School of Graduate Studies
AskAuckland Central
Alfred Nathan House
The University of Auckland
Tel: +64 9 373 7599 ext 81321
Email: postgradinfo@auckland.ac.nz

Co-Authorship Form

This form is to accompany the submission of any PhD that contains published or unpublished co-authored work. **Please include one copy of this form for each co-authored work**. Completed forms should be included in all copies of your thesis submitted for examination and library deposit (including digital deposit), following your thesis Acknowledgements. Co-authored works may be included in a thesis if the candidate has written all or the majority of the text and had their contribution confirmed by all co-authors as not less than 65%.

Please indicate the chapter/section/pages of this thesis that are extracted from a co-authored work and give the title and publication details or details of submission of the co-authored work. Aspects of Chapter 3 has been published in: Wang ZJ, Wang VY, Huang SM, Niestrawska JA, Young AA, Nash MP. Identifying myocardial mechanical properties from mri using an orthotropic constitutive model, In: International Workshop on Statistical Atlases and Computational Models of the Heart. Springer. 2014, pp. 135–144.	
Nature of contribution by PhD candidate	Design of the study in collaboration with supervisors and performed all analyses as well as wrote the majority of the manuscripts.
Extent of contribution by PhD candidate (%)	80%

CO-AUTHORS

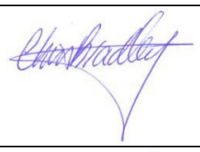
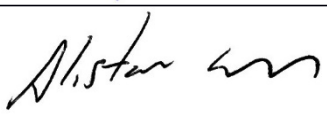
Name	Nature of Contribution
Martyn P. Nash	Main supervision of the design and analyses of the studies. Read and edited the manuscripts and suggested improvements to the studies.
Vicky Y. Wang	Supervision of the design and analyses of the studies. Read and edited the manuscripts and suggested improvements to the studies.
Alistair A. Young	Supervision of the design and analyses of the studies. Read and edited the manuscripts and suggested improvements to the studies.
Chris P. Bradley	Supervision of the design and analyses of the studies. Read and edited the manuscripts and suggested improvements to the studies.
Justyna Niestrawska	Development of the modified orthotropic constitutive equation for modelling the spontaneously hypertensive rat heart.
Sue-Mun Huang	Development of a modelling framework for the mechanics of spontaneously hypertensive rat hearts.

Certification by Co-Authors

The undersigned hereby certify that:

- the above statement correctly reflects the nature and extent of the PhD candidate's contribution to this work, and the nature of the contribution of each of the co-authors; and
- that the candidate wrote all or the majority of the text.

Name	Signature	Date
Vicky Y. Wang		10 Jan 2018
Martyn Nash		1/9/2018
Sue-Mun Huang		1/9/2018

Chris P. Bradley		10/1/2018
Alistair Young		10 Jan 2018
Justyna A. Niestrawska		1/10/2018

School of Graduate Studies
AskAuckland Central
Alfred Nathan House
The University of Auckland
Tel: +64 9 373 7599 ext 81321
Email: postgradinfo@auckland.ac.nz

Co-Authorship Form

This form is to accompany the submission of any PhD that contains published or unpublished co-authored work. **Please include one copy of this form for each co-authored work**. Completed forms should be included in all copies of your thesis submitted for examination and library deposit (including digital deposit), following your thesis Acknowledgements. Co-authored works may be included in a thesis if the candidate has written all or the majority of the text and had their contribution confirmed by all co-authors as not less than 65%.

Please indicate the chapter/section/pages of this thesis that are extracted from a co-authored work and give the title and publication details or details of submission of the co-authored work. Aspects of Chapters 4 and 5 is under consideration for publication at an international journal: Wang ZJ et al. Diastolic myocardial stiffness and wall stress in human heart failure using personalized biomechanical analysis. 2018	
Nature of contribution by PhD candidate	Design of the study in collaboration with supervisors and performed all analyses as well as wrote the majority of the manuscripts.
Extent of contribution by PhD candidate (%)	80%

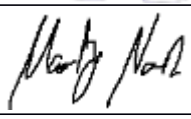
CO-AUTHORS

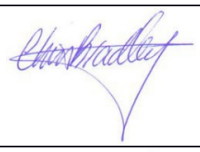
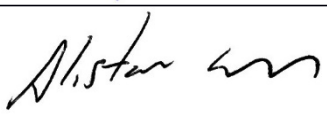
Name	Nature of Contribution
Martyn P. Nash	Main supervision of the design and analyses of the studies. Read and edited the manuscripts and suggested improvements to the studies.
Vicky Y. Wang	Supervision of the design and analyses of the studies. Read and edited the manuscripts and suggested improvements to the studies.
Alistair A. Young	Supervision of the design and analyses of the studies. Read and edited the manuscripts and suggested improvements to the studies.
Chris P. Bradley	Supervision of the design and analyses of the studies. Read and edited the manuscripts and suggested improvements to the studies.
Jie Jane Cao	Provide clinical data for biomechanical analysis. Contributed to the design of the studies and gave clinical perspective on the results. Read and edited the manuscripts and suggested improvements to the study.

Certification by Co-Authors

The undersigned hereby certify that:

- the above statement correctly reflects the nature and extent of the PhD candidate's contribution to this work, and the nature of the contribution of each of the co-authors; and
- that the candidate wrote all or the majority of the text.

Name	Signature	Date
J Jane Cao		9 Jan 2018
Vicky Y. Wang		10 Jan 2018
Martyn Nash		1/9/2018

Chris P. Bradley		10/1/2018
Alistair Young		10 Jan 2018