

Grant application pre-proposal form 2025

NWO Talent Programme – Vici scheme

Applied and Engineering Sciences
Science
Social Sciences and Humanities



Version: January 2025

Information about rules and guidelines (the 'explanatory notes') are embedded in this form. Please expand the explanatory notes for information about terms, conditions and requirements.

Note: The explanatory notes are automatically visible in Google Docs. To view them on Apple devices, select 'Outline' under the 'View' tab in Word.

← Expand for general explanatory notes

1. NWO domain and field of research

← Expand for explanatory notes on section 1

1a. NWO domain

Social Sciences and Humanities (SSH/SGW)

1b. Main field of research

State the main field of research and other fields of research, if applicable, in order of relevance, by selecting names and codes from the dropdown menu. For more information, see the explanatory notes.

	Code/Field of research:
Main field of research:	27.50.00 Social and economic history
Other field(s) of research (if applicable):	Choose second field of research (if applicable)
	Choose third field of research (if applicable)
	Choose fourth field of research (if applicable)

2. Evidence-based curriculum vitae

← Expand for explanatory notes on section 2

2a. Academic profile

For more information, expand the explanatory notes

Section 2a1. General academic profile

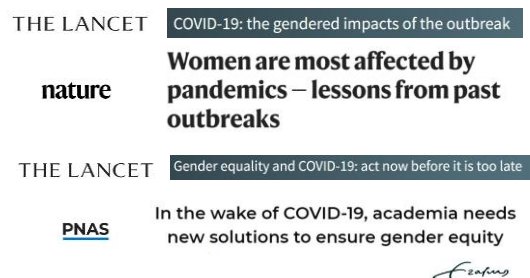
Trained at the universities of York, Cambridge, and Utrecht, I am an Associate Professor at the *Erasmus School of History, Culture, and Communication*. My research addresses critical societal questions by using historical data to understand long-term impacts of epidemics and other disasters on society, with a specific focus on how these hazards both affect and are affected by different forms of inequality.

Historians are vital for understanding both the past and present—and I collect and use historical data, often major feats of extraction from original archival manuscripts [4-6,9,10], to test hypotheses posed in other fields of the natural or social sciences, and the humanities [2]. Different to disciplines using contemporary data, I make the case for long-run information going back deeper into the past to achieve this. For example, I have used sex-disaggregated historical information going back to the 14th century to test (and challenge) some of the basic principles of the “female mortality advantage” (female survivorship over male) said to be associated with famines and some epidemics [4,6,10]. Elsewhere, I have used long-run serial data on land distribution and employed lifecycle analysis to question existing notions of intrinsic social logic or natural tendencies towards accumulation, consolidation, and greater inequality within rural societies [5].

Overall, I have applied these principles to better understand how societies interpret and cope with epidemics, and how epidemics help shape societies that experience them—**developing a new paradigm for epidemic-society interaction where I suggest that our thinking should not be why epidemics cause substantial structural change but why, given that mortality has often been so great, change is frequently so modest and temporary?**

Building on piloted projects funded by the *British Academy* and the *Scouloudi Prize*, which allowed me to start compiling large amounts of historical demographic data, my previous *NWO* grants have provided me a platform to better understand important societal questions such as how epidemics have affected cohesion and discord within communities (*VENI*), and how epidemics have helped redistribute economic resources within and between communities (*VIDI*)—both funded well before the world knew of COVID-19.

These projects have shown, however, that there is more to do—and a clear societal need—to better understand female experiences of epidemics, which accords with our recent experience of COVID. It justifies my new line of inquiry with this *VICI* proposal, analysing the long-term impact of epidemic disease outbreaks on women [4,6,10]—and especially why these impacts on women have differed across contexts. The importance of this work has been scientifically recognised, as I am now under contract to write a new book on the methodological and conceptual implications of this topic.



Over my career, I have used grant funding productively to create output of quality. I became a Fellow of the *Royal Historical Society* in 2022 in recognition of my overall “contribution to historical scholarship”. My publication record consists almost entirely of peer-reviewed books [1-3], with a 4th book manuscript submitted to the publisher and a 5th under contract, and articles in diverse international historical journals, culture and communication forums, and natural sciences publications. Such diversity reflects my successful work across economic, social, demographic, cultural, environmental, and gender history domains—escaping discipline-driven myopic thinking—to engage with other fields from archaeology to media to the climate sciences. I, moreover, work across an exceptionally broad timespan—trained as a medievalist but now an expert in long-run developments linking the distant and recent past.

I have always encouraged ethical and transparent research practices—I am a member of the Ethics Committee of my faculty—and, where appropriate, publish all original data, calculations, and replication packages via *Open ICPSR*. My research is usually open access—including 2 of 3 published books, and both under-contract books.

I persuade and influence academic trends internationally. I was the curator of the *International Medieval Congress 2024* (Leeds, UK) on “Crises”, the largest UK conference in any scientific discipline, where I assembled scholars from around the world critically engaging with historicised concepts of resilience, vulnerability, and adaptation. Similarly, I was part of a panel of interdisciplinary (history, bioarchaeology, genetics, climate sciences, epidemiology) experts contributing to the “Biraben 2.0” project funded by the *Radcliffe Center* at Harvard University, where we developed the institutional setting for a new global database of historical plagues (Black Death digital archive). Thus, I use my international scientific contacts in productive ways—engaging across disciplines to address broader academic and societal questions [1].

I also find it important to engage “local” communities. That is the rationale behind my public lecture and Q&A session at the *Rijksmuseum Boerhaave*, Leiden (2020), where I participated in their “*Besmet!*” exhibition to introduce my research to lay audiences to help improve wider “health literacy”. How information on disease is represented and accessed by wider society has been a key concern of my more recent ventures into visual culture and epidemic disease [3], which will be expanded in the *VICI* as an important form of societal outreach. My previous projects led to a podcast interview with the *CDC (US Centers for Disease Control and Prevention)* and a popular Canadian radio show on *The Current*, while I was interviewed by the *NRC-Handelsblad* on the topic of this *VICI*—epidemics and women. In this way, I am continuously pushing my research into epidemic-society interactions down new and complex avenues, linking past and present.

Section 2a2. Leadership and mentorship
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I have a verifiable track record of managing and completing large projects (*VENI, VIDI*)—including close supervision of a postdoc, 2 PhD candidates (1 now employed at Utrecht University), and 8 student assistants and interns. Working with a 3rd PhD candidate on a separate *ERC* project, my guidance led to several co-authored works [4,8]. I am explicitly involved in the research process of all my team members—maintaining contact every week, problem-solving together, and co-writing—while giving them freedom to develop their own directions, ideas, and importantly, confidence. I try to help normalise failure by being transparent about what I do not achieve, and I encourage my team to develop new skills—my PhD student from a cultural history background can now perform regression analyses and code, for example, alongside “traditional” skills such as paleography.

My scientific record is full of collaborations—the most prominent product being a field-defining synthesis [1]. I have been the organiser of numerous panels at international conferences (*World Economic History Congress* or *Rural History Conference*, for example), presented papers around the world on more than 60 occasions, guest edited special issues for journals, and am co-organising a major conference on “Disasters, Resilience, and Social Diversity” with Charles University, Prague.

Finally, I take seriously my broader contribution to the scientific community by participating in *NWO*, *ERC*, and other research grant committees, acting as expert commentator for training programs such as *Posthumus* (for young economic historians), and being a prolific reviewer for journals and book proposals. I am receptive to the challenges and precarity that the young in academia currently face, and my academic work and community building are characterised by a positive, encouraging, and inclusive edge. I have helped set up a new historical journal at EUR—a bottom-up student collective enterprise—with the goal of “*counteracting racism, misogyny, and classism within academia*”.

Word count 2a1 + 2a2. Academic profile (max. 1200 words):	1191
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2b. Key output

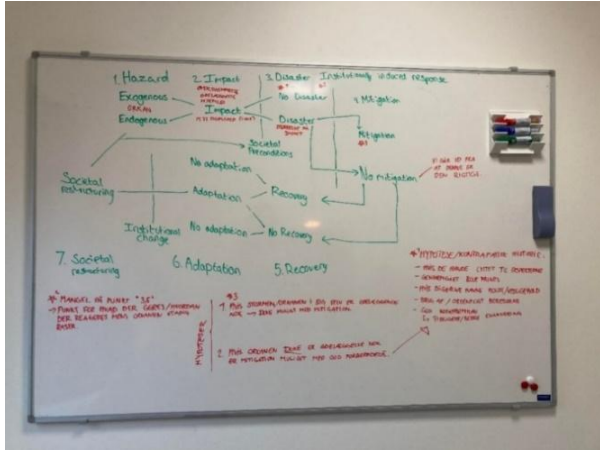
For more information, expand the explanatory notes.

(10 key outputs max. Total word limit: 700 words, excl. references, URLs, output types and indicators)

Information about the culture and standards of the scientific field [optional]	Historical discipline mainly produces books, chapters, and journal articles.
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Key output 1

Open Access: Yes

Reference:	B. van Bavel, D.R. Curtis, M. De Keyser, J. Dijkman, M. Hannaford, E. Van Onacker, and T. Soens, <i>Disasters and History: The Vulnerability and Resilience of Past Societies</i> . Cambridge: Cambridge University Press, 2020. [Equal authorship]
URL:	https://doi.org/10.1017/9781108569743
Type:	Book, authored
Quality indicators:	1) Academic collaboration and/or interdisciplinary engagement 2) Contribution to (academic) educational programme(s) 3) Commentary, Scholarly: Reviews, articles, blogs and/or other expert discussion
Motivation:	This book uses “an astonishingly broad base of historical knowledge about shocks and biophysical hazards” (<i>English Historical Review</i>, 2022), to establish <u>what historians can learn from disasters and what disaster scholars can learn from history</u>. It demonstrates systematic collaboration with other scholars—my role being a driver of the theoretical framework and writer. The book argues that while economic, institutional, and ecological systems often remained resilient to hazards, people within those systems experienced obscured hardships—<u>sometimes women</u>. This book is lauded for its theoretical framework that students have applied to their own work, which demonstrates how I bring complex information together in an accessible manner to enable others.  <i>Incorporation of book's explanatory framework in a BA history class</i>

Key output 2

Open Access: No

Reference:	D.R. Curtis, <i>Coping with Crisis: The Resilience and Vulnerability of Pre-Industrial Settlements</i> . Farnham: Ashgate, 2014.
URL:	https://www.book2look.com/embed/9781317159643
Type:	Book, authored
Quality indicators:	1) Commentary, Scholarly: Reviews, articles, blogs and/or other expert discussion 2) Citations: Total number 3) Originality/novelty
Motivation:	This is the first historical work to develop an overarching explanatory framework to understand resilience and vulnerability in pre-industrial societies and then test it empirically using systematically comparative case studies. Since publication, other scholars have applied the pioneering framework to their own cases—either confirming or critiquing its findings—demonstrating how I am advancing scientific consensus and debate. It was noted that it is “a bold work that challenges the reader intellectually on an uncommonly high level” (<i>Continuity & Change</i> , 2016), with favourable reviews in relevant journals (<i>American Historical Review</i> ; <i>The Sixteenth Century Journal</i> ; <i>Economic History Review</i> , 2015).

Key output 3

Open Access: Yes

Reference:	Q. Han and D.R. Curtis, <i>Infectious Inequalities: Epidemics, Trust and Social Vulnerabilities in Cinema</i> . London: Routledge, 2022. [Equal authorship].
URL:	https://doi.org/10.4324/9781003261667

Type:	Book, authored
Quality indicators:	1) Academic collaboration and/or interdisciplinary engagement 2) Public use/interest 3) Originality/novelty
Motivation:	My latest book shows that I transcend disciplines—moving into new areas such as visual representation. Different from traditional film studies, we used a large film database to observe trends and patterns—the strength that I contributed. Brought into view during COVID, how health information is represented and accessed by wider society has become an urgent issue—and a key concern of this book. Building on this work, how epidemics are instrumentalised to represent women visually over time is given specific analytical attention in the <i>VICI</i> .

Key output 4

Open Access: Yes

Reference:	D.R. Curtis and J. Roosen, The Sex-Selective Impact of the Black Death and Recurring Plagues in the Southern Netherlands, 1349–1450. <i>American Journal of Physical Anthropology</i> 164, 2 (2017) 246–59. [Equal authorship].
URL:	https://doi.org/10.1002/ajpa.23266
Type:	Article, refereed
Quality indicators:	1) Academic awards, prizes and/or grants directly related to this output 2) Academic collaboration and/or interdisciplinary engagement 3) Optional: choose a third indicator
Motivation:	This article demonstrates my capacity to use different vocabularies and framing norms to address the natural sciences and reveals my ability to guide young PhD candidates towards high-quality publications. Winner of a <i>Feminae: Medieval Women and Gender Article Award</i> (USA) in 2018, it provides systematic evidence that plague outbreaks killed more women than men compared to “normal times”. The <i>VICI</i> will allow us to understand why this was the case.

Key output 5

Open Access: Yes

Reference:	D.R. Curtis and B. van Besouw, Lifecycle Land Decumulation Strategies in a Seventeenth-Century Rural Community. <i>Economic History Review</i> early online (2024). [Equal authorship].
URL:	https://doi.org/10.1111/ehr.13408
Type:	Article, refereed
Quality indicators:	1) Other, please describe: Develops a method important for the proposed VICI 2) Optional: choose a second indicator 3) Optional: choose a third indicator
Motivation:	This article is the first to develop a micro-level lifecycle analysis of resource accumulation that will be one method employed in the <i>VICI</i> work package which analyses female landownership and wealth acquisition.

Key output 6

Open Access: Yes

Reference:	D.R. Curtis and Q. Han, The Female Mortality Advantage in the Seventeenth-Century Rural Low Countries. <i>Gender and History</i> 33, 1 (2021) 50–74. [Curtis as main author]
URL:	https://doi.org/10.1111/1468-0424.12495
Type:	Article, refereed
Quality indicators:	1) Originality/novelty 2) Optional: choose a second indicator 3) Optional: choose a third indicator
Motivation:	This study underlines my expertise in gendered dimensions of epidemic outbreaks—employing my own collected sex-disaggregated database of mortality information—the largest anywhere in the pre-industrial world. It argues that epidemics bring into focus female hardships born out of structural inequalities obscured from view in “normal times”. In the <i>VICI</i> , I move beyond mortality—to understand the impact on those surviving women.

Key output 7

Open Access: Yes

Reference:	B. van Bavel and D.R. Curtis, Better Understanding Disasters by Better Using History: Systematically Using the Historical Record as One Way to Advance Research into Disasters. <i>International Journal of Mass Emergencies and Disasters</i> 34, 1 (2016) 143–169. [Equal authorship].
URL:	https://doi.org/10.1177/028072701603400107
Type:	Article, refereed

Quality indicators:	1) Originality/novelty 2) Contribution to (academic) educational programme(s) 3) Optional: choose a third indicator
Motivation:	This article makes the case for more explicit and systematic use of history to better understand how societies have adapted or failed to adapt to hazards, shocks, and disasters—and escaping short-term myopia justifies the long-term analysis of epidemic impacts on women in the <i>VICI</i> . The framework used in this article now features widely in disaster studies and environmental history programmes taught at relevant BA programmes in Europe and the United States.

Key output 8

Open Access: Yes

Reference:	J. Roosen and D.R. Curtis, Dangers of Noncritical Use of Historical Plague Data. <i>Emerging Infectious Diseases</i> 24, 1 (2018) 103–110. [Equal authorship].
URL:	https://doi.org/10.3201/eid2401.170477
Type:	Article, refereed
Quality indicators:	1) Other, please describe: Citations within natural sciences (different field) 2) Social Media activity: Mentions, shares and/or other social media engagement 3) Academic collaboration and/or interdisciplinary engagement
Motivation:	Based on our dissatisfaction with natural and social scientists' problematic use of historical data—this article corrects entrenched methodological flaws with studies using descriptive references to “plague” as either dependent or independent variables. It is now a standard citation in natural sciences approaches to historical plague databases, and has appeared widely in news stories, blogs, policy documents (National Bureau of Economic Research, USA), and social media.

Key output 9

Open Access: Yes

Reference:	B. van Besouw and D.R. Curtis, Estimating Warfare-Related Civilian Mortality in the Early Modern Period: Evidence from the Low Countries, 1620–99. <i>Explorations in Economic History</i> 84 (2022) 101425. [Equal authorship].
URL:	https://doi.org/10.1016/j.eeh.2021.101425
Type:	Article, refereed
Quality indicators:	1) Academic collaboration and/or interdisciplinary engagement 2) Reproducibility 3) Transparency, accessibility
Motivation:	This article is the product of five years of original data collection, curation, and statistical analysis across <i>VENI</i> and <i>VIDI</i> projects—showing how I steer young scholars towards excellence. The massive supplementary files are exemplary of open access data, transparency, and reproducibility, and are trustworthy principles on which the quantitative aspects of the <i>VICI</i> will be based.

Key output 10

Open Access: Yes

Reference:	D.R. Curtis, From One Mortality Regime to Another? Mortality Crises in Late Medieval Haarlem, Holland, in Perspective. <i>Speculum</i> 96, 1 (2021) 127–155.
URL:	https://pure.eur.nl/ws/portalfiles/portal/48394706/SPECULUM.pdf
Type:	Article, refereed
Quality indicators:	1) Academic invitations directly related to this output 2) Evidence of academic use, other 3) Optional: choose a third indicator
Motivation:	This publication in the journal of the <i>Medieval Academy of America</i> was the basis behind my invite to curate the <i>International Medieval Congress</i> (Leeds, UK) in 2024—bringing together scholars discussing adaptation, resilience, and vulnerability in a historical context.

Word count 2b. Key output (max. 700 words):	700
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3. Research idea

← Expand for explanatory notes on section 3

Title:	The Impact of Epidemics on Women: A Long-Run History
Key words (max. 5):	Epidemics, women, inequality, institutions, long-term
Research idea (max. 150 words):	While <i>The Atlantic</i> magazine's headline from March 2020 of "CORONAVIRUS IS A DISASTER FOR FEMINISM!" is extravagant, the more understated subheading of "Pandemics affect men and women differently" has found wide scholarly support, and is corroborated by recent work on SARS, Zika, and Ebola. In this <i>VICI</i> , I suggest that if correct, then more research is needed to understand how and why this is the case. Departing from other social science approaches, I use my expertise in long-term society-epidemic interaction to (a) <u>emphasise the temporality of epidemic effects</u> , distinguishing between immediate or short-term burdens and long-run structural changes for women; and use my strong economic and social history background (b) to explain why some epidemic impacts affect women differently across time and space. Doing so, means not only comparing women and men, but also between different "statuses" of women and between women living in different institutional and cultural settings.
Word count 3. Research idea:	149

4. Administrative details

← Expand for explanatory notes on section 4

4a. Personal details

Title(s), initial(s), surname(s):	Dr. D. R. Curtis
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4b. Doctorate

University/College of higher education:	Utrecht University
Date of PhD award (dd-mm-yy):	31-8-2012
Supervisor(s) ('Promotor(en)'):	Prof. Dr. Bas van Bavel
Thesis title:	Preindustrial societies and strategies for the exploitation of resources: A theoretical framework for understanding why some societies are resilient and some settlements are vulnerable to crisis

4c. Prospective host institution

Host institution:	Erasmus University Rotterdam
Research group:	Erasmus School of History, Culture and Communication

4d. Work experience since completing your (first) PhD

List appointments chronologically, with your current post in the bottom row.

Past appointments	Appointment type	Period (date-date)	FTE	Institution
Other: (please specify) Research & Teaching Assistant	Position: Fixed term (If other, please specify here)	1-9-2012 – 31-1-2013	0,6	Utrecht University
Other: (please specify) Research & Teaching Assistant	Position: Fixed term (If other, please specify here)	1-3-2013 – 31-8-2013	0,6	Utrecht University
Postdoctoral researcher (If other, please specify here)	Position: Fixed term (If other, please specify here)	1-9-2013 – 28-2-2014	0,6	Independent Researcher (with British Academy funding)
Postdoctoral researcher (If other, please specify here)	Position: Fixed term (If other, please specify here)	1-3-2014 – 31-1-2016	0,8	Utrecht University
Assistant professor	Position: Fixed term (If other, please specify here)	1-2-2016 – 31-1-2019	1,0	Leiden University
Associate professor	Position: Fixed term	1-2-2019 – 31-8-2020	1,0	Erasmus University Rotterdam
Current appointment	Appointment type	Period (date-date)	FTE	Institution
Associate professor (If other, please specify here)	Position: Permanent (If other, please specify here)	1-9-2020 - Current	1,0	Erasmus University Rotterdam

4e. Net academic research time

Calculate your net academic research time, as described in the explanatory notes. Do not include the calculation, only state the actual number of months.

Number of months:	118
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If applicable: describe any special circumstances causing a reduction in productivity (max. 100 words):

Applicant statements

Use of extension clause

If you use the extension clause, only provide the date of the confirmation email (talent@nwo.nl) granting the extension. You only need an extension if you exceed the year limit on the reference date.

Are you using the extension clause?: No

If yes, the extension was confirmed on: Choose the date

By submitting this form, I declare that:

By submitting this form, I declare that:

- *I have completed this form truthfully and that I satisfy the nationally and internationally accepted standards for scientific conduct as laid down in the **Netherlands Code of Conduct for Research Integrity 2018**.*
- *I endorse the code of conduct for the use of laboratory animals and the code of conduct for biosecurity (in the event of dual use of the expected results) and will act accordingly, where applicable.*
- *The contact details in my ISAAC profile are up to date (i.e. email address postal address, phone number, personal details and correspondence language).*

Initial(s) and surname(s)¹: D R Curtis

Place: Rotterdam

Date: 1-3-2025

¹ To avoid gender effects, please do not state your first name.



APPENDIX: PRELIMINARY ASSESSMENT REPORT VICI SSH 2025

Grant: Vici SSH 2025
File number: VI.C.251.017
Applicant: dr. D.R.C. Curtis
Title project: The Impact of Epidemics on Women: A Long-Run History

How was the assessment of your pre-proposal realised?

The assessment committee assessed the above-mentioned pre-proposal, in the same way as all other pre-proposals, according to the procedure and the criterion as described in the Call for proposals. For this criterion, your pre-proposal received a numerical score. The assessment committee subsequently drew up a provisional advice for the Board.

In this round, NWO uses the score scale below and the associated translation into qualifications.

Score	Qualification
1.0 to 1.4	Excellent
1.5 to 3.4	Very good
3.5 to 5.4	Good
5.5 to 9.0	Unsatisfactory

The table below provides information on the normalised weighted score and qualification of your pre-proposal. The score given resulted in a qualitative ranking of the pre-proposals. The number of pre-proposals that are selected is approximately 3 times the number of proposals that can be awarded funding.

In this round, your pre-proposal has been assessed in the panel Humanities. In this panel, the 12 highest ranked pre-proposals out of the 49 submitted pre-proposals are selected for the next phase. The cut-off score is drawn at a final score of 1.7.

The substantive assessment of your pre-proposal

Below you will find an explanation of the assessment of the assessment committee for the assessment criterion.

Assessment criterion	
Quality of the researcher (100%, final score)	1.3
Qualification	Excellent
Position in the ranking within your panel	3
Intended advice	Selected



Motivation from the assessment committee:

Criterion 1 - Quality of the researcher (100%)

The researcher fits the target group exactly: the researcher is clearly at the stage of consolidation and further development of their leadership/research group, and very evidently demonstrates in the pre-proposal that the Vici will contribute to the researcher's development in this area.

It is evident that the researcher's qualities exceed what is customary within the international peer group, as evidenced by the CV, the quality and impact of the key output and by other academic achievements. The researcher is consolidating the field, extending their own expertise step for step in creative ways but with clear focus. In the committee's view, the applicant's research lends itself well to science communication to broader groups and institutions in society. In this regard, the committee asks the applicant to consider the following point of improvement: more attention could be given to research output that translates research findings for a wider audience. In the pre-proposal, this only includes the involvement in a public exhibition mentioned in the CV.

The researcher's own work is excellently positioned with respect to scientific and (where possible) societal themes or questions.

Based on the pre-proposal, the committee assesses the quality of the researcher's (inter)national network, collaborative abilities and visibility as excellent. The committee states that the researcher's network and collaboration history are appropriate. Furthermore, the committee states that the research track reveals successful and impactful collaborations with national and international colleagues (see e.g. key output 1). Nearly all of the key output listed by the applicant testifies to the strong visibility of the research.

In the CV, the researcher very convincingly and clearly demonstrates the capability of generating highly innovative ideas and independently developing these successfully. The committee states that the researcher

uses historical data to test hypotheses, the relevance of which by far transcends the applicant's discipline and the time period that is the object of study. The use of large amounts of historical data has led to new insights about how societies cope with epidemics. The research offers an innovative, refreshing and rewarding interdisciplinary perspective on what epidemics bring about.

Based on the description in the academic profile, the committee assesses the researcher's established leadership and mentorship skills and approach to mentorship and contribution to the development of individuals as appropriate. The committee states that the researcher has average experience in supervising PhD candidates (taking into account the average seniority within the target group). In terms of leadership, there is considerable experience in coordinating large research projects. According to the committee, the way teamwork is described gives trust in a careful and inspiring leadership. The committee further notes that the pre-proposal provides little information regarding the applicant's leadership experience at the level of research and teaching within the institution.

The committee assesses that the researcher's key output and academic profile align very well with the research idea. The committee states that the researcher's key output and research history very clearly builds on the research idea.

The committee assesses the criterion 'Quality of the researcher' as 'Excellent'.

Grant application proposal form 2025

NWO Talent Programme – Vici scheme

Applied and Engineering Sciences
Social Sciences and Humanities
Science



In this application form, the information on rules and guidelines (the Explanatory Notes) are embedded in the form. Please expand the Explanatory Notes for information on guidelines, terms, conditions and requirements. **Make sure to remove the Explanatory Notes before saving the document as a PDF** to ensure the document is readable for the external referees and the assessment committee.

For ZonMw applicants, please use the ZonMw version of the application form.

Note: on Apple computers, the rules and guidelines can be made visible by selecting “Outline” under the “View” tab in Word. Also, the rules and guidelines are automatically visible when you open the application form in Google docs.

← Expand for General explanatory notes

1. General information

← Expand for Explanatory notes on section 1

1a. Title of research proposal

Title:	The Impact of Epidemics on Women: A Long-Run History
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1b. Scientific summary of research proposal

Scientific summary:	While <i>The Atlantic</i> magazine’s March 2020 headline “CORONAVIRUS IS A DISASTER FOR FEMINISM!” appears sensationalist, its understated subheading of “Pandemics affect men and women differently” is supported by recent work on AIDS, SARS, Zika, and Ebola. If correct, then more research is needed to understand how and why this is the case. I use my historical expertise in long-term society-epidemic interactions to explain why epidemic impacts on women vary across time and space, distinguishing between immediate, short-term, and long-term effects. This approach requires not only comparisons between women and men, but also among women themselves—across women in different contexts, and between women of different statuses within the same context. This <i>VICI</i> breaks new ground by integrating economic, social, demographic, and cultural history to generate fresh insights into women’s varied experiences of epidemics. It moves beyond mortality and wages to analyse impacts across five diverse dimensions from the Middle Ages to the present, examining women’s experiences of care; experiences of quarantine; access to wealth and resources; exposure to abuse and violence; and the visual narratives created around women. These impacts encompass tangible assets such as possessions and conceptual assets such as identities and representations.
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	These outcomes are reconstructed at three analytical scales—micro, meso, and macro—to capture intricate detail, enable systematic comparative analysis, and ensure broader representativeness. By using different levels of comparison, this <i>VICI</i> attempts to work out what has been driving the very different epidemic experiences of women—was this connected to different disease characteristics and epidemiology; to different societal institutions and values; or different statuses or identities of women themselves? Ultimately, this <i>VICI</i> enhances conceptual frameworks of societal resilience, vulnerability, and adaptation which have developed across diverse disciplines such as history, psychology, development economics, and environmental sciences, but have yet to explicitly or systematically incorporate women.
Word count (max. 300 words):	300

1c. Keywords

Key words (max. 5):	Epidemics, women, inequality, institutions, long-term
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1d. NWO domain

Chosen domain:	Social Sciences and Humanities (SSH/SGW)
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1e. Main field of research

Main field of research:	27.50.00 Social and economic history
Other field(s) of research:	Choose a second field of research (if applicable)
	Choose a third field of research (if applicable)
	Choose a fourth field of research (if applicable)

1f. Public summary of research proposal

Title in English:	The Impact of Epidemics on Women: A Long-Run History
Public summary in English:	According to a 2020 article in <i>Nature</i> , “Women are most affected by pandemics”. Is that correct in historical perspective? And if so, how, when, and why?
	This <i>VICI</i> is the first in-depth historical analysis into how women have experienced epidemics and why some epidemic impacts have affected women differently across time and space, exploiting comparisons between women and men, between women in different contexts, and between women of different statuses.
	The project analyses five diverse dimensions of epidemic impact on women, including female experiences of care; quarantine; access to wealth and resources; abuse and violence; and visual narratives about women.
Word count summary	100

(50-100 words):	
Title in Dutch:	De invloed van epidemieën op vrouwen door de eeuwen heen
Public summary in Dutch:	"Vrouwen worden het meest getroffen door pandemieën". Dit beoogde een artikel in het tijdschrift <i>Nature</i> uit 2020. Klopt dat vanuit historisch perspectief? En zo ja, hoe, wanneer en waarom? Deze <i>VICI</i> is de eerste diepgaande historische analyse van de manieren waarop vrouwen epidemieën hebben beleefd en waarom de impact verschilde afhankelijk van de tijdsperiode en context. Hierbij wordt gebruikgemaakt van vergelijkingen tussen vrouwen en mannen, vrouwen in verschillende regio's, en vrouwen van verschillende statussen. Het project analyseert vijf verschillende manieren waarop epidemieën het leven van vrouwen hebben beïnvloed—zorg; quarantaine; toegang tot welvaart en hulpbronnen; misbruik en geweld; en visuele representatie.
Word count summary (50-100 words):	100

2. Research proposal

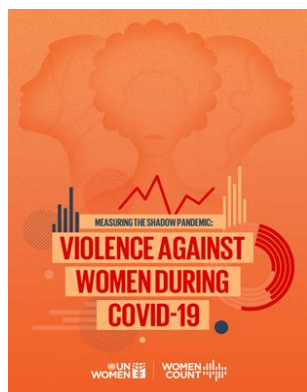
← Expand for Explanatory notes on section 2

2a. Description of proposed research

2a1. Overall aim and key objective

State-of-the-art and objectives

Ineffectual technocratic or ideologically driven responses to COVID reminded us that the humanities and social sciences are integral to tackling epidemic diseases. However, our ability to better analyse economic, social, demographic, and cultural impacts has been limited by a lack of data disaggregated down relevant categories—especially sex and gender (Criado Perez 2019). This is a problem because it has been argued that women and girls often bear the most severe consequences of disasters (Rivers 1982; Enarson & Morrow 1998; Neumayer & Plümper 2007; Thurston e.a 2021), and recent epidemics of Ebola and Zika support this narrative (Wenham e.a. 2020a; 2020b). Under epidemic conditions, public health research has suggested women have experienced increased domestic abuse and violence through imposed isolation; been exposed to infections through disproportionate presence as workers in care, service, or health sectors; encountered difficulties in accessing basic sexual health and reproductive resources under lockdowns; and paused or left education or forsaken work to care for others (Davies & Bennett 2016; Harman 2016; Sia e.a. 2016; Smith 2019). Nevertheless, if what is mentioned above is correct, that women are unduly burdened by epidemics to a greater degree than men, then more systematic research is first needed to verify this, and then investigate to what extent, how, in which conditions, and why this is the case.



This VICI offers the very first in-depth historical analysis into how women have experienced epidemics and why some epidemic impacts have affected women differently across time and space. Employing insights from economic, social, demographic, cultural, and visual history, it enhances current conceptual frameworks across diverse disciplines on societal resilience, vulnerability, and adaptation to environmental and biological pressures by explicitly focusing on women.

The value of the proposed historical approach is precisely in the role of time and allows for three contributions.

- First, we escape myopic preconceptions derived from contemporary cases of epidemic disease. During COVID we saw trends such as domestic abuse towards women (Rocha e.a. 2024) and heightened levels of female vaccine hesitancy (Zintel e.a. 2023). While not dismissing these phenomena, it is also essential that we move away from seeing these outcomes as inevitable but shaped by specific contextual conditions (Ogilvie 2025). Can historical analysis reveal in which conditions outcomes such as these were more likely?
- Second, while short-term hardships and opportunities linked to epidemics are undoubtedly important, we also focus on how these epidemic experiences shape female fortunes years down the line. Immediate suffering or burdens can be severe, though they sometimes ease or change over time. This insight is further important because history has shown that while women have responded in dynamic ways to mega-shifts in circumstances, over time men have sometimes reined in those gains (Bennett 1996; Green 2008; Belich 2022). When has this happened and in which conditions?
- Third, using the “laboratory” of the historical record, we are not only able to place the epidemic impacts on women against those already obtained for men, but are also able to look at variations among and between women themselves. Not all women have experienced the same epidemic impacts across contexts, and not all categories or statuses of women have been affected the same within the same context.

How well do we understand the historical impacts of epidemics on women, and are there limits to that knowledge?

While research has heavily focused on sex-selective epidemic mortality in historical perspective (DeWitte 2009; Curtis & Roosen 2017; Zarulli e.a. 2018; Curtis & Han 2021; Didelot & Evans 2022; Ham 2025), there has been less on the fortunes of surviving women. This is a problem given that deaths are only one indicator, and epidemic mortality rates are not always high. For example, many of the above-mentioned societal disadvantages for women during epidemics even occurred simultaneous to higher death rates among men—as seen during COVID (Flor e.a. 2022).

Economic historians working on epidemic impacts on women have focused on material conditions such as wages, access to the labour market, and ages of marriage. This has led to a divided literature. Some scholars suggest severe outbreaks such as the Black Death brought very few advantages for female waged work in certain parts of Europe (Humphries & Weisdorf 2015; Horrell et al. 2020), while others suggest women benefitted from labour shortages in certain sectors (Hatcher 2001; Voigtländer & Voth 2013, Drelichman & Agudo 2020; De Pleijt & van Zanden 2021).

Some scholars suggest women delayed marriage after terrible outbreaks, in the process exploiting lifecycle labour opportunities (Van Zanden e.a. 2019), while others dispute the empirical evidence behind that (Bennett 2019; Bailey 2023; Ogilvie 2025). Regardless, evidence of this type is often skewed towards England (Bailey 2024), and wages are not straightforward welfare indicators for women. Historically, and in parts of the world today, women have often contributed more to household economies, participated in informal markets, or performed work with less rigid classifications (Howell, 1986; Bennett 1996; Ogilvie 2003; Whittle 2019; Whittle & Hailwood 2020).

Alternatively, there is a rich social, cultural, and medical history scholarship on long-term changes to women's roles in public health (Wiesner 1993; Green 2008; Cabré 2008; Strocchia 2019), with a literature that specifically focuses on women and epidemics—recognising that women could survive diseases and take on new post-epidemic forms of employment or financial remuneration, but simultaneously experience other forms of prejudice, restriction, and burdens less easy to quantify. Some historians have provided qualitative evidence focusing on, for example, restrictions on female mobility (Massong 2021; Beauvieux 2023), persecution of sex workers (Coomans 2021; Curtis 2021a), public shaming of women (Carmichael 1998), speculations about female poisoners (Thorpe 2019; Feci 2020), and the demands or expectations on women to provide care within houses, neighbourhoods, and institutions (Munkhoff 1999; Winer 2017; Strocchia 2019; Curtis 2025a; Ogilvie 2025)—all highly valuable and insightful, though often applicable to a specific context or epidemic outbreak.

What we miss at present is an overarching comparative approach to the historical dimension of epidemic impact on women. This requires both a broader geographical array of cases, and more comparative approaches across time, which can be extended in two ways—more systematic analysis of a specific variable impacted by epidemic disease within a defined context (such as female access to land or wealth, for example, likely strongly affected by inheritance practices filtering the effects of mass mortality), or more cases across a wider temporal arc to draw a richer narrative comparison. Variation in epidemic outcome for women must be the cornerstone of our future research direction. Although differences between women and men remain relevant, the outcome variable of interest also becomes differences between women both within and between contexts.

What is the contribution of this *VICI*, then?

Regarding the dependent variables (outcomes), this project breaks new ground by examining epidemic impacts and experiences of women across five dimensions which cover a diverse range of interacting economic, social, demographic, and cultural components—i.e., a more holistic reconstruction of female lives touched by epidemics than only wages or mortality. Not only are these outcomes highly relevant to women's welfare and wellbeing (Ogilvie 2025), but they also differ across time and between localities, have immediate-, short-, and longer-term facets, and can each be compared between women and men, and different statuses of women. They include:

- (a) Women's experiences of care provision
- (b) Women's experiences of quarantine and isolation
- (c) Women's access to wealth, property, and resources
- (d) Women's experiences of violence and abuse
- (e) Stories told about women through visual representation

Regarding the independent variables (drivers), the question of why these epidemic experiences might have differed for some women over others is not straightforward to solve—not least because of the large number of simultaneously occurring confounding variables which filter and negotiate these impacts. In this *VICI*, I focus on the three main existing pressures—at the level of epidemics (epidemiology); society (institutional, cultural, or micro-demographic characteristics); and women (intersections). Have the main drivers of differences in epidemic impacts for women across time and space been epidemiological, societal, or intersectional?

First, some epidemics killed more widely and universally, disrespecting status, while others were more selective by focusing on the poor or the frail or very young (Alfani 2022; Curtis 2025a). Some epidemics killed more men or more women. These differing pressures were likely relevant to how surviving women differentially experienced life after an outbreak—their entrance into labour markets, their capacity to secure or manage inheritances, or their ability to negotiate the marriage market, for example. It is important for this *VICI*, then, that many (a-c above) of the indicators of epidemic impact on women are being tested in areas where I have already reconstructed large amounts of epidemic mortality information across time and space (Curtis 2015; 2016; 2021b; 2024; 2025a; Curtis & Roosen 2019; Curtis & Han 2021; Van Besouw & Curtis 2022). This way I can compare women's experiences or impacts in different epidemic conditions but also can compare women's experiences or impacts in conditions where epidemic characteristics are held constant (i.e., not influencing the outcome).

Second, epidemics have occurred across societies where women's positions were and are very different (Evans 2022). Epidemics created different opportunities and restrictions for women living in widely diverging institutional settings or cultural values. For example, although the family is a fundamental institution, its arrangement, importance, and economic and social function greatly differs across societies, with specific implications for females (Ogilvie 2025). In parts of early modern northwest Europe, women already became less economically tied to structures of kinship—marrying late or not at all, and using a combination of state, market, and collective institutions as sources of welfare provision (Van Zanden e.a. 2019). In contrast, early modern southern Italy had clear kin-related constraints on female

behaviour—marrying early and universally (via dowries), residing patrilocally, and discouraged to work outside the domestic household (Curtis 2015). Epidemics create more widows, and thus we might hypothesise that epidemics affect women differently in societies with death-centred inheritance systems compared to societies with marriage-centred inheritance systems (Viazzo 2003). Even when isolating only those societies where inheritance was largely through death, however, we might see differences. We might hypothesise that epidemics affect women differently in societies where wealth is bestowed impartibly to one eldest male son, compared to societies where wealth is divided between all children, or equitably divided between children and a spouse. It is important, then, that for this *VICI*, many of the indicators of epidemic impact on women (a-c above) are tested through systematic comparison across regions where these clear institutional and cultural differences are sharp but also can be held constant (i.e., not influencing the outcome). The temporal and geographical dimensions of the *VICI* are further elaborated in the methods section.

Third, gender intersected with other categories including age, race or ethnicity, marital status, socio-economic position, migration background, and sexuality, and it is possible that these overlapping social categories or identities helped stimulate diverse epidemic effects (Morgan e.a. 2021). Indeed, the tropes created about Mary Mallon as the infamous “Typhoid Mary” were not simply through her status as a woman, but in combination with her position as an unmarried Irish immigrant, her poverty, and moralised views of her single status and presumptions about her sexual behaviour (Leavitt 1996). Thus, even within one isolated context, the epidemic experience of a young, unmarried, and poor woman might be very different to that of an older propertied woman. Sex-disaggregated wage evidence for England has suggested that married female wage earners, more likely to take on casual waged work, might have experienced more favourable post-Black Death circumstances than younger unmarried women with long-term contracts (Humphries & Weisdorf 2015). As a hypothesis-driven project, this *VICI* takes six commonly employed intersections in multi-disciplinary approaches to health-related outcomes (Bauer e.a. 2021) and proceeds to create explicit hypotheses linking the impact of categories or statuses of women to the five epidemic outcomes (a-e) mentioned above.

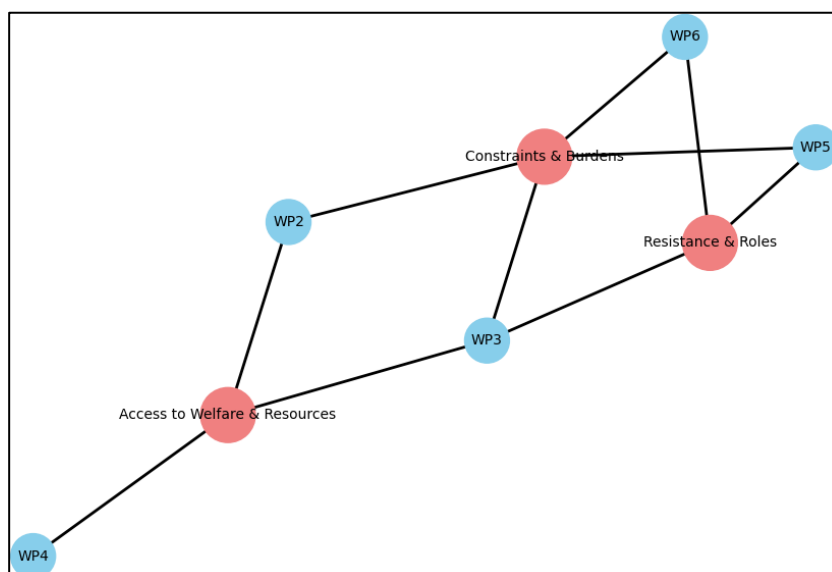


Hypothesised impacts of intersecting categories on epidemic outcomes

		Outcomes				
		Care	Quarantine / Isolation	Access wealth & resources	Violence & Abuse	Visual representation
Intersecting categories	Age	Young women & girls more likely to perform care for financial gain	Young women more likely to go to institutions	Old women trade wealth for care; young women lose out	Young women more likely to experience violence	Young women more likely represented as spreaders
	Socio-economic status	Poor women more likely to perform care for financial gain	Poor women more likely to go to institutions	Poor women unlikely to acquire resources	Poor women more likely to experience violence	Poor women more likely represented as spreaders
	Marital status	Unmarried women more likely to perform care for financial gain	Unmarried women more likely to go to institutions	Unmarried women unlikely to acquire resources	Unmarried women more likely to experience violence	Unmarried women more likely represented as spreaders
	Migration status	Outsider women more likely to perform care for financial gain	Outsider women less likely to go to institutions	Outsider women unlikely to acquire resources	Outsider women more likely to experience violence	Outsider women more likely represented as spreaders
	Sexuality	Female sexual practices unimportant in driving care for financial gain	Female sexual practices used to justify institutional isolation	Female sexual practices important part of exclusion from wealth	Female sexual practices used to justify violence	Female sexual practices important part of spreader image
	Race/Ethnicity	Othering prevents some women from performing care for financial gain	Othering prevents some women from going to institutions	Othering unimportant part of exclusion from wealth	Othering used to justify violence	Othering important part of spreader image

Methods

To test the hypotheses posed above, five coherent work packages (WP2-6) have been developed that each correspond to one of the epidemic impacts on women, but also relate to at least one of three conceptual lines that give the project cohesion: (i) **the imposition of epidemic-induced constraints and burdens on women** (WP 2,3,5,6 all relate); (ii) **female resistance to constraints, and women's epidemic roles** (WP 3,5,6 all relate); and (iii) **female access to welfare and resources** (WP 2,3,4 all relate). Hence, this project is receptive to the notion that epidemics impacted both tangible assets such as possessions and conceptual assets such as identities.



This *VICI* integrates approaches from economic, social, demographic, cultural, and visual history—including subfields of gender, medical, and environmental history. More specifically, these WPs allow for distinctive historical methods: WP2 on female “plague cleaners” and WP3 on women’s experiences of isolation and quarantines require deep archival research with original manuscripts; WP4 on women’s access to wealth and property after epidemics requires assembling large quantitative datasets and formal statistical analyses; WP5 on women’s experience of abuse and violence requires text-mining techniques and wide literature review; and WP6 on the visual representation of women during epidemics requires different kinds of cultural, media, communication, and art historical analysis.

Geographical and temporal dimensions

This project employs a tri-scale analysis—micro, meso, and macro—to capture intricate detail, enable systematic comparative analysis, and ensure broader representativeness.

For epidemic outcomes on women (a-b), we confine our analysis to the late-medieval and early modern Low Countries (WP2-3), as these indicators require micro-level data and time-consuming fine-grained and detailed linkages of names in manuscript sources which I have found for these areas. Here, I identified a wealth of untapped original source material on both plague cleaners and female isolation, in both urban and rural contexts, and I can provide specialist guidance to the two PhD candidates. We do not go earlier than the 15th century as there is less information on plague cleaners before 1500 (Coomans 2021), and institutional isolation practices only pick up from the late 1400s onwards (Curtis 2025a). We can control for and exploit spatiotemporal differences in the characteristics of epidemics.

For epidemic outcome on women (c), we use a meso-level comparative analysis between and within regions of the 17th-19th-century Low Countries, west Bohemia, and southern Italy (WP4). We compare serial information from wealth and property registers over time within and across localities, supported by wills and transaction documents, with the choice of the three areas justified by sharp spatial and temporal differences in inheritance practice, marriage behaviour, and elderly care culture, which created very different pressures on epidemic-induced resource redistribution towards different categories of women—i.e., old and young; married and unmarried; rich and poor (Da Molin 1990; Ogiłvie & Edwards 2000; Velková 2011; Curtis 2015; Van Zanden e.a. 2019). These periods have been chosen because it is at this point in these areas that we have sources which can more systematically reconstruct the characteristics of epidemic outbreaks over time (Eckert 1996; Fusco 2007; Curtis 2025a), and from this period (and sometimes earlier) that we have serial indicators (or many datapoint) for wealth and property distribution and transfer in certain localities (Cerman 2008; Curtis 2013; 2025a; Klír 2024; Curtis & van Besouw 2025; Alfani & Sardone 2025).

The extraction of such intricate and systematic information necessitates these specific case study dimensions. Nevertheless, although clearly contextualised, each case still captures a wide range of socio-institutional and intersectional variables at play. However, in this *VICI* we also collect information on epidemic impacts on women that stand out for their broad representativity or wide applicability over space and time. Certain epidemic outcomes on women (d-e) are chosen because the type of information—qualitative descriptions of abusive or violent acts against and by women (WP5), and images of women in or using epidemic contexts (WP6)—can be collected and organised much more easily (Cohn 2018; Lynteris 2022), in many places and going back far in time, using printed and digital sources. These indicators are obtained in different places around the world and across the long term from before the Black Death of the mid-14th century up to the modern day—which allows us to take in the most lethal epidemic in Eurasian history (Green 2020), to show broad patterns of temporal change or continuity, and to compare epidemic effects on women when societies still understood disease through providential or miasmatic frameworks (Agresta 2020) with societies operating under germ theory ideas (bringing new prejudices: Patterson 2009). This approach is

further justified as epidemic-related violence towards women (Rocha e.a. 2024) and feminised narratives about diseases exist today (Han & Curtis 2021a).

Types of comparison at the level of women and men

This *VICI* is predominantly interested in female experiences of epidemics and their impact on women. The reason is that while we have a lot of historical research on the impact of epidemics on adult men, or non-disaggregated between the sexes, we have far less on women. This project is the first to start explicitly collecting and systematically analysing epidemic information relating specifically to women on a wide scale and over a long time period.

Nevertheless, this *VICI* is also set up to have some baseline information on men to relativise what is happening to women during epidemics—justifying the five outcome variables. In each WP it is possible to obtain comparative evidence for epidemic impact on men—as cleaners, in isolation contexts, in obtaining wealth, in experiencing or perpetuating violence or abuse, or in visual representation. Helpfully, some of that information on men already exists.

As mentioned above, however, the lines of comparison do not have to be restricted to how women are affected differently or similarly to men by epidemics. A large amount of focus in this *VICI* are down two, up to now, undeveloped comparative lenses—between women within different social or historical contexts, and between different categories of women within the same individual context. Using all three lines of comparison will allow this project to make major analytical advances beyond the state of the art, escaping myopia and reductionism.

Types of comparison at the level of women

Intersectional approaches are varied and complex and there is no one-size-fits-all approach in this *VICI*. Each WP has different types, quantities, and scales of information, with differing sample sizes, and thus it would be restrictive to commit to one specific technique. What is confirmed from the outset is that the impact of epidemics interacting with different categories of women within each WP will be teased out using a combination of multivariate statistical analyses and qualitative comparative approaches, as the context demands, as widely employed in intersectional historical health research (Godde e.a. 2020; Klärner e.a. 2022; Mahendran e.a. 2022; Yaussy 2022). To support the application and integration of more technical statistical approaches, Postdoc A will be a highly proficient quantitative researcher from either economics, economic history, or demography. Postdoc B will be able to code—writing and running scripts, scraping digital information from archival websites, and visualising data.

In the research plan, there are more specific source and methodological details relating to each WP.

2a2. Research plan

As well as the five major research WPs (WP2-6), this project requires a foundation period (WP1), an overarching synthesis (WP7), and consistent administration (WP8).

WP1. Setting the foundations [starts 1 July 2026]

	<i>Fte</i>	<i>Months</i>
<i>PI</i>	0.7	1-6

To succeed, WP2-6 will each benefit from strong foundations. In an initial preparation phase, I make sure four things are in order.

First, I create a starting package for each WP2-6. Here, I draw up a bibliography of relevant literature; the primary sources that we already have; places where further source material might be found; a brief elaboration of what is to be done with the sources; and assemble and store any data that has already been extracted.

Second, some of the WPs (especially 2-4) only work effectively with a sharply defined temporal and spatial understanding of when and where epidemics occurred, and their characteristics. As PI of previous projects, I have already produced large datasets of burials that reconstruct the severity, pervasiveness, and selectivity of epidemics in the early modern Low Countries and parts of west Bohemia and southern Italy (Curtis 2015; 2016; 2025a; Van Besouw & Curtis 2022; *supplemented by*: Delille 1971; Da Molin 1984; Eckert 1996; Fusco 2007; Bedini 2020; Velková & Tureček 2021). I use some of this preparation period to fill in gaps—dependent on the regions of focus in WP2-4.

Third, I take time to establish the profile of the researchers I will hire—creating clear and coherent advertisements.

Fourth, I travel to meet with the members of my advisory board to stimulate early ideas and organise the solid international scientific network which is already behind the project.

WP2. Risks and rewards? Female plague cleaners [starts 1 January 2027]

	<i>Fte</i>	<i>Months</i>
<i>PhDa</i>	1.0	7-54
<i>RAa</i>	0.4	25-27

SUMMARY: Before and during industrialisation, epidemics led to female employment in different caregiving roles—especially as paid cleaners in other infected people’s houses, yet we still know very little about them. This **PhD project** uses personal accounts of debts and assets, labour contracts, testaments, and civil disputes to understand whether this element of a “disease economy” reflected women’s adaptive capacity or instead burdens and coercion?

Across preindustrial Europe, women and men were employed during epidemics as paid cleaners or caregivers. These individuals went into infected people’s houses and performed diverse tasks while the afflicted was sick and after they died. Such labour included care, cleaning, and fumigation, but also fetching food and goods for the house; witnessing testaments; installing locks; codifying corpses and carrying them; and tending to children, animals, and crops. In some

places such as 16th-century London, public female codifiers of corpses (searchers) were separate to domestic carers (keepers) (Munkhoff 1999), whereas in others such as France and the Low Countries, they combined roles (Curtis 2025a).

While we currently have anecdotal and fragmentary information on these people, we still know very little about them. This neglect is unfortunate, not only because they are one of the most important direct preindustrial public health workers (Munkhoff 2014; Strocchia 2019), whose costs sometimes reduced an infected household's post-mortem assets by as much as 75% (Curtis 2025a), but they are a window into the lives of poor women often weakly represented in the historical written record.

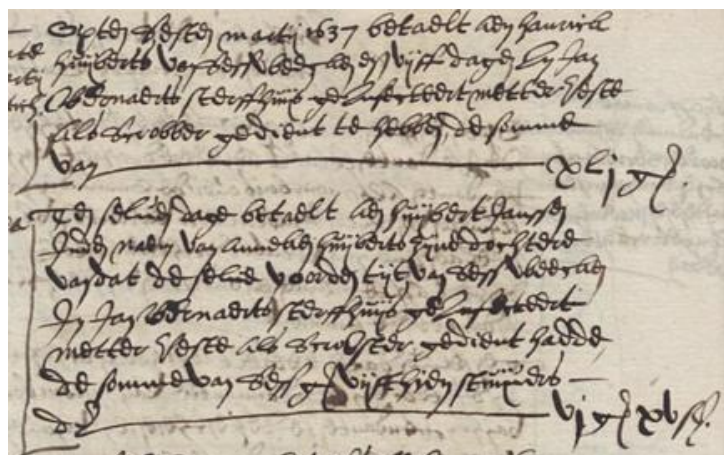
WP2 is a perfect opportunity for a PhD project which leverages entirely under-exploited archival documents and can offer clear comparisons between women and men doing similar tasks. Who were the women doing this work? What were their demographic and social profiles? How did their responsibilities evolve over time, and how were they perceived by broader society? Were there differences between urban and rural cleaners? How did women view the balance between risks and rewards in this work? And did this element of the disease economy reflect elements of personal opportunity and adaptation, or instead burdened vulnerabilities that cut across intersections of status?

Sources and their use

There is an abundance of untapped source material in Low Countries archives that can shine new light on this micro-level epidemic intervention. References to plague cleaners can be found in personal accounts of debts and assets; labour contracts; wills and testaments; and civil disputes, among others. While economic historians compile datasets on wages going back in time, often craftsmen or labourers, this WP can provide wholly new quantitative insights into gendered characteristics of the disease economy—especially given that women's commercial contribution was frequently connected to house, health, and care work—as the sources provide previously unexploited information on financial remuneration and conditions of plague cleaners across fixed periods (Curtis 2025a).

Women and men

Although in some historical contexts, certain categories of elite men were more likely to do this job (Johnson 2022), in most other cases, sources suggest women of varying statuses more frequently appeared as plague cleaners (Harkness 2008; Newman 2012; Craig 2021; Curtis 2025a). This information on men will be used to our advantage to relativise the lives and experiences of women doing the same or similar work. So, for example, personal financial accounts have shown cases where female and male plague cleaners were working in the same individual's household for almost the same period. The woman's wages were not only six times less than the man's wages but also paid to her father (Fig 1). In other cases, however, women have been found to receive high wages. What explains this variability?



[On 6 March 1637 paid to Hanrick Huijberts for 6 weeks and 5 days in the "deathhouse" of Jan Bernaerts infected with plague, as a cleaner, the sum of 41 guilders...

...On the same day paid to Huijbert Janssen in the name of Anneken Huijberts his daughter for the same time of 6 weeks in the "deathhouse" of Jan Bernaerts infected with plague, as a cleaner, the sum of 6 guilders 15 stuivers...]

Fig 1. Personal assets and debts during the 1636/7 plague: Fragment from Jan Bernaerts, Dinther, Brabant Brabants Historisch Informatie Centrum, Den Bosch, Schepenprotocol Dinther, 7603, no. 12, fo. 51v.

Intersections

In some historical contexts, paid female epidemic cleaners and carers were older and often widowed (Munkhoff 1999), while in others they were young and unmarried—sometimes girls (Curtis 2025a). There is potentially a lot of variation to exploit here. Thus, we take a three-step approach. First, we identify which categories or statuses of women were more likely to be plague cleaners. Second, we reconstruct the fortunes of the female plague cleaners and disaggregate this information down the lines of relevant intersections—be that migratory background, wealth, age, or marital status. Third, we compare the fortunes of these female plague cleaners with a sub-group of women from the same community that were not plague cleaners.

Accordingly, WP2 also requires careful cross-referencing of these women's information with other sources that can provide indicators on their fortunes—including documents on births, marriages, and deaths, household censuses, and documents on wealth such as probate inventories, wills, and fiscal registers.

Outcomes

- 1. One PhD thesis, either monograph or articles
- 2. One international peer-reviewed journal article (e.g., *Economic History Review*; *Gender and History*)
- 3. One open-access dataset for plague cleaners’ wages and other remunerations

WP3. A scourged space? Epidemics and female isolation [starts 1 January 2027]

	Fte	Months
PhDb	1.0	7-54
RAa	0.4	28-30

SUMMARY: Quarantine and isolation have long been epidemic responses. Although it has been acknowledged that pest houses had gendered aspects of policy, healthcare provision, and management, we currently have no systematic analysis of women’s experiences in these institutions. This **PhD project** dives into these rich institutional administrations to better understand the fortunes of women confined to pest houses, and especially how the lives of survivors compared to those who never entered them.

Recent literature has shown that early modern women were more visible in public spaces than previously thought (Van den Heuvel 2019; Mansell 2021). Epidemics, however, brought spatial restrictions for women, often based around miasmatic concerns regarding societal corruptions, and included—bans on women attending funerals and wakes, crackdowns on sex work, moralising discourses on female market traders, and city-wide ordinances that confined women to homes for long periods (Cohn 2010; Crawshaw 2011; Curtis 2020a; 2021a; 2025a; Coomans 2021; Massong 2021; 2024), receiving resources to remain at home (Aymard 1973). Women were also sent to pest houses and often separated from men in the same institutions (Cipolla 1981; Crawshaw 2016; Strocchia 2019; Benyovsky Latin 2020; Beauvieux 2023). Nevertheless, we lack systematic insights into women’s experiences of epidemic-induced isolation.

WP3 is a perfect opportunity for a PhD project that exploits rich archival documentation to draw new qualitative and quantitative insights. Who were the women that worked in pest houses, and who were the female patients? Did they differ from the women that were quarantined or isolated domestically? What were these women’s experiences inside the institutions, and how did they differ from men’s experiences? How did women deal with separation from other family members, and how did families deal with separation from these women? Were these places sites of social tension (Calvi 1989), and how did women resist burdens and obligations placed on them in these institutions? How did the fortunes of survivors of these institutions compare to other non-institutionalised women?

Sources and their use

There are numerous institutional archives of pest houses across the Low Countries that can shine new light on this micro-level epidemic intervention. Illuminating case studies have focused on public health institutions such as hospitals and how they functioned during epidemics (Oosterbaan 1954; Jacquet-Ladrier 1980; Plomp 1980; Kool-Blokland 1990; 1995; Vis 1991; Steendijk-Kuypers 1994; Leppink 1996; Ladan 2012)—although not specifically concentrating on pest houses or women. While some plague or smallpox-afflicted patients were treated in hospitals with separate rooms or were sent to temporary huts built in settlement peripheries or rural areas (Curtis 2025a), WP3’s focus will be explicitly on purpose-built pest houses—with Leiden, Rotterdam, Amersfoort, Valenciennes, Maastricht, Mechelen, and Namur, already identified as highly promising comparative cases with rich underexploited administrations.

These archives allow insights into several aspects of women’s experiences of institutional life during epidemics. We obtain demographic information on the women themselves—ages, origins, and socio-economic status. We also gain insights into women’s treatment and care, the economic costs involved in their stay, and how visitors were received. Some documents provide insights into relationships established between patients and staff, and we also have evidence of attempted female resistance to authority and confinement. Indeed, we know that women fled pest houses to visit friends and family and were punished in houses of correction as a result (Beauvieux 2023; Curtis 2025a).

Women and men

Both women and men were admitted to pest houses—although many institutions took in more females, who were physically segregated from men (Ladan 2012; Curtis & Han 2021). Where women and men shared their lives in proximity in pest houses, this information will be used to relativise the isolation experiences of women. Not only can we compare qualitative aspects of treatments, policy, and resistance, but we can also quantitatively compare female outcomes to those of men. Several pest houses provide sex-disaggregated quantifiable information on dates of entry or re-entry for patients, whether they were discharged or died, and how this changed over time.

Intersections

We take a three-step approach to this topic. First, we ascertain which types or statuses of women were more likely to be found isolating or receiving treatment in pest houses during epidemics. Is it necessarily true that these places were mainly the preserve of the poor? Second, we reconstruct the fortunes of those women in pest houses and disaggregate this information down the lines of relevant intersections—be that migratory background, wealth, age, or marital status. Third, we zoom in on those women that survive their infection and experience in these institutions (case death rates were less than 50%, even during plagues: Curtis 2025a; Ogilvie 2025) and reconstruct their lives upon release. This is important given that recent work has suggested that those that avoided institutional confinement during epidemics did not necessarily have better outcomes (Alfani e.a. 2024).

Accordingly, WP3 requires careful cross-referencing of these women’s information with other sources that can provide indicators on their fortunes—including documents on births, marriages, and deaths, household censuses, and documents on wealth such as probate inventories, wills, and fiscal registers.

Outcomes

- 1. One PhD thesis, either monograph or articles
- 2. One international peer-reviewed journal article (e.g., *Social History of Medicine*; *Journal of Social History*)
- 3. One recorded public engagement interactive lecture and Q&A at a former pest house

MESO-SCALE: LOW COUNTRIES, WEST BOHEMIA, AND SOUTHERN ITALY, 17TH–19TH CENTURY

WP4. In sickness and in wealth? Epidemics and female access to resources [starts 1 July 2027]

	Fte	Months
PDa	0.8	13-48
RAb	0.4	19-24

SUMMARY: This **postdoc project** investigates how epidemic-induced mortality reshaped patterns of female property ownership and asset use. Drawing on serial sources—including fiscal registers, lease books, and household censuses—it measures distribution before, during, and after epidemics. Did women acquire new wealth after sudden mass mortality, what did they do with their estates, and how did they use them to ensure welfare or wellbeing?

Research into epidemics and economies has shifted from preoccupation with wages to focus on the redistribution of wealth and property—reshaping our understanding of long-term inequality (Alfani 2022). The gendered dimensions of this process, however—especially how epidemics affect female access to wealth and property—is missing, aside from some pioneering efforts with women’s land inheritance before and after the Black Death (Bardsley 2014). Documents written by women show their concerns about their own finances and epidemic situations, as seen in a Prague woman’s letter sent from Jerusalem during the 1567 plague (Fig 2).

Epidemics lead to deaths, and hence widowers and widows, and more heirs. Women gained new responsibilities and authorities over resources within households, often against the wishes of surviving sons and deceased husband’s male relatives (Cohn 1996). By comparing between the Low Countries, west Bohemia, and southern Italy, WP4 allows us to examine this process in three societies with very different distinctive pressures and incentives for widows (Skinner 1993; 2014)—two with death-centred models of property transmission (usually, but not always, down partible lines in the Low Countries, and impartible in west Bohemia), and one with a marriage-centred model of property transmission (dowries in southern Italy)—which created different pressures and incentives for different statuses of women.

The analysis centres around two questions relating to the acquisition of wealth and property, and how that was used by women. Thus, first, in each of the Low Countries, west Bohemia, and southern Italy, did women find it easier to acquire wealth and property after epidemics, was this independently managed by women, and was this access a long-lasting structural development or temporary? My own pilot studies on this issue point more to the transient nature of epidemic “rewards” for women—female landholding rising with mortality but quickly receding to previous levels (Fig 3). Second, if acquiring access, what did women do with these estates to ensure future welfare? For example, did women in the aftermath of epidemics benefit from their unexpected single status, using access to their estates to lease land or rent out property, acquire annuities, provide sources of credit, or did they use these resources to maintain future welfare through kinship links (Zuijderdijn & Overlaet 2021; Maegraith & Lanzinger 2022; Pompermaier 2023)—enticing new marriages or trading with other family members in exchange for care?

WP4 is the responsibility of a quantitatively trained postdoc from economics, economic history, or demography, which will allow for effective curation of the serial economic and demographic data; sharp formal regression analyses to establish the effects of epidemics and the impact of interactions with different inheritance regimes and intersecting dimensions of female status; and guarantee reproducibility and transparency.

Sources and their use

One of the methodological limitations to work on epidemics and redistribution so far has been the lack of appropriate serial sources that show changing distributions of wealth and property (Curtis 2020b)—notwithstanding a pioneering exception (Alfani 2010), and recent follow up work (Alfani & Di Tullio 2018; Curtis & Van Besouw 2025; Hilkens 2025; Van Besouw e.a. 2025). More usually, we have distribution markers from fiscal sources at individual random years with

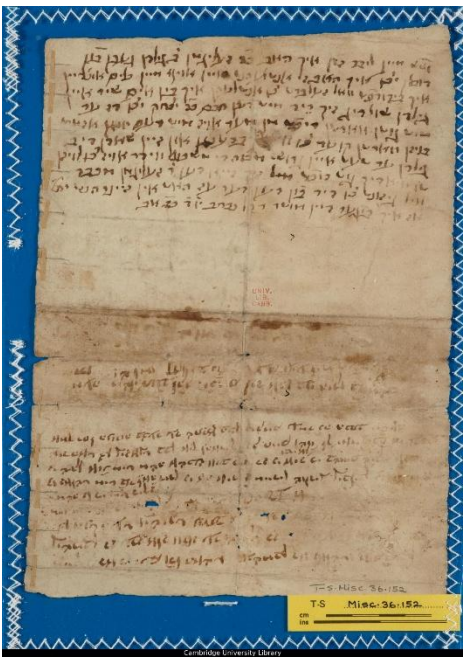


Fig 2. Letter, Jerusalem to Cairo on the 1567 plague, Rachel Zusman of Prague, University of Cambridge digital library

large temporal gaps. Hence, the reconstruction of women's property distribution has often come from one point in time (Wensky 1980; Smail 1997; Rollo-Koster 2010).

WP4 addresses that problem. Benefitting from my *VIDI*, I have already identified specific series of wealth and property registers in the Low Countries, west Bohemia, and southern Italy—some annual (*veldboeken*) or frequent (*morgenboeken*; *riveli*; *verpondingen*; *Klosteurbücher*; *Losungsbücher*; *terriers*) which sometimes run for many years linking the 15th-19th centuries. Some sources distinguish between resources owned and used. This allows us to be temporally systematic—reconstructing female wealth and property access before, during, and after an outbreak.

Two stand-out features characterise our approach in WP4. First, we integrate demographic sources such as parish registers and household censuses with the serial nature of distribution sources to reconstruct estates over the entire lives of female individuals—a lifecycle analysis I already developed (Curtis & Van Besouw 2025)—allowing us to calculate effects of exposure to epidemics on accumulation or decumulation. Second, we integrate other documents into this study that provide further contextualisation of the property transfer process—wills, lease books, civil disputes, house and mortgage transaction books, and probate inventories. Indeed, as well as for themselves, women worked to facilitate strategies of coping after sudden epidemic deaths—distributing inheritances and legacies to children and other family members, serving as guardians and executors, and managing credit and debt (Coolidge 2025).

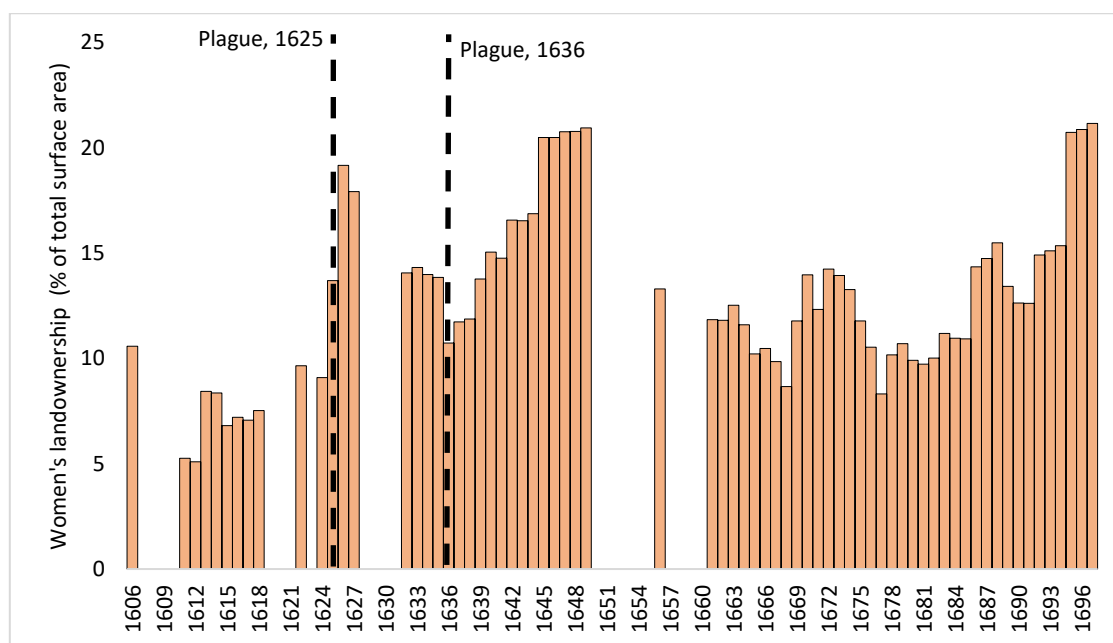


Fig 3. Female landownership, Oudenbosch, Brabant, 17th century
West Brabants Archief, Bergen op Zoom, Dorpsbestuur Oudenbosch, 0300, nos. 0918–29, 0960–8.

Women and men

Men are mentioned in wealth and property registers more frequently than women. Many of these sources are organised by head of household, which, if a man was present, was always a husband or father. The women who appear in these sources are generally widows and single unmarried women. Nevertheless, married female resource ownership and access can in some sources (e.g., *veldboeken*) still be reconstructed indirectly by plotting over the lifecycle what a woman had before marriage or how a man's estate increased after marriage (i.e., what the woman brought with her).

Thus, the approach in WP4 is not a direct comparison of male and female accumulation strategies and to quantify how they were affected by epidemics, but to consider instead to what extent epidemics impacted how women accessed and managed property independently of men. Did epidemics create emancipatory conditions where women were free to use property of their own volition, or instead provide resources for female welfare only under the proviso of paternalistic or patriarchal controls?

Intersections

We take a three-step approach to this topic. In the beginning, we remain at the aggregate level of all women. Simply, did women get more access to wealth and property after epidemics, and did this differ within and between regions of the Low Countries, west Bohemia, and southern Italy? Did the death-centred inheritance systems, and the more partible death-centred ones, logically create more opportunities for women in hyper-mortality conditions? In the second phase, we bring in intersections. We analyse which categories of women were more likely to benefit from ownership of or access to wealth and property after epidemics, and whether this diverged across the three meso-areas characterised by very different inheritance conditions. Finally, we try to understand how women used this wealth and

property, whether it was freely or with restrictions, and then once again, whether this differed across categories of women, and across the Low Countries, west Bohemia, and southern Italy.

Outcomes

- 1. Two international peer-reviewed journal articles (e.g., *Journal of Economic History*; *Population Studies*)
- 2. One short handbook or pamphlet (e.g., *CUP ELEMENTS*) on women and wealth distribution in historical perspective
- 3. The organisation of a first project workshop on approaches and methods to analyse epidemic impacts on women

MACRO-SCALE: GLOBAL, 14TH CENTURY TO THE MODERN DAY

WP5. The corrupted body? Epidemics and female experiences of violence and abuse [starts 1 January 2027]

	Fte	Months
PI	0.6	7-42

SUMMARY: Epidemics have sometimes exploded into expressions of abuse or violence—either by authorities towards targeted groups or by groups from below against authorities. On occasion, this was expressed in physical control over women’s bodies, and yet women were also protagonists of violent resistance against perceived injustice and carried out their own violent unjust acts. In this project, I scour newspaper databases and criminal records to better understand which women were involved, their roles, and their ideologies.

Recent literature has suggested that rather than the clichéd view of epidemics automatically leading societies into excessive reactions such as panic, blame, or hatred, there was a spectrum of responses (Jedwab e.a. 2021). Many epidemics were simply “quiet”, subsumed into the ordinary rhythms of everyday life as predicted recurrences, or even encouraged compassion and cohesion (Cohn 2018; Curtis 2025a). Even with uproar, protest, and violence, the ways in which these manifested themselves were diverse—in some cases resisting colonial repression (Klein 1988; Echenberg 2002; Hodges 2005), class-based antagonism (Evans 1988; Cohn 2018), distrust of outside authorities (Han & Curtis 2021b), and protecting the status quo and customary practices and privileges (Cordell e.a. 2023; Curtis 2025a).

In line with the diversity of epidemic-related resistance, scholars have started to address women’s different roles in this process (Cohn 2018; Curtis 2025a). On the one hand, it is reasonable to expect that with widespread historical inequalities in access to wealth, rights, and resources, women might have been put in situations where they were more susceptible to abuse or violence during and after epidemics (Arnold 1993; Sellers-García 2022), as seen during COVID (Rocha e.a. 2024). Outbreak narratives of women as sources or spreaders of infection made that more likely (Wald 2008; Han & Curtis 2022). Yet, women were also participants in collective epidemic-related violence—resisting male authorities and officials and targeting other women of certain statuses (Catanach 2007; Cohn 2018; Rose 2018; Curtis 2025a; Ogilvie 2025). This is unsurprising given that women have been instigators of or participants in other violent protests throughout history—in particular, food riots and those related to arbitrary tax (Bohstedt 1988; Byfield 2003).

In WP5, I go further by closely scrutinising the associations between women and abuse or violence in epidemic contexts. Which women were more likely to experience violence, by whom was this inflicted, and did this differ across context and time, and why? Similarly, which types of women were more likely to perpetuate or participate in abuse or violence during epidemics, what were their roles and aims, and did this differ across context and time, and why?

Sources and their use

Widespread digitalisation of manuscripts and printed literature, the integration of searchable databases, and advances in text-mining techniques have opened new avenues for examining the relationship between epidemics and acts of uproar, protest, and violence (Cohn 2017; 2018). In WP5, I build on this foundational work—expanding the source base while specifically foregrounding women’s experiences and involvement.

In WP5, the temporal and geographical dimensions are widened—through the type of qualitative information being processed, the increasing digital availability of sources, and the project’s overarching aim for representative evidence across diverse contexts. Given the extensive reading and synthesis required, I lead WP5. I draw on three sources to create a large global dataset of “female-associated abuse and violence during epidemic outbreaks”—(i) digital databases of criminal and civil offenses; (ii) text-mining of digitised newspapers; and (iii) systematic searches of secondary literature using targeted digital queries.

This dataset enables the extraction of valuable information on epidemic characteristics; the nature of abusive or violent acts; and the identity, background, and status of the women and men who are perpetrating or experiencing this abuse or violence. I classify them into the following categories: (i) intentional killing; (ii) accidental killing; (iii) physical injury; (iv) property damage or destruction; (v) denial of access to places or resources; (vi) mass gatherings with potential for violence; (vi) threats of violence; and (vii) verbal or written insults.

Women and men

Women and men experienced abuse and violence during epidemic outbreaks, and women and men perpetuated both too. Other nuances existed such as men using violence against other men as a perceived way of defending “female honour” during epidemics (Ogilvie 2025)—as seen during the smallpox vaccination protests of 1904 in Rio de Janeiro (Fig 4). The collection of such a wide array of examples will allow me to, first, discern to what extent the female experience of abuse and violence was different to male experiences—in frequency, and qualitatively in form and

extent. Second, I will discern to what extent female participation in, and perpetuation of epidemic-related abuse and violence was different to men’s—again in quantitative terms, and then whether the nature of the acts, the targets, and the aims deviated from male. Was violence defensive, opportunistic, or for an ideological purpose?

Intersections

This analysis proceeds in two stages. First, I examine which categories of women were more likely to experience violence—using the breadth of examples to differentiate isolated incidents from patterns of structural targeting. Second, I investigate women as agents of abuse. Were all female categories involved in epidemic-related violence, and among those identified, did they all share similar aims and methods?



Fig 4. “Vaccine-Obligation War”. O Malho, 29/10/1904

Outcomes

- 1. One international peer-reviewed journal article (E.g., *Journal of Global History; Past & Present*)
- 2. One recorded interactive public engagement lecture at a museum
- 3. An open-access dataset of global cases of women’s experiences/involvement in epidemic-related violence

WP6. Spreading and sacrifice? Epidemics and female visual representation [starts 1 January 2027]

	Fte	Months
PDb	0.8	7-42
RAC	0.4	13-18

SUMMARY: Historical sources are not necessarily neutral reconstructions of female experiences of epidemics but instead subjective societal perceptions—sometimes elite and male. **This postdoc project** assembles paintings, memorials, manuscript doodles, caricatures, magic lanterns, posters, photos, and television shows and films to better understand the continuities and changes in the narratives created about women by instrumentalising epidemics through visual images, their societal and cultural impact, and how they were received.



Fig 5. Her “carelessness affects the family then the city”, in 病毒の伝播, 1926

Although women have created material about epidemics they experienced, still, understandably, most historical sources on epidemic impacts have been produced by men. Images are potentially an important way of placing women back into disease narratives (Arnold 2023). Nevertheless, rather than reflecting reality, these might present subjective expectations of what women do and experience during epidemics, or how women should behave or act (Han & Curtis 2021a; 2022). From the earliest medieval associations of menstruation and disease susceptibility (Green 2005), images have long been morally coded—the previously mentioned example of Typhoid Mary as an “unclean” or “fallen” woman a case in point (Wald 2008). Colonial and postcolonial photography used paternalistic logic and civilising ideals (Snelders e.a. 2019), and thus these images are important not only for what they say about women but also how female-epidemic tropes can be used to highlight

broader societal failures, concerns over moral integrity, and fears of national decline or vulnerabilities (Fig 5-6) (Ostherr 2005; Walton 2021; Lynteris 2022).

However, despite several standout examples, our temporal understanding of how women and epidemics have been visually represented remains fragmented. We lack a clear sense of which visual tropes have evolved, which have persisted, and how these representations diverged across cultures and societies. Recent scholarship has called for more systematic spatial and temporal tracing of these narratives and the protagonists involved (Jensen et al. 2022; Curtis 2025b). In WP6, a postdoc—trained in art history, culture or media studies, or communication—will examine how visual culture has shaped knowledge production about women and epidemics. This includes analysing stories told about (and sometimes by) women through visual media across different historical periods and geographic contexts.

Sources and their use

Visual sources, which can often be accessed quickly and digitally (Table 1), and reducing linguistic demands, allow for the wider geographical scale and longer temporal scope of WP6. Some of the databases and archives below have thousands of relevant images. We will collect as much visual evidence of women represented in epidemic scenarios as possible across the world from the 14th century up until the modern day—coming from paintings, memorials, manuscript doodles, caricatures, magic lanterns, posters, photos, and films—in the process developing the first publicly accessible annotated global database of epidemic imagery specifically related to women (see Societal Relevance section).

For each visual source, the content is analysed down several lines. Who is producing the material, for whom, and for what purpose? How are women being portrayed? How is the image accessed and received by viewers and audiences?

By using such a diverse array of visual culture over such a long period, it is possible to observe patterns, but also whether and how one medium interacts with, reproduces, or replaces another (intermediality), as this can be an important driver of continuity or change in types of representation over time. To start, we can separate our visual data out between real and imaginary images. Then, embedded in the literature, we begin with four broad identifiable tropes—the vulnerable woman; the burdened woman; the female saviour; and the female spreader (Brummett, 1995; Ostherr 2005; Wald 2008; Day 2017; Curtis & Han 2021a; 2022)—and through the course of WP6, these will be nuanced, critiqued, refined, and supplemented.



Fig 6. Noffie the Skita, the “promiscuous parasite”, in *Borne on Two Wings*, 1945

Table 1: Non-exhaustive digital sources for visual images of epidemics across time

Digital source	What
Bibliothèque Numérique Asiatique	Films
CDC Public Health image library	All visual material
Chinese Film & Cross-Cultural Humanities database	Films
Endangered Archives Programme (British Library)	All visual material
Harvard Contagion Collection	All visual material
ICRC Audiovisual Archives	All visual material
Japanese Animated Film Classics database	Films
MED Film Project	Films
Pandemics, Plagues, Pestilence, & Peste in Art (Boston University)	Paintings
Prelinger Archives	Films
Visual Plague database	Photographs
Wellcome Trust analogue & digital catalogue	All visual material

Women and men

There are several layers to how images of men in epidemic-related visual culture can shine further light on the representation of women over time. First, we can directly compare visual representations of women with those of men—both separately and in the same image, if possible. This is important because we can also identify patterns and trends in the sometimes-implausible absences of women from epidemic images and reflect on the drivers behind decentring of women—silences rather than confirmation (Catanach 2007), as seen during AIDS visuals in the 1980s-90s (Roth & Hogan 1998). Previous literature has suggested that certain images have been used to develop masculine notions of epidemic control or expertise—sidelining female contributions (Lynteris 2016; 2022; Han & Curtis 2021c)—or instead as a reflection of male anxieties or challenges to clearly delineated gender roles (e.g., the threat of female “poisoners”: Hanson 2011).

Second, and moving beyond the state of the art, WP6 examines the reception side—how these visual representations of women in epidemic contexts were accessed, interpreted, critiqued, and even defied by audiences, and especially by women. Escaping the confines of the visual image itself, the postdoc will incorporate, where possible, critiques (in newspapers, for example) and descriptions of popular responses, including attempted censorship, approval or uproar, and even physical destruction of the visual material. Thus, for example, during the 1910/11 Manchurian plague and recurring cholera outbreaks of the 1920s, visual educational material was carried to rural communities by paid labourers (Bu 2017), but women directly wrote about their disregard of Russian and Chinese instructions they encountered (Ling 1989; Hong 2002).



Intersections

Visual sources are useful because we receive immediate and clear indicators as to the categories of the women being depicted—i.e., there is less need for cross-referencing with other sources to gain background information on the underlying intersections involved. In WP6, the approach proceeds in a simple and straightforward manner—to observe, according to the six categories of interest, which types of women were more likely to be represented in a certain way in association with epidemic contexts, whether that changed over time or deviated across space and culture, and to gain an understanding of why.

Outcomes

1. Two international peer-reviewed journal articles (e.g., *Public Understanding of Science*; *Science Communication*)
2. One visual essay for a peer-reviewed journal (e.g., *Visual Studies*)
3. One annotated open-access online database and exhibition of visual material on women and epidemics
4. A special exhibition of a sample of the visual material on women and epidemics at *Rijksmuseum Boerhaave*, Leiden

WP7. Synthesis [starts 1 January 2030]

	Fte	Months
PI	0.6	43-60

My role as PI is to assemble the key threads into a coherent whole as an act of synthesis—aligning the specifics of the diverse empirical research in WP2-6 with the overarching hypotheses. I use the final 18 months of the project to bring together all the evidence to write a book on women's experiences of epidemics across the long term—incorporating the tri-scale micro, meso, and macro levels of analysis. In particular, a key requirement will be to weave together quantitative and qualitative evidence produced from the *VICI*, and distinguishing subjective perceptions and rhetorical traditions about women from female "experiences". Accordingly, our *VICI* evidence will not be siloed but multilayered and triangulated to provide additional layers of validation or exposure of contradictions. In this writing phase, different chapters will be presented to relevant research groups connected to the project advisory board.

Outcomes

1. One open access book synthesising the findings of the project on epidemics and women across time
2. Interdisciplinary conference presenting headline results to educational/advocacy and policy-steering groups
3. One commentary piece presenting headline results in a broad natural science journal such as *The Lancet*

WP8. Ongoing supervision and administration [starts 1 January 2027]

	Fte	Months
PI	0.1	7-60

A *VICI* needs a window of time for consistent supervision and administration—to offer the best conditions for the team. After the initial setup in WP1, WP8 continues throughout the rest of the project, and allows me to devote time to developing the competencies of the two PhDs and two postdocs under my guidance. My previous *VIDI* taught me the importance of this.

Timetable of work and collaboration

			Year 1				Year 2				Year 3				Year 4				Year 5			
Months			1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	31-33	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60
Wp	Team	Fte																				
1	PI	0,7																				
2	PhDa	1,0																				
	RAa	0,4																				
3	PhDb	1,0																				
	RAa	0,4																				
4	PDa	0,8																				
	RAb	0,4																				
5	PI	0,6																				
6	PDb	0,8																				
	RAc	0,4																				
7	PI	0,6																				
8	PI	0,1																				

Key: **green** = preliminary setup (sources, burials, recruitment); **red** = dive into the literature, source identification, developing analytical techniques; **yellow** = collecting relevant data; **orange** = organisation and analysis of evidence; **purple** = main writing phase; **black** = supervision

Above, I summarise the overall distribution of project members and timing of the project phases. The presentation of ongoing findings at workshops and conferences begins for all members of the *VICI* once they reach the **orange** phase of their research trajectory. Relevant conferences include *World Economic History Congress*; *European Social Science History Conference*; *Berkshire Conference of Women Historians*; *Rural History Conference*; *British Society for the History*

of Science Annual Conference; Economic History Society Annual Meeting; Social History Society Conference; International Medieval Congress; and International Association for Visual Culture Conference. PhD candidates will gain experience in presenting their work to audiences from an earlier phase by being embedded within either the *NW Posthumus* research training scheme for economic and social historians or the *Huizinga* research training scheme for cultural historians working in the Low Countries—helping them with research design. This is supported by our own internal *VICI* team seminars, where outside experts will be invited. Student research assistants aid the collection and curation of empirical materials.

Using my national and international networks, I have assembled a project advisory board.¹ I will integrate findings into my current networks—such as *EURHO* (European Rural History Organisation), *GEWINA*, and *Inequality Network*—encouraging incorporation of women into areas where gendered approaches are less visible. I will also stimulate and intensify discussions with other important projects on epidemic-society interaction in historical perspective—the *EPIBEL* team in Belgium; the *premodern healthscaping* specialists working in the Netherlands, Italy, and Australia; the *EPIDEMY Lab* in the UK, the *Mortalitas* Mediterranean group, and the *global Black Death digital archive*. Based on my previous work, it is clear I work productively in teams and in collaboration. For broader academic and societal impact, the *VICI*'s findings will also be closely embedded within the *Gender and Public Health Emergencies* working group.

2a3. Expertise of the applicant: alignment with research proposal

My previous projects have given me a platform to better understand important societal questions such as how epidemics have affected cohesion and discord within communities (*VENI*), and how epidemics have helped redistribute economic resources within and between communities (*VIDI*)—both funded well before the world knew of COVID. During this work, I realised that there is more to do—and a clear societal need—to better understand female experiences of epidemics. Thus, as preparation for this *VICI*, I built foundations by gathering sex-disaggregated mortality evidence to test widely accepted principles connected to the “female mortality advantage” (Curtis & Roosen 2017; Curtis & Han 2021; Curtis 2021b; 2025a) and obtaining initial qualitative insights into epidemic impacts on female survivors (Curtis 2021a; 2025a). Now it is time to make this a more systematic investigation, by formally testing some of the hypotheses I have developed in this work.

I am a social and economic historian by background, grounding me in the quantitative aspects of the *VICI*, but I have also incorporated cultural and visual history into my work on epidemics (Han & Curtis 2020; 2021a; 2021b; 2021c; 2021d)—important for a project which integrates so many different subdisciplines of history. More than this, my previous work on epidemics has escaped discipline-driven myopic thinking—engaging with other fields from bioarchaeology to media to the climate sciences and disaster studies (Roosen & Curtis 2018; Van Bavel e.a. 2019; 2020; Curtis 2025b). This has made me proficient in the framing norms of these fields—enriching and heightening the reach of this *VICI*. Moreover, given the long-term nature of this project, it is important that I work across an exceptionally broad timespan—trained as a medievalist but now an expert in long-run developments linking the distant and recent past. I believe that I can engage both academics and wider society with this project—lending itself to science communication. I am now under contract to write a short introductory book on the methodological, conceptual, and societal implications of this topic (Curtis 2026), an important starting step for the *VICI*, which is supported by a *Royal Historical Society* (UK) scheme to better elaborate the value, use, discourse, and impact of history in contemporary society and culture. I have been interviewed about women and epidemics in the Dutch newspaper, *NRC* (2025c).

2a4. Motivation for the choice of host institution

The innovative nature of this *VICI* is that it holistically integrates aspects of economic, social, demographic, cultural, and visual history, making the *Erasmus School of History, Culture, and Communication* (*ESHCC*) the ideal institution to embed the project. Given the prominent use of visual sources, this *VICI* benefits from a history department integrated within the *Erasmus Research institute for Media, Culture, History & Society* (*ERMeCHS*). The history department works thematically rather than restricted to period where we are equally dedicated to economic and cultural issues, and often economy and culture intersecting. Our department recently has consolidated high-level expertise in the historical dimensions of the *UN*, and this *VICI* will be able to use historical data to further scrutinise the *UN Women* recommendations on epidemic responses (Herten-Crabb e.a. 2025).

Meanwhile, across faculties, this project is supported by the *Erasmus Centre for Women and Organisations*, at the *School of Management*, the *International Institute of Social Studies* (Den Haag), and I am further embedded within the *Medical Ethics, Philosophy, and History of Medicine* group at *Erasmus MC* in an ongoing research network examining exclusion and inclusion in public health. Erasmus University Rotterdam has a strong background in interdisciplinary work in economics, culture, and health. It also provides institutional support for leadership development, which will allow me to derive long-term structural consolidation of a research group related to the *VICI* and beyond it—setting an agenda as an important place for the study of disasters, epidemics, and society in historical perspective.

Page count (max. 14 pages):

14

¹ Although I have assembled relevant international scholars, I refrain from names here to avoid creating biases in the proposal and reduce gender effects. Likewise, I do not mention individuals in the host institution choice section.

2b. Scientific and/or societal impact of proposed research

Specify via drop down menu which kind of impact the proposal focusses on:

Chosen focus:	Scientific and societal impact are of comparable focus
---------------	--

“THE CORONAVIRUS IS A DISASTER FOR FEMINISM” declared *The Atlantic* in March 2020 (Lewis). Although provocative, the more understated subheading of “Pandemics affect men and women differently” is something reasonably confirmed during our global crisis. Epidemics offer a valuable window through which gendered disparities can rise to the surface on access to work, resources, information, education, safety, and autonomy (Herten-Crabb e.a. 2025)—issues sometimes obscured in normal times. Yet our progress remains constrained by a lack of data disaggregated down relevant categories, and especially sex and gender (Criado Perez 2019).

If anything, this problem has deepened. The political situation in countries with leading scientific institutions such as the USA has obstructed funding for gender-sensitive research. Further, a global retreat from foreign aid is pressurising programs designed to mitigate disease effects in vulnerable areas. These developments are particularly concerning for women given rising female-male HIV prevalence ratios across most of eastern and southern Africa (Hegdahl e.a. 2016; Risher e.a. 2021) or mothers of children in Brazil born during Zika struggling to receive resources (Veras Mota 2025). What emerges is a dual challenge, and a societal crisis that is also scientific—a problem in need of funding yet facing structural obstacles.

This is the first ever project to systematically collect epidemic-related data on women across diverse geographical contexts and wide temporal scales; to analyse why outcomes for women differ by context and female status; and assess short- and long-run impacts. Its scientific value is high because the significance of the issue extends beyond epidemics—confronting broader failures in public health systems to account for gendered dynamics. The

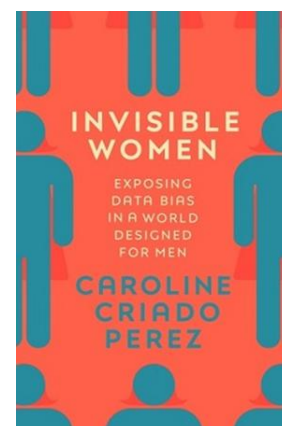
neglect of sex-disaggregated data collection extends well beyond the public health sector (Criado Perez 2019) with implications for global governance (Rai & Waylen 2008). These problems are not abstract concerns—they shape real-world outcomes for women and men today (Wenham & Davies 2022). The societal urgency of this issue is underscored by growing public awareness, including in my interviews with the NRC (Curtis 2025c).

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■ INTERVIEW

‘Elke epidemie treft ook de positie van vrouwen in de samenleving’

Genderverschillen De maatschappelijke gevolgen van epidemieën zijn groot. En vrouwen worden anders geraakt dan mannen. „Sterfte is slechts één aspect.”



the public; (b) informing gender-sensitive health policy using historical perspectives; and (c) preserving, curating, and making accessible critical historical and cultural materials.

Preparation and capacity-building phases

Although societal engagement beyond disciplinary boundaries is encouraged by universities and the NWO, it is often overlooked that we need to develop and improve these competences. To begin the Vici, both postdocs and I will participate in a series of public engagement training courses offered to academics by the Wellcome Connecting Science group (part of the Wellcome Trust, London). These courses are designed to sharpen our communication with a wider diversity of audiences, and an appropriate choice because of their specific commitment to considering the complex challenges and opportunities facing scientists researching sex and gender issues in health and disease.

On a scientific level, a data, methods, and concepts workshop held at EUR in the first year is an opportunity for a discussion about the problems, limitations, pitfalls, and opportunities facing collection and analysis of epidemic data connecting to women. The idea is to especially bring qualitative and quantitative researchers from history and other related disciplines into a dialogue. One of the clear added values of this Vici is its organic interdisciplinary character. This will lead to a short open-access handbook of best practices linking the sub-fields. Members of the above-mentioned project advisory board will be invited.

Sustained interaction and dissemination phases

Given that an important component of this Vici centres on visual culture, it is a perfect setting for societal impact. Visuals such as paintings, photos, or films affect how we think and feel—and stories are how we make sense of the world, embody cultural values, morals, and assumptions, and share that understanding with others. In the fields of science communication and public understanding of science, the importance of visuals in public health has been emphasised—their educational role and impact on societal and institutional trust (Kendal 2021; Han & Curtis 2022).

Building on my own successful public event (2020) at the *Besmet!* exhibition at the *Rijksmuseum Boerhaave*, Leiden, we will partner with this institution. We will establish our own special subject exhibition there—exploiting the visual component of the project to create a display of female-epidemic images across a long temporal span. This will be tied to a series of interactive events, where we gauge audience or viewer responses to and interpretation of a series of different epidemic images that are presented to them—combining surveys, audience response systems, and dialogue group discussion. That way this is truly two-way engagement—providing access to visuals for a wide group and encouraging participation and receiving information back from the group. How do audiences interpret the women’s function, roles, status, and more, in epidemic scenarios?



Fig 7. Burning Marit, the “Female Spreader”, in *Himlaspelet*, 1942

We also aim for incremental forms of societal engagement. As a regular host of *EUR* scholars, we will partner with the *KINO* cinema, Rotterdam, and show a short bi-weekly series of films across a set period which centre on representation of women in epidemic contexts—from early cinematic representations such as *Die Pest in Florenz* (1919) and *Jezebel* (1938) to modern female images created in *Contagion* (2011); films remade such as *I promessi sposi* (1923; 1941; 1964) and *The Painted Veil* (1934; 1957; 2006); and films across context such as Sweden’s *Himlaspelet* (1942, Fig 7), Argentina’s *La Peste* (1992), and Taiwan’s *洞* [*The Hole*] (1998). For each showing, we will have a short audience discussion session, and postdoc B will give a public lecture at this series.

More broadly, the project will also make some recurring interventions. First, project findings are presented at a *EUR* public lecture every year coinciding with *International Women’s Day* celebrations, which are followed by an audience Q&A and discussion. Similarly, an interactive lecture and public engagement session on women and pest houses will take place at the *Maastricht Pesthuys Podium*, supported by my close contacts with the *Tracé Limburgs Samenlevingsarchief*. Internationally, I will use contacts from my prior visiting researcher stays in China (Nanjing; Shanghai Jiaotong) to establish an interactive lecture and public engagement session at the *Hong Kong Museum of Medical Sciences* that disseminates the project approach and findings connected specifically to East Asia (from WP5-6). Second, in the later phases, we will hold an ambitious conference at *EUR* with invited representatives from educational/advocacy groups interested in gendered epidemic issues, including the *Gender and Disasters Network*, the *Gender and COVID-19 Group*, and the *Dutch Society for Gender and Health*; different media outlets such as the *NRC* and *The Economist*; and those groups interested in steering and bringing together policy such as the *Gender and Health Hub*. This differs from the traditional academic conference as the objective is to discuss the implications of the overall findings from the *VICI* considering societal needs and policy recommendations and relating those findings specifically to the principles currently established by the relevant *UN Women* domain on public health crises.

Lasting products

The project will be advertised on a professionally developed website, with an interactive section on the contemporary relevance of the findings and allowing online responses from academics and the public. Key findings will be visualised in images and figures to foster broader understanding, and all data will be openly accessible from this website.

In connection with the physical exhibitions of visual material on epidemics and women, space will also be made for an initial display of a sample of material as a digital storytelling exhibition at the *Boerhaave*, encouraging audience and viewer feedback, which then outlasts the physical exhibitions and becomes expanded and turned into the world’s first online annotated database of global female-epidemic imagery. This will be supported by regional engagement—a smaller physical exhibition will be set up at the *Limburgs Museum*, Venlo, on the subject of witchcraft and plague, coinciding with the unveiling of the national monument for the memory of the victims of witch-hunts in Roermond in 2026/7, and an online exhibition of material made available on the museum’s interactive platform, *Ons Museum*. This will include a contribution to the popular book project *Verborgene Vrouwen van Limburg*. We will teach an interdisciplinary elective on gender, disasters, and history as a new course on the Applied History MA at *ESHCC*.

Undesirable societal impact and mitigation?

This project might bring up findings that do not mirror contemporary situations—for example, the idea that women participated in abuse and violence during past epidemics might be challenging or retraumatising given the level of domestic abuse against women during COVID. Similarly, there might be a perception that this *VICI* belittles male suffering—after all, more men died of COVID (Flor e.a. 2022). These might be bigger problems if political or ideological groups decontextualise findings without nuance to make spurious arguments against gender equality policies.

To mitigate, the *VICI* is built on several principles. We emphasise the importance of historical context and warn against overly simplistic parallels. We promote the idea that epidemic impact means more than deaths. We eschew determinism and foreground divergent outcomes, emphasising that women’s epidemic impact can differ across context and women’s status, and the *same applies for men*. More tangibly, we will ensure that all findings and narratives developed are communicated with nuance yet comprehensible. This means combining scientific

dissemination with communication of findings in wider traditional media platforms (*NRC, El País, The Times*), policy and society forums (*Gender & Health Hub, UN Women participatory forum*), and our own open-access videos, video essays, and podcasts explaining contentious or misused findings, and their implications.

Already the *VICI* has inbuilt mechanisms mitigating common issues such as a perception of Eurocentric biases or overplaying gender to the detriment of other categories. The *VICI* expands out in WP5-6 to take on global perspectives, and at the heart of the project's approach, we are directly concerned with (a) why women's epidemic outcomes are so different, and (b) how and why they might differ across diverse female categories (intersections).

Finally, I am a man leading a project with explicit relevance to women. While sensitive to this issue, my view is that gendered historical analysis benefits from broad participation, including engagement from men, and especially in economic issues where gendered analyses remain less developed. To strengthen project inclusion, I will employ women on the *VICI*, include women in the project advisory board, and choose female co-supervisors of PhDs. I have a track record of working productively with women based on my collaborative publication record and supervision experience.

To summarise the original scientific and societal contribution of this *VICI*:

- ✓ A wide range of epidemic impacts on women considered
- ✓ Immediate, short-, and longer-term reconstructions of epidemic impacts for women
- ✓ Tri-scale analysis combining intricate detail, systematic comparative analysis, and broader representativeness
- ✓ Hypothesis-driven research that tries to understand differences in epidemic outcomes
- ✓ Systematic integration of economic, social, demographic, cultural, and visual history
- ✓ High emphasis on systematic quantification of epidemic impacts on women
- ✓ Women at the forefront of historical approaches to the concepts of resilience, vulnerability, and adaptation
- ✓ Engagement across disciplines—including bioarchaeology, demography, gender studies, economics, medical humanities, epidemiology, disaster studies, media and communication, visual studies
- ✓ Addresses a societal problem prominent in the public discourse and consciousness
- ✓ High emphasis on visual culture—as an inclusive and accessible means of engagement across societal groups
- ✓ Two-way public engagement encouraging participation and responses from audiences
- ✓ Lasting and accessible digital products
- ✓ Critical engagement with policy-making institutions on public health and women
- ✓ Responsible and transparent data collection and public access (Van Besouw & Curtis 2021; Curtis 2023)

Page count (max. 2.5 pages):

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2d. Data management

1. Will this project involve reusing existing research data?

Yes: Are there any constraints on its reuse? Why?

Explanation:	There are no constraints on its reuse
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2. Will data be collected or generated that are suitable for reuse?

Yes: Please answer questions 3 and 4.

Explanation (if 'no'):	Explanation
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3. After the project has been completed, how will the data be stored for the long-term and made available for reuse by third parties? Are there possible restrictions to data sharing or embargo reasons? Please elaborate.

Explanation:	Data collected and generated during the VICI will be stored in a <i>EUR</i> cloud-based location with password protection. The access to the storage will be managed by the PI or the person responsible for the data management plan. The researchers involved in the project will discuss and agree on the folder structure and naming convention that match the best the nature of the project and data. The data will be backed up on a regular basis to prevent accidental loss. Data and data documentation supporting publications will be made Open Access immediately upon publication. They will be published with metadata under CC-BY license in a domain specific trusted repository that facilitates study replication. Alternatively, it will be stored at the <i>EUR</i> Data Repository for the period of 10+ years. It is our intention to make the data as <i>FAIR</i> as possible. After the completion of the project, the data and data documentation will be cleared from the storage and moved to a long-term research data archive called <i>EUR</i> Archive. The archival package containing all documentation about the research project will be preserved for 10 years. It will be possible to access it for verification of scientific integrity. All necessary expertise (e.g., RDM, legal, archive, security) and secure infrastructure (mentioned above) to prepare and store the data during and after the research are available at no costs at <i>EUR</i>.
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4. Will any costs (financial and time) related to store and prepare data for sharing/preservation be incurred?

No: All the necessary resources (financial and time) to store and prepare data for sharing/preservation are or will be available at no extra cost.

3. Budget

← Expand for Explanatory notes on section 3

3a. Budget summary

Please complete the budget table using your budget-Excel as a reference.

Overview budget	Amount
1. Personnel costs	1393318
2. Material costs	106282
3. Investments	0
4. Knowledge utilisation	0
Total project budget incl. co-funding and excess costs	1499600
Total NWO funding	1499600
Total covering excess costs by host institution	0
Total in-kind co-funding (third parties)	0
Total in-cash co-funding (third parties)	0

3b. Budget clarification

Explanation of budget choices (max. 150 words):	As PI, I work 0.7fte on the <i>VICI</i>, combining my existing 0.4fte for research with 0.3fte from the <i>NWO</i> across five years. Within this 0.7fte, I make room for project administration and supervision tasks. Teaching and student interaction are important to me; thus, I do not exceed 0.7fte. The two postdocs are chosen as they provide specific kinds of expertise – one quantitative and statistical and one in visual culture analyses, supplementing my own skillset Two of the WPs centre on consulting rich underexploited archives and are perfect for original PhD projects. Given the reliance on original archival material, the organisation and curation of the data are supported by three student research assistants – linking education with research opportunities. The major material costs are travel and dissemination. The costs of the visual exhibitions mentioned in the social impact section are covered by the institutions, and thus not included in the budget.
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3c. Interest/benefits for stakeholders (mandatory for AES applications, not applicable for SSH/Science)

Will there be any stakeholders involved in a user committee in the proposed project? If so, please describe the involved stakeholders and briefly motivate their interest and involvement in the proposed project in the next table. Please note: for applications within the AES domain at least 4 stakeholders should be mentioned, of which minimum 2 non-academic stakeholders.	No, not applicable
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Name for each stakeholder:	Type user	Interest and benefits for stakeholders in user committee:
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		<i>Please do not use more than 70 words for the description of each user.</i>
	Choose from list	Description
	Choose from list	Description
	Choose from list	Description
	Choose from list	Description

3d. Additional (applications for) funding for overlapping project(s)

Have you applied for and/or obtained any additional funding for (parts of) this project either from NWO or from any other institution, and/or has the same idea been submitted elsewhere?	No
Explanation (if 'yes') (max. 100 words):	Explanation, if applicable

4. Administrative details

4a. Ethical aspects

Approval from a medical ethics review committee:	Not applicable
Approval from an animal experiments committee:	Not applicable
Permission for research with the population screening Act:	Not applicable
Approval from any other recognised ethics review committee(s):	Not yet applied for

4b. Closing statement

I have included a 'Statement exceeding maximum funding':	Not applicable
I have included a 'Declaration co-funding':	Not applicable
I declare that my contact details in ISAAC are up to date (i.e. e-mail and postal address at host institute for full duration of the round, phone number).	Yes
By submitting this form, I declare that I have completed this application form truthfully, and that I satisfy the nationally and internationally accepted standards for scientific conduct as stated in the 'Netherlands Code of Conduct for Research Integrity 2018 (□). I endorse the Code of Conduct for Laboratory Animals and the Code of Conduct for Biosecurity/possibility for dual use of the expected results and will act accordingly, if applicable.	

Title(s), initial(s) and last name:	Dr. DR Curtis
Place:	Rotterdam
Date:	1/9/2025

Application

Title	The Impact of Epidemics on Women: A Long-Run History
Applicant	dr. D.R.C. Curtis
File number	VI.C.251.017
Your rebuttal on the referee reports is in progress	

1 - Scientific quality and innovative character of the research proposal

Explanation

This criterion consists of the following elements: - The extent to which the proposed research has the potential to make an important contribution to the advancement of science; - The extent to which the proposed research contains (elements of) scientific innovation in terms of theory, technology, methods and/or topic; - The extent to which the proposed research goes beyond a gradual evolution of the applicant's current research; - Whether the proposed research strikes an equitable balance between being challenging and feasible; - Whether the proposal is in line with the researcher's expertise, or whether the researcher presents a convincing vision on how this alignment will be achieved; - The extent to which the proposed approach is appropriate; - The clarity of the proposal, including question(s) posed and the objectives. Please note: Information about the research proposal can be found in section 2a of the application form.

1a

Please comment to what extent the proposed research has the potential to make an important contribution to the advancement of science, and to what extent it contains (elements of) scientific innovation in terms of theory, methods and/or topic.

comment referee 1

The proposal does not indicate the potential to make an important contribution to the advancement of science; its methodological and theoretical dimensions do not come across as either innovative or interdisciplinary.

comment referee 2

This research proposal builds directly on the applicant's established record in studying the gendered impact of epidemics in medieval and pre-industrial societies. The project is designed to develop new insights into how epidemics affected women, thereby making a significant contribution to our understanding of how gender relations have evolved over centuries. Leveraging the applicant's extensive expertise on the societal impact of historical epidemics, particularly in the Low Countries, this project will systematically investigate the impact on women of the experience and long-term consequences of epidemic events. Moving beyond the existing literature, the applicant will conduct an in-depth historical analysis that integrates economic, social, demographic, and cultural history. The goal is to achieve a more holistic reconstruction of female lives touched by epidemics, beyond the narrow lenses of wages or mortality.

The project's originality lies in its ambitious synthesis of a large body of existing knowledge within a novel, overarching framework that allows for systematic comparison across time and space. Furthermore, by analyzing and unlocking untapped original source material, this research will make a substantial contribution to our understanding of the past.

comment referee 3

I agree with the PI: while historians, social scientists, archaeologists, and geneticists have analysed sexual differences in susceptibility to epidemic diseases, differences in economic inequalities after pandemics, and to a certain extent different experiences of pandemics and epidemic controls have been understudied, and I know no studies to concentrate on these sexual differences over long periods of time or across wide geographic areas of demographic or cultural experiences. This holistic study of gender and pandemics will mark an important contribution to the study of diseases and history. However, the specific boundaries of this ambitious study, could be presented more sharply.

comment referee 4

As the applicant rightly points out, there is no systematic study of the differential impact of epidemics on women over the long run, particularly the pre-modern period. The application's comprehensive bibliography lists all the major relevant historical literature and a good deal of the relevant scholarship in other fields, including the visual arts, but the vast majority of these works are focused on specific periods and places, and women have only recently begun to receive sustained scholarly attention. The chief innovation of this project is its interdisciplinary and intersectional comparative approach over such a long period and in multiple regions to understand why and how epidemics affected women depending on their circumstances. One mark of the maturity of the approach is the applicant's attention to and articulation of intersectionality; even ten years ago, I doubt that an application with all these elements could have been written. This is a bold and challenging project with a lot of moving parts. The number of different sources and methodologies the project hopes to employ is mind-boggling, though the careful selection of project post-docs and post-grads should help.

comment referee 5

The project *The Impact of Epidemics on Women: A Long-Run History* has the potential to make an important contribution to both the historiography of women and gender, and the historiography of medicine. Through carefully crafted questions resulting from the previous work by the applicant, it addresses the issue of how epidemics may impact differently women and men as well as women of different social status. As the applicant acknowledges there is important evidence regarding different contexts and historical periods indicating that differences exist. Nevertheless, the extent of these differences and the cartography of the contexts where they do appear, have not been the subject of systematic research. The project intends to address these topics with innovative comparative methods in order to understand the complexity of factors that may be underlying them.

Rebuttal**1b**

Please comment to what extent the proposed research strikes an equitable balance between being challenging and feasible. In addition, please comment to what extent the proposed approach is appropriate, and to what extent the proposal is clear, including the question(s) posed and the objectives.

comment referee 1

Plainly, the application proposes an unrealistic project, whose chronological, geographic and thematic boundaries are way too broad and often vaguely defined. I honestly do not believe the project is capable of delivering its promised objectives within the constraints of both the timeframe and human resources. The proposal does not really make it clear WHAT it means by epidemics: that is, WHAT kind of epidemics? It appears that the proposal wants to address ALL sorts of epidemics, but this comes across in an amorphous manner. There are lots of references to plague, but none to cholera, typhus, smallpox. Likewise, the proposal does not define chronological and geographic boundaries. What periods does it intend to cover? Which regions? While it is made clear in the 'meso-scale' section (including the Low Countries, West Bohemia and Southern Italy), there is no chronological and geographic indication in the 'macro scale' section.

In the 'sources and their use' sections, only a vague discussion provided, mostly focusing on the Low Countries (and to a much lesser extent – about western Bohemia and southern Italy). There is virtually nothing about archives and archival sources. Elsewhere (p. 13), the applicant is talking about 'digital databases' and 'text mining' --- but does not indicate the chronological and geographic boundaries of the same sources. Which/whose (statistical/textual) databases? What regions do they cover? What periods? It all looks very vague and not convincing. Likewise – visual sources are mentioned (p. 15) very vaguely, without any chronological and geographic specifications. Statements like 'from the 14th century up until the modern day' do not convince. Finally, when listing a catalogue of digital sources (p. 15), the applicant got me totally lost: there are Japanese and American digital archive databases. Does it imply the author intends to delve into modern Japan and America as well? This is clearly a stretch, to say the least.

This adds another concern: languages. While I have to no doubt that the applicant is proficient in English, Dutch and Latin (and presumably Italian), what about the sources in W Bohemia? Are they in German or Czech – or both? Who would read, translate and interpret the Czech sources?

comment referee 2

This research project is highly feasible, grounded in five coherent and well-explained work packages and the applicant's considerable scientific experience. Simultaneously, it is exceptionally ambitious, as it seeks to integrate five distinct dimensions of women's experiences of epidemics—care provision, quarantine and isolation, access to wealth and resources, violence and abuse, and visual representation—across three analytical levels: epidemiological, societal, and individual. This complex framework will be applied to a large, comparative body of materials from different societies and time periods. The work packages are clearly and systematically elaborated, forming an appropriate structure to achieve the overarching goal of a deeper understanding of epidemics' impact on women. While WP6, "Epidemics and Female Visual Representation," adds a valuable and concrete layer to the project, its connection to the core research endeavor appears less integrated than the others and peripheral to the central research question.

comment referee 3

Curiously, the PI never confronts the dichotomy of risk and feasibility: neither term appears in this proposal. Indeed, given the ambitious perspectives of this project over space, time, and numerous subjects, the PI should have discussed the risks and strategies to mitigate them, even if NWO had not required such a discussion. For starters, the PI might have addressed the variability of data across time, geography, and types of sources—documentary and visual. What about limited access to archival sources after Covid which continue to affect archival openings and limited distribution across Europe? What about uncatalogued series, palaeographic challenges and the mass of materials (for which the PI supplies few estimated numbers). No methodological issues are confronted here as with the selection of pandemics, case studies, and strategies for sampling archives and their collections.

comment referee 4

In general, the aims and planned outcomes attached to the eight work packages are ambitious but doable within the time frame of the grant. There are positive signs that the organization of the work packages draws on the applicant's past experience with big research projects involving multiple team members—such as the time built into setting the foundation in WP1, enrolling the team in a public engagement training course, the conscious use of academic networks, and building in

sufficient time for ongoing supervision and administration. There is probably no better institutional host for this project than the Erasmus School given its excellent and innovative faculty and its training programs for graduate students.

comment referee 5

The project is certainly challenging, as it covers a complex issue during a long period of time. The applicant is aware of the methodological challenges involved in the broad time span that intends to cover. This is the reason why they have been confronted by defining particular case studies that will allow for thorough contextual study and ensure feasibility. The allocation of human resources (2 PhDs and 2 Postdocs plus the 0.70 PI) is convincingly planned and in tune with the project's objectives. In addition, the applicant has also addressed the issue of his lack of expertise in certain methodologies (visual) and chronologies (the modern period) by planning to hire two postdocs already trained in these domains. The allocation of PhD projects to the areas closer to the applicant's expertise is an appropriate way to take advantage of his significant experience regarding particular sources and methods to interpret them.

Rebuttal

1c

Please comment to which extent the proposal is aligned with the researcher's expertise, or whether the researcher presents a convincing vision on how this alignment will be achieved. In addition, please comment on to what extent the proposed research goes beyond a gradual evolution of the applicant's current research.

comment referee 1

The applicant has proven himself over the years as a high-profile research of economic and social history, with a particular emphasis on plague. However, the proposed application goes well beyond his expertise --- thus, his work tended to focus primarily on the Low Countries; there is no evidence of his expertise in art/film/visual culture history, let alone related to the regions/archives he mentioned in the proposal (most notably, Japan). These gaps may will be filled by PhDs and post-docs he's planning to hire, but without proper expertise, supervising such projects would be challenging and potentially yielding not the best results.

comment referee 2

The project is directly aligned with the researcher's established expertise and is poised to generate a substantial body of new material, thereby significantly deepening and expanding the applicant's current research line.

comment referee 3

The PI has worked extensively with epidemics and gender studies in two previous team-funded projects. He has gathered data from these projects, which he will re-examine in the present project. To what extent does this work represent more than a gradual evolution of the PI's previous work? What proportion of this previously collected data will be re-cycled into the new project? I would like to give him the benefit of the doubt. However, he might have addressed this question more effectively by emphasizing that he plans to engage with wider ranges of diseases, places, chronologies, and cultural questions than he has in the past.

comment referee 4

There is considerable alignment between the research proposal and the expertise of the applicant, who has authored or co-authored an impressive number of relevant publications listed in the bibliography. The references to these works scattered throughout the proposal indicate how much preliminary work the applicant has already done on the ideas presented here. Indeed, I did wonder how the books synthesising the findings of the project (in WP7) is going to differ from the forthcoming "short introductory book on the methodological, conceptual, and societal implications of this topic" that is forthcoming from CUP in 2026, entitled The impact of epidemics on women: A long-run history.

comment referee 5

The project is focused on an issue that has been the subject of previous studies by the applicant. Previous studies are the foundation of the present application inasmuch as they constitute the intellectual basis of the reflection leading to the design of the project. Nevertheless, the project cannot be described as a gradual evolution of the applicant's current research because it involves a significant step further, incorporating into the analysis periods and types of sources never explored before with the aim to reach a challenging goal.

Rebuttal

1d

What improvements would you suggest to increase the strength of the proposal?

comment referee 1

- (1) Scale down CONSIDERABLY, in space and time, in topic and field
- (2) Define clearly the chronological, geographic and thematic boundaries of the project
- (3) Stick to one dimension of historical inquiry (socio-economic, rather than socio-economic AND art/visual)

comment referee 2

The specific approach elaborated by the applicant is robust, leaving little room for significant improvement. However, two key methodological questions emerge that could be clarified to further strengthen the proposal.

First, given the project's expansive temporal and geographical scale, which builds on both qualitative and quantitative data, the framework for analyzing the evolution of power relations between classes and sexes could be more explicitly elaborated. The applicant correctly notes that epidemic experiences are embedded in specific contexts, but the theoretical role of epidemics within these power structures remains ambiguous. It is unclear whether epidemics are primarily conceptualized as a magnifying glass that exposes pre-existing inequalities, or as a potential trigger that actively reshapes them. A more clearly defined theoretical position on this relationship would sharpen the analytical focus.

Second, the proposal's focus on the impact "on women" could be refined. A more comprehensive "gender-specific analysis" might be a more powerful lens, as the applicant themselves notes that understanding women's experiences necessitates studying both genders and their changing relationships over time. The current framing, while justified by the need to highlight an oppressed gender role, risks appearing narrowly focused, potentially influenced by contemporary COVID-19 narratives (e.g., domestic violence, reproductive health). Explicitly adopting a relational gender analysis would not diminish the focus on women but would instead ground it in a more robust historical and sociological framework.

comment referee 3

Continuing from the previous question, I would suggest more rigour in specifying the chronological, geographic, and documentary dimensions of this exciting project. As for diseases, only plague is mentioned as subject of investigation. What about "malfrancesca" (or reputed syphilis), known in the early modern period as principally (but not entirely) as a sexually transmitted disease? Despite the long and rich historiography of syphilis (especially within the prism of emotional history), scholars have discussed little on how women experienced this disease and how their experiences may have differed from men's even in the 19th and 20th centuries. Will the next most important malady after plague for the early modern period—smallpox—be studied? For the 19th century, which at least is listed for WP4, will cholera and yellow fever feature? As with geography, only three large regions have been specified—the Low Countries, west Bohemia, and southern Italy. But within these regions, what cities or regions will be investigated? What archives will be consulted. As for "southern Italy" what does this mean in terms of regions and what archives?

Second, I am perplexed by the chronological divisions in this proposal. It is fine to divide chronological periods among different WPS, but dividing these chronologies across the "tri-scale" analysis—micro, meso, and macro—strikes me as limiting the comparative possibilities of the project. WP2 and WP3 concern the micro beginning with the 15th century and the end date is unclear, while the meso concerns the 15th to 17th and the macro, from the 14th century to the present. This chronology is further confused for "Southern Italy", where the PI references the work of Patricia Skinner, an early medievalist concentrating on the 6th to the 12th centuries, a period never mentioned by the PI. Moreover, if the PI is looking for early sources for serial analysis of epidemics, why isn't there a concentration on city and regions in northern Italy (Lucca, Genoa, Siena, Pisa, Florence, Venice and their hinterlands), where fiscal and notarial records begin centuries earlier than in "southern Italy" and remain much more numerous into the early modern period?

comment referee 4

The time frames covered by the work packages are often slippery. It's all very good to claim that the investigation is going to go from the Black Death to COVID-19, but WP2 on female plague cleaners and WP 3 on pest houses start in the late 16th century (with the best evidence in the late 17th to 19th centuries), the "newspapers and criminal records" for WP5 on female experiences of violence during epidemics are going to be rare before the 17th century, and the focus of WP6 is necessarily going to be late modern with some early modern engravings. Bolstering the post-Black Death content (late 14th to 15th century) would help smooth out this imbalance.

WP5 is the riskiest because it is going to be so difficult to isolate an epidemic as a factor in violence in the pre-modern sources available for such an investigation given what we know about the biases of legal sources. The techniques and methodologies cited by the applicant might work for the late 18th century onwards, but it's hard to see how the "large global dataset" is going to include any systematic and usable data for the late 14th to 16th centuries. But if the plan works and comparative data for both men and women in epidemics in different regions are produced, along with baseline stats for non-epidemic years, for the early as well as later periods under study, this WP would be very much "high reward".

comment referee 5

One of the shortcomings I find in this proposal, as a reviewer, is having no access to the names of the scholars that have agreed to be part of the Advisory board and their role. I think that this project needs the advice of experts in the fields that fall outside the specialization of the applicant, therefore ensure that interdisciplinary expertise is supporting the project all along its life. I also find necessary to plan regular board meetings with them -for the kick-off of the project and for monitoring it as a whole. The project mentions that the Advisory board will be invited to attend a workshop on methods to produce a handbook of best practices but it remains unclear what disciplines are represented at the board and what is the final purpose of this handbook.

Rebuttal

2 - Scientific and/or societal impact

Explanation

The applicant is given the choice to either focus on scientific impact, societal impact, or to focus on both aspects. One type of impact is not considered as superior to the other. The impact criterion can be positively assessed if an applicant only focuses on one type of impact, either scientific or societal or on both. However, the applicant should clearly motivate their choice(s) and elaborate on the potential impact. Scientific impact is the impact of research on one's own research field, on related research fields or on science in general. Societal impact can broadly be defined as any cultural, economic, industrial, environmental and/or societal change that is (in part) the result of the knowledge and skills acquired through the proposed research. Not all questions of impact are applicable for all applications. This depends on the focus the applicant has chosen (scientific, societal or both types). Information on impact is available in section 2b of the application form.

2a

Please comment on the applicant's motivation to either focus on scientific impact, societal impact, or to focus on both types of impact. Is in your opinion the motivation for the chosen focus adequate and convincing?

comment referee 1

Unfortunately, the proposal does not make it explicit how it is focused on scientific and societal impact. It looks like a very research-oriented project, with good potential to generate new data, but as far as a wider impact is concerned, I cannot judge, based on the proposal. I am not sure the proposed exhibition and website can make much impact.

comment referee 2

The applicant states that the scientific and societal impact are of comparable focus. This seems appropriate as the subject has a clear scientific aspect and touches a relevant societal issue. It is probably also the starting point for the applicant who introduces the project by referring to the recent COVID-19 epidemic. However, the scientific impact seems much more important and direct than the societal impact.

comment referee 3

The PI has emphasized the societal impact by attracting larger non-academic audiences into the project through exhibitions, films, and interviews. It should be noted that such noble aspirations with scholarly efforts to engage the general public can have disappointing numbers.

comment referee 4

One of the more impressive features of the application is its ability to contextualize the timeliness of its historical investigation into the gendered implications of epidemics, especially given the current concerns about COVID, SARS, and other modern pandemics. Some of the planned outcomes are more innovative than one usually finds in these types of grants, including the exhibition at the Rijksmuseum Boerhaave in Leiden that will be tied to several interactive events, the cooperative partnership with a local cinema to show relevant films and sponsor audience discussions and a lecture, and the various efforts to disseminate results via print and online media. Developing a professionally designed website that can feature the results of the project is also an excellent idea. There are obvious scholarly advantages as well, not only in terms of the open access data sets and publications that will result, but also in the establishment of a long-term research group.

comment referee 5

The applicant has chosen to focus on both scientific and societal impact. This choice seems reasonable to this reviewer. The research proposed will clearly have a historiographical impact but deepening our knowledge on gender and epidemics will surely have a societal impact. This would have been the case before the COVID 19 pandemic, but after that it has become clearer to society as a whole the importance to know about the diverse effects that epidemics have in society. Regarding societal impact the applicant and the project's team will attend specific training at the Wellcome Trust which is a reasonable measure.

Rebuttal

2b

If scientific impact is (part of) the applicants' focus, please comment on whether the proposal conveys an ambitious vision and an appropriate strategy 1. Regarding the dissemination and/or implementation of the research results with regard to the applicant's field of research, related fields or science in general; 2. Regarding the dissemination and/or implementation of the research results with regard to the broader scientific community.

comment referee 1

The proposal does not make it clear how its disseminating paths (the proposed exhibition and website) will be impactful to either the general public or broader scientific community.

comment referee 2

The strategy regarding dissemination in the scientific community is appropriate for the research field of the applicant who has a broad network in his field. The envisaged publication of a book already planned by Cambridge University Press and the different other initiatives will help for a large dissemination. Of course the development of the working package on visuals can be very important in this regard as it is an evident path to reach a broader public. Finally, the preservation and curation of critical historical materials constitutes a valuable scientific contribution in its own right.

comment referee 3

The PI could have emphasized more the scientific impact of this project: why women's experiences are important for understanding epidemics/pandemics with current and future diseases. He might have emphasized how such reactions to sexual differences have affected scientific or behavioural practices in the past and how this knowledge could be applied to future health measures, advice, and policies.

comment referee 4

ANSWER: ...

comment referee 5

The project's dissemination plan is sound, as far as the number of publications are concerned. Dissemination in Social Science History, History of Medicine and Women and Gender Studies venues could be more intensified.

Rebuttal**2c**

If societal impact is (part of) the applicants' focus, please comment on the following aspects: 1. The added value of the project for societal impact; 2. The potential for societal impact on the short and long term; 3. The envisioned way in which the proposed research will contribute to societal impact; 4. Did the applicant pay sufficient attention to the key risks of undesirable societal impact and the proposed measures to prevent or mitigate this and increase the chance of desired impact?

comment referee 1

As stated in 2b: The proposal does not make it clear how its disseminating paths (the proposed exhibition and website) will be impactful to either the general public or broader scientific community.

comment referee 2

The project's potential for societal impact appears more limited than the applicant envisions. While it will undoubtedly contribute valuable historical knowledge on gender and power relations, its capacity to influence contemporary society is modest for two reasons. First, its contributions—while academically valuable—pertain to historical awareness rather than contemporary policy or practice. Second, the transferability of insights from pre-industrial societies to modern contexts is limited. Research on recent epidemics and their consequences like the COVID-19 pandemic offers a more direct pathway to societal relevance.

comment referee 3

The PI pays most attention to point 4: the possible undesirable societal impact of a man being the PI of a project concentrated on women.

comment referee 4

ANSWER: ...

comment referee 5

There are a significant number of local initiatives planned to engage with the wider public as well as long lasting products that may impact the digital world. Mitigation measures to fight misconceptions and undesirable effects are carefully considered, as well as the participation of a wide variety of actors in engagement activities.

Rebuttal**2d**

If the applicant has chosen to primarily focus on one type of impact, please comment whether the applicant gives proportional attention to increasing (unforeseen) opportunities for societal impact during the project, if the focus is on scientific impact, or vice versa.

comment referee 1

It was not made very explicit in the proposal.

comment referee 2

not applicable

comment referee 3

...

comment referee 4

Not applicable

comment referee 5

not applicable

Rebuttal**2e**

What improvements would you suggest to increase the strength of the scientific and/or societal impact?

comment referee 1

To indicate the proposed impacts in a clearer way.

comment referee 2

The project is already very ambitious and large.

Potential improvements are summarized in the weaknesses section.

comment referee 3

To concentrate more on the scientific aspects of this broad and ambitious project, the PI could explain further why women matter in the study of epidemics beyond presenting higher or lower mortality or morbidity rates as has been the concerns of epidemiologists.

comment referee 4

I actually do not have much to add (except for my comment on data management below) since the applicant's understanding of and plans for scientific and social impact are so good. One small note—I think the relative lack of bioarchaeological evidence is a missed opportunity.

comment referee 5

The methodology of co-creation is not clearly used and could surely help enrich the aims of the project.

Rebuttal

3 - Summarizing assessment

Explanation

NWO kindly asks you to summarize the most important strong and weak points of the proposal as a whole. In answering the question, please take into account the proposed research and the scientific and/or societal impact. Please formulate the strengths and weaknesses in such a way that they are comprehensible and substantiated for a broader scientific committee that may be outside of your field of expertise.

3a

Please indicate point by point 5 strengths of the proposal and place them in order of importance, starting with the most important one.

comment referee 1

- (1) It proposes to deal with a highly important historical topic
- (2) It proposes to work across space and time (although oftentimes, it is unclear what periods and regions the proposal will be dealing with)
- (3) It proposes to work statistical data
- (4) It proposes to unearth new archival data
- (5) It proposes to disseminate findings to the general public (via an exhibition and website)

comment referee 2

1. This project is distinguished by its systematic approach to analyzing the impact of epidemics on women.
2. It is structured through a series of clear, coherent work packages, each with well-defined and valuable specific outcomes.
3. By integrating a large set of scientific approaches—from economic, social demographic and cultural history—the research is poised to achieve its goal
4. A more sophisticated and holistic understanding of both the historical impact of epidemics on women and the evolving role and position of women in the past.

comment referee 3

1. The overarching proposal of a holistic study of women in epidemics over a long period, wide geography, and interdisciplinary range of subjects from mortality rates to the history of emotions.
- 2) the wide-ranging and up-to-date bibliography
- 3) The intersection of quantitative and qualitative analysis
- 4) The clear-cut instructions outlined in the WPs for the PhDs and RAs
- 5) The background of the PI, especially his previous experience in running large team projects.

comment referee 4

1. Wide-ranging and feasible plans for dissemination of project findings to policy makers, news media, and the general public, as well as the usual scholars in the field.
2. Attention to and articulation of intersectionality in the gendered analysis and the recognition that baseline information on men has to be collected to contextualize the findings on women and to avoid cherry-picking.
3. WP 4 on epidemics and female access to resources has high potential to make major contributions to scholarship on

women, epidemics, and inequality, not least because of its contribution of solid data to help settle current debates in the field.

4. The integration of different methodologies to achieve the aims of the project. The project has an innovative and ambitious blend of quantitative and qualitative approaches, though the quantitative analyses are likely to yield the most innovative and useful results, including the annotated global database of epidemic imagery.

5. The outcomes for each work package are appropriate, feasible, and, in some cases, even imaginative.

comment referee 5

1. Studying the gender experiences of epidemics focusing on women with the goal to understand the experiences of society as a whole

2. Addressing long-term trends through in-depth study of particular contexts

3. Understanding and studying the variety of experiences of women in epidemic situations: as carers, as sufferers, as diagnostic personnel of epidemic outbreaks; intersectional analysis

4. Addressing diverse local contexts -not simply one region through time

5. Taking advantage of the researcher's previous expertise and knowledge of particular sets of sources.

Rebuttal

3b

Please indicate point by point 5 weaknesses of the proposal and place them in order of importance, starting with the most important one.

comment referee 1

(1) It is quite vague and not convincing, as far as the chronological and geographic dimensions are concerned

(2) It promises to achieve too much without convincing and strong foundations, in terms of expertise and human resources

(3) It aims to cover too many types of sources and fields of inquiry (socio-economic/demographic history and visual art/cinema history)

(4) It does not indicate clearly its scientific and societal impact

(5) It does not indicate clearly how and where it will procure historical datasets

comment referee 2

1. The project's most significant challenge lies in a fundamental methodological tension: the pursuit of a single, overarching approach (theory?) for a phenomenon that the applicant describes as contextual, varying by epidemic type, societal structure, and women's intersectional positions. Reconciling this specificity with a unified theoretical framework presents a formidable challenge.

2. The proposal lacks a clearly defined theoretical model for how epidemics interact with power structures. It remains ambiguous whether epidemics are conceptualized as a magnifying glass (exposing pre-existing inequalities) or a trigger (actively reshaping them). To address this, the project would benefit from a historical framework that outlines the evolution of economic and societal structures, positioning epidemics as a disruptive force within that broader context.

3. The exclusive focus on the impact "on women" creates a potential methodological narrowness. The proposal would be significantly strengthened by adopting an explicit gender-relational framework, which the applicant's own logic implies is necessary. This would shift the focus from a singular analysis of women to a comparative analysis of how epidemics disrupted, reinforced, or transformed the roles and power relations between genders and classes. This approach would yield more nuanced and historically grounded conclusions and still allows to focus on specific aspects of the impact on women that remained hidden in past research;

4. The value and integration of WP6 ("Epidemics and Female Visual Representation") within the core research endeavor is less compelling than that of the other work packages. While not indispensable to the primary analysis, it could serve as a powerful tool for the dissemination and public engagement of the project's findings.

comment referee 3

1. Lacking specific references to archives that will be visited and the approximate chronological ranges of documentary series to give an idea of the magnitude of work expected in the WPs

2. Lacking specific information defining characteristics of the case studies proposed in this project

3. The avoidance of discussion of the project's risks and feasibility.

4. Vagueness about the study of "Southern Italy": what cities/regions? what documentation? Why has the PI chosen "southern Italy" (whatever the geography of that label might entail) over the earlier and more voluminous data that could be collected for places such as Genoa, Lucca, Venice, etc in central and northern Italy?

5. As noted above, the project's WPs demarcated by the temporal scales of analysis—micro, meso, and macro—present problems that I have discussed above. Moreover, these terms are never defined in regard to the specific time frames of this project.

comment referee 4

1. I understand that the availability of appropriate sources dictates that some periods be highlighted, but the time frame of the larger project—from the Black Death to COVID—does not always match the chronological parameters of the research in the work packages, with the earlier period (before the late 16th century) in particular receiving less sustained attention.

2. The literature review, as reflected in the bibliography is excellent, but does not adequately reflect the abundant scholarship (not all of it published in the major journals like *Past and Present* or *Economic History Review*) on late medieval

and early modern English plague mortality and its influence on inheritance, women's work, age at marriage, and household formation. And given the sophistication and abundance of the scholarship for England, it is unclear why the applicant does not even attempt to note the possibilities for comparative analysis here.

3. The figure on p. 7 is useless.

4. As noted above, WP5 on female abuse and violence is very high risk because of the difficulties of deriving reliable data from the available sources and the rather vague articulation of the methodologies required to produce the global dataset.

5. WP6 on epidemics and female visual representation is an intriguing outlier in this application. It does add interdisciplinarity and offers an avenue to reach a wider audience, but the copyright difficulties involved in making the global database of epidemic imagery are not acknowledged.

comment referee 5

1. Each of the contexts chosen will not be studied for the whole period covered by the project.

2. Unclear the experts and types of expertise involved at the advisory level

3. The scope of visual sources to be analysed appears to be very broad and is unclear how contextual analysis can be covered in ways similar to what is planned in the other case studies

4. There is no integration of co-creation initiatives or citizen science measures. Activists and other stakeholders are planned to be contacted at later phases of the project, not at the beginning to influence its execution and development

5. The project's website -an important dissemination instrument- and its sustainability plan is not well described; copyright issues are not addressed

Rebuttal

4 - Datamanagement: Feedback

Explanation

With the data management section NWO mainly wants to raise awareness about the importance of responsible data management. The section is therefore not included in a committee's decision about whether a proposal should be awarded funding or not. NWO does, however, submit this section to the committee and referees for any advice or feedback. After a proposal has been awarded funding, the researcher should elaborate the section into a data management plan. For this, applicants can make use of the advice they have received.

If you have any suggestions or advice on the data management section, please state it here, otherwise use 'not applicable'.

comment referee 1

N/A

comment referee 2

not applicable

comment referee 3

No detailed discussion as of yet on data management

comment referee 4

Please make the data easily downloadable (preferably in spreadsheets) with clearly labelled fields and make codebooks or guidelines employed in coding data transparent. Be honest about problems with the data.

comment referee 5

There is no information on data archiving -archiving in public international platforms should be planned.

Rebuttal

Overall

Application

Title	The Impact of Epidemics on Women: A Long-Run History
Applicant	dr. D.R.C. Curtis
File number	VI.C.251.017
Your rebuttal on the referee reports is in progress	

1 - Scientific quality and innovative character of the research proposal

Explanation

This criterion consists of the following elements: - The extent to which the proposed research has the potential to make an important contribution to the advancement of science; - The extent to which the proposed research contains (elements of) scientific innovation in terms of theory, technology, methods and/or topic; - The extent to which the proposed research goes beyond a gradual evolution of the applicant's current research; - Whether the proposed research strikes an equitable balance between being challenging and feasible; - Whether the proposal is in line with the researcher's expertise, or whether the researcher presents a convincing vision on how this alignment will be achieved; - The extent to which the proposed approach is appropriate; - The clarity of the proposal, including question(s) posed and the objectives. Please note: Information about the research proposal can be found in section 2a of the application form.

1a

Please comment to what extent the proposed research has the potential to make an important contribution to the advancement of science, and to what extent it contains (elements of) scientific innovation in terms of theory, methods and/or topic.

comment referee 1

The proposal does not indicate the potential to make an important contribution to the advancement of science; its methodological and theoretical dimensions do not come across as either innovative or interdisciplinary.

comment referee 2

This research proposal builds directly on the applicant's established record in studying the gendered impact of epidemics in medieval and pre-industrial societies. The project is designed to develop new insights into how epidemics affected women, thereby making a significant contribution to our understanding of how gender relations have evolved over centuries. Leveraging the applicant's extensive expertise on the societal impact of historical epidemics, particularly in the Low Countries, this project will systematically investigate the impact on women of the experience and long-term consequences of epidemic events. Moving beyond the existing literature, the applicant will conduct an in-depth historical analysis that integrates economic, social, demographic, and cultural history. The goal is to achieve a more holistic reconstruction of female lives touched by epidemics, beyond the narrow lenses of wages or mortality.

The project's originality lies in its ambitious synthesis of a large body of existing knowledge within a novel, overarching framework that allows for systematic comparison across time and space. Furthermore, by analyzing and unlocking untapped original source material, this research will make a substantial contribution to our understanding of the past.

comment referee 3

I agree with the PI: while historians, social scientists, archaeologists, and geneticists have analysed sexual differences in susceptibility to epidemic diseases, differences in economic inequalities after pandemics, and to a certain extent different experiences of pandemics and epidemic controls have been understudied, and I know no studies to concentrate on these sexual differences over long periods of time or across wide geographic areas of demographic or cultural experiences. This holistic study of gender and pandemics will mark an important contribution to the study of diseases and history. However, the specific boundaries of this ambitious study, could be presented more sharply.

comment referee 4

As the applicant rightly points out, there is no systematic study of the differential impact of epidemics on women over the long run, particularly the pre-modern period. The application's comprehensive bibliography lists all the major relevant historical literature and a good deal of the relevant scholarship in other fields, including the visual arts, but the vast majority of these works are focused on specific periods and places, and women have only recently begun to receive sustained scholarly attention. The chief innovation of this project is its interdisciplinary and intersectional comparative approach over such a long period and in multiple regions to understand why and how epidemics affected women depending on their circumstances. One mark of the maturity of the approach is the applicant's attention to and articulation of intersectionality; even ten years ago, I doubt that an application with all these elements could have been written. This is a bold and challenging project with a lot of moving parts. The number of different sources and methodologies the project hopes to employ is mind-boggling, though the careful selection of project post-docs and post-grads should help.

comment referee 5

The project *The Impact of Epidemics on Women: A Long-Run History* has the potential to make an important contribution to both the historiography of women and gender, and the historiography of medicine. Through carefully crafted questions resulting from the previous work by the applicant, it addresses the issue of how epidemics may impact differently women and men as well as women of different social status. As the applicant acknowledges there is important evidence regarding different contexts and historical periods indicating that differences exist. Nevertheless, the extent of these differences and the cartography of the contexts where they do appear, have not been the subject of systematic research. The project intends to address these topics with innovative comparative methods in order to understand the complexity of factors that may be underlying them.

Rebuttal

R2-5 agree that the VICI is innovative, challenging, and ambitious. R1 disagrees, although provides no reasoning.

This is the world's first systematic analysis of why epidemics affect women differently across time, space, and status; the first to distinguish short- and long-run effects; and the first to integrate economic, social, demographic, cultural, and visual history to holistically reconstruct women's lives affected by epidemics beyond mortality.

1b

Please comment to what extent the proposed research strikes an equitable balance between being challenging and feasible. In addition, please comment to what extent the proposed approach is appropriate, and to what extent the proposal is clear, including the question(s) posed and the objectives.

comment referee 1

Plainly, the application proposes an unrealistic project, whose chronological, geographic and thematic boundaries are way too broad and often vaguely defined. I honestly do not believe the project is capable of delivering its promised objectives within the constraints of both the timeframe and human resources. The proposal does not really make it clear WHAT it means by epidemics: that is, WHAT kind of epidemics? It appears that the proposal wants to address ALL sorts of epidemics, but this comes across in an amorphous manner. There are lots of references to plague, but none to cholera, typhus, smallpox. Likewise, the proposal does not define chronological and geographic boundaries. What periods does it intend to cover? Which regions? While it is made clear in the 'meso-scale' section (including the Low Countries, West Bohemia and Southern Italy), there is no chronological and geographic indication in the 'macro scale' section. In the 'sources and their use' sections, only a vague discussion provided, mostly focusing on the Low Countries (and to a much lesser extent – about western Bohemia and southern Italy). There is virtually nothing about archives and archival sources. Elsewhere (p. 13), the applicant is talking about 'digital databases' and 'text mining' --- but does not indicate the chronological and geographic boundaries of the same sources. Which/whose (statistical/textual) databases? What regions do they cover? What periods? It all looks very vague and not convincing. Likewise – visual sources are mentioned (p. 15) very vaguely, without any chronological and geographic specifications. Statements like 'from the 14th century up until the modern day' do not convince. Finally, when listing a catalogue of digital sources (p. 15), the applicant got me totally lost: there are Japanese and American digital archive databases. Does it imply the author intends to delve into modern Japan and America as well? This is clearly a stretch, to say the least.

This adds another concern: languages. While I have to no doubt that the applicant is proficient in English, Dutch and Latin (and presumably Italian), what about the sources in W Bohemia? Are they in German or Czech – or both? Who would read, translate and interpret the Czech sources?

comment referee 2

This research project is highly feasible, grounded in five coherent and well-explained work packages and the applicant's considerable scientific experience. Simultaneously, it is exceptionally ambitious, as it seeks to integrate five distinct dimensions of women's experiences of epidemics—care provision, quarantine and isolation, access to wealth and resources, violence and abuse, and visual representation—across three analytical levels: epidemiological, societal, and individual. This complex framework will be applied to a large, comparative body of materials from different societies and time periods. The work packages are clearly and systematically elaborated, forming an appropriate structure to achieve the overarching goal of a deeper understanding of epidemics' impact on women. While WP6, "Epidemics and Female Visual Representation," adds a valuable and concrete layer to the project, its connection to the core research endeavor appears less integrated than the others and peripheral to the central research question.

comment referee 3

Curiously, the PI never confronts the dichotomy of risk and feasibility: neither term appears in this proposal. Indeed, given the ambitious perspectives of this project over space, time, and numerous subjects, the PI should have discussed the risks and strategies to mitigate them, even if NWO had not required such a discussion. For starters, the PI might have addressed the variability of data across time, geography, and types of sources—documentary and visual. What about limited access to archival sources after Covid which continue to affect archival openings and limited distribution across Europe? What about uncatalogued series, palaeographic challenges and the mass of materials (for which the PI supplies few estimated numbers). No methodological issues are confronted here as with the selection of pandemics, case studies, and strategies for sampling archives and their collections.

comment referee 4

In general, the aims and planned outcomes attached to the eight work packages are ambitious but doable within the time frame of the grant. There are positive signs that the organization of the work packages draws on the applicant's past experience with big research projects involving multiple team members—such as the time built into setting the foundation in WP1, enrolling the team in a public engagement training course, the conscious use of academic networks, and building in sufficient time for ongoing supervision and administration. There is probably no better institutional host for this project than the Erasmus School given its excellent and innovative faculty and its training programs for graduate students.

comment referee 5

The project is certainly challenging, as it covers a complex issue during a long period of time. The applicant is aware of the methodological challenges involved in the broad time span that intends to cover. This is the reason why they have been confronted by defining particular case studies that will allow for thorough contextual study and ensure feasibility. The allocation of human resources (2 PhDs and 2 Postdocs plus the 0.70 PI) is convincingly planned and in tune with the project's objectives. In addition, the applicant has also addressed the issue of his lack of expertise in certain methodologies (visual) and chronologies (the modern period) by planning to hire two postdocs already trained in these domains. The allocation of PhD projects to the areas closer to the applicant's expertise is an appropriate way to take advantage of his significant experience regarding particular sources and methods to interpret them.

Rebuttal

R1 is concerned about broad chronology, geography, and themes, although R2-5 consider this the VICI's added value. I cover many centuries to systematically separate short and long-run effects on women – distinguishing temporary suffering or burdens from structural change. I maintain feasibility with my tri-scale approach (micro, meso, macro) across five WPs. Therefore, it is unnecessary to go from the 14th century to the present day in each WP. That is only possible in WP5-6 because of the type and accessibility of the sources.

The geographical boundaries for WP2-4 are carefully considered and justified and tightly designed around specific sources I already identified. In WP3 I clearly list the urban pest house administrations. For space, I do not provide exhaustive archival citations, instead showing explicit examples of material available. WP4 employs a systematic regional comparison, chosen for the relevant serial sources on wealth distribution, and clear micro-demographic differences that allow observation of epidemic impacts under different institutional conditions. WP5-6 have wide geographical boundaries because there is no need to impose unnecessary limitations. R1 questions whether I could access Japanese or American digital archives. Why not? I have already created and analysed a global dataset of epidemic films going back to earliest cinema (Han & Curtis, 2022; output 3).

Given the ambitious nature of this VICI, risks are inevitable (R3) – but I have negated many. Not being reliant on one source or evidence type spreads risk, and the VICI does not hinge on the success of every single component. The project is hypothesis-driven where any negative findings are valuable. WP5-6 benefit from printed material and digital/visual databases, reducing linguistic demands and easing pressure on physical archive access.

R2 sees WP6 as valuable but asks if it is integrated into the central research question. WP6 is vital because it considers how evidence about epidemics and women is constructed, who produces it, and the blurry lines between effects and representations. It also heightens societal engagement and impact. Stories and images are how people make sense of the world.

R1 correctly points to my wide linguistic range. For west Bohemia (WP4), wealth distribution sources are in German, which I read. My postdocs will meet other language requirements. The point about disease typologies, I address in 1d.

1c

Please comment to which extent the proposal is aligned with the researcher's expertise, or whether the researcher presents a convincing vision on how this alignment will be achieved. In addition, please comment on to what extent the proposed research goes beyond a gradual evolution of the applicant's current research.

comment referee 1

The applicant has proven himself over the years as a high-profile research of economic and social history, with a particular emphasis on plague. However, the proposed application goes well beyond his expertise --- thus, his work tended to focus primarily on the Low Countries; there is no evidence of his expertise in art/film/visual culture history, let alone related to the regions/archives he mentioned in the proposal (most notably, Japan). These gaps may will be filled by PhDs and post-docs he's planning to hire, but without proper expertise, supervising such projects would be challenging and potentially yielding not the best results.

comment referee 2

The project is directly aligned with the researcher's established expertise and is poised to generate a substantial body of new material, thereby significantly deepening and expanding the applicant's current research line.

comment referee 3

The PI has worked extensively with epidemics and gender studies in two previous team-funded projects. He has gathered data from these projects, which he will re-examine in the present project. To what extent does this work represent more

than a gradual evolution of the PI's previous work? What proportion of this previously collected data will be re-cycled into the new project? I would like to give him the benefit of the doubt. However, he might have addressed this question more effectively by emphasizing that he plans to engage with wider ranges of diseases, places, chronologies, and cultural questions than he has in the past.

comment referee 4

There is considerable alignment between the research proposal and the expertise of the applicant, who has authored or co-authored an impressive number of relevant publications listed in the bibliography. The references to these works scattered throughout the proposal indicate how much preliminary work the applicant has already done on the ideas presented here. Indeed, I did wonder how the books synthesising the findings of the project (in WP7) is going to differ from the forthcoming "short introductory book on the methodological, conceptual, and societal implications of this topic" that is forthcoming from CUP in 2026, entitled *The impact of epidemics on women: A long-run history*.

comment referee 5

The project is focused on an issue that has been the subject of previous studies by the applicant. Previous studies are the foundation of the present application inasmuch as they constitute the intellectual basis of the reflection leading to the design of the project. Nevertheless, the project cannot be described as a gradual evolution of the applicant's current research because it involves a significant step further, incorporating into the analysis periods and types of sources never explored before with the aim to reach a challenging goal.

Rebuttal

R2-5 see my expertise and proposed research as well aligned. R4 praises the preliminary foundational work. R3 notes that I move beyond incremental evolution by engaging with a "wider range of diseases, places, chronologies, and cultural questions" than previously.

R1 suggests I have no expertise in cultural/visual history, which is incorrect. In the pre-proposal, I list my book "Infectious Inequalities", a long-run analysis of cinematic representation of epidemics, which examined American, European, and East Asian films (appearing in the China Perspectives series). In the proposal, I state "I am a social and economic historian by background, grounding me in quantitative aspects of the VICI, but I have also incorporated cultural and visual history into my work on epidemics" with supporting references.

My forthcoming CUP book (R4) is an important foundation for the project, clarifying the state of the art, pertinent questions, and an analytical framework. The VICI would provide the answers.

1d

What improvements would you suggest to increase the strength of the proposal?

comment referee 1

- (1) Scale down CONSIDERABLY, in space and time, in topic and field
- (2) Define clearly the chronological, geographic and thematic boundaries of the project
- (3) Stick to one dimension of historical inquiry (socio-economic, rather than socio-economic AND art/visual)

comment referee 2

The specific approach elaborated by the applicant is robust, leaving little room for significant improvement. However, two key methodological questions emerge that could be clarified to further strengthen the proposal. First, given the project's expansive temporal and geographical scale, which builds on both qualitative and quantitative data, the framework for analyzing the evolution of power relations between classes and sexes could be more explicitly elaborated. The applicant correctly notes that epidemic experiences are embedded in specific contexts, but the theoretical role of epidemics within these power structures remains ambiguous. It is unclear whether epidemics are primarily conceptualized as a magnifying glass that exposes pre-existing inequalities, or as a potential trigger that actively reshapes them. A more clearly defined theoretical position on this relationship would sharpen the analytical focus. Second, the proposal's focus on the impact "on women" could be refined. A more comprehensive "gender-specific analysis" might be a more powerful lens, as the applicant themselves notes that understanding women's experiences necessitates studying both genders and their changing relationships over time. The current framing, while justified by the need to highlight an oppressed gender role, risks appearing narrowly focused, potentially influenced by contemporary COVID-19 narratives (e.g., domestic violence, reproductive health). Explicitly adopting a relational gender analysis would not diminish the focus on women but would instead ground it in a more robust historical and sociological framework.

comment referee 3

Continuing from the previous question, I would suggest more rigour in specifying the chronological, geographic, and documentary dimensions of this exciting project. As for diseases, only plague is mentioned as subject of investigation. What about "malfrancesc" (or reputed syphilis), known in the early modern period as principally (but not entirely) as a sexually transmitted disease? Despite the long and rich historiography of syphilis (especially within the prism of emotional history), scholars have discussed little on how women experienced this disease and how their experiences may have differed from men's even in the 19th and 20th centuries. Will the next most important malady after plague for the early modern period—smallpox—be studied? For the 19th century, which at least is listed for WP4, will cholera and yellow fever feature? As with geography, only three large regions have been specified—the Low Countries, west Bohemia, and southern Italy. But

within these regions, what cities or regions will be investigated? What archives will be consulted. As for “southern Italy” what does this mean in terms of regions and what archives?

Second, I am perplexed by the chronological divisions in this proposal. It is fine to divide chronological periods among different WPS, but dividing these chronologies across the “tri-scale” analysis—micro, meso, and macro—strikes me as limiting the comparative possibilities of the project. WP2 and WP3 concern the micro beginning with the 15th century and the end date is unclear, while the meso concerns the 15th to 17th and the macro, from the 14th century to the present. This chronology is further confused for “Southern Italy”, where the PI references the work of Patricia Skinner, an early medievalist concentrating on the 6th to the 12th centuries, a period never mentioned by the PI. Moreover, if the PI is looking for early sources for serial analysis of epidemics, why isn’t there a concentration on city and regions in northern Italy (Lucca, Genoa, Siena, Pisa, Florence, Venice and their hinterlands), where fiscal and notarial records begin centuries earlier than in “southern Italy” and remain much more numerous into the early modern period?

comment referee 4

The time frames covered by the work packages are often slippery. It’s all very good to claim that the investigation is going to go from the Black Death to COVID-19, but WP2 on female plague cleaners and WP 3 on pest houses start in the late 16th century (with the best evidence in the late 17th to 19th centuries), the “newspapers and criminal records” for WP5 on female experiences of violence during epidemics are going to be rare before the 17th century, and the focus of WP6 is necessarily going to be late modern with some early modern engravings. Bolstering the post-Black Death content (late 14th to 15th century) would help smooth out this imbalance.

WP5 is the riskiest because it is going to be so difficult to isolate an epidemic as a factor in violence in the pre-modern sources available for such an investigation given what we know about the biases of legal sources. The techniques and methodologies cited by the applicant might work for the late 18th century onwards, but it’s hard to see how the “large global dataset” is going to include any systematic and usable data for the late 14th to 16th centuries. But if the plan works and comparative data for both men and women in epidemics in different regions are produced, along with baseline stats for non-epidemic years, for the early as well as later periods under study, this WP would be very much “high reward”.

comment referee 5

One of the shortcomings I find in this proposal, as a reviewer, is having no access to the names of the scholars that have agreed to be part of the Advisory board and their role. I think that this project needs the advice of experts in the fields that fall outside the specialization of the applicant, therefore ensure that interdisciplinary expertise is supporting the project all along its life. I also find necessary to plan regular board meetings with them -for the kick-off of the project and for monitoring it as a whole. The project mentions that the Advisory board will be invited to attend a workshop on methods to produce a handbook of best practices but it remains unclear what disciplines are represented at the board and what is the final purpose of this handbook.

Rebuttal

Building on 1b, I further clarify my temporal choices. The VICI does not require equitable information for all periods and places. Thus, while WP5 is high risk, high reward (R4), and it is more challenging to extract medieval evidence of epidemic violence on women (I started this for some Low Countries cities using criminal convictions: Curtis, 2026) than for the 17th century onward (where I can systematically scour digital newspapers), it is no problem having more evidence for later periods. I go back to the Black Death in WP5-6 simply to include the most severe outbreak of the past 1000 years. Likewise, I address the present day in some WPs because epidemics occur today, heightening social relevance of findings. The temporal dimensions of my WPs are not vague or slippery (R3-4) but are explicit, justified, and relate to the contextual practicalities and objectives of each WP (recognised by R5 in 1b, R2 in 3a).

I reject R1’s call to “scale down considerably”. I do not need to limit the ambition of the VICI because each WP has appropriate temporal and geographical dimensions for the source base available and methods employed. Likewise, I reject R1’s call to stick to “only socio-economic impacts”. If I do so, I repeat the limitations I outlined in the state of the art and contradict the views of R2-5.

An issue in 1b (R1) and returning here concerns disease typologies (R3). I deliberately use the generic term “epidemic” to refer to spikes in infections above the norm in a population, which ensures I do not exclude any disease and respect a “retrospective diagnosis” historiography. We can only identify disease outbreaks through what contemporaries thought they were. In the VICI I am receptive to diversity in disease characteristics (WP1), as one of three analytical levels for understanding differential epidemic outcomes for women: epidemiological, societal (institutional/micro-demographic), and individual (intersections).

For WP4 (R3), Skinner is cited to emphasise specific pressures on widows in southern Italy rather than evidence for female wealth distribution. I use southern Italy instead of the north/centre because the south has micro-demographic features contrasting sharply with the Low Countries and west Bohemia (early near universal marriage; dowries; no lifecycle service). Hence, it serves as institutional variation, which might explain differences in epidemic impacts on women. Northern Italy has earlier sources for wealth distribution (Alfani, 2023), but its micro-demographic features do not contrast as clearly with the other two meso-areas (Viazzo, 2003). Within southern Italy, there are many sub-regions I can use, again a source of

variation, and my previous work with fiscal records in Apulia and Sicily (Curtis, 2015) will lead us there first.

R2 asks whether epidemics are a lens for exposing inequalities or as a trigger for reshaping inequalities. For me, it is not one or the other. R2 sophisticatedly reframes what I am already doing – why epidemics change women's lives in one context but not in another. While epidemics can reshape women's lives (change), epidemics can also foreground women's experiences already happening in non-epidemic times (continuity). Rather than a unified theoretical framework (3b), which might over-simplify, constrain, and create intellectual blind spots, my VICI uses hypotheses and systematic comparison across context, time, and status to identify which conditions are more likely to produce certain types of epidemic effect on women.

R2 asks about gendered analysis. My proposal focuses on epidemic outcomes for women because we lack this information. However, gendered aspects are not absent. Each outcome for women can be systematically compared to men – see "women and men" sections for WP2-6 (recognised by R4 in 3a, "baseline information on men"). Further, in my VICI I reframe the comparative lens. As well as women and men, I compare differences in outcomes between women across spatial and temporal context, and between different statuses of women within a single context. Finally, gender and power dynamics are organically integrated in the VICI because women's relationships with men are part of their epidemic experiences, and differences in epidemic outcomes for women might be connected to their experiences of institutions built on paternalistic or patriarchal values.

I did not mention the names involved in the advisory board (R5) to avoid biasing the proposal. I have roles for Guido Alfani (epidemics and inequality); Jane Crawshaw (epidemics and space); Alice Evans (women and development), Monica Green (gender and public health), and Christos Lynteris (visual representation of epidemics).

2 - Scientific and/or societal impact

Explanation

The applicant is given the choice to either focus on scientific impact, societal impact, or to focus on both aspects. One type of impact is not considered as superior to the other. The impact criterion can be positively assessed if an applicant only focuses on one type of impact, either scientific or societal or on both. However, the applicant should clearly motivate their choice(s) and elaborate on the potential impact. Scientific impact is the impact of research on one's own research field, on related research fields or on science in general. Societal impact can broadly be defined as any cultural, economic, industrial, environmental and/or societal change that is (in part) the result of the knowledge and skills acquired through the proposed research. Not all questions of impact are applicable for all applications. This depends on the focus the applicant has chosen (scientific, societal or both types). Information on impact is available in section 2b of the application form.

2a

Please comment on the applicant's motivation to either focus on scientific impact, societal impact, or to focus on both types of impact. Is in your opinion the motivation for the chosen focus adequate and convincing?

comment referee 1

Unfortunately, the proposal does not make it explicit how it is focused on scientific and societal impact. It looks like a very research-oriented project, with good potential to generate new data, but as far as a wider impact is concerned, I cannot judge, based on the proposal. I am not sure the proposed exhibition and website can make much impact.

comment referee 2

The applicant states that the scientific and societal impact are of comparable focus. This seems appropriate as the subject has a clear scientific aspect and touches a relevant societal issue. It is probably also the starting point for the applicant who introduces the project by referring to the recent COVID-19 epidemic. However, the scientific impact seems much more important and direct than the societal impact.

comment referee 3

The PI has emphasized the societal impact by attracting larger non-academic audiences into the project through exhibitions, films, and interviews. It should be noted that such noble aspirations with scholarly efforts to engage the general public can have disappointing numbers.

comment referee 4

One of the more impressive features of the application is its ability to contextualize the timeliness of its historical investigation into the gendered implications of epidemics, especially given the current concerns about COVID, SARS, and other modern pandemics. Some of the planned outcomes are more innovative than one usually finds in these types of grants, including the exhibition at the Rijksmuseum Boerhaave in Leiden that will be tied to several interactive events, the cooperative partnership with a local cinema to show relevant films and sponsor audience discussions and a lecture, and the various efforts to disseminate results via print and online media. Developing a professionally designed website that can feature the results of the project is also an excellent idea. There are obvious scholarly advantages as well, not only in terms of the open access data sets and publications that will result, but also in the establishment of a long-term research group.

comment referee 5

The applicant has chosen to focus on both scientific and societal impact. This choice seems reasonable to this reviewer. The research proposed will clearly have a historiographical impact but deepening our knowledge on gender and epidemics will surely have a societal impact. This would have been the case before the COVID 19 pandemic, but after that it has become clearer to society as a whole the importance to know about the diverse effects that epidemics have in society. Regarding societal impact the applicant and the project's team will attend specific training at the Wellcome Trust which is a reasonable measure.

Rebuttal

R2-5 all support dual focus – a societal crisis which is a scientific problem. R1 makes an unsupported statement without reasoning.

2b

If scientific impact is (part of) the applicants' focus, please comment on whether the proposal conveys an ambitious vision and an appropriate strategy 1. Regarding the dissemination and/or implementation of the research results with regard to the applicant's field of research, related fields or science in general; 2. Regarding the dissemination and/or implementation of the research results with regard to the broader scientific community.

comment referee 1

The proposal does not make it clear how its disseminating paths (the proposed exhibition and website) will be impactful to either the general public or broader scientific community.

comment referee 2

The strategy regarding dissemination in the scientific community is appropriate for the research field of the applicant who has a broad network in his field. The envisaged publication of a book already planned by Cambridge University Press and the different other initiatives will help for a large dissemination. Of course the development of the working package on visuals can be very important in this regard as it is an evident path to reach a broader public. Finally, the preservation and curation of critical historical materials constitutes a valuable scientific contribution in its own right.

comment referee 3

The PI could have emphasized more the scientific impact of this project: why women's experiences are important for understanding epidemics/pandemics with current and future diseases. He might have emphasized how such reactions to sexual differences have affected scientific or behavioural practices in the past and how this knowledge could be applied to future health measures, advice, and policies.

comment referee 4

ANSWER: ...

comment referee 5

The project's dissemination plan is sound, as far as the number of publications are concerned. Dissemination in Social Science History, History of Medicine and Women and Gender Studies venues could be more intensified.

Rebuttal

R4 lauds the proposal's "ability to contextualize the timeliness of its historical investigation into the gendered implications of epidemics" (2a), although R3 urged me to reflect more on "why women's experiences are important for understanding epidemics with current and future diseases". Besides women make up 50% of the world's population, we urgently lack sex- and gender-disaggregated epidemic data. My VICI is the first systematic attempt to collect this data across diverse geographical contexts and wide temporal scales. It is an urgent public health issue. Female-male HIV prevalence ratios are rising in sub-Saharan Africa. Women with children born with Zika lack institutional support in Brazil. But more importantly my VICI tries to solve a tangible scientific puzzle – why are negative outcomes for women only seen sometimes?

As someone who has worked with resilience, vulnerability, and adaptation concepts (output 1-2) – widely used across disciplines dealing with epidemics and environmental hazards – women's experiences are absent in the major analytical frameworks.

2c

If societal impact is (part of) the applicants' focus, please comment on the following aspects: 1. The added value of the project for societal impact; 2. The potential for societal impact on the short and long term; 3. The envisioned way in which the proposed research will contribute to societal impact; 4. Did the applicant pay sufficient attention to the key risks of undesirable societal impact and the proposed measures to prevent or mitigate this and increase the chance of desired impact?

comment referee 1

As stated in 2b: The proposal does not make it clear how its disseminating paths (the proposed exhibition and website) will be impactful to either the general public or broader scientific community.

comment referee 2

The project's potential for societal impact appears more limited than the applicant envisions. While it will undoubtedly contribute valuable historical knowledge on gender and power relations, its capacity to influence contemporary society is modest for two reasons. First, its contributions—while academically valuable—pertain to historical awareness rather than contemporary policy or practice. Second, the transferability of insights from pre-industrial societies to modern contexts is limited. Research on recent epidemics and their consequences like the COVID-19 pandemic offers a more direct pathway to societal relevance.

comment referee 3

The PI pays most attention to point 4: the possible undesirable societal impact of a man being the PI of a project concentrated on women.

comment referee 4

ANSWER: ...

comment referee 5

There are a significant number of local initiatives planned to engage with the wider public as well as long lasting products that may impact the digital world. Mitigation measures to fight misconceptions and undesirable effects are carefully considered, as well as the participation of a wide variety of actors in engagement activities.

Rebuttal

R4-5 refer positively to my initiatives and lasting products, “more innovative than one usually finds” (2a) with “wide-ranging dissemination” (3a), and my mitigation of undesirable outcomes. I have taken seriously my personal status and how it impacts a project on women (R3).

Although R2 believes my VICI furthers understanding on gender and power relations, I do not agree that the contributions mainly pertain to “historical awareness rather than contemporary policy or practice”. The major large-scale conference at EUR is multi-disciplinary and integrates scientific and non-academic partners – educational and advocacy groups, media outlets, and those steering policy such as the Gender & Health Hub, with the objective of scrutinising the principles established by the UN Women domain on public health crises. Further, I reject the view that “recent epidemics and COVID” offer a more direct pathway to societal relevance. This is a modernist myopic contention that this VICI counters. If we only look at COVID, what can we learn about epidemics and women’s lives in the long run? Nothing, because the evidence is not there. Only through history can we say something meaningful about epidemic impacts that play out over time.

R2&4 state that WP6’s focus on the visual helps stimulate societal engagement (3b) – and this links with policy. Images are vital in fostering public health education and developing trust in health messaging (Kendal, 2021).

2d

If the applicant has chosen to primarily focus on one type of impact, please comment whether the applicant gives proportional attention to increasing (unforeseen) opportunities for societal impact during the project, if the focus is on scientific impact, or vice versa.

comment referee 1

It was not made very explicit in the proposal.

comment referee 2

not applicable

comment referee 3

...

comment referee 4

Not applicable

comment referee 5

not applicable

Rebuttal

R1’s answer is inapplicable to my proposal.

2e

What improvements would you suggest to increase the strength of the scientific and/or societal impact?

comment referee 1

To indicate the proposed impacts in a clearer way.

comment referee 2

The project is already very ambitious and large.

Potential improvements are summarized in the weaknesses section.

comment referee 3

To concentrate more on the scientific aspects of this broad and ambitious project, the PI could explain further why women matter in the study of epidemics beyond presenting higher or lower mortality or morbidity rates as has been the concerns of epidemiologists.

comment referee 4

I actually do not have much to add (except for my comment on data management below) since the applicant's understanding of and plans for scientific and social impact are so good. One small note—I think the relative lack of bioarchaeological evidence is a missed opportunity.

comment referee 5

The methodology of co-creation is not clearly used and could surely help enrich the aims of the project.

Rebuttal

I agree that bioarchaeological evidence is valuable (R4), but given the ambition and scale of this VICI, I should not stretch too far outside my expertise. R5 mentions "co-creation". My social outreach activities already are highly collaborative – see the two-way engagement using audience response systems to visuals.

R3 asks why it is important to move beyond sex-disaggregated mortality. In the VICI, I do not question the importance of death – I have contributed significant sex-disaggregated mortality evidence (output 4,6,10). But epidemics do not always lead to deaths, even when infecting many people. And there are always survivors. COVID can be an important lens. More men died, but women often faced other consequences – domestic abuse; disproportionate burdens in "key" sectors; foregoing work or education to care for others; and restricted access to sexual health and reproductive resources. Importantly, in my VICI, I treat none of this as given. During some epidemics in some contexts for some women, we might see negative effects – but elsewhere not. The question is why?

3 - Summarizing assessment**Explanation**

NWO kindly asks you to summarize the most important strong and weak points of the proposal as a whole. In answering the question, please take into account the proposed research and the scientific and/or societal impact. Please formulate the strengths and weaknesses in such a way that they are comprehensible and substantiated for a broader scientific committee that may be outside of your field of expertise.

3a

Please indicate point by point 5 strengths of the proposal and place them in order of importance, starting with the most important one.

comment referee 1

- (1) It proposes to deal with a highly important historical topic
- (2) It proposes to work across space and time (although oftentimes, it is unclear what periods and regions the proposal will be dealing with)
- (3) It proposes to work statistical data
- (4) It proposes to unearth new archival data
- (5) It proposes to disseminate findings to the general public (via an exhibition and website)

comment referee 2

1. This project is distinguished by its systematic approach to analyzing the impact of epidemics on women.
2. It is structured through a series of clear, coherent work packages, each with well-defined and valuable specific outcomes.
3. By integrating a large set of scientific approaches—from economic, social demographic and cultural history—the research is poised to achieve its goal
4. A more sophisticated and holistic understanding of both the historical impact of epidemics on women and the evolving role and position of women in the past.

comment referee 3

1. The overarching proposal of a holistic study of women in epidemics over a long period, wide geography, and interdisciplinary range of subjects from mortality rates to the history of emotions.
- 2) the wide-ranging and up-to-date bibliography
- 3) The intersection of quantitative and qualitative analysis
- 4) The clear-cut instructions outlined in the WPs for the PhDs and RAs
- 5) The background of the PI, especially his previous experience in running large team projects.

comment referee 4

1. Wide-ranging and feasible plans for dissemination of project findings to policy makers, news media, and the general public, as well as the usual scholars in the field.

2. Attention to and articulation of intersectionality in the gendered analysis and the recognition that baseline information on men has to be collected to contextualize the findings on women and to avoid cherry-picking.
3. WP 4 on epidemics and female access to resources has high potential to make major contributions to scholarship on women, epidemics, and inequality, not least because of its contribution of solid data to help settle current debates in the field.
4. The integration of different methodologies to achieve the aims of the project. The project has an innovative and ambitious blend of quantitative and qualitative approaches, though the quantitative analyses are likely to yield the most innovative and useful results, including the annotated global database of epidemic imagery.
5. The outcomes for each work package are appropriate, feasible, and, in some cases, even imaginative.

comment referee 5

1. Studying the gender experiences of epidemics focusing on women with the goal to understand the experiences of society as a whole
2. Addressing long-term trends through in-depth study of particular contexts
3. Understanding and studying the variety of experiences of women in epidemic situations: as carers, as sufferers, as diagnostic personnel of epidemic outbreaks; intersectional analysis
4. Addressing diverse local contexts -not simply one region through time
5. Taking advantage of the researcher's previous expertise and knowledge of particular sets of sources.

Rebuttal

R2-5 agree that my VICI contributes to a scientific problem with its ambitious geographical and temporal scope; integration of quantitative and qualitative analysis; diversity of sources and methods; detailed feasible WPs; close alignment with my expertise; and dissemination of findings to diverse non-academic parties.

3b

Please indicate point by point 5 weaknesses of the proposal and place them in order of importance, starting with the most important one.

comment referee 1

- (1) It is quite vague and not convincing, as far as the chronological and geographic dimensions are concerned
- (2) It promises to achieve too much without convincing and strong foundations, in terms of expertise and human resources
- (3) It aims to cover too many types of sources and fields of inquiry (socio-economic/demographic history and visual art/cinema history)
- (4) It does not indicate clearly its scientific and societal impact
- (5) It does not indicate clearly how and where it will procure historical datasets

comment referee 2

1. The project's most significant challenge lies in a fundamental methodological tension: the pursuit of a single, overarching approach (theory?) for a phenomenon that the applicant describes as contextual, varying by epidemic type, societal structure, and women's intersectional positions. Reconciling this specificity with a unified theoretical framework presents a formidable challenge.
2. The proposal lacks a clearly defined theoretical model for how epidemics interact with power structures. It remains ambiguous whether epidemics are conceptualized as a magnifying glass (exposing pre-existing inequalities) or a trigger (actively reshaping them). To address this, the project would benefit from a historical framework that outlines the evolution of economic and societal structures, positioning epidemics as a disruptive force within that broader context.
3. The exclusive focus on the impact "on women" creates a potential methodological narrowness. The proposal would be significantly strengthened by adopting an explicit gender-relational framework, which the applicant's own logic implies is necessary. This would shift the focus from a singular analysis of women to a comparative analysis of how epidemics disrupted, reinforced, or transformed the roles and power relations between genders and classes. This approach would yield more nuanced and historically grounded conclusions and still allows to focus on specific aspects of the impact on women that remained hidden in past research;
4. The value and integration of WP6 ("Epidemics and Female Visual Representation") within the core research endeavor is less compelling than that of the other work packages. While not indispensable to the primary analysis, it could serve as a powerful tool for the dissemination and public engagement of the project's findings.

comment referee 3

1. Lacking specific references to archives that will be visited and the approximate chronological ranges of documentary series to give an idea of the magnitude of work expected in the WPs
2. Lacking specific information defining characteristics of the case studies proposed in this project
3. The avoidance of discussion of the project's risks and feasibility.
4. Vagueness about the study of "Southern Italy": what cities/regions? what documentation? Why has the PI chosen "southern Italy" (whatever the geography of that label might entail) over the earlier and more voluminous data that could be collected for places such as Genoa, Lucca, Venice, etc in central and northern Italy?
5. As noted above, the project's WPs demarcated by the temporal scales of analysis—micro, meso, and macro—present problems that I have discussed above. Moreover, these terms are never defined in regard to the specific time frames of this project.

comment referee 4

1. I understand that the availability of appropriate sources dictates that some periods be highlighted, but the time frame of the larger project—from the Black Death to COVID—does not always match the chronological parameters of the research in the work packages, with the earlier period (before the late 16th century) in particular receiving less sustained attention.
2. The literature review, as reflected in the bibliography is excellent, but does not adequately reflect the abundant scholarship (not all of it published in the major journals like *Past and Present* or *Economic History Review*) on late medieval and early modern English plague mortality and its influence on inheritance, women's work, age at marriage, and household formation. And given the sophistication and abundance of the scholarship for England, it is unclear why the applicant does not even attempt to note the possibilities for comparative analysis here.
3. The figure on p. 7 is useless.
4. As noted above, WP5 on female abuse and violence is very high risk because of the difficulties of deriving reliable data from the available sources and the rather vague articulation of the methodologies required to produce the global dataset.
5. WP6 on epidemics and female visual representation is an intriguing outlier in this application. It does add interdisciplinarity and offers an avenue to reach a wider audience, but the copyright difficulties involved in making the global database of epidemic imagery are not acknowledged.

comment referee 5

1. Each of the contexts chosen will not be studied for the whole period covered by the project.
2. Unclear the experts and types of expertise involved at the advisory level
3. The scope of visual sources to be analysed appears to be very broad and is unclear how contextual analysis can be covered in ways similar to what is planned in the other case studies
4. There is no integration of co-creation initiatives or citizen science measures. Activists and other stakeholders are planned to be contacted at later phases of the project, not at the beginning to influence its execution and development
5. The project's website -an important dissemination instrument- and its sustainability plan is not well described; copyright issues are not addressed

Rebuttal

These points have already been made and addressed in sections 1-2.

4 - Datamanagement: Feedback

Explanation

With the data management section NWO mainly wants to raise awareness about the importance of responsible data management. The section is therefore not included in a committee's decision about whether a proposal should be awarded funding or not. NWO does, however, submit this section to the committee and referees for any advice or feedback. After a proposal has been awarded funding, the researcher should elaborate the section into a data management plan. For this, applicants can make use of the advice they have received.

If you have any suggestions or advice on the data management section, please state it here, otherwise use 'not applicable'.

comment referee 1

N/A

comment referee 2

not applicable

comment referee 3

No detailed discussion as of yet on data management

comment referee 4

Please make the data easily downloadable (preferably in spreadsheets) with clearly labelled fields and make codebooks or guidelines employed in coding data transparent. Be honest about problems with the data.

comment referee 5

There is no information on data archiving -archiving in public international platforms should be planned.

Rebuttal

On R4-5's comments about copyright (3b), not all images can be included in the database, although links to external sources and explanatory research notes can always be provided.

I will use public archiving forums such as Dataverse where I already store large datasets (R4-5).

Overall



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Corresp. no. 2026/SGW/02142121 E-mail sgw-vici@nwo.nl
File no. VI.C.251.017 Website www.nwo.nl/en

Round NWO Talent programme SSH Vici 2025
Title The Impact of Epidemics on Women: A Long-Run History
Please include date, file number and correspondence number in any reply

Subject Decision SSH Vici proposal

Dear Dr Curtis,

On February 16, NWO finalised the decision making process on your above-mentioned proposal. Unfortunately, the Domain Board Social Sciences and Humanities decided to reject your proposal. NWO has assessed your proposal according to the procedure and criteria described in the Call for proposals. The assessment report is attached.

If you have any questions about this decision or if you are considering lodging an objection, you can contact the Vici programme officers via the above-mentioned email address or phone number to get a further explanation. This contact does not have a suspensive effect for the objection period.

Yours sincerely,
On behalf of the board of the Dutch Research Council Domain Social Sciences and Humanities,

A handwritten signature in black ink, appearing to read 'I.M. Werner', is written over a blue circular stamp. The stamp contains the text 'NWO' and 'Dutch Research Council'.

Dr. I.M. Werner
Director

Attachment:
Assessment report

File no. VI.C.251.017
Corresp.no. 2026/SGW/02142121



*The NWO Domain Social Sciences and Humanities is authorised to take this decision under a mandate from the NWO Executive Board.
Please see: www.nwo.nl/mandateregulation.*

You have the right to lodge an objection to this decision within six weeks from the date on which this decision was sent. Your objection should be sent in writing or by mail to the NWO Executive Board, P.O. Box 93138, 2509 AC The Hague. It must be signed and dated, must specify your name and address, and must state the reasons why you object to the decision. A copy of this decision letter should be enclosed with your written objection. Further information about the objections procedure can be found on the NWO website.

You can also file your objection digitally. To do so, you can only use the email address that is provided by NWO for this: bezwaar@nwo.nl. Your digital objection must satisfy the same requirements as a written objection. Make sure that you scan your written objection or add a scanned signature in your objection.





APPENDIX: ASSESSMENT REPORT

Grant: NWO Talent Programme SSH Vici 2025, panel Humanities
File number: VI.C.251.017
Applicant: dr. D.R.C. Curtis
Title: The Impact of Epidemics on Women: A Long-Run History

How was the assessment of your proposal realised?

The assessment committee assessed the above-mentioned proposal, in the same way as all other proposals, according to the procedure and criteria as described in the Call for proposals. For each criterion, your proposal received a numerical score. The assessment committee subsequently drew up an advice. Based on this advice, the Board decided to award or reject proposals.

In this round, NWO uses the score scale below and the associated translation into qualifications.
A proposal must receive at least the qualification 'very good' to be eligible for awarding.

Score	Qualification
1.0 to 1.4	Excellent
1.5 to 3.4	Very good
3.5 to 5.4	Good
5.5 to 9.0	Unsatisfactory

The table below provides information on the normalised weighted scores and final qualification of your proposal.

Assessment criteria	
Criterion I: Quality and innovative character of the research proposal (weighting 75%)	3.4
Criterion II: Scientific and/or societal impact (weighting 25%)	2.2
Final score	3.1
Qualification	Very good
Position in the ranking within your panel	13

The scores given resulted in a ranking of the proposals. In total, NWO awarded 5 proposals out of the total 14 submitted proposals within your panel. Based on the ranking and the limited financial resources your proposal cannot be awarded.

The substantive assessment of your proposal

Below you find an explanation of the assessment of the assessment committee for each of the assessment criteria.

Motivation from the assessment committee

Criterion I: Quality and innovative character of the research proposal

With the proposed research, the applicant aims to explain why epidemic impacts on women vary across time and space, analysing five dimensions from the Middle Ages to the present, examining female experiences of care; quarantine; access to wealth and resources; abuse and violence; and visual narratives about women.

Reviewers 2, 3 and 5 commented positively about the alignment of the proposal with the applicant's expertise. Reviewers 2, 3, 4 and 5 also considered the proposal to contain scientifically innovative elements, namely in its long temporal perspective on the impact of epidemics on women, and its holistic approach to understanding how



epidemics affect women. Furthermore, reviewer 4 highlights how the articulation of intersectionality indicates the maturity of the approach. The committee agrees with these positive evaluations.

The reviewers also expressed some points of critique. The committee judges that the rebuttal convincingly responds to certain points of critique, for example reviewer 1's question regarding the applicant's ability to supervise research on sources and regions beyond their expertise.

However, the committee is not fully convinced by the candidate's rebuttal to the points of critique raised by reviewers 1, 3 and 4 regarding the methodological details and feasibility of the proposed research. Specifically, the spatial and temporal boundaries for WP5-6, as well as the thematic definition on the kinds of epidemics to be studied in WP4-6, remain insufficiently clear to the committee after reading the rebuttal. Relatedly, this raises concerns regarding the integration of specific work packages in the project as a whole, and affects negatively the committee's assessment on the comparative power of the proposed research.

Furthermore, the committee is not fully convinced by the applicant's rebuttal to reviewers 3 and 4's questions on how the project goes beyond the applicant's current research. The committee assesses that the applicant's response regarding the forthcoming CUP book does not position it sufficiently clearly against the proposed research.

Based on this assessment, the committee qualifies the criterion 'Quality and innovative character of the research proposal' as 'very good'.

Criterion II: Scientific and/or societal impact

The applicant chose to focus their proposal on both scientific and societal impact. Most of the reviewers commented that this focus is sufficiently convincing. According to the committee, the applicant's rebuttal addresses convincingly the remarks by reviewers 2 and 3 on this point.

Reviewer 4 was positive about the innovativeness of the proposed dissemination strategy for the general public, through an exhibition, website, films, public discussions, and conferences. Reviewers 2, 4 and 5 noted the timeliness of the research with regards to societal interest after the COVID pandemic. The committee agrees with these positive evaluations.

Reviewer 3 asked for further reflection on how to increase the project's impact on policymakers. The committee is satisfied with the applicant's rebuttal on this point.

However, the committee is of the opinion that the dissemination strategy for scientific impact is sound but not excellent. It also finds it a missed opportunity that the applicant does not address Reviewer 5's suggestions on co-creation initiatives or a sustainability plan for the planned website.

Based on the aforementioned reasons, the committee qualifies the criterion 'scientific and/or societal impact' as 'very good'.