

**ERC Starting Grant 2015
Research proposal [Part B1]**

**Better Understanding the Metaphysics of Pregnancy:
*Organisms, Identity, Personhood & Persistence***

BUMP

Cover Page:

- Name of the Principal Investigator (PI) : **Elselijn Kingma**
- Name of the PI's host institution for the project : **University of Southampton**
- Proposal duration in months : **60 Months**

Every single human is the product of a pregnancy: an approximately nine-month period during which a foetus develops within its mother's body. Yet pregnancy has not been a traditional focus in philosophy. That is remarkable, for two reasons:

First, because pregnancy presents fascinating philosophical problems: what, during the pregnancy, is the nature of the relationship between the foetus and the maternal organism? What is the relationship between the pregnant organism and the later baby? And when does one person or organism become two?

Second, because so many topics immediately adjacent to or involved in pregnancy have taken centre stage in philosophical enquiry. Examples include questions about personhood, fetuses, personal identity and the self.

This project launches the metaphysics of pregnancy as an important and fundamental area of philosophical research.

The core aims of the project are:

- (1) to develop a philosophically sophisticated account of human pregnancy and birth, and the entities involved in this, that is attentive to our best empirical understanding of human reproductive biology;
- (2) to articulate the metaphysics of organisms, persons and selves in a way that acknowledges the details of how we come into existence; and
- (3) to start the process of rewriting the legal, social and moral language we use to classify ourselves and our actions, so that it is compatible with and can accommodate the nature of pregnancy.

The project will investigate these questions in the context of a range of philosophical sub disciplines, including analytic metaphysics, philosophy of biology and feminist philosophy, and in close dialogue with our best empirical understanding of the life sciences – most notably physiology.

The areas of philosophy that this project engages with are covered by two different SH panels: panel 4 (the Human Mind and its Complexity) and panel 5 (Cultures and Cultural Production).

Because this is primarily a project in analytic metaphysics, it is submitted to panel SH5 (SH5_11: metaphysics). Panel SH4 is listed as a secondary panel because a significant part of the research is in philosophy of biology (SH4_13: philosophy of science). The project also engages question about personal ontology and personal identity that could fall either under SH5 (SH5_11: metaphysics) or SH4 (SH4_12: philosophy of mind); questions in (applied) ethics (SH5_12: ethics); and a range of feminist-oriented work from a variety of philosophical and other disciplines, which is not explicitly mentioned, but which is presumably also housed under panel SH5. The project also draws upon work in sociology and history; bio-medicine; and medical ethics.

Section a: Extended Synopsis of the scientific proposal (max. 5 pages)

Context

Every single human is the product of a pregnancy; a (usually) nine-month period of development within another human's body. Yet pregnancy itself has not been a traditional focus in philosophy. That is remarkable, for two reasons. First, because pregnancy presents fascinating philosophical problems: What, during the pregnancy, is the relationship between foetus and maternal organism? How do pregnant organisms relate to their potential offspring? And when does one person or organism become two? Second, because so many topics that seem to depend on those questions have taken up centre stage in philosophical enquiry. Examples include questions about personhood, personal identity and personal persistence; the boundaries of the self and the relationship between self and body; coming into existence; and a variety of topics in reproductive ethics, such as the rights over and obligations towards fetuses and/or (future) offspring.

These are not mere academic questions; they are practical. At this very moment, courts attempt to rule whether women can undergo forced Caesarean Sections on behalf of their foetus' or future offspring's wellbeing; whether women who smoke or take other toxic substances during pregnancy can be held criminally liable; and who, in case of conflict, has final rights over the contents of a (surrogate) mother's womb. Less dramatically but possibly more seriously – and certainly more commonly – doctors and medical ethicists struggle to assimilate the facts of maternal-foetal intertwinement, maternal autonomy, and the different risk profiles that intervention-options present to mother and foetus into a coherent reasoning process and morally and/or clinically adequate recommendation; lawmakers wonder how we can consistently criminalise feticide without criminalizing abortion; and pregnant women all over the world fret over the risks and benefits of jogging, eating fish and drinking alcohol – or working in their field or engaging in a possibly risky profession – in the context of balancing their duty of care to self, foetus, present and future offspring.

One thing that unites all these struggles is the inadequacy of the conceptual language in which we try to analyse them. Our moral, legal and social languages encode certain universal assumptions: that there is a distinction between self and other; between intervening and 'letting things happen'; and between persons, other persons and non-persons. But these distinctions break down when our object of consideration is a pregnant human. The reason for this inadequacy, I suggest, is twofold. First, even though pregnancy is how every person comes into existence, our language, laws and thinking about persons have not developed from a vantage point that was very attuned towards the possibility of *being* pregnant. Second, and more profoundly, pregnancy presents genuine and deep philosophical puzzles that may not be easy to solve, and that have not been adequately investigated. This project will take up that task.

Scientific & Social Importance

BUMP fits exceptionally well within the ERC remit for High Risk/High Gain Research. It sets out a completely *new* direction of research, which, by combining different areas of philosophy with the empirical findings of other academic disciplines, is approached in an *interdisciplinary* and *methodologically innovative* way. It is *ambitious* in size and scope and *bold* because it is willing to question established philosophical dogma and assumptions. It is *ground-breaking* because it places our gestational origin not as liminal, but as a key aspect of who and what we are, which will affect and possibly overturn a range of key practical and philosophical assumptions. Finally it is both *fundamental* and has a *wide practical and scholarly remit*. The former because it approaches pregnancy not through the biased lens of a particular moral or social question or agenda – such as the morality of abortion or the oppression of women – but through combining detailed attention to our best scientific understanding of human reproduction and development with a systematic investigation of its most fundamental philosophical aspects. The latter because the resulting understanding of pregnancy is likely to affect practical social, medical and moral questions, such as the treatment and obligations of pregnant women, as well as our personal and socio-cultural understanding of persons and their relations to their parents and offspring.

To realize the important social impact of this research, a significant portion of the requested resources will be devoted to knowledge transfer, as described in more detail later on in the proposal.

State of the Art: The Foetal Container Model

Pregnancy appears in three main contexts in analytic philosophy. First, in the context of the non-identity problem: the question whether future individuals can be harmed or wronged by the consequences of choices or conditions that were necessary to their existence (Parfit, 1984) Second, in the context of debates about the morality of abortion (e.g. McMahan 2002; Thompson, 1971). Third, in other questions in reproductive ethics, such as questions about genetic screening and questions about a pregnant woman's obligations towards her (future) offspring (e.g. Buchanan et al., 2000). In none of these contexts does the literature pay due attention to the peculiar *metaphysical* questions that pregnancy raises: questions about the nature of pregnancy; the entities involved in it; and the relations between them. In this literature, what I call the *foetal*

container model of pregnancy is implicitly, and uncritically, assumed. According to this model, the foetus develops *inside* the maternal organism as “a tub of yogurt is inside your refrigerator” (Smith & Brogaard, 2003: 74). But foetus and pregnant organism are not otherwise seen as overlapping, related or intertwined.

The best illustration of the lack of philosophical focus on pregnancy is its conspicuous absence in places where such focus ought to appear. Take, for example, Olson (1997), who defends the dual claims (1) that we literally were once foetuses, and (2) that human persons are organisms. On that view we, literally, once inhabited our mothers. One would expect that to raise questions about pregnancy, personal identity and the relation between the gestating organism and her foetus/offspring. But at no point, not even in a footnote in an entire book devoted to these arguments, are those questions mentioned. That is not a particular criticism of Olson; it is entirely typical for the analytic philosophical literature – a silent testament to the widespread implicit acceptance of the foetal container model.

This stands in stark contrast to the large body of work that explicates and criticise the foetal container model. A rich tradition in history and sociology documents its recent development and historical contingency (McClive, 2002; Duden, 1993); emphasises the role of political and professional interests in its construal (e.g. Arney, 1982; Petechsky, 1987); and explains it more generally within the context of larger social, classed and gendered power structures (e.g. Caspar, 1998; Duden, 1998; Katz-Rothman, 1994; Oakley, 1984). A wide range of feminist scholarship, meanwhile, has investigated the experience and (lack of) symbolic representation of pregnancy to present an image that is radically different from the foetal container model: metaphysically messy and ambiguous (Young, 1984; Kristeva, 1993; Irigaray, 1985; Howes, 2007), active and agential (Ruddick, 1994; Lindeman Nelson, 1994), constructed & transitional (Bergum, 1997) and characterized by intimacy and intertwinement (Little, 1999; 2005). But neither of these criticisms has successfully engaged analytic metaphysics; the entries on neither feminist metaphysics nor analytic feminism in the highly influential ‘Stanford Encyclopedia of Philosophy’ mention pregnancy *at all*.

There are many reasons for this lack of engagement, but at least one is this: analytic metaphysics is broadly naturalistic in outlook, which requires a conception of pregnancy and organisms that is attentive to our best understanding of reproductive biology. Most feminist work, however – and for understandable reasons – has shied away from such a perspective, stressing that *persons* are pregnant, but perhaps overlooking that mammals are too. This lack of engagement between the two traditions means, on the one hand, that analytic philosophy still lacks the means to adequately conceptualise pregnancy, and on the other that much of the feminist work on pregnancy has not sufficiently probed the metaphysically peculiar claims that some of their claims seem to commit to. There is a dire need for a project that can bridge this gap:

Aims

- 1) to develop a philosophically sophisticated account of human pregnancy and birth, and the entities involved in this, that is attentive to our best understanding of human reproductive biology;
- 2) to articulate a metaphysics of organisms, persons and selves that acknowledges the details of how we come into existence;
- 3) to start the process of rewriting the legal, social and moral language we use to classify ourselves and our actions so that it is compatible with and can accommodate the nature of pregnancy.

Topics to be Investigated

The project will proceed through the investigation of five interrelated subprojects.

1. Metaphysics & Physiology of Pregnancy: Beyond the Foetal Container.

Subproject one forms the backbone of the larger research project. It will closely investigate the physiology of pregnancy in conjunction with existing philosophical literature on when we come into existence, in order to do three things.

First, it will properly articulate the central questions and puzzles that the larger research project will answer: questions about the nature of pregnancy, the nature of maternal-foetal and foetal-baby relations, and the timing of organismic multiplication. Often the main philosophical work lies in asking the right questions, and the multiplication question is an example of this: it posits the maternal organism as an essential part of the story of how persons come into existence.

Second, it will investigate alternatives to the foetal container model. An example of such an alternative is the part-whole model, according to which foetuses are not merely *inside*, but a *proper part* of pregnant organisms – like hearts, kidneys, nails and hair. (Kingma, *under review*). I will refer back to this particular hypothesis throughout the proposal in order to illustrate how the different subprojects are related, and how a fundamental investigation of the nature of pregnancy can bear upon a range of interesting and difficult questions in different domains.

Third, it will articulate an important and – perhaps – radical assumption in the project: the assumption that the metaphysics of pregnancy is prior to the metaphysics of persons. This entails an explicit commitment

to the possibility of revising dearly held assumptions about what a human or person is or what properties humans or persons have. For example, it is often simply assumed that persons and human beings could never be part of other humans (e.g. Howsepian, 2008); this project may force us to question such assumptions. This commitment posits some particular methodological requirements; for example that concepts used in this project, such as humans and persons, without the use of which the project cannot progress, should be seen as mere placeholders whose meaning and properties may turn out to differ radically from what we presently expect them to be.

2. *Reproducing Mammals: Organisms, Individuals and Other Biological Categories*

Although we think of humans primarily as persons, they (also) reproduce as organisms – a feature they share with the rest of the biological world. Subproject two sets difficult questions about persons aside, and focuses solely on *biological organisms*. It will investigate the core claims and questions of subproject one, *metaphysics and physiology of pregnancy*, in the context of the most sophisticated views of organisms that the philosophy of biology has to offer. Most of these are very friendly to the idea that organisms can be part of other organisms; some include the bacteria that line our gut as part of the human organism, for example (e.g. Dupré & O'Malley, 2009). But they also work with a conception of organism that is in many ways quite different from our commonplace practical and philosophical assumptions about ourselves.

Subproject two has several important roles within the overall project. First, it keeps it firmly aware of our being mammals and animals as well as persons and should prevent us from adopting an overly anthropocentric approach; second, I expect this to generate alternative ways of conceiving the relation between foetus and gestational organism, suggesting accounts of the nature of pregnancy that we might not otherwise have thought to consider, whilst simultaneously ruling out some that would have seemed plausible had one only focused on persons. These will feed back into subproject one.

3. *Metaphysics of Nested Entities: Mereology, Identity, Persistence & Constitution.*

If there are interesting metaphysical relations between foetus and future baby – such as identity and persistence – as well as interesting metaphysical relations between foetus and maternal organism then the nature of pregnancy presents us with a metaphysical entity that has unusual features at its most basic and abstract level. This raises interesting new questions in the context of two established but difficult metaphysical questions: (1) how we distinguish wholes from their parts, and (2) how entities remain the same thing over time, whilst undergoing change.

Subproject three investigates these problems. The role of this subproject within the larger whole is to ensure that solutions are built from first principles and respect basic metaphysical constraints. Specifically, I suspect that some of the puzzles about pregnancy are not peculiar to humans, persons or even animals, but reflect more general and basic philosophical puzzles about wholes, parts, identity and constitution. If so they need to be solved (or at least articulated and addressed) at that more basic and general level.

4. *Reproducing Persons: Self, Other and Future Self*

Ultimately this project strives towards an account of the reproduction of persons. Subprojects two, *reproducing organisms*, and three, *the metaphysics of nested parts*, ensure that the project is, first, sensitive to our best understanding of human reproduction, *qua* mammalian organisms, and, second, respects the general rules of logic and metaphysics. With those conceptions in place, subproject four investigates what the nature of pregnancy teaches us about persons. This separates out into two sub-questions.

The first sub-question is: what does the nature of pregnancy imply for our conceptions of what persons are? It will investigate, for example, how common philosophical conceptions of persons (as organisms, minds, brains, or self-constructing narrative agents) are affected by and could accommodate alternatives to the foetal container model and the other research findings about the nature of pregnancy.

Second, it will investigate the relation between past and future persons and explore whether this is affected by earlier research findings on the peculiar nature of pregnancy. Take, for example, the part-whole hypothesis, which conjectures that fetuses are part of the pregnant organism. If we also suppose that persons are organism, then this may suggest new ways of conceiving the relationship between pregnant organism and future offspring. We can explore, for example, whether the pregnant organism is a person that is about to *split* into two future persons: one mother-person, and one offspring-person. On this understanding the pregnant organism's relationship to future offspring is (like) its relationship towards its future *selves*.

Reconceptions of the maternal-offspring relationship such as this one have the potential to affect some of the moral, legal and practical questions I discussed in the introduction: e.g. how we think about the obligations of pregnant women, and what, if anything, would justify externally enforcing them.

5. *Philosophical Embedding and Translation*

Subproject 5 re-embeds the findings of the project in a wider philosophical context. This has two components. The first focuses on ethics, and in particular on a translation of the research findings into the legal and moral domain; our moral and legal language may reflect certain assumptions that are not warranted

in the light of pregnancy, such as the tacit assumptions that persons are always distinct. If this project finds that, some, or all, persons do not have the properties we tacitly assume them to have, we have to revise the language underpinning social, moral and legal analysis to accommodate those findings.

The second component allows for situating this project's highly analytic and approach to the philosophical investigation of pregnancy within the wider tradition of philosophical and feminist reflection on pregnancy, birth and motherhood in relation to the self.

Feasibility & Implementation

Some groundwork for this project has already been laid, which warrants initial confidence in the viability of its overall radically new research direction. Early versions of two research papers that provide the background to this research project, one articulating some of pregnancy's philosophical questions and another criticising Smith & Brogaard's (2003) defence of the foetal container model, have been presented to internal audiences at Cambridge, King's College London, Southampton and Eindhoven as well as two peer-reviewed conferences. Both have received very positive responses, generating invitations to speak about this topic in additional venues.

In addition, the University of Southampton has awarded this research project a prestigious £6,000 'proof of concept' grant under their 'Adventures in Research Scheme'. This scheme supports the development of research ideas in their earliest stages, and as such recognises the exceptional promise and novelty of this project. With help of a further £1,000 from the interdisciplinary Southampton Ethics Centre, this award supports four workshops (June, 2014, April 2015, June 2015, Sept 2015) that help to refine the research questions for this project, build a network of supporting scholars within and outside philosophy; and explore its connections to moral and legal questions. Past and confirmed speakers to these workshops include Rebecca Kukla (Georgetown, Philosophy); Hazel Biggs (Southampton, Law); John Dupre (Exeter, Biology); Sally Fischer (Warren-Wilson); Thomas Pradeu (Paris, Philosophy); and Rosamund Scott (KCL, Law).

The Team

Seven Core Individuals will be conducting research on this project.

As PI, I will be devoting 70% of my time to this project, over the course of five years. My own research will focus on an articulation of the central questions in subproject one, *metaphysics and physiology of pregnancy*, as well the development of subprojects four, *reproducing persons*, and five, *philosophical embedding and translation*.

Two Post-Docs, one with expertise in philosophy of biology and one specialising in metaphysics, will be devoting the bulk of their three year tenure to, respectively subproject two (*reproducing mammals*), and subprojects three and four (*metaphysics of nested entities* and *reproducing persons*). A specialist in ethics will join the team in years 4 and 5 to contribute her expertise to the ethics component of subproject five, *philosophical embedding and translation*. This is a comparatively smaller but vital part of the project, which allows the findings of the overall research to be translated into the wider practical and philosophical literature and provides the bridge between this project and an envisaged follow-up project that will focus on the moral implications of a proper understanding of the nature of pregnancy.

Two PhD students will also join the team, and a half-time Administrative, Research & Knowledge Transfer Assistant will be appointed for the duration of the project.

Academic Activities

Weekly development sessions will be held with the entire research team in which participants will share ongoing work and research findings, and read relevant third party texts as well as each other's work. In years 2 and 3 some of these development sessions will take the form of all day workshops in which invited speakers will be asked to contribute. In years 2, 3 & 4 visiting fellows will join the team for a term and participate in its activities. Visitors from other disciplines will be particularly sought after, and these activities together will ensure collaboration within and interdisciplinary education of the research team. In year 4 a large international conference will be organised, where first outputs of the project will be shared with a global intellectual community.

Impact, Engagement and Knowledge Transfer

The investigation in this project has the potential for considerable social impact. In ethics, policy and law, for example, reconfigurations of the pregnant organism-offspring relation might radically alter how we think about the scope of choices open to pregnant women. In ordinary life, reproducing families who currently are being offered a single conceptualization of pregnancy as the foetal container model may welcome an alternative way of thinking about the important and life-transforming process they are experiencing.

This project is committed to realising this impact in two important ways. First, whilst this is not itself a project in ethics, and will not seek to investigate the full moral implications of its metaphysical findings, the project is committed to translating its findings so that those currently engaging in relevant areas of moral,

legal and bioethical enquiry are able to take the findings of this project on board. That, in academic terms, is the role of the ethics component of subproject 5, *philosophical embedding*. Second, it will actively communicate the broader implications of the project – the renewed conception of the metaphysics of pregnancy – to a wider audience including those working in clinical medicine, policy makers, lawyers, and the people this project is about: all of us.

Knowledge Transfer is often promised, and rarely properly implemented. I have extensive experience and an impressive track record in this area having published in the popular press, medical journals, midwifery journals and on blogs; having made multiple radio-appearances; and having engaged with and advised midwives, professional obstetricians and human rights lawyers. I have therefore a very concrete sense of the importance and exciting rewards of knowledge transfer and engagement, as well as an established social and professional network that is relevant to this project. My extensive experience in this area also means that I am acutely aware of the amount of time and commitment that knowledge transfer, outreach and engagement requires, and the very real pressures and conflict this can cause with the need to do in-depth research and publish and disseminate this academically.

To ensure that both research and knowledge transfer will receive full attention on this project, a part-time research, administrative & knowledge transfer assistant (KTA) will be appointed. The KTA's main priority will be realising the social impact of the research project, and they will possess the skills, interests and initiative suited to that task. They will assist me in, e.g. writing for medical, professional and policy publications, developing and implementing a social media strategy for the project, expanding my existing network by making contact with key professional and policy figures as well as other media outlets, organising focus groups, designing a website that graphically presents the findings of the research project to a wider audience and marketing and improving that website via the international blogosphere (which, when it comes to pregnancy, birth and early motherhood is very active). They will also seek further resources to support the outreach activities of this project, for example by applying for dissemination grants and actively co-opting existing avenues (e.g. festivals of ideas).

All team-members will contribute to these activities where appropriate, but the appointment of a dedicated KTA will allow the researchers to have a primary focus on their research whilst ensuring that knowledge transfer also receives the constant dedication that this important part of the project requires. As PI, I will lead on research and knowledge transfer equally and make sure that all of the project's considerable and important promises, both in academic and social terms, will be fully realised.

Key Outputs

Academic

- Series of 12 high quality journal articles by PostDocs [3 each]; PI [3]; PhD students [1 each]; and Ethics Specialist [1].
- Monograph by PI launching the Metaphysics of Pregnancy (contract in year one, full version in year three).
- Edited Volume by PostDocs & PI – contributions from team members, visiting scholars and conference contributors.

Knowledge Transfer/Impact

- Policy briefs for governments & professional organisations; conference contributions to professional conferences; creation of health care professional network.
- Articles in medical & other health care professional journals,
- Articles in newspaper and other media engagement, e.g. radio programme, ideas festivals.
- Website for popular audience & Social Media strategy, e.g. blog, twitter.

References (Only key references are listed; complete list appears in B2)

- Dupré, John and Maureen O'Malley, 2009, "Varieties of Living Things: Life at the Intersection of Lineage and Metabolism", *Philosophy & Theory in Biology*, 1: 1–25.
- Howsepian, A.A., 2008, "Four Queries Concerning the Metaphysics of Early Human Embryogenesis." *Journal of Medicine and Philosophy*, 33: 140–157.
- Irigaray, Luce, 1985, *This Sex Which Is Not One*, Ithaca: Cornell University Press.
- Little, Margaret Olivia, 1999, "Abortion, intimacy, and the duty to gestate", *Ethical Theory and Moral Practice* 2: 295–312.
- Olson, Erik, 1997. *The Human Animal: personal identity without psychology*. Oxford University Press.
- Parfit, Derek, 1984, *Reasons and Persons*. Oxford: Oxford University Press.
- Smith, Barry & Brogaard, Berit, 2003, "Sixteen Days", *Journal of Medicine and Philosophy*, 28: 45-78.
- Young, I.M. (1984), 'Pregnant Embodiment: subjectivity and alienation'. *Journal of Medicine and Philosophy*, 9: 45-62.

Section b: Curriculum Vitae (max. 2 pages)

ELSELIJN KINGMA - 23rd May 1981 - LEEWARDEN, NL

Current Academic Positions

From September 2013: Lecturer in Philosophy, School of Humanities, University of Southampton, UK.

January 2011-December 2019: Socrates Professor in Philosophy & Technology in the Humanist Tradition, Department of Philosophy & Ethics, University of Eindhoven, NL [0.2 FTE].

Previous Academic & Research Positions

January 2013-August 2013: Teaching & Research Associate, Department of History & Philosophy of Science, University of Cambridge, UK.

January 2010-January 2013: Post-Doctoral Research Fellow, Centre for Humanities and Health/Department of Philosophy, King's College London, UK.

September 2008-August 2009: Post-Doctoral Training Fellow, Department of Clinical Bioethics, National Institutes of Health (NIH), Bethesda MD, USA.

Educational History

October 2005-August 2008: PhD, Department of History & Philosophy of Science, University of Cambridge, UK. Title: *Health and Disease, Defining our Concepts*. Supervised by Tim Lewens.

October 2004-June 2005: MPhil in History and Philosophy of Science and Medicine, University of Cambridge, UK. *First Class Degree*.

January 2001-September 2004: Drs (= BSc & MSc) Psychology, University of Leiden, the Netherlands. Specialisation: Cognitive & Neuropsychology. *Cum Laude*.

September 1999-September 2004: Drs (= BSc & MSc) Clinical Medicine, University of Leiden, the Netherlands.

Research Grants, Prizes & Awards

2013-2015: University of Southampton 'Adventures in Research' Award (with Dr Fiona Woollard). Project: 'Taking Pregnancy Seriously: in Metaphysics, Ethics and Epistemology'. (£6,000).

2014: University of Southampton Interdisciplinary Ethics Centre, Grant for 'Taking Pregnancy Seriously in Ethics' workshop (with Dr Fiona Woollard). (£1,000).

2005-2008: Wellcome Trust PhD Studentship. Project: 'A Philosophical Account of Health and Disease'. (appx. £60,000).

2005-2008: Cambridge European Trust Award (£9,000).

2005: Royal Dutch Medical Society 'Dick Held' Junior Research Award (€1,250).

2004-2005: Dutch 'Talent Fund' Scholarship for master degree abroad (€18,500).

2004-2005: Cambridge European Trust Award (£3,000).

2004-2005: Leiden International Study Fund (€2,250).

2002: Leiden University Medical Centre Excellent Student Research Prize (€3,620).

Primary Research Interests

Philosophy of Medicine, Philosophy of Science, Bioethics

Areas of Competence

Philosophy of Biology, Philosophy of Mind, Feminism and Feminist Philosophy

Teaching Record

Lecturing: Courses in Philosophy of Medicine, Philosophy of Science, Bio- and Research Ethics, Feminism and Feminist Philosophy.

Doctoral Supervision: Supervised one PhD student to Completion (as one of two Supervisors). Thesis title: "*Evidence Based Curative Health Promotion*". Defended 18 November 2011, University of Wageningen, NL.

Masters Supervision: Topics in Bioethics, Philosophy of Medicine, Philosophy of Psychiatry, Political Philosophy & Feminism.

Undergraduate Supervision: Topics in Bioethics, Philosophy of Psychiatry, Feminist Philosophy, Business Ethics and Metaphysics.

Organisation of Scientific & Interdisciplinary Meetings (Selection)

- 18 June 2014: *Workshop* ‘Taking Pregnancy Seriously in Ethics and Epistemology I’. Department of Philosophy/Southampton Ethics Centre, UK. (*Main Organiser*)
- 7 December 2012: *Conference* ‘Boorse and Commentators’, King’s College London, Department of Philosophy/Centre for the Humanities and Health, UK. (*Initiator and sole organiser*)
- 21 September 2012: *Inaugural Symposium* ‘Design for Health Promotion’, Eindhoven University of Technology, the Netherlands. (*Initiator and sole organiser*)
- 18 March 2011: *Interdisciplinary Workshop* ‘Personhood and Identity in Medicine’, King’s College London, Dpt of Philosophy/Centre for Humanities and Health, UK. (*Main organiser*)
- 10 September 2010: *Interdisciplinary Workshop* ‘Concepts of Health and Disease’, King’s College London, Dpt of Philosophy/Centre for Humanities and Health, UK. (*Main organiser*)

External Service

- Member of Scientific Committee, ERC Starting Grant “Philosophy of Pharmacology: Safety, Statistical Standards and Evidence Amalgamation” (2015-2019).
- External Examiner of PhD Thesis, University of Louvain/Leuven (2014).
- External Examiner of MPhil Essays, Department of History and Philosophy of Science, University of Cambridge, UK (2011, 2014).
- Grant Evaluator, Research Foundations Flanders (FWO); Netherlands Institute for Advanced Study in the Humanities (NIAS).

Internal/University Service

- Study Abroad Coordinator: Philosophy Department, University of Southampton. (From September 2014).
- Women In Science and Technology (WISet) Steering Group: Member, University of Southampton. (From January 2014).
- Visiting Speaker & Research Day Coordinator: Philosophy Department, University of Southampton. (From September 2013).
- Departmental Working Parties: MA revision (from November 2013); Women in Philosophy Guidelines Implementation (from January 2014). University of Southampton.
- Seminar Organiser: Internal Work in Progress Seminars (March 2012-September 2012) & Philosophy of Medicine Biweekly Seminar Series (January 2010-April 2013), Philosophy Department/Centre for Humanities and Health, King’s College London, UK.
- PostDoc Representative, Centre for Humanities and Health Board, King’s College London, UK. (2012)
- PhD Representative, Department of History & Philosophy of Science Board, University of Cambridge, UK. (October 2006-September 2007)

Editorial and Refereeing Work

- Editor: *Journal for Evaluation in Clinical Practice*, Special issue in the philosophy of medicine (2012, 2013 & 2014)
- Reviewer: *British Journal for the Philosophy of Science*; *Synthese*; *Journal of Applied Philosophy*; *Philosophy, Psychiatry & Psychology*; *Biosocieties*; *Theoretical Medicine and Bioethics*; *International Studies in the Philosophy of Science*; *Erkenntniss*; *Preventive Medicine*; *TOPOI*; *British Journal for Undergraduate Philosophy*, *Studies in the History and Philosophy of Biological and Biomedical Sciences*, *Journal of Medicine and Philosophy*.

Project Management

Before embarking on a career in philosophy, I designed and led a multi-departmental research project in clinical medicine & neuropsychology as a fourth-year medical student (2002-2004). The project would go on to include over 200 human research participants. I designed the research tools and database, passed ethics review, oversaw the inclusion of the first 50 participants and managed a team of student assistants before handing the project over to a psychiatrist whose (eventual) PhD would be based on this project.

Career Breaks

- 27 May – 1 September 2013: Maternity Leave (3 months)
- 1 June – 3 October 2011: Maternity Leave (4 months)

Appendix: All on-going and submitted grants and funding of the PI (Funding ID)
Mandatory information (does not count towards page limits)

On-going Grants

<i>Project Title</i>	<i>Funding source</i>	<i>Amount (Euros)</i>	<i>Period</i>	<i>Role of the PI</i>	<i>Relation to current ERC proposal¹</i>
Taking Pregnancy Seriously in Metaphysics, Ethics and Epistemology	University of Southampton	~ 8.000,- (£ 6.000)	November Jan 2014 – Oct 2015	Co-investigator with Dr Woollard; co-organising four workshops	Seed funding; workshops to refine ideas and build network
n/a					
n/a					

Grant applications

<i>Project Title</i>	<i>Funding source</i>	<i>Amount (Euros)</i>	<i>Period</i>	<i>Role of the PI</i>	<i>Relation to current ERC proposal²</i>
n/a					
n/a					
n/a					

¹ Describe clearly any scientific overlap between your ERC application and the current research grant or on-going grant application.

Section c: Early achievements track-record (max. 2 pages)

As well as an outstanding academic pedigree and track-record, I bring three unique skills to the project. First: my multi-disciplinary background. I have Master's level and above degrees and experience in clinical medicine, psychology, philosophy of science and bioethics. This puts me in a unique position to oversee this research project, which engages in fundamental philosophical analysis in close engagement with the life sciences. Second: the breadth of my publication and dissemination record which extends from the highest quality specialist journals in my field to international medical journals, professional midwifery publications, newspapers, magazines, blogs and radio appearances. In combination with my outstanding presentation skills, this makes me very well-qualified to deliver on both the high quality academic promise of this project, as well as its knowledge transfer and engagement aspects. Third, the ability to achieve original and high quality performance in a new area in a short period of time; throughout my career I have shown a rare ability to progress across disciplinary boundaries, and I have published in international journals in each of them. None of my publications have my PhD supervisor as co-author.

Highlighted Publications (5)

Kingma, E. (2007) '**What is it to be healthy?**' *Analysis*; 67, 128-133.

- Published in one of the top ten general philosophy journals.
- Written and accepted within two years' of my first starting to study philosophy.
- 44 Citations (Google Scholar, 29 January 2015).
- Regarded by many (including Boorse himself) as the most devastating criticism of Boorse's seminal (1977) account of Health and Disease.

Kingma, E. (2010a) '**Paracetamol, Poison and Polio; why Boorse's account of function fails to distinguish health and disease**' *British Journal for the Philosophy of Science*; 61, 241-264.

- Published in one of the world's top two Philosophy of Science Journals.
- On that journal's most downloaded list.
- 25 Citations (Google Scholar, 29 January 2015).
- Sparked its own in-print debate with two responses (Hausman, 2011; Garson & Piccinini, 2014) and one reply (Kingma 2015) in that same journal.

Kingma, E. (2010b) '**Home Birth: distinguishing rights and interests**' [Correspondence] *The Lancet*; 376, 1298.

- Evidence of my ability to publish in different high quality disciplinary venues
- Sparked invitations to speak at medical conferences and to write further articles on this topic in medical and midwifery journals (e.g. Kingma, 2011c)

Kingma, E., Chisnall, B. & McCabe, MM. (2011a). '**Interdisciplinary Workshop on Health and Disease: report**'. *Journal of Evaluation in Clinical Practice*; 17, 1018-1022.

- Report on the pioneering interdisciplinary workshop methodology that I developed.

Kingma, E. (2014) '**Naturalism about Health and Disease: adding nuance for progress**'. *Journal for Medicine and Philosophy* (special issue on health and disease); 39, 590-608.

- Invited Paper for Special Issue based on a 2012 Hamburg Conference; both at the conference and in print I am the *only* junior scholar to appear alongside *all* the established names on philosophy of health and disease.

Other Publications (selection)*Short Books*

Kingma, E. (2012a) '*Health and Health Promotion*' (Inaugural Lecture). Eindhoven. ISBN 978-90-386-3248-3.

Book Chapters (selection)

Kingma, E. & Banner, N. (2014) 'Liberating Practice from Philosophy: a critical examination of values-based practice and its underpinnings' In: Loughlin, M. (Ed.) *Debates in Values-based Practice: Arguments for an Against*. Cambridge: Cambridge University Press.

Kingma, E. (2013) 'Naturalist Accounts of Disorder' In: Fulford, K.W.M., Davies, M., Graham, G.; Sadler, J., Stanghellini, G. & Thornton, T. (Eds.) *Oxford Handbook of Philosophy and Psychiatry*. Oxford: OUP.

Kingma, E. (2012b) 'Health and Disease: social constructivism as a combination of naturalism and normativism' In: Carel, H. & Cooper, R. (Eds) *Health, Illness and Disease: Philosophical Essays*. Durham: Acumen Publishing

Philosophy Journals (selection)

Kingma, E. (2015) 'Situation-Specific Disease and Dispositional Function: reply to Hausman' *British Journal for the Philosophy of Science*. doi: 10.1093/bjps/axu041

Kingma, E. (2011b) 'What is Philosophy of Medicine?' *Paradigmi* (Invited Paper in Special Issue on the Philosophy of Medicine), 11-28.

Medical Journals (selection)

Kingma, E. (2013) 'Tuchtzaak Verloskundigen Grote Misser' [Court Case Midwives Big Mistake]. *Medisch Contact*, 40: 2020-22.

Kingma, E. (2012e) 'Wie beslist over de plaats van bevalling? Morele rechten en plichten rond the bevalling.' [Who decides about the place of birth? Moral rights and duties surrounding delivery]. *Tijdschrift voor Verloskunde [Dutch Journal for Midwifery]*.

Kingma, E. (2011c) 'The Lancet's Risky Ideas: rights, interests and home-birth' *International Journal for Clinical Practice*; 65, 918-920.

Kingma, E.M., van Duijn, E., Timman, R., van der Mast, R.C. & Roos, R.A.C. (2008) 'Behavioural Problems in Huntington's Disease using the Problem Behaviours Assessment' *General Hospital Psychiatry*; 30, 155-61.

Newspapers & Magazines (selection)

Kingma, E. (2013). 'Improving our thinking'. *AIMS Journal*, 25 (2), -. <http://tinyurl.com/p8b6xzz>

Kingma, E. (2012) 'Vrouwenquotum overwint vooroordelen' [Women's quota conquer prejudice] *NRC Handelsblad* [Dutch national newspaper] 8 November.

Kingma, E. (2012) 'Wie beslist over de plaats van bevallen?' [Who decides about the place of birth?] *Trouw* [Dutch national newspaper] 18 July.

Public Lectures, Invited Talks (a selection of the most recent)

2014:

'The ethics of home birth and informed decision making', Home Birth Summit III, Seattle, WA, USA. (Sep).

'The limits of naturalism: health, disease and values'. Brocher Summer Academy in the Ethics of Global Population Health 2014, The Brocher Foundation, Geneva, CH. (June).

2013

'Ethics and Economics in the organisation of our birth systems', Midwifery Today/Birthrights in the European Union Conference, Blankenberge, BE. (Nov).

'Rechten en Belangen rond de Geboorte: een filosofische analyse' [Rights and Interests in Birth: a philosophical analysis], Annual Conference; Dutch Society for Obstetrics and Gynaecology, Arnhem, NL. (Nov).

2012

'Overdosing on Paracetamol – still a problem (reply to Hausman)', Christopher Boorse and the philosophy of medicine symposium, University of Hamburg, DLD. (Nov).

'Disease and Dysfunction', British Society for the Philosophy of Science Meeting, London, UK. (Oct).

'Health and Health Promotion', Inaugural Lecture, Socrates Professorship in Philosophy and Technology in the Humanist Tradition, Eindhoven University of Technology, NL. (Sep).

Video: <https://www.youtube.com/watch?v=qFhNjLCrrZ4&feature=youtu.be>

'Three suggestions for improving Evidence Hierarchies', AHRC panel on Mechanisms and the Evidence, Hierarchy, Evidence and Causality in the Sciences Conference, University of Canterbury, UK. (Sep).

'The relation between science and policy', Human Rights in Childbirth Conference, The Hague, NL. (Jul).

'Mental Disorder is Not Evolutionary Dysfunction', Philosophy Department, University Bristol, UK (Mar).

2010

'Concepts of Health and Disease: beyond naturalism and normativism', University of Cambridge History and Philosophy of Science Departmental Seminar, Cambridge, UK.

'Health & Disease: reconciling naturalism and normativism', Dalhousie Philosophy Department Colloquium, Halifax, CA.

'The failures of Naturalism: Boorse's Biostatistical account of Health and Disease', Harvard University Program in Ethics and Health invited talk, Boston/Cambridge, USA.

Radio Appearances (selection)

December 2014: *ABC (Australian Broadcasting Cooperation)*'s 'The Philosopher's Zone': Episode: 'Metaphysics of Pregnancy'.

<http://www.abc.net.au/radionational/programs/philosopherszone/metaphysics-of-pregnancy/5940086>

July 2012: *BBC Radio 4*: Interviewed for Program 'Reclaiming the Sceptic'.

<http://www.bbc.co.uk/programmes/b01kkp5v>

Prizes and Awards – see CV