Biobank Research Ethics Committee

Annual report 2021

UMC Utrecht

tcbio.umcutrecht.nl

Content

Preface

With this annual report, the Biobank Research Ethics Committee (BREC, in Dutch: TCBio) reports its contribution to the biobank governance structure in the UMC Utrecht in 2021.

The changes implemented in 2021 in meeting frequency and support staff now places the Committee in a better position to facilitate and improve an efficient and rapid review procedure. This allows further development of the review system for research with human tissue material in the UMC Utrecht. In this way, we can continue to fulfill the promise to protect the rights and interests of patients who donate their tissue for this type of research.

We thank the Board of Directors for their support in making this possible.

Prof. J.J.M. van Delden (MD PhD, chair)

Summary

In 2021, a recovery of the number of biobank and release protocol submissions was seen compared to the reductions seen in 2020 when the COVID-19 pandemic started. The number of opinions concerning release protocols increased substantially to the highest number ever.

The major change in the reporting year was the increase in meeting frequency from monthly meetings to meetings every two weeks. This was also facilitated by an increase in supporting staff. These changes were implemented as of the 1st of April 2021.

Despite the increased number of positive opinions granted, there was a small decrease in the Committee's review time. In 2022, the goal is to reduce the average review time further when the increase in meeting frequency has been in effect for the whole calendar year. Further optimization of the release protocol template in 2022 is also aimed at facilitating a more efficient review procedure.

1 Competent authority BREC

Biobanks, comprising collections of human biological material and associated data, are increasingly important in medical-scientific research. Typically, the research question for which the human biological material and associated data will be used, is only globally known at the time donors provide their material to the biobank. Also, researchers generally do not know for which specific purpose the material and data will be used and by whom. This allows only general information to be provided to the donor. By giving broad consent at the time of donation to the biobank, donors transfer part of their control rights over the material and data to the biobank. To continue donor support for biobanks now and in the future, donors must be able to rely on their material and data being handled in a responsible manner in the biobank and during the medical-scientific research.

The following principles are important for donor trust:

- protection of confidentiality of the human biological material and associated data,
- type of donor consent,
- handling of findings,
- ownership of the material, and
- transparency on commercial use.

For the UMC Utrecht, these principles are detailed in the UMC Utrecht Biobank Regulations.

As a result of the UMC Utrecht Biobank Regulations[1] adopted by the Board of Directors in 2013, the Biobank Research Ethics Committee (BREC, in Dutch: Toetsingscommissie Biobanken – TCBio, hereafter: the Committee) was appointed by the UMC Utrecht Board of Directors. The Committee operates independently from the Central Biobank UMC Utrecht. The latter is responsible for the monitoring of the quality, the registration and the storage of the human biological material as sub-biobanks.

With the Biobank Regulations the UMC Utrecht aims to build a high-quality infrastructure for medical-scientific research for all UMC Utrecht researchers and their partners. To reach this goal, the Committee reviews whether the human biological material and associated data are collected and stored as sub-biobanks in the Central Biobank UMC Utrecht in accordance with the criteria laid down in the UMC Utrecht Biobank Regulations. Similarly, the Committee reviews whether the human biological material and associated data will be used in a responsible way in medical-scientific research.

This governance model does not solely serve the interests of the donor but also those of the researcher and society as a whole ensuring that (scarce) material will be used for the right purposes. Donors must be able to rely on their material and data being used for relevant medical-scientific research only.

In cases where human biological material is collected for yet unspecified purposes from participants during clinical research that is subject to the Medical Research Involving Human subjects Act (WMO), the Committee has requested the MREC Utrecht to perform the review of the establishment of the sub-biobank in parallel with the WMO review in order to avoid that researchers have to deal with two separate ethics committees at the same time.

1 For details on the UMC Utrecht Biobank Regulations, refer to Biobanks UMC Utrecht - Toetsingscommissie Biobanken.

2 Committee members

New Committee members are recruited through the divisions of the UMC Utrecht or proposed by members leaving the Committee. In 2021, radiologist dr. F. Mohamed Hoesein and substitute ethicist prof. dr. A. Bredenoord left the committee. The committee was happy to welcome geneticist dr. M. Siemelink and medical oncologist dr. J. Roodhart in the committee.
A complete list of the Committee members in 2021 is provided in Attachment 1.

3 Committee secretariat

The Committee is supported by staff from the Department of Research Review (in Dutch: Afdeling Toetsing Onderzoek), part of the Directorate Quality of Care & Patient Safety. This Department also supports the Medical Research Ethics Committee (MREC, in Dutch: METC) Utrecht. Head of Department in 2021 was Mrs. S. de Weerd until 1-08-2021. Thereafter, Mrs. J. van Luipen filled this position as acting Head of Department until a new Head of Department is expected to be appointed in 2022.

In 2021, two new employees were welcomed into the Department of Research Review to support the Committee. Mrs. A.H.M. van den Oetelaar fills the new position of Committee Secretary and Mrs. M. Koppes joined the Department in the new position of Senior review procedure coordinator. Both positions were made possible by the extra funds made available by the Board of Directors starting in April 2021.

A list of all employees that support the Committee can be found in Attachment 1.

4 Committee's operating procedure

In general, the Committee's operating procedure is comparable to that of an accredited MREC. The Committee's operating procedures have been laid down in the rules of procedure (in Dutch: huishoudelijk reglement). The most recent version can be found on the Committee's website: Meer informatie - Toetsingscommissie Biobanken (umcutrecht.nl)

In 2021, the Committee convened 21 times. In the first three months of the year the monthly meeting day which, until the end of 2020 was set on Thursdays, was changed to every third Monday of the month. This allows the Committee's questions to be formulated and sent to researchers in the same week as the meeting. This way the committee's review period was reduced by several days. Starting April 2021, the frequency of Committee meetings were also increased to once every 14 days on Mondays. This change was facilitated by the recruitment of an additional committee secretary and review procedure coordinator (see also section 5 below).

From March 2020 onwards, due to the measures related to the COVID-19 pandemic, all meetings were held online via video conferencing. As usual, meeting documents were provided via a digital platform (Viadesk).

At the beginning of each meeting, the chair checks whether all required experts are present and whether any members have a conflict of interest with any of the files to be discussed. These issues are documented in the minutes of the meeting. Members with a conflict of interest leave the meeting for the duration of the discussion of the files concerned.

During the Committee meeting, for each file the relevant review criteria are discussed in a point-by-point fashion. For each review criterion, committee members offer their advice when relevant. Members do not put their advice in writing ahead of the meeting. In general, decisions are reached unanimously.

5 Results of 2021 and aims for 2022

5.1 Results in 2021

As part of the aims set for 2021, the following were initiated in order to further improve the review procedure:

a) As the review of the privacy aspects such as linking of human material to medical data frequently leads to committee questions, the focus has been on improving the template release protocol. Additional clarification of the information researchers need to provide on data protection and handling in the protocol is aimed at reducing the necessity to ask for additional information or arguments. In this way, the Committee hopes to grant a positive opinion in a faster review procedure. By the end of 2021, the new template was nearly finalized.
b) In addition, first steps to set up documents that provide more information for both Committee members and researchers on various aspects on the review procedures in general, and on privacy aspects in particular, were started. These will be continued in 2022 (see 5.2 below).

In addition to these results over 2021, the Committee secretaries participated in national initiatives to improve procedures for multicenter biobanks. By sharing our experience built up over the past 8 years with our counterparts in other academic hospitals we contributed to harmonizing these procedures in the future. However, so far, no concrete results of these initiatives can be reported.

5.2 Aims for 2022

A) In 2022 we will continue to strengthen the organization of the Committee's review process in order to minimize the number of (rounds of) questions.

   Specifically we aim to:
   1) Finalize and implement the improved format release protocol especially with regards to the section on data protection and data handling.
   2) Provide background information to committee members and researchers on relevant privacy legislation e.g. in the form of frequently asked question format (FAQs) on the TCBio website.
   3) Organize a seminar/webinar on relevant privacy regulations for Committee members and researchers

B) In 2022, following the Central Committee on Research Involving Human Subjects (CCMO), we will explore ways to strengthen patient participation in the Committee in 2023.

6 Review of sub-biobanks and release protocols

To comply with the UMC Utrecht Biobank Regulations, two types of protocols may be submitted: sub biobank protocols (in Dutch: deelbiobankprotocol) and release protocols (in Dutch: uitgifteprotocol).

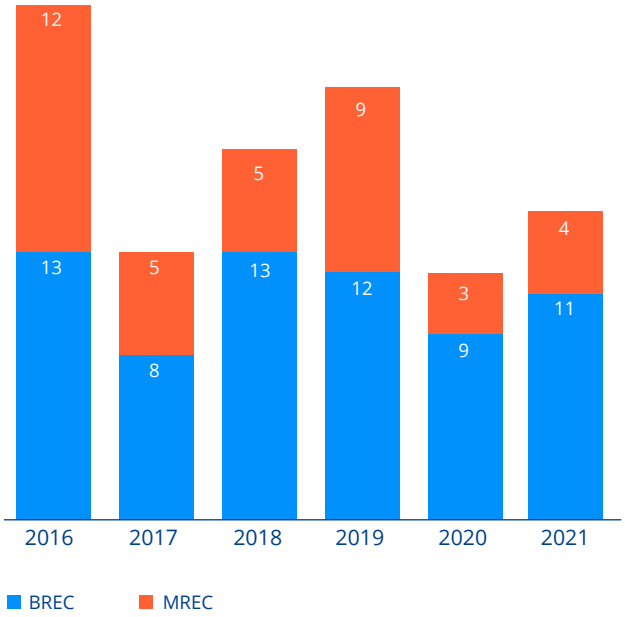
6.1 Sub-biobank submissions

6.1.1 Number of new sub-biobanks submitted

As laid down in the UMC Utrecht Biobank Regulations, all new sub-biobank protocols collecting human biological material for as yet unspecified research questions are reviewed by the Committee. However, as described in section one, the MREC Utrecht reviews sub-biobanks that are established when human biological material for storage for later, not yet specified use is also collected from subjects taking part in clinical research subjected to WMO review by the MREC. Given the above, the total number of new UMC Utrecht sub-biobanks that were intended to be set up in 2021 is therefore reflected by the sum of sub-biobank submissions received for review by either the Committee or the MREC.

The total number of sub-biobank submissions increased slightly in 2021. The majority of the sub-biobanks (11 out of 15) were received by the Committee (Figure 1) while the remaining four sub-biobank protocols were submitted to the MERC in parallel with clinical research that was subject to the WMO as described in section 1.

Figure 1
Number of sub-biobank protocols submitted to the Committee (blue) and the MREC (orange) in 2021 compared to 2016-2020.

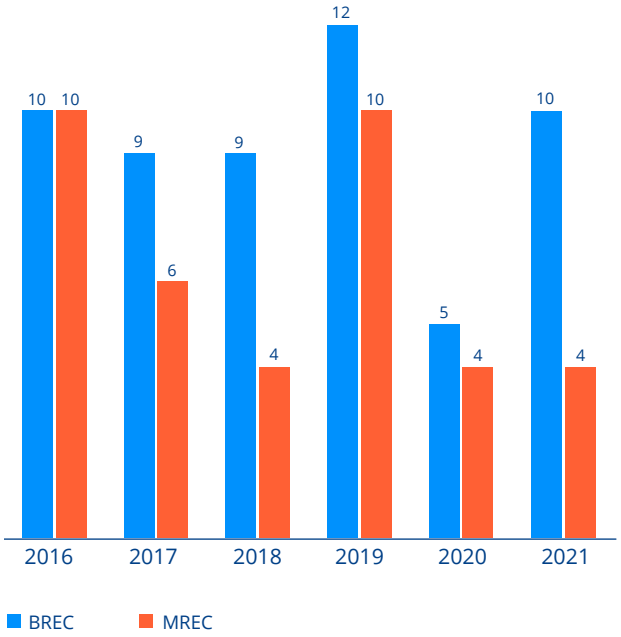


6.1.2 Number of recommendations to the Board of Directors issued on sub-biobanks

For all fifteen sub-biobank review procedures completed in 2021, the Committee/MREC recommended the Board of Directors to approve the sub-biobank (Figure 2). There were no recommendations for rejection.

Similarly to the increased number of sub-biobank submissions in 2021 (Figure 1), the total number of recommendations for approval was also increased in 2021 (Figure 2).

Figure 2
Number of sub-biobanks recommended by the Committee (blue) and MREC (orange) for approval by the Board of Directors in 2021 compared to 2016-2020.



Note: Review procedures may extend into the next calendar year. Therefore, the sum of both committees' recommendations (for either approval or rejection) within a calendar year may differ from the total number of submissions in that year shown in Figure 1

6.1.3 Sub-biobanks submitted by UMC Utrecht Divisions

Of the eleven sub-biobank protocols submitted by UMC Utrecht divisions to the Committee (Figure 1), three protocols were submitted each by the divisions Images & Oncology and Brain, two by the divisions of Internal Medicine & Dermatology and Women & Babies and one by the division Laboratories, Pharmacy & Biomedical Genetics. The Committee received no new sub-biobank protocols from the divisions Children, Heart & Lung, Julius Center, Surgical Specialties and Vital Functions.

In addition, the MREC received four sub-biobank protocols for review in parallel with a WMO review (Figure 1), which were submitted by the divisions Internal Medicine & Dermatology (2), Heart & Lung (1) and Images & Oncology (1).

6.2 Release protocols

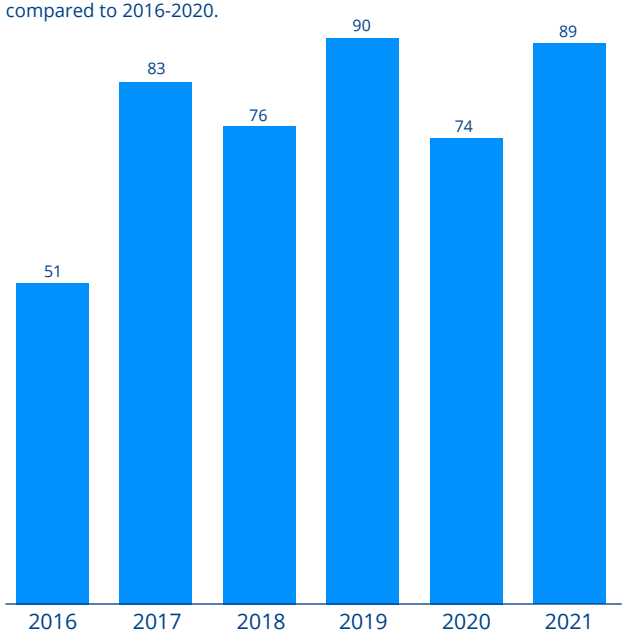
6.2.1 Number of new release protocols submitted

The total number of new release protocol submissions in 2021 increased compared to 2020 to about the level of 2019 (Figure 3). Of the total number of submissions (89), the majority (57) originated from UMC Utrecht divisions. This number is again increased compared to the year 2020 when UMC Utrecht submissions fell from 69 in 2019 to 41 in 2020. It therefore seems likely that the decrease in 2020 was largely due to the restrictions as a result of the COVID-19 pandemic to carry out research. A breakdown of the release protocol submissions by UMC Utrecht division in 2021 is given in Figure 5.

As in previous years, a substantial number of release protocol submissions originated from HUB Organoids. HUB Organoids (HUB) was founded by Hubrecht Institute, UMC Utrecht and Royal Academy of Arts and Sciences (KNAW) to refine organoid development and foster organoid adoption globally[2]. Together with the UMC Utrecht Central Biobank, HUB Organoids manages the HUB sub-biobanks that have been established for organoids originating from different tissues and diseases.
As for all UMC Utrecht sub-biobanks, release requests from the HUB sub-biobanks are reviewed by the Committee. HUB facilitates release protocol submissions from the HUB sub-biobanks. These therefore also include some release requests for studies by UMC Utrecht researchers although the fast majority of submissions concern requests not directly related to UMC Utrecht research and for which HUB bears the responsibility. In 2021, 31 of the total 89 release protocol submissions were submitted by HUB. This number is comparable to the number of submissions in 2020 (33).

In addition to submissions by UMC Utrecht and HUB Organoids and by way of exception, the Committee reviewed one release protocol submission from a biobank not linked to the UMC Utrecht or any other institution with a biobank ethical review committee. In these cases, and in the absence of applicable National legislation, the Committee still applies the UMC Utrecht Biobank Regulation to review the release protocol even though these external requests do not formally fall within the scope of the UMC Utrecht Biobank Regulation.

Figure 3
Number of new release protocols submitted in 2021 compared to 2016-2020.

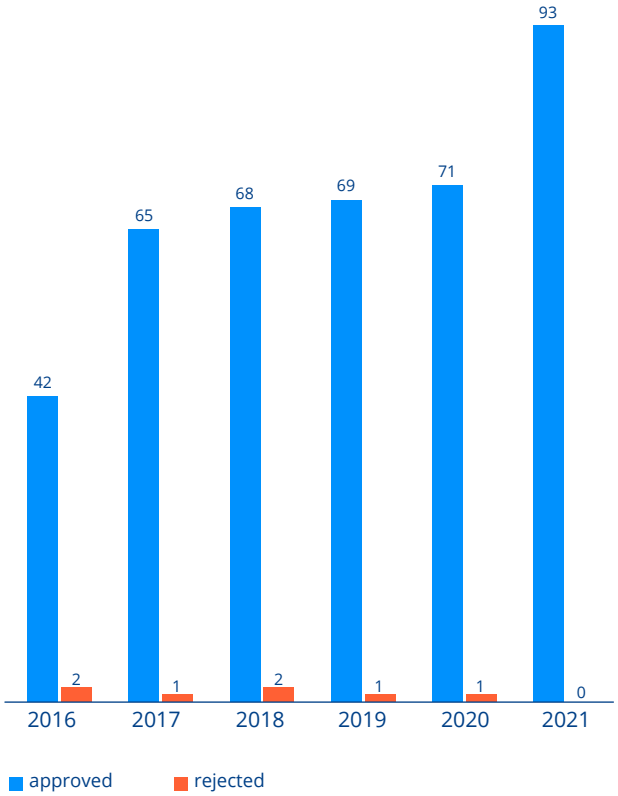


6.2.2 Number of decisions regarding release protocols

The total number of release protocols approved by the Committee in 2021 increased substantially compared to previous years (Figure 4). No release protocols were rejected by the Committee.
The increased number of approvals reflects primarily the increased number of release protocol submissions (Figure 3). In addition there is also a carry-over effect due to protocols submitted in one year being approved or rejected in the next.

2 Link to HUB website: About | HUB Organoids

Figure 4
Number of release protocols approved (blue) and rejected (orange) in 2021 compared to 2016-2020.



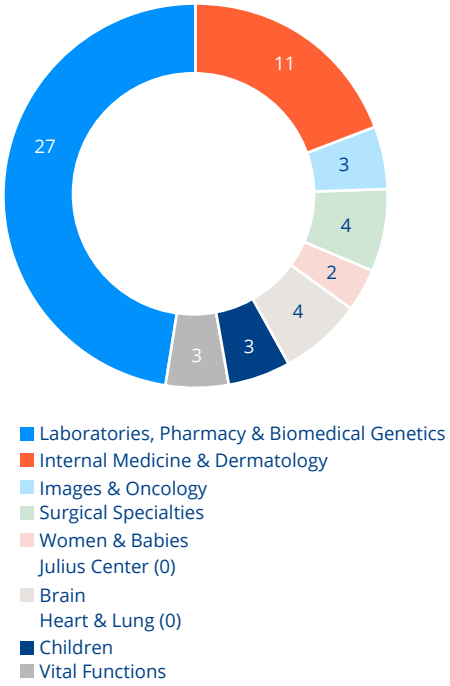
Note: Review procedures may extend into the next calendar year. Therefore, the sum of the approvals and rejections within a calendar year may differ from the total number of submissions in that year shown in Figure 3.

Overall, as release protocols comprise the majority of the committee's agenda, these data underscore a continued increase in the committee's workload.

6.2.3 Release protocols submitted by UMC Utrecht Divisions

The number of release protocol submissions per UMC Utrecht division varied in 2021 from 0 and 27 (Figure 5). Similarly to the year 2020, the highest number of release protocols were submitted by the divisions Laboratories, Pharmacy and Biomedical Genetics (27) and Internal Medicine and Dermatology (11).

Figure 5
Number of release protocols submitted in 2021 by UMC Utrecht divisions.



6.3 Review time

The average total time for sub-biobank and release protocol reviews are shown in Table 1. In 2021, the average review time decreased compared to 2020 although it still exceeded the maximum time limit set by the committee. As already described in section 5, as of April 2021 the meeting frequency was increased in order to reduce the average review time. As this came into effect during the reported year, the full effect cannot be seen yet in the present report.

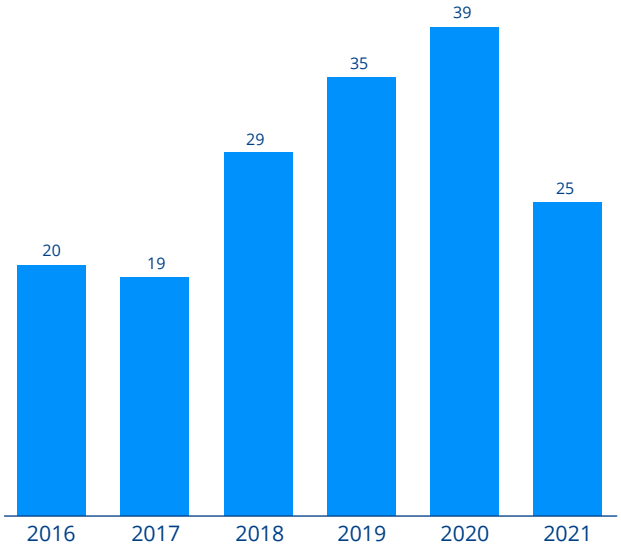
Year	Sub-biobank	Release protocol
2019	54,9 (n=12)	48,3 (n=70)
2020	67,6 (n=5)	51,5 (n=72)
2021	66,5 (n=10)	46,5 (n=93)

Table 1
Average duration of review (in calendar days) for the recommendations and approvals given in 2021 compared to 2019-2020. The review time limit according to the Committee's rules of procedure are 56 days for sub-biobanks and 42 days for release protocols.

6.4 Amendments

In 2021, after a steady increase in the years 2018-2020, the number of sub-biobank and release protocols that were amended one or more times decreased. The committee has delegated the review of non-substantial amendments to the chair. Only changes that affect the criteria for approval of a biobank or release protocol are reviewed in the Committee meeting. Amendments for which no review by the Committee is required are reported to the Committee in the next meeting as weekly listings.

Figure 6
Number of sub-biobank and release protocols amended at least once in 2021 compared to 2016-2020.



6.5 Incidental findings

The term "incidental findings" refers to unforeseen individual donor results that raise issues regarding the obligation to return the results to the donor. Per the Committee's Standard Operating Procedures, all reports of incidental findings are subject to review, in order to provide guidance on the return of the results to the donor. In 2021, no reports of incidental findings were received.

6.6 Final reports

Once their release protocol is approved, researchers are asked to report results within one year of completion of the study. As in previous years, only a handful of final reports were received in 2021. To date, there has been no active follow-up by the Committee to ascertain study results, as this is considered to be the responsibility of the researcher.

6.7 Submission procedures

Background information on the importance of review, current forms and templates to facilitate the Committee's review per UMC Utrecht Biobank Regulations, and instructions for submissions are provided on the Committee's website: Home - Toetsingscommissie Biobanken (umcutrecht.nl)

In January 2021, the completely redesigned and updated Dutch version of the website was launched. In addition to facilitate non-Dutch speaking researchers, an English version of the website was launched in August 2021.

In contrast to the previous site on the UMC Utrecht internal network site (Connect), the new website is accessible from outside the UMC Utrecht systems and can therefore be reached by both UMC Utrecht employees and external parties wishing to collaborate with the UMC Utrecht.

The employees of the Department of Research Review can be contacted daily by e-mail and telephone for questions and advice on review procedures and requirements. Visits for consultation are usually allowed twice a week at scheduled times, but were replaced by telephone or video consultations from March 2020 onwards due to the COVID-19 pandemic.

7 Appeal against committee decisions

No formal appeals were received.

8 Other committee activities

Besides the reviews under the UMC Utrecht Biobank Regulation reported above there are no other review activities to report for 2021.

9 Requests for information under the Freedom of Information Act

As in previous years, no requests for information under de Freedom of Information Act (in Dutch: Wob-verzoek) were received in 2021.

10 Internal quality assurance and training

About once or twice a year, the Committee's secretary (re)trains UMC Utrecht employees on the UMC Utrecht biobank policy. However, in 2021 no such presentations took place.

In November 2021, the annual meeting of the MREC was again held jointly with members of the Committee. Due to the COVID-19 measures, the meeting was held online using video conferencing. During the annual meeting relevant developments regarding research ethics and national and or international regulations are discussed. Attendance facilitates training of TCBio committee members.

Topic "The role of the MERC in the drug development regulatory system".

As the Committee is also part of the regulatory system, knowledge of the discussions regarding regulatory requirements in drug development is also relevant for members of the Committee.

The program was as follows:

Prof. dr. H.N. (Huib) Caron
(Roche Genentech)
The role of the pharmaceutical industry in the regulatory system

Prof. dr. P.G.M. (Peter) Mol
(Professor Drug Regulatory Science RUG, Senior assessor CBG-MEB, SAWP member (EMA)):
Collaboration/coordination between Medicines Evaluation Board (CBG) and CCMO (Central Committee on Research Involving Human Subjects)

Drs C.A. (Stan) van Belkum
(Executive director CCMO):
The role of the Central Committee on Research Involving Human Subjects (CCMO) and Medical Ethics Review Committee (METC)

There was a large attendance by members from both committees.

11 Attachments

Attachment 1

Committee members and office staff

Committee members in 2021

Prof. J.J.M. (Hans) van Delden MD PhD	Ethicist, chair
Mr. M. (Martin) Bootsma PhD	Epidemiologist
Mrs. B.C. (Claire) Collins LLM	Lawyer
Prof. R. (Roel) Goldschmeding MD PhD	Pathologist
Mrs. D.A.H. (Dennie) Gulikers-Schoonderbeek BSc	Privacy officer
Mr. I. (Imo) Höfer MD PhD	Physician/scientist
Mrs. H.E. (Titia) van Lier LLM MA	On behalf of donors
Mrs. G.V. (Gaby) Minasian LLM	Lawyer
Mr. F.A.A. (Firdaus) Mohamed Hoesein MD, PhD (until 1-09-2021)	Radiologist
Prof. J.K. (Hans Kristian) Ploos van Amstel PhD	Geneticist
Mrs. N.A. (Kiki) Tesselaar PhD	Immunologist
Mr. P.M.J. (Paco) Welsing PhD	Epidemiologist
Mr. M. (Marten) Siemelink MD PhD (from 14-06-2021)	Geneticist
Mrs. J.M.L. (Jeanine) Roodhart MD PhD (from 01-09-2021)	Medical Oncologist

Substitute members in 2021

Prof. A.L. (Annelien) Bredenoord PhD (until 1-10-2021)	Ethicist
Mrs. I.E. (Irene) de Bruijne	On behalf of donors
Mrs. A.M. (Alexia) Franse LLM (until 01-07-2021)	Lawyer
Mrs. A.M. (Jenny) Zijlmans LLM	On behalf of donors

Staff from the Department of Research Review that supported the Committee in 2021

Mr. R.P. (Rutger) Chorus MA	Senior review procedure coordinator
Mrs. W.A. (Antoinette) Groenewegen PhD	Secretary
Mrs. M. (Mandy) Koppes MSc	Senior review procedure coordinator from 22-03-2021
Mrs. J. (Jolande) van Luipen MA	Acting Head of Department Research Review - from 01-08-2021)
Mrs. A.H.M. (Anita) van den Oetelaar MSc	Secretary from 01-04-2021
M. (Michael) de Ridder	Advisor on information and archive
Mrs. P.B. (Pauline) de Vries Bed	Management assistant
Mrs. S. (Saskia) de Weerd LLM	Head of Department Research Review - until 01-08-2021).

Attachment 2: Abbreviations

BREC Biobank Research Ethics Committee
(in Dutch: Toetsingscommissie Biobanken, TCBio)

MREC Medical Research Ethics Committee
(in Dutch: Medisch-Ethische Toetsingscommissie, METC)

UMC University Medical Center

WMO Medical Research Involving Human Subjects Act
(in Dutch: Wet Medisch-Wetenschappelijk Onderzoek met Mensen)

Wob Freedom of Information Act
(in Dutch: Wet Openbaarheid van Bestuur)

Colophon
Text and graphics: R. Chorus
Text and editing: W.A. Groenewegen
Contact: tcbio@umcutrecht.nl

Date: March 2, 2022

Heidelberglaan 100
3584 CX Utrecht

088 75 555 55
info@umcutrecht.nl

umcutrecht.nl

UMC Utrecht