

2018

Activity Report



EHRA at a glance

Mission:

Improving the quality of life and reducing sudden cardiac death by limiting the impact of heart rhythm disturbances

The following report will offer greater detail, but here are just a few highlights from the past 12 months:



President's Introduction

I am pleased to present you the 2018 activity report of the European Heart Rhythm Association (EHRA). Together, we again have achieved many things during the last year.

A new EHRA Board started its work in August, at the ESC Congress. It consists of veterans and newcomers to guarantee the continuation of active programmes, energy for new initiatives, and more comprehensive representation among our constituency.

This report presents an overview of our most significant achievements, which confirm EHRA's position as the leading heart rhythm association. Moreover, we have intensified our collaboration with sister societies.

Together we will strive to further our association's mission, i.e. to limit the impact of heart rhythm disturbances for our patients. To achieve that, we will continue our efforts for an outstanding annual congress, high-quality educational courses and webinars, certification of EP experts through exams, scientific initiatives (including partnering in EU research projects, ESC registries, and prospective trials like EAST and STEEER-AF), practical guidance documents, new health initiatives, and advocacy at different levels.

I am grateful to preside over such a formidable organisation by counting on board members and a vast group of volunteers in and out of EHRA's 12 official committees. Furthermore, we can rely on different staff members at the European Heart House, who try to keep up with our expanding number of activities.

Please take the time to read through this report and appreciate the efforts of all volunteers and staff. Even if you are not currently part of one of EHRA's committees, you can contribute. Feel free to contact us, since our board is committed to including whoever has energy and ideas that help to pursue our mission.

I certainly hope to meet you at our annual Congress, 17-19 March in Lisbon, and at many other opportunities throughout Europe.

Thank you for being part of EHRA.

With my best wishes,

Prof. Hein Heidbüchel, MD PhD, FEHRA, FESC EHRA President 2018 - 2020



EHRA 2018-2020 Board

As of June 2017, EHRA's board is aligned with the ESC's strategic plan, adopting the five pillars structure.



Executive Board Members



Prof. Hein Heidbüchel President FESC, FEHRA



Prof. A. John Camm Past-President FESC, FEHRA



Prof. Christophe Leclercq President-Elect FESC, FEHRA



Prof. Helmut Pürerfellner Treasurer **FESC**



Prof. Jose Luis Merino Secretary **FEHRA**



Prof. Gerhard Diller Representative of the ESC WG on Grown-up Congenital Heart Disease



Prof. Dr. Dobromir Dobrev Representative of the ESC WG on Cardiac Cellular Electropysiology



Assoc. Prof. Joost Lumens Representative of the ESC WG on E-Cardiology



Prof. Elijah Behr Representative of the European Cardiac Arrhythmia Genetics Group FESC



Prof. Gerhard Hindricks Editor-in-Chief of EP Europace Journal FESC, FEHRA

ADVOCACY



EDUCATION



CONGRESS





MEMBERSHIP







Dr. F.M. Moscoso Costa













FESC, FEHRA

RESEARCH





Prof. J. Steffel FESC, FEHRA





Prof. I.C. van Gelder

Advocacy

Until August 2018





Health economics Coordinator Prof. F. Leyva



E-communications Committee Dr. C. Elsner



Women in EP Coordinator Dr. S. Ernst FESC

Health Economics

2018 saw the creation of a joint coordinator role for m-Health, health economics and outcomes assessment. The activities have been focused on establishing appropriate goals for the coming term and to strengthen relationships within the ESC, sister organisations, and other international stakeholders, to best promote m-Health and health economics among arrhythmia patients.

E-communications



"The www.afibmatters.org is a multilanguage website providing up-to-date, detailed information in layman's terms from medical doctors on various aspects of atrial fibrillation, such as symptoms, lifestyle recommendations, diagnostic tools and different treatment options. In this way, the website contributes in aiding patients and their relatives to better understanding this disease."

Prof. Natasja De Groot - EHRA E-Communications Committee Member



9 languages: English, French, German, Italian, Spanish, Swedish, Portuguese, Russian and Polish

Advocacy

Women in EP

Goal: to highlight the unique aspects of female gender in patients with cardiac arrhythmias and better represent the female healthcare professionals working in electrophysiology.



220 female EP experts now constitute the Women in EP Scientific Network

Women in EP Scientific Network is growing

180 contacts have declared interest in actively participating in EHRA Congresses and other scientific meetings as chair or speaker

Workshop at EHRA Congress: Over 31% of female faculty for EHRA 2018 were recommended thanks to the Women in EP Scientific Network

Women in EP collaborated on **H2020 ESCAPE NET workshop** on gender differences in healthcare.
This workshop was held during EHRA 2018 and co-chaired by Women in EP Coordinator (2017-2018), Sabine Ernst.

From September 2018





E-communications Committee Dr. F.M. Moscoso Costa



mHealth, Health economics and PROM Coordinator Dr. E. Svennberg



Women in EP Coordinator Dr. L. Vitali Serdoz



Education

PILLAR CHAIRS - Until August 2018



Certification Committee Prof. J. Cosedis Nielsen



Education Committee Prof. J.L. Merino



Selection Committee (incl. Trg fellowship) Prof. P. Kirchhof

Certification

The EHRA certification process aims at assessing the competence, knowledge and skills of physicians and allied professionals. The system is designed to certify both practical experience and expertise in cardiac devices and electrophysiology. EHRA certification was launched in 2005, when 2100 candidates successfully passed the written exam.

This exam is a rigorous test of knowledge with pass marks set by the standard-setting committee using validated statistical methods.

Success in the exam provides 10-year certification at level one, but for physicians, an additional logbook of 200 cases is needed to achieve full level two certification. Success rates have improved in recent years, which may in part be due to the exam preparatory courses organised by the EHRA Education Committee.



The proportion of candidates passing the exam in 2018

The EHRA Recognised Training Centre (ERTC) Programme Initiative encourages good educational practices by providing a quality label for training excellence and efficiency. 23 centres have gone through the selection process and are now enrolled in the programme.



73.5% ELECTROPHYSIOLOGY



69.1% CARDIAC DEVICES



84% ALLIED PROFESSIONALS



Education

Education

Every year, EHRA designs and provides the latest educational training programmes to help maintain professional excellence among cardiologists specialising in pacing and arrhythmias. During 2018, EHRA delivered the following courses:

Date	Торіс	Location	Course Director	Attendees
Mar	Implantable devices for diagnosis and treatment of heart rhythm disorders	St Petersburg	Christophe Leclercq Maxim Didenko	68
Apr	Apr EHRA Interventional EP and Examination Preparatory Course (EPC)		Jose Luis Merino Fernando Arribas	61
June * Clinical electrophysiology and catheter ablation of tachycardia for interventional cardiologists		Moscow	Hein Heidbuchel Amiran Revishvili	76
Oct	Advanced EP with focus on VT	Warsaw	Katja Zeppenfeld 55 Marta de Riva	
	International CP	Vienna	Jan Steffel Jean-Claude Deharo	161
Nov	Advanced EP with focus on AF	Madrid	Luigi Di Biase Andrea Sarkozy	60
Dec	* Cardiac arrhythmia management & cardiac electrophysiology for cardiologists	Moscow	Haran Burri Maxim Didenko	94

^{*} In partnership with the Russian Scientific Society of Clinical Electrophysiology, Arrhythmology and Cardiac Pacing (RSSA).

The aim of "EHRA in Russia" is to enhance EHRA's visibility through three key actions:

- Help Young EPs in Russia by providing them with tailored educational programmes
- Increase EHRA membership among Russian heart rhythm physicians and allied professionals interested in or involved in the field of EP and CP
- Co-developed EP educational courses in the Russian language





Education

ESC eLearning Platform

This platform delivers a series of training modules and aims to coordinate cardiovascular training for the various subspecialties. EHRA content is organised in two tracks and is accessible only to EHRA members.



56 online courses have an assessment mechanism

(MCQ test), allowing you to obtain 1 European CME Credit (ECMEC) per course, upon successful completion

Fellows CP track

(containing 16 individual modules)

Fellows EP track

(containing 43 individual modules which includes 18 modules dedicated to lead management and extraction)

Individual modules normally consist of an on-demand slideshow with accompanying audio. Learning outcomes are assessed with multiple-choice questions.

Webinars

EHRA organised a total of 11 webinars during 2018, as shown in the following table. These included five webinars for EHRA members and a series of six open-access webinars available to everyone. The recordings of these webinars can be found on the dedicated section of the EHRA webpage.

Date	Торіс	Presenter(s)	Moderator	Attendees
Jan	* Pericardial access for ablation: All you should know	Antonio Berruezo	Fréderic Sacher	87
Feb	Left ventricular leads in CRT: Active or passive fixation?	Mauro Biffi Francisco Leyva	Haran Burri	199
Mar	* All you need to know on channelopathies	Arthur Wilde	Christian Wolpert	119
Apr	How to manage bleeding in patients on oral anticoagulants	Peter Verhamme Jan Steffel	Christian Sticherling	207
	* Role of MMI for managing patients with AF	Elif Sade Gianluca Pontone	Gerhard Hindricks	106
May	Dabigatran versus rest of the world (Warfarin, antiXa, Aspirin): What could RE-SPECT ESUS study show differently than NAVIGATE ESUS?	Georg Ntaois Laurent Fauchier Giuseppe Boriani		244
Jun	Robotics in Medicine: Where are we in Electrophysiology?	Christian De Chillou Georg Noelker	Tamas Szili-Torok	138
Jul	* Difficult accessory pathway ablations: What we have learned in the last 30 years	Jose Merino	Isabel Deisenhofer	76
Sep	How to perform safe and effective catheter ablation in the pediatric population	Roman Gebauer	Nico Blom	45
Nov	What is new in the new ESC Syncope Guidelines?	Jean-Claude Deharo Angel Moya Rose Anne Kenny		322
Dec	Ablation of Ventricular Tachycardias (ischemic and non-ischemic)	Frederic Sacher John Silberbauer	Josef Kautzner	354

^{*} Recordings accessible to EHRA members only.

Selection

Following the implementation of the new MedTech regulations, the EHRA Selection Committee is in charge of selecting candidates to attend the EHRA Annual Congress.

472 Educational Congress grants and **207 Industry Congress grants** were awarded for EHRA 2018.

The committee continues the Training Fellowship activities which promote the development of academic medicine in the field of cardiac rhythm disorders in the ESC area (ESC member countries as well as affiliated countries), to reduce differences in the clinical practice and improve cardiac electrophysiological culture.

The fellowship activities cover:

- EHRA International Training Fellowships, in partnership with the Asia Pacific Heart Rhythm Society (APHRS), give physicians from the Asian Pacific zone the opportunity to undertake training in clinical cardiac EP, for one year at approved facilities of ESC member countries.
- EHRA Observational Training Programme gives applicants the chance to attend two to four weeks of clinical shadowing and learning in electrophysiology, and cardiac pacing at one of the EHRA Recognised Training Centres (ERTC).

In 2018, one International Training Fellowship was granted, while 25 EHRA Observational Training Programme grants were awarded to physicians from across Europe.

PILLAR CHAIRS - From September 2018



Certification Committee Dr. S. Tzeis



Education Committee Prof. J. Steffel



Selection Committee Prof. I. Deisenhofer



Congress

PILLAR CHAIR - Until August 2018



Congress Scientific Programme Committee for EHRA 2018 Congress Prof. C. Leclercq

EHRA Congress

EHRA Congress proves to be a fundamental platform for cardiac rhythm scientific exchange and professional networking. Delegates have the chance to learn about new research and meet world-renowned experts.

EHRA Facts & Figures

2018 EDITION



+3,900 participants from 82 countries



+980 abstracts submitted



350 faculty members



+1,600m² exhibition space



+150 scientific sessions



50 exhibiting companies



10 lecture rooms including the Agora



20 hours of CME credits





EHRA 2019

PILLAR CHAIR - From September 2018



EHRA 2019-2020 **Congress Scientific Programme Committee** Prof. H. Burri



Membership

Until August 2018





National Cardiac Societies Committee Prof. I. C. van Gelder



International Affairs Coordinator Prof. L. Mont



Young EP Committee Assoc. Prof. V. Kutyifa

National Cardiac Societies

Three main objectives shape the activities of the National Cardiac Societies Committee

- To improve relations between EHRA and EP NCS/WG as well as monitor their expectations to facilitate collaboration
- To encourage individual members to join EHRA and become more involved in the association
- To implement actions and procedures which lead to better networking, such as the EHRA Summit, and joint sessions on EP NCS/WG events

2018 Highlights:

EHRA Summit

The EHRA Summit was held in June at the European Heart House, Sophia Antipolis, France, and dealt with "Education in a Changing Landscape." More than 100 participants gathered for the event. Representatives from 33 EP NCS/ EP WG of the ESC member countries attended. 41 countries contributed to the discussions on hot topics related to the implementation of new MedTech regulations and the importance of education.

EHRA Joint sessions

EHRA collaborated with EP NCS/WG on several joint sessions throughout the year.

Date	Local Organiser	Event	Topic of joint session	EHRA Representatives
17 Jan	Associação Portuguesa de Arritmologia, Pacing e Eletrofisiologia (APAPE) & Instituto Português do Ritmo Cardíaco (IPRC)	ARRITMIAS 2018 Cascais, Portugal	"Contribution of national associations for diversity and knowledge in Europe"	Hein Heidbüchel Elena Arbelo
4 Oct	Belgium Heart Rhythm Association	12th edition of the Belgian Heart Rhythm Meeting "Arrhythmias for every cardiologist"	"Pacing and synchronism"	Carsten Israel Francisco Leyva
6 Oct	Bulgarian Association of Cardiostimulation and Electrophysiology	Bulgarian Cardiology Congress Albenia, Bulgaria	Joint Session of BSC with ASCEB and EHRA	Gregory Y. H. Lip Martin Borggrefe
8 Oct	Arrhythmia Alliance & British Heart Rhythm Society	Heart Rhythm Congress 2018 Birmingham, UK	"STARS (Syncope Trust And Reflex anoxic Seizure charity) - Take Fainting to Heart: Syncope & PoTs Update"	A. John Camm Richard Sutton
21 Oct	Arrhythmias Working group of the Turkish Cardiac Society	Turkish Society of Cardiology Congress Antalya, Turkey	"Atrial Fibrillation"	Dennis den Uijl Yuri Blaauw

Membership

MEMBERSHIP

Join the leading Network of European Cardiac Rhythm Management

www.escardio.org/EHRA-membership

Get access to a myriad of benefits!



Recognising excellence through the Fellowship of EHRA

Annual call for applications 1 August - 15 October





EP Europace Journal
Print copy





EP Europace Journal online access	SILVER benefits

 Discount on EHRA Congress, educational courses, exams, textbooks and publications Access to EHRA post congress resources on ESC 365 and e-learning Live and on-demand webinars EHRA members' Lounge Voting rights* EHRA Directory 	IVORY benefits	IVORY benefits
€72	€134	€242
€30	€104	€224
£ 60	€104	€224

Nurse, Scientist, Technician
*reserved to ESC member countries

Physician or Cardiologist Under 40 or in training

More discounts, more learning opportunities - Combine EHRA Silver Membership with ESC Professional Membership or with another Subspecilaty Association Silver Membership.

Under 40 or in training? Combine EHRA Silver Membership with ESC Professional Membership and get full access to all ESC family of congresses resources via the New ESC 365.



Membership

International Affairs

The EHRA International Affairs Coordinator is responsible for extending the valuable relationships and deep cooperation between EHRA and its sister societies. Face-to-face meetings were organised at the board level to discuss topics of mutual interest and ongoing collaboration, including scientific documents and joint sessions. These sister societies included APHRS (Asia Pacific), LAHRS (Latin America), HRS (USA).

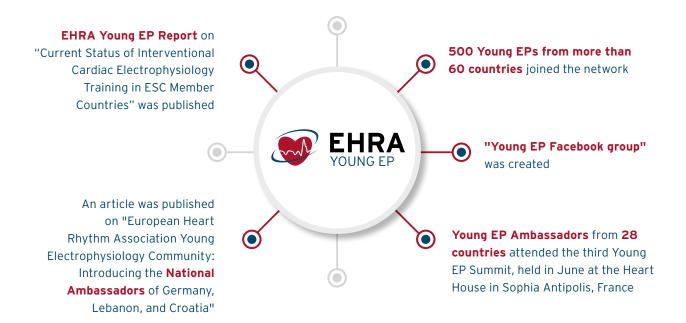
APHRS: Asia Pacific Heart Rhythm Society

HRS: Heart Rhythm Society

LAHRS: Latin American Heart Rhythm Society



EHRA Young Electrophysiologists (Young EP)



From September 2018





National Cardiac Societies Committee Prof. I. C. van Gelder



International Affairs Coordinator Prof. L. Mont



Young EP Committee Dr. J. Kosiuk



Until August 2018





Scientific Documents Committee Prof. G. Y. H. Lip



Scientific Initiatives Committee Dr. N. Dagres

Scientific Documents

The Committee facilitates, develops, and publishes relevant scientific content. Recent articles published in EP Europace Journal include:

- EHRA/ESC Working Group on Thrombosis, EAPCI and ACCA joint European consensus document on Management of antithrombotic therapy in atrial fibrillation patients presenting with acute coronary syndrome and/ or undergoing percutaneous cardiovascular interventions, endorsed by HRS, APHRS, LAHRS and CASSA
- EHRA consensus document on Management of arrhythmias and cardiac electronic devices in the critically ill and post-surgery patient, endorsed by HRS, APHRS, CASSA and LAHRS
- EHRA position paper on Arrhythmia management and device therapies in endocrine disorders, endorsed by APHRS and LAHRS
- EHRA consensus document on Sex differences in cardiac arrhythmia, endorsed by HRS and APHRS
- EHRA expert consensus statement on Lead extraction: recommendations on definitions, endpoints, research trial design, and data collection requirements for clinical scientific studies and registries, endorsed by APHRS/HRS/
- The 2018 European Heart Rhythm Association Practical Guide on Use of non-vitamin K antagonist oral anticoagulants in patients with atrial fibrillation
- EHRA/HRS/APHRS/LAHRS expert consensus on Arrhythmias and cognitive function: what is the best practice?



The "EHRA Key Messages app"

containing the main messages of the published scientific documents in a concise format and providing highlights in an accessible format.

Ranked as the best electrophysiology journal in the world, the EP Europace achieved an impressive **impact** factor of 5.231 in 2017, a new record!

EP Europace is the EHRA's official journal, as well as the one of the ESC Working Groups on Cardiac Cellular Electrophysiology and e-Cardiology.



Scientific Initiatives

The Committee continues to undertake research through its surveys, which provide insight into how consistently arrhythmia treatment is applied across ESC member countries. It also monitors the implementation of ESC Clinical Practice Guidelines.

EP Surveys

The surveys involve over 100 EP European centres belonging to the EHRA Scientific Research Network. These surveys help EHRA determine how cardiologists are adopting the ESC guidelines, their use of, and access to devices or ablation procedures, their use of diagnostic tools, and their treatment of patients with various arrhythmias. The results of these findings are published in the EP Europace Journal and on the EHRA website.

In 2018, the Scientific Initiatives Committee led five surveys, including two surveys evaluating implementation of the guidelines:

- "Management of Patients With Ventricular Arrhythmias and Prevention of Sudden Cardiac Death Translating Guidelines Into Practice"
- "Translating Guidelines Into Practice for the Management of Atrial Fibrillation"

Registries and Trials

EHRA is represented by the Scientific Initiatives Committee Chair within the European Observational Research Programme (EORP) for a number of important registries and trials. These registries and trials enable a timely assessment of the uptake of ESC Guidelines, monitoring of their implementation, and determination of the adherence to these guidelines.

Notable amongst these are:

Atrial Fibrillation Ablation Registry (AFA) aims at describing the clinical epidemiology of patients undergoing an Atrial Fibrillation Ablation procedure, and the diagnostic and/or therapeutic processes applied. The registry tracks new anti-thrombotic drugs and new anti-arrhythmic agents, and determines the outcomes as they relate to AF Guideline adherence. The main results, including one-year outcomes, were published in the European Heart Journal in May 2017.

Atrial Fibrillation General Long-term Registry was launched in 2014. The long-term phase has completed recruitment with more than 19,700 patients currently enrolled. The main results were published in September 2017 in the EP Europace Journal.

Atrial Fibrillation Phase III was launched in June 2018 in adherence to the new guidelines published in 2016. Enrolment is ongoing (snapshot enrolment of a maximum of three months for each centre). Enrolment will be completed in June 2019. Publication of new guidelines is planned for the second semester of 2019 and will include results of AFIII registry.

European Lead Extraction ConTRolled Registry (ELECTRa) is a large prospective, multi-centre, European-controlled registry of consecutive patients undergoing TLE procedures in European countries including a one-year follow-up phase. Recruitment was completed some time ago with more than 3,500 patients and the main results were published in October 2017 in the European Heart Journal.

Epicardial/Hybrid Atrial Fibrillation Ablation Registry (EHAFAR) aims at describing the diagnostic and therapeutic approaches used in routine practice when performing Epicardial Hybrid Atrial Fibrillation Ablation (EHAFA) procedures. This registry aims at enrolling almost 350 patients in 30 centres. Enrollment ends 31 March 2018 when the target is reached (398 patient and 27 centres).

	EORP	#Countries	#Centres	#Patients	Registry Status	Publication Status
	Pilot phase	10	72	1,410	Registry Completed	Publication in progress
	Long-term phase	27	115	3,670	Registry Completed	Publication in progress
Atrial	Pilot phase	9	70	3,229	Registry Completed	Publication in progress
Fibrillation General	Long-term phase	35	488	19,754	Follow-Up ongoing	Publication in progress
	Long-term Sub-study				Enrolment in progress	
Atrial Fibrillation Phase III		18	89	2,180	Enrolment ongoing	-
ELECTRa		19	73	3,555	Registry Completed	Publication in progress
EHAFAR		10	27	398	Enrolment in progress	-

EHRA's involvement in other research activities:

EAST-AFNET 4 Trial

Early Comprehensive Atrial Fibrillation Stroke Prevention Trial (EAST) is a European, investigator-initiated study jointly conducted by AFNET and EHRA. The trial is supported by a unique partnership including Sanofi Aventis and St Jude Medical, receiving further funding from the German Ministry of Education and Research (BMBF) through the German Centre for Cardiovascular Research (DZHK).

Its aims are to determine whether early, comprehensive, rhythm control intervention can help prevent adverse cardiovascular outcomes associated with atrial fibrillation, including stroke and death, compared to usual care. At the end of 2016, recruitment was completed and 2,789 patients were enrolled in 11 European countries. Since January 2017 the follow-up is ongoing in this long-term endpoint-driven study.

• EU funded Projects

Together with the ESC, and through its Scientific Initiatives Committee, EHRA is involved in a number of EU-funded research projects, often as a dissemination partner. EHRA's role is fundamental to ensure that the very latest best practices are shared with as many cardiovascular practitioners, researchers and institutions as possible.

European Sudden Cardiac Arrest network: towards Prevention, Education, New Effective Treatment (ESCAPE- NET). Together with large international scientific societies/associations and the European Resuscitation Council (ERC), EHRA is involved in order to translate the outcomes into European clinical practice for the prevention of Sudden Cardiac Arrest, and European infrastructures to improve survival after SCA.

This is a Horizon 2020 funded project.

At EHRA Congress 2018 a workshop on gender differences in healthcare was held in collaboration with the EHRA Women in EP Coordinator.





This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 733381.

From September 2018

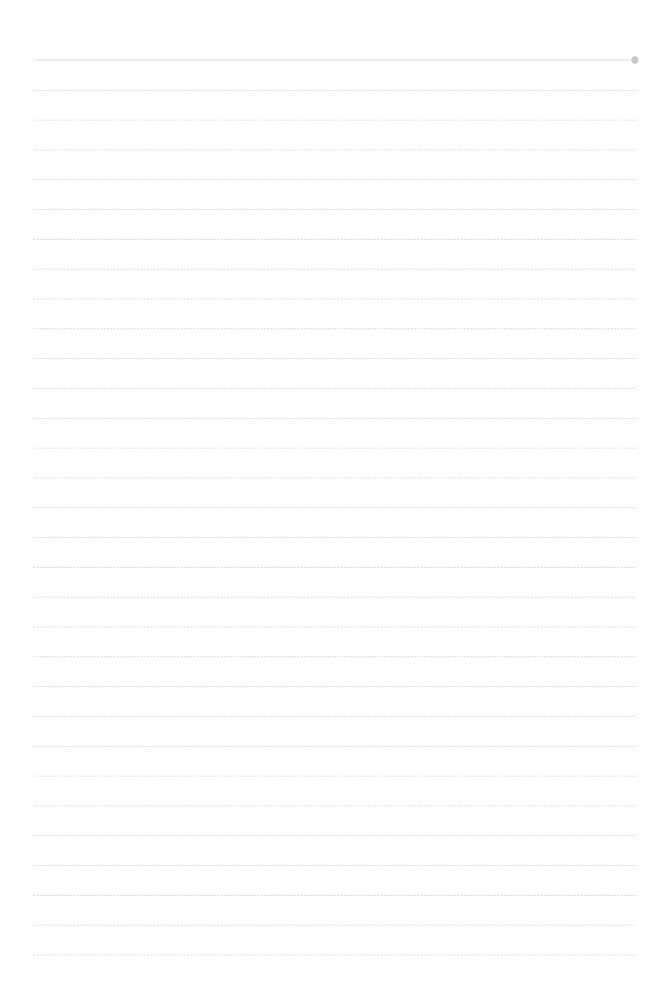




Scientific Documents Committee Dr. N. Dagres



Scientific Initiatives Committee Assoc. Prof. T. Potpara





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