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This Annual Report contains an overview of EHA’s activities in 2021, executed to support EHA’s mission:

“The European Hematology Association (EHA) promotes excellence in patient care, research, and education in hematology.”
INTRODUCTION

“2021: EHA, A NEW ERA, A NEW DIRECTION”

Whilst the world is recovering from the COVID-19 pandemic, with its major impact on the hematology community and on patients suffering from hematologic diseases, I would like to look back on the tremendous work the European Hematology Association (EHA) has developed and executed in 2021, in a fast changing environment.

EHA has undergone major internal changes, enabling us to not only continue but to broaden our work through innovative projects and programs that are a perfect fit for the post-pandemic era. We also continue fulfilling our mission: Connecting hematologists worldwide to support career development and research, harmonize hematology education, and advocate for hematologists and hematology. EHA never stopped striving for excellence and professionalism in all its endeavors, and delivers high quality outputs in a fast evolving world.

Despite having high hopes for a hybrid format, EHA was forced to organize a fully virtual Annual Congress in June 2021. Using networks, expertise, and skills, EHA was able to organize a very successful 2021 virtual congress, extended with Thematic Days, which attracted over 18,000 participants.

In its educational efforts, EHA has initiated the development and delivery of in-house content, supporting continuous, excellent educational programs on our EHA Campus, and has also produced innovative micro-learning programs that rapidly gained popularity on social media. Other successful activities have continued: EHA’s popular and highly educational Scientific Working Group Meetings, the organization of virtual (mini-) Tutorials around the globe, and our (joint) Guidelines Workshops. We are also in the advanced planning stages of the new EHA Research Conference, which will take place in October of this year.

As part of its advocacy program, EHA has engaged with EU institutions and stakeholders to ensure that the views and needs of hematologists are heard, particularly with regard to access to innovative therapies. Pressure is rising on European health systems because of the COVID-19 pandemic, the high cost of many novel therapies, and now the Ukraine crisis. EHA has worked continuously on accelerating the development and revision of EU policies, legislation, and funding programs in hematology related topics.

This is just a selection of the many 2021 activities driven by the EHA Board, our Committee members, and the numerous volunteers with whom we collaborate. With our ambitious projects and programs, we aim to continue to serve the interest of hematologists in their journey towards a cure for all patients suffering from blood disorders.

Prof Elizabeth Macintyre
EHA President
EHA is a non-governmental and non-profit membership organization guided by its mission and core values of independence, integrity, and transparency. Our Board and Committees dedicate expertise and time on a voluntary basis. With our projects and activities, we serve the interest of hematology researchers and clinicians with the goal to improve patient care. EHA has put several instruments in place in order to ensure that these interests are fulfilled.
HOW EHA IS FORMED

THE EHA BOARD IS THE GOVERNING BODY OF THE ASSOCIATION AND DEALS WITH ISSUES OF STRATEGY AND POLICY. THE BOARD SETS THE GOALS AND OBJECTIVES IN CONFORMITY WITH EHA'S STATUTES.

THE 2021 EXECUTIVE BOARD CONSISTS OF:

Elizabeth Macintyre, President
John Gribben, Past President
Antonio Almeida, President-elect

Kirsten Grønbæk, Secretary
Konstanze Döhner, Treasurer
Kimmo Porkka, General Member
The EHA Board sets up committees and units to perform specific tasks and activities. Below is a list of active EHA committees:

- Curriculum Committee,
- EHA Campus Editorial Board,
- European Board for Accreditation in Hematology,
- Education Committee,
- EHA-ASH TRTH Joint Oversight Committee,
- European Affairs Committee,
- Fellowships and Grants Committee,
- Global Outreach Program Committee,
- Good Governance Committee,
- Guidelines Committee,
- HemaSphere Editorial Board,
- Membership Committee,
- Nomination Committee,
- Online Case Unit,
- Research Committee,
- Scientific Program Committee, EHA Congress 2022,
- SPC Advisory Board, EHA Congress 2022,
- Sponsor and Fundraising Committee,
- SWG Committee,
- YoungEHA Committee.

The EHA Board and its committees are supported by the Executive Office, located in The Hague, the Netherlands. The Executive Office consists of an international team of 45+ professionals who work in a dynamic, result-driven, and open environment, taking pride in serving the association in an efficient manner.
WHAT EHA DOES...

BY ORGANIZING AN ANNUAL CONGRESS, PROVIDING AN EDUCATIONAL PROGRAM BASED ON THE EUROPEAN HEMATOLOGY CURRICULUM, PUBLISHING A JOURNAL, LOBBYING FOR HEMATOLOGY, PROMOTING RESEARCH, OFFERING FELLOWSHIPS AND MENTORING PROGRAMS, EHA SUPPORTS HEMATOLOGISTS IN AND OUTSIDE EUROPE TO FURTHER IMPROVE THE PLIGHT OF PATIENTS SUFFERING FROM BLOOD DISORDERS.

...CONNECTS HEMATOLOGY PROFESSIONALS

With 4,831 members in 100 countries worldwide, EHA is the largest European-based association that connects hematology professionals and opens opportunities for both professional and personal development within the field of hematology.

...MAKES HEMATOLOGY KNOWLEDGE AVAILABLE WORLDWIDE

Based on its educational program, EHA develops smaller scale meetings and exports them outside Europe.

...HARMONIZES HEMATOLOGY EDUCATION

EHA is one of the largest international, independent providers of peer-reviewed hematological knowledge. As a knowledge platform, the association offers a comprehensive and integral curriculum which forms the basis of the Medical Education Program (MEP). The MEP enables professionals to improve their hematology knowledge through the EHA Learning Center, master classes, and scientific meetings. This allows professionals to always be aware of the latest trends, developments, publications, and studies.

...ENCOURAGES PROFESSIONAL DEVELOPMENT AMONG HEMATOLOGISTS

EHA delivers on its promise to support the careers of young researchers in hematology in Europe through its Career Development program. This program supports research funding, mobility, training, and mentoring programs with top-tier scientists.

...ADVOCATES FOR HEMATOLOGY

EHA represents hematology and hematologists in the European political and policy arena.

It does so primarily by:

• raising awareness of hematology as a distinct medical discipline with specific needs,
• increasing the visibility of EHA as the representative of hematology professionals in Europe,
• advocating key EHA positions vis-à-vis policymakers, politicians, and interest groups,
• contributing to policy debates, to influence future legislation/regulation, and
• building relationships and alliances that support and strengthen our advocacy work.

By engaging with EU institutions and other relevant stakeholders — patients, other medical professions, pharmaceutical companies, issue-based expert groups — EHA promotes the interests of its members in key policy areas.

EHA strives to achieve more and better research funding opportunities, improve regulation, increase the availability and affordability of medicines, and harmonize education and training of hematologists.
CONNECTING HEMATOLOGISTS WORLDWIDE
With 4,831 members in 2021, there has been an increase (8.6%) in the number of EHA members compared to 2020. The main membership base is situated in Europe, which accounts for almost 75% of our members.

In 2021, the joint memberships with various National Hematology Societies in Europe were prolonged. Members of the Spanish, British, Italian, and Swiss Societies of Hematology can make use of the joint membership. Joint membership with the Hellenic Society of Haematology (Greece) will launch in 2022.

Membership has been promoted via different communication channels such as the website, promotional emails, and Congress. During and after the virtual EHA Congress in June, members are given a 50% discount.
The YoungEHA committee operated completely virtually in 2021 due to the COVID-19 pandemic. Despite these limitations, they were involved in the organization of the EHA2021 Virtual Congress for the YoungEHA Research Meeting (YERM) with an average attendance of about 500 people, and for two YoungEHA sessions with an attendance of more than 500 and 400 attendees. There was also a considerable online presence.

2021 came with a promise of hope for a better year. Whether it delivered – that’s up for debate!
Despite the current climate, it is clear that our community remains engaged and keen for positive change. We plan to strengthen these bonds and build new ones, as we continue to be a voice for the young hematology community.

The YoungEHA committee represented a community of over 1800 junior EHA members in 2021. We received a high interest of new applicants for our committee, with 30 applicants for three open positions.

In the future, the YoungEHA committee hopes to continue this positive trend in representing the voice and needs of young hematologists, young scientists, and other early career members within EHA, and to engage the YoungEHA community in the field of hematology and EHA activities.
The EHA2021 Virtual Congress was once more an immense success. Thanks to the great collaboration and support of the Scientific Program Committee and the EHA Board, the EHA2021 Virtual Congress permitted hematologists from around the world to immerse themselves in the latest news in hematology and its subspecialties. This success would not have been the same without the support of EHA’s industry partners and sponsors; and last, but not least, without the passion and enthusiasm of members of the Hematology community. The EHA2021 Congress chapter closed on August 15, 2021. You will find the EHA2021 Congress report below.

EHA is working on the next Congress, innovating the congress model further.
34.29% of speakers / chairs were women.

Almost four in ten (38.36%) invited speakers were female.

47.14% of speakers in the Congress Abstract Program were women.

45% of EHA members identify as women, 49% identify as men, and 6% are unspecified.

EHA includes the many voices of the hematology community: eha.nl/taskforceDEI

3,849,340 REACHED ON FACEBOOK

30,900,997 IMPRESSIONS
HARMONIZING HEMATOLOGY EDUCATION
EDUCATION

“AN INVESTMENT IN KNOWLEDGE PAYS THE BEST INTEREST”

EHA CAMPUS: IN-HOUSE CONTENT CREATION

The EHA Campus has grown exponentially in 2021, and has been filled with amazing courses, many of them created in-house by our creative team of hematology experts, instructional design specialists, and medical writers. By creating courses ourselves, EHA can guarantee objective content that is free of commercial influence. EHA also has the ability to update this material regularly as science progresses. In parallel, EHA continues to work with medical communication agencies when our needs are greater than our capacity to produce content ourselves.

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2021</th>
</tr>
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<tbody>
<tr>
<td>TOTAL LOGINS</td>
<td>18379</td>
<td>191015</td>
</tr>
<tr>
<td>UNIQUE CAMPUS USERS/VISITORS</td>
<td>3708</td>
<td>4406</td>
</tr>
<tr>
<td>COURSE ENROLLMENTS</td>
<td>4037</td>
<td>4114</td>
</tr>
<tr>
<td>COURSE PASSED</td>
<td>1165</td>
<td>1988</td>
</tr>
</tbody>
</table>
LOGINS PER MONTH

- 2020: 1531
- 2021: 1581

AVERAGE UNIQUE USERS/ VISITORS PER MONTH

- 2020: 309
- 2021: 367

COURSE ENROLMENTS PER MONTH

- 2020: 297
- 2021: 343

COURSES COMPLETED BY PARTICIPANTS (PASS PERCENTAGE)

- 2020: 29%
- 2021: 48%

Courses completed in 2021
- Jun: 74
- Total: 968

Course enrolments in 2021
- Jun: 192
- Total: 2231

Campus users/visitors in 2021
- Jun: 396
- Total: 2373

Total logins in 2021
- Jun: 920
- Total: 9881
QR CASES:

QR Case 1: Thrombosis and hemostasis
QR Case 2: Acquired TTP
QR Case 3: Heparin-induced thrombocytopenia
QR Case 4: CML (1)
QR Case 5: CML (2)

CLINICAL CASES UNCOVERED:

Clinical Cases Uncovered - 23
Clinical Cases Uncovered - 24

COURSES

Presentation skills
E-course on thrombosis (updated)
Thalassemia: Follow the Iron
Women with Bleeding Disorders
ITP in Practice
Treatment of Adult ITP: A Guideline to the Guidelines
• Immunotherapy Program
  o Regulatory Aspects of Immunotherapy
  o Tumor Antigen-Targeting Monoclonal Antibodies
  o Ethics, Consent and the Need for Multidisciplinary Care in Immunotherapy Clinical Trials and in Clinical Practice
  o Cell Therapy
• EHA-LSHBT Hematology Updates (each course includes a keynote lecture and a clinical case)
  o β-Thalassemia
  o Chronic Lymphocytic Leukemia (CLL)
  o Iron Deficiency (ID)/Iron Deficiency Anemia (IDA)
  o Acute Myeloid Leukemia (AML)
  o Acute Lymphoblastic Leukemia (ALL)
  o Mantle Cell Lymphoma (MCL)
  o Hemophilia
• Diagnosing and treating iron deficiency (each course includes an e-learning module and a podcast)
  o Iron Deficiency - Webinar and Reflection
  o Module 1: Heart Failure
  o Module 2: Chronic Kidney Disease
  o Module 3: Women
• Hematology of the Aging Patient: Dispelling Myths (each course includes an e-learning module and a podcast)
  o The definition of aging
  o Comprehensive Geriatric Assessment (CGA) of Older Adults
  o Inappropriate Medications
  o Frailty and Medical Decision-Making
• Thalassemia
  o Fertility, Pregnancy, and Quality of Life in Thalassemia Patients
  o Treatment of Thalassemia Beyond Transfusion and Iron Chelation
• SCD
  o Sickle Cell Disease Screening and Diagnosis
  o Sickle Cell Disease Complications
  o Sickle Cell Disease Treatment
Available on the EHA Campus (for EBAH credits) but also on Apple Podcasts, Google, Spotify and multiple other platforms, our experts’ podcasts have been very successful in 2021. Since January 2021, we published a total of 22 podcasts, covering topics ranging from hematopoietic stem cell transplantation (HSCT) to patients’ points of view on SCD or MM in underserved patients’ populations.

2021, THE YEAR OF SOCIAL MEDIA: MICROLEARNING FOR ALL

#Thinking Thursday are visual challenges proposed to our readers every other Thursday on our different online platforms (Twitter, Instagram, LinkedIn, and Facebook). We offer schemas depicting clinical challenges including empty boxes where readers must guess what information is missing.

On EHA’s Twitter account, every other Monday is an #EHACase day: we challenge our readers with a bite-size clinical case that can involve a patient’s clinical presentation, blood count, imaging, or cell morphology.

Our “classical” Learning Mondays questions went visual: On alternate Mondays, you will find a hematological challenge to test your knowledge; answers and feedback are given the following week.

Would you like to review diagnostic criteria, treatment guidelines, or clinical algorithms? Monthly QR cases, accessible on your phone by scanning the QR code published on social media, interactively guide you through the work-up and management of hematology patients. Find the links to our already published social media challenges here.
EUROPEAN HEMATOLOGY EXAM

The fifth European Hematology Exam took place on June 3, 2021. In 2021, the EHA Congress was virtual and no main exam session could take place. National societies were offered the possibility to organize a session for candidates residing in their countries. The exam took place in 15 countries simultaneously, at a single site/country. 142 candidates (76%) passed the exam this year. Read the full report here.

EUROPEAN HEMATOLOGY PROGRESS TEST

In March and November 2021, the European Hematology Progress Test took place. This online learning tool is available to EHA members twice a year, for one month, on the EHA Campus. Participants can use it to identify their knowledge gaps in hematology, and keep track of their improvements over time. It is modeled on previous European Hematology Exams.

The number of participants is growing. In March, 185 people did the test and 199 in November.

Upon completion of the test, participants receive immediate feedback on their correct and incorrect answers, including references for more in-depth reading and studying. Three weeks after the end of the testing period, participants receive the comprehensive results per curriculum section, together with feedback on their overall performance and progress.
THE RETURN OF THE MASTERCLASS: NEW AND BETTER

The EHA classical Masterclass returned in 2021, with 55 mentees across 11 time zones. An online clinical preceptorship, the Masterclass allowed participants to work in groups with a mentor and study five complex hematology clinical cases in depth. Each case is written by an EHA expert.
In 2021, all cases were new. The role of the mentors was to take a leading position in stimulating the discussion within each group to support peer-to-peer learning.

INTERNATIONAL COLLABORATION & OUTREACH

INTERNATIONAL COLLABORATION

EHA’s International Collaboration Program in 2021 sent European speakers to countries ‘around the world’ to take part virtually in a variety of Joint Symposia, sharing their knowledge and providing education. The program is an important tool to create connections between Europe and many countries around the world.

Joint symposia were organized at the annual congresses of the following partner societies:

- [VIRTUAL] European Society for Blood and Marrow Transplantation Annual Meeting,
- [VIRTUAL] Korean Society of Hematology International Meeting,
- [VIRTUAL] Hematology Society of Taiwan Annual Congress,
- [VIRTUAL] British Society of Haematology Congress,
- [VIRTUAL] Japanese Society of Hematology International Symposium,
- [HYBRID] International Society for Experimental Hematology Annual Meeting,
- [VIRTUAL] Philippine College of Hematology and Transfusion Medicine (PCHTM) 2nd Annual Convention,
- [HYBRID] International Myeloma Workshop,
- [HYBRID] Japanese Society of Hematology Annual Congress,
- [VIRTUAL] Russian Onco-Hematology Society International Conference on Malignant Lymphoma,
- [VIRTUAL] European Association for Nuclear Medicine Annual Meeting,
- [HYBRID] National Congress of the Spanish Hematology and Hemotherapy Society, and National Congress of the Spanish Society of Thrombosis and Hemostasis,
- [HYBRID] Argentinian Society of Hematology Biennial Congress,
- [VIRTUAL] Associação Brasileira de Hematologia, Hemoterapia e Terapia Celular Annual Congress,
- [HYBRID] Turkish Society of Hematology Congress,
- [VIRTUAL] Indian Society of Haematology and Blood Transfusion Congress,
GLOBAL OUTREACH PROGRAM

In 2021, EHA’s Global Outreach Program was held mostly virtually. However, the aim remained unchanged: to provide hematology medical education to mostly countries outside Europe, based on local needs. EHA’s Global Outreach Program consisted of Hematology Tutorials, Joint Symposia, and Highlights of Past EHA (HOPE) meetings. In addition, the Balkan day and, new to 2021, the Tanzania Microscopy Course were held.

HEMATOLOGY TUTORIALS

Hematology Tutorials are courses aiming to provide laboratory and clinical hematologists with an integrated diagnostic and clinical work-up of hematological disorders. The scientific program takes the participants through the diagnostic and clinical pathway with plenary lectures, interactive clinical case study sessions, and self-assessment sessions. The faculty were available to provide individual guidance to the participants throughout the meeting.

In 2021, tutorials were held virtually, with shortened programs to be more ‘virtual friendly’. Several tutorials were converted to ‘mini’ Tutorials, in order for attendees to still receive updates while awaiting a full (face-to-face) meeting. Mini Tutorials still featured educational elements, but in a condensed form.

EHA-PTHIT HEMATOLOGY MINI TUTORIAL

April 12-13, 2021 | Virtual
Chairs: Prof G Gaidano, Prof I Hus, Prof T Robak

As a prelude to the full, already planned, Tutorial, EHA and the Polish Society of Hematology and Transfusion (PTHiT) presented a virtual ‘mini Tutorial’. During two evenings in April, divided into four sessions, the mini Tutorial shared expertise about the recent achievements in the diagnostic procedures and treatment of the most common lymphoid and myeloid malignancies.

The mini Tutorial focused on AML, CLL, MPN, and DLBCL with extended Q&A time, allowing for ample discussion and interaction.

Over 200 delegates from across the globe registered for the meeting, with attendees from Western, Southern, and Eastern Europe. The meeting was rated excellent by the vast majority of attendees, with a 9.11/10 average rating in the survey (10 being best).

A delegate said: “I like the on-line events in general very much. The format is very helpful in everyday practice.” Faculty also appreciated the meeting: “A concept of combining a general presentation with structured self-assessment case presentations seems to me very fruitful and informative. I find it also creative because presenters are encouraged to revise their knowledge and respond to issues emerging from the ‘partner’ presentations.”
**EHA-TSH HEMATOLOGY TUTORIAL**

June 25-26, 2021 | Virtual  
Chairs: Prof S Eichinger, Prof H Özsan  

In close collaboration with the Turkish Society of Hematology, EHA has already organized annually nine live joint Tutorials, organized as part of the Turkish School of Hematology, a training program for Turkish fellows in hematology. In 2020, unfortunately, the Tutorial had to be cancelled due to the world-wide COVID-19 pandemic, but in 2021 the Tutorial was back fully virtually.

The 2021 virtual Tutorial spanned two days and focused on immune hematological disorders. Over 60 fellows registered for the meeting, with an average attendance of 41 unique viewers per session.

Using the end-of-day and end-of-meeting evaluation polls in Zoom, the vast majority strongly agreed that the meeting was stimulating and challenging, and 75% rated the overall meeting as excellent.

*“It has been a very important participation and experience for me. It was an incredible excitement to be in the same session with Marie Scully. I hope I can take part in EHA organizations again in new sessions and tutorials in the future.”*  

**EHA-AHA-GBMTA MINI TUTORIAL**

November 10-11, 2021 | Virtual  
Chairs: Prof G Gaidano, Prof YK Hakobyan, Dr T Kvatchadze  

EHA, the Armenian Hematology Association (AHA), and, for the first time, the Georgian Association For Blood and Bone Marrow Transplantation (GBMTA) organized a virtual "mini Tutorial" on November 10 and 11, 2021. During four sessions divided over two evenings, the mini Tutorial focused on increasing knowledge of biology, diagnostics, and management of CLL, MDS and MM, and transplantation.

Through lectures, interactive self-assessment cases, and clinical case presentations, participants of the mini Tutorial not only heard from experts in the field, but the virtual sessions also allowed them to learn about the biology of CLL, MDS, and MM, increase their ability to correctly classify CLL, MDS, and MM, list and describe diagnostic methods and treatment of CLL, MDS, and MM and describe and indicate the role of transplantation in a new era of treatment of hematological diseases.
After a successful mini Tutorial in April 2021, EHA and PTHiT decided to organize a second two-evening Tutorial, awaiting a full physical Tutorial in Poland. On November 15-16, in four sessions, the mini Tutorial focused on assessing and increasing knowledge of the treatment of myeloid and lymphoid diseases.

The Tutorial included the following topics:

- Current treatment strategies in chronic myeloid leukemia,
- A new set of treatment options for low-risk myelodysplastic syndrome,
- Current treatment standards and emerging strategies in mantle cell lymphoma,
- New treatment strategies for multiple myeloma.

Through lectures, interactive self-assessment cases and clinical case presentations, mini Tutorial participants did not only hear from experts in the field, but could also test their knowledge on the topics at hand. The mini Tutorial was attended by 70 unique attendees from over 34 countries including Poland, Romania, Egypt, Slovakia, Sri Lanka, the United States, and more.

During the extended Q&A time, it was possible for participants to interact – questions were submitted by the attendees, and then answered live by the faculty. The mini Tutorial was attended by more than 100 unique attendees from over 26 countries, including Armenia, Georgia, Italy, Moldova, United Kingdom, Bolivia, Saudi Arabia, and more.

With feedback such as “... an opportunity to discuss the “burning” topics in my field of expertise” and “as a little nation and subsequently the low quantity of hematologists, I wholeheartedly believe, future internet based congresses (not just online) will be more productive for us, as far as discernment and educating”, we are able to look back at a successful mini Tutorial with AHA and GBMTA.
After being postponed due to the COVID-19 crisis in early 2020 the EHA-AAH Balkan Hematology Tutorial has been rescheduled for April 2022. To bridge this long period it was decided together with the Albanian Association of Hematology (AAH) to hold a virtual Mini Tutorial with a reduced program of 4 sessions.

The Mini Tutorial included the following topics:

- DLBCL: Definition, diagnosis and pathogenesis
- First-line treatment of DLBCL
- Second-line treatment of DLBCL
- CAR-T cell therapy: What’s next in the treatment of DLBCL

All partners from the Balkan region were invited to propose local speakers for inclusion in the program, and many provided input and participated in the program. The majority of the Balkan partners also promoted the meeting so a wide variety of nationalities from the region were included as delegates in the meeting. A total of 157 unique viewers attended the meeting from 27 different countries.
HIGHLIGHTS OF PAST EHA (HOPE)

The highlights program was intended for physicians, scientists, and medical students in Europe, the Middle East, Asia, Africa, and Latin America who could not attend the EHA Congress or who were interested in additional sessions and interaction with the speakers.

In 2021, the meeting programs were once more created in collaboration with regional partners who selected topics and speakers from the EHA2021 program of particular interest to their respective local hematologists. The on-demand lectures were available to registrants prior to the live days, and invited speakers were present during the live sessions to allow interaction with local delegates during a Q&A session.

Additionally, each meeting also featured a live Regional Joint Symposium with local speakers, highlighting their own experience and challenges faced in a certain field.

The HOPE meetings were held virtually, on the same platform as EHA2021, reinforcing the connection to the Congress and allowing the use of key EHA2021 content, including the Opening Ceremony and Plenary sessions.

The three HOPE 2021 meetings were kindly supported by Janssen and Gilead.
EHA in conjunction with six regional partner societies, Hematology Society of Bangladesh, Indian Society of Haematology and Blood Transfusion, Pakistan Society of Haematology, Philippine Society of Haematology and Blood Transfusion, Sri Lanka College of Haematologists, and Thai Society of Hematology, compiled the program for the third edition of HOPE Asia, organized virtually for the second year in a row. The meeting was chaired by Prof Gianluca Gaidano from EHA.

The tailored program focused on giving the hematology community in Asia access to a specific range of topics and content from the EHA2021 Virtual Congress.

The session topics were:

- Coagulopathy & COVID-19,
- Lymphoma,
- Multiple Myeloma,
- Myeloid Leukemias,
- Red Cell Disorders & Hemoglobinopathies,
- Thrombosis and Hemostasis,
- Transfusion.

EHA kicked-off the first virtual live day on September 10 with over 540 registrants from multiple Asian countries. The meeting consisted of six scientific sessions divided over two days, and a Regional Joint Partner Symposium with lectures from regional speakers on September 11. During the live sessions, EHA2021 Virtual Congress speakers presented short summaries of their lectures and participated in live Q&A and panel discussions. A week prior to the meeting, attendees gained access to the on-demand lectures to prepare questions. This led to dynamic questioning and discussions during the live days.

"More than a year in a pandemic and here we are, doing great in what we do best, being doctors and specialists in HEMATOLOGY! We are learning every day, and we can assimilate more if we share our knowledge and inputs." – Dr Jesus Relos, President, Philippine Society of Hematology and Blood Transfusion
The Partners of HOPE Asia contributed immeasurably by identifying and attending to the hematological needs of their country and region. This entailed helping to compose the program, actively promoting the meeting, and registering society and network members. Additionally, the partners recommended talented and enthusiastic chairs for each session, while talented regional experts gave their presentations in the Regional Joint Symposium, which focused on Lymphoma.

HIGHLIGHTS OF PAST EHA (HOPE) MIDDLE EAST AND NORTH AFRICA (MENA)

Platform open: September 17-29, 2021
Live days: September 23-24, 2021

Meeting Chair:
Prof Gianluca Gaidano (European Hematology Association)

The sixth HOPE MENA, with highlights of the EHA Annual Congress, took place September 23-24, 2021. Fully virtual for the second year in a row, the program was compiled together with eight regional partner societies.

The sessions were moderated by an international chair as well as a regional representative from our partners. The session topics were:

- Bleeding & platelet disorders,
- Myeloid malignancies,
- Lymphoid malignancies,
- Red Cell Disorders & Hemoglobinopathies,
- COVID-19,
- Cell Therapy and Allogeneic Transplant.
Under the scientific guidance of Gianluca Gaidano (on behalf of EHA) and seven regional partner societies, Highlights of Past EHA (HOPE) Latin America was held for the third time.

The meeting consisted of eight scientific sessions on the following topics:

- Acute leukemia,
- Hemoglobinopathies,
- Platelets,
- White cell disorders,
- COVID-19,
- Multiple myeloma,
- CLL.

Partners also had the opportunity to propose a speaker for the Regional Joint Symposium, which focused on viruses and lymphoma this year. Speakers in the session gave their presentations live and shared some of the challenges they faced in their country, contributing to greater shared experience.

HOPE MENA 2021 counted over 270 registrations from Middle Eastern and North African countries only. The registrations were collected on an individual basis and via the partner societies. Participants rated the meeting 8.5 out of 10.
The topic of the Regional Joint Symposium was regional updates on hematological malignancies.

There were almost 250 registrations with almost 150 unique viewers attending the live sessions.
OTHER ACTIVITIES

2ND EHA-BALKAN HEMATOLOGY DAY

Date: October 2, 2021

In collaboration with the Romanian Hematology Society, EHA organized the 2nd EHA-Balkan Hematology Day, focused on multiple myeloma. The meeting was hosted on October 2, 2021 during the National Congress of the Romanian Hematology Society in Sinaia, Romania in a hybrid format.

The EHA-Balkan Hematology Day covered the following topics related to MM:
• Diagnosis and staging,
• Frontline therapy,
• MM in the relapsed/refractory patient.

The program was composed of international experts, complemented with case presentations by speakers from the Balkan region. Local speakers were proposed by the Balkan partner societies for a truly regional outlook.

Over 350 delegates registered for the meeting from the Balkans. The majority of attendees participated in the meeting virtually, but a large group of attendees from Romania and neighboring countries participated live in Sinaia, Romania. The faculty participated in the meeting via livestream.

DIGITAL MICROSCOPY COURSE

On October 12, the pilot Digital Microscopy Course was held under the guidance of Gina Zini and Marielle Wondergem. Approximately 20 participants from Tanzania joined. The course itself was tailored to local wishes, which were identified in the months prior to the event, so the content was well-received and appreciated by the attendees. Connection issues made it difficult to hear certain participants and hampered interaction, so issues concerning interaction and connectivity will be improved for a future edition.
EUROPEAN PROJECTS
ABOUT CELLULAR THERAPIES:
T2EVOLVE

Since the kick-off of the Topics-in-Focus program in 2018, EHA and its partners have been furthering the programs related to CAR T-cell therapy. As such, EHA has joined T2EVOLVE: a new, breakthrough alliance of academic and industry leaders in cancer immunotherapy under the European Union’s Innovative Medicines Initiative (IMI). The key objective of T2EVOLVE is to accelerate development and increase awareness and access of cancer patients to immunotherapy with immune cells that harbor a genetically engineered T-cell receptor (TCR) or synthetic chimeric antigen receptor (CAR). Simultaneously, T2EVOLVE aims to provide guidance on sustainable integration of this treatment into the EU healthcare system. The strategic objective of T2EVOLVE is to accelerate the process of developing CAR T-cell therapy in the European Union (EU), to grant EU patients access to the most ground-breaking and best available medical care while providing guidance on the sustainable implementation of this novel treatment in the EU healthcare system, and to help alleviate the financial burden of health care on the economy and society. Moreover, patient involvement will ensure that the perspectives of cancer patients are at the center, in the research setting as well as along the cancer care continuum. EHA is part of the following work packages (WP) WP1, WP2, and WP5. More information is available on the T2EVOLVE website, led by EHA.
EUROPEAN PROJECTS
ABOUT CELLULAR THERAPIES:
GoCART

EHA and the European Society for Blood and Marrow Transplantation (EBMT), the two leading European societies in the field of hematology and stem cell transplantation, announced a strategic partnership to empower Europe to become a global leader in the field of cellular therapy for hematological diseases, bringing their collective resources and expertise to bear in the newly founded GoCART coalition.

Advancing the field of cell and gene-based therapies requires progress on multiple fronts. To address such a wide range of complex issues, there is a need for strong collaboration amongst all relevant stakeholders.

The aims of the GoCART Coalition are to:

- Improve health outcomes for patients,
- Engage stakeholders and establish a sustainable European coalition in the field of gene and cellular therapy,
- Collaborate and share data and knowledge to prevent duplication of effort and maximise resources,
- Promote harmonization of data collection, education, standards of care, regulatory approval and reimbursement processes in Europe,
- Set-up a pre-and post-marketing registry that supports regulatory decision making and shared research purposes,
- Develop a gene and cellular therapy education and information program for patients and health care professionals,
- Harmonize standards of care and center qualification,
- Advance policies that further the shared mission and vision.

In summary, GoCART aims to build on and accelerate the excellent European network that is emerging in the field of gene and cellular therapies. The goal is to collectively overcome hurdles, use the available resources effectively in order to maximize the output of these efforts. This will contribute to increasing patient access to innovative therapies, guaranteeing quality of patient care and producing excellent science.

For more information: http://www.thegocartcoalition.com
The EHA Research Committee (RC) has a new Chair, Prof Brian Huntly, Head of Department and Professor of Leukaemia Stem Cell Biology at the University of Cambridge, UK, and EHA Board member. Prof Shai Izraeli, who chaired the Research Committee through its transition years and the very difficult times of the first COVID-19 pandemic waves, rotated off in June 2021, but accepted to stay on for one year in order to support the transition period. Prof Antonio Almeida replaced Prof Huntly as EHA Board representative in the RC. The RC began implementing new activities approved in the last Investment plan, integrating existing activities with additional grants and training initiatives, new activities like the EHA Research Conferences (EHA ReCon) and an enhanced promotion plan for HemaSphere.

The renewed composition of the EHA RC is the following:
Brian Huntly, Chair
Ruud Delwel, vice-Chair
Arndt Borkhardt, member
Mhairi Copland, member
Thomas Mercher, member
Jessica Okosun, member
Kostas Stamatopoulos, member
Shai Izraeli, additional member
Antonio Almeida, Rep EHA Board
Meritxell Alberich-Jorda, Rep Fellowships & Grants Committee
Adele Fielding, Rep CRTH
Achille Iolascon, Rep SWG Committee
Anna Kabanova, Rep YoungEHA Committee
Veronika Sexl, Rep TRTH
Martina Muckenthaler, Rep HemaSphere Editorial Board
The Research Committee has directly managed the development of this initiative, and nominated a small taskforce that worked hard to create a concept, identify external co-organizers, and collaboratively draft an outstanding program. The organizing committee includes Emmanuelle Passegue, Cristina Lo Celso, Mick Milsom, Meri Alberich Jorda, Antonella Fidanza, Jürg Schwaller, Thomas Mercher, and Brian Huntly.

The meeting will be held on October 17-20, 2022 in Palermo, Italy. The first edition is titled: “Extrinsic signals and perturbations in normal and malignant hematopoiesis”.

This flagship meeting is positioned to become the premier scientific meeting of EHA. Its small, intimate, and research topic-focused nature will greatly complement the much larger, wide-ranging, and more clinically/translationally oriented EHA Annual Congress that takes place in June.

The meeting is expected to attract around 250 delegates and will be organized over 3.5 days, with significant time set aside for discussion, breakouts, networking, and social activities. The aim of the 2022 meeting is to present, synthesize, and discuss state-of-the-art extrinsic signaling to, and perturbation of normal and malignant hematopoietic stem cells.

The program is divided into six topics each with two sessions; one with experts in the field, and one in which young investigators have the opportunity to present their research. The following topics will be addressed:

- Aging,
- Inflammation,
- Epigenome,
- Microenvironment,
- Metabolism,
- Extracellular factors.
EHA partners with Scientific Working Groups (SWGs) to foster science and spread knowledge in basic, translational, and clinical research in hematology in Europe. Currently, there are 24 SWGs, covering both disease-oriented and overarching topics.

SWG INVOLVEMENT IN EUROPEAN AFFAIRS INITIATIVES

SWG involvement in European Affairs activities is crucial. Amongst the interactions between EHA SWGs and the EHA European Affairs initiatives, three can be highlighted:

- **EuNet-INNOCHRON**, European Network for Innovative Diagnosis and Treatment of Chronic Neutropenias, is a COST Action chaired by Helen Papadaki and Carlo Dufour, Chairs of the EHA SWG on Granulocytes and Constitutional Marrow Failure Disorders.
- SWGs were asked to raise awareness on the impact that the new *In Vitro Diagnostic medical devices Regulation (IVDR)* will have on hematology labs. For this, the EHA Office created a flyer, together with the EHA Taskforce on IVD, which is chaired by Jacques van Dongen, chair of the EHA SWG ESLHO, and whose members include the chairs of the SWG on AML, Transfusion, and Diagnostics.
- Recently, EHA joined the *European Network for Teenagers and Young Adults with Cancer (ENTYAC)* network. SWGs were requested to fill in and disseminate an ENTYAC survey, with the aim of mapping the state of development of age-specific AYA care across Europe, in order to understand the challenges and record progress over time. EHA’s participation in ENTYAC is currently coordinated by Josef Vormoor, chair of the SWG on Pediatrics.
SWG BUSINESS MEETINGS

Every year, SWGs are invited to hold their SWG Business Meetings. The SWG Business Meetings were commonly used to update the SWG members on the status of the SWG internal activities. However, in 2021 business meetings were repurposed, so they could also be used to:

- Disseminate scientific information and updates in the field,
- Coordinate participation in EHA initiatives and collaborations with other groups/networks,
- Prepare attendees for the EHA Congress (recommended sessions, etc.), if the meeting takes place before the congress,
- Provide highlights of the congress, if the meeting takes place after the congress,
- 13 SWG Business Meetings were scheduled in 2021. SWGs were encouraged to invite members of other SWGs and scientific groups from other societies to stimulate collaboration.

SWG RECOMMENDATIONS

The EHA Office drafted a SWG Recommendations document, which was approved by the SWG Committee. This document was prepared to serve as a guide for EHA Scientific Working Groups and covers SWG structure, requirements and activities, as well as recommendations on the interactions with their SWG members and the EHA Office.

The document is not enforceable and presents best practices. Most of the Scientific Working Groups are now compliant with these recommendations.

SCIENTIFIC MEETINGS

3RD EHA-EBMT EUROPEAN CAR T-CELL MEETING

February 4-6, 2021 | Virtual
Chairs: Prof H Einsele (EHA), Prof C Chabannon (EBMT)

For the 3rd time now, the European Hematology Association (EHA) and the European Society for Blood and Marrow Transplantation (EBMT) jointly organized the European CAR T-cell Meeting; the meeting took place in 2021 in a virtual format.

The meeting addressed a broad range of topics including basic, translational, and clinical research in the exciting field of CAR-T. The program offered a special focus on research across Europe, the USA, and Asia, clinical management and regulatory aspects, and broadened perspectives by incorporating patient organizations, nurses, and data managers.
Junior and senior hematologists from around the world gathered virtually for the live days of the EHA-SWG Scientific Meeting on Acquired Aplastic Anemia on April 29-30, 2021. This meeting was organized by EHA and the EHA Scientific Working Group on Granulocyte and Constitutional Marrow Failure Syndromes. A curated program presented a worldwide approach to the topic and offered an excellent opportunity for participants to learn about aspects of the disease.

The faculty of the Scientific Meeting consisted of an international group of experts in their respective fields, who joined online from different continents and gave the latest updates through pre-recorded lectures, Live Keynotes, Patient cases, and engaged in live Q&A panel discussions. The meeting gave insights into the diagnosis and treatment of severe aplastic anemia in Europe, but also in areas with limited resources. We discussed special aspects of AAA, the treatment of PNH, moderate AA, and other supportive treatment options. To conclude the meeting, we stepped into future perspectives: looking at somatic mutations in AA and how to improve diagnostic accuracy of marrow failures.

In total, 79 abstracts were submitted and accepted, of which 11 were selected for an oral presentation, the others were given the opportunity to submit a poster presentation. The full abstract texts and the presentations were available on the meeting platform. One abstract was selected as the winner of the first “EHA-EBMT Joint Fellowship Award in the Field of Cell Therapy and Immunotherapy” for emerging investigators.

In total, over 1,700 delegates and faculty members attended this virtual meeting with a satisfaction rating of 3.4 out of 4 (with 4 being the best).
The interactivity during the virtual meeting was great. Many attendees took the opportunity and posted live questions during the session, which led to interesting discussions with the faculty.

One week prior to the live days, more than 200 delegates gained access to the online platform. This gave the attendees the opportunity to watch 15+ pre-recorded sessions and prepare their questions for the Live Sessions and Q&A discussions. Additionally, the online platform offered attendees a place to meet, connect, and interact with hematology peers by scheduling one-on-one meetings. The platform remained open until May 29, 2021. This allowed for access to the content and peers for more than 30 days.

EHA-SWG SCIENTIFIC MEETING ON PATIENT-CENTERED GERIATRIC HEMATOLOGY

October 6-7, 2021 | Virtual
Chairs: Prof R Cordoba, Prof V Goede

On October 6-7, 2021, an international group of hematologists, specialist nurses, patient advocates, geriatricians, basic research and pharma representatives gathered digitally to participate in this meeting.

The scientific program consisted of four scientific sessions and one session organized with the Lancet Group. Each scientific session consisted of three lectures, given live, followed by an extended round-table style Q&A, during which the attendees had the opportunity to interact with various experts.

In total, 115 delegates from 28 different countries in Europe, North America, South America, Asia, and Australia registered. 82 delegates attended at least one session live. Registered delegates also had the chance to view recorded sessions on-demand for up to month after the live days. Overall, the meeting was rated an 8.4 out of 10.
In 2021, EHA published three guidelines and initiated even more guidelines projects. EHA further promoted collaborations between the EHA-SWGs and other medical societies and associations, including ESMO, EuNet-INNOCHRON, EuroBloodNet, British Society of Haematology (BSH), International Society of Amyloidosis (ISA), and the International Society on Thrombosis and Haemostasis (ISTH).

**EHA GUIDELINES: PUBLISHED**

In 2021, EHA published three collaborative guidelines projects:

**AL Amyloidosis (EHA-ISA project)**

*Guidelines for high dose chemotherapy and stem cell transplantation for systemic AL amyloidosis: EHA-ISA working group guidelines*

**Multiple Myeloma (EHA-ESMO project)**

*Multiple Myeloma: EHA-ESMO Clinical Practice Guidelines for Diagnosis, Treatment and Follow-up*

**Methemoglobinemia (EHA-EuroBloodNet)**

*Recommendations for diagnosis and treatment of methemoglobinemia*
In 2021, EHA continued four EHA guidelines projects and launched one new one:

<table>
<thead>
<tr>
<th>GUIDELINES TITLE</th>
<th>TYPE</th>
<th>SWG(S) INVOLVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antifungal prophylaxis and therapy in patients with AML treated with new agents</td>
<td>Evidence-based</td>
<td>Infections in Hematology, AML</td>
</tr>
<tr>
<td>Patient-reported outcomes measurement in hematology</td>
<td>Evidence-based</td>
<td>Quality of life, Aging in Hematology</td>
</tr>
<tr>
<td>Cardiovascular toxicity in older adults with hematologic malignancies</td>
<td>Evidence-based</td>
<td>Aging in Hematology, European Society of Cardiology (ESC)</td>
</tr>
<tr>
<td>Management of anti-thrombotic treatment in thrombocytopenic patients</td>
<td>Consensus-based</td>
<td>Bleeding and Thrombosis, ESC</td>
</tr>
<tr>
<td>New: Cytopenias in the elderly</td>
<td>Consensus-based</td>
<td>MDS, GCMFS, Lymphoma Group, Red Cells&amp; Iron, Aging in Hematology, Thrombocytopenias, Platelet Function Disorders</td>
</tr>
</tbody>
</table>
EHA GUIDELINES: COLLABORATIVE PROJECTS

In 2021, EHA continued three guidelines projects and launched four new ones. One EHA guidelines project was updated to a collaborative one; the "Anticoagulant and anti-platelet treatment in patients with inherited bleeding disorders" guidelines project re-launched as an EHA-ISTH project also involving experts from ESC and EAHAD.

<table>
<thead>
<tr>
<th>GUIDELINES TITLE</th>
<th>TYPE</th>
<th>EXPERTS FROM OTHER ORGANIZATIONS / NETWORK INVOLVED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>New:</strong> Clinical Practice Guidelines for non-transplant therapy of AL amyloidosis</td>
<td>Consensus-based</td>
<td>International Society of Amyloidosis (ISA)</td>
</tr>
<tr>
<td>Use of next-generation sequencing in the diagnosis of congenital anemias</td>
<td>Consensus-based</td>
<td>British Society of Haematology (BSH)</td>
</tr>
<tr>
<td>Diagnosis and Treatment of Chronic Neutropenias</td>
<td>Evidence/Consensus-based</td>
<td>European Network for Innovative Diagnosis and Treatment of Chronic Neutropenias (Eunet-INNOCHRON)</td>
</tr>
<tr>
<td>Updated: Anticoagulant and anti-platelet treatment in patients with inherited bleeding disorders</td>
<td>Consensus-based</td>
<td>International Society on Thrombosis and Haemostasis (ISTH), European Association for Haemophilia and Allied Disorders (EAHAD)</td>
</tr>
<tr>
<td>Diffuse large B-cell lymphoma (DLBCL)</td>
<td>Consensus-based</td>
<td>European Society for Medical Oncology (ESMO)</td>
</tr>
<tr>
<td><strong>New:</strong> Primary CNS lymphomas</td>
<td>Consensus-based</td>
<td>ESMO</td>
</tr>
<tr>
<td><strong>New:</strong> Peripheral T-cell lymphomas</td>
<td>Consensus-based</td>
<td>ESMO</td>
</tr>
<tr>
<td><strong>New:</strong> HIV lymphomas</td>
<td>Consensus-based</td>
<td>ESMO</td>
</tr>
</tbody>
</table>
EHA ENDORSEMENTS OF OTHER SOCIETIES’ GUIDELINES

In 2021, EHA published six endorsements of other societies:

**Hereditary Hemorrhagic Telangiectasia**

_EHA Endorsement of the Second International Guidelines for the Diagnosis and Management of Hereditary Hemorrhagic Telangiectasia_

**Infections**

_EHA Endorsement of the Global Guideline for the Diagnosis and Management of Rare Mold Infection: An Initiative of the European Confederation of Medical Mycology in Cooperation With International Society for Human and Animal Mycology and American Society for Microbiology_

_EHA Endorsement of the Global Guideline for the Diagnosis and Management of Rare Yeast Infections: An Initiative of the European Confederation of Medical Mycology in Cooperation With the International Society for Human and Animal Mycology and American Society for Microbiology_

**Lymphoma**

_EHA Endorsement of ESMO Clinical Practice Guidelines for Newly Diagnosed and Relapsed Follicular Lymphoma_

**MDS**

_EHA Endorsement of the European Guidelines for Myelodysplastic Syndromes, MDS-RIGHT_

**Waldenström’s Macroglobulinemia**

_EHA Endorsement of ESMO Clinical Practice Guidelines for Diagnosis, Treatment, and Follow-up for Waldenström’s Macroglobulinemia_

EHA GUIDELINES WORKSHOPS

EHA has initiated a series of online workshops dedicated to guidelines (produced or endorsed by EHA) for diagnosis and treatment of hematologic diseases. These workshops are aimed at disseminating good practices and knowledge with the help of patient cases, presentations, and discussions with the guidelines’ authors and EHA experts. The workshops held in 2021 were:
In the EHA2021 Virtual Congress, EHA launched for the first time ever, Guidelines sessions. These sessions were live, virtual, and featured an overview of the guidelines by a lead author, a patient presentation which illustrated the applicability of the guidelines in real-world setting and concluded by an interactive panel discussion fuelled by the participants’ questions.

### EHA2021 CONGRESS GUIDELINES SESSIONS

In the EHA2021 Virtual Congress, EHA launched for the first time ever, Guidelines sessions. These sessions were live, virtual, and featured an overview of the guidelines by a lead author, a patient presentation which illustrated the applicability of the guidelines in real-world setting and concluded by an interactive panel discussion fuelled by the participants’ questions.

<table>
<thead>
<tr>
<th>DATES</th>
<th>GUIDELINES WORKSHOP TOPIC</th>
<th>CHAIRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 14, 2021</td>
<td>EHA Guidelines Workshop Diagnosis and Treatment of Chronic Myelomonocytic Leukemias in Adults</td>
<td>P Fenaux (FR) &amp; L Malcovati (IT)</td>
</tr>
<tr>
<td>February 23, 2021</td>
<td>EHA Endorsement of ESMO Clinical Practice Guidelines for Diagnosis, Treatment, and Follow-up of Chronic Lymphocytic Leukemia</td>
<td>B Eichhorst (DE) &amp; P Ghia (IT)</td>
</tr>
<tr>
<td>March 16, 2021</td>
<td>Multiple Myeloma: EHA-ESMO Clinical Practice Guidelines for Diagnosis, Treatment and Follow-up</td>
<td>MA Dimopoulos (GR) &amp; P Sonneveld (NL)</td>
</tr>
<tr>
<td>April 20, 2021</td>
<td>Fundamentals for a Systematic Approach to Mild and Moderate Inherited Bleeding Disorders: An EHA Consensus Report</td>
<td>R Abdul-Kadir (UK), I Pabinger (AT), &amp; F Rodeghiero (IT)</td>
</tr>
</tbody>
</table>

### EHA2021 CONGRESS GUIDELINES SESSIONS

<table>
<thead>
<tr>
<th>DATES</th>
<th>GUIDELINES</th>
<th>CHAIRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 13, 2021</td>
<td>Marginal Zone Lymphomas: EHA Endorsement of ESMO Clinical Practice Guidelines</td>
<td>C Thieblemont (FR) &amp; E Zucca (CH)</td>
</tr>
<tr>
<td>June 14, 2021</td>
<td>Mild and Moderate Inherited Bleeding Disorders: An EHA Consensus Report on Fundamentals for a Systematic Approach</td>
<td>F Rodeghiero (IT) &amp; I Pabinger (AU)</td>
</tr>
<tr>
<td>June 14, 2021</td>
<td>Multiple Myeloma: EHA-ESMO Clinical Practice Guidelines for Diagnosis, Treatment, and Follow-up</td>
<td>MA Dimopoulos (GR) &amp; P Sonneveld (NL)</td>
</tr>
<tr>
<td>June 15, 2021</td>
<td>Rare Inherited Anemias: EHA Guidelines on Management of Pregnancy</td>
<td>A Iolascon (IT) &amp; MD Capellini (IT)</td>
</tr>
</tbody>
</table>
HemaSphere

EHA’s official journal, HemaSphere, publishes results of highly relevant basic, translational, and clinical research in hematology. The journal is especially interested in strong studies reporting novel findings that are of high impact to the field of hematology. HemaSphere is the premier hematology information resource, and enhanced by the HemaTopics section of the journal, featuring insightful discussions on all aspects related to hematology such as summaries of important articles, reports of new therapies, discussions on European policy, and more. HemaSphere is guided by an international, expert Editorial Board, offers a fast and constructive review process, and maintains low article processing fees. The journal officially releases 12 primary issues per year, but publishes a steady flow of new content via its continuous online publishing schedule. HemaSphere is an online, fully open access journal, dedicated to supporting hematology patient care, research, and education worldwide.

2021 MILESTONES

Publishing Statistics – In 2021, HemaSphere transitioned from a bimonthly to monthly issue schedule, launching 12 regular issues and 2 supplements. Below, the breakdown of publications per type is illustrated. By the end of 2021, HemaSphere published 153 manuscripts.
Indexing – *HemaSphere* is proud to be fully indexed in PubMedCentral (PMC) and Scopus, with a growing CiteScore (5.3 as of December 2021). In the 2nd half of 2021, *HemaSphere*’s Clarivate coverage was further expanded, and the journal is now covered in Clarivate Analytics’ Science Citation Index Expanded (SCIE) – Hematology, CC/Clinical Medicine – Hematology, and Essential Science Indicators – Clinical Medicine sections.

Anticipating an Impact Factor – 2021 brought *HemaSphere* some long-awaited news: Clarivate completed an evaluation of the journal using Web of Science selection criteria, and determined that *HemaSphere* achieved impact criteria. As such, *HemaSphere* is thrilled to announce that it is expecting its first impact factor in June 2022.

Increasing Citations – 2021 continued *HemaSphere*’s path of steadily increasing citations. The trajectory of citations through the end of 2021 is depicted previously.

*HemaSphere* Twitter Account – just over a year after launching a dedicated Twitter account, *HemaSphere* welcomed over 930 followers (and counting), over 2.2 million post impressions, and 32,000+ profile visits. Social media continues to be an important tool to aid the expansion of *HemaSphere*’s reach.

Key Content – In 2021, the journal completed its Gene Therapy Special collection, boasting high quality reviews on cutting-edge topics, authored by top leaders in the field. The journal also connected with the EHA Annual Congress via the *HemaSphere* June issue, featuring important reviews and perspectives from prominent EHA2021 speakers. In addition, *HemaSphere* reviewed and published three interesting review articles from the European Medicine Agency (EMA) and its scientific review of drug approvals, *HemaSphere* began the publication of the newly updated EHA Research Roadmap series, and *HemaSphere* jointly published an expert-driven guidelines article on multiple myeloma in conjunction with *Annals of Oncology*. 
SUPPORTING CAREER DEVELOPMENT AND RESEARCH
TALENT ACCELERATOR
GRANTS 2021

EHA focuses on accelerating the career of promising researchers in hematology by providing EHA Research Grants, funding lab-based research of talented early career researchers and physician-scientists. Recognizing the unprecedented challenges in the research environment, characterized by an acute shortage of hematology research funding due to the ongoing COVID-19 pandemic, EHA increased the number of Research grants in 2021 from six to nine. Additionally, the Junior Research Grant was expanded to €150,000 for three years. Furthermore, the newly introduced Kick-off Grants and Bilateral Collaborative Grants have increased the scope of proposals and widened the spectrum of applicants. Later in the year, EHA re-started its support towards exchanges and mobility through the EHA Research Mobility Grants.

RESEARCH GRANTS

The following early career researchers received EHA Research Grants in 2021.

ADVANCED RESEARCH GRANTS

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antonella Fidanza</td>
<td>University of Edinburgh, UK</td>
<td>The Role of Mechanosignaling in the Embryonic Development of the Human Hematopoietic Tissue</td>
</tr>
<tr>
<td>Antonella Nai</td>
<td>Ospedale San Raffaele, IT</td>
<td>Unravelling the Mechanisms of Erythropoiesis Regulation by TFR2 and its Therapeutic Targeting</td>
</tr>
<tr>
<td>Christian Di Buduo</td>
<td>University of Pavia, IT</td>
<td>A New Approach to Understanding the Pathogenesis of Myeloproliferative Neoplasms by Shaping the Endoplasmic Reticulum/Mitochondria Calcium Toolkit Dynamic in Megakaryopoiesis</td>
</tr>
</tbody>
</table>
JUNIOR RESEARCH GRANTS

Ana Rio-Machin  Cecile Lopez  Els Mansell  Ferran Nadeu
Barts Cancer Institute, Queen Mary University of London, UK  University of Cambridge, UK  Lund University, SE  Institut d’Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), ES

Uncovering the Molecular Mechanisms and Therapeutic Vulnerabilities of T(6;9)-Driven Acute Myeloid Leukaemia  Gene Regulatory Complexes and Networks Regulated by the ERG Oncogene  Uncovering and Exploiting the Metabolic Basis for HSC Fate Availability  Tracking the Origin of Chronic Lymphocytic Leukemia Progression and Transformation Through its Genomic and Transcriptomic Footprints

PHYSICIAN SCIENTISTS’ RESEARCH GRANTS

Giulio Cavalli  Mirjam Belderbos
Ospedale San Raffaele S.R.L., IT  Princess Máxima Center for Pediatric Oncology, NL

Dissecting Paracrine Mechanisms in the Pathogenesis and Treatment of Erdheim-Chester Disease  Peripheral Blood or Bone Marrow Stem Cells? Population Dynamics of Blood in Human Hematopoietic Stem Cell Transplantation Recipients
TOPICS-IN-FOCUS GRANTS

Hematology is an exciting, fast-paced medical field on the front-lines of an ever-changing world. The speed of developments in clinical, molecular, and technological innovations confront hematologists with the need to quickly adapt to new techniques and therapies. EHA launched the Topics-in-Focus program to support hematologists in these rapidly developing scenarios, aiming to raise awareness, provide education, further research, and build a network of experts in specific, fast-growing areas. As such, EHA has spotlighted research in Immunotherapy and Hemoglobinopathies. In 2021, EHA awarded two Topics-in-Focus grants meant for quality basic or translational research projects.

<table>
<thead>
<tr>
<th>Nikoleta Psatha</th>
<th>Sébastien Anguille</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic-in-Focus Advanced Research Grant</td>
<td>Topic-in-Focus Physician Scientists’ Research Grant</td>
</tr>
<tr>
<td>(Hemoglobinopathies)</td>
<td>(Immunotherapy)</td>
</tr>
<tr>
<td>Aristotle University of Thessaloniki, GRE</td>
<td>University of Antwerp / Antwerp University Hospital, BE</td>
</tr>
<tr>
<td>Development of New Generation, Erythroid Specific Gene Therapy Vectors for β-Hemoglobinopathies</td>
<td>Antigen-specific Non-signaling CARs as Hemato-Oncological Remedy (ANCHOR)</td>
</tr>
</tbody>
</table>

KICK-OFF GRANTS

Kick-off Grants support basic and translational early-career researchers in hematology, and allow them to test a high-risk but potentially high impact idea that lacks solid preliminary data and is therefore too premature to submit for regular funding.

The first Kick-off Grants call was launched in the summer and the Fellowship & Grants Committee finalized the selection process in November. Following the success of this first call and the high quality of applications received, a new call will open in June 2022.

Congratulations to the seven early-career researchers awarded this one-year grant:
<table>
<thead>
<tr>
<th>Ana Cordeiro Gomes</th>
<th>Martin Böttcher</th>
<th>Meng Wang</th>
<th>Oskar Marin-Bejar</th>
<th>Karolina Škvárová</th>
<th>Claudia Tersteeg</th>
<th>Richard Pouw</th>
</tr>
</thead>
<tbody>
<tr>
<td>i3S - Instituto de Investigação e Inovação em Saúde, Universidade do Porto, POR</td>
<td>University Hospital Magdeburg, GER</td>
<td>University of Cambridge, UK</td>
<td>Institut d’Investigació Biomédica de Bellvitge, ES d’Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), ES</td>
<td>Second Faculty of Medicine, Charles University Prague, CZ</td>
<td>Katholieke Universiteit Leuven, BE</td>
<td>Sanquin Research, NL</td>
</tr>
</tbody>
</table>

- **Inflammabone** - Understanding how Chronic Infection disrupts the hematopoietic niche leading to osteopenia Vulnereabilities of T(6;9)-Driven Acute Myeloid Leukaemia
- **Ferrosence** - Ferroptosis sensitivity in CLL
- **Harnessing endogenous DNA damage for targeted therapy in acute myeloid leukaemia**
- **Unraveling GATA2 deficiency cell fate**
- **Development of new therapeutic strategies for patients with Fanconi Anemia: Prime editing as a novel tool for seamless correction of FANCA mutation**
- **SIRT3 levels modulate procoagulant platelet formation**
- **Studying complement biology under physiological flow**
BILLATERAL COLLABORATIVE GRANTS

Bilateral Collaborative Grants are intended to encourage and support collaboration between two independent research groups in basic/translational hematology research, that are located in two different European countries.

The first call for the Bilateral Collaborative Grants opened in June and closed in September 2021. Selection is currently underway, with recipients to be announced.

The Fellowship & Grants Committee was impressed by the quality of the proposals received and the collaborative efforts of PIs across different labs in Europe, and is planning to open a new call for the grant in June 2022.

RESEARCH MOBILITY GRANTS

EHA strives to develop the careers of young scientists by supporting mobility and facilitating a visit to a research group in another institute. Both institutes should have complementary expertise as this visit is intended to promote collaboration between the institutes. These grants have a low threshold for application but have a quick turnaround in review and selection. The call is open throughout the year.

After several months on hold due to the travel uncertainties caused by the pandemic, this call was re-started in 2022. By the end of December, the Fellowships & Grants committee had selected the following awardees:

<table>
<thead>
<tr>
<th>Paul Hengeveld</th>
<th>Estelle Bourbon</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Home Institute:</strong> Erasmus University Rotterdam, NL</td>
<td><strong>Home Institute:</strong> University Paris Saclay, FR</td>
</tr>
<tr>
<td><strong>Host Institute:</strong> Centre for Research and Technology-Hellas (CERTH), GRE</td>
<td><strong>Host Institute:</strong> Center for Cell Engineering of Sloan Kettering Institute, USA</td>
</tr>
<tr>
<td><strong>Molecular Properties of the Subset #111 B-cell Receptor in Chronic Lymphocytic Leukemia</strong></td>
<td><strong>Anti-tumor efficacy and selectivity of dual CD4-CD7 CAR-T cells for the treatment of CD4+CD7- T cell lymphoma.</strong></td>
</tr>
</tbody>
</table>
TALENT ACCELERATOR MENTORING PROGRAMS

EHA mentoring programs are a unique opportunity to engage with peers and faculty, learn from each other not only in the formal classroom but also around a dinner table or during a coffee break. Because of the importance of ongoing engagement and the need for physical presence, EHA mentoring programs were severely affected by the restrictions imposed by the COVID-19 pandemic. During the last 12 months, EHA faced the ongoing task to reschedule face to face opportunities.

Despite these challenges, EHA believes that, going forward, mentoring programs will return to offer key learning moments for young researchers and provide important tools to support their career. It is with this belief, that EHA is finalizing a new mentoring program to be added alongside the current EHA CRTH and TRTH.

COMPUTATIONAL BIOLOGY TRAINING IN HEMATOLOGY (CBTH)

EHA has been working, in collaboration with the European Molecular Biology Laboratory (EMBL) – European Bioinformatics Institute (EBI), to design this new mentoring program. The goal of the program is to support the development of computational biology skills in hematology researchers. Participant selection is expected to start in 2022, and the first workshop will be rolled out in early 2023.

CLINICAL RESEARCH TRAINING IN HEMATOLOGY (CRTH)

Due to the prevailing COVID-19 pandemic, CRTH 2020-2021 was initially rescheduled to October 2021 but was further postponed until May 2022. A total of 20 scholars were selected to attend this nine-month long unique training and mentoring experience focused on clinical research in Europe, with a global scope.
EHA-ASH TRANSLATIONAL RESEARCH TRAINING IN HEMATOLOGY (TRTH)

TRTH provides early career researchers with a unique, year-long training and mentoring experience. TRTH is a joint effort of EHA and the American Society of Hematology (ASH), and is focused on helping early-career hematological scientists build successful careers in hematological translational research.

The 2020 edition of the TRTH spring course was postponed because of the onset of the pandemic, and it was not possible to re-schedule in 2021. Nonetheless, a series of virtual thematic sessions were held between November 2020 and October 2021. The class looks forward to meet in-person in March 2022.

Thematic sessions held online:

- Kick-off session by the co-directors Elizabeth Macintyre and Janis Abkowitz
- Academic vs industry careers by Ross Levine & Glenn Begley
- Data, data, data, endless data by Donna Neuberg & Elisa Laurenti
- Publications: reading and writing by Kostas Stamatopoulos & José Lopez
- Getting into the right mindset for the actual TRTH Spring Course by Sara Meyer
- Career paths and job opportunities in Europe and the U.S by John Gribben

HOW DO WE MONITOR OUR IMPACT? ResearchFish

EHA strives to support career development of young researchers, but how can we see that? Measuring this impact should go beyond merely tracking publication records and this is why we have started working with ResearchFish.

ResearchFish is used globally by funders and universities to track research and evidence impact. The platform uses technology and algorithms to collect outcomes and outputs of research from the web, external data sources, and the researchers themselves.

Recipients of EHA grants and participants in the EHA mentoring programs are encouraged to submit an entry via ResearchFish annually and that allows us to monitor programs overall and course correct when needed.
LOBBYING FOR HEMATOLOGY

“REPRESENTING HEMATOLOGY AND HEMATOLOGISTS IN EUROPE”
AWARENESS, ADVOCACY, AND STAKEHOLDER RELATIONS

EHA serves as the voice of hematologists in Europe, working to raise awareness of their contribution to healthcare and health research, and to promote their specific needs and interests. To be an effective advocate for hematology professionals and their patients, EHA interacts and collaborates with key stakeholders, taking an integrated approach to policy, regulatory, and scientific relations.

ADVOCACY PRIORITIES

EHA’s policy and lobbying activities are based on three overarching priorities:

• Support for hematology research (increased funding and improved governance),
• Access to affordable diagnostics and treatment for patients with blood disorders,
• An optimized regulatory framework in line with the needs of hematology and hematologists.

STAKEHOLDER RELATIONS

At the basis of EHA’s policy and advocacy work is proactive and sustained engagement and alignment with patient organizations, nurses, EU institutions, industry partners, and national hematology societies. Active participation in alliances and EU-funded projects is an integral part of our stakeholder strategy.

HIGHLIGHTS 2021: EU PHARMACEUTICAL AND HEALTH POLICIES

Rising pressures on European health systems resulting from the COVID-19 pandemic, the fight against cancer, and the costliness of many novel therapies have accelerated the development and revision of EU policies, legislation, and funding programs in health. EHA engaged with EU institutions and stakeholders to ensure that the views and needs of hematologists, particularly regarding access to innovative therapies, found their way into key EU initiatives, such as:

• Revision of the EU pharmaceutical and orphan drugs legislation,
• EU funding programs, in particular Horizon Europe and EU4Health,
• The new EU HTA Regulation,
• The Europe’s Beating Cancer Plan.

Together with its allies (other medical societies, patient organizations), EHA was instrumental in securing a prominent place in these EU initiatives for key topics such as personalized medicine, unmet needs, precision diagnostics, affordability of cell and gene therapies, and real-world evidence generation.

To increase the visibility of hematology and magnify the voice of hematologists in the cancer stakeholder landscape, EHA joined the European Cancer Organisation as well as the multistakeholder advocacy collaborative Rare Cancers Europe at the start of 2021.
REDUCING BUREAUCRACY IN CLINICAL TRIALS

One particularly high-profile and high-impact activity at the European level is the (EHA initiated and led) campaign to reduce unnecessary and potentially harmful administrative burdens for investigators and participants in clinical trials. The Recommendations of the Coalition for Reducing Bureaucracy in Clinical Trials (‘Coalition Recommendations’) were published in November 2021. Key concerns and recommendations of the Coalition on safety reporting, ethics requirements, and regulatory guidance have already been incorporated in the revision of the ICH E6 GCP guidelines, the draft guidance of the Good Clinical Trials Collaborative, and, crucially, the implementation of the EU Clinical Trials Regulation.

IN VITRO DIAGNOSTICS REGULATION (IVDR) AND PRECISION DIAGNOSTICS

The BioMed Alliance IVDR Taskforce, chaired and represented in the EU’s Medical Devices Coordination Group by EHA President Elizabeth Macintyre, won an important first achievement for the academic diagnostic community with the European Commission’s October 2021 announcement that application of key IVDR requirements would be postponed and rolled out progressively between May 26, 2022 and 2028.

In December, the BioMed Alliance published the results of a survey, designed and overseen by the EHA Taskforce on IVD, on the current use of IVD tests and IVDR preparedness among diagnostic laboratories.

HEALTH TECHNOLOGY ASSESSMENT (HTA) REGULATION

Having lobbied actively for an EU mechanism for joint HTA, with structural involvement of clinicians and patients, EHA is finding itself positioned in the front-row of HTA regulation following the December 2021 adoption of the EU HTA Regulation. Both EHA and the BioMed Alliance (for which EHA has co-led on the topic) have been invited to join the stakeholder framework for implementation of the HTA Regulation. EHA has advocated for an important role for medical societies, with timely selection and consultation of experts, which is crucial for ensuring the quality and uptake of joint clinical assessments which, in turn, will improve efficiency, reduce cost, and increase access to treatments with demonstrated clinical and patient benefits.

EUROPEAN MEDITCINES AGENCY (EMA)

Throughout 2021, EHA continued to invest in the strengthening of a constructive, mutually beneficial collaboration with EMA. Among the collaborations’ results were the first EHA-EMA Joint Symposium at EHA’s Annual Congress, involvement in a new EMA policy-level stakeholder group, and participation in a structured dialogue between EMA and academia on optimization of cancer medicines.
With almost 100,000 patient data sets identified, the HARMONY Alliance is fully equipped to facilitate state-of-the-art research into blood cancers. The HARMONY Big Data Platform is a unique research infrastructure, with a data lake and advanced big data analytic tools, that are being used to accelerate the development of more effective treatments for patients with Hematologic Malignancies (blood cancers). The data sets have been shared by the European Partners and Associated Members of the HARMONY Alliance. The HARMONY data lake is one of the largest databases of its kind and it is still growing. Careful procedures have been installed to ensure the anonymization and the quality of the data. Additionally, HARMONY’s data scientists have developed sophisticated methods for data harmonization and analysis.
HARMONY has developed a fully operational clinical data-sharing platform based on datasets harmonized with the Common Data Model (CDM) structure. Datasets from the HM’s covered by the action have been included, reaching a total 62,770 records in the platform and over 100,000 cases identified, coming from 130 data sources from 17 countries.

Research into better treatments for patients has been boosted by the approval of four new research projects, revised and approved by experts, and increasing the number to 17, covering all HM’s. View HARMONY Research Projects here >

Apart from strong global relations with the American Society for Hematology, HARMONY has expanded its frontiers to Latin-America and Asia.

During 2021, the number of Associated members (AM) willing to share knowledge and data has been increased considerably. HARMONY is now a consolidated community with 49 associated members and 53 partners, being the biggest hematological community in Europe.

2021 was a key year in optimizing the collaboration between data providers and researchers. A HARMONY ‘Mapping Team’ was created to process more data to OMOP language in less time. New variables were included by upgrading the concept lists in Taxonomy during the mapping process of the new Data Sources. Access to data has been enhanced by: updating the data discovery tools (ATLAS) to include information about the new Data Sources, improving Zeppelin’s configuration to grant the correct platform behavior as well as the incorporation of ATLAS. Moreover, the number of analyses and requests for workspaces has increased considerably. The HARMONY modelling tool has been optimized to speed up the process of generating Quality Gates, Quality Reports, and Data Source mappings as well as the improvement of the Profiling Tool to deal with Data Sources composed by several files automatically.

In 2021, Delphi surveys were successfully completed for acute myeloid leukemia (AML), chronic lymphocytic leukemia (CLL), non-Hodgkin lymphoma (NHL), myelodysplastic syndromes (MDS) and multiple myeloma (MM), while for acute lymphoblastic leukemia (ALL) the first round is also completed. Patients, clinicians, regulators and drug developers participated in the HARMONY Alliance Delphi Surveys. Completed surveys will allow HARMONY researchers to develop Core Outcome Sets (COS) for blood cancers.
THE HARMONY ALLIANCE ‘COMMUNICATIONS HUB’

In 2021, EHA secured the impact of the HARMONY Alliance messages by delivering a consistent and effective flow of communication and dissemination activities:

- To maximize the impact of the HARMONY Alliance as a whole;
- To ensure the uptake of results of Individual HARMONY Big Data Platform HARMONY;
- Research Projects and related activities;
- To offer opportunities and benefits for prospective Associated Members to join;
- To keep the internal community engaged;
- To reach out in order to grow the external network.;
- And to continuously raise awareness for big data innovations in blood cancer research.

The 2nd year of the COVID-19 pandemic continued to burden HARMONY community members and again had an impact on the internal and external communications activities. Except for the hybrid General Assembly organized by EHA, meetings and presentations by HARMONY Experts were organized in a virtual manner.

In 2021, the HARMONY Communications team, led by EHA, continued to develop new and inspiring content to inform, motivate, and engage both the internal HARMONY community and external networks. New HARMONY content was communicated through digital articles and blogs, newsletters, press releases, videos, social media campaigns, and personal presentations. Despite the restraints linked to the pandemic situation, HARMONY has been present at a large number of meetings and conferences. View a select of the HARMONY news items here >

HIGHLIGHTS OF THE MAIN HARMONY COMMUNICATION AND DISSEMINATION ACTIVITIES IN 2021

- Increased the overall (virtual) visibility of HARMONY even further as a unique and large-scale Public-Private Partnership, with over 100 organizations, by successfully maintaining and profiling the HARMONY Alliance as a fully functioning and effective virtual organization with its own unique format and form.
- Implemented communications and dissemination strategies for expanding awareness about the critical importance of Big Data/Al/RWD in hematology and how HARMONY contributes;
- Spotlighted the developments around the HARMONY Big Data Platform i.e. the HARMONY data barometer;
- Spotlighted HARMONY results such as new scientific abstracts by HARMONY Experts;
Developed a large amount of new content (written articles/blogs, infographics, dedicated artwork and videos).

- Bringing together data, collaboration and trust for advances in medicine >
- Artificial intelligence to decode Hematologic Malignancies >
- Find more blogs at here >

Generated participation in HARMONY virtual meetings in various forms, and generated engagement and interest for presentations by HARMONY Experts at conference and meetings. Some examples are below:

- December 2021: HARMONY Alliance presented results at the ASH annual meeting 2021 >
- November 2021: The General Assembly of the HARMONY Alliance took place in The Hague, The Netherlands, and was organized in a hybrid format >
- June 2021: HARMONY participated in the EHA2021 Virtual Congress >
- June 2021: HARMONY organized virtual meeting with EMA: To provide EMA with insights and potentials of the HARMONY Big Data Platform; to explain about the data sets, data access and data analytic services; to interact on how and where it is envisaged to interface with EMA both in terms of its regulatory and research role.
- May 2021: HARMONY organized internal workshop for its Patient Cluster >

Ensured that knowledge of HARMONY’s work reached not just a European-wide audience, but an international one as well;

Continued to maximize the use of available social-media tools (posts, alerts, promotions, invitations, articles/blogs, quote cards, etc.) to increase global awareness of HARMONY’s achievements and its ongoing work;

Delivered digital, carefully crafted, and designed materials to deliver the HARMONY ‘message’ in relation to the innovative, and medically ground-breaking nature of its mission. Some examples are below:

- About HARMONY Delphi Surveys >
- HARMONY Delphi Survey web page for CLL >
- HARMONY Factsheet to attract the interest of bone marrow transplant professionals >
Continuously updated and improved the appearance and content of the website, thus enhancing its value as an online center point of valuable information;

Continuously managed the social media channels;

Ensured the use of HARMONY’S corporate design for consistency of content, tone, and style.

Brought the ‘big data for blood cancer’ communication concept ‘to life’ by developing new artwork and content, but maintaining a strong ‘bond’ with the HARMONY corporate identity.

This tag line, also used as a social media hashtag, was transformed into a dedicated campaign concept, as a foundation for online communication activities around data sharing and big data analytics in blood cancer research. The first part of the campaign took place during EHA2021, targeted at clinicians and researchers. The second part of the campaign took place during the Blood Cancer Awareness Month in September 2021, targeted at patients. Read more at: www.bigdataforbloodcancer.eu.
MAINTAINING RELATIONSHIPS AND PHILANTHROPY
PARTNERSHIPS AND FINANCIAL SUPPORT 2021

2021 was another year affected by the COVID-19 pandemic. The new digital reality was embraced by the world as virtual education and collaboration became the “new standard”.

The learnings of the first pandemic year have been very instrumental in transforming EHA’s educational and scientific offerings into virtual & hybrid. The experiences of 2020’s virtual congress pivot supported the EHA2021 Virtual Congress in becoming an immense success. The EHA online educational program has grown and diversified. The EHA Campus has expanded with novel online learning programs, interactive courses, and microlearning cases offered to the hematology community worldwide.

This progress was made possible by continuous support of and collaboration with EHA partners. EHA expresses its deepest gratitude to EHA Corporate Sponsors and supporters for their trust and commitment during 2021. EHA is looking forward to continue an ongoing dialogue with its existing partners, as well as welcoming new organizations on board to support a number of EHA activities.

Additionally, EHA would like to express its appreciation to supporters of the EHA Friends’ Fund. The EHA Friends’ Fund is meant to build a healthier and more promising future for hematology patients by providing opportunities in education and career development for future leaders in the field of hematology.
EHA is a common good non-profit organization under Dutch law. It receives its funding through corporate partnerships with industry partners and through activity-based sponsorships for EHA’s programs. Profits generated from its congress and other programs are invested in other activities that serve the hematology community, according to the objectives and mission of EHA.

EHA is a Board-led organization. The Executive Board, the Board, and its committee members contribute on a voluntary basis to the association’s work for a defined period. The EHA Executive Office leads all efforts in executing the EHA strategy and employs a variety of highly experienced employees.

**BALANCE SHEET AS OF DECEMBER 31, 2021 (IN €’000)**

<table>
<thead>
<tr>
<th>Assets</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed assets</td>
<td>232</td>
<td>180</td>
</tr>
<tr>
<td>Current assets</td>
<td>1,804</td>
<td>1,108</td>
</tr>
<tr>
<td>Cash and Cash equivalents</td>
<td>20,868</td>
<td>26,622</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td>22,905</td>
<td>27,910</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserves</td>
<td>19,824</td>
<td>22,722</td>
</tr>
<tr>
<td>Current Liabilities</td>
<td>3,081</td>
<td>5,188</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td>22,905</td>
<td>27,910</td>
</tr>
</tbody>
</table>
### STATEMENT OF INCOME AND EXPENSES 2021 (IN €’000)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11,219</td>
<td>11,726</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual Congress</td>
<td>2,110</td>
<td>1,746</td>
</tr>
<tr>
<td>Research and Mentoring</td>
<td>1,643</td>
<td>2,354</td>
</tr>
<tr>
<td>Education and Training</td>
<td>436</td>
<td>412</td>
</tr>
<tr>
<td>Direct operations</td>
<td>182</td>
<td>124</td>
</tr>
<tr>
<td>Indirect operations*</td>
<td>3,281</td>
<td>4,095</td>
</tr>
<tr>
<td>HARMONY project</td>
<td>(41)</td>
<td>(47)</td>
</tr>
<tr>
<td><strong>Total expenses</strong></td>
<td>7,611</td>
<td>8,686</td>
</tr>
<tr>
<td><strong>Operational result</strong></td>
<td>3,609</td>
<td>3,041</td>
</tr>
<tr>
<td>Financial income / (expenses)</td>
<td>(82)</td>
<td>(143)</td>
</tr>
<tr>
<td><strong>Result</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>including staff costs</em></td>
<td>3,527</td>
<td>2,898</td>
</tr>
</tbody>
</table>
WORK PLAN AND BUDGET 2022

Based on EHA’s Strategy, input was collected from EHA’s Committees and Working Groups for the 2022 Work Plan and Budget. Input was provided at two levels:

- EHA’s existing program portfolio and proposed strategic direction in 2022.
- New EHA program initiatives fitting within EHA’s overarching strategy.
- For ongoing projects as well as for new program initiatives, the scopes of these initiatives were developed, including the budgets, and collected in a draft Work Plan and Budget 2022 which was approved by the Board. The budget is summarized in the table below.

## BUDGET 2022 (IN €’000)

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td>15,330</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Expenses</td>
<td></td>
</tr>
<tr>
<td>Annual Congress</td>
<td>5,550</td>
</tr>
<tr>
<td>Research and Mentoring</td>
<td>3,517</td>
</tr>
<tr>
<td>Education and Training</td>
<td>690</td>
</tr>
<tr>
<td>Direct operations</td>
<td>1,095</td>
</tr>
<tr>
<td>Indirect operations*</td>
<td>4,620</td>
</tr>
<tr>
<td>HARMONY project</td>
<td>-</td>
</tr>
<tr>
<td>Financial income and expenses</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Total expenses</td>
<td>15,472</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial income / (expenses)</td>
<td>(150)</td>
</tr>
<tr>
<td>Budgeted result</td>
<td>(292)</td>
</tr>
</tbody>
</table>
INVESTING IN THE FUTURE

At the October meeting, the EHA Board also discussed its ambition to grow and expand activities in Research & Mentoring, Education, Congress & Meetings, and Communication to ensure that EHA broadens its current benefits for members and non-members and can fulfil and broaden its strategic goals. In lieu of this, the EHA Board decided that one additional department should be specifically formed to solely work on relationship building for EHA stakeholders in and beyond Europe. EHA’s financial position is solid, allowing the association to develop and implement considerable programs that contribute to achieving its strategic goals. New programs have been presented to the EHA Board to obtain approval for an additional investment plan for 2022 and beyond.

NOTES TO THE FINANCIAL STATEMENTS

The financial statements are prepared in accordance with guideline RJ640 (Non-profit organizations) of the Dutch Accounting Standards Board.

The financial statements are prepared in Euros, the functional currency of the European Hematology Association.

Valuation of assets and liabilities and determination of the result takes place under the historical cost convention. Unless presented otherwise at the relevant principle for the specific balance sheet item, assets and liabilities are carried at nominal value. Income and expenses are accounted for on an accrual basis. Profits are only included when realized on the balance sheet date. Losses originating before the end of the financial year are considered if they have become known before preparation of the financial statements.

Revenues from goods are recognized upon delivery. The cost price of these goods is allocated to the same period. Revenues from services are recognized in proportion to the services rendered. The cost price of these services is allocated in the same period. Transactions in foreign currencies are recorded at the FX-rates of the dates of the transactions. At the end of the financial year the unsettled balances of foreign currency transactions are revalued at the year-end FX-rates.
“TOWARDS A CURE FOR ALL BLOOD DISORDERS”