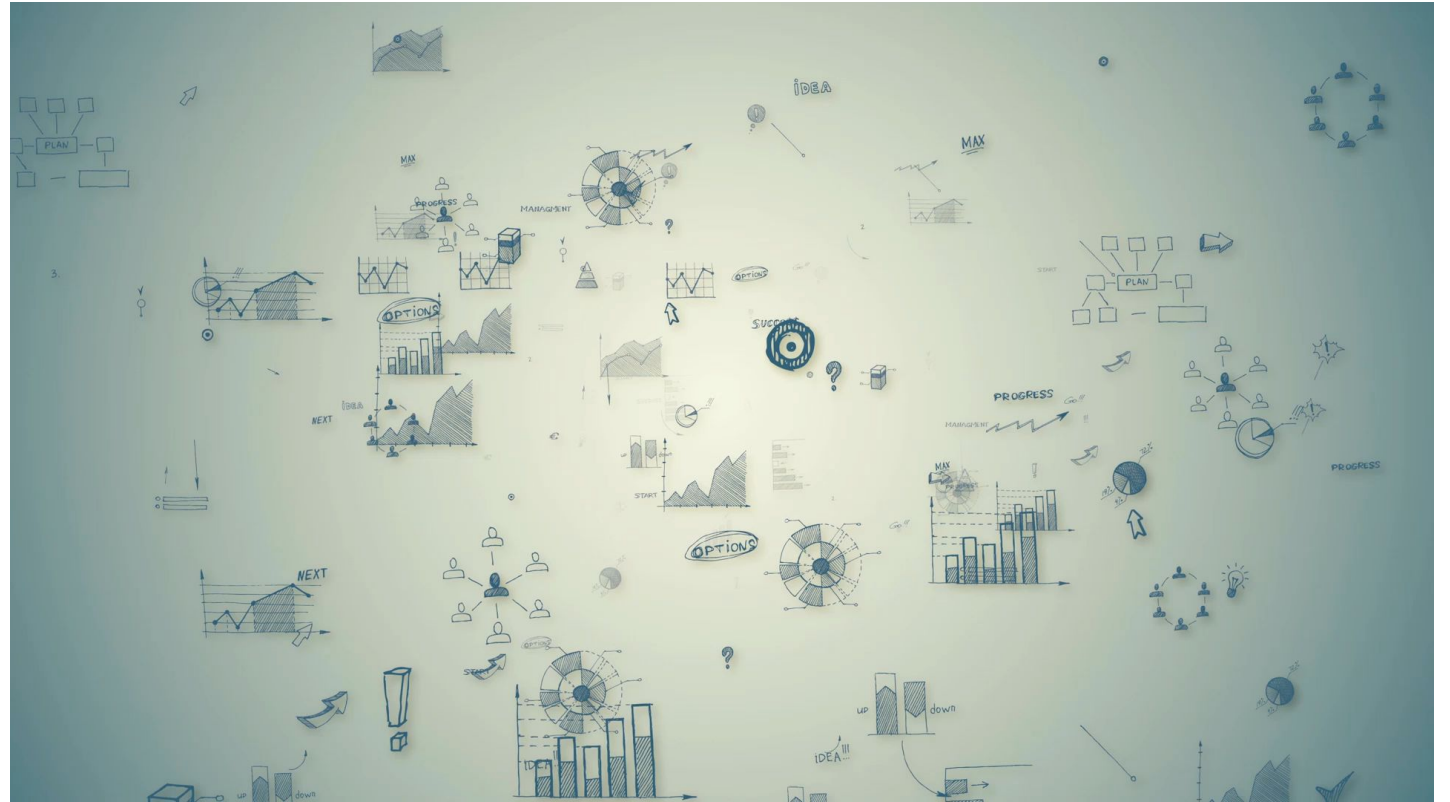


Rethinking Master's and Phd Theses



Ideas for front-end developments

30th September 2021

Connie Clare
Aminah Ghorbani

Amineh's general observations & perspectives:

- **Full text and metadata needs to be widely accessible** to ensure that highly valuable and impactful Masters degree research is not hidden from the world.
- **TU Delft Masters theses are some of the highest standard worldwide** (often comparable to doctoral theses) but **poor findability on Google/Google Scholar means poor visibility and impact for students.** This needs to be improved to benefit both students and supervisors.
- More emphasis needed on Masters theses since they are not always supported by peer-reviewed publications and, therefore, do not always undergo the stringent checks that PhD theses do.

Example demonstrated by Amineh:

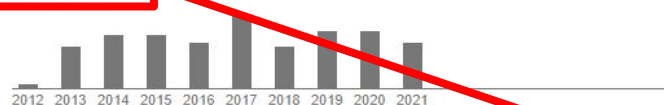
- 30 Master's students have cited her peer-reviewed publication:
https://scholar.google.com/citations?view_op=view_citation&hl=en&user=feLO3B8AAAAJ&citation_for_view=feLO3B8AAAAJ:roLk4NBRz8UC

MAIA: a framework for developing agent-based social simulations

[HTML] from surrey.ac.uk

Authors	Amineh Ghorbani, Pieter Bots, Virginia Dignum, Gerard Dijkema
Publication date	2013/3/31
Journal	Journal of Artificial Societies and Social Simulation
Volume	16
Issue	2
Pages	9
Description	In this paper we introduce and motivate a conceptualization framework for agent-based social simulation, MAIA: Modelling Agent systems based on Institutional Analysis. The MAIA framework is based on Ostrom's Institutional Analysis and Development framework, and provides an extensive set of modelling concepts that is rich enough to capture a large range of complex social phenomena. Developing advanced agent-based models requires substantial experience and knowledge of software development knowledge and skills. MAIA has been developed to help modellers who are unfamiliar with software development to conceptualize and implement agent-based models. It provides the foundation for a conceptualization procedure that guides modellers to adequately capture, analyse, and understand the domain of application, and helps them report explicitly on the motivations behind modelling choices. A web-based application supports conceptualization with MAIA, and outputs an XML file which is used to generate Java code for an executable simulation.

Total citations Cited by 116



Scholar articles MAIA: a framework for developing agent-based social simulations
A Ghorbani, P Bots, V Dignum, G Dijkema - Journal of Artificial Societies and Social Simulation, 2013
Cited by 116 Related articles All 13 versions

MAIA: a framework for developing agent-based social simulations

Search within citing articles

The complexities of agent-based modeling output analysis
JS Lee, T Filatova, A Ligmann-Zielinska... - Journal of Artificial... 2015 - econstor.eu
The proliferation of agent-based models (ABMs) in recent decades has motivated model practitioners to improve the transparency, replicability, and trust in results derived from ABMs. The complexity of ABMs has risen in stride with advances in computing power and ...
☆ ⓘ Cited by 230 Related articles All 19 versions ⓘ

[PDF] econstor.eu

Structuring qualitative data for agent-based modelling
A Ghorbani, G Dijkema... - Journal of Artificial... 2015 - jasss.soc.surrey.ac.uk
Using ethnography to build agent-based models may result in more empirically grounded simulations. Our study on innovation practice and culture in the Westland horticulture sector served to explore what information and data from ethnographic analysis could be used in ...
☆ ⓘ Cited by 42 Related articles All 7 versions ⓘ

[HTML] surrey.ac.uk

nADICO: A nested grammar of institutions
C Franz, MK Purvis, M Nowostawski... - on Principles and... 2013 - Springer
We propose a refined institutional scheme derived from Crawford and Ostrom's Grammar of Institutions (GoI) that has been refined to provide a more comprehensive representation of conventions, norms, and rules, which extends to describing institutions in more detail but ...
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[PDF] psu.edu

A coupled flood-agent-institution modelling (CLAIM) framework for urban flood risk management
YA Abebe, A Ghorbani, I Nikolic, Z Vojinovic... - Environ. Model... 2019 - complexevo.org
In this paper, we describe a modelling framework that allows the integration of human and physical components of flood risk. Within this framework, flood risk management is conceptualized as a coupled human-flood system. The human subsystem includes ...
☆ ⓘ Cited by 31 Related articles All 12 versions ⓘ

[PDF] complexevo.org

A conceptual framework for the analysis of the effect of institutions on biofuel supply chains
JA Moncada, Z Lukasz, M Junginger, A Faaij... - Applied Energy, 2017 - Elsevier
The economic performance of biofuels supply chains depends on the interaction of technical characteristics as technological pathways and logistics, and social structures as actor behavior, their interactions and institutions. Traditional approaches focus on the technical ...
☆ ⓘ Cited by 26 Related articles All 23 versions ⓘ

[HTML] sciencedirect.com

AMASON: Abstract meta-model for agent-based simulation
E Klügl, E Davidsson - German Conference on Multiagent System... 2013 - Springer
The basic prerequisite for methodological advance in Multi-Agent Based Modelling and Simulation is a clear, ideally formally-grounded, concept of our subject. A commonly accepted, implementation-independent meta-model may improve the status of MABS as a ...
☆ ⓘ Cited by 26 Related articles All 7 versions ⓘ

Structuring socio-technical complexity: Modelling agent systems using institutional analysis
A Ghorbani - 2013 - researchgate.net

[PDF] researchgate.net

1 or 2 PhD theses but no pdf versions of MSc theses from TU Delft repository are shown in the list, only those which have been published elsewhere, e.g. Taylor & Francis, Researchgate.

Aims and objectives:

- To make MSc and Phd theses more accessible/visible internally and externally.
- To present theses in a more innovative way so that students can feel proud of how the work is presented on their university website.
- To make the process of publishing theses (and data/code) more seamless and streamlined for students.

Research questions:

- Are there any Universities that publish theses with a functionality beyond metadata & pdf download?
- What front-end developments and features could be implemented to present theses in a more innovative way?

EXAMPLE DATABASES FOR e-THESES & DISSERTATIONS	NARCIS - National Academic Research and Collaborations Information System (Netherlands).
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Networked Digital Library of Theses and Dissertations	OpenDOAR
Open Dissertations	PQDT Open
ProQuest Dissertations & Theses Global (incl. UK & Ireland)	Savifadok: digital repository of South Asian Studies
American Doctoral Dissertations	South African National ETD Portal
ARGO: National Documentation Centre Greece	SwePub
Trove: collections from Australian libraries, universities, museums, galleries and archives	Tesis Doctorales en Red (TDR)
Biblioteca Digital Brasileira de Teses e Dissertações - BDTD - Inicio	Theses Canada (Canada).
Hong Kong University Theses Online (Hong Kong).	Thèses en Ligne TEL (France).


Front-end development ideas and features

- Metadata: Linking to author and supervisor research overview
- Metrics: views, downloads, citations & altmetrics
- Visualisation: e-book format
- Figures: main figures slideshow, embedded media and simulations
- Graphical/media abstract
- Word clouds
- Downloading in extra formats (html, epub, mobi)
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- Bibliography maker

Metadata: authors/supervisors

1 - 50 out of 1,839 Sort by: Award year

2021

[Developing a conversation about identifying community needs to embrace well-being through social prescribing interventions](#) 
Author: Thomas, G., 27 Sep 2021
Supervisor: Lynch, M. (Supervisor) & Spencer, L. (Supervisor)
Student thesis: Masters by Research

[Impedimetric biosensor designed for the multiplex detection of cortisol and human growth hormone](#) 
Author: Ashton, R., 27 Sep 2021
Supervisor: Gwenin, C. (Supervisor)
Student thesis: Doctor of Philosophy

[An Exploration of the potential markers of literacy difficulties in Welsh-English Bilinguals](#) 
Author: Owen, C., 24 Sep 2021
Supervisor: Thomas, E. (Supervisor)
Student thesis: Doctor of Philosophy

[Discourse and Dementia: Using positioning theory to explore whether an Appreciative Inquiry approach supports people living with dementia to challenge discourse](#) 
Author: Davies Abbott, I., 24 Sep 2021
Supervisor: Huws, J. (Supervisor) & Williams, S. (Supervisor)
Student thesis: Doctor of Philosophy

[Hospital Acquired Pneumonia- What's the Score? A scoping review and original case study investigating the role of severity scoring indices in Hospital Acquired Pneumonia in the UK](#) 
Author: Peirson, M., 24 Sep 2021
Supervisor: Williams, S. (Supervisor), McKeon, D. (External person) (Supervisor), Hoare, Z. (Supervisor) & MacLeod, C. (Supervisor)
Student thesis: Masters by Research

- Allows you to distinguish between MSc and PhD theses
- Allows you to click through to read more about the author and supervisors

RESEARCH PORTAL > THESES > DISCOURSE AND DEMENTIA

Discourse and Dementia

Overview

- [Ian Davies Abbott](#)
- [School of Medical and Health Sciences](#)

Electronic versions

Documents

- [2021DaviesAbbottphd_no signature](#)
5.45 MB, PDF document

Research areas

- Dementia, Positioning, discourse, Appreciative Inquiry, Doctor of Philosophy

Abstract

Aims: Appreciative Inquiry is a change methodology, which is based on the hypothesis that there is a positive core in every system. People living with dementia experience discourse, which malignantly positions them within society, potentially leading to negative consequences for them. This study aims to adapt the Appreciative Inquiry approach by using the positive experiences of people living with dementia to inform a mechanism of change to positively influence the discourse of family members/carers of people living with dementia, healthcare workers and lay people.

[https://research.bangor.ac.uk/portal/en/theses/discourse-and-dementia\(06f69b65-a10f-4c05-98ed-a268e64d3f02\).html](https://research.bangor.ac.uk/portal/en/theses/discourse-and-dementia(06f69b65-a10f-4c05-98ed-a268e64d3f02).html)

<https://research.bangor.ac.uk/portal/en/theses/search.html>

Metadata: authors/supervisors

RESEARCH PORTAL > RESEARCHERS > IAN DAVIES ABBOTT

Mr Ian Davies Abbott

Lecturer in Healthcare Sciences (Mental Health Nursing)

Affiliations

- School of Medical and Health Sciences

Overview | Research outputs | Impact | Research activities | **Theses**

Research outputs (8)

- [Living in a care home during COVID-19: A case study of one person living with dementia](#) E-pub ahead of print
Research output: Contribution to journal > Article
- [Dementia care from behind the mask? Maintaining well-being during COVID-19 pandemic restrictions: Observations from Dementia Care Mapping on NHS mental health hospital wards in Wales](#) E-pub ahead of print
Research output: Contribution to journal > Article
- [Today we Talked: A novel approach to overcoming barriers to sexual safety on mental health wards](#) Published
Research output: Contribution to journal > Article

[View all](#)

Prof. activities and awards (2)

- [29th Alzheimer Europe Conference](#)
Activity: Participating in or organising an event > Participation in conference
- [Supporting Continuing Professional Development](#)
Activity: Talk or presentation > Oral presentation

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Details

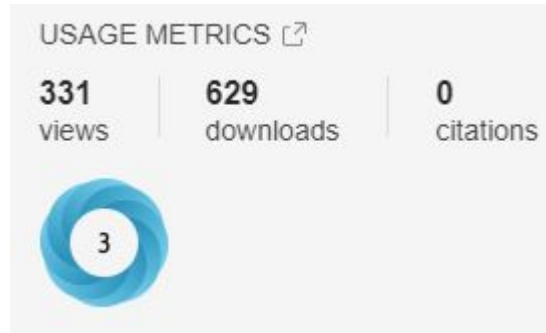
Original language	English
Awarding Institution	Bangor University
Supervisors/Advisors	Jaci Huws (Supervisor) Sion Williams (Supervisor)
Thesis sponsors	Bangor University
Award date	24 Sep 2021

- Clicking author or supervisor name could take you to their profile in Pure or [Research Portal Page](#)(?) to see detailed overview of research outputs
- **IMPORTANT: Link to supervisor page could provide an overview of all of the MSc and PhD they have supervised in the past.** There is currently no overview of this and it would be useful for supervisors to have these listed to direct students to relevant theses.

[https://research.bangor.ac.uk/portal/en/researchers/ian-davies-abbott\(9b0c036f-08a5-41cc-af53-5108a096330c\).html](https://research.bangor.ac.uk/portal/en/researchers/ian-davies-abbott(9b0c036f-08a5-41cc-af53-5108a096330c).html)

Metadata: Metrics

- Views, downloads, citations, altmetrics



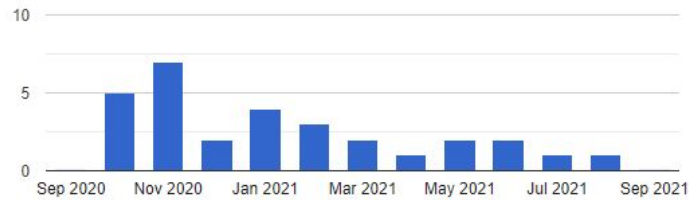
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Download activity - last 12 months



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[10](#) [25](#) [50](#) [all](#)

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One-carbon metabolism and epigenetic programming of mammalian development

 Tools

Clare, Constance E (2021) *One-carbon metabolism and epigenetic programming of mammalian development*. PhD thesis, University of Nottingham.

 PDF (Corrected thesis following examination on December 3rd 2020) (Thesis - as examined) - Requires a PDF viewer such as [GSview](#), [Xpdf](#) or [Adobe Acrobat Reader](#). Available under Licence [Creative Commons Attribution](#).
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1
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Abstract

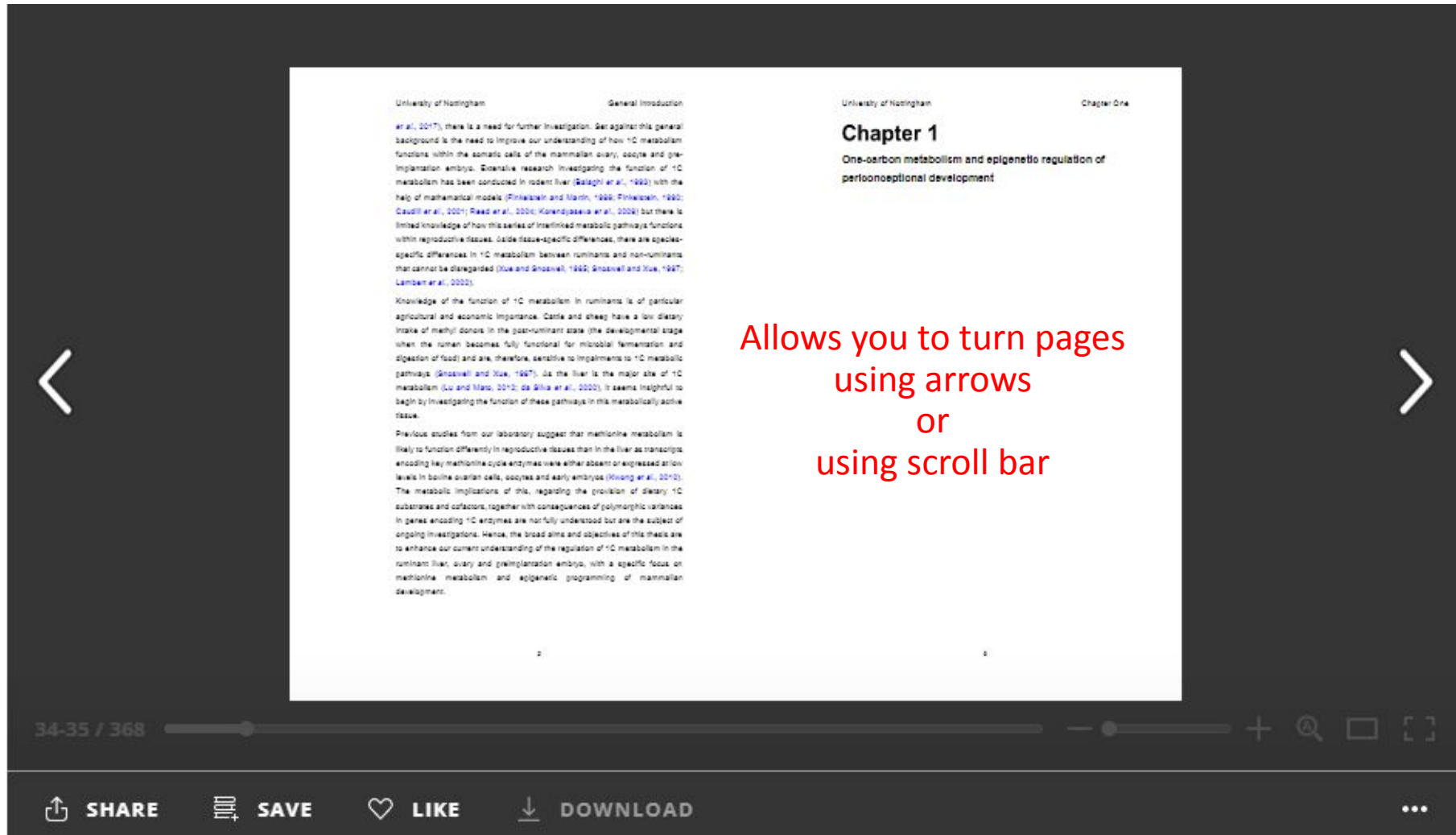
One-carbon (1C) metabolism comprises a series of integrated metabolic pathways, including the linked methionine-folate cycles, that provide methyl groups for the synthesis of biomolecules and the epigenetic regulation of gene expression via chromatin methylation. Most of the research investigating the function of 1C metabolism pertains to studies undertaken in the rodent liver. Comparatively little is known about the function of 1C metabolism in reproductive and embryonic cells, particularly in domestic ruminant species. Periconceptional dietary deficiencies in 1C substrates and cofactors are known to lead to epigenetic alterations in DNA methylation in genes that regulate key developmental processes in the embryo. Such modifications can have negative implications on the subsequent development, metabolism and health of offspring. This thesis sought to improve current understanding of the regulation of 1C metabolism in the ruminant liver, ovary and preimplantation embryo through in vivo and in vitro nutritional supplementation experiments coupled with metabolomic, transcriptomic and epigenetic analyses.

The first part of this thesis (Chapter 2) assessed the metabolic consequences of dietary methyl deficiency using novel mass spectrometry-based methods that were developed for the quantification of B vitamins, folates and 1C-related amines in sheep liver. This study provided the first comparison of the relative abundance of bioactive 1C metabolites in liver harvested from methyl deficient sheep relative to a control study population of abattoir derived sheep. Relevant reductions in dietary methyl availability led to significant alterations in hepatic 1C metabolite concentrations. Large natural variations in the hepatic

Brainstorm based
on Connie's PhD
thesis

<http://eprints.nottingham.ac.uk/id/eprint/64521>

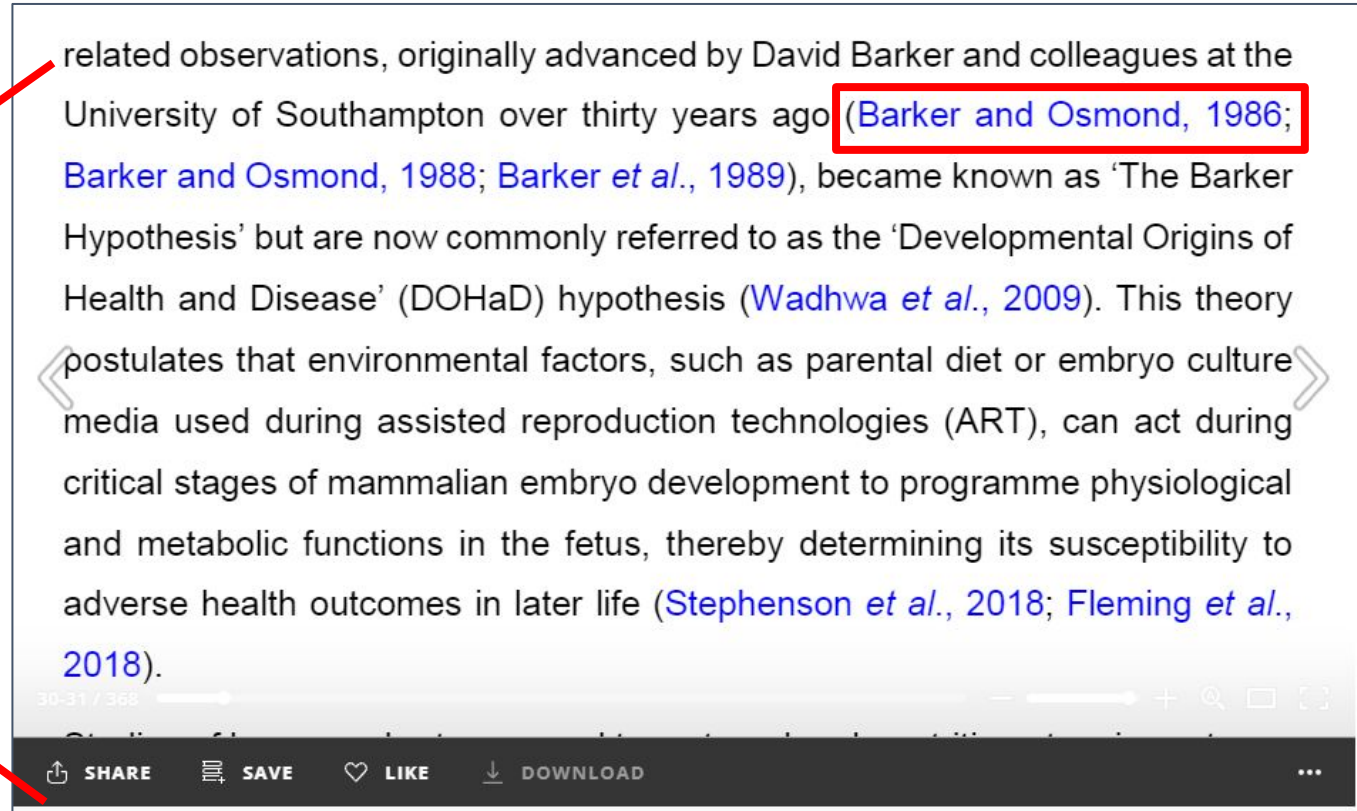
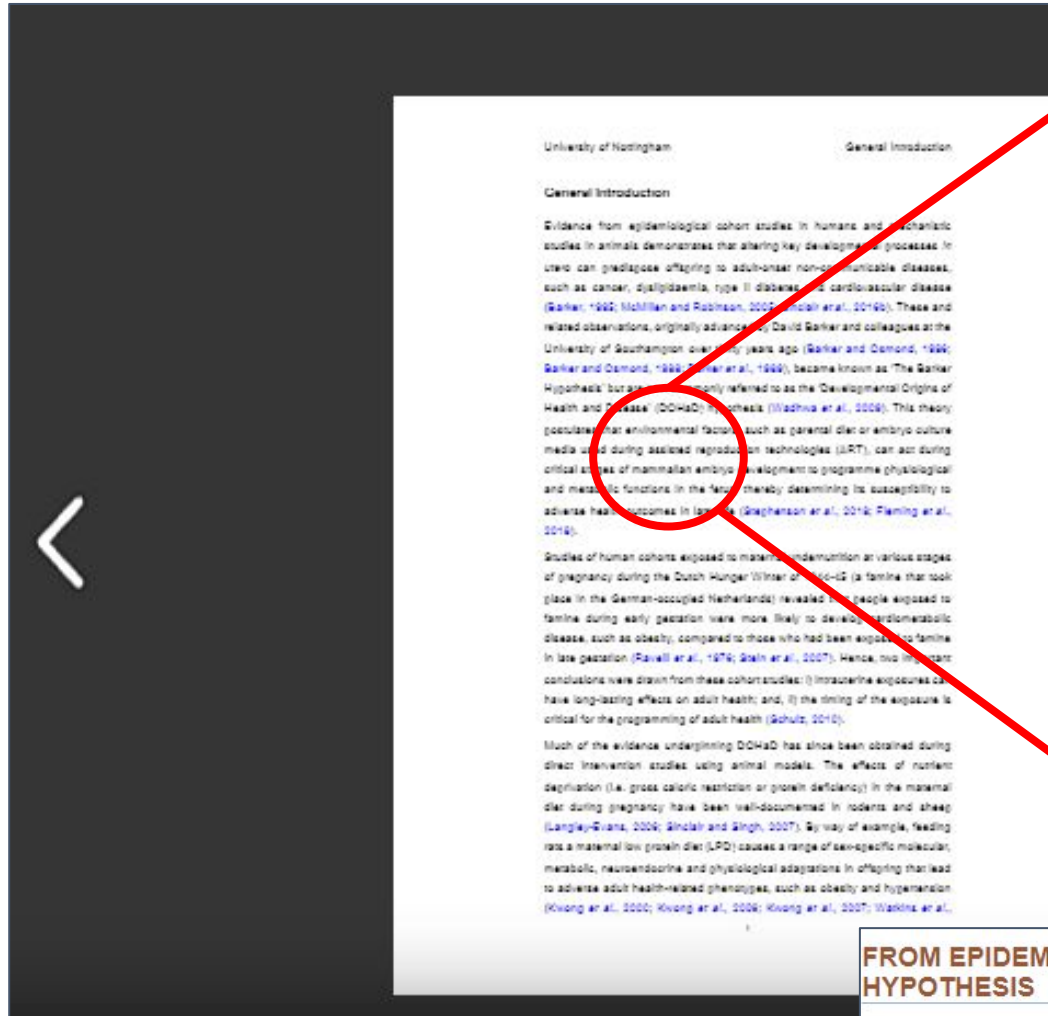
Text visualisation ideas: e-book (example using Issuu.com)



Allows you to turn pages
using arrows
or
using scroll bar

https://issuu.com/connieclare/docs/constance_emily_clare_phd_thesis_submission

Text visualisation ideas: double click to zoom



- Could the in-text references be clickable?

FROM EPIDEMIOLOGICAL OBSERVATIONS TO THE FETAL ORIGINS HYPOTHESIS

The Developmental Origins of Health and Disease (DOHaD) approach evolved from epidemiological studies of infant and adult mortality. A trio of articles in *The Lancet* by Barker and colleagues¹⁻³ perhaps the most influential early publications in this area that led to the fetal origins hypothesis (called "Barker's hypothesis"). There are many reviews of Barker's hypothesis, and one of the best provided by Barker himself, who summarized the genesis of the developmental origins hypothesis. Its main points are best described by quotes from these original sources, which we provide later.

Barker⁴ gives a personal account of a program of epidemiological research of the geographic distributions

Go to:

Links

Cited in Books

Review Fetal nutrition and cardiovascular disease in adult life.
Barker DJ, Gluckman PD, Godfrey KM, Harding JE, Owens JA, Robinson JS
Lancet. 1993 Apr 10; 341(8850):938-41.
[\[PubMed\]](#) [\[Ref list\]](#)

Text visualisation ideas: Navigation by chapter

DETAILS **CHAPTERS**

One-carbon metabolism and epigenetic programming of mammalian development

Published on Sep 16, 2021

One-carbon (1C) metabolism comprises a series of integrated metabolic pathways, including the linked methionine-folate cycles, that provide... [See More](#)

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connieclare **FOLLOW**

Relevant figure

4 MIN READ **Methionine and epigenetic programming**
Pages 64-65

3 MIN READ **1.8 Working hypothesis**
Pages 66-67

3 MIN READ **2.1 Introduction**
Pages 69-70

One-carbon metabolism and epigenetic programming of mammalian development

Constance Emily Clare
BSc (Hons)

Thesis submitted in fulfillment of the requirements for the degree of
Doctor of Philosophy (PhD)

September 2020

The University of Nottingham
UNIVERSITY OF NOTTINGHAM - UK, USA - MALAYSIA
School of Biosciences
Sutton Bonington Campus
Loughborough
Leicestershire
LE12 9RD

1 / 368

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- Might not be relevant for MSc theses as they are much shorter, but chapters and sections could be downloadable.

https://issuu.com/connieclare/docs/constance_emily_clare_phd_thesis_submission

Text visualisation ideas: Navigation by table of contents or scroll bar

University of Nottingham Tables

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1.3.1 Homocysteine remethylation 20

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University of Nottingham Tables

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CHAPTER 1 CHAPTER 2 CHAPTER 3 CHAPTER 4

Text visualisation ideas: Navigation by figures/images, tables, other sources.

Figures (6)

Datasets

Equations (2)

References (42)

Cited By (120)

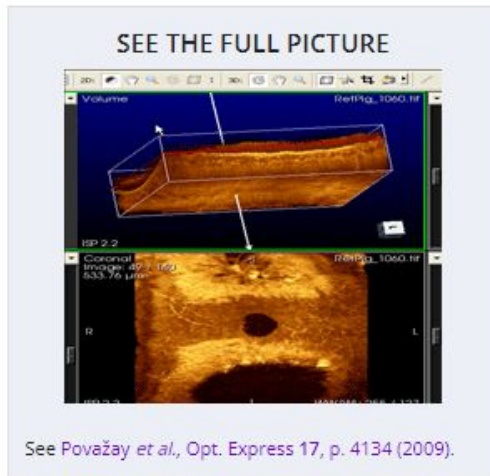
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Figures (6)

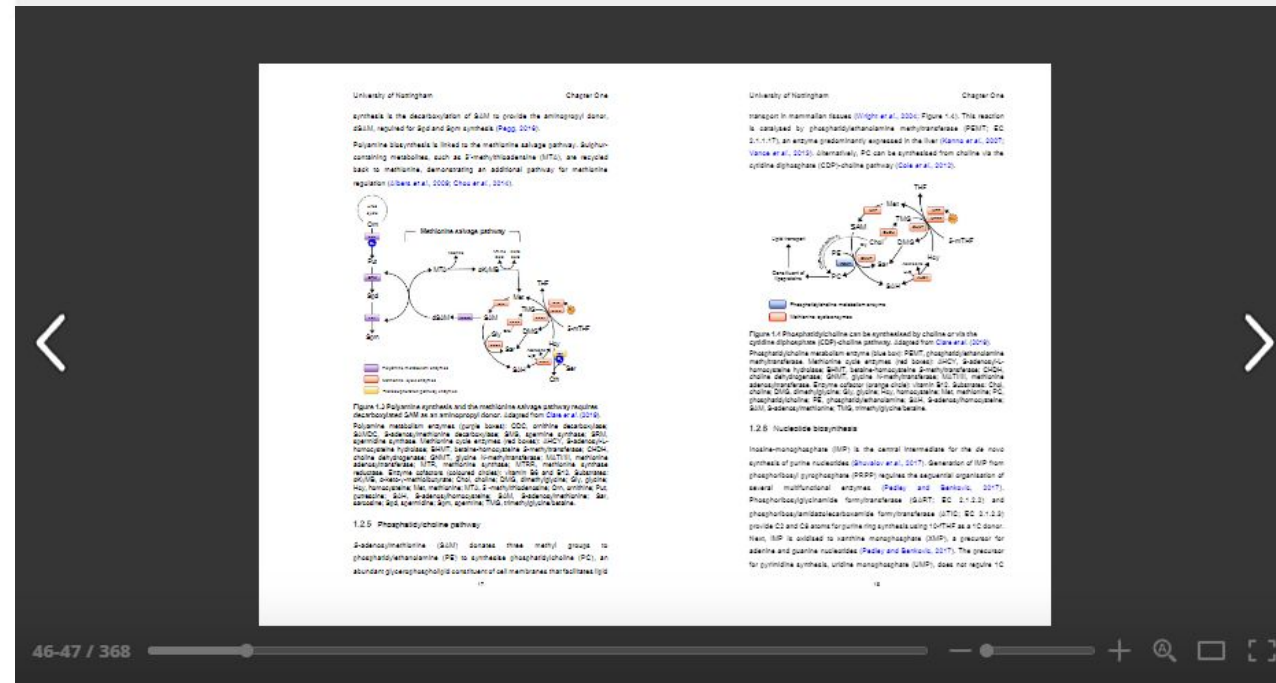


Main figures for thesis/chapters could be added to a slideshow at the top of the text view.



<https://www.osapublishing.org/isp.cfm>

Simulations or 3D images/models could be embedded within text/page?



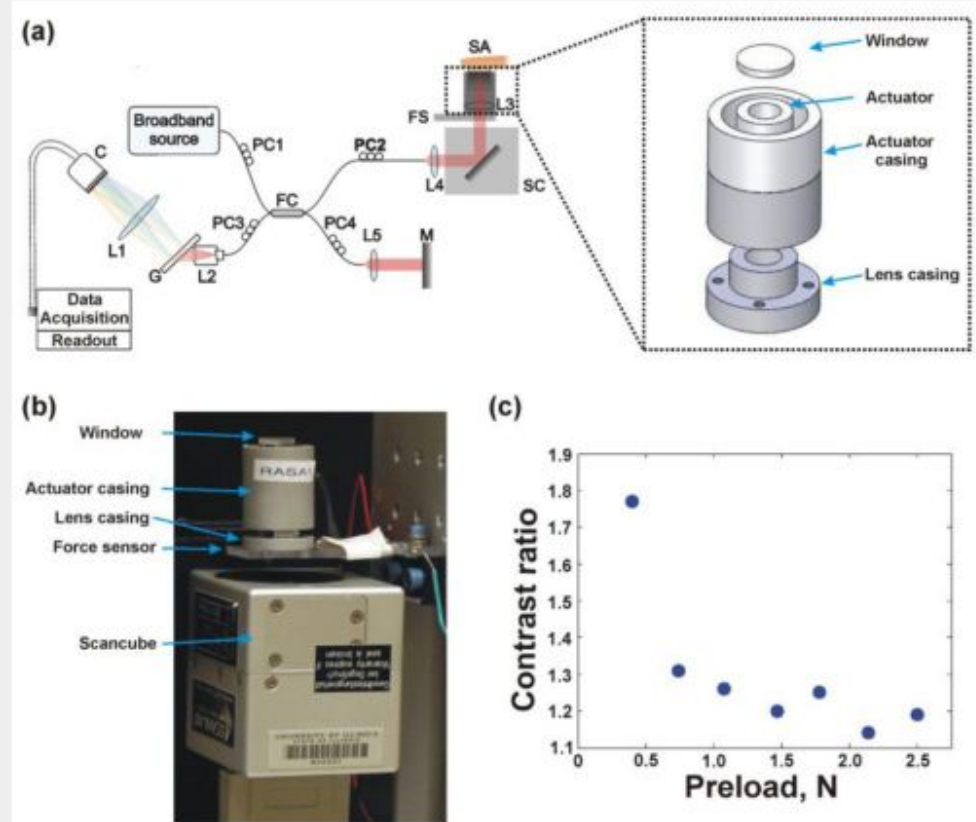


Fig. 1 (a) Schematic diagram of the OCE system; C: CCD camera, L1-L5: lenses, G: diffraction grating, PC1-PC4: polarization controllers, FC: 50/50 fiber coupler, M: mirror, FS: force sensor, SC: Scancube, SA: sample arm. A schematic of the sample arm is presented in the inset; (b) Photograph of the sample arm; and (c) Contrast ratio (ratio of strain rate magnitude) between stratum corneum and epidermis versus preload.

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- Clickable figures that are individually downloadable for reuse

Text visualisation ideas: Embedded media

Example of PhD student who made videos for each of her thesis chapters :)

<https://vimeo.com/showcase/3459242>

The image shows a screenshot of a PDF document with a video player embedded within it. The PDF content is from the University of Nottingham, Chapter One, and discusses demethylation machinery and DNA methylation analysis. The video player is positioned in the lower right quadrant of the page and displays a 2D dam-break benchmark dataset simulation. The video player interface includes a play button, a progress bar at 0:11 / 0:20, and a title 'The 2D dam-break benchmark dataset • mixing • 82!'. Below the video player, there are social media sharing options: SHARE, SAVE, LIKE, and DOWNLOAD. The entire screenshot is framed by a dark border with navigation arrows on the left and right sides.

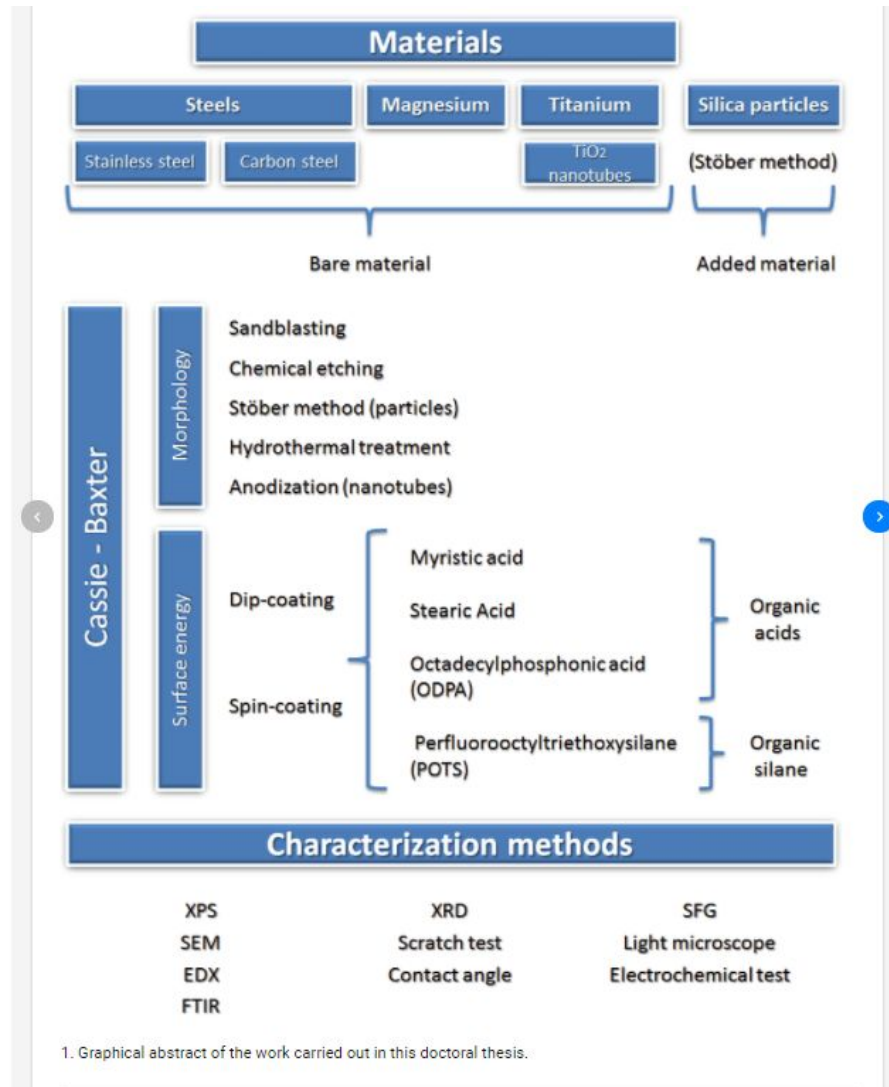
Example data collection on 4TU.ResearchData and YouTube simulations:

<https://doi.org/10.4121/c.5353691.v1>

https://www.youtube.com/playlist?list=PLb_klyJ6w5QihDIztSqN0GRhT7awNnibe

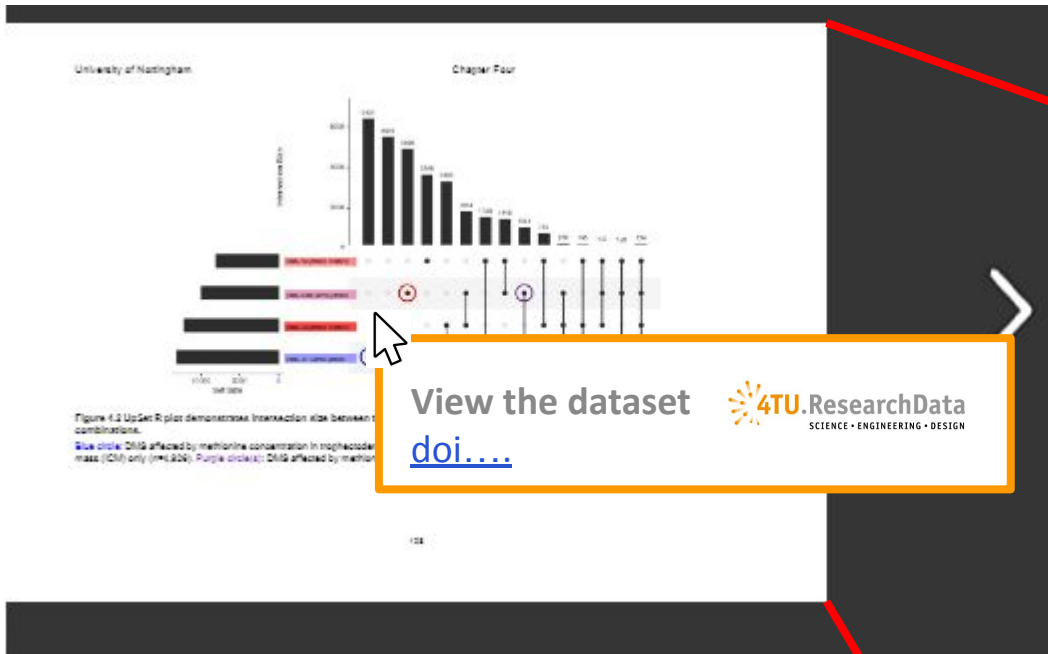
Text visualisation ideas: Graphical abstract

https://www.researchgate.net/publication/322627227_Functionalization_of_Steels_and_other_Metallic_Materials_with_Hydrophobic_Layers_-_Influence_on_Wetting_and_Corrosion_Resistance



This would be extra work for the researcher but it could be nice to provide space for a graphical/media abstract of the thesis that could feature on the main search page.

Text visualisation ideas: Figures linked to published data/code in 4TU.ResearchData



- Hover over figures to the underlying data and code that corresponds to Chapter or Figures as appropriate.
- A workflow might need to be implemented so that researchers upload the underlying data/code (as part of TU Delft policy) before they upload their thesis. This could be difficult to implement depending on the number of figures and datasets.

Parameter	Descripti...
Median sp...	Median of..
Mean dist...	Distance ..
Turning a...	Median of..

Table 1. Brief description of the twelve parameters calculated from the trajectory of the flies used in this paper.

A more detailed description is available at <http://dx.doi.org/10.6084/m9.figshare.844624>.

<https://f1000research.com/articles/3-176/v2>

Differentially Methylated CpGs from each pairwise comparison

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Version 2 Dataset posted on 22.01.2021, 19:21 by [Richard Emes](#), [Kevin D. Sinclair](#), [Connie Clare](#)

USAGE METRICS [↗](#)

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CATEGORIES

- [Animal Growth and Development](#)
- [Animal Breeding](#)
- [Animal Nutrition](#)
- [Agricultural and Veterinary Sciences not elsewhere classified](#)

KEYWORDS

[methylation](#) [RRBS](#)

LICENCE


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HISTORY

- **22.01.2021** - First online date, Posted date

Differentially methylated cytosines between groups were identified using the Chi-squared test in methylKit and annotated using the genomation package (Akalin et al., 2012; Akalin et al., 2015 [77, 78]). Results were filtered for 'in gene/promoter' to remove intergenic regions, and for a minimum difference of >20% methylation (Du et al., 2010; Slieker et al., 2015) [79, 80].

Text visualisation ideas: Preview of publications associated with theses

International Journal of Molecular Sciences 

Article

Interspecific Variation in One-Carbon Metabolism within the Ovarian Follicle, Oocyte, and Preimplantation Embryo: Consequences for Epigenetic Programming of DNA Methylation

Constance E. Clare ^{1,†}, Valerie Pestinger ^{1,†}, Wing Yee Kwong ^{1,†}, Desmond A. R. Tutt ², Juan Xu ^{1,†}, Helen M. Byrne ², David A. Barrett ², Richard D. Ames ^{1,†} and Kevin D. Sinclair ^{1,*}

<https://doi.org/10.3390/ijms22041838>

Interv. by MDPI, 2021, 22, 1838. <https://www.mdpi.com/journal/ijms>

Check for updates

Citation: Clare, C.E.; Pestinger, V.; Kwong, W.Y.; Tutt, D.A.R.; Xu, J.; Byrne, H.M.; Barrett, D.A.; Ames, R.D.; Sinclair, K.D. Interspecific Variation in One-Carbon Metabolism within the Ovarian Follicle, Oocyte, and Preimplantation Embryo: Consequences for Epigenetic Programming of DNA Methylation. *Int. J. Mol. Sci.* **2021**, *22*, 1838. <https://doi.org/10.3390/ijms22041838>

Academic Editor: Adhikari Animeshwar

Received: 20 January 2021
Accepted: 9 February 2021
Published: 12 February 2021

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Keywords: one-carbon metabolism; methionine; Assisted Reproduction Technologies (ART); embryo; Epigenetics; DNA methylation; genomic imprinting

1. Introduction

One-carbon (1C) metabolism refers to a series of interlinking and closely associated metabolic pathways that serve to provide methyl groups (1C units) for the de novo synthesis and/or methylation of purines and pyrimidines, biogenic amines, proteins, and phospholipids; all of which are critical for cellular function [1,2]. These cellular processes are particularly important during the periconceptual period, which witnesses sweeping epigenetic alterations to DNA and associated proteins during the latter stages of gametogenesis and early embryogenesis [3]. These epigenetic modifications initially enable

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Publications associated with this thesis

Clare CE, Grassington JH, Kwong WY and Sinclair KD (2019) One-Carbon Metabolism: Linking Nutritional Biochemistry to Epigenetic Programming of Long-Term Development. *Ann. Rev. J. Clin. Invest.* **7**: 263-87

Xu J, Clare CE, Grassington JH, Sinclair KD and Barrett DA (2020) Comprehensive and quantitative profiling of 5 vitamins. *J. Chromatogr. B*. **1159**: 112664

Clare CE, Pestinger V, Kwong WY, Tutt DAR, Xu J, Byrne HM, Barrett DA, Ames RD and Sinclair KD (2021) Interspecific variation in one-carbon metabolism within the ovarian follicle, oocyte and consequences for epigenetic programming of DNA methylation. *International Journal of Molecular Sciences*. In press.

Publications associated with BBSRC-funded PIPs

Clare C, Cruz M, Papadopoulos E, Savage J, Tegeris M, Wang Y, Witwolski I and Williams J (2018) *Engaging Researchers with Data Management: The Cookbook*. Open Book Publishers. doi:10.1067/OBP-0182

C. Clare (2019) *The Real World of Research Data: Zenodo*. <https://doi.org/10.5281/zenodo.3264173>

C. Clare (2020) *Sound bytes: alpha5 coding*. *Nature*. **581**(200). doi:10.1038/d41586-020-01666-7

Conference abstracts associated with PhD

Clare CE, Tutt D, Kwong WY and Sinclair KD (2019) Methionine, one-carbon metabolism and bovine preimplantation embryo development. 12th International Conference on One-Carbon Metabolism & Vitamins and Homocysteine: Understanding their role in health and disease from the womb to old age. Southern Catalonia, Spain, June 2019

Clare CE, Tutt D, Kwong WY and Sinclair KD (2020) Methionine, one-carbon metabolism and bovine preimplantation embryo development. Fertility 2020. Society for Reproduction and Fertility, Edinburgh, UK, January 2020

University of Nottingham Acknowledgements

Acknowledgements

I would like to express my gratitude to my supervisors, Prof. Kevin Sinclair, Prof. David Barrett and Prof. Ranjita Gilbert.

Kevin, thank you for your unwavering support, guidance and philosophical discussion over the past four years, and particularly during the current pandemic. You've taught me the importance of 'staying in scientific research' and how to become resilient to overcome the many hurdles and knockbacks. I won't forget your words of wisdom, and will try to get my 'ducks in a row' and 'keep my powder dry' in the future.

David, your patience, kindness and positive mentoring made learning mass spectrometry a little easier in the early days. Thanks to you and Cash Dizon for offering your technical expertise during my time working in the School of Pharmacy.

Ranjita, thank you for your scientific input into the embryology work. You led by example and have been an inspiration to me.


My sincere appreciation goes to my colleagues at the University of Nottingham who have made this work possible.

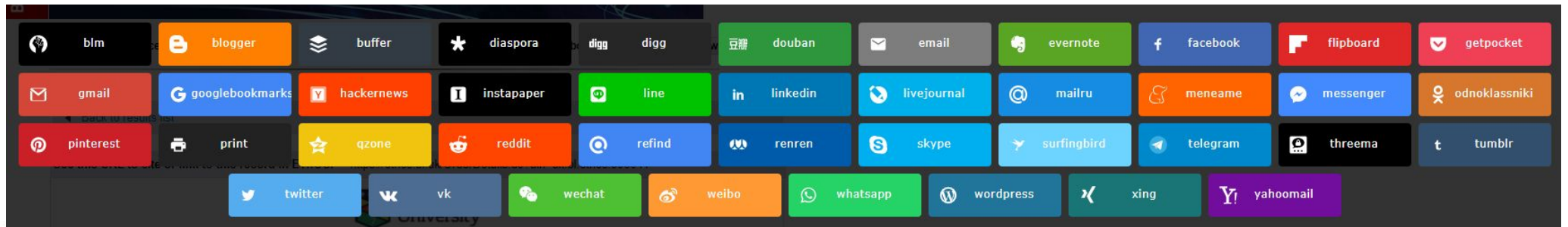
Lydia Kwong, thank you for sharing your knowledge and for assisting with the molecular research, particularly the RRBS and gPCR. On a side note, your birthday cakes are spectacular and I will miss them greatly.

Das Tom: It has been a pleasure to have you as a colleague and more importantly as a friend. Thank you for always finding time to help me, no matter how busy your schedule, and for the deep and meaningful chats over coffee - Long may they continue!

Richard Ames, thank you for your help with the bioinformatic analyses. Analysing the DNA methylation data became one of the most enjoyable aspects of my PhD. I think I could be converted to a computational biologist after all.

To the technical specialists: Dongfeng Li, Doris Klisch and Kamilla Derwicka, thank you all for your help and education in the lab. Ralph Howard, thank you for waking up at the crack of dawn and travelling miles to the abattoir to collect cattle ovaries - this work would not have been possible without you! Also, thanks to Leigh Silvester and Chris Jifford for coming to the rescue with IT support on numerous occasions.





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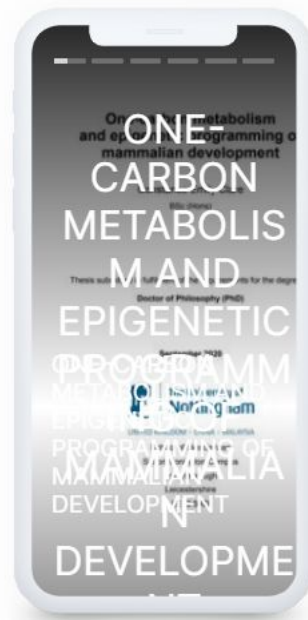
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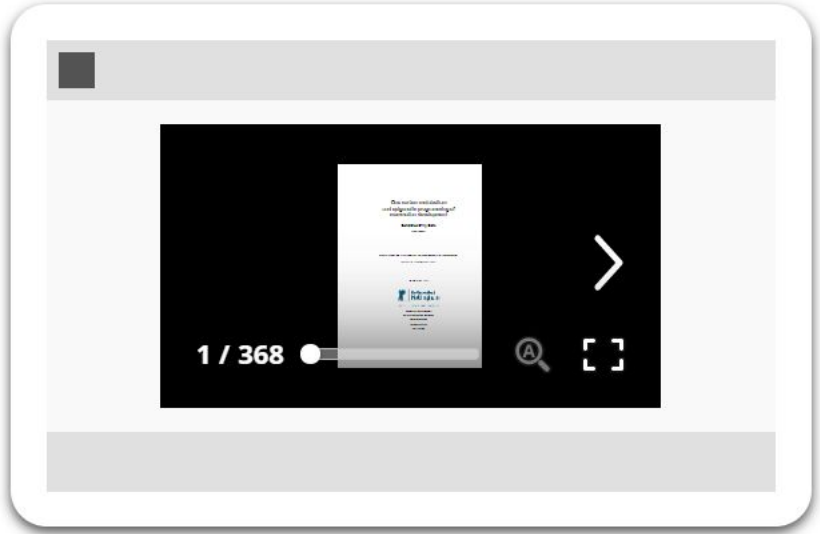
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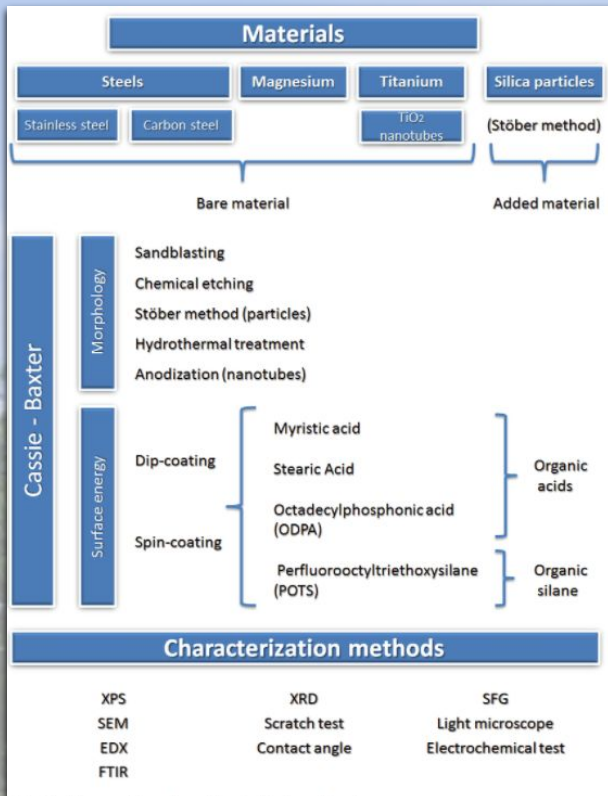
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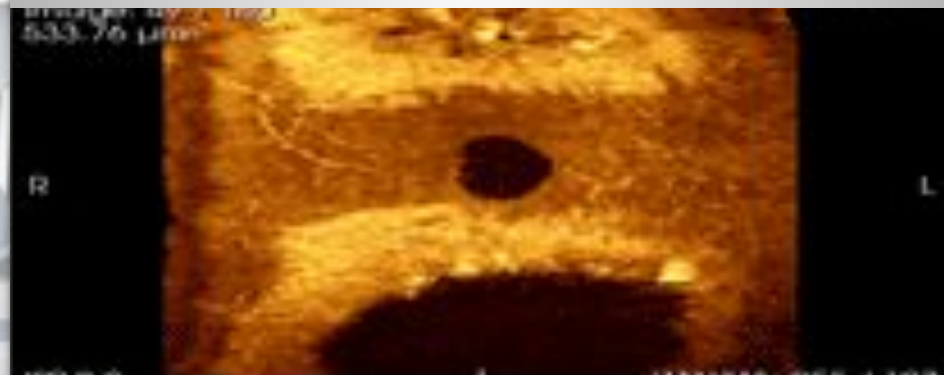
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