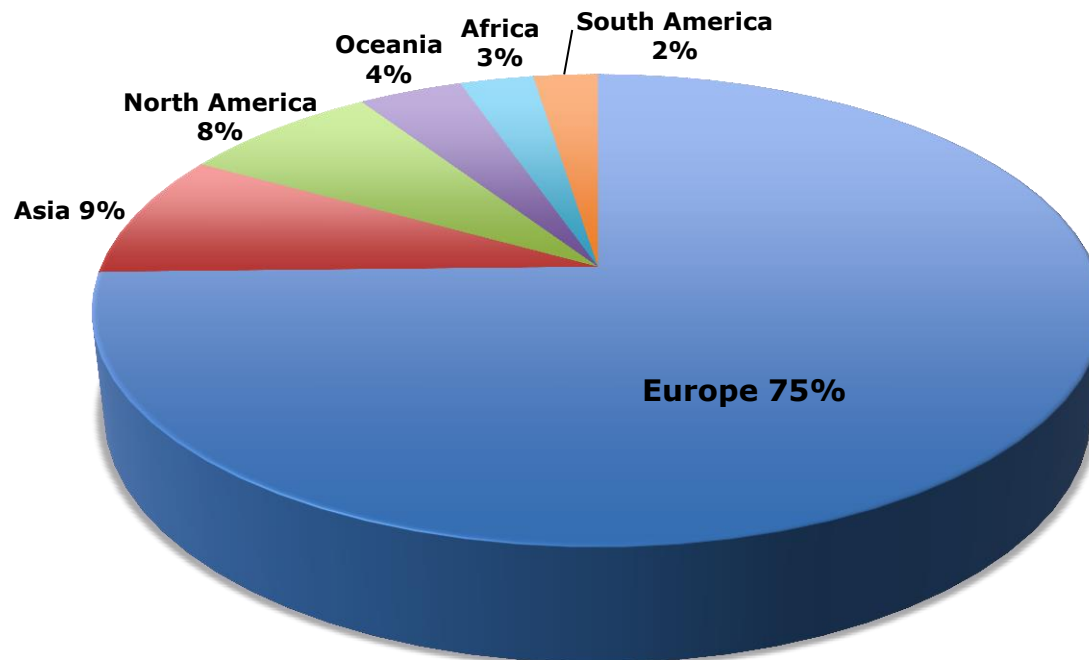


EHA Membership

3,444 members (December 31, 2013)

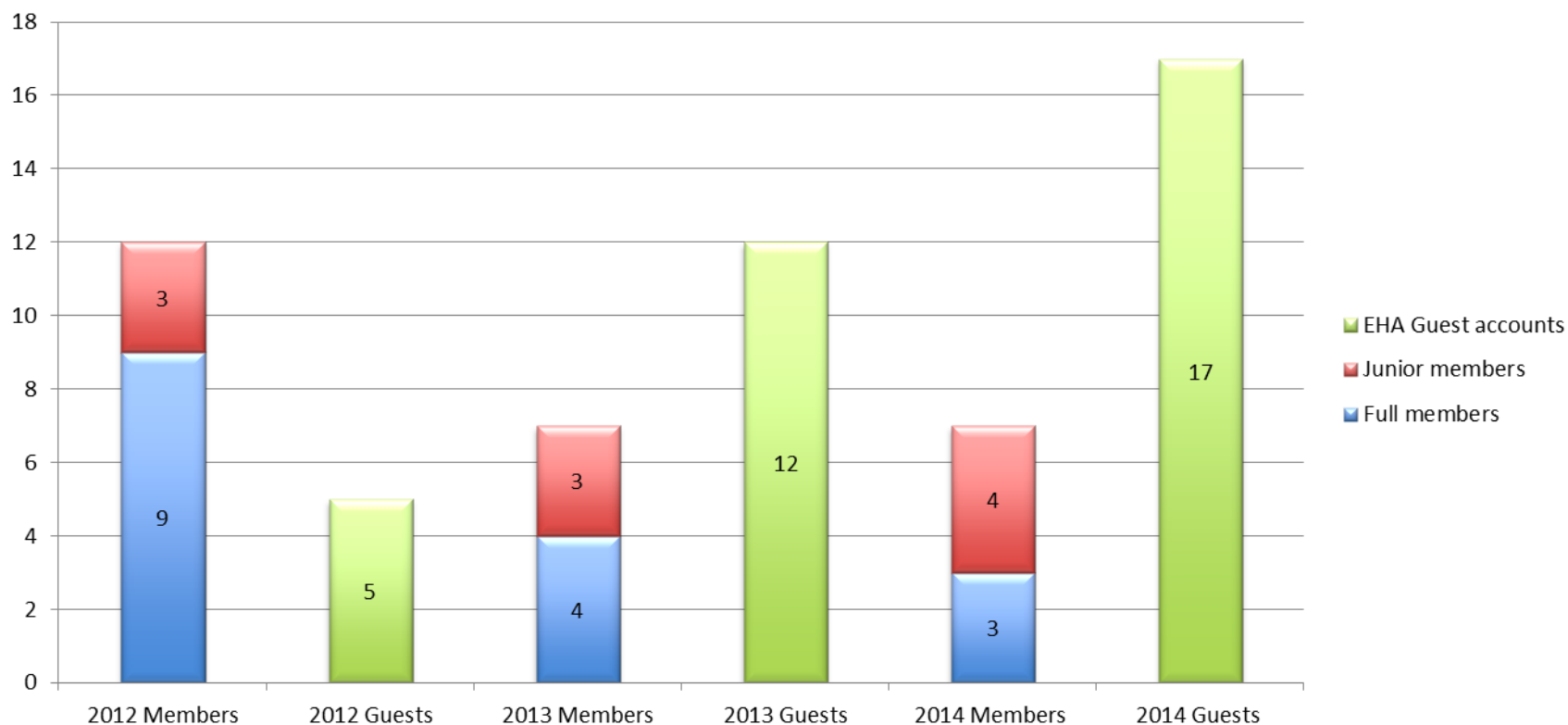
2,134 Senior members – 1,310 Junior members

Members per continent





Estonia: number of EHA Members and EHA Guest accounts 2012 – July 2014



Milline on EHA agenda?

Meditiiniline haridus

Teadustöö

Hematoloogia teavitustöö

(Lobbying for Hematology)



EHA Haridus/Koolitus:

Integratsioon

EHA pakub mitmekülgset meditsiinilise koolituse programmi:

- Aastakongress juunis ühes euroopa suurlinnas
- Koolitused, mida nimetatakse 'Hematology Tutorials'
- EHA-Teaduslikud Töögrupid (SWG's) Teaduslikud Seminarid
- EHA Õppekeskus; EHA veebipõhine õppeplatvorm
- 'EHA Learning Center'

Learning





Väga varieeruv

- Hematoloog, iseseisev erialana (Eesti)
 - Hematoloog ja sisearst (Rootsi, Bulgaaria, Holland, Belgia - kompetents)
 - Hematoloog ja onkoloog (Saksamaa)
- Õppeaeg 2 (Holland, Bulgaaria) – 8 aastani (UK)

H-Net 2008-2011

Regionaalhaigla



European Network for Harmonisation of Training in Hematology

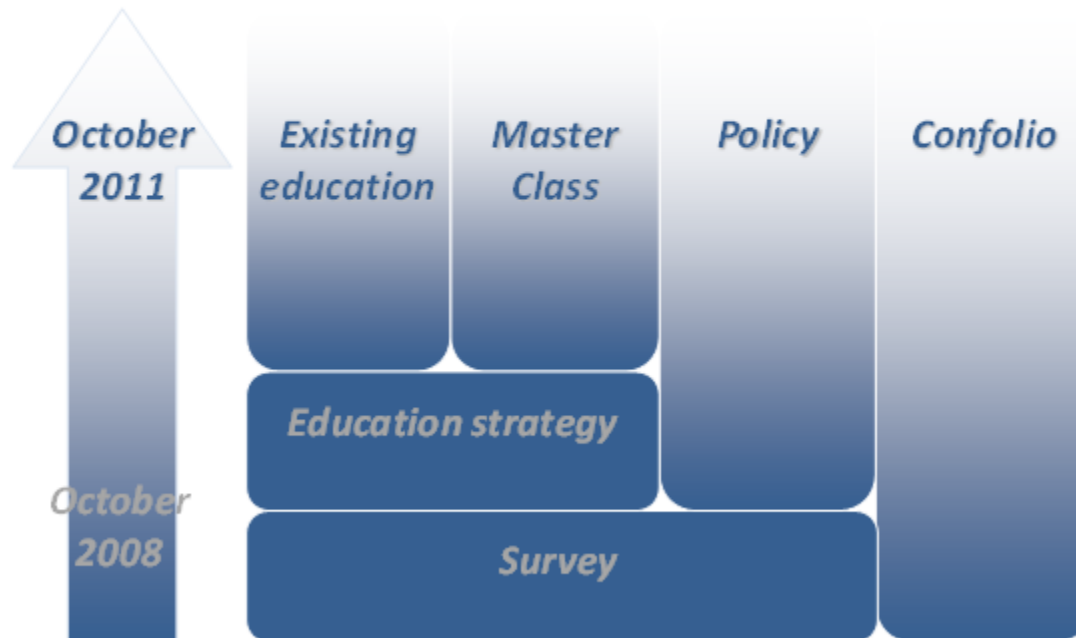
- Eesmärk ühtlustada ja parandada hematoloogide väljaõpet Euroopas
- Tähtsustada Hematoloogiat kui iseseisvat eriala Euroopa tasemel

Rahastatud Euroopa Komisjoni poolt
(Leonardo da Vinci)

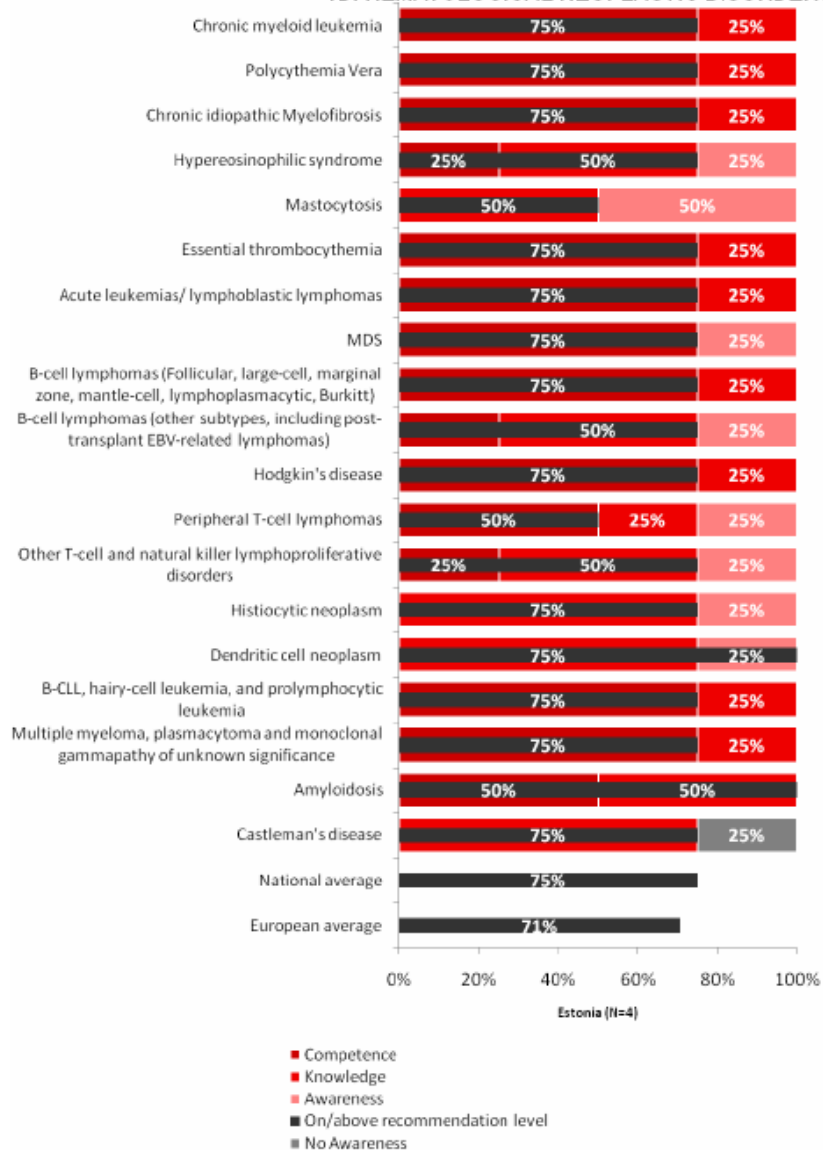




H-Net Building Blocks



1D: HEMATOLOGICAL NEOPLASTIC DISORDERS



H-Net tulemused



- Uus CV-pass
- Meisterklass (Master Class)
- Confolio – EHA Learning Center
- Poliitilisel tasemel Hematoloogia tähtsustamine
- Brüsseli deklaratsioon

EUROPEAN HEMATOLOGY CURRICULUM

I. THE EUROPEAN HEMATOLOGY ASSOCIATION CURRICULUM PROJECT

This document describes the European Curriculum for training in hematology, which is an educational tool of the European Hematology Association (EHA) and reflects the organization's mission statement:

MISSION STATEMENT OF THE EUROPEAN HEMATOLOGY ASSOCIATION (EHA)

"The European Hematology Association (EHA) aims to promote excellence in clinical practice, research and education in European hematology."

DEFINITION OF A HEMATOLOGIST

For EHA a hematologist is a physician who specializes in the diagnosis, treatment, prevention, and/or investigation of disorders of the hematopoietic, hemostatic, and lymphatic systems, and disorders of the interaction between blood and blood vessel wall. Hematology contains both clinical and laboratory competences.

THE EHA CURRICULUM COMMITTEE

The EHA Curriculum Committee (see Appendix

THE ROLE OF EUROPEAN COMMISSION FUNDING

The start of the Hematology Curriculum was the EC Leonardo da Vinci (LdV) funded project "The European Council for Accreditation in Hematology" or ECAH 2004-2006, with EHA as the leading organization. This project resulted in three main achievements - the EHA Curriculum, the EHA CME system, and the restoration of hematology as an EU-recognized specialty. ECAH also led to the establishment of the network of national linkers. The Curriculum Committee and the network remained active after the end of the ECAH project and jointly developed the basis for the subsequent LdV-funded project, H-Net 2008-2011.

H-NET

The major aim of H-Net is to harmonize and improve training in hematology by creating a platform for targeted education, based on identified competence gaps in individuals, countries and regions and a new system of training and communication. The EHA European Curriculum plays an important role in this project.

Kes on hematoloog?



- For EHA a hematologist is a physician who specializes in the diagnosis, treatment, prevention and/or investigation of disorders of the hematopoietic, hemostatic, and lymphatic systems and disorders of the interaction between blood and blood vessel wall.
- Hematology contains both clinical and laboratory competences



- I Kliiniline hematoloogia: healoomuline
- II Kliiniline hematoloogia: müeloidsed kasvajakad
- III Kliiniline hematoloogia: lümfoidsed kasvajakad ja plasmarakulised haigused
- IV Kliiniline hematoloogia: Tüvirakkude transplantatsioon ja spetsiaalsed ravid
- V Laboratoorne diagnostika
- VI Tromboos ja hemostaas
- VII Transfusioonimeditiin
- VIII Üldised oskused

Level 3 descriptors: The trainee can:

2 CLINICAL HEMATOLOGY: MYELOID MALIGNANCIES

2A: MYELOPROLIFERATIVE AND MYELOYDYSPLASTIC NEOPLASMS

The trainee has received training in:

- a) Chronic myeloid leukemia (level 3)
- b) Polycythemia vera (level 3)
- c) Primary myelofibrosis (level 3)
- d) Essential thrombocythemia (level 3)
- e) Chronic eosinophilic leukemia (level 2)
- f) Mastocytosis (level 2)
- g) Neoplasms with eosinophilia and abnormalities of PDGFR and/or FGFR1 (level 2)
- h) CMML (level 3)
- i) MDS low risk disease (level 3)
- j) MDS intermediate and high risk disease (level 3)
- k) Other Myeloproliferative and Myelodysplastic disorders including pediatric disorders (e.g. JMML) (level 2)

	Level 1	Level 2	Level 3
a) Chronic myeloid leukemia (level 3)	☐	☐	☒
b) Polycythemia vera (level 3)	☐	☐	☒
c) Primary myelofibrosis (level 3)	☐	☐	☒
d) Essential thrombocythemia (level 3)	☐	☐	☒
e) Chronic eosinophilic leukemia (level 2)	☐	☒	☐
f) Mastocytosis (level 2)	☐	☒	☐
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j) MDS intermediate and high risk disease (level 3)	☐	☐	☒
k) Other Myeloproliferative and Myelodysplastic disorders including pediatric disorders (e.g. JMML) (level 2)	☐	☒	☐

Patient management	- describe in more detail the pathogenesis, epidemiology, and clinical features associated with the condition; - identify symptoms and tests required to diagnose condition and interpret test results correctly (as Level 2); - decide on management / treatment and manage the patient during treatment [NOTE: for most disorders this includes managing first-line treatment including clinical trials, and identifying treatment failure and need for second-line management] [NOTE: will have seen and managed an appropriate number of patients, taking into account the incidence of the condition]
Laboratory skills and diagnosis	- in relation to specific laboratory tests, interpret raw results and report/apply them; - in relation to specific tests, and recognising variation in professional roles across Europe, perform tests
Transfusion medicine	- manage special requirements (e.g. platelet refractoriness, allo-immunisation); - select and administer special components (e.g. cryo-preserved stem cells, autologous transfusion); - provide consultation on transfusion needs in invasive procedures; massive transfusion (e.g. in pregnancy, surgery, trauma)
Knowledge of professional issues	- fulfil all the requirements of Levels 1 and 2, and in addition; - seek out and integrate new knowledge and thinking on the specific issue; - explain issue in appropriate language to non-specialist audience (e.g. patient)
General professional skills	- fulfil all the requirements of Levels 1 and 2, and in addition; - recognise and plan how to improve own limitations in skill areas and demonstrate that this has happened

CV Passport – oodatud oskused

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Level 3 descriptors: The trainee can:

Patient management	- describe in more detail the pathogenesis, epidemiology, and clinical features associated with the condition; - identify symptoms and tests required to diagnose condition and interpret test results correctly (as Level 2); - decide on management / treatment and manage the patient during treatment [NOTE: for most disorders this includes managing first-line treatment including clinical trials, and identifying treatment failure and need for second-line management] [NOTE: will have seen and managed an appropriate number of patients, taking into account the incidence of the condition]
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Knowledge of professional issues	- fulfil all the requirements of Levels 1 and 2, and in addition; - seek out and integrate new knowledge and thinking on the specific issue; - explain issue in appropriate language to non-specialist audience (e.g. patient)
General professional skills	- fulfil all the requirements of Levels 1 and 2, and in addition; - recognise and plan how to improve own limitations in skill areas and demonstrate that this has happened

EHA Master Class

Kirjeldus

Internenti õppekursus
väiksele grupile õpilastele
koos juhendajaga, mentor

- ❑ Võimaldab ühtlustada ja tõsta hematoloogia õppekvaliteeti
- ❑ Aitab noortel hematoloogidel luua professionaalset ja sotsiaalset võrgustikku, et jagada teadmisi ja kogemusi

1) **Täispikkuses Meisterklass** - >> Kursus (6 kuud):
käsitseb mitut hematoloogia valdkonda

2) **“Bite size” Meistrikllass** - >> on mõeldud kitsama
valdkonna teadmiste parandamiseks (algus Oktoober 2014)



Regionaalhaigla

EHA ÕPPEKESKUS

Kõikehõlmav hematoloogia
Põhineb Euroopa Hematoloogia Curriculum'il
Eelretsenseeritud õppematerjal
Sobilik residentidele, noortele
ja kogenud hematoloogidele
Kätte saadav ehaweb.org
EHA19 Kongressi materjalid

EHA Members enjoy free and
unlimited access
to the EHA Learning Center



Brüsseli deklaratatsioon

Regionaalhaigla

On March 11, 2011, H-Net met in Brussels. H-Net is the European Network for Harmonisation of Training in Haematology and is funded by a Leonardo da Vinci Grant from the European Commission, DG Education and Culture. The meeting was attended by most of its partnership which includes the European Hematology Association (EHA), the European School of Haematology (ESH), 24 national societies for Haematology in Europe, and the universities of Liverpool and Uppsala. On the occasion of the meeting, there was unanimous support for the

"Brussels Declaration on the Recognition of Professional Qualifications" that follows:

The mobility of Haematology trainees is of the utmost importance. Mobility stimulates the exchange of knowledge and experience in a profession that has, in terms of research, literature and continuing education, already developed a decidedly international orientation. Moreover, the mobility of trainees from Member States that are challenged in their educational resources allows for increasing competence to the level of best practices in Europe. H-Net supports the Haematology Curriculum which expresses the minimum recommended levels of competence that a Haematology trainee should attain on a consensual description of the scope of the specialty of Haematology. The approach is decidedly bottom-up: Member States are free to opt in on (parts of) the curriculum given national circumstances that are disease specific (e.g. prevalence of certain diseases) and reflect professional traditions (e.g. in Austria or Germany the specialty of haemato-oncology exists).

H-Net believes it can support the European Union with its aim to introduce a "28th regime" curriculum and suggests that it be based, where the discipline of Haematology is concerned, on the Haematology Curriculum as developed by EHA with the support of 31 national societies of Haematology. Furthermore, given the scope of the discipline of Haematology as described in the Haematology Curriculum, H-Net believes it can support the European Union by

recommending **the minimum training requirement for Haematology be five years or three years when previous training encompassed the equivalent of at least two years in internal medicine.**

So agree:

Ulrich Jäger - European Hematology Association
Eva Hellstöm-Lindberg - European Hematology Association, Swedish Society for Hematology
Paolo Rebulla - European Hematology Association
Cheng Hock Toh - European Hematology Association
Andreas Petzer - Austrian Society of Hematology and Oncology
Dominique Bron - Belgian Haematological Society
Margarita Guenova - Bulgarian Society of Clinical and Transfusion Haematology
Jaroslav Cermák - Czech Haematology Society
Ole Weis Bjerrum - Danish Society of Hematology
Gert Ossenkoppele - Dutch Society of Haematology
Edward Laane - Estonian Society of Hematology
Nancy Hamilton - European School of Haematology
Charis Matsouka - Hellenic Society of Hematology
Szabolcs Modok - Hungarian Society of Hematology and Transfusiology
Francesco Buccisano - Italian Society of Hematology
Antonio Parreira - Portuguese Society of Hematology
Krzysztof Lewandowski - Polish Society of Hematology and Transfusion Medicine
Tomas Lipšic - Slovak Society of Hematology and Transfusiology of Slovak Medical Association
Mikuláš Hrubisko - Slovak Society of Hematology and Transfusiology of Slovak Medical Association
Jose Tomas Navarro Ferrando - Spanish Society of Hematology and Hemotherapy
Maria Liljeholm - Swedish Society of Haematology
Pierre Cornu - Swiss Society of Hematology
Hamdi Akan - Turkish Society of Hematology
Janet Strivens - University of Liverpool
Ambjörn Naeve - Uppsala University



- ESH-EHA 11th Tutorial, Diagnostic Work-Up of Hematological Malignancies Focus on Lymphoid Malignancies (Type II Tutorial), May 15–17, 2009 Chairs: E. Laane, E. Kimby, G. Zini, R. Foà
- ESH-EHA 19th Tutorial, Diagnostic Work-Up of Hematological Malignancies Focus on Myeloid Malignancies (Type III Tutorial), May 06–08, 2011 Chairs: E. Laane, A. Porwit, G. Zini, H. Everaus
- ESH-EHA 33rd Tutorial (Type I Tutorial) on Thrombosis, Hemostasis and Iron September 12-14, 2014 Chairs : E. Laane, R. Lassila, S. McCann

Hematoloogia – eriala

Prof. Hele Everaus

Regionaalhaigla



RESIDENTUURI PROGRAMM HEMATOLOOGIA ERIALAL

Regionaalhaigla

Hematoloogia
residentuur Eestis

1	PROGRAMMI NIMETUS EESTI JA INGLISE KEELES	Hematoloogia <i>Hematology</i>	Kood 2678
2	ÕPPEASTE	Residentuur	
3	VALDKOND	Tervis ja heaolu	
4	ERIALA(D)	Hematoloogia	
5	ÕPPEASUTUS(ED)	Tartu Ülikool	
6	TEADUSKON(NA)D	Arstiteaduskond	
7	NOMINAALNE ÕPPEAEG	4 aastat	
8	ÕPPETÖO VORM	Päevane õpe	
9	ÕPPETÖO KEEL	Eesti keel	
10	ÕPIVALJUNDITE SAAVUTAMISEKS VAJALIKUD TEISED KEELED	enalakirjanduse lugemiseks vajalik inglise keele oskus	
11	ÕPPEKAVA VERSIOON	2011_1	
12	KINNITAMINE	1. Teaduskonna nõukogus 16.03.2011 2. Ülikooli nõukogus 25.03.2011	
13	VASTUVÕTUTINGIMUSED	1. Residentuuri võetakse konkursi alusel vastu isikuid, kes on registreeritud EV Terviseameti tervishoiutöötajate registris ja kes on lõpetanud: - Tartu Ülikooli arstiõppe, olles immatrikuleeritud arsti- või hambaarstiõppesse 1997/1998. õppeaastal või hiljem; - Tartu Ülikooli arstiõppe ja internatuuri, olles immatrikuleeritud arsti- või hambaarstiõppesse enne 1997/1998. õppeaastat või - kellel on vastav välisriigis omandatud kõrgharidus. 2. Konkursitingimused määratakse residentuuri eeskirjas.	
14	RESIDENTUURI ÜLDEESMÄRGID	Residentuuri üldiseks eesmärgiks on valmistada ette hematoloogia eriala spetsialistid, kellel on nii teoreetiline kui ka praktiline igakülgne väljaõpe iseseisvaks tööks hematoloogina.	
15	ERIALAPROGRAMMI STRUKTUURI LÜHIKIRJELDUS	Hematoloogia residentuur toimub 4-aastase õppena, kokku 44 kuud, millele lisandub 4 puhkusekuud. Õpe koosneb nii praktilisest kui ka teoreetilisest koolitusest. Arst-residentidele koostatakse individuaalne õpingukava: Õpingukava sisaldab: - Praktilist koolitust - kohustuslikud tsükliid – minimaalselt kokku 40 kuud - valikulised tsükliid kokku 4 kuud - Teoreetilist koolitust 24 EAP mahus	
16	ANTAV KVALIFIKATSIOON/ KRAAD	<i>Hematoloogi kutse</i> <i>Hematologist</i>	
17	NÕUDED ÕPPEPROGRAMMI LÕPETAMISEKS	Residentuuri programmi läbimine täies mahus ning lõpueksami edukas sooritamine. Residentuuri vältel peab arst-resident läbima kõik kohustuslikud praktilise koolituse tsükliid ning vähemalt kaks valikulist praktilise koolituse tsükliid.	



4-aastane õpe

Omab täielikku ettevalmistust järgnevates eriala aspektides:

- Kliiniline hematoloogia
 - Punavere patoloogia, luuüdi puudulikkus, mittekasvaja-
jalised leukotsütaarsed patoloogiad, hematoloogilised
kasvajad, vereloome tüvirakkude transplantatsioon,
hematoloogilise patoloogia ravi aspektid, toetusravi ja
erakorraline abi pediaatriline hematoloogia, erinevad
situatsioonid
- Diagnoosimine
 - Morfoloogia, punavere laboratoorsed uuringud,
immuunhematoloogia, immuunfenotüüpiseerimine,
geneetika ja molekulaarpatoloogia



Omab täielikku ettevalmistust järgnevates eriala aspektides:

- Trombootilised ja hemostaatilised patoloogiad
 - Laboratoorsed uuringud, omandatud veritsused, kaasasündinud veritsused, trombotsüütide patoloogiad, trombofiilia/tromboos, trombolüütilised preparaadid
- Transfusioonimeditsiin
 - Veredoonorlus, sobivustestimine, vere ja vere komponentide kasutamist reguleeriv seadusandlus, juhendid
 - Transfusiooni praktiline teostamine, reaktsioonid ja nende käsitlemine
 - Koesobivusantigeenid, nende testimine
 - Flebotoomia raviotstarbeline kasutamine



Omab täielikku ettevalmistust järgnevates eriala aspektides:

- Üldised oskused
 - Kliiniliste uuringute läbiviimise põhimõtted, oskus kasutada meditsiini andmebaase kliiniliste otsuste tõenduspõhisuse toetamiseks
 - Tõenduspõhise, personaliseeritud ja süsteemse meditsiini põhimõtete tundmine
- Teoreetiline koolitus 24 AP
- Arst-residentidele koostatakse individuaalne õppekava
- Lõpueksam

Hematoloogia residentuuri lõpetanud

Regionaalhaigla



1997 – dr. Ain Kaare
1999 – dr. Katrin Palk
1999 – dr. Ulvi-Kaire Kongo
1999 – dr. Mari Punab
1999 – dr. Kadri Urbsoo
2001 – dr. Edward Laane
2001 – dr. Sirje Mikkel
2003 – dr. Virge Aabrams
2004 – dr. Diana Loigom
2005 – dr. Ines Vaide
2008 – dr. Tatjana Tratš
2009 – dr. Dmitri Gorjatšev

Hematoloogia osakond Tallinna Vabariiklik Keskhaigla

Regionaalhaigla



Tallinna Vabariiklik Kekshaigla Hematoloogia

Regionaalhaigla



Dr. Luule Sepp

Regionaalhaigla



Dr. L. Teemusk, dr. L. Sepp, dr E. Laane, dr. H-M. Proso

Aili Laane
1938-2008

Regionaalhaigla



Dr. Katrin Palk
Dr. Mirja Varik

Regionaalhaigla



Dr L. Sepp, dr M. Varik, dr. K. Palk

Dr. Eevi Pärsik

Hematoloogia, reumatoloogia

Regionaalhaigla



Dr. Ines Vaide

Regionaalhaigla



Kristiina Karp

Hemofiiliaõde

Regionaalhaigla



Jaanika Jänes

Müeloomiõde

Regionaalhaigla



Dr. Sirje Suuroja
Dr. Anna Porwit

Regionaalhaigla



TÄNAN!

Regionaalhaigla



PALJU ÕNNE JUUBELI PUHUL!